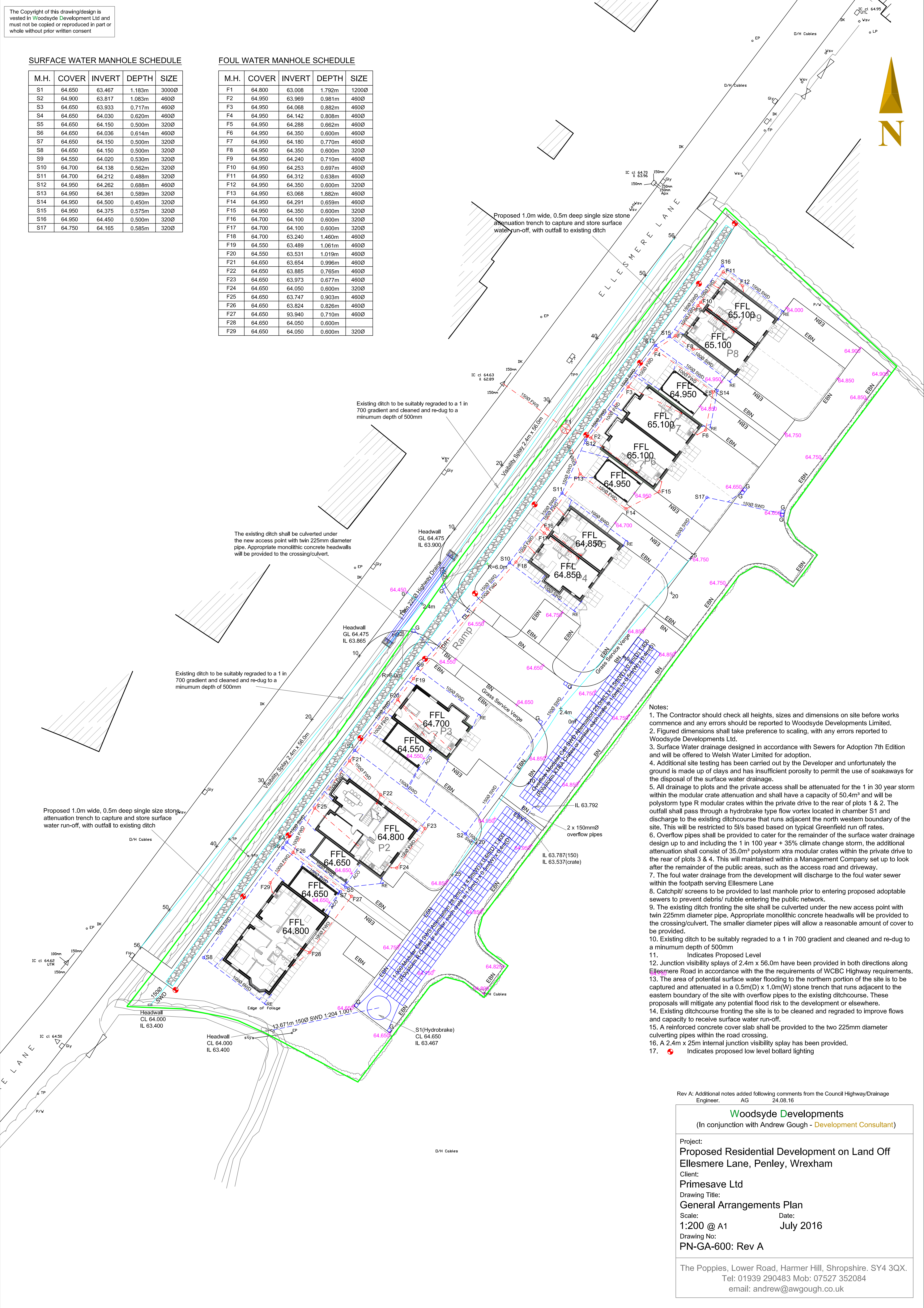


SURFACE WATER MANHOLE SCHEDULE

M.H.	COVER	INVERT	DEPTH	SIZE
S1	64.650	63.467	1.183m	3000Ø
S2	64.900	63.817	1.083m	460Ø
S3	64.650	63.933	0.717m	460Ø
S4	64.650	64.030	0.620m	460Ø
S5	64.650	64.150	0.500m	320Ø
S6	64.650	64.036	0.614m	460Ø
S7	64.650	64.150	0.500m	320Ø
S8	64.650	64.150	0.500m	320Ø
S9	64.550	64.020	0.530m	320Ø
S10	64.700	64.138	0.562m	320Ø
S11	64.700	64.212	0.488m	320Ø
S12	64.950	64.262	0.688m	460Ø
S13	64.950	64.361	0.589m	320Ø
S14	64.950	64.500	0.450m	320Ø
S15	64.950	64.375	0.575m	320Ø
S16	64.950	64.450	0.500m	320Ø
S17	64.750	64.165	0.585m	320Ø

