

SURFACE WATER DRAINAGE
Rainwater to be collected in 100mm wide half round uPVC and 65mm diameter uPVC downpipes. Water to discharge to Marley rainwater gullies. Rainwater to disperse to surface water SAB system *as designed by Coopers civil engineers.*

PLUMBING
Wastes from wash hand basins, bath, shower and Kitchen sink to be 50mm minimum diameter uPVC pipe fitted with 75mm deep seal traps. WC wastes to be 110mm diameter uPVC PolyPipe. Wastes to connect into 110mm diameter uPVC SVP's or Short Stacks as indicated. Where drains connect to SVP within garage contractor to fit fire collars to prevent main dwelling from ingress of fire providing minimum 30min fire protection. All connections being made on bossed socket adapters. SVP to terminate 900mm above nearest opening light and fitted with anti pest cover or tile and vent terminal dependant on its location. Short Stack to terminate above flood level of any sanitary ware and be fitted with Durgo air admittance valve. Kitchen sink to connect into BIG as indicated, any further appliances to connect into anti-syphon traps prior to discharging to BIG serving Kitchen area.

FOUL DRAINAGE
All new drains are to be 110mm diameter uPVC drains laid in granular material at a fall of 1 in 40. Drainage to connect into Soil Vent Pipes (SVPs) or short stacks as indicated. Wastes to connect into 450mm & 300mm preformed manholes as indicated, set on 150mm thick concrete base. New pipes to be haunched in sand/ cement mortar. SVP and short stack to have 600mm radius bend at base. Drains passing through walls are to be isolated from structure with 600mm long x 100mm wide x 150mm deep reinforced concrete lintels. Drains passing under structure and within 300mm of finished external ground level are to be encased with 150mm concrete. Wastes to connect into existing foul water drains. Any new preformed manholes to be fitted in strict accordance to manufacturer's instructions. Invert and cover levels of manholes to be confirmed prior to commencement of any drainage works. *All drainage works is subject to a Section 10s & 10s Agreement from Welsh Water. Contractor to inspect any existing drainage system prior to any drainage works*

PHYSICAL INFRASTRUCTURE FOR HIGH SPEED ELECTRONIC COMMUNICATIONS NETWORKS (PART R BUILDING REGULATIONS)
Building work must be carried out so as to ensure that the building is equipped with a high-speed-ready in building physical infrastructure up to a network termination point for high speed electronic communications networks. Requirement R1 is to ensure that copper or fibre-optic cables or wireless devices capable of delivering broadband speeds of greater than 30Mbps can be installed in the future. A suitable position for at least 1 network termination point is to be identified by the contractor, suitable ducting should be provided to connect all such network termination points to an appropriate access point. Contractor to refer to PAS 2016 and manufacturer's specifications on the duct dimensions, bending radii etc, required to allow copper and fibre optic cables to be installed.

SPRINKLER SYSTEM
Dwelling to be fitted with sprinkler system to specialist manufacturers details. Sprinkler system to be zoned to ensure system targets affected area. *Specialist Manufacturer to specify exact positioning of sprinkler heads* Fire sprinkler system to be in accordance with BS 9251:2014 (fire sprinkler systems for domestic, residential and occupancies - code of practice). All works in relation to sprinkler system to be as per specialist manufacturer's specification. Installer to provide certification for installation of sprinkler system on completion.

