

EN40 WIND ZONE MAP

Wind loading categories

	N/m ²
Extra Heavy	576
Heavy	466
Medium	429
Light	396
Specialist	Contact Abacus

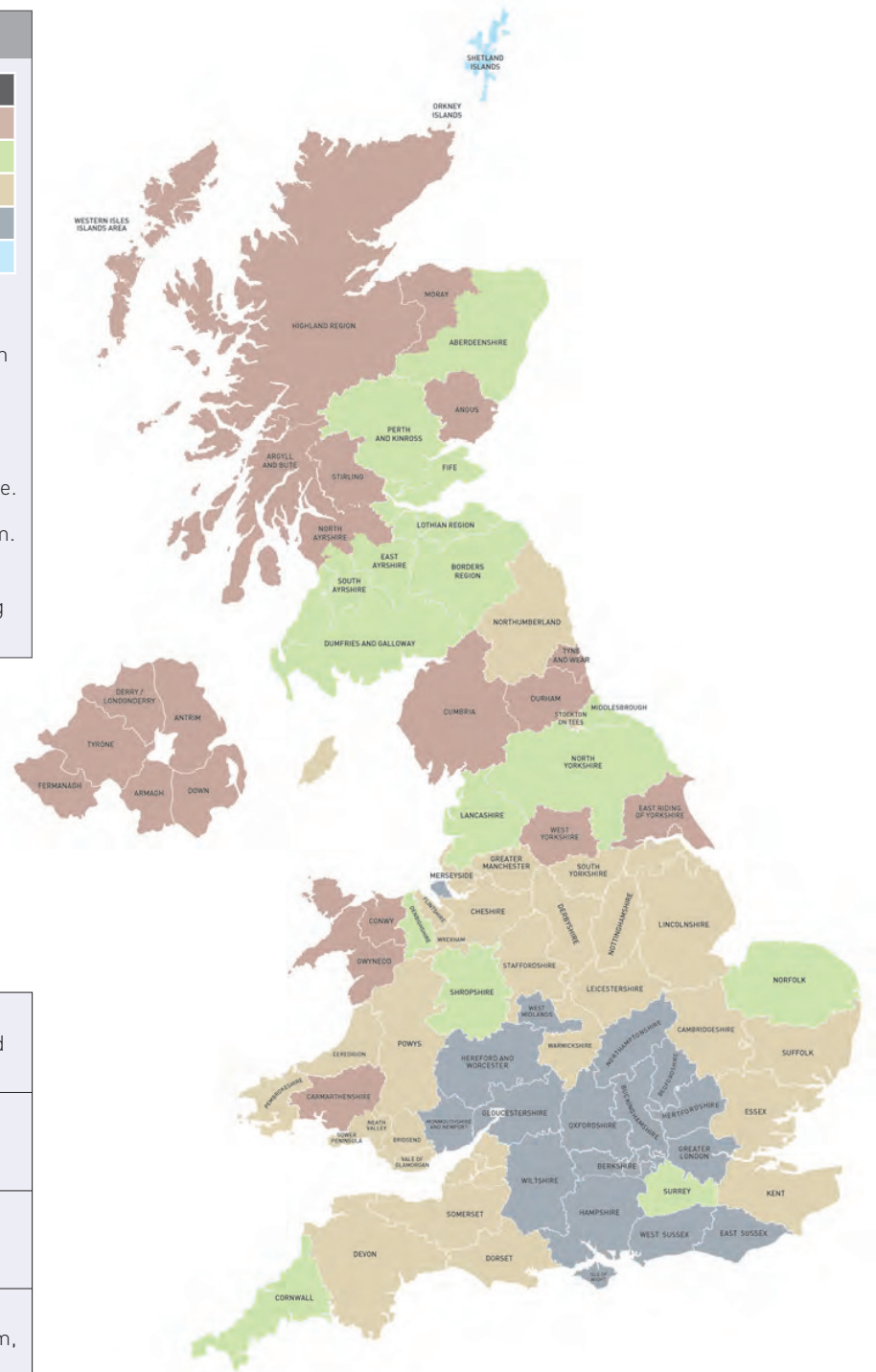
The rationalized wind loading factor, R_{wf} , are all stated at 10m above ground level, and for a mean return period of 25 years.

