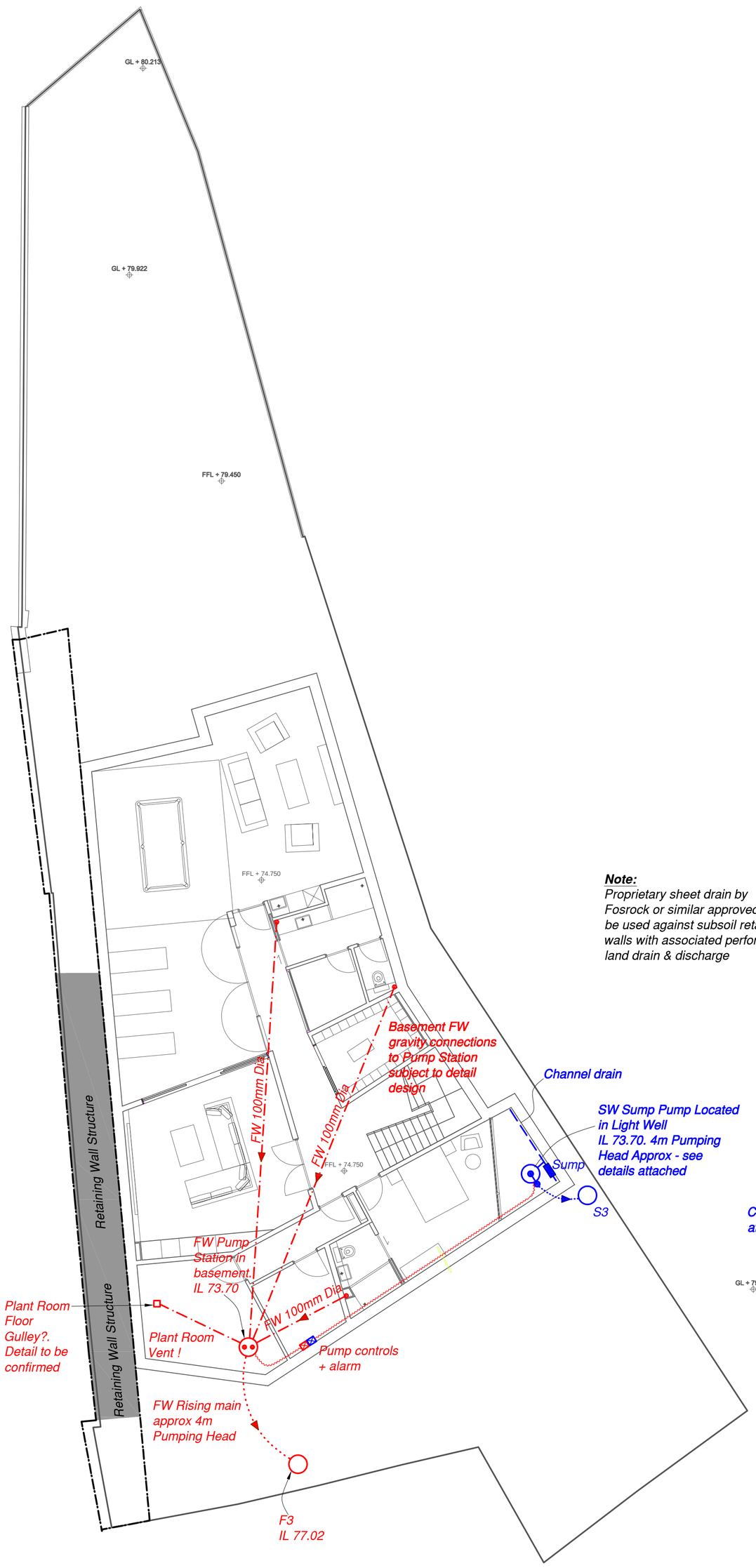
Key

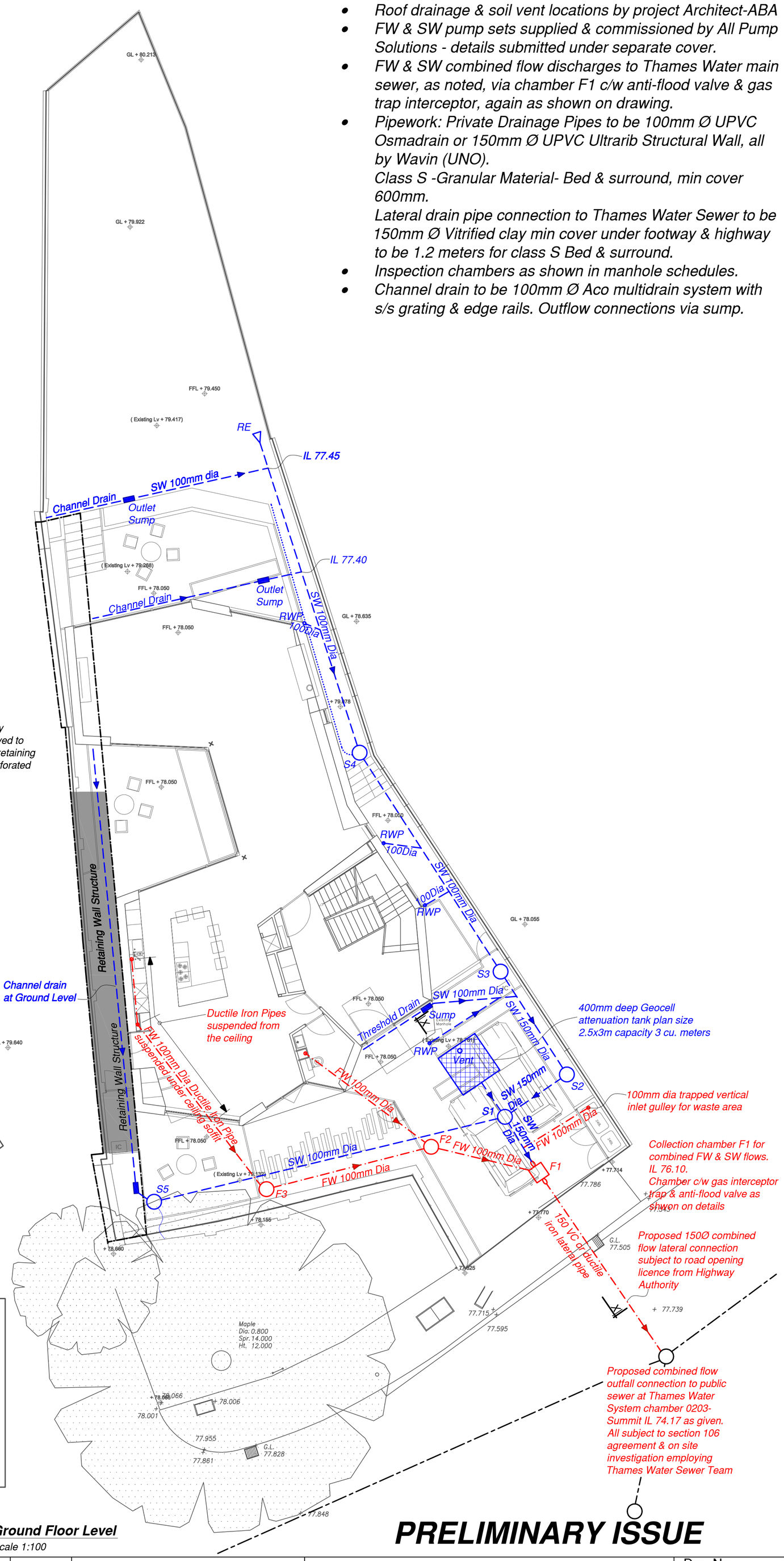
FWMH	Foul Water Manhole
SWMH	Storm Water Manhole
	Foul Water Gravity Pipe
	Storm Water
	Foul Water Pump
	Storm Water Pump
	RWP

Proposed Ground Floor & Basement Drainage:

- *All works subject to planning approval, Building Regulation Approval & detail design changes.*
- *SW discharges to combined flow chamber F1 via flow-control chamber SI. SW outflow restricted to existing greenfield runoff using hydro brake flow control as shown. Temporary storm water storage volume calculated using 1:100 year storm event + 30% for climate change + 10% increase in impermeable area post development. Storage tank constructed from Geocell units or similar approved c/w waterproof membrane surround, vent & top hat pipe connection to chamber F1. All generally in accordance with FRA prepared by Price & Myers.*
- *Roof drainage & soil vent locations by project Architect-ABA*
- *FW & SW pump sets supplied & commissioned by All Pump Solutions - details submitted under separate cover.*
- *FW & SW combined flow discharges to Thames Water main sewer, as noted, via chamber F1 c/w anti-flood valve & gas trap interceptor, again as shown on drawing.*
- *Pipework: Private Drainage Pipes to be 100mm Ø UPVC Osmadrain or 150mm Ø UPVC Ultrarib Structural Wall, all by Wavin (UNO). Class S -Granular Material- Bed & surround, min cover 600mm. Lateral drain pipe connection to Thames Water Sewer to be 150mm Ø Vitrified clay min cover under footway & highway to be 1.2 meters for class S Bed & surround.*
