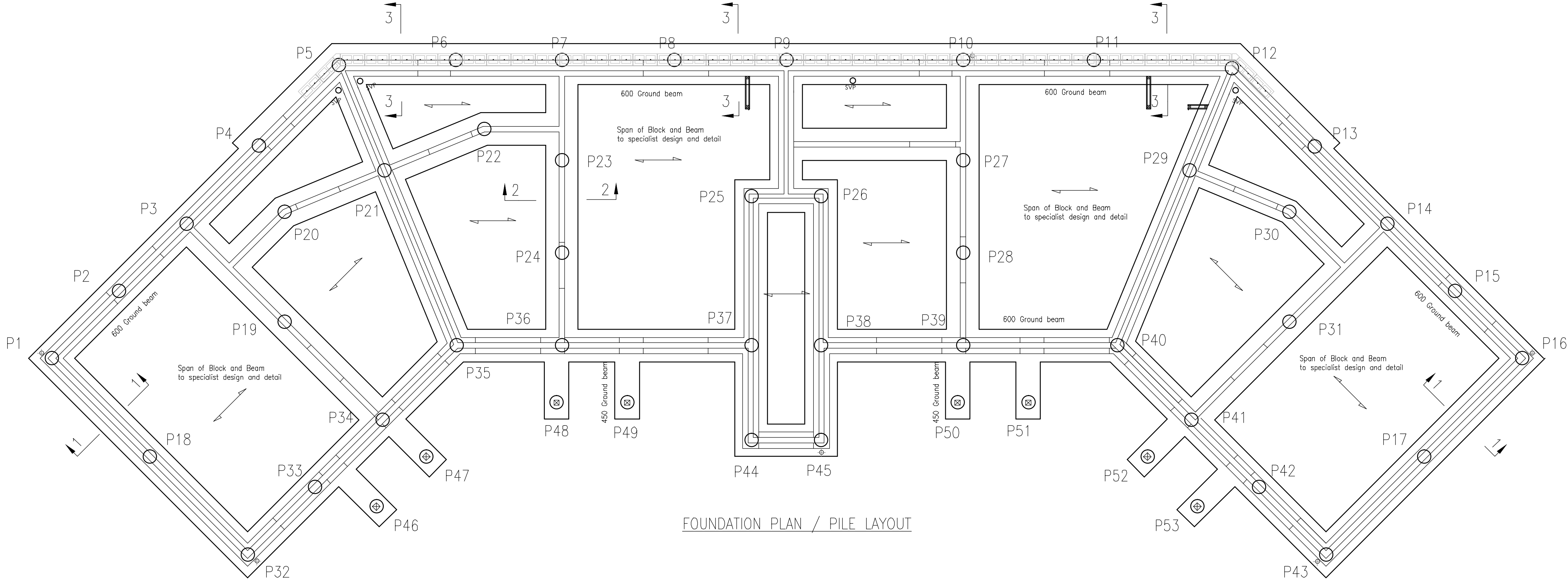
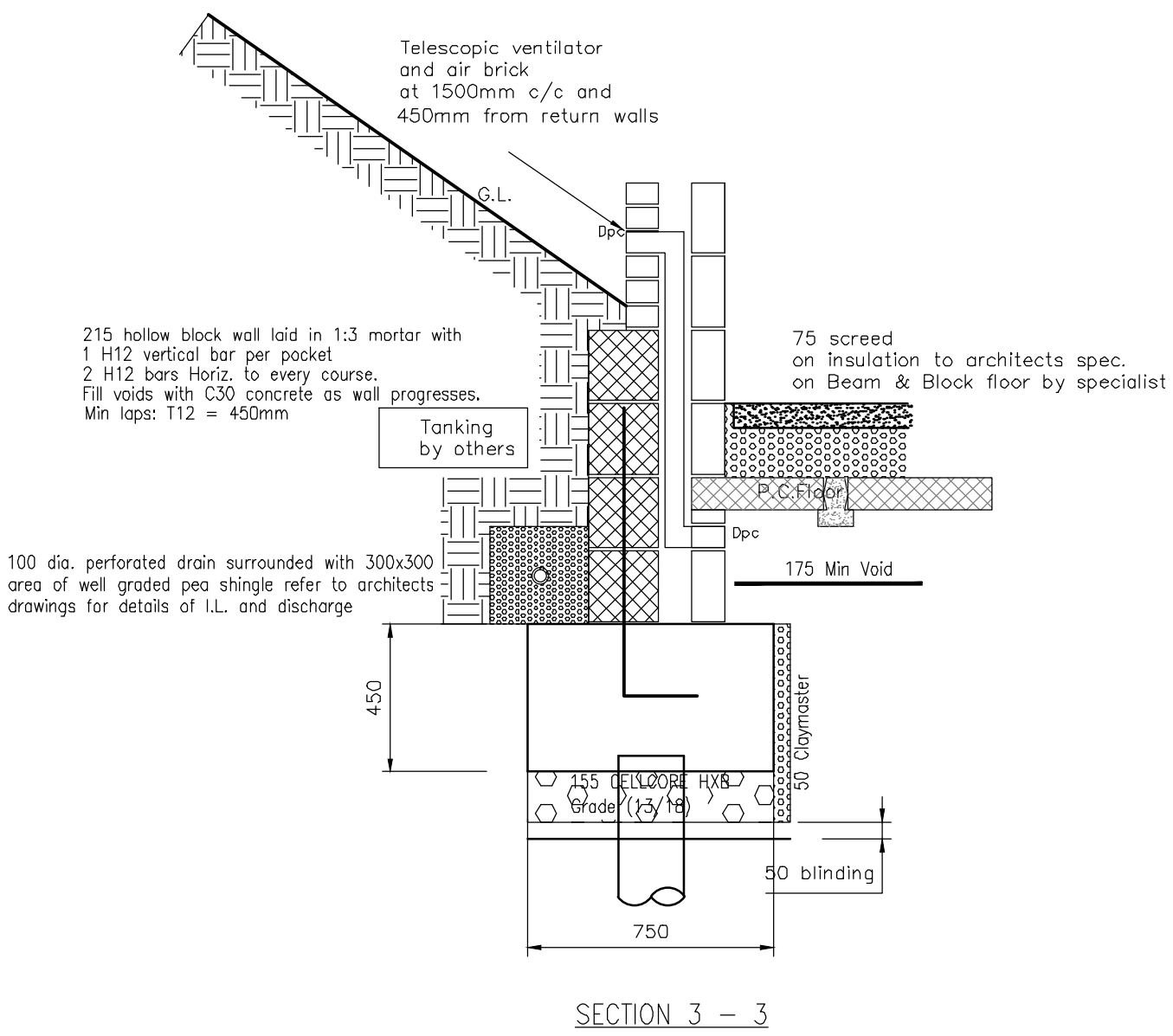