Abacus standard columns are based on:

Terrain Category II - 8m and above.

Terrain Category III - less than 8m.

Note: coastal sites, sites above 250m or sites subject to funnelling will require special consideration.



Tyne and Wear includes:

Gateshead, Newcastle, North and South Tyneside and Sunderland.

West Yorkshire includes:

Calderdale, Bradford, Kirklees and Wakefield.

South Yorkshire includes:

Barnsley, Doncaster, Rotherham and Sheffield.

Greater Manchester includes:

Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan.

West Midlands includes:

Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton.

Greater London includes:

All London boroughs.

Terrain Category I:

Seasides. At the edge of a lake with a length exposed to the wind of at least 5km. Flat even land without obstacles.

Terrain Category II:

Fenced off cultivated land, some small agricultural buildings, houses or trees.

Terrain Category III:

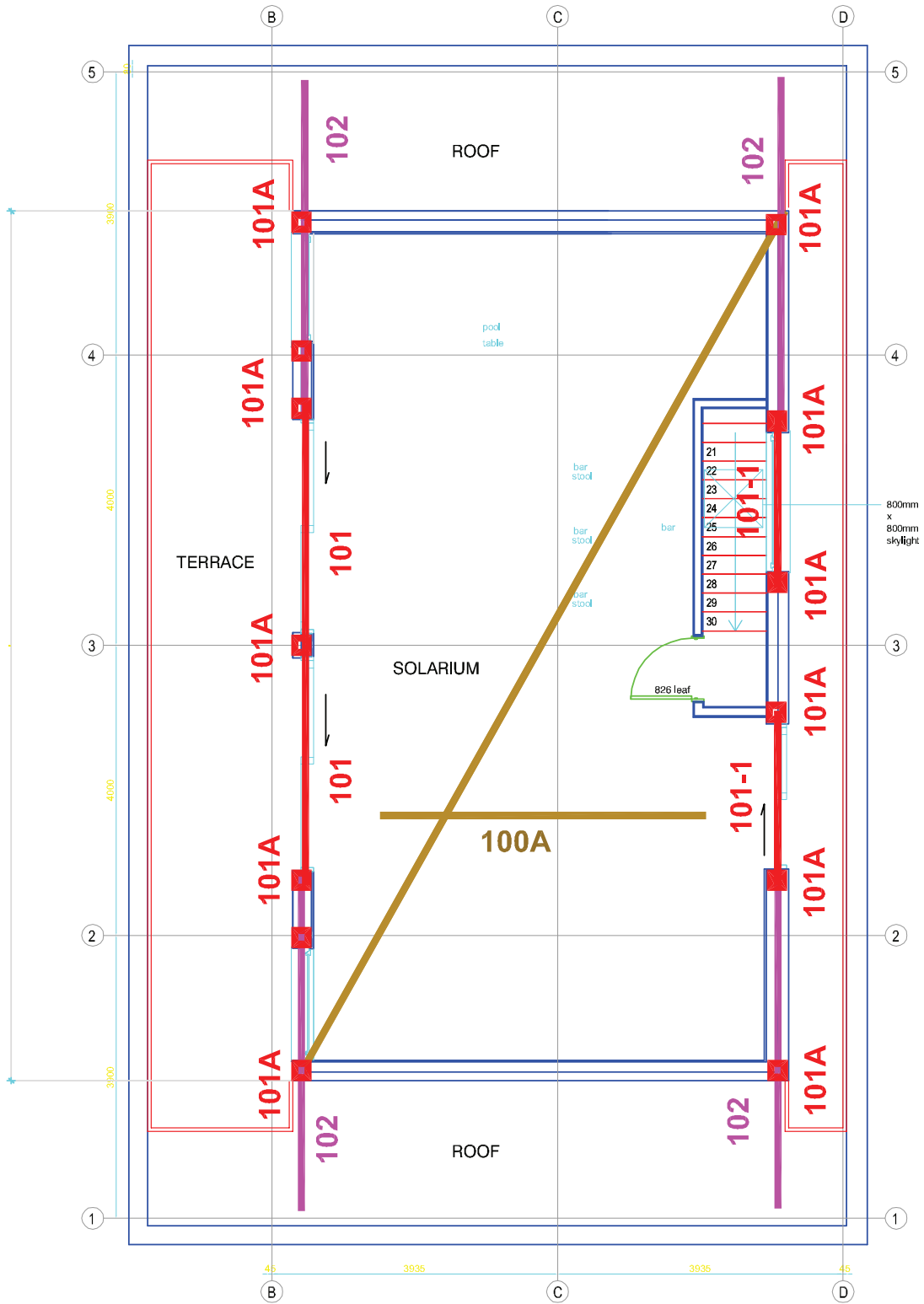
Industrial or sub-urban zones and forest.