- *Inspection chambers as shown in manhole schedules.*
- *Channel drain to be 100mm Ø Aco multidrain system with s/s grating & edge rails. Outflow connections via sump.*



Note:
Proprietary sheet drain by Fosrock or similar approved to be used against subsoil retaining walls with associated perforated land drain & discharge



SW Run-off Stategy:
The storm water flows are controlled by the use of a "Hydro-brake" installed to chamber S1. The Hydro-brake has been designed to limit the outflow from new development (taking account of a 1:100 year storm event plus 30% for climate change) to less than the existing outflow from the site.
The storm water flows collect in chamber S1, the Hydro-brake restricts the outflow and in he event of heavy rainfall the storm water backs-up into the into the attenuation tank.

Basement Level
Scale 1:100

Ground Floor Level
Scale 1:100

PRELIMINARY ISSUE

REV	DATE	
A	04.01.14	*Redrawn*
B	07.01.14	*Updated*
B	07.01.14	*Additional notes added, extent of retaining wall reduced.*

brunel design partnership
Consulting Engineers
West End House, Blackfriars Road,
Nailsea, Bristol BS48 4DJ
Tel: 01275 866499 Fax: 01275 866122
Email: Bruneldesign@bruneldesign.co.uk

Contract	28 Belsize Lane, London.	Scale	1:100 @ A1
Title	Drainage GA - Ground Floor & Basement	Date	Dec. 13
Architect	Alison Brooks Architects	Drawn by	WA

Drg. No. C
B3897/100