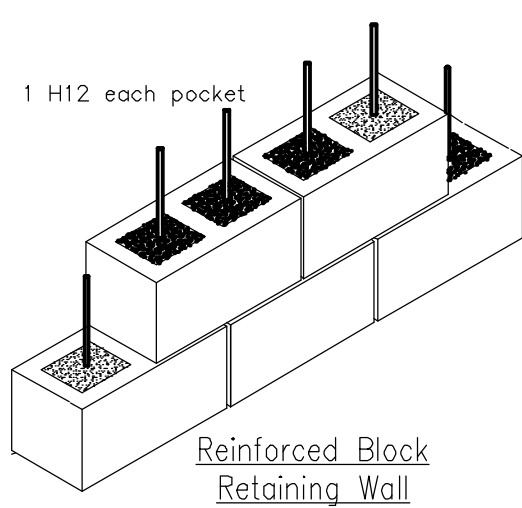
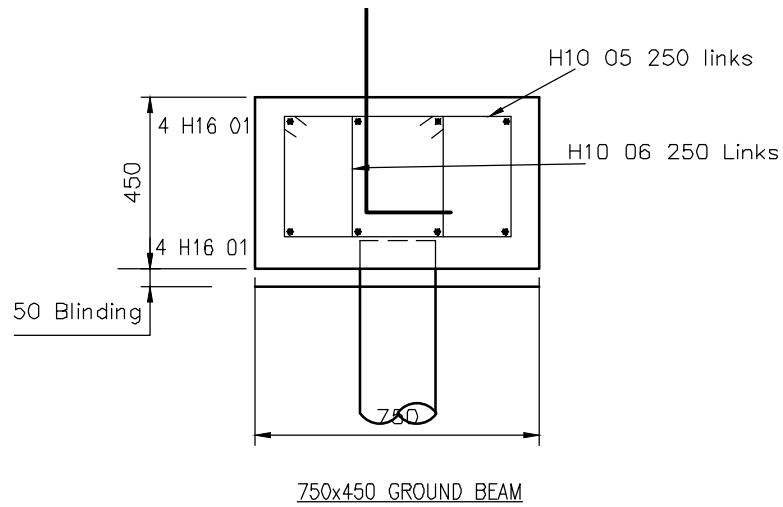
