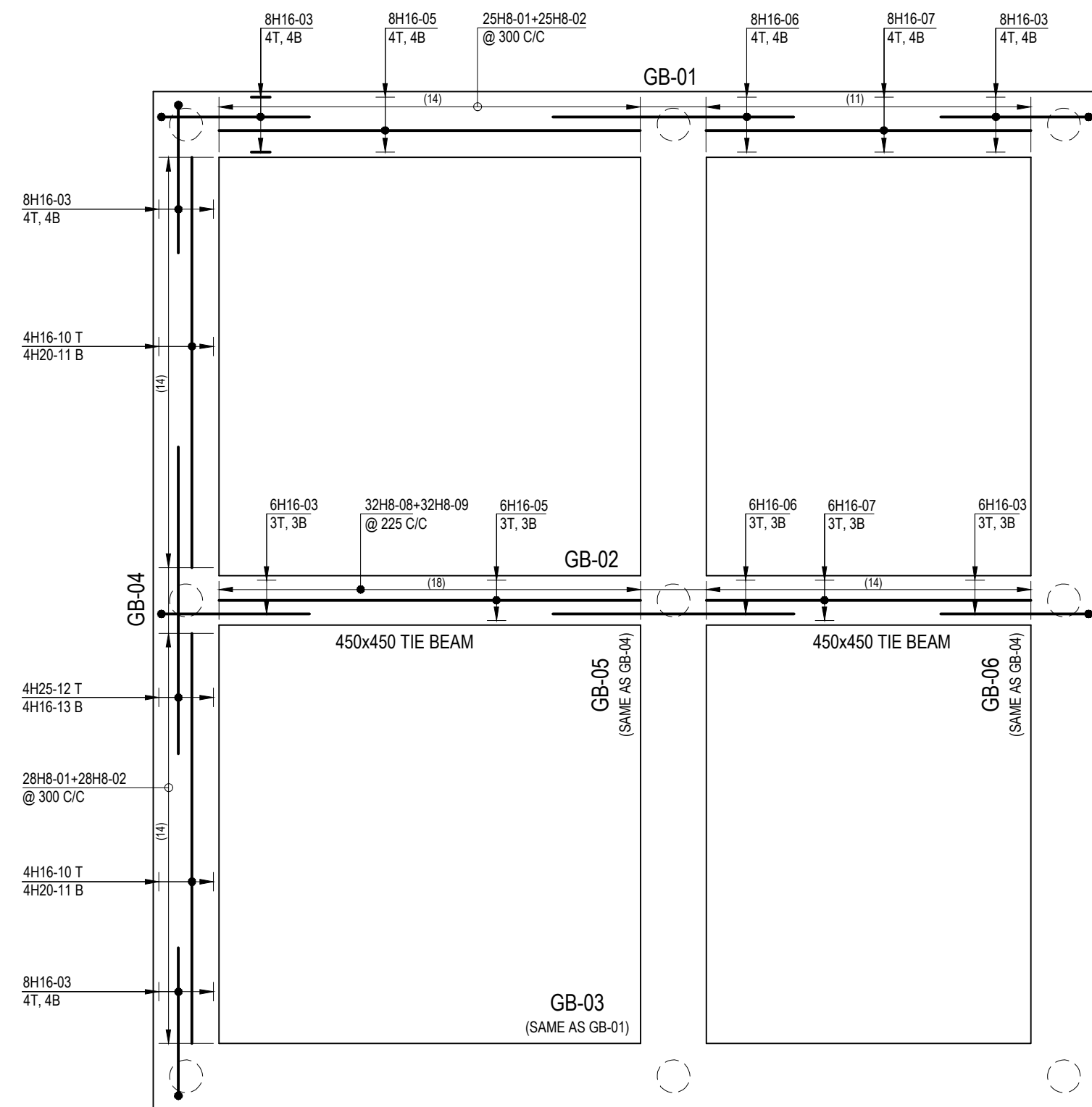


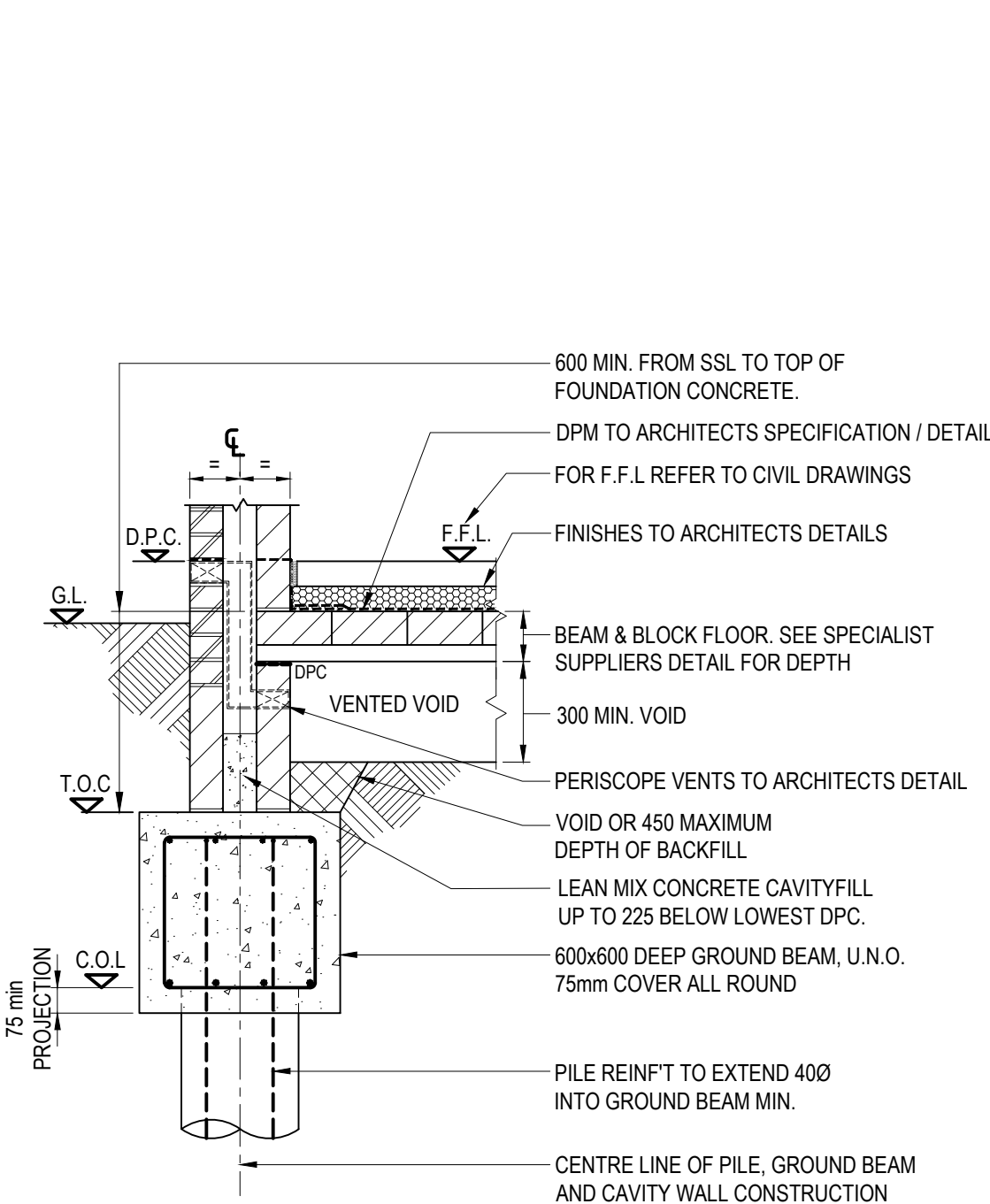
GENERAL ARRANGEMENT

SCALE 1:50



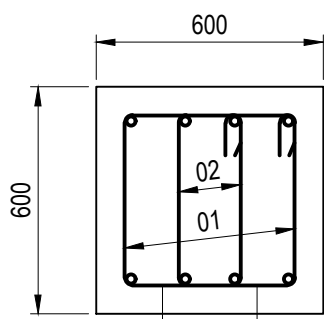
REINFORCEMENT DETAIL

SCALE 1:50



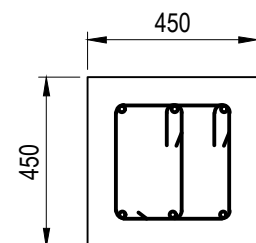
TYPICAL PILE FOUNDATION  
DETAIL FOR EXTERNAL WALLS

SCALE 1:20



TYPICAL SECTION GROUND  
BEAM 600x600

SCALE 1:20



TYPICAL SECTION GROUND  
BEAM 450x450

SCALE 1:20

KEY:

← DENOTES SPANS OF SUSPENDED FLOOR

Pile Schedule Plot 55			
PILE REF	LOAD (kN)	CUT OFF LEVEL (m. A.O.D.)	Min. CAST LVL. (m. A.O.D.)
P01	250	153.900	154.500
P02	375	153.900	154.500
P03	200	153.900	154.500
P04	400	153.900	154.500
P05	425	153.900	154.500
P06	450	153.900	154.500
P07	250	153.900	154.500
P08	375	153.900	154.500
P09	200	153.900	154.500
FFL = 155.475 (REFER TO CIVILS DRAWING)			
TOP OF GROUND BEAM = 154.425			

NOTE  
MINIMUM CAST LEVEL ASSUMES TOP 600mm OF  
PILE IS UNUSABLE AND WILL BE CUT DOWN.

