1) GENERAL

A) These drawings to be read in conjunction with all relevant drawings produced by the Architect, M&E consultant and all other specialists drawings.
B) Knapp Hicks & Partners drawings are not to be scaled to obtain dimensions. All dimensions are to be obtained from the Architect's drawings and site measurement.
C) All setting out information and levels are to be obtained from the Architect's drawings.
D) Details of all non-structural items, ie ventilation, insulation, services, waterproofing, fire protection, damp proofing, finishes etc. are to be obtained from the Architect's drawings.
E) The contractor is to inform the Architect and Knapp Hicks & Partners of any discrepancies shown on the drawings with regard to the size, position and arrangement of the existing structure and associated elements.
F) All structural work is to be to the satisfaction of the Building Inspector and/or Knapp Hicks & Partners. The Contractor is responsible for contacting Building Control in good time to allow for all structural works to be inspected, particularly excavations for foundations.
G) The Contractor is to inform Knapp Hicks & Partners of all builders work holes required to be formed in structural members (eg holes in steel beams, floor joists etc.) and await Knapp Hicks & Partners comments prior to ordering materials, installation of member or formation of holes.
H) All works are to be in accordance with the current British Standard and Building Regulations.
I) The Contractor must exercise due care and attention to any disturbed ground with regards to contamination or pollution or deleterious material.
J) The lengths of all pre-fabricated elements are to be obtained from the Architects drawings and/or site measurements.

2) HEALTH & SAFETY

A) Prior to works commencing, the Contractor must notify the local Health & Safety executive area office of the work, using Form F10, in accordance with the CDM Regulations 2015.
B) The Contractor is responsible for the stability of the existing structure and all retained earth works, both on the site and on adjoining sites and must take all necessary precautions to safeguard their stability. All temporary works and the stability of the works in general during construction is the responsibility of the Contractor.
C) The Contractor is to obtain relevant C.O.S.H.H. information with regards to the materials he proposes to use in the works and is to ensure that all operatives are aware of the requirements stated in the C.O.S.H.H. regulations.
D) The Contractor is to comply with the requirements of the Health & Safety at Work Act 1974 in terms of the Employer's responsibilities.
E) Where appropriate suitable lifting equipment including craneage is to be used for the moving or locating of individual building elements and materials. All lifting equipment and cranes are to be operated and supervised by suitably qualified personnel and restricted areas of work shall be designated during these operations.

3) TIMBER

A) All structural timber to be in accordance with BS 5268 for workmanship and quality and BS 4471 for sizes.
B) All structural timber to be strength class C24 or better and to have a moisture content at the time of installation of not more than the following-

- covered in general unheated spaces 24%
- covered in generally heated spaces 20%
- Internal in continuously heated space 20%

C) All new timber to be provided with suitable treatment and preservative.
D) All timbers forming beams are to be bolted together using M12 grade 4.6 bolts at 600 centres
E) New floor and roof joists spanning more than 2.5M to be restrained by solid noggins along their centre.
F) New joists spanning more than 4.5M to be restrained by solid noggins at third spans.
G) All fixing nails, screws and bolts to have galvanised finish (unless noted otherwise) or similar which should be compatible with the timber preservative.
H) Nails to be to BS 1202:Part 1. The diameter of pre-drilled holes should not exceed 0.8times the nail diameter.
I) Screws to be to BS 1202 to be fixed in pre-drilled holes not exceeding 0.5times the shank diameter and passing through holes not exceeding the shank diameter.
J) Bolts to be minimum garde 4.6 with oversized washers in accordance with BS 5268
K) Spacing of all nail, screw and bolt fixings shall be in accordance with BS 5268
L) All Notches and holes in timber members shall be in accordance with the Building Regulations, Trada or NHBC guidelines, or in accordance with manufacturers instructions to engineered joists or rafters.
M) All timber wall plates to be provided with 30x5mm thk. galvanised restraint straps at max. 2m centres fixed to wall under with a min. 3 No. screw fixings in accordance with the Building Regulations and manufacturer's instructions.
N) 30x5mm thk. galvanised 'L' type lateral restraint strapping to be provided at a max. 2m centres between inner leaf of the external/party walls and fixed to a min. 3 No. floor/ceiling joists including all necessary solid timber noggins/packing in accordance with the Building Regulations and manufacturer's instructions.
P) Joist hangers built into walls to be restraint type hooked over supporting leaf in accordance with the Building Regulations. Alternatively provide 30x5mm thk. galvanised 'L' type twisted lateral restraint straps, min. 1200 long at a max. 2m centres fixed to side of floor joists.
Q) 30x5mm thk. galvanised 'L' type twisted lateral restraint straps to be provided between inner masonry leaf and fixed over a min. 3 No. rafters at a max. 2m centres along the head of all gable wall panels including all necessary solid timber noggins/packing in accordance with Building Regulations & manufacturer's instructions.
R) All truss rafters to be fixed to wall plate in accordance with the manufacturer's instructions.
S) Truss rafters to be provided with 100x25mm solid timber secondary longitudinal & diagonal bracing designed and fixed in accordance with manufacturers instructions.

4) LINTELS

A) All lintels to be to the manufacturers design and to be installed in strict accordance with their instructions.
B) For non-standard lintels refer to engineers plans.
C) All lintels to be provided with min 150mm end bearings.

5) MASS CONCRETE PADSTONES

A) Concrete to be grade C30
B) All beams to be bolted to padstones with 2 No. M12 resin anchors.