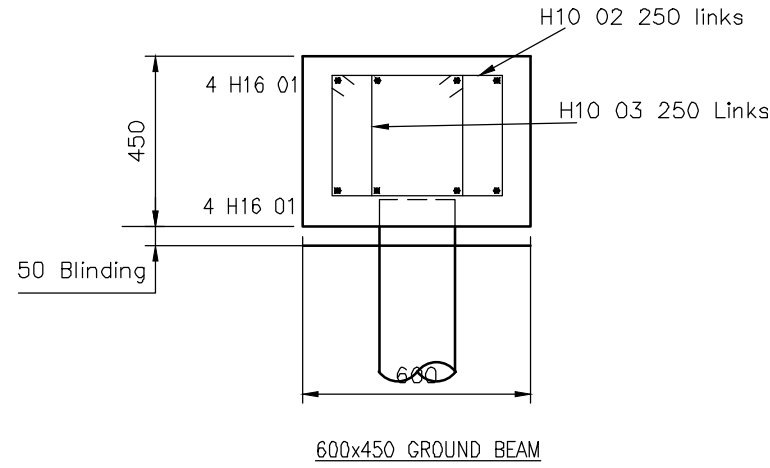
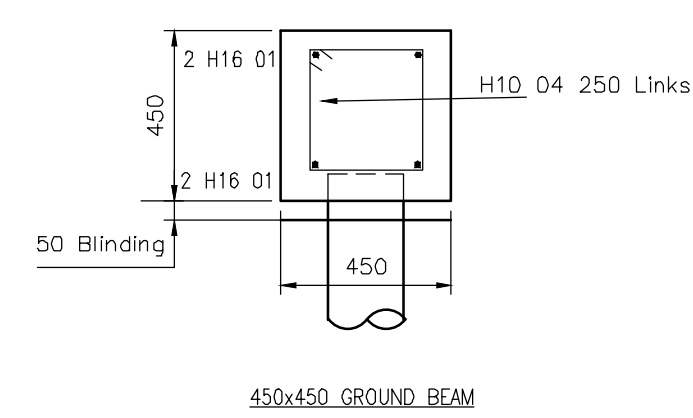