Terrain Category VI:

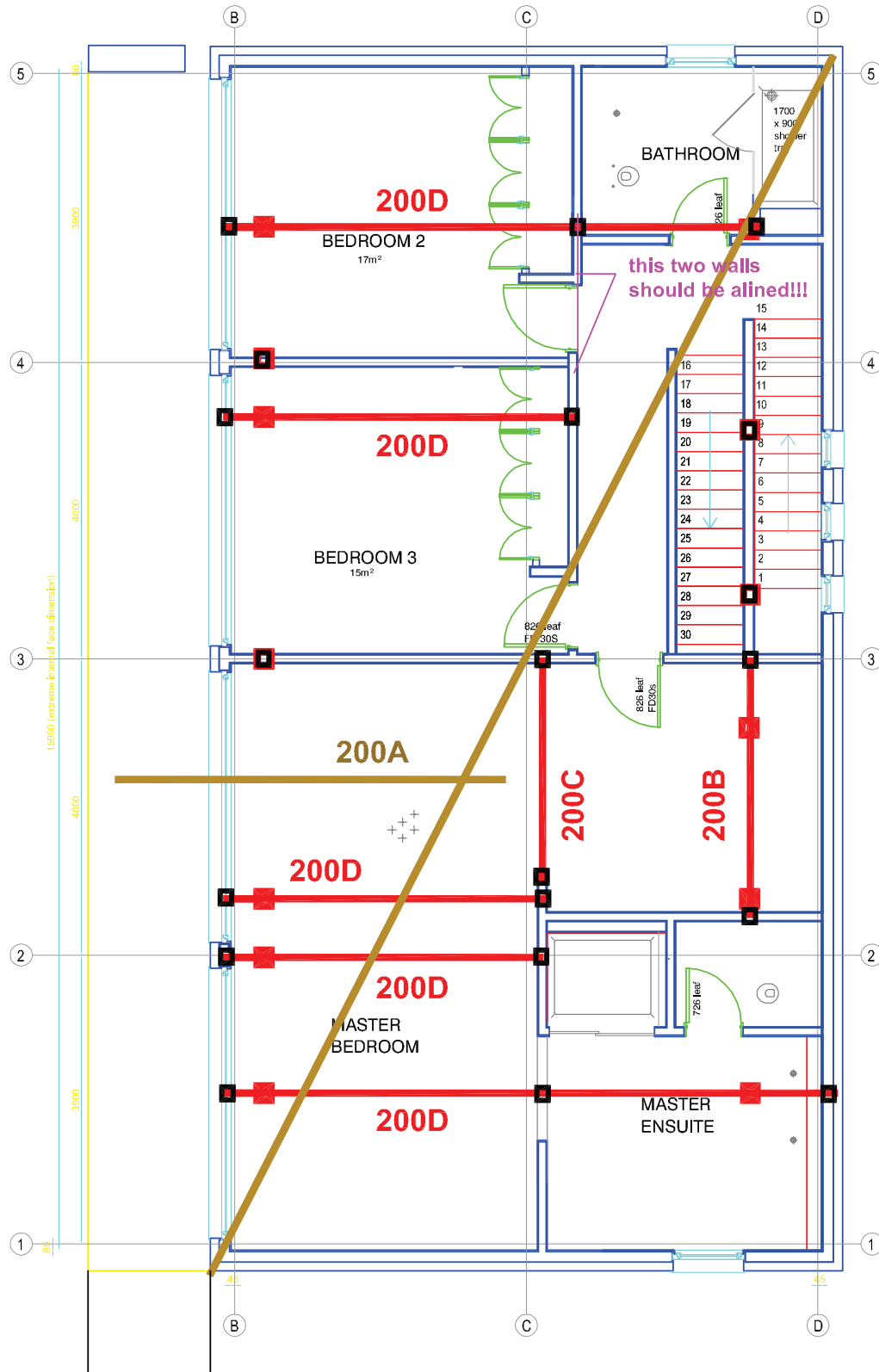
Urban perimeters with at least 15% of the surface built on, and/or on which the average heights of buildings exceed 15m.

