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A1

FOR PLANNING

HYDROBRAKE MANHOLE DETAILS					
REF.	Sa10	Sb7	Sc7	Sd5	Se9
Volume (m^3)	3.1	1.7	2.1	5.8	2.6
Unit reference	MD-SHE-0045 -7000-0500-7000	MD-SHE-0044 -8000-0790-8000	MD-SHE-0041 -8000-1077-8000	MD-SHE-0035 -6000-1103-6000	MD-SHE-0045 -8000-0724-8000
Design Head (m)	0.500	0.790	1.077	1.103	0.724
Design flow (l/s)	0.7	0.8	0.8	0.6	0.8
Diameter (mm)	45	44	41	35	45
Invert Level (m)	53.248	53.814	53.655	54.062	54.033
Minimum outlet pipe Diameter. (mm) = 75 - Suggested Manhole Diameter (mm) = 1200 Flush-Flo™ Calculated - Objective Minimise upstream storage - Application Surface - Sump Available Yes					

RETENTION POND. SEE DRAWING CHC-00-GR-DR-C--00107 FOR R149 DRAINAGE LAYOUT

GREEN ROOF

INFILTRATION TRENCH

EXISTING UISCE EIREANN WAYLEAVE

EXISTING 450mm Ø RISING MAIN

EXISTING 750mm Ø FOUL SEWER

EXISTING 750mm Ø FOUL SEWER

SO01371103 CL:53.85 IL:50.97

SO01372002 CL:55.57 IL:50.71

SO01372001 CL:55.89 IL:50.49

SO01373001 CL:56.59 IL:50.29 Crown Level: 51.04 225Ø Inlet IL: 50.619

SO01374002 CL:56.61 IL:50.11

SO01375(CL:56.73 IL:50.03

DETENTION POND. SEE DRAWING CHC-00-GR-DR-C--00107 FOR R149 DRAINAGE LAYOUT

BREAK IN KERB. INLETS FOR SURFACE WATER RUNOFF

300mm CARRIER PIPES BETWEEN SWALES AND INTERCEPTION STORAGE. HEADWALL ETC. TO LANDSCAPE ARCHITECTS DETAILS

IL. 53.583

ROYAL CANAL

KINGSPAN NSFP006 FULL RETENTION SEPARATOR OR SIMILAR APPROVED

KERB INLETS FOR SURFACE WATER RUNOFF

NEW CONNECTION TO EXISTING 750mm Ø WW SEWER USING EXISTING UÉ MH REF. SO01373001 WITH BACKDROP ARRANGEMENT.

POSITION OF PROPOSED CULVERT

LINE OF EXISTING GAS MAIN

STORM CATCHMENT A

15m INTERCEPTION VOLUME STORAGE DETAILS
15mm INTERCEPTION STORAGE PROVIDED 36.800cu.m
LENGTH (40m) x WIDTH (4m) x DEPTH (0.575m)
IL: 52.673m

CONVEYANCE/DETENTION SWALE DETAILS
LENGTH (40m)
COVER LEVEL: 54.500m
IL: 54.125m

STORM CATCHMENT B

15mm INTERCEPTION VOLUME STORAGE DETAILS
15mm INTERCEPTION STORAGE PROVIDED
48.000cu.m
LENGTH (50m) x WIDTH (4m) x DEPTH (0.600m) x POROSITY (0.4)
IL: 53.214m

CONVEYANCE/DETENTION SWALE DETAILS
LENGTH (50m)
COVER LEVEL: 55.163m
IL: 54.788m

STORM CATCHMENT C

15mm INTERCEPTION VOLUME STORAGE DETAILS
15mm INTERCEPTION STORAGE PROVIDED
52.800cu.m
LENGTH (60m) x WIDTH (4m) x DEPTH (0.550m) x POROSITY (0.4)
IL: 53.105m

CONVEYANCE/DETENTION SWALE DETAILS
LENGTH (60m)
COVER LEVEL: 55.305m
IL: 54.930m

STORM CATCHMENT D

15mm INTERCEPTION VOLUME STORAGE DETAILS
15mm INTERCEPTION STORAGE PROVIDED
36.000cu.m
LENGTH (60m) x WIDTH (4m) x DEPTH (0.375m) x POROSITY (0.4)
IL: 53.687m