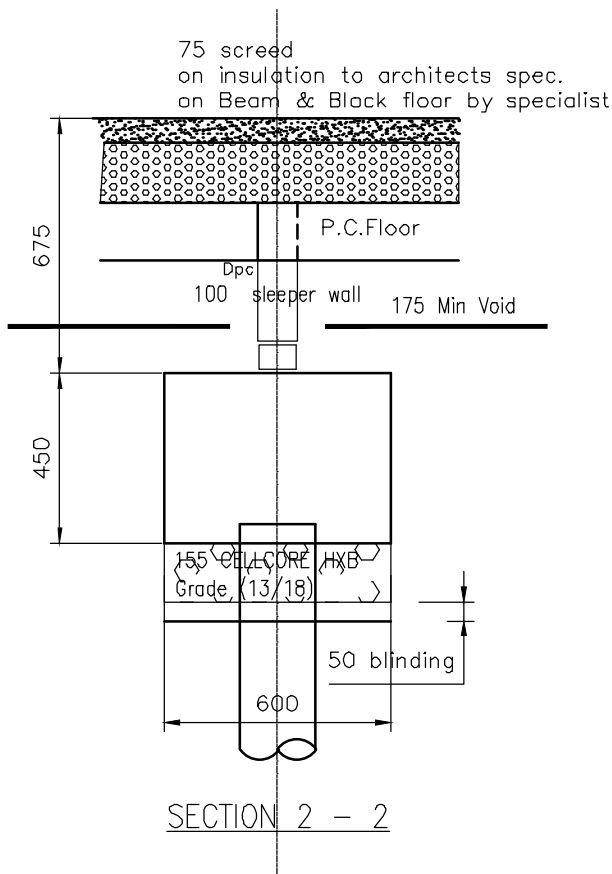
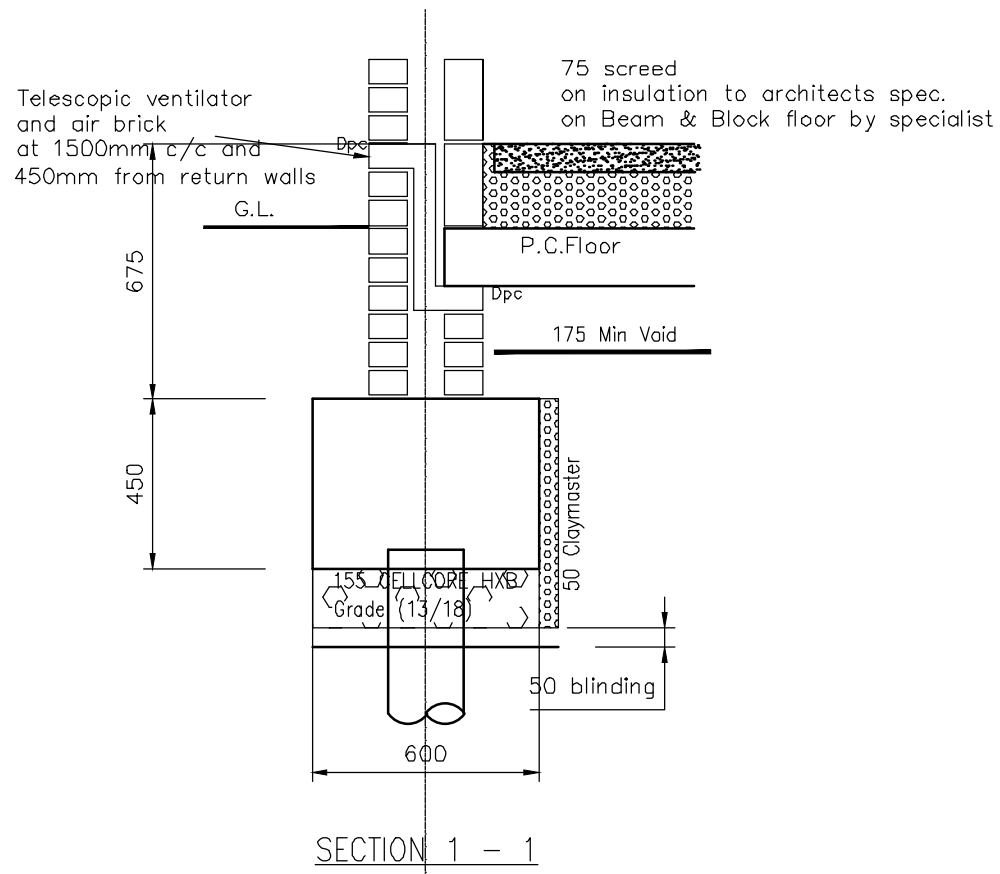