FOUL WATER MANHOLE SCHEDULE

M.H.	COVER	INVERT	DEPTH	SIZE
F1	64.800	63.008	1.792m	1200Ø
F2	64.950	63.969	0.981m	460Ø
F3	64.950	64.068	0.882m	460Ø
F4	64.950	64.142	0.808m	460Ø
F5	64.950	64.288	0.662m	460Ø
F6	64.950	64.350	0.600m	460Ø
F7	64.950	64.180	0.770m	460Ø
F8	64.950	64.350	0.600m	320Ø
F9	64.950	64.240	0.710m	460Ø
F10	64.950	64.253	0.697m	460Ø
F11	64.950	64.312	0.638m	460Ø
F12	64.950	64.350	0.600m	320Ø
F13	64.950	63.068	1.882m	460Ø
F14	64.950	64.291	0.659m	460Ø
F15	64.950	64.350	0.600m	320Ø
F16	64.700	64.100	0.600m	320Ø
F17	64.700	64.100	0.600m	320Ø
F18	64.700	63.240	1.460m	460Ø
F19	64.550	63.489	1.061m	460Ø
F20	64.550	63.531	1.019m	460Ø
F21	64.650	63.654	0.996m	460Ø
F22	64.650	63.885	0.765m	460Ø
F23	64.650	63.973	0.677m	460Ø
F24	64.650	64.050	0.600m	320Ø
F25	64.650	63.747	0.903m	460Ø
F26	64.650	63.824	0.826m	460Ø
F27	64.650	93.940	0.710m	460Ø
F28	64.650	64.050	0.600m	
F29	64.650	64.050	0.600m	320Ø



- Notes:
1. The Contractor should check all heights, sizes and dimensions on site before works commence and any errors should be reported to Woodsyde Developments Limited.
 2. Figured dimensions shall take preference to scaling, with any errors reported to Woodsyde Developments Ltd.
 3. Surface Water drainage designed in accordance with Sewers for Adoption 7th Edition and will be offered to Welsh Water Limited for adoption.
 4. Additional site testing has been carried out by the Developer and unfortunately the ground is made up of clays and has insufficient porosity to permit the use of soakaways for the disposal of the surface water drainage.
 5. All drainage to plots and the private access shall be attenuated for the 1 in 30 year storm within the modular crate attenuation and shall have a capacity of 50.4m³ and will be polystorm type R modular crates within the private drive to the rear of plots 1 & 2. The outfall shall pass through a hydrobrake type flow vortex located in chamber S1 and discharge to the existing ditchcourse that runs adjacent the north western boundary of the site. This will be restricted to 5l/s based based on typical Greenfield run off rates.
 6. Overflow pipes shall be provided to cater for the remainder of the surface water drainage design up to and including the 1 in 100 year + 35% climate change storm, the additional attenuation shall consist of 35.0m³ polystorm xtra modular crates within the private drive to the rear of plots 3 & 4. This will maintained within a Management Company set up to look after the remainder of the public areas, such as the access road and driveway.
 7. The foul water drainage from the development will discharge to the foul water sewer within the footpath serving Ellesmere Lane
 8. Catchpit/ screens to be provided to last manhole prior to entering proposed adoptable sewers to prevent debris/ rubble entering the public network.
 9. The existing ditch fronting the site shall be culverted under the new access point with twin 225mm diameter pipe. Appropriate monolithic concrete headwalls will be provided to the crossing/culvert. The smaller diameter pipes will allow a reasonable amount of cover to be provided.
 10. Existing ditch to be suitably regraded to a 1 in 700 gradient and cleaned and re-dug to a minimum depth of 500mm
 11. Indicates Proposed Level
 12. Junction visibility splays of 2.4m x 56.0m have been provided in both directions along Ellesmere Road in accordance with the requirements of WCBC Highway requirements.
 13. The area of potential surface water flooding to the northern portion of the site is to be captured and attenuated in a 0.5m(D) x 1.0m(W) stone trench that runs adjacent to the eastern boundary of the site with overflow pipes to the existing ditchcourse. These proposals will mitigate any potential flood risk to the development or elsewhere.
 14. Existing ditchcourse fronting the site is to be cleaned and regraded to improve flows and capacity to receive surface water run-off.
 15. A reinforced concrete cover slab shall be provided to the two 225mm diameter culverting pipes within the road crossing.
 16. A 2.4m x 25m internal junction visibility splay has been provided.
 17. Indicates proposed low level bollard lighting

Rev A: Additional notes added following comments from the Council Highway/Drainage Engineer. AG 24.08.16

Woodsyde Developments

(In conjunction with Andrew Gough - Development Consultant)

Project:
Proposed Residential Development on Land Off
Ellesmere Lane, Penley, Wrexham
Client:
Primesave Ltd
Drawing Title:
General Arrangements Plan
Scale:
1:200 @ A1
Date:
July 2016
Drawing No:
PN-GA-600: Rev A

The Poppies, Lower Road, Harmer Hill, Shropshire. SY4 3QX.
Tel: 01939 290483 Mob: 07527 352084
email: andrew@awgough.co.uk