

HEALTH, SAFETY AND ENVIRONMENT

1. THIS GEO-STRUCTURAL DESIGN HAS BEEN CARRIED OUT AND REVIEWED IN ACCORDANCE WITH THE CONSTRUCTION, DESIGN & MANAGEMENT (CDM) REGULATIONS 2015 AND DOES NOT INCLUDE ANY ABNORMAL RISK ITEM THAT A COMPETENT CONTRACTOR WOULD NOT BE AWARE OF WHEN UNDERTAKING CONSTRUCTION WORKS SHOWN.
2. DFS PILE WALL LAYOUT AND DESIGN ACCOUNT FOR 1:100 VERTICALITY TOLERANCE (WITH CFA DRILLING TECHNIQUE, USING HEAVY DUTY AUGERS), 25mm HORIZONTAL POSITIONAL TOLERANCE (WITH A TEMPORARY GUIDE WALL IN-PLACE) AND 30mm OVER-BREAK IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE ICE SPECIFICATION FOR PILING & EMBEDDED RETAINING WALLS (ICE SPERW, 2015). BASED ON THESE, THERE ARE POTENTIALS FOR PILES IN THE SECANT WALL TO ENCRUSH INTO THE PROPOSED BASEMENT AREA BY MAGNITUDES OF UP TO 105mm. IT IS IMPERATIVE THAT THE ARCHITECT, PROJECT STRUCTURAL ENGINEER AND PRINCIPAL CONTRACTOR MAKE ALLOWANCE FOR THIS.
3. THE PRINCIPAL CONTRACTOR AND ASSOCIATED SUB-CONTRACTORS MUST CARRY OUT INDEPENDENT RISK ASSESSMENTS THAT ARE APPLICABLE TO THEIR WORKS AND FULLY COMPLY WITH THE ABOVE STATED REGULATION.
4. THE PRINCIPAL CONTRACTOR AND ASSOCIATED SUB-CONTRACTORS MUST REVIEW THE SITE-SPECIFIC AND HISTORICAL BOREHOLE LOGS OF THE SITE TO HAVE ADEQUATE KNOWLEDGE OF GROUND CONDITIONS ON THE SITE, PRIOR TO COMMENCEMENT OF WORKS.
5. DURING SITE OPERATIONS, IF OBSERVED GROUND CONDITIONS DIFFER FROM THE GENERALISED STRATIGRAPHY SHOWN IN THIS SET OF DRAWINGS, DFS MUST BE INFORMED IMMEDIATELY.
6. IT IS THE RESPONSIBILITY OF THE PRINCIPAL CONTRACTOR AND ASSOCIATED SUB-CONTRACTORS TO ENSURE THAT SITE OPERATIVES ARE COMPETENT AND EXPERIENCED IN THE AREA OF WORKS TO BE UNDERTAKEN.
7. IN ADDITION TO THE RISK/HAZARD TYPICALLY ASSOCIATED WITH THE GROUND ENGINEERING WORKS DETAILED IN THIS DRAWING, ADDITIONAL SITE/WORK-SPECIFIC HAZARDS HAVE BEEN IDENTIFIED THROUGH DESIGN RISK ASSESSMENT. THESE ARE OUTLINED IN 7.1 - 7.4 BELOW. ALL SITE OPERATIONS MUST ACCOUNT FOR ALL USUAL AND SITE/WORK-SPECIFIC HAZARDS.
 - 7.1. PILING PLATFORM LEVEL IS UNCONFIRMED AT THIS STAGE. HOWEVER, FOR DESIGN PURPOSE, THE PILING MAT LEVEL FOR THE PERIMETER PILE WALLS AND BEARING PILES IS GENERALLY TAKEN TO BE THE EXISTING GROUND LEVEL IN THE AREA OF PROPOSED WORKS; APPROX. +45.500M OD. NONETHELESS, THE PRINCIPAL CONTRACTOR MUST CONFIRM ACTUAL PILING PLATFORM LEVEL(S) PRIOR TO THE COMMENCEMENT OF PILING WORKS ON THE SITE, SO THAT THE PILE WALL SCHEDULE & BEARING PILE SCHEDULE MAY BE AMENDED ACCORDINGLY.
 - 7.2. A REINFORCED CONCRETE CAPPING BEAM MUST BE CONSTRUCTED ON THE PILE WALL, WHILE TEMPORARY PROPS MUST BE INSTALLED DURING BULK EXCAVATION FOR THE NEW BASEMENT AS ILLUSTRATED IN THESE DRAWINGS.
 - 7.3. A TEMPORARY GUIDE WALL MUST BE PUT IN-PLACE PRIOR TO THE INSTALLATION OF PILE WALLS.
 - 7.4. IN ADDITION, IT IS IMPERATIVE THAT THE CONCRETE MIX DESIGN FOR THE HARD PILES IN THE BORED PILE WALLS ACCOUNT FOR 10mm MAXIMUM AGGREGATE SIZE AND SET-RETARDING ADMIXTURES IN ORDER TO EASE THE INSTALLATION OF REINFORCEMENT CAGES INTO CONCRETED DRILLHOLES. REINFORCEMENT CAGE VIBRATORS MAY ALSO BE REQUIRED TO FORCE THE STEEL CAGES DOWN TO THE DESIGN DEPTHS.