FOUNDATION PLAN / PILE LAYOUT



PILING NOTES

1. PILING SHALL COMPLY WITH THE LATEST EDITION OF THE ICE SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALL AND IN ACCORDANCE WITH PILING CONTRACT SPECIFICATION D30.
2. UNFACTORED AXIAL WORKING LOADS FOR PILES = 250KN MINIMUM F.O.S = 3.0 TO BE USED.
3. a) PRELIMINARY TEST PILES (1No.) ARE TO BE TESTED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. b) WORKING TEST PILES 1 No IN ACCORDANCE WITH THE CONTRACT SPECIFICATION. c) SONIC INTEGRITY TESTING OF ALL INSTALLED PILES.
4. THE PILING SUB-CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION AND TESTING OF ALL PILES TO THE SATISFACTION OF THE ENGINEER AND BUILDING CONTROL.
5. PILE SETTING OUT
 - a) PILE CUT OFF LEVELS TO BE 75mm ABOVE PILECAP SOFFIT LEVEL.
 - b) DETAILS OF PILES OUTSIDE TOLERANCES TO BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION OF THE PILE CAP.
 - c) FACE TO FACE OF PILES TO BE MIN 3 TIMES THE DIAMETER UNLESS SHOWN OTHERWISE.
 - d) IS THE RESPONSIBILITY OF THE MAIN CONTRACTOR.
6. PILE CONCRETE SPECIFICATION: - (TO CONTRACTOR DESIGN) SULPHATE RESISTING PORTLAND CEMENT TO BS4027.
7. MINIMUM AREA OR REINFORCEMENT = 0.4%
ALL REINFORCEMENT TO BE HIGH TENSILE STEEL EXCEPT THE HELICAL BINDING.
8. THE PILING CONTRACTOR SHALL CONFIRM THE SITE INVESTIGATION REPORT FINDINGS IN SO FAR THAT HE SHALL SATISFY HIMSELF THAT THE RESULTS OF THE BORINGS FROM 2No. OTHER PILE LOCATIONS ARE SATISFACTORY FOR THE PILE DESIGN. ANY SIGNIFICANT VARIATIONS DISCOVERED WHICH MAY AFFECT THE PILE DESIGN MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND/OR THE CONTRACT ADMINISTRATOR IMMEDIATELY.
9. SHOULD AN ALTERNATIVE PILE DIAMETER BE PROPOSED BY THE MAIN OR PILING CONTRACTOR, ALL REDESIGN, DRAFTING, SCHEDULING AND APPROVAL COSTS FOR THE PILECAPS ARE TO BE BORNE BY THE CONTRACTOR.
10. THE PILING CONTRACTOR SHALL OBTAIN THE APPROVAL OF THE LOCAL AUTHORITY AND THE ENGINEER & CLIENT TO ALL ASPECTS OF HIS WORK, INCLUDING THE DESIGN, THE METHODS AND THE TIMES OF WORKING, THE NOISE LEVELS, THE EQUIPMENT USED etc.
11. PILES SHALL BE INSTALLED FROM PILING MAT LEVEL.
12. ALL PILES SHALL HAVE THE NOMINAL LOAD CAPACITY AS SPECIFIED. ACTUAL FOUNING LEVELS SHALL BE DETERMINED BY THE PILING CONTRACTOR AND ARE TO BE REVIEWED BY THE ENGINEER.
13. FOR STRUCTURAL DESIGN OF THE PILES TO BS 8110 THE PARTIAL LOAD FACTOR SHALL BE TAKEN AS 1.50 ON THE HORIZONTAL APPLIED LOADS AND 1.0 ON THE INTERNAL TENSION LOADS.
14. THE CONTRACTOR SHALL ALLOW FOR ANY BENDING MOMENTS INDUCED IN THE PILE DUE TO ECCENTRICITIES CAUSED BY PILE INSTALLATION TOLERANCES.
15. THE PILING CONTRACTOR IS TO DETERMINE IN HIS DESIGN TO THE APPROVAL OF THE ENGINEER, THE DEPTHS AT WHICH THE HORIZONTAL SHEAR LOADS ARE RESISTED BY THE PILES. ADDITIONAL BENDING MOMENTS DUE TO THE DEPTH OF GROUND RESTRAINT, DETERMINED BY THE PILING CONTRACTOR, SHALL BE ALLOWED FOR BY THE PILING CONTRACTOR.
16. THE PILING CONTRACTOR MUST ALLOW FOR OTHER LOADS WHICH AFFECT THE DESIGN OF THE PILES SUCH AS CLAY HEAVE AND CHANGES IN GROUNDWATER LEVEL.
17. EACH PILE TO RESIST 10KN MINIMUM HORIZONTAL SHEAR AT THE TOP OF EACH PILE U.N.O.
18. ALL PILES ARE TO BE DESIGNED WITH A MINIMUM ECCENTRICITY OF 75mm.
19. ALL PILES ARE TO BE DESIGNED FOR AN AXIAL FORCE OF 250KN (UNFACTORED) AND A MINIMUM TENSION OF 20KN (UNFACTORED) U.N.O.
20. FOR DETAILS OF GROUND CONDITIONS REFER TO GROUND APPRAISAL REPORT CONDUCTED BY AVIRON. (MARCH 2017). CLIENT TO PROVIDE CONTRACTOR WITH COPY OF SAID REPORT AND ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THIS.

