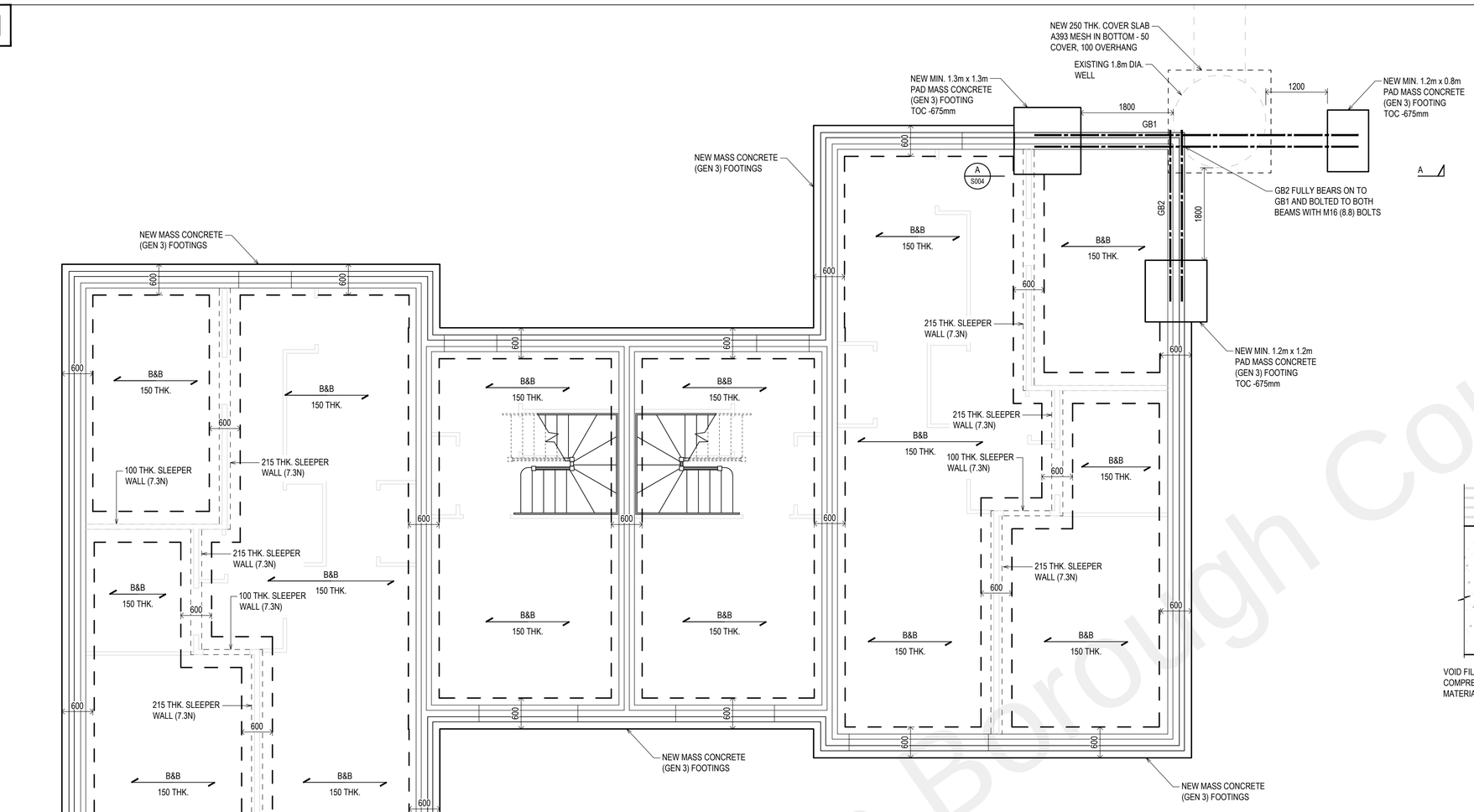
A1



PLOTS 1 TO 4 GROUND FLOOR & FOUNDATION PLAN

SCALE 1-50

FOUNDATION NOTE:
FOUNDATIONS TO BE A MINIMUM 600 WIDE AND FOUNDED BELOW THE MADE GROUND AND INTO THE SAND WHICH IS BETWEEN 700mm AND 1300mm BELOW GROUND LEVEL. CONCRETE TO FOUNDATIONS TO BE GEN 3.