6) MASONRY

A) All load bearing masonry to be in accordance with BS 5628 for workmanship and quality.
B) All bricks to be in accordance with BS 3921. All blocks to be in accordance with BS 6071.
C) Unless otherwise shown all load bearing masonry is to be block bonded to existing structure. Block bonding is not permitted for exposed brickwork unless approved by the Architect. "Wallstarter"/"Furfix" channel to be fixed at junction of existing building and new building brickwork/blockwork.
D) All loadbearing masonry to be constructed using the following:
Bricks 20N/mm2 with frogs laid upper most, unless otherwise noted on the drawings.
Blocks to be minimum 3.6N/mm2 unless otherwise noted on the drawings.
E) All masonry below ground level to be min. class B engineering brickwork or dense concrete (1500 kg/m3) min. 7 N/mm2 blockwork in 1:3 mortar.
F) All mortar to be Designation (ii) in accordance with BS 5628 for workmanship and quality.
G) Ready mix mortar to be in accordance with BS 4721
H) Cement should be in accordance with BS 12, BS 146:Part2 BS 4027 or BS 5224
I) Aggregates should be in accordance with BS 882, BS 1200, BS 877 Part 2 or BS 3797: Part 2
J) Colour pigments should comply with BS 1014 and should not exceed 10% by mass of cement content
K) Plasticisers are permitted and should comply with BS 4887 and to be used in strict accordance with manufacturers instructions.
L) All proposals for blockwork outer leaf substrates (minimum 7N/mm²), bed joint reinforcement, embedded mesh, movement joint locations, etc. to external rendered elevations/finishes must be checked and approved by appointed rendering specialist as being suitable for the proposed rendering system prior to commencement of the works.

7) FIXINGS

A) All joist hangers, frame clips, restraint straps, fixings, bolts and masonry support systems to be installed in strict accordance with the manufacturers instructions.
B) All new timber joists and/or timber beams are to be supported using joist hangers unless noted otherwise.
C) All wall roof wall plates to be strapped to wall under in accordance with the Building Regulations.

8) STEELWORK

A) All structural steelwork to be in accordance with BS 5950 for workmanship and quality and BS 4 for dimensions and detailing.
B) The steelwork contractor shall be responsible for maintaining the stability and integrity of the steel frame at all times by the provision of adequate temporary works.
C) Fabrication and erection of steelwork to comply with the relevant sections of BS 5950 and `The National Structural Steelwork Specification'.
D) All dimensions to be checked on site prior to any fabrication works and any discrepancies are to be brought to the engineers attention.
E) All structural steelwork to be Grade S275 unless noted otherwise.
Internal steelwork with web/flange and plates thickness of up 30mm to be S275 or S275JR to BS EN 10025 unless noted otherwise.
External steelwork and steelwork within external cavity walls with web/flanges/plates thickness of up to 54mm to be minimum Grade S275J0 to BS EN 10025 unless noted otherwise.
Hollow steel sections up to 54mm wall thickness to be minimum Grade S355J0H to BS EN 10025 unless noted otherwise.
F) All internal protected structural steelwork to be suitably cleaned to remove all loose rust and scale and painted with high build zinc phosphate modified alkyd to a dry film thickness of not less than 75microns prior to delivery to site. Following installation, all damaged areas to be touched up in accordance with paint manufacturers instructions.
G) All external steelwork or members built in to external cavity wall to be suitably cleaned to ensure sections are free of surface contamination and then shot blast to SA 2.5, then subsequently hot-dip galvanised to BS 729 to a dry-film thickness of not less than 85microns
H) All galvanised members requiring subsequent paintwork finish shall receive 'T' wash prior to application to paint system in accordance with the paint manufacturers instructions.
J) For details of fire protection to steelwork refer to Architects drawings.
K) Unless otherwise noted, all welds to be minimum 6mm full profile fillet welds in accordance with BS 5135 unless noted otherwise. Where a weld is called up as full strength butt weld (FSBW) it is assumed that it will be full penetration. Site welding will not be acceptable, unless by prior approval by the engineer.
L) All bolts to be minimum M16 grade 8.8 bolts unless agreed otherwise by the engineer.
M) The ends of all new steel beams supported by walls are to be bricked in solid to provide adequate restraint against torsion at support.
N) All beams supported on masonry to have minimum bearing of 100mm unless noted otherwise and to be fixed to padstone under with 2No M12 anchors thro' 14mm holes in btm flange.
P) Where beams are supporting existing walls, gap between underside of walls and top of beam to be fully filled with 1:3 (cement:sand) semi-dry packing over the full width of the supported area.
Q) All multiple steels forming beams are to be bolted together using M16 grade 4.6 bolts 600mm centres with spacer tubes as necessary.
R) All steelwork to steelwork connections to be designed & detailed by the steelwork fabricator for a minimum ultimate shear load of 50kN unless noted otherwise.
U) End connections to be designed by the steelwork contractor to meet the requirements of BS 5950. Where appropriate neoprene washers or similar separation mediums are to be provided to prevent Bi-metallic reactions.
V) All holes in beams to be accurately drilled and not punched or burnt.
W) All bolt and nut assemblies are to be fitted with an appropriate washer under nut and all bolts to protrude at least 2 no. threads beyond end of nut.
Y) All hollow sections are to be hot rolled unless noted otherwise and all ends to be sealed.

ALL STRUCTURAL STEELWORK MUST BE PROVIDED WITH THE MANDATORY CE MARKING & SUPPLIED BY SUITABLY CE MARKING APPROVED COMPANY IN ACCORDANCE WITH CONSTRUCTION PRODUCTS REGULATION REQUIREMENTS - EXECUTION CLASS EXC2.

Rev	Date	Revision	By	Chk
P1	18.05.22	PRELIMINARY ISSUE FOR COMMENT	JFM	JM

Client

UNITED GRAND LODGE OF ENGLAND

Project

35 GREAT QUEEN STREET
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Drawing Title

CONSTRUCTION NOTES
SHEET 1 of 2

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DATE	May 22	CHECK	JM	

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