REINFORCED CONCRETE NOTES

1. CONCRETE DESIGNATED MIX TO BE GRADE RC40.
2. CONCRETE COVER TO BEAMS: 50mm TOP & BOT & SIDES. CONCRETE COVER TO COLUMNS: 50mm ON ALL SIDES.
3. ALL REINFORCEMENT LABELED 'H' TO BE GRADE BS800.
4. REINFORCEMENT IS DETAILED ON BAR BENDING SCHEDULE SHEETS- 01 TO BS8666.2005
5. MINIMUM LAP LENGTHS AS NOTED IN THE FOLLOWING TABLES:-

TENSION ANCHORAGE LAPS GIVEN IN BAR Ø's				
CONC. GRADE	25	30	35	40
BS800	H	H	H	H
LAP IN Ø's	44	40	38	35
6. CONCRETE FINISHES TO BE IN ACCORDANCE WITH ARCHITECTS / ENGINEERS SPECIFICATIONS.
7. CONSTRUCTION AND MOVEMENT JOINTS TO BE AS AGREED WITH THE ENGINEER.
8. ALL REINFORCED CONCRETE AND WORKMANSHIP TO BE TO B.S. 8110.
9. ALL CONCRETE AND WORKMANSHIP TO BE TO B.S. 8500.
10. ALL TIE WIRE AND SACRIFICIAL SHUTTER TIES ARE TO HAVE THE SAME COVER AS THE REINFORCING TIE.
11. ALL CONCRETE TO COMPLY WITH THE NATIONAL STRUCTURAL CONCRETE SPECIFICATION SECOND EDITION PARTS 1 & 2 BS 8110 AND BS 8500, AND PBA SPECIFICATION.
12. INDICATES SPAN DIRECTION OF PRECAST CONCRETE FLOOR BY SPECIALIST

