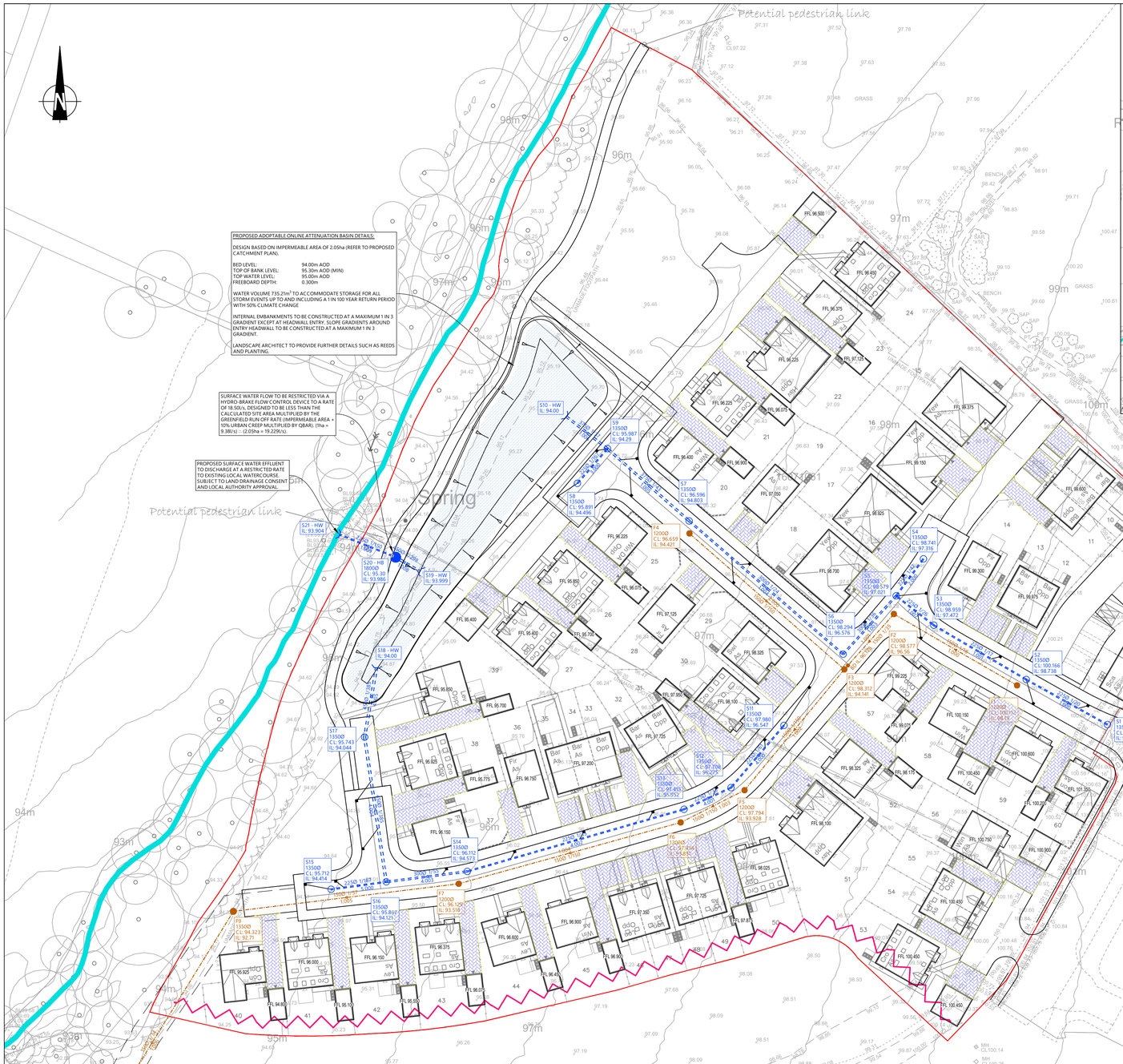
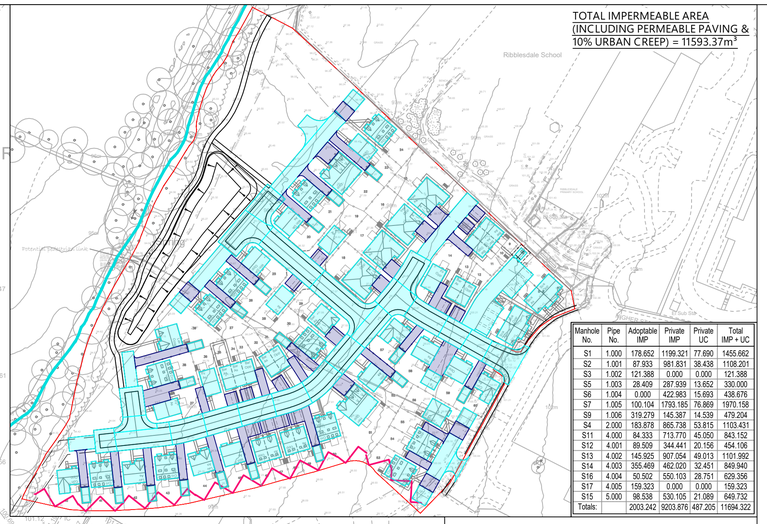