Table A.1 - Rationalized wind loading factor, Rwf and maximum altitude.

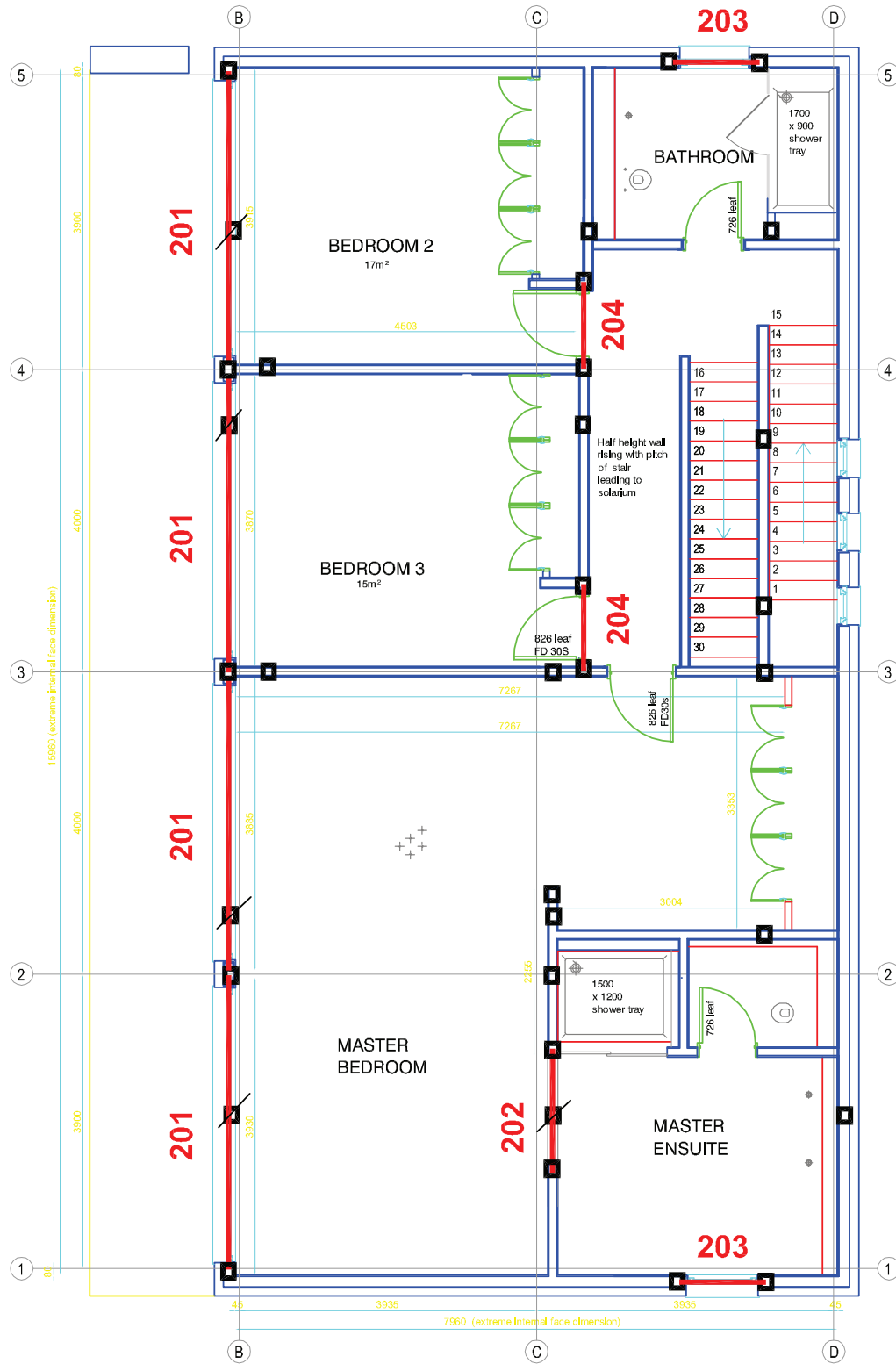
Administrative Area	Maximum Altitude m	10 Min Mean Wind Velocity m/sec	Rationalized Wind Loading Region	Administrative Area	Maximum Altitude m	10 Min Mean Wind Velocity m/sec	Rationalized Wind Loading Region
Aberdeen	141	25.2	Heavy	Medway	174	22.58	Light
Aberdeenshire	117	25.73	Heavy	Merseyside	142	24.15	Medium
Angus	250	25.2	Extra Heavy	Merthyr Tydfil	250	22.58	Heavy
Antrim	217	26.25	Extra Heavy	Mid Lothian	141	25.2	Heavy
Argyll and Bute	170	27.3	Extra Heavy	Middlesbrough	95	26.25	Heavy
Armagh	250	24.68	Extra Heavy	Milton Keynes	202	22.05	Light
Bath and North East Somerset	250	22.05	Medium	Monmouthshire and Newport	202	22.05	Light
Bedfordshire	147	23.1	Light	Moray	250	25.2	Extra Heavy
Blackburn and Darwen	142	24.15	Medium	Neath Port Talbot	193	23.1	Medium
Blackpool	98	24.15	Light	Norfolk	95	26.25	Heavy
Blaenau Gwent	250	22.05	Medium	North Ayrshire	217	26.25	Extra Heavy
Bournemouth	98	24.15	Light	North East Lincs	52	25.2	Light
Bracknell Forest	250	21	Light	North Lanarkshire	190	24.15	Heavy
Bridgend	221	22.58	Medium	North Lincs	94	25.2	Medium
Brighton and Hove	147	23.1	Light	North West Somerset	202	22.05	Light
Bristol	231	21.53	Light	North Yorkshire	95	26.25	Heavy
Buckinghamshire	202	22.05	Light	Northamptonshire	147	23.1	Light
Caerphilly	250	22.05	Medium	Northumberland	50	26.25	Medium
Carmarthenshire	250	25.2	Extra Heavy	Nottingham	147	23.1	Light
Cambridgeshire	117	24.68	Medium	Nottinghamshire	142	24.15	Medium
Cardiff	250	22.05	Medium	Orkney	87	29.4	Extra Heavy