NOTE FOUNDATIONS CLOSE TO BOUNDARY WALL WILL NEED TO BE EXCAVATED AND POURED ON THE SAME DAY AND CONSTRUCTED IN 3m LENGTHS ALLOWING 24 HOURS BETWEEN EXCAVATION AND CONCRETING.

FOUNDATION STEEL SCHEDULE	
REF	TYPE
GB1*	2 No. 305x165UB46
GB2*	2 No. 203x133UB25

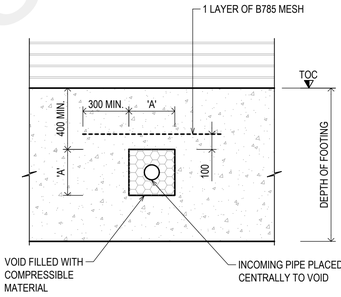
NOTE: ALL STEEL TO BE GRADE S355
*BOLTED TOGETHER WITH M16 BOLTS @ 900 C/C
ALL FOUNDATION BEAMS TO BE ENCASED IN CONCRETE MIN. 75mm COVER TO ALL EXPOSED SIDES.

CDM REGULATIONS 2015 - DESIGNER'S RESIDUAL RISKS

1. SHORING/PROPPING TO DEEP EXCAVATIONS TO DESIGNED BY OTHERS.
2. EDGES OF EXCAVATIONS SHOULD BE PROTECTED WITH SUBSTANTIAL BARRIERS WHERE PEOPLE ARE LIABLE TO FALL INTO THEM.

NOTE:
REFER TO ARCHITECT'S DRAWINGS FOR ALL BUILDING SETTING OUT INFORMATION.

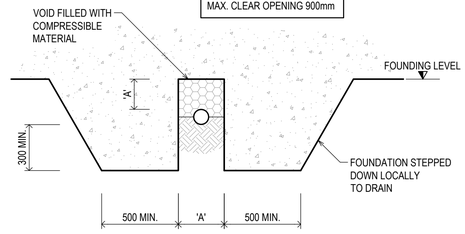
NOTE:
ALL TEMPORARY PROPPING BY OTHERS.



TYPICAL VOID DETAIL THROUGH FOOTING

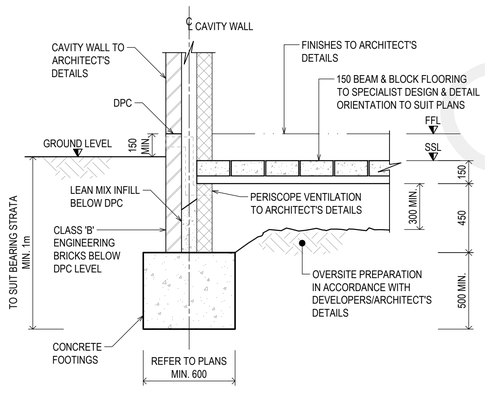
SCALE N..T.S.

NOTE
DIMENSION 'A' EQUALS PIPE DIAMETER PLUS 200mm, MAX. CLEAR OPENING 900mm



TYPICAL VOID DETAIL PASSING UNDER FOOTING

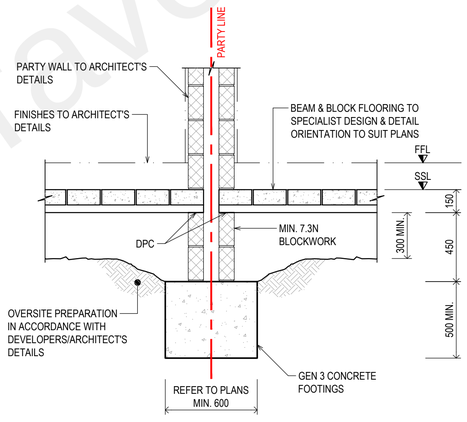
SCALE N..T.S.



TYPICAL EXTERNAL SECTION

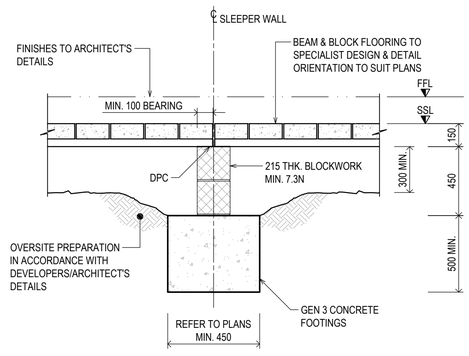
SHOWING BEAM & BLOCK FLOORING OPTION ONLY

SCALE 1-20



TYPICAL INTERNAL SECTION (PARTY WALL)

