

DO NOT SCALE



STORM Network 1										
Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Number	Upstream Manhole Invert	Cover	Number	Invert	Cover
1.000	225	81	CLAY	41.405	S1	184.60	186.02	S2	184.09	185.51
1.001	225	170	CLAY	28.443	S2	184.01	185.51	S4	183.84	186.02
1.002	300	119	CLAY	18.631	S4	183.84	186.02	S5	183.69	185.21
1.003	300	16	CLAY	15.950	S5	183.69	185.21	S6	182.67	184.17
1.004	375	98	CONC	16.855	S6	182.60	184.17	S7	182.43	184.00
1.005	375	326	CONC	19.209	S7	182.43	184.00	S8	182.37	184.50
1.006	375	325	CONC	31.895	S8	182.37	184.50	S13	182.27	185.17
1.007	450	44	CONC	19.434	S13	182.19	185.17	S14	181.75	183.91
1.008	450	402	CONC	10.457	S14	181.75	183.91	S15	181.73	183.23
1.009	450	404	CONC	10.895	S15	181.73	183.23	S16	181.70	182.40
1.010	450	200	CONC	44.860	S16	181.42	182.40	S18	181.20	182.40
1.011	225	100	CLAY	33.341	S18	181.20	182.40	S19	180.87	183.00
2.000	225	14	CLAY	29.425	S3	186.00	187.42	S4	183.92	186.02
3.000	225	22	CLAY	12.090	S9	186.74	188.17	S12	186.19	187.62
3.001	225	14	CLAY	33.848	S12	186.19	187.62	S13	183.74	185.17
4.000	225	25	CLAY	24.535	S10	187.83	188.25	S11	186.33	188.25
4.001	225	19	CLAY	12.194	S11	186.63	188.25	S12	186.10	187.62
5.000	225	18	CLAY	39.840	S17	183.66	185.08	S18	181.43	182.40

FOUL Network 1										
Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Type	Pipe Length	Number	Upstream Manhole Invert	Cover	Number	Invert	Cover
1.000	150	80	CLAY	42.239	F1	184.17	186.13	F2	183.65	185.59
1.001	150	150	CLAY	32.583	F2	183.65	185.59	F4	183.43	186.24
1.002	150	151	CLAY	22.125	F4	183.43	186.24	F5	183.28	185.15
1.003	150	14	CLAY	14.253	F5	183.28	185.15	F6	182.28	184.23
1.004	150	38	CLAY	14.314	F6	182.28	184.23	F7	181.90	184.00
1.005	150	150	CLAY	16.849	F7	181.90	184.00	F8	181.79	184.50
1.006	150	150	CLAY	30.963	F8	181.79	184.50	F15	181.58	185.30
1.007	150	150	CLAY	12.749	F15	181.58	185.30	F16	181.50	184.38
1.008	150	43	CLAY	29.787	F16	181.50	184.38	F19	180.80	182.80
1.009	150	151	CLAY	12.965	F18	180.80	182.80	F19	180.71	183.40
2.000	150	8	CLAY	17.304	F3	185.68	187.03	F4	183.43	186.24
3.000	150	20	CLAY	10.059	F9	186.21	188.16	F13	185.72	187.72
3.001	150	15	CLAY	10.880	F13	185.72	187.72	F14	184.97	186.91
3.002	150	13	CLAY	22.541	F14	184.97	186.91	F15	183.23	185.30
4.000	150	25	CLAY	48.613	F10	187.91	189.86	F12	185.55	187.94
4.001	150	23	CLAY	5.149	F12	185.95	187.94	F13	185.72	187.72

Split level gardens with 1:3 rolling steps to tie in with boundary levels.

Note

- This is a preliminary design demonstrating a drainage solution is achievable to discharge flows from the proposed development.
- The specification in all respects shall be in accordance with the current Wrexham CBC Specification and Construction publication in force in the county at the time of construction.

Legend

- Red Line Boundary
- Existing public foul sewer
- Existing public surface water sewer
- Existing private surface water sewer
- Existing private surface water sewer (to be abandoned)
- Existing site levels (contours at 0.5m intervals)
- Proposed adoptable foul sewer
- Proposed adoptable surface water sewer
- Proposed Slab Level
- Foul Rising Main
- Filter Drain SUDs Feature
- Permeable Paving SUDs Feature
- Retaining Wall
- Flag Retaining Wall
- Underbuild
- Step in Slab

Surface Water attenuation requirements (based on 15.5l/s flow restriction (QBAR))
Basin Base = 400m²
Basin IL at Outfall = 181.200
Basin Depth = 1.2m
Max Water Depth = 1m

Existing private 450dia surface water sewer.

Adoptable FW Pumping Station
CL 183.400
IL 177.513 (incoming 180.713)
Rising Main to F17 Gravity network to Existing FW Public Sewer
3m dia wet well to provide emergency storage (240l x 70 = 16.8 cu.m)
Estimated 4.5m deep.

Proposed foul flows to discharge into proposed adoptable FW pumping station.

Surface Water Flow Rates

Site Area = 2.5ha

Developable Site Area = 2.2ha

Existing Greenfield Run-off Rates

1yr = 13.68 l/s
30yr = 27.67 l/s
100yr = 33.89 l/s
Qbar = 15.54 l/s

Proposed Run-off Rates

Flow rates to be restricted to Qbar Greenfield run-off rate
1yr = 15.54 l/s
30yr = 15.54 l/s
100yr = 15.54 l/s

Measured Imp Area = 1.1ha

Connection point crosses third party land and requires SABS approval.

S16 (1.8 Dia Flow control manhole)
Hydrobrake Optimum Flow Regulator
Restricted to 15.5 l/s @ 1.35m design head

Maintenance path 2m, to be agreed with WCC SABS.

Further review of tie-in levels with existing and proposed highway required.

STRATEGY

F	28.06.21	Updated to suit revised panning laout	PJN	AJ
E	28.05.21	Updated to suit revised panning laout	LW	AJ
D	23.03.21	IL F18-F19 updated	LW	AJ
C	22.01.21	Plot 7-8 retainer updated	LW	AJ
B	19.01.21	Step removed 68-69, 60-61	LW	AJ
A	14.01.21	Updated to suit revised layout	LW	AJ
Rev.	Date	Revision	By	Appd.

coopers
chartered consulting engineers
Tel: 01244 684910
Fax: 01244 684911
Email: admin@coopers.co.uk
Web: http://coopers.co.uk
Park House
Sandpiper Court
Chester Business Park
Chester
CH4 9QU

Client
Taylor Wimpey

Project
Link Road Development Module Brymbo

Title
Engineering Layout

DRAWING NUMBER	SCALE at A1	1:500
5972/SK07	DATE	July 20
	DRAWN	LW
	CHECKED	AJ
	REVISION	F