Ceredigion	142	24.15	Medium	Oxfordshire	250	21	Light
Channel Islands	141	25.2	Heavy	Pembrokeshire	142	24.15	Medium
Cheshire	193	23.1	Medium	Perth and Kinross	165	24.68	Heavy
Clackmannanshire	190	24.15	Heavy	Peterborough	98	24.15	Light
Conwy	250	24.15	Extra Heavy	Plymouth	142	24.15	Medium
Cornwall	141	25.2	Heavy	Poole	147	23.1	Light
Cumbria	242	25.73	Extra Heavy	Portsmouth	147	23.1	Light
Darlington	72	25.73	Medium	Powys	193	23.1	Medium
Denbighshire	244	23.1	Heavy	Reading	250	21	Light
Derby	174	22.58	Light	Redcar and Cleveland	95	26.25	Heavy
Derbyshire	193	23.1	Medium	Renfrewshire	250	25.2	Extra Heavy
Devon	142	24.15	Medium	Rhondda Cynon Taff	250	22.58	Heavy
Dorset	193	23.1	Medium	Rutland	122	23.63	Light
Down	250	25.2	Extra Heavy	Scottish Borders	117	25.73	Heavy
Dumfries and Galloway	117	25.73	Heavy	Shropshire	250	22.58	Heavy
Dundee	242	25.73	Extra Heavy	Slough	250	21	Light
Durham	217	26.25	Extra Heavy	Somerset	193	23.1	Medium
East Ayrshire	117	25.73	Heavy	South Ayrshire	117	25.73	Heavy
East Dunbartonshire	165	24.68	Heavy	South Gloucester	231	21.53	Light
East Lothian	141	25.2	Heavy	South Lanarkshire	165	24.68	Heavy
East Renfrewshire	250	25.2	Extra Heavy	South Yorkshire	142	24.15	Medium
East Riding of Yorkshire	217	26.25	Extra Heavy	Southampton	174	22.58	Light
East Sussex	147	23.1	Light	Southend	147	23.1	Light
Edinburgh	165	24.68	Heavy	Staffordshire	221	22.58	Medium
Essex	167	23.63	Medium	Stirling	250	25.2	Extra Heavy
Falkirk	190	24.15	Heavy	Stockton on Tees	72	25.73	Medium
Fermanagh	250	25.2	Extra Heavy	Stoke on Trent	221	22.58	Medium
Fife	141	25.2	Heavy	Suffolk	94	25.2	Medium