Manhole No.	Pipe No.	Adoptable IMP	Private IMP	Private UC	Total IMP + UC
S1	1.000	178.652	1199.321	77.690	1455.662
S2	1.001	87.933	981.831	38.438	1108.201
S3	1.002	121.388	0.000	0.000	121.388
S5	1.003	28.409	287.939	13.652	330.000
S6	1.004	0.000	422.983	15.693	438.676
S7	1.005	100.104	1793.185	76.869	1970.158
S9	1.006	319.279	145.387	14.539	479.204
S4	2.000	183.878	865.738	53.815	1103.431
S11	4.000	84.333	713.770	45.050	843.152
S12	4.001	89.509	344.441	20.156	454.106
S13	4.002	145.925	907.054	49.013	1101.992
S14	4.003	355.469	462.020	32.451	849.940
S16	4.004	50.502	550.103	28.751	629.356
S17	4.005	159.323	0.000	0.000	159.323
S15	5.000	98.538	530.105	21.089	649.732
Totals:		2003.242	9203.876	487.205	11694.322

KEY:

- ADOPTABLE SURFACE WATER SEWER (SECTION 104 WATER INDUSTRY ACT)
- ADOPTABLE FOUL WATER SEWER (SECTION 104 WATER INDUSTRY ACT)
- ADOPTABLE HYDRO-BRAKE FLOW CONTROL CHAMBER
- ADOPTABLE SW HEADWALL
- ADOPTABLE ROAD GULLY & 150mmØ CONNECTION
- EXISTING FOUL WATER SEWER
- EXISTING SURFACE WATER CULVERT
- WATERCOURSE (TRIBUTARY OF THE RIVER RIBBLE)
- PERMEABLE PAVING

NOTES:

1. DO NOT SCALE THIS DRAWING.
2. THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS, ARCHITECTS AND SPECIALIST DESIGN DRAWINGS AND DETAILS.
4. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE. ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
5. ALL DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH DESIGN AND CONSTRUCTION GUIDANCE FOR FOUL AND SURFACE WATER SEWERS OFFERED FOR ADOPTION UNDER THE CODE FOR ADOPTION AGREEMENTS FOR WATER AND SEWERAGE COMPANIES OPERATING WHOLLY OR MAINLY IN ENGLAND ("THE CODE")

DRAINAGE DESIGN NOTES:

1.1. SURFACE WATER DISCHARGE RATES SET AT A PRACTICAL MINIMUM LIMIT BASED ON GREENFIELD RUN-OFF CALCULATIONS: TOTAL IMPERMEABLE AREAS MULTIPLIED BY QBAR GIVING A TOTAL SITE DISCHARGE RATE.