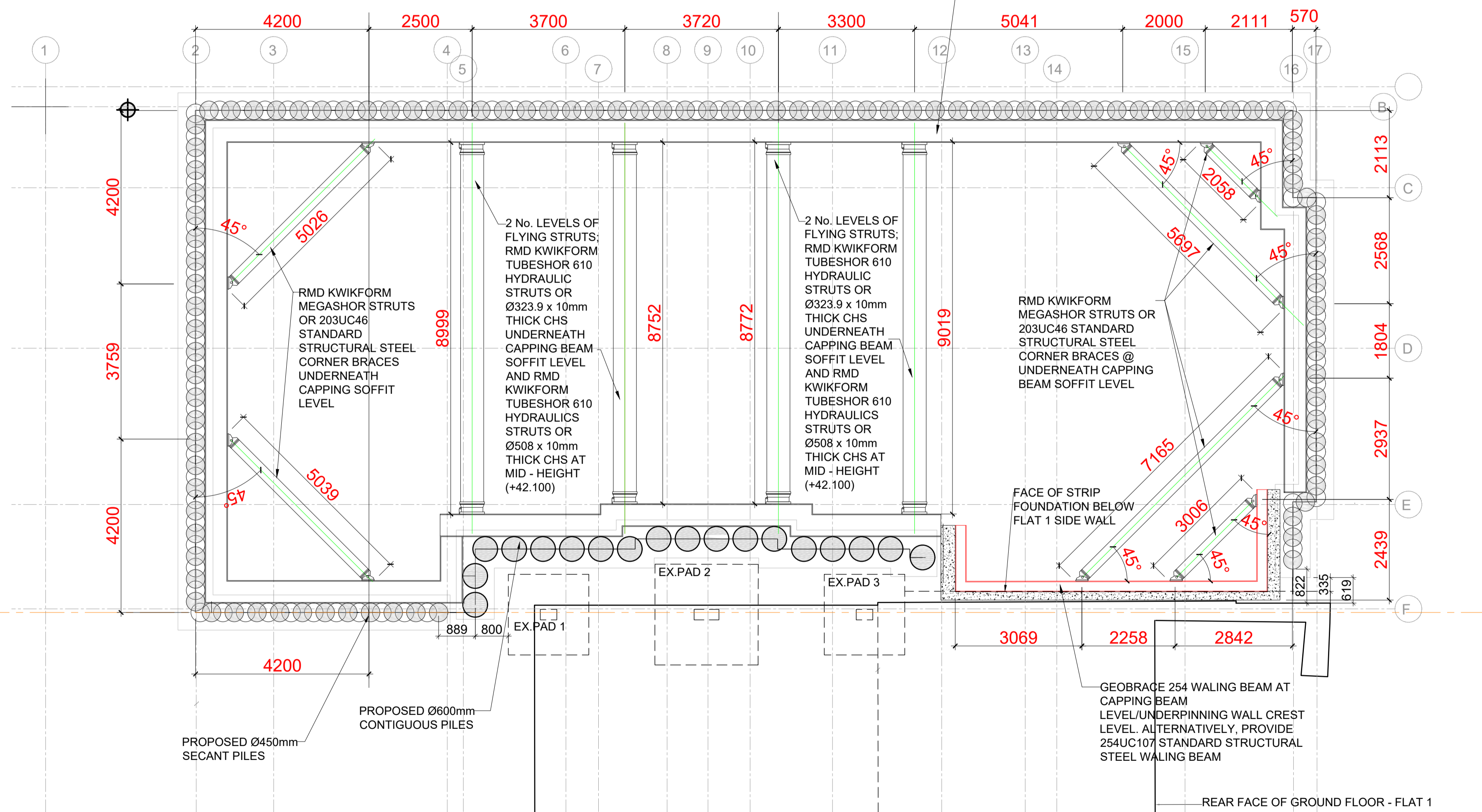
SUMMARY OF TEMPORARY PROPPING SCHEME

- * PROP TYPE A: 6 No's. RMD KWIKFORM MEGASHOR STRUTS OR 203UC46 STANDARD STRUCTURAL STEEL CORNER BRACES (2.5m - 7.5m LENGTHS)
- * PROP TYPE B: 4 No's RMD KWIKFORM TUBESHOR 610 HYDRAULIC STRUTS OR Ø323.9 x 10mm THICK CHS AT UNDERNEATH CAPPING BEAM SOFFIT LEVEL.
- * PROP TYPE C: 4No's RMD KWIKFORM TUBESHOR 610 HYDRAULICS FLYING STRUTS OR Ø508 x 10mm THICK CHS AT MID - HEIGHT (+42.100); (< 10m LENGTH)
- * 1-2 No. LEVELS OF RMD KWIKFORM GEOBRACE 550 OR TWIN - 356 x 406 x 235 UC STANDARD STRUCTURAL STEEL WALING BEAMS ON TOP OF EACH OTHER UNDERNEATH CAPPING BEAM SOFFIT LEVEL AND AT MID-HEIGHT OF WALL (+42.100).
- * 1 No. LEVEL OF RMD KWIKFORM GEOBRACE 254 OR 254UC107 STANDARD STRUCTURAL STEEL WALING BEAM AROUND CREST LEVEL OF SEGMENTAL UNDERPINNING WALL.

LEGEND

- Ø600mm CONTIGUOUS PILES
- Ø450 MALE SECANT PILES
- Ø450 FEMALE PILES

RMD KWIKFORM GEOBRACE 550 OR TWIN - 356 x 406 x 235 UC STANDARD STRUCTURAL STEEL WALING BEAMS ON TOP OF EACH OTHER UNDERNEATH CAPPING BEAM SOFFIT LEVEL AND AT MID-HEIGHT OF WALL (+42.100)