Flintshire	193	23.1	Medium	Surrey	250	22.58	Heavy
Glasgow	165	24.68	Heavy	Swansea	167	23.63	Medium
Gloucestershire	231	21.53	Light	Swindon	250	21	Light
Greater London	174	22.58	Light	Telford and Wrekin	202	22.05	Light
Greater Manchester	167	23.63	Medium	Thurrock	174	22.58	Light
Gwynedd	250	25.2	Extra Heavy	Torbay	122	23.63	Light
Halton	147	23.1	Light	Torfaen	250	22.05	Medium
Hampshire	147	23.1	Light	Tyne and Wear	217	26.25	Extra Heavy
Hartlepool	95	26.25	Heavy	Tyrone	250	25.2	Extra Heavy
Herefordshire	202	22.05	Light	Vale of Glamorgan	221	22.58	Medium
Hertfordshire	147	23.1	Light	Warrington	147	23.1	Light
Highland	127	28.35	Extra Heavy	Warwickshire and Coventry	250	22.05	Medium
Inverclyde	242	25.73	Extra Heavy	West Berkshire and Newbury	250	21	Light
Isle of Anglesey	94	25.2	Medium	West Dunbartonshire	141	25.2	Heavy
Isle of Man	94	25.2	Medium	West Lothian	190	24.15	Heavy
Isle of Wight	147	23.1	Light	West Midlands	231	21.53	Light
Isles of Scilly	52	25.2	Light	West Sussex	147	23.1	Light
Kent	167	23.63	Medium	West Yorkshire	250	24.68	Extra Heavy
Kingston upon Hull	52	25.2	Light	Western Isles	87	29.4	Extra Heavy
Lancashire	141	25.2	Heavy	Wiltshire	202	22.05	Light
Leeds City	250	24.68	Extra Heavy	Windsor and Maidenhead	250	21	Light
Leicester	174	22.58	Light	Wokingham	250	21	Light
Leicestershire	193	23.1	Medium	Worcestershire	231	21.53	Light
Lincolnshire	94	25.2	Medium	Wrexham	221	22.58	Medium
Londonderry	217	26.25	Extra Heavy	York	52	25.2	Light
Luton	202	22.05	Light	Shetland	Special case - seek special assistance	31.50	Special case - seek special assistance



