

**General Drainage Notes:**  
 Existing details shown on this drawing including kerblines, existing drains, chambers, sewers, pipework, stub connections where new connections, diversions or abandonment are shown, invert levels and pipe sizes shall be checked and confirmed to the engineer prior to the commencement of any works. Any discrepancies shall be reported to the engineer prior to any new construction.

All drainage works shall be carried out in accordance with the requirements of the local authority and in conjunction with all relevant British Standards and Codes of Practice

All drainage shall comply with the typical drainage construction details and the requirements of BS EN 752.

Access covers and frames shall comply with the loadings specified and to BS EN 124 and kitemarked or if recessed covers are specified then in accordance with FACTA association equivalent.

The proposed building outlines shown on this drawing are for information only. Refer to Architects plans for precise location setting out information and details.

All underslab drainage shall be clear of foundations unless shown otherwise with long radius bends kept to a minimum and used where unavoidable.

All private drainage pipework for foul and surface water systems have been designed on the basis of UPVC to BS EN 1401-1, unless noted otherwise.

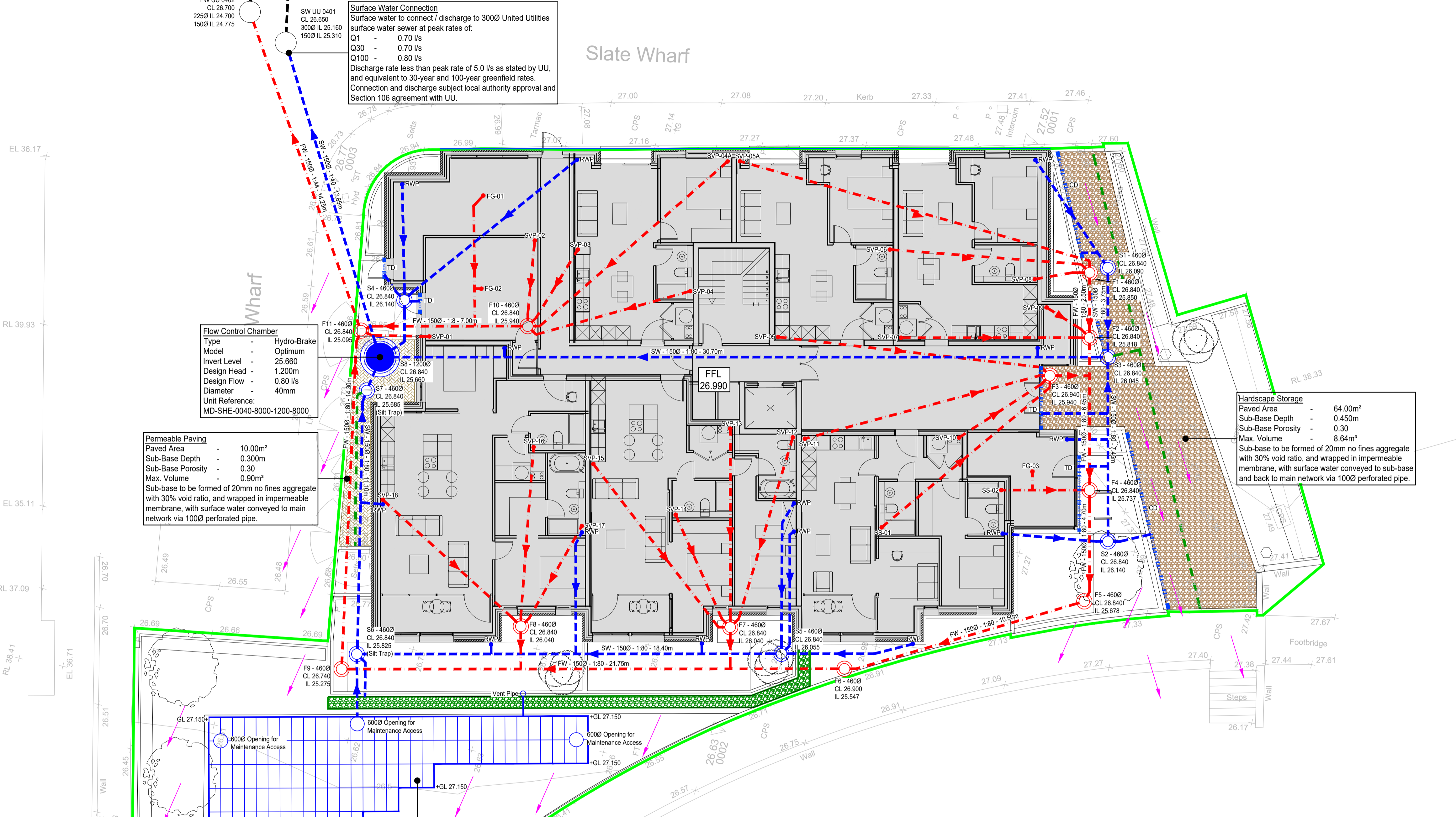
Where new drainage is situated within 5 metres of new or existing trees the pipework shall be encased in concrete to reduce the risk of root ingress.