CONVEYANCE/DETENTION SWALE DETAILS
LENGTH (60m)
COVER LEVEL: 55.681m
IL: 55.306m

STORM CATCHMENT E

15mm INTERCEPTION VOLUME STORAGE DETAILS
15mm INTERCEPTION STORAGE PROVIDED
46.440cu.m
LENGTH (43M) x WIDTH (4m) x DEPTH (0.675m) x POROSITY (0.4)
IL: 53.358m

CONVEYANCE/DETENTION SWALE DETAILS
LENGTH (43m)
COVER LEVEL: 56.143m
IL: 55.768m

DRAINAGE LAYOUT
Scale 1:500

Further Information – Kildare County Council PA Reg. Ref. 26/60878

EXISTING UISCE EIREANN WAYLEAVE

EXISTING FOUL SEWER

STORM SEWER (PUBLIC)

STORM WATER MANHOLES

FOUL SEWER (PUBLIC)

FOUL WATER MANHOLES

PRIVATE FOUL MANHOLE

EXISTING 450mm Ø WASTEWATER RISING MAIN

15mm INTERCEPTION VOLUME STORAGE

BIO RETENTION TREE PIT

225Ø PERFORATED STORM SEWER

CONVEYANCE SWALE

PERMEABLE PAVING - TRAFFIC CATEGORY 3

PERMEABLE PAVING - TRAFFIC CATEGORY 2

EXISTING GAS MAIN

General Notes

1. Do not scale from this drawing. Refer to ArchRGects drawings for all works levels and setting out.
2. This drawing is to be read in conjunction wRGh all other Engineer's and ArchRGect's drawings and specifications. Where discrepancies are observed please notify CHC for clarification.
3. Contractor to check all levels (existing and proposed), setting out and dimensions on sRGe prior to commencement of the works and advise the consultants of any discrepancies.
4. All works to be constructed in accordance wRGh current building control legislation, local authorRGy requirements and good building practice.
5. All Insulation, weathering materials (dpc, dpm, flashings etc), radon barriers and sumps and all sub-floor ducting all to ArchRGect's details.
6. Location of all service pop-ups to be confirmed and set out by the ArchRGect.
7. Refer to ArchRGect's drawings and specifications for fire strategy and all fire protection requirements
8. All materials and products specified must carry CE marking and Declarations of Performance as appropriate.
9. Contractor shall note the recommendations of the sRGe investigation report in respect of all excavation depths, ground water levels and identification of required adequate bearing strata. All foundation formation soft spots or disturbed ground not covered in SI report to be recorded and notified to the Engineer.

Manhole Name	Cover Level (m)	Pipe Out Invert Level (m)	Pipes In Invert Level (m)	Pipes In Backdrop (mm)
F1	55.295	53.586		
F2	54.765	52.777	52.777	
F3	54.845	52.697	52.697	
F4	55.469	54.031		
F5	55.705	53.867		
F6	55.689	53.370	53.370	
			53.370	
F7	55.384	52.998	53.073	
F8	55.178	52.293	52.293	
			52.847	554
F9	55.711	54.273		
F10	55.792	53.752	53.752	
F11	55.437	53.263	53.338	
F12	55.229	52.026	52.026	
			52.578	552
F13	55.663	54.240		
F14	56.040	54.615		
F15	55.947	54.380	54.380	
F16	55.928	53.539	53.539	
			54.272	733
F17	55.619	53.252	53.327	
F18	55.992	54.039		
F19	55.828	53.648	53.648	
F20	55.914	54.189		
F21	56.067	54.133		
F22	55.962	54.026	54.026	
			54.026	
F23	56.175	53.869	53.869	
F24	55.807	53.466	53.466	
			53.467	
F25	55.626	53.059	53.059	
			53.134	1
F26	55.595	51.770	51.770	
			53.017	1246
F27	56.590	OUTFALL	51.619	