1.2. DISCHARGE RATES TO BE CONFIRMED BY LEAD LOCAL FLOOD AUTHORITY (LLFA).

1.3. SURFACE WATER HYDRAULIC SIMULATIONS ARE IN ACCORDANCE WITH LANCASHIRE LLFA STANDARDS. APPLYING A RUN-OFF COEFFICIENT OF 1 AND MADD FACTOR OF 0.

1.4. APPROPRIATE SUDS REQUIRED IN ORDER TO ENSURE ADEQUATE TREATMENT OF SURFACE WATER FLOWS PRIOR TO DISCHARGE IN ACCORDANCE WITH THE SIMPLE INDEX METHOD AS SET OUT IN THE SUDS MANUAL (CIRIA C753).

1.5. ALL MANHOLE COVERS TO BE SET 1m AND MANHOLES TO BE A MINIMUM OF 0.5m FROM THE KERBLINE.

1.6. INCOMING LATERAL CONNECTIONS TO BE CONFIRMED AT DETAILED DESIGN.

1.7. FOR SOFT LANDSCAPING; INCLUDING GARDENS AND EXISTING GREENFIELD LAND WITHIN THE SITE BOUNDARY, LOCAL LAND DRAINAGE MAY BE INTRODUCED WHERE LOW SPOTS OCCUR NEAR BUILDING THRESHOLDS. ANY REQUIRED COLLECTION FEATURES WILL BE DESIGNED TO DIRECT FLOWS AWAY FROM BUILDINGS, WITH FINAL ARRANGEMENTS CONFIRMED AT DETAILED DESIGN.

FIRST 5 MM INTERCEPTION NOTE

THE INTERCEPTION OF THE FIRST 5 MM OF RAINFALL HAS BEEN CONSIDERED ON A SUB CATCHMENT BASIS IN ACCORDANCE WITH CURRENT SUDS GUIDANCE.

PRIVATE DRIVEWAYS AND PARKING AREAS ARE PROPOSED AS PERMEABLE PAVING WITH UNLINED SUB BASES, PROVIDING SOURCE CONTROL AND INTERCEPTION STORAGE AT PLOT LEVEL. THESE FEATURES CAPTURE RUNOFF FROM FREQUENT RAINFALL EVENTS, WITH A VERY LOW DEGREE OF PERMEABILITY ALLOWING FOR GRADUAL DISSIPATION.

ROOF DRAINAGE IS NOT ROUTED THROUGH PERMEABLE PAVING AND WILL DISCHARGE DIRECTLY TO THE FORMAL SURFACE WATER DRAINAGE NETWORK.

ADOPTABLE HIGHWAY AND SHARED SURFACES ARE NOT ROUTED VIA INTERCEPTION FEATURES DUE TO SITE CONSTRAINTS, INCLUDING LIMITED CORRIDOR SPACE AND NO OPPORTUNITY TO DISCHARGE TO PRIVATE LAND.

THE OVERALL STRATEGY MAXIMISES SOURCE CONTROL WHERE PRACTICABLE AND PROVIDES A PROPORTIONATE APPROACH TO INTERCEPTION.

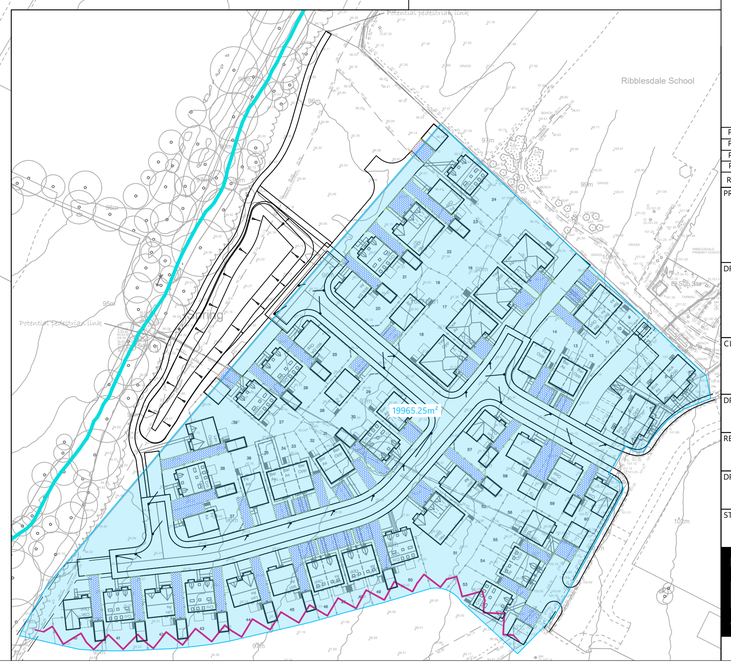
SUDS HIERARCHY NOTE:

1. RAINWATER HARVESTING AND NON POTABLE REUSE: CONSIDERED AS FIRST PRIORITY, HOWEVER NOT PROPORTIONATE FOR THE PROPOSED RESIDENTIAL LAYOUT AND THEREFORE NOT TAKEN FORWARD.
2. INFILTRATION TO GROUND: EXCLUDED DUE TO CONFIRMED COHESIVE CLAY STRATA AND NON VIABLE INFILTRATION CONDITIONS.
3. RAINFALL INTERCEPTION AND SOURCE CONTROL: TO BE PROVIDED AS THE PRIMARY SUDS MEASURE THROUGH PLOT LEVEL FEATURES, INCLUDING PERMEABLE PAVING AND OTHER SOURCE CONTROL FEATURES WHERE APPLICABLE.
4. DISCHARGE TO WATERCOURSE: PREFERRED FINAL DISCHARGE ROUTE VIA THE ORDINARY WATERCOURSE LOCATED TO THE WEST OF THE SITE BOUNDARY.
5. DISCHARGE TO SEWER: NOT REQUIRED FOR THE PROPOSED SURFACE WATER DRAINAGE STRATEGY AND THEREFORE EXCLUDED.

DEVELOPABLE AREA SURFACE WATER NETWORK CATCHMENT -SCALE- 1:1000

SURFACE WATER FLOW TO BE RESTRICTED VIA A HYDRO BRAKE FLOW CONTROL DEVICE TO 18.5 l/s, CALCULATED AGAINST THE GREENFIELD RUNOFF RATE BASED ON THE TOTAL DEVELOPMENT AREA (19965m²), USING QBAR OF 9.38 l/s/Ha, PROVIDING A DERIVED DISCHARGE RATE OF 19.229 l/s.

THE ATTENUATION NETWORK HAS BEEN DESIGNED BASED ON THE IDENTIFIED IMPERMEABLE AREA CATCHMENT ONLY, WITH CV VALUES CONSERVATIVELY SET TO 1.0 IN BOTH SUMMER AND WINTER SCENARIOS TO ALLOW FOR ALL OTHER POTENTIAL CONTRIBUTING AREAS WITHIN THE WIDER DEVELOPMENT EXTENT. ADDITIONAL DETAILED DESIGN MEASURES, INCLUDING OVERLAND FLOW ROUTES AND LAND DRAINAGE INTERCEPTION WHERE APPLICABLE, SHALL BE DEVELOPED AT POST PLANNING DETAILED DESIGN STAGE TO CONFIRM THE FINAL SURFACE WATER MANAGEMENT STRATEGY.



REV:	AMENDMENTS:	DRN:	CHK:	DATE:
P04	Updated to suit latest masterplan	BW	EC	07.07.26
P03	Miscellaneous dotted line removed	BW	EC	14.05.26
P02	Drainage Areas Table added	BW	EC	06.05.26
P01	First Issue	BW	EC	01.05.26

PROJECT: Higher Standen Drive Clitheroe

DRAWING TITLE: Drainage Strategy (Basin Volume & Outfalls)

CLIENT: Applethwaite Ltd

DRAWING NUMBER: P26127-DGC-Z1-GF-DR-C-0001

REVISION:	SHEET SIZE:	SCALE:
P04	A1	1:500
DRAWN BY: BW	CHECKED BY: EC	DATE: 01.05.2026

STATUS: PRELIMINARY

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