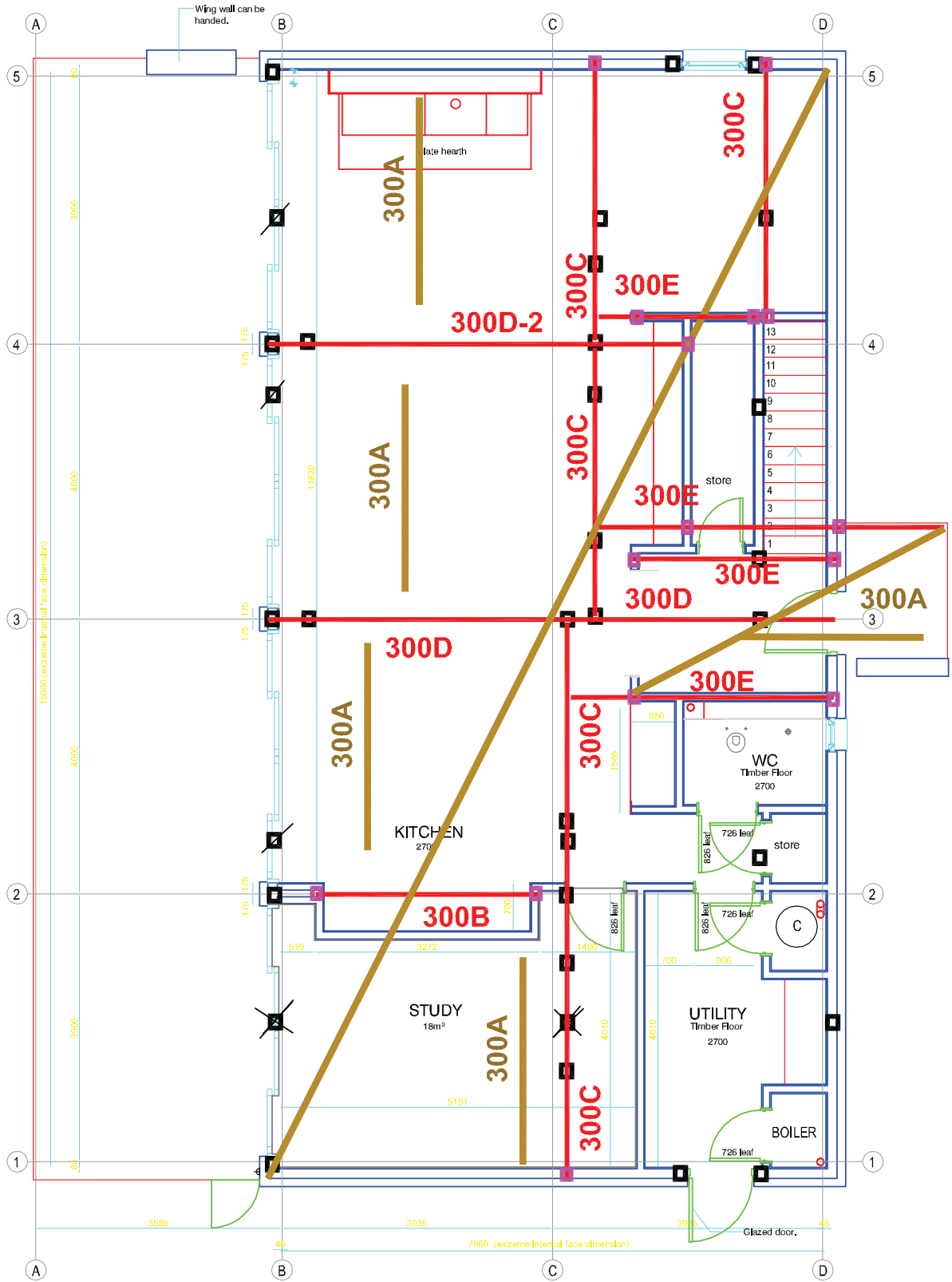
POSITION PLAN -1



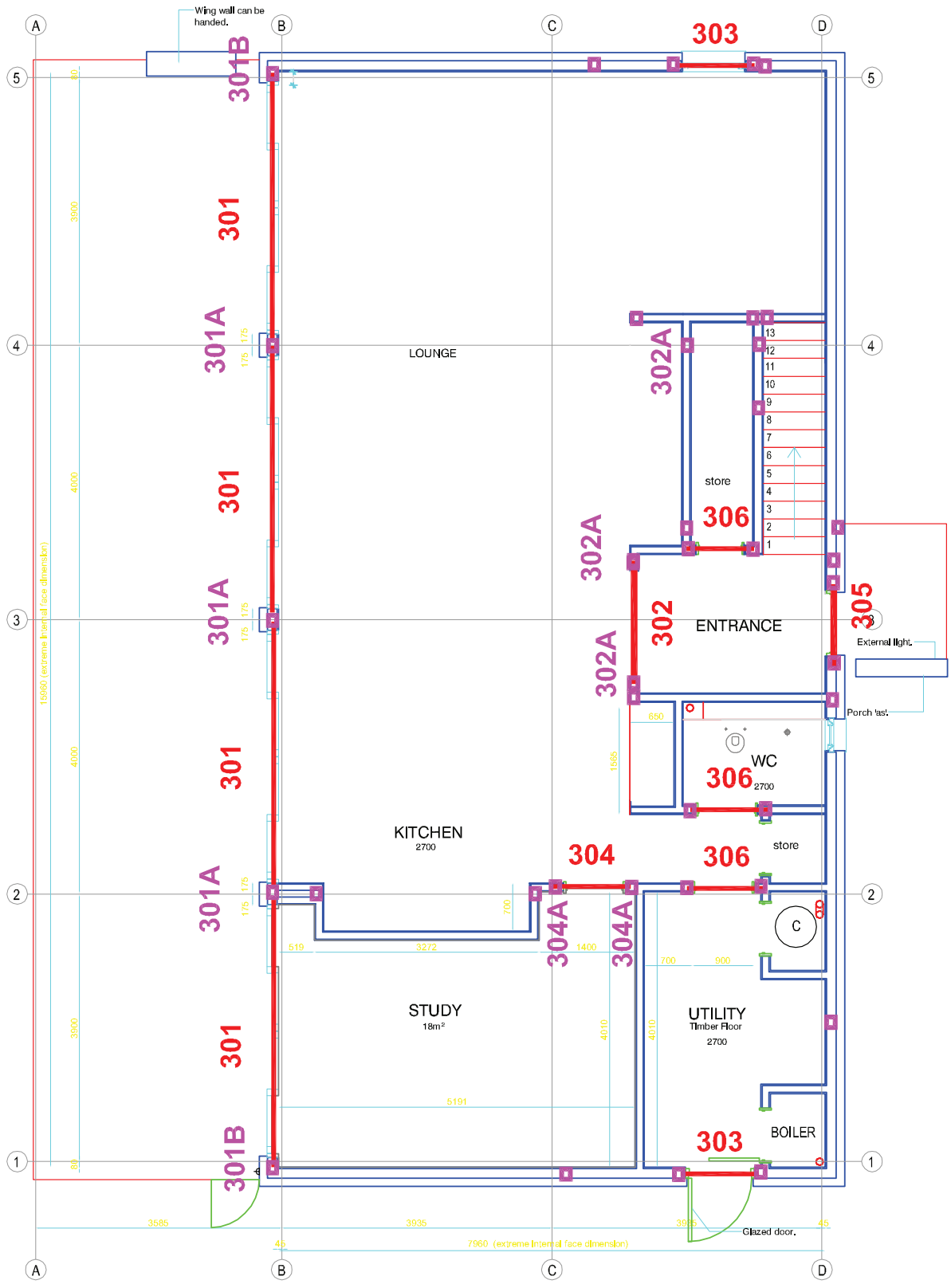
POSITION PLAN - 2



POSITION PLAN -3



POSITION PLAN - 4



POSITION PLAN - 5

