New and altered steel stanchions and roof rafters and cross bracing sizes are indicative and require Portal Frame Design by Specialist Consultant.

Trimming Out Steelworks through First Floor Structure to suit Clients Disabled Platform Lift equipment, 1250mm wide x 1560mm deep including motor gear at rear end of the lift

Existing dual pitched steel beam rafters to Gridlines A and G to be removed and the stanchions increased in height to suit 4700mm eaves height above existing floor slab level with new sections welded in.

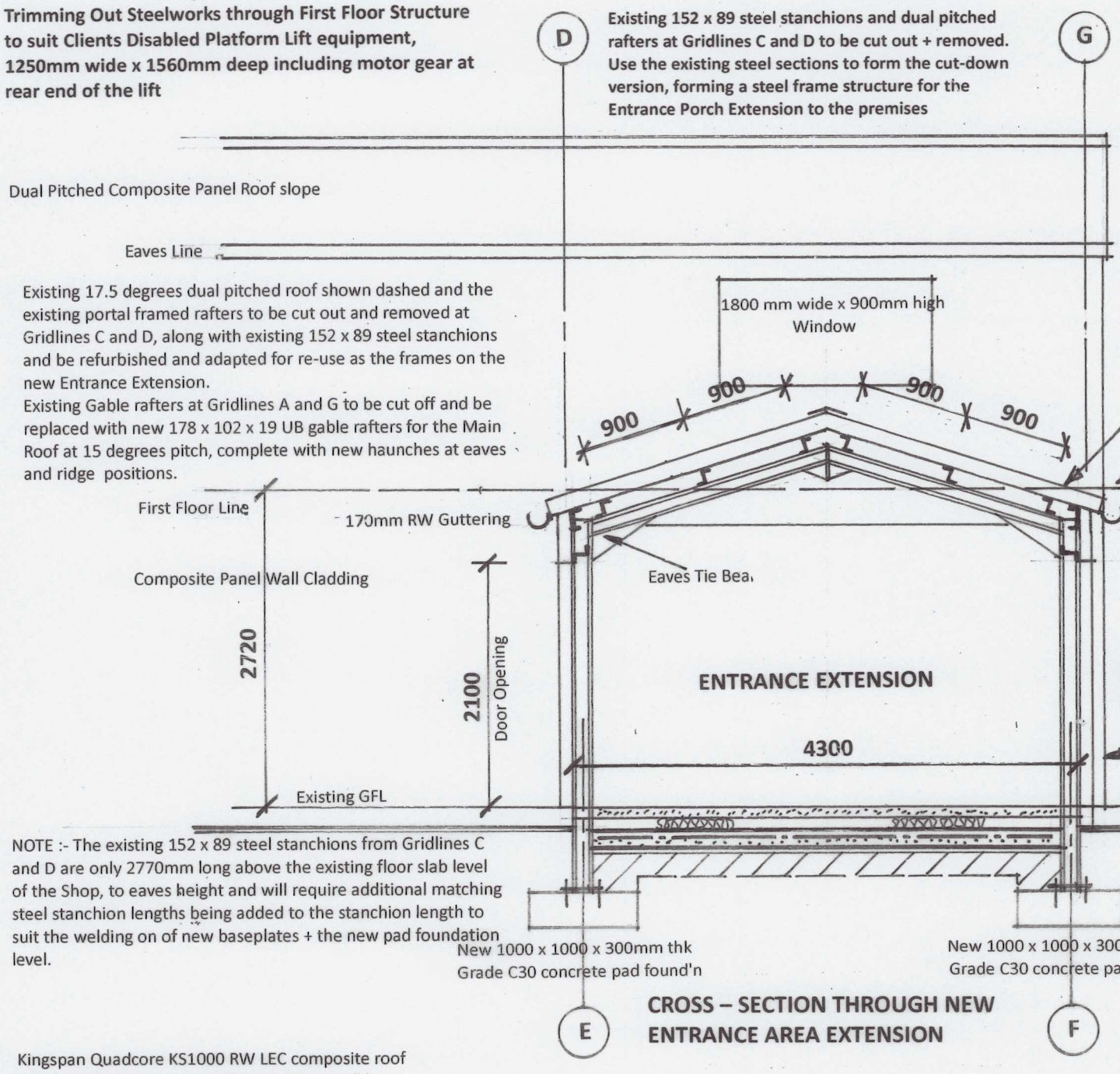
Existing 152 x 89 steel stanchions and dual pitched rafters at Gridlines C and D to be cut out + removed. Use the existing steel sections to form the cut-down version, forming a steel frame structure for the Entrance Porch Extension to the premises

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PROPOSED EXTENSIONS AND ALTERATIONS TO BRONINGTON VILLAGE SHOP PREMISES AT SCHOOL LANE, BRONINGTON, NR. WHITCHURCH, WREXHAM, SY13 3HN FOR MESSRS R. MILLERCHIP AND P. HUXLEY.