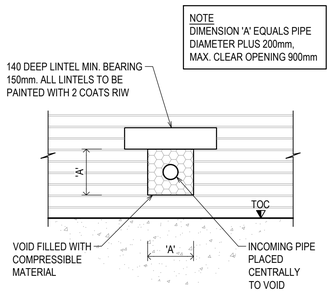
SCALE 1:20



TYPICAL INTERNAL SECTION 215 THK SLEEPER WALL

SCALE 1:20

NOTE
DIMENSION 'A' EQUALS PIPE DIAMETER PLUS 200mm, MAX. CLEAR OPENING 900mm



TYPICAL VOID DETAIL THROUGH BRICKWORK

FOR WHEN INCOMING PIPES PASSES THROUGH TOP 400mm OF FOUNDATION

SCALE N..T.S.

Notes:

STRIP FOOTINGS & PAD FOUNDATION NOTES

1. ALL DIMENSIONS TO BE CHECKED ON SITE. ALL DETAILS AND DIMENSIONS RELATING TO SUB-CONTRACTORS OR SUPPLIERS WORK MUST BE CHECKED AND AGREED BETWEEN THE SUB-CONTRACTOR OR SUPPLIER AND THE GENERAL CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SETTING OUT DIMENSIONS BEFORE COMMENCING WORK.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
3. THE MAIN CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STABILITY OF THE STRUCTURE AND THE STABILITY OF ADJACENT STRUCTURES WHILST THE WORKS ARE IN PROGRESS.
4. ANY DISCREPANIES, ERRORS OR OMISSIONS TO BE REPORTED TO THE PROJECT CO-ORDINATOR FOR FURTHER INSTRUCTION BEFORE COMMENCEMENT OF WORKS.
5. THE ENGINEER IS NOT RESPONSIBLE FOR DIMENSIONS, EXCEPT WHERE SHOWN ON HIS DRAWINGS, ALL SETTING OUT INFORMATION, DIMENSIONS, ETC. SHALL BE CALCULATED FROM THE ARCHITECTS DRAWINGS.
6. FOR DIMENSIONED LAYOUTS OF WALLS SEE ARCHITECTS DRAWINGS.
7. FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF BS8004 1986
8. SPREAD FOUNDATIONS HAVE BEEN DESIGNED FOR A BEARING PRESSURE AT FORMATION LEVEL OF NOT MORE THAN 120kN/m² IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SITE INVESTIGATION REPORT. SHOULD DIFFERENT GROUND OCCUR ALONG AN EXCAVATION OR VOIDS FOUND IN EXCAVATING, ALLOW FOR A CUT STRIP OF A393 FABRIC MESH AT MID DEPTH
9. CONCRETE MIX FOR FOUNDATIONS SHALL BE A DESIGNATED MIX TYPE C16/20 TO BS8500 USING 20mm MAXIMUM AGGREGATE AND WITH A SLUMP CONSISTENCE CLASS OF S3/S4 (COMPACTED BY MECHANICAL VIBRATOR). CONCRETE BEAMS TO FOOTING / GROUND BEAMS TO HAVE A DESIGN SULPHATE CLASS OF DS-1 AND AN ACEC CLASS OF AC-1
10. GROUND FLOOR BEAM & BLOCK FLOOR TO BE DESIGNED TO THE FOLLOWING LOADS:-
 FINISHES = 1.80kN/m²
 SELF WEIGHT (BY MANUFACTURER)
 IMPOSED LOADS = 1.5kN/m² U.N.O.
 PC / B+B = INDICATES SPAN OF NOM 150mm DEEP BEAM & BLOCK FLOOR UNITS
11. FOOTINGS TO BE PLACED CENTRALLY BELOW WALLS AND TO BE FOUNDED A MINIMUM OF 1500mm BELOW EXTERNAL FINISHED LEVELS.
12. ALL FOUNDATIONS TO BE FOUNDED IN NATURAL SOILS. EXCAVATIONS FOR FOUNDATIONS SHOULD NORMALLY BE 'BOTTOMED UP' BY HAND WITH THE SIDES OF THE TRENCH ADEQUATELY SUPPORTED WHERE NECESSARY HOWEVER WHERE A MECHANICAL EXCAVATOR IS EMPLOYED A TOOTHLESS BUCKET SHOULD BE FITTED. ALL FORMATIONS SHOULD BE INSPECTED AND IF ANY POCKETS OF SOFT MATERIAL OR MADE GROUND ARE FOUND THESE SHOULD BE EXCAVATED THROUGH AND FOUNDATIONS LOCALLY DEEPENED TO SUIT. ALL FOUNDATIONS DEPTHS TO BE AGREED ON SITE WITH THE LOCAL BUILDING INSPECTOR.