SUSPENDED FLOOR SLABS :

- SUSPENDED GROUND FLOOR SLABS TO BE BEAM AND BLOCK CONSTRUCTION OR WIDESPAN HOLLOWCORE PLANKS. CONSTRUCTION DESIGNED AND SUPPLIED BY AN APPROVED SPECIALIST SUPPLIER.
- FOR SPAN LENGTHS AND POSITION OF PARTITION WALLS REFER TO ARCHITECTS DRAWINGS. FOR SUB-FLOOR VOID VENTILATION DETAILS REFER TO ARCHITECT'S DRAWINGS.
- SPAN OF FLOOR BEAMS INDICATED THUS:-
- SUSPENDED FLOOR SLABS TO BE DESIGNED FOR THE FOLLOWING LOADS :-  
DEAD - (EXCLUDING SELF WEIGHT OF FLOOR UNITS)  
HOUSES / FLATS:  
FINISH & INSULATION 0.15 kN/m<sup>2</sup>  
75mm SCREED 1.8 kN/m<sup>2</sup>  
GARAGES:  
100mm SCREED 2.4 kN/m<sup>2</sup>  
PARTITIONS :-  
PLASTER BOARD STUDWORK 1.0 kN/m RUN  
NON-LOAD BEARING BLOCKWORK 3.0 kN/m RUN  
IMPOSED - (TO B.S. EN 1991-1, CATEGORY A, C & F)  
HOUSES 1.5 kN/m<sup>2</sup>  
FLATS 1.5 kN/m<sup>2</sup>  
STAIRS 3.0 kN/m<sup>2</sup>  
GARAGES 2.5 kN/m<sup>2</sup>
- IF REQUIRED, D.P.M. (1200 POLYTHENE MIN.) TO BE CONTINUOUS ACROSS BUILDING INCLUDING INTERNAL WALLS AND LINKED TO A CAVITY TRAY IN THE EXTERNAL WALLS. ALL SERVICE ENTRIES/PENETRATIONS TO BE SEALED USING PROPRIETARY PRODUCTS.

GROUND BEAMS :

- ALL GROUND BEAMS TO BE 600x600, UNLESS NOTED OTHERWISE.
- ALL GROUND BEAMS ARE SET OUT CENTRALLY OVER PILES, UNLESS NOTED OTHERWISE
- CONCRETE GRADE C28/35 (Min.) TO BE DESIGNED FOR SULPHATE CLASS DS1 AND ACEC CLASS AC1 DESIGN CHEMICAL CLASS DC1 TO B.R.E. SPECIAL DIGEST 1.
- CONCRETE COVER TO REINFORCEMENT  
TOP 75mm  
BOTTOM 75mm  
SIDES 75mm
- ALL CONCRETE WORKMANSHIP TO BE IN ACCORDANCE WITH RECOMMENDATIONS SET OUT IN BS8110.
- ALL CONCRETE TO BE FULLY MECHANICALLY VIBRATED.
- ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE CONSTRUCTION

MASONRY:

MASONRY TO FOUNDATIONS TO HAVE A COMPRESSIVE STRENGTH AT LEAST EQUAL TO THAT USED ABOVE DPC, OR AS NOTED ON THE FOUNDATION DETAILS, WHICHEVER IS THE GREATER. IN ALL CASES BLOCKWORK BELOW DPC SHOULD HAVE A MINIMUM DENSITY OF 1500kg/m<sup>3</sup>. A MINIMUM COMPRESSIVE STRENGTH OF 7.3N/mm<sup>2</sup> WITH A RELEVANT BBA CERTIFICATE AND BE LAID IN CLASS (i) OR (ii) MORTAR.

REINFORCEMENT ON THIS DRAWING SCHEDULED ON BENDING SCHEDULES BMK30135-RPS-SI-00-SH-S-0232.

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Notes

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- This drawing should be read in conjunction with all other relevant drawings and specifications.