DRAWING NO. 325 / 003 AUGUST 2024
SCALE OF DRAWING :- 1 : 50 at A3

CROSS SECTIONS FOR GENERAL BUILDING AND STEELWORKS ARRANGEMENTS



Existing 17.5 degrees dual pitched roof shown dashed and the existing portal framed rafters to be cut out and removed at Gridlines C and D, along with existing 152 x 89 steel stanchions and be refurbished and adapted for re-use as the frames on the new Entrance Extension.
Existing Gable rafters at Gridlines A and G to be cut off and be replaced with new 178 x 102 x 19 UB gable rafters for the Main Roof at 15 degrees pitch, complete with new haunches at eaves and ridge positions.

NOTE :- The existing 152 x 89 steel stanchions from Gridlines C and D are only 2770mm long above the existing floor slab level of the Shop, to eaves height and will require additional matching steel stanchion lengths being added to the stanchion length to suit the welding on of new baseplates + the new pad foundation level.

Kingspan Quadcore KS1000 RW LEC composite roof panels with 100mm core (131mm thk overall) to achieve a U value of 0.18 W/m2k OR Equivalent. to comply with Welsh Govt Building Regulations - Approved Document L2.

Albion 14620 x 4.62 kg/m OR Equivalent Single Span overlap / sleeved roof purlins to Entrance Extension roof, fixed over the refurbished, relocated steel beam rafters complete with cleats as per BS EN 1993-1-3 : 2006.

Kingspan QuadcoreKS1000 RW composite wall panels with 73mm core (104mm thk overall) to achieve a U value of 0.25 W/m2k OR Equivalent. to comply with Welsh Govt Building Regulations - Approved Document L2.

Albion 14620 x 4.62 kg/m OR Equivalent Single Span Butt side rail system to walls, fixed between columns complete with inset cleats as per BS EN 1993-1-3 : 2006.

New Ground Floor Construction to Entrance Extension to comprise of a 75mm thk nylon fibre reinforced ready-mixed floor screed on 500 gauge polythene separating membrane or 100mm thk Celotex GA4000 PIR floor insulation on 150mm thk Grade C30 concrete slab, reinforced with A193 mesh fabric to the top section of the floor slab with min 40mm concrete cove on 1200 gauge Visqueen damp-proof membrane, turned up to side walls and into the external wall DPC position, on min 25mm rolled sand blinding on min 200mm thk consolidated crushed stone hardcore, free from water soluble sulphates, vegetable matter + other deleterious materials.

CROSS – SECTION THROUGH NEW ENTRANCE AREA EXTENSION

NOTE :- Steel Beams and Stanchion sizes to Portal Frames are indicative and require Specialist Consultants Portal Frame Design for confirmation.