Manhole Name	Cover Level (m)	Pipe Out Invert Level (m)	Pipes In Invert Level (m)	Pipes In Backdrop (mm)
SA1	55.335	54.536		
SA2	55.116	54.273	54.273	
SA3	55.000	54.183	54.183	
SA4	55.474	54.024		
SA5	55.414	53.871	53.871	
SA6	54.900	53.476	53.476	
SA7	54.730	53.460	53.535	
			53.535	
SA8	54.536	53.352	53.352	
SA9	54.887	53.762		
SA10	54.500	53.248	53.248	
			53.323	
SA11	56.099	53.170	53.170	
SA12	53.508	OUTFALL	53.164	
SB1	55.577	54.452		
SB2	55.722	54.597		
SB3	55.665	54.401	54.401	
			54.401	
SB4	55.674	54.549		
SB5	55.711	54.297	54.372	
			54.372	
SB6	55.176	53.832	53.832	
SB7	55.163	53.814	53.814	
SB8	56.089	53.745	53.745	
SB9	55.000	OUTFALL	53.738	
SC1	55.866	54.741		
SC2	55.843	54.418		
SC3	55.665	54.540		
SC4	55.791	54.166	54.166	
			54.466	300
SC5	55.808	54.059	54.677	543
			54.134	
SC6	55.199	53.675	53.675	
SC7	55.305	53.655	53.655	
SC8	55.800	53.567	53.567	
SC9	56.019	OUTFALL	53.558	
SD1	55.842	54.417		
SD2	55.991	54.566		
SD3	55.941	54.515	54.515	
SD4	55.846	54.289	54.364	
			54.364	
SD5	55.681	54.062	54.062	
SD6	56.259	53.976	53.976	
SD7	56.469	OUTFALL	53.969	
SE1	56.016	54.591		
SE2	55.746	54.222	54.297	
SE3	55.853	54.155	54.155	
SE4	56.068	54.643		
SE5	55.972	54.547	54.547	
SE6	56.128	54.417	54.417	
SE7	56.161	54.383	54.383	
SE8	55.994	54.055	54.055	
			54.130	
SE9	56.143	54.033	54.033	
SE10	56.200	53.213	53.968	755
SE11	56.419	53.134	53.134	
SE12	56.629	OUTFALL	53.127	

CATCHMENTS
Scale 1:1250

CATCHMENT A
CATCHMENT B
CATCHMENT C
CATCHMENT D
CATCHMENT E

SECTION THROUGH PROPOSED CULVERT
SCALE 1:100

CANAL FOOTPATH
LEVEL OF PROPOSED FOOTPATH ACCESS TO CANAL
SIZE OF BOX CULVERT TO BE CONFIRMED UPON FURTHER SURVEY WORK OF DITCH
56.770
56.770
56.714
56.064
55.998
54.463
LEVEL OF EXISTING GROUND
T.B.C.

Issue	Suitability	Date	Description	Designed	Drawn	Approved
P04	S4	13.11.2026	Issued for further information.	P.C.	N.N.	P.C.
P03	S4	15.07.2026	Issued for Planning.	P.C.	N.N.	P.C.
P02	S4	07.07.2026	Issued for Planning.	P.C.	N.N.	P.C.
P06	S2	20.05.2026	Site layout revised.	P.C.	N.N.	P.C.
P01	S4	07.11.2025	Issued for Pre-Planning	P.C.	N.N.	P.C.
P05	S2	03.11.2025	Swale extended.	P.C.	N.N.	P.C.
P04	S2	22.10.2025	Issued for information.	P.C.	N.N.	P.C.
P03	S2	27.02.2025	Wayleave added	P.C.	N.N.	P.C.
P02	S2	24.02.2025	Revised sRGe layout.	P.C.	N.N.	P.C.
P01	S2	11.10.2024	Issued for information.	M.H.	N.N.	M.H.

Suitability: S1=Coordination, S2=Information, S4=Planning, D2=Tender, D3=Compliance, A1=Construction, CR=As Constructed

Project: Confey Lands LRD, Leixlip

Drawing TRGle: Drainage Layout

Client: Leixlip and Newbridge SPV Limited

Originator.	Area.	Level.	Type.	Role.	Number.
CHC	-00	-GR	-DR	-C	-00200

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