Concrete encasement of the pipework shall be required where the vertical clearance between two pipes crossing is less than 300mm.

All existing drainage shall be assumed to be 'live' and shall be maintained at all times during the works. Existing drainage shall be reconnected to the new drainage system unless proven to be redundant for abandonment. All existing drainage to be abandoned shall be sealed by appropriate means.

Upon completion all new drainage installation together with any existing drainage retained shall be jetted and CCTV surveyed upon completion. Contractor to ensure that the drainage system is fully operational, free of excess debris/silt and all identified faults rectified.

**HEALTH & SAFETY:** The works shall be carried out by specialist competent and experienced contractors. All operatives shall have received full and appropriate training with appropriate qualifications for the operations they are required to undertake. All work shall be carried out in accordance with the relevant Health & Safety Regulations.



**Site Specific Drainage Notes:**  
 Proposed rainwater and foul down pipe locations to be confirmed prior to the commencement of any drainage works.

All external levels and subsequent cover levels of proposed drainage network to be confirmed by Architect prior to commencement of any drainage works.

Existing sewer size, levels and location to be confirmed prior to commencement of any drainage work.

Surface and foul water discharge to United Utilities sewers subject to local authority approval, and Section 106 agreement with United Utilities. No drainage work to commence until approval notices are given.

All foul water pipes to be 1000, and all surface water pipes to be 1500 unless shown otherwise.