13. TOP LEVEL OF FOUNDATION ASSUMES THAT EXCAVATION OCCURS BEFORE FILLING OPERATIONS. IF FILLING OF THE SITE OCCURS FIRST, TOP LEVELS MAY BE RAISED TO SUIT. BOTTOM LEVELS SHOULD NOT BE ADJUSTED FOR THIS NOTE.
14. NO CONCRETE IS TO BE PLACED IN AN EXCAVATION UNTIL FORMATION LEVEL HAS BEEN AGREED ON SITE WITH THE LA OR NHBC AND ENGINEER.
15. STRIP OR TRENCH-FILL FOUNDATIONS SHOULD BE CAST CONTINUOUSLY THROUGHOUT. HOWEVER WHERE CONSTRUCTION JOINTS ARE UNAVOIDABLE THEY SHOULD BE LOCATED AWAY FROM ANY RETURN AND FORMED AS FOLLOWS:
 15.1. THE FIRST POUR IS CAST AGAINST A PLY STOP-END WITH 4H20x600 LONG DOWEL BARS PROTRUDING 300mm. BEFORE THE NEXT SECTION IS POURED THE STOP-END IS REMOVED AND THE EXPOSED CONCRETE THOROUGHLY CLEANED WITH A WIRE BRUSH.
16. WHERE DRAINS PASS THROUGH LOAD-BEARING WALLS, PRE-CAST 100x100dp PC CONCRETE LINTELS ARE TO BE USED TO BRIDGE OVER OPENINGS, MAINTAINING 50mm CLEARANCE. ENDS OF CONCRETE LINTELS ARE TO BE COATED WITH BITUMEN TO PROTECT ANY EXPOSED REINFORCEMENT. WHEN PIPES PASS THROUGH FOOTINGS SLEEVE THE PIPE WITH PLASTIC SLEEVE MIN 25mm CLEARANCE AROUND PIPE (MAX ALLOWABLE SLEEVE SIZE IS 300mmØ) REFER TO DRAINAGE ENGINEERS DRAWINGS FOR DETAILS
17. SUB FLOOR VOIDS TO BE FILLED/ EXCAVATED TO ENSURE MAXIMUM RETAINED HEIGHT DOES NOT EXCEED 450mm.
18. LONG POURS OF CONCRETE SHALL BE SUBJECTED TO THERMAL STRESSES WHERE POUR WOULD EXCEED 12m IN LENGTH, ALLOW FOR A DAY JOINT WITH 4No M20 (2T, 2B) DOWELS OR ALTERNATIVELY REINFORCED WITH FABRIC MESH (A393) IN THE TOP AND THE BOTTOM (50mm COVER).
19. BLOCKWORK STRENGTHS
 ALL BLOCKWORK BELOW DPC TO BE 7.3N/mm² OR 20N BRICKS UNLESS STATED OTHERWISE. ALL MORTAR BELOW DPC TO BE 1:3 (CEMENT:SAND) UNLESS OTHERWISE STATED
20. EXISTING SERVICES ARE UNKNOWN BY THE ENGINEER. CONTRACTOR TO CHECK ON SITE AS WELL US REVIEW AGAINST ARCHITECTURAL DRAWN LAYOUT

Rev	Description	Drn	Chk	Date
B	FOOTINGS TO CORNER REVISED TO SUIT EX. WELL LOCATION	CJP	SMB	04.08.22
A	FIRST ISSUE	CJP	SMB	25.02.22

BdR
Civil & Structural Engineering Consultants
The Old Engine House, Goblands Farm Business Park
Court Lane, Hadlow, Kent. TN11 0DP
Tel 01732.851416
email: engineering@bdr.uk.com

Client
THE LONGLEY GROUP

Project
FORMER ST JOHNS AMBULANCE HQ
ARMOURY DRIVE, GRAVESEND
KENT DA12 1NB

Drawing
NEW FLATS - FOUNDATION PLANS, SECTIONS & DETAILS GENERAL ARRANGEMENT

PRELIMINARY

Scale @ A1	Date	Drawn by	Checked
1:50, 1:20, 1:10	25.02.22	CJP	SMB

Job No.	Drg. No.	Rev
21-0741	S001	B

Gravesham Borough Council