NOTES:

- THIS DRAWING TO BE READ IN CONJUNCTION WITH THE SPECIFICATION AND ALL RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS.
- REFER TO DRG. BMK30135-RPS-SI-00-DR-S-0200 FOR STANDARD NOTES & FOUNDATION SECTION DETAILS.
- REFER TO DRG. BMK30135-RPS-SI-00-DR-S-0201 FOR BOUNDARY WALL DETAILS.
- REFER TO DRG. BMK30135-RPS-SI-00-DR-S-0205-0206 FOR FOUNDATION LAYOUT.

PILING:

- THIS SITE IS IN AN AREA OF CHALK HAZARD / RISK OF SOLUTION FEATURES.  
PILES TO BE DESIGNED AND INSTALLED BY A SPECIALIST CONTRACTOR FOR THE AXIAL UNFACTORED LOADS INDICATED. PILES ARE TO BE DESIGNED TO ACCOUNT FOR POTENTIAL SOLUTION FEATURE AND BE EXTENDED THROUGH THE POSSIBLE CHALK / SOLUTION FEATURES AND PENETRATE MINIMUM 3m INTO SUITABLE MATERIAL.

THE PILING CONTRACTORS ATTENTION IS DRAWN TO THE INDICATED RISK OF VOIDS IN THE GROUND RESULTING FROM DISSOLUTION OR MINING OF THE CHALK BEDROCK.  
SEE THE SITE INVESTIGATION REPORT(S) REF:  
• RSK GEO-ENVIRONMENTAL SITE ASSESSMENT REF 1922510 R01 (04)  
• RSK SUPPLEMENTARY GEOTECHNICAL SITE INVESTIGATION (PHASE 1 DEVELOPMENT) REF 1922510-R02(00)

THE PILING WORKS ARE TO BE MONITORED BY THE PILING CONTRACTOR FOR EVIDENCE OF VOIDS OR DISTURBED GROUND

ANOMALOUS GROUND OR SUSPECTED VOIDS (OPEN OR INFILLED) SHALL BE ADVISED TO RPS IMMEDIATELY - THIS MAY BE INDICATED BY UNUSUAL DRILLING CONDITIONS OR CONCRETE CONSUMPTION.

A CHECK SHALL BE UNDERTAKEN THAT ALL PILES ARE BEING FOUNDEN IN CHALK BEDROCK BY EXAMINATION AND RECORDING ARISINGS.

WHERE VOIDS MAY BE ENCOUNTERED OR SUSPECTED THE CONTRACTOR WILL BE REQUIRED TO UNDERTAKE A TEST BORE IN THE PRESENCE OF AN RPS ENGINEER TO EXAMINE THE GROUND TO DEPTH. THE TEST BORE TO THEN BE CONCRETED SEPARATELY.

WHERE IT IS SUSPECTED THAT PILES MAY BE AFFECTED BY VOIDS OR DISTURBED GROUND A MAINTAINED LOAD TEST WILL BE REQUIRED.

- PILES TO BE CONTINUOUS FLIGHT AUGERED OR BORED TYPE, MAXIMUM ASSUMED DIAMETER 450mm.
- PIILING CONCRETE TO BE DESIGNED FOR SULPHATE CLASS DS2 AND ACEC CLASS AC2 DESIGN CHEMICAL CLASS DC2 TO B.R.E. SPECIAL DIGEST 1.
- ALL PILES ARE TO BE SUITABLY DESIGNED & REINFORCED AGAINST THE EFFECTS OF NEGATIVE SKIN FRICTION. REFER TO THE SOILS REPORT.
- ALL PILES ARE TO BE INTEGRITY TESTED.
- PILES MAY BE DESIGNED WITH A FACTOR OF SAFETY OF 2.5 WITH PILES BEING LOAD TESTED. ALTERNATIVELY THE PILES MAY BE DESIGNED TO A HIGHER FACTOR OF SAFETY WHEN NO LOAD TEST IS REQUIRED.
- WHERE A FACTOR OF SAFETY OF 2.5 IS USED WORKING PILE LOAD TESTS ARE TO BE CARRIED OUT ON A MINIMUM OF 1% OF PILES INSTALLED. A MINIMUM OF TWO No. AT THIS SITE. THE PILE TESTS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE INSTITUTION OF CIVIL ENGINEERS "SPECIFICATION FOR PILING".
- THE LOCATION OF THE TEST PILES IS TO BE DETERMINED ONCE THE PHASING AND PROGRAMME OF WORKS IS AGREED WITH THE PILING SUB-CONTRACTOR.
- ALL PILING WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE INSTITUTION OF CIVIL ENGINEERS "SPECIFICATION FOR PILING".

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Project  
**Grange Farm, Bovington**

Title  
**Piling & Ground Beams G.A. & RC Details Plot 55 (EMA46 - Rightford)**

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