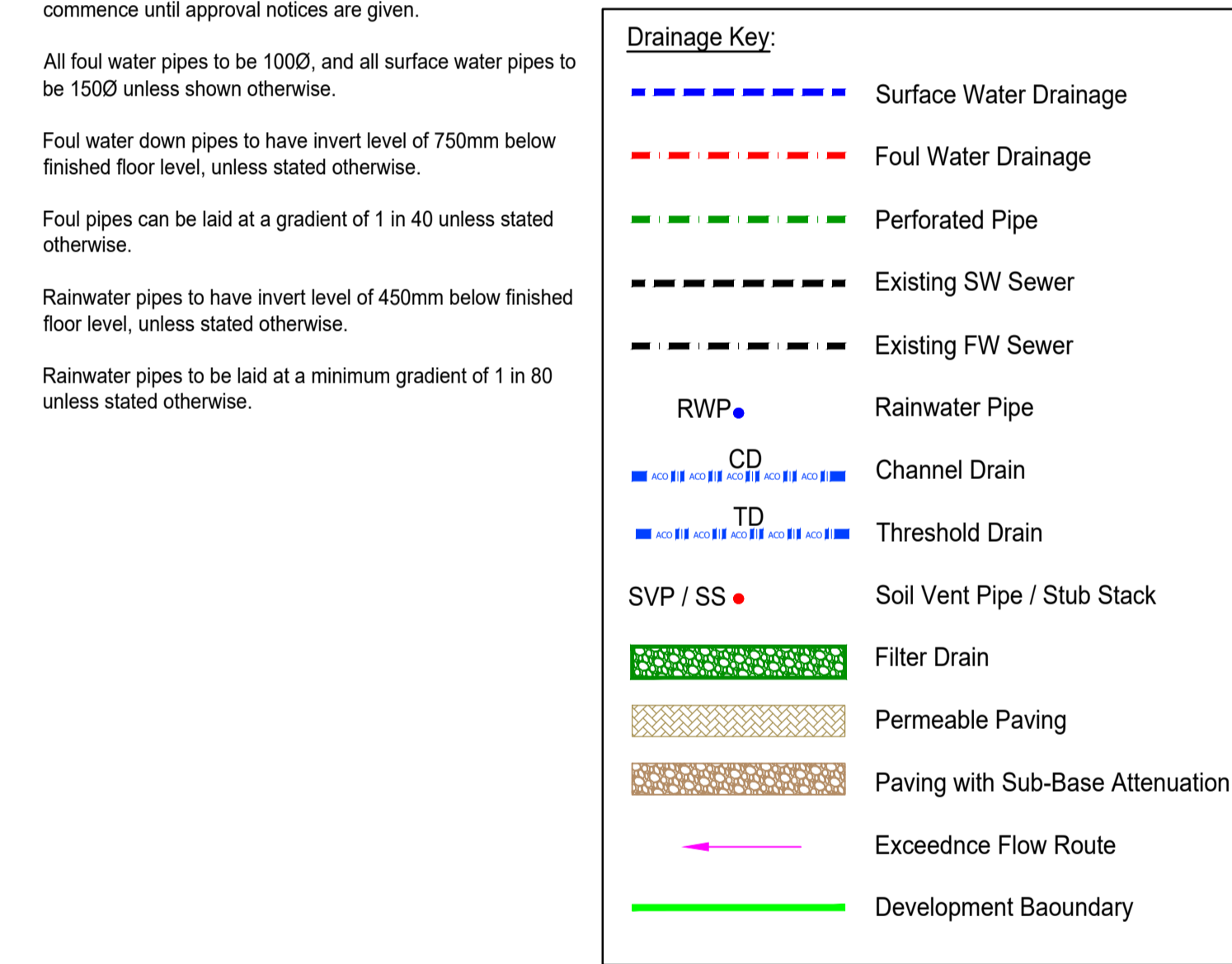
Foul water down pipes to have invert level of 750mm below finished floor level, unless stated otherwise.

Foul pipes can be laid at a gradient of 1 in 40 unless stated otherwise.

Rainwater pipes to have invert level of 450mm below finished floor level, unless stated otherwise.

Rainwater pipes to be laid at a minimum gradient of 1 in 80 unless stated otherwise.

**Drainage Specifications**  
 Foul water pipes to be Poly pipe to BS EN 1401-1 or similar  
 Surface water pipes to be Poly pipe Riddigrain or similar  
 Manholes to be PCC by FC McCann or similar  
 Flow control to be Hydro-Brakes by Hydro International  
 Inspection chambers to be Poly pipe or similar  
 Threshold and Channel drain by ACO or similar



**Exceedence Event Note**  
 If an extreme storm greater than the designed 1 in 100-year + 40% climate change were to occur, there is a potential for the network to flood.  
 Flood water will follow the topography of the post and pre-development site, where it will flow away from the proposed residential building, towards the south-east boundary and into the Bridgewater Canal.  
 The flood water will not flow towards any existing dwelling / properties near the site, and therefore will not increase the risk of flooding to the proposed dwelling or to neighbouring land and property.