GENERAL NOTES

1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS DRAWINGS AND SPECIFICATIONS.
2. REFER TO ARCHITECTS DRAWINGS FOR ALL SETTING OUT DIMENSIONS, DETAILS, VENTILATION, DAMP PROOFING AND ALL OTHER ARCHITECTURAL ELEMENTS.
3. All timber connections to be bolted with 1 No. 12mm dia bolt + washer plate unless noted otherwise.
4. The main contractor shall be responsible for all temporary works without exception.
5. The main contractor shall provide a method statement and risk assessment for the installation of all steel beams and removal of existing walls, including temporary works and packing.
6. Refer to padstone schedule for details of padstones.
7. The steelwork fabricator shall visit site to establish all dimensions necessary for their fabrication. The fabricator shall be responsible for all such dimensions without exception. All beam bearings are to be a minimum of 150mm.
8. All steelwork shall be shot blasted and primed with 2 coats of red-oxide prior to delivery to site. Primer shall be touched-up after erection of steelwork.
9. All steelwork to be clad with 2 layers of plasterboard or similar approved material to provide ½ fire resistance.
10. All timber to be grade C24 unless noted otherwise. Rafters to be doubled where providing support to dormer and/or velux windows.
11. Provide 30x5mm galvanised lateral restraint straps to all floor joists, rafters and ceiling joists spanning parallel to the external wall, over 3 No. joists / rafters with solid nogginns all at 2000mm max centres.
Provide 30x5mm galvanised vertical restraint straps at 2000mm max centres to all wall plates.
12. Refer to Specialist drawings and calculations for details of the precast concrete floors. Floors to be installed strictly in accordance with the manufacturers details and specifications.
13. Refer to Specialist drawings and calculations for details of PCC floors. Imposed loads = 1.5 kN/m² for domestic areas.
Partition loads = 1.0 kN/m² unless noted otherwise. Precast concrete floors to be installed strictly in accordance with the manufacturers instructions.

A COPY OF THE MANUFACTURERS P.C.FLOOR LAYOUT AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDER AND ESPECIALLY INSTALLATION.

A COPY OF THE MANUFACTURERS BEAM & BLOCK LAYOUT DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDER AND ESPECIALLY INSTALLATION.

MASONRY SPECIFICATION

LEVEL	EXTERNAL WALLS	PARTY WALLS	INTERNAL WALLS	MORTAR
Below Dpc	100 Dense conc. 100 Cavity 100 Dense conc.	100 Dense conc. 75 Cavity 100 Dense conc.	100 Dense conc. 100 Lightweight Block 100 Studwork	1:3
Dpc to First floor	100 Block 7N. 100 Cavity 100 Block 7N.	100 Dense conc. 75 Cavity 100 Dense conc.	100 Lightweight Block 100 Studwork	1:1:6
First floor to Roof	100 Block 7N. 100 Cavity 100 Block 7N.	100 Dense conc. 75 Cavity 100 Dense conc.	100 Lightweight Block 100 Studwork	1:1:6

PILE DATA		
PILE NUMBER	PILE LOAD	CUT OFF LEVEL
P1	125	(IBC)
P2	125	"
P3	125	"
P4	125	"
P5	250	"
P6	250	"
P7	250	"
P8	250	"
P9	250	"
P10	250	"
P11	250	"
P12	250	"
P13	125	"
P14	125	"
P15	125	"
P16	125	"
P17	125	"
P18	250	"
P19	250	"
P20	250	"
P21	250	"
P22	250	"
P23	250	"
P24	250	"
P25	250	"
P26	250	"
P27	250	"
P28	250	"
P29	250	"
P30	250	"
P31	250	"
P32	125	"
P33	125	"
P34	125	"
P35	250	"
P36	250	"
P37	250	"
P38	250	"
P39	250	"
P40	250	"
P41	125	"
P42	125	"
P43	250	"
P44	250	"
P45	250	"
P46	100	"
P47	100	"
P48	100	"
P49	100	"
P50	100	"
P51	100	"
P52	100	"
P53	100	"

IMPORTANT

1. This drawing is to be checked on site by the contractor prior to the commencement of the works. Any discrepancy must be reported to the Engineer.
2. No deviation may be made from the contents of this drawing without prior permission from the Engineer.
3. This drawing is to be removed from currency immediately a revised edition has been issued.
4. All rights described in chapter IV of the Copyright Design Acts 1988 have been generally asserted.