

Martin Redston Associates

Consulting Civil & Structural Engineers

Tel: 020 7837 5377

Email: enquiries@redstonassociates.co.uk

Web: www.redstonassociates.co.uk

Date

Eng. PS

Job No. 16.440

Sheet No.

PC-1

28 CANFIELD GARDENS
NW6.

LOAD CASES

<u>ELEMENTS</u>	<u>DL</u>	<u>LL</u>	<u>TOTAL</u> kn/m^2
PITCHED ROOF :	1.35	0.75	2.1
FLAT ROOF :	1.05	0.75	1.8
DOMESTIC LOFT FLOOR :	0.50	1.50	2.0
STORAGE LOFT FLOOR :	0.50	0.50	1.0
DOMESTIC ROOM FLOOR :	0.70	1.50	2.2
STPD PARTITION (DIRECT) :	0.50	—	0.5
BLANKET PARTITION :	1.00	—	1.0
112mm BRICKWORK :	2.50	—	2.5
225mm BRICKWORK :	4.80	—	4.8
330mm BRICKWORK :	7.50	—	7.5
450mm BRICKWORK :	9.80	—	9.8
COMMUNAL STAIRCASE :	0.50	3.00	3.5

Martin Redston Associates

Consulting Civil & Structural Engineers

Tel: 020 7837 5377

Email: enquiries@redstonassociates.co.uk

Web: www.redstonassociates.co.uk

Date

Eng. PS

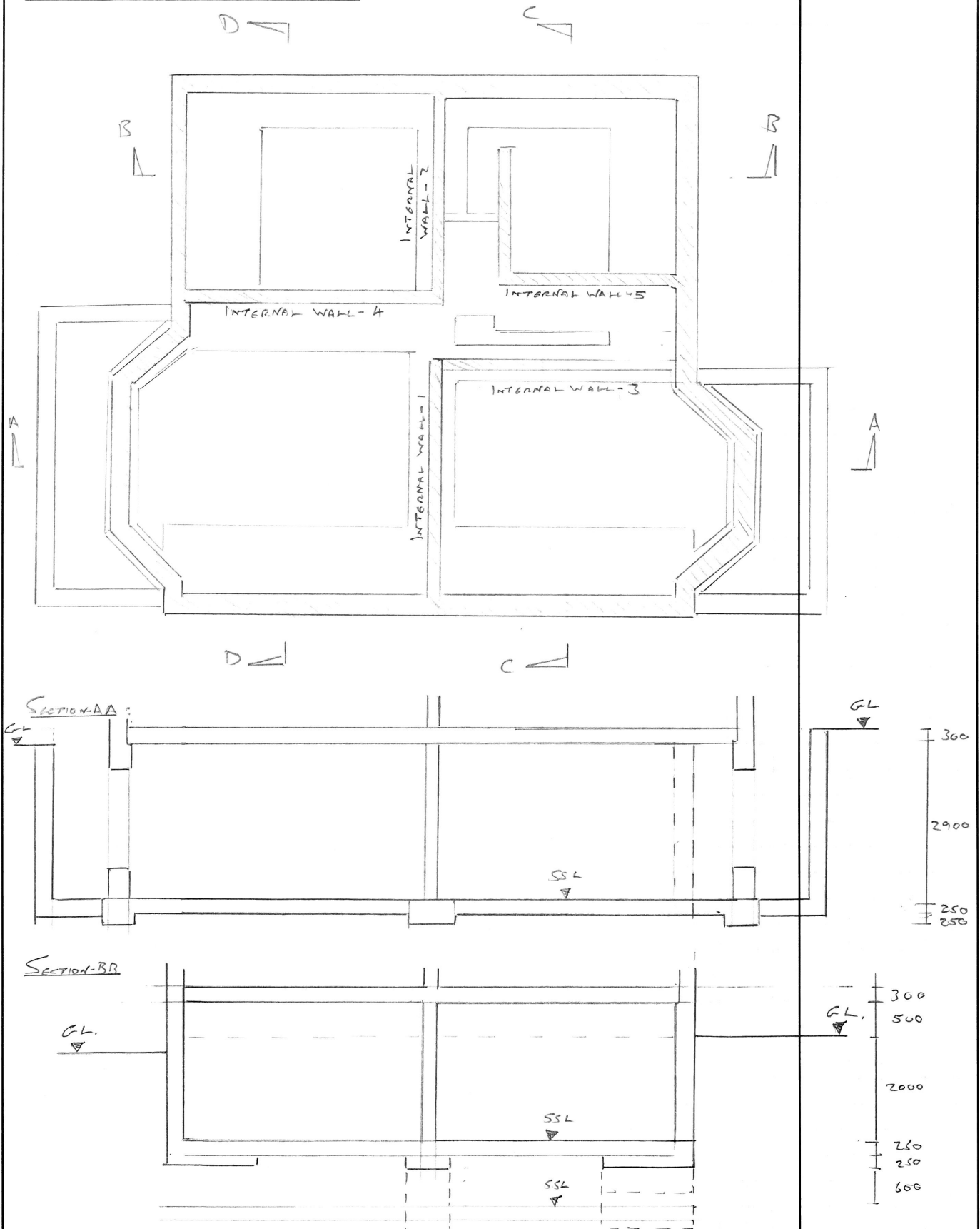
Job No. 16.440

Sheet No.

PC-2

28 CANFIELD GARDENS
NW6.

BASMENT STRUCTURE.



Martin Redston Associates

Consulting Civil & Structural Engineers

Tel: 020 7837 5377

Email: enquiries@redstonassociates.co.uk

Web: www.redstonassociates.co.uk

Date

Eng. PS

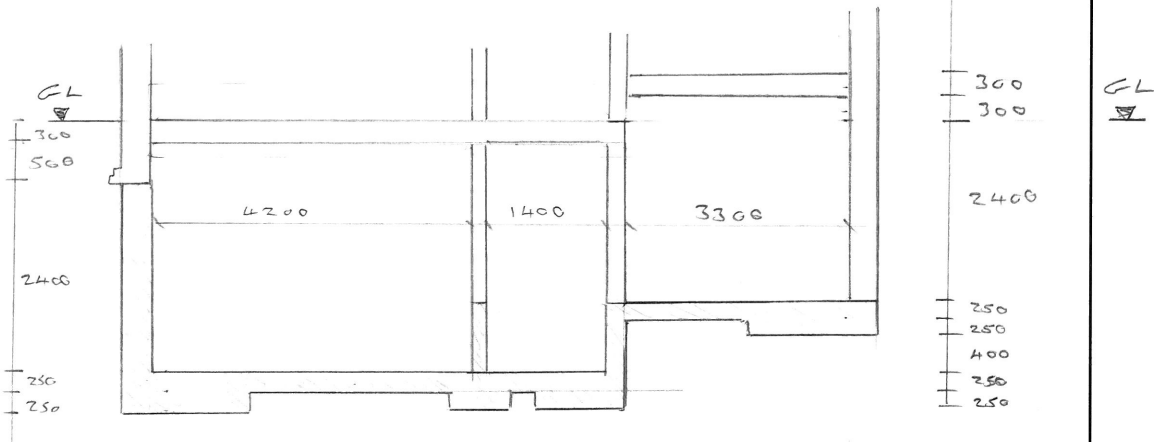
Job No. 16440

Sheet No.