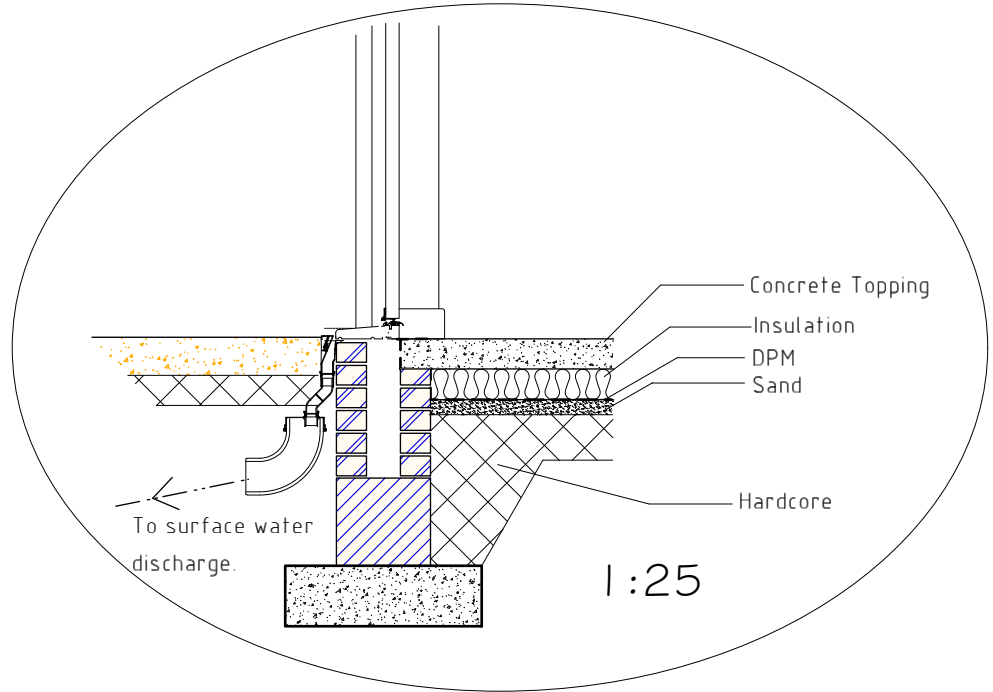
ELECTRICAL WORKS
All electrical works are to be completed by a competent person registered with an electrical self-certification scheme and to take full responsibility to ensure that new works are in compliance with BS7671:2001. On completion the client should receive certification signed by the designer, installer and person responsible for testing of the new electrical system. Ensure that electrical sockets and light switches are sited between 450mm and 1200mm above floor level. Avoid placing sockets back to back, stagger with 150mm minimum gap. Ensure cables to be sleeved where possible contact with polystyrene could occur.

MECHANICAL VENTILATION
Provide mechanical ventilation to wc, kitchen, en-suite and bathroom by means of Vent Axia or similar wall/ceiling mounted electrically operated fans extracting directly to external air to the following requirements:

WC - Lo-Carbon Solo Plus T - Centrifugal Extract Fan, Fan to extract at a rate of 6 litres per second min, door to be undercut by 10mm to allow for continuous ventilation
Bathroom, en-suite, - fans to extract at a rate of 15 litres per second, (type of fan to be in line extractor confirmed adequate by manufacturer) to be operated in conjunction with light switch with a 15 minute over run facility. (Door to bathroom and en-suite to be undercut by 10mm to allow for continuous ventilation)
Kitchen - cooker hood to extract at a rate of 30 litres per second
Vents to be covered with weather proof grilles taken to tile vent terminal at points of discharge to external air.

FIRE PRECAUTIONS
Provide mains operated interacting smoke/heat detectors to the positions indicated on floor plans. All detection units are to be provided with battery back up with the ability to be trickle charged to ensure continuity in the event of mains power failure. Detection and warning of fire from one unit must be audible throughout each entire dwelling. Detectors to be positioned 300mm minimum away from walls and lights. Detection units in each dwelling are to be linked to ensure early warning of fire is achieved.