GENERAL ARRANGEMENT OF TEMPORARY PROPPING SCHEME (SCALE 1:75)

IMPORTANT CONSTRUCTION NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, AND SPECIALISTS LATEST DRAWINGS AND SPECIFICATIONS. ANY DISCREPANCIES MUST BE REPORTED TO DFS, ENGINEER AND ARCHITECT IMMEDIATELY.
4. ONLY FIGURED DIMENSIONS ARE TO BE USED. ANY QUERIES MUST BE REFERRED TO DFS.
5. 50mm COVER TO PILE REINFORCEMENT.
6. STRICT SUPERVISION OF BULK EARTH WORKS IS REQUIRED TO ENSURE THAT EXCAVATIONS DO NOT EXCEED THE DESIGN DEPTH SHOWN IN THESE DRAWINGS (4.85m).
7. BORED PILE WALL SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE ICE SPECIFICATIONS FOR PILING AND EMBEDDED RETAINING WALLS (ICESPERW, 2016).
8. THE BORED PILE WALLS ARE DESIGNED FOR BOTH TEMPORARY AND PERMANENT USE.



DEEP FOUNDATIONS SPECIALISTS LIMITED
2ND FLOOR, THE PORTER BUILDING 1 BRUNEL WAY
SLOUGH SL1 1FG.
TELEPHONE: 01753 396498

BROXWOOD VIEW LIMITED

BROXWOOD VIEW, 29 ST. EDMUND'S TERRACE LONDON NW8 7QH

GENERAL ARRANGEMENT OF TEMPORARY PROPPING SCHEME

DATE: 25 APR 2023 DRAWN: AR CHECKED: AA
DRAWING NO: DFS221011-05 REV: 05 SCALE: 1:75 @ A1