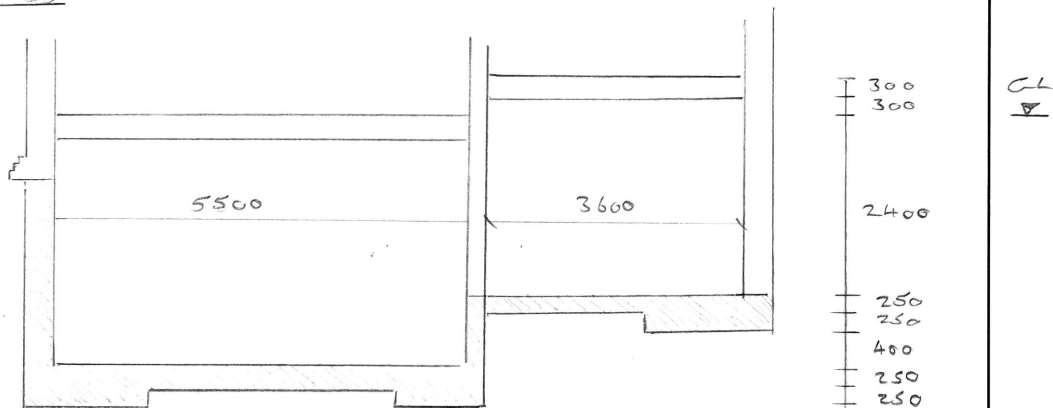
PC-3

28 CANFIELD GARDENS
NW6.

SECTION-CC



SECTION-DD



By REFERENCE TO GEOLOGICAL SURVEY MAP GROUND
CONDITIONS ARE LONDON CLAY.

∴ BASIC GROUND BEARING PRESSURE = 100 kN/m^2
@ SURFACE LEVEL

UNDERSIDE OF FOUNDATION DEPTH BETWEEN 2.9-3.7M.
BELOW GROUND SURFACE LEVEL.

∴ CLAY LIKELY TO BE FIRM TO STIFF & WELL
COMPACTED

∴ CONSERVATIVE GROUND BEARING PRESSURE
RANGES $100-150 \text{ kN/m}^2$.

Martin Redston Associates

Consulting Civil & Structural Engineers

Tel: 020 7837 5377

Email: enquiries@redstonassociates.co.uk

Web: www.redstonassociates.co.uk

Date

Eng. PS

Job No. 16'440

Sheet No.

PC-4

28 CANFIELD GARDENS
NW6.

INTERNAL LOAD BEARING WALLS

THERE ARE 5 NO. WALLS OF STRUCTURAL SIGNIFICANCE INTERNALLY.

WALLS 4 & 5 ARE RETAINING WALLS & ARE CALCULATED IN THAT SECTION.

WALLS 1, 2 & 3 ARE LOAD BEARING WALLS BEARING ON STRIP FOUNDATIONS.

LOAD RUNDOWNS:

	DL	LL	TOTAL
WALL 1 = VDL = SPINE WALL-1 = SEE SHEET = 42.6			
" " " =		18.3	
330mm BRICK = $7.5 \times 2.9 =$ 21.8			
	64.4	18.3	82.7 kN/m
WALL 2 = VDL = SPINE WALL-2 = SEE SHEET = 34.3			
" " " =		17.8	
330mm BRICK = $7.5 \times 2.7 \times 0.85 =$ 17.2			
	51.5	17.8	69.3 kN/m
WALL 3 = VDL = SPINE WALL-3 = SEE SHEET = 58.7			
" " " =		23.0	
330mm BRICK = $7.5 \times 2.9 \times 0.85 =$ 18.5			
	77.2	23.0	100.2 kN/m

Martin Redston Associates

Consulting Civil & Structural Engineers

Tel: 020 7837 5377

Email: enquiries@redstonassociates.co.uk

Web: www.redstonassociates.co.uk

Date

Eng. PS

Job No. 16.440

Sheet No.

PC-5

28 CANFIELD GARDENS
NW6,

By Reference to Geological Survey Map Ground
Conditions ARE LONDON CLAY,

∴ Basic Ground Bearing Pressure = 100 kN/m^2

Underside of Foundation Depth Between 2.9-3.2m
Below Ground Level.

∴ Clay likely to be Firm to Stiff & well
compacted & 20% additional strength factor
acceptable

∴ GBP = 120 kN/m^2 ,

Wall-1 = $\frac{82.7}{120} = 0.689 \text{ m width Per M Run.}$

Wall-2 = $\frac{69.3}{120} = 0.578 \text{ m width Per M Run.}$

Wall-3 = $\frac{100.2}{120} = 0.835 \text{ m width Per M Run.}$

∴ Walls 1 & 2 to have 700mm wide
CONCRETE STRIP FOUNDATION

Wall-3 to have 900mm wide
CONCRETE STRIP FOUNDATION

All concrete to be minimum C-35 (N) grade
& 500mm deep. Formation to Wall-2
to step down with 2nd transition bases
to same level as internal wall-4 retaining
wall base.