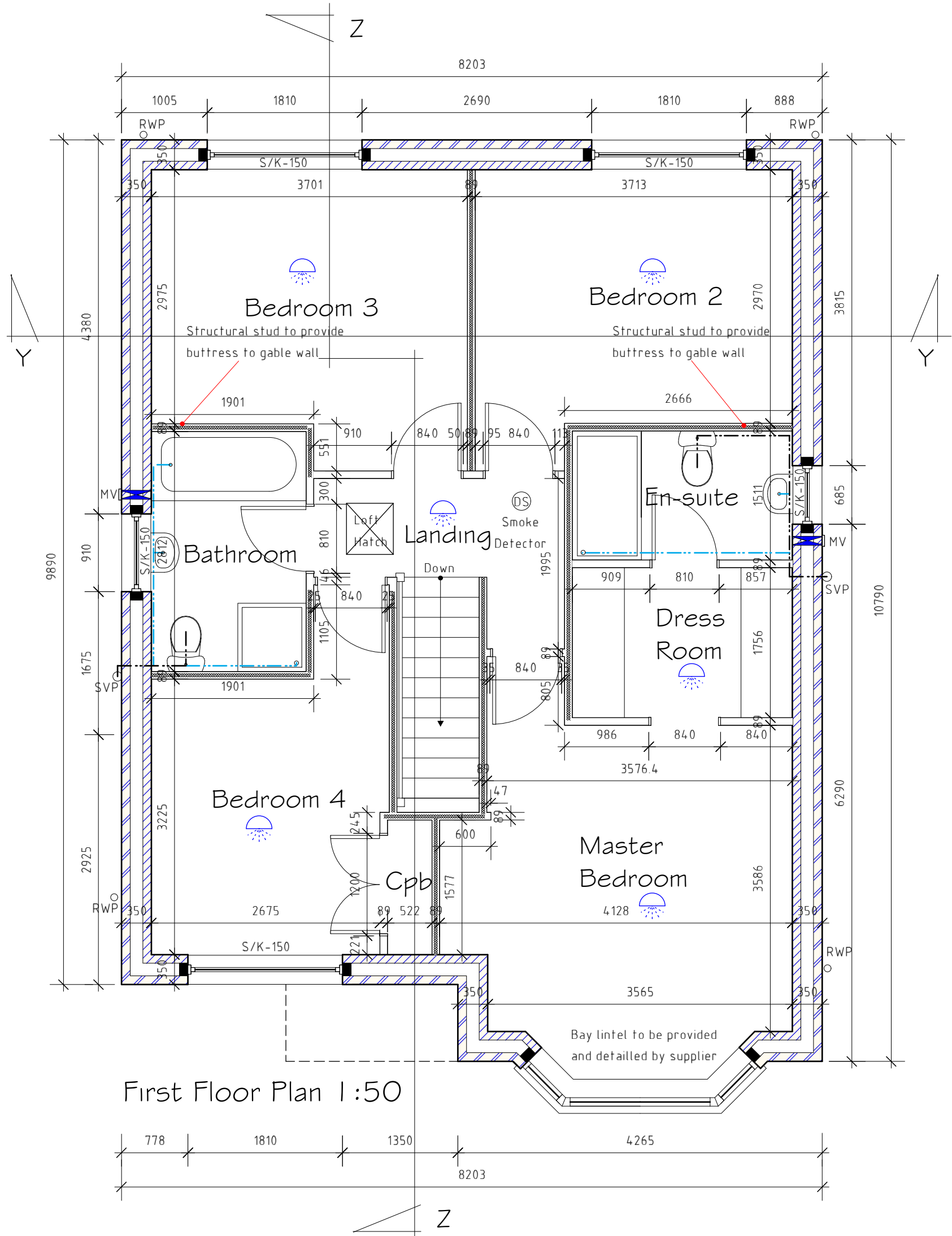
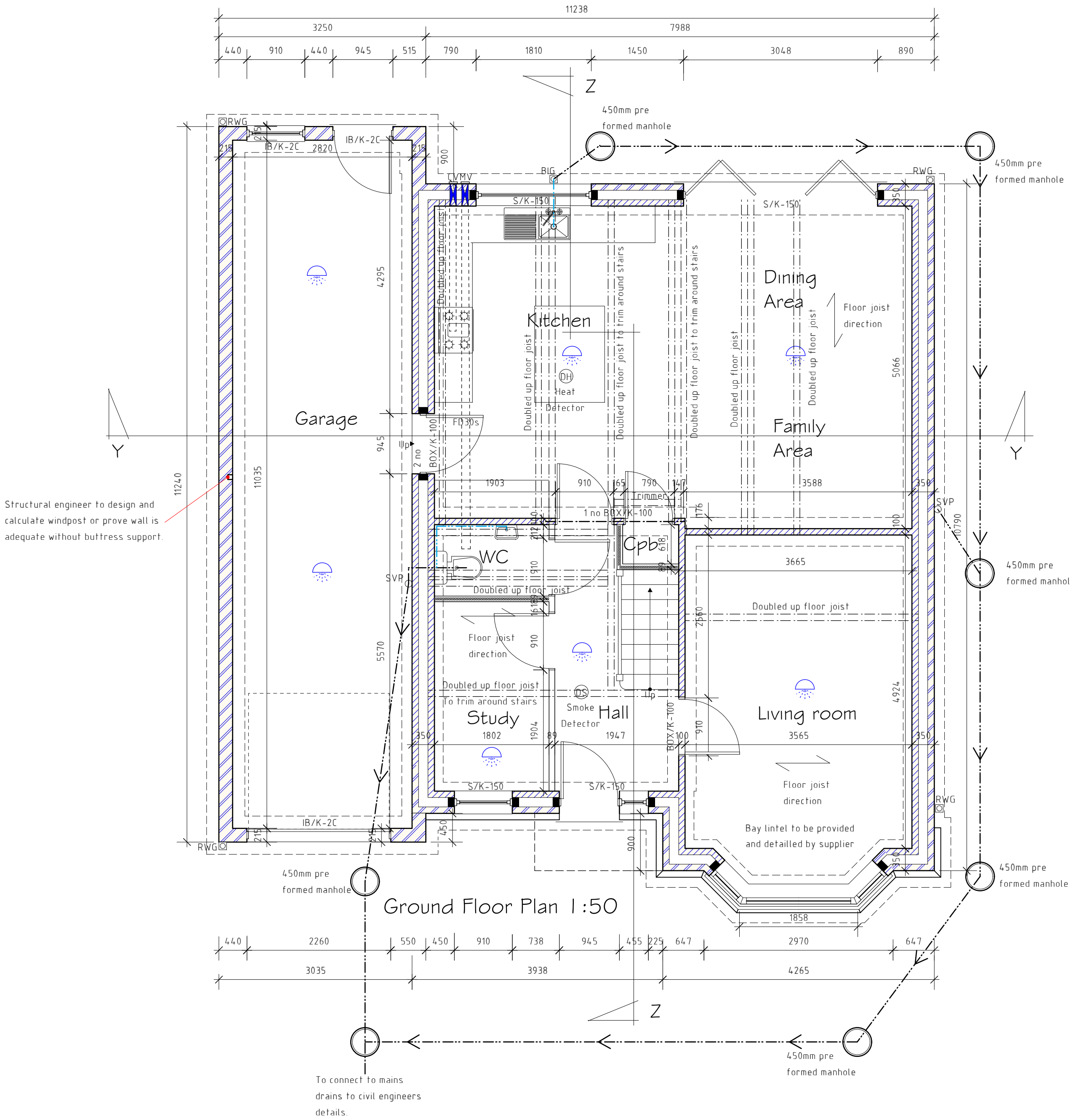
HEATING
Dwelling to be heated by means of GAS fired condensing combi boiler with a SEDBUK rating of at least 89% to power radiators & underfloor, system fitted with time and temperature zone control system. Boiler to be fitted with weather compensator and interlock. No radiators to be fitted in positions which would reduce landings / walkways to less than 900mm wide. Ensure boiler will not discharge opposite boundaries where within 2.5m. Heating system installed by GAS SAFE registered engineer.