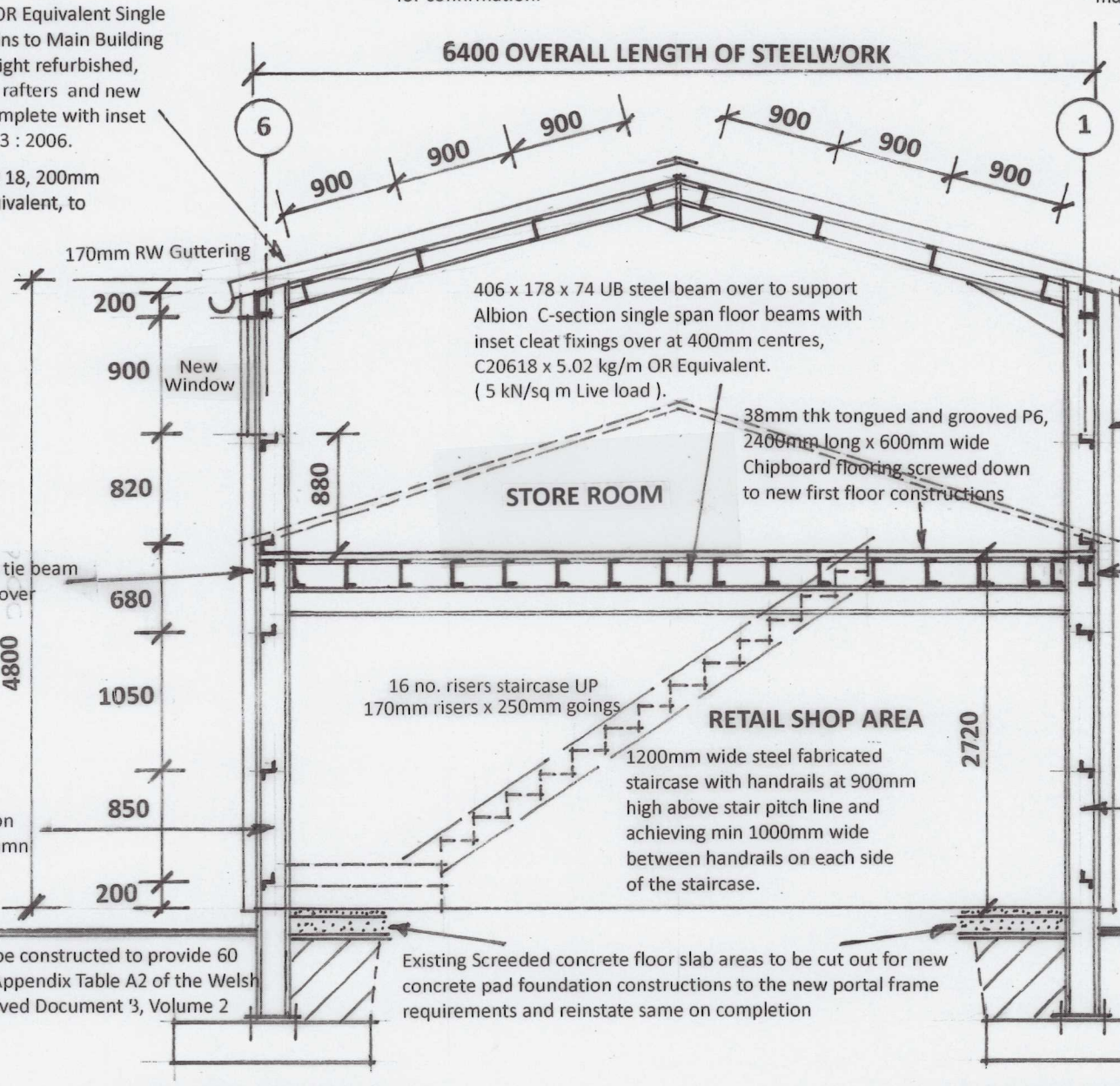
Kingspan Quadcore KS1000 RW LEC composite roof panels with 100mm core (131mm thk overall) to achieve a U value of 0.18 W/m2k OR Equivalent. to comply with Welsh Govt Building Regulations - Approved Document L2.

Albion 14620 x 4.62 kg/m OR Equivalent Single Span butt jointed roof purlins to Main Building roof, fixed over the new height refurbished, relocated steel beam gable rafters and new steel portal frame rafter complete with inset cleats as per BS EN 1993-1-3 : 2006.

Albion Eaves Beams EB 200 18, 200mm high x 100mm wide OR Equivalent, to BS EN 1993-1-3 : 2006

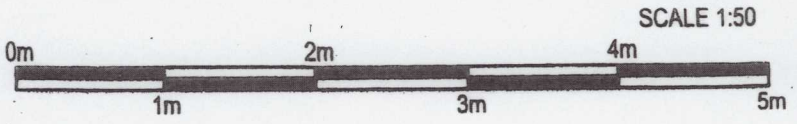
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Albion 14620 x 4.62 kg/m OR Equivalent Single Span Butt side rail system to walls, fixed between columns complete with inset cleats as per BS EN 1993-1-3 : 2006.



CROSS – SECTION TO MAIN BUILDING

SCALE 1:50



All new concrete foundations to be founded at least 1000mm deep below ground level, in solid firm ground conditions to be agreed with Building Inspector.

Gridline 1 External Wall Construction in close proximity to neighbouring boundary to be constructed to provide 60 minutes Fire Resistance, full height, as per Appendix Table A2 of the Welsh Govt Building Regulations Approved Document B, Vol 2