UP STREAM MH DETAILS							PIPE DETAILS			DOWN STREAM MH DETAILS			FURTHER INFORMATION	
MH	CL	IL	DEPTH TO SOFFIT	MH SIZE	MH TYPE	COVER SIZE	COVER TYPE	PIPE SIZE	PIPE GRADIENT	PIPE LENGTH	D / S MH	D / S CL		D / S IL
F1	26.840	25.850	0.840	460	PPIC	460x460	Recessed	150	80	2.50	F2	26.840	25.818	Poly pipe PPIC
F2	26.840	25.818	0.872	460	PPIC	460x460	Recessed	150	80	6.45	F4	26.840	25.737	Poly pipe PPIC
F3	26.940	25.940	0.850	460	PPIC	460x460	Recessed	150	80	1.70	Y-Junction to Mian Drainage		Poly pipe PPIC	
F4	26.840	25.737	0.953	460	PPIC	460x460	Recessed	150	80	4.70	F5	26.840	25.678	Poly pipe PPIC
F5	26.840	25.678	1.012	460	PPIC	460x460	Recessed	150	80	10.50	F6	26.900	25.547	Poly pipe PPIC
F6	26.900	25.547	1.203	460	Silt Trap Chamber	460x460	Solid Cover with 350mm Reducer	150	80	21.75	F9	26.740	25.275	Silt Trap Chamber
F7	26.840	26.040	0.650	460	PPIC	460 Diameter	Solid	150	-	1.30	Y-Junction to Mian Drainage		Poly pipe PPIC	
F8	26.840	26.040	0.650	460	PPIC	460 Diameter	Solid	150	-	1.30	Y-Junction to Mian Drainage		Poly pipe PPIC	
F9	26.74	25.275	1.315	460	PPIC	460x460	Solid Cover with 350mm Reducer	150	80	14.3	F11	26.840	25.095	Poly pipe PPIC
F10	26.84	25.94	0.750	460	PPIC	460x460	Recessed and Sealed	150	8	7	F11	26.840	25.095	Poly pipe PPIC
F11	26.84	25.095	1.595	460	PPIC	460x460	Solid Cover with 350mm Reducer	150	44	14.25	UU 0402	26.700	24.775	Poly pipe PPIC

S1	26.840	26.090	0.600	460	PPIC	460x460	Recessed	150	80	3.75	S3	26.840	26.045	Poly pipe PPIC
S2	26.840	26.140	0.550	460	PPIC	460x460	Recessed	150	80	7.45	S3	26.840	26.045	Poly pipe PPIC
S3	26.840	26.045	0.645	460	PPIC	460x460	Recessed	150	80	30.70	S8	26.840	25.660	Poly pipe PPIC
S4	26.840	26.140	0.550	460	PPIC	460x460	Recessed	150	4	2.00	S8	26.840	25.660	Poly pipe PPIC
S5	26.840	26.055	0.635	460	PPIC	460x460	Solid	150	80	18.40	S6	26.840	25.825	Poly pipe PPIC
S6	26.840	25.825	0.865	460	PPIC	460x460	Solid	150	80	11.10	S7	26.840	25.685	Poly pipe PPIC
S7	26.840	25.685	1.005	460	PPIC	460x460	Recessed	150	80	2.00	S8	26.840	25.660	Poly pipe PPIC
S8	26.840	25.660	1.030	1200	Flow Control	750x750	Recessed	150	40	13.85	UU 0401	26.650	25.310	Flow Control Chamber

PRELIMINARY - FOR APPROVAL

**PROPOSED DEVELOPMENT AT  
 SLATE WHARF  
 CASTLEFIELD  
 FOR PRESTBURY ESTATES LTD**

Scale: 1:100 @ A1  
 Drawn by: MDS  
 Date: Aug '21

Drawing No.:  
 c 13955/30-P2

BELOW GROUND DRAINAGE LAYOUT

**NORTHERN STRUCTURAL  
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