DISABLED ACCESS
Provide ramped access, maximum gradient of 1 in 12 to entrance point of dwelling with 900mm deep level platform at top of slope. Allow for roll-over threshold to front door. Internal doors are to be of such a size so as to provide clear opening between stops of 800mm.

EFFICIENT LIGHTING
100% of fixed light fittings to be fitted with lighting outlets which take lamps of luminous efficacy of at least 40 lumens/circuit watt to ensure that extension has efficient light fittings of more than one per 25m². Otherwise, ensure 100% of all new fixed light fittings are fitted with lamps of at least 40 lumens / circuit watt luminous efficiency.

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PLANS HAVE NOT YET GAINED LOCAL AUTHORITY APPROVAL AND MAY BE SUBJECT TO CHANGE

SHOULD ANY VARIATIONS BETWEEN TIMBER FRAME DRAWINGS AND ARCHITECTURAL PLANS BE FOUND CONTRACTOR TO CONTACT TIMBER FRAME MANUFACTURER

PLANS MUST BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEERS DETAILS & SAP ASSESSORS DETAILS

DO NOT SCALE OFF DRAWING: If in doubt, ask.

A	05/21	Design Amends	D.J.E.
Rev	Date	Detail	Initial

Project: Plot 8 Proposed residential development at Willow Cottage, Ruabon, Wrexham. LL14 6LE.	
Title: Floor Plans	Scale: (A1) 1:50
Drawn By: D.J.Edwards	Date: March 2021
Drawing No: G080/023	Sheet: 1 of 3