



Section A-A
1:20

MASONRY

All blockwork to be min. 7N dense concrete block, in mortar designation (iii/M4). Below ground mortar to be designation (iii/M6).

Wall ties to be provided in accordance with BS EN 845-1:2013 at max. 900mm horizontal and 450mm vertical centres, staggered in alternative rows. Additional ties are to be provided around all openings at 225mm vertical centres and 150mm max from opening. Ties to be type 2 stainless steel or non-ferrous in areas of severe exposure.

All openings in blockwork to receive bedjoint reinforcement 2no. courses above & below and extend 500mm past each side of opening.

All new masonry to be mechanically tied into existing with stainless steel Furix starter ties or similar approved. Ties fitted at 450mm vertical ctrs in accordance with Manufacturers specification.

No masonry construction shall be conducted while the temperature is below 4° C on a rising thermometer or 5° C on a falling thermometer.

Lateral restraint straps are required at floor, ceiling joist, rafter or flat roof joist levels in accordance with the provisions in BS EN 1996-2:2006 and Building Regulation requirements at a maximum spacing of 2m.

STEELWORK NOTES

The Contractor is to take accurate site dimensions prior to commencement of fabrication details for new steelwork. Fabrication details to be submitted to Engineer for comment prior to fabrication.

Levels of all new steelwork to be determined on site and agreed with Architect prior to fabrication.

New steel beams to be packed tight against the existing walls using dry pack prior to the removal of the needle and props.

No variation to the structural details shown on this drawing is to be undertaken without prior approval from the Engineer.

All columns to be continuous unless stated otherwise and a splice detail is provided.
All steelwork to be hot rolled grade S355JO to BS EN 10025:2019, unless stated otherwise.

All hollow sections to be hot rolled grade S355J2H to BS EN 10210:2006, unless stated otherwise.

All structural steelwork has been designed and shall be fabricated in accordance with BS EN 1090 in execution class 2, unless stated otherwise.

All beams to have a minimum bearing on 150mm where possible.

Steelwork Protection - All steelwork to be blast cleaned to Sa 2½ in accordance with BS EN ISO 12944.
Internal Specification - coat with a Zinc phosphate epoxy primer to 85 µm in accordance with BS EN ISO 12944.
External Specification - hot dip galvanised to 140µm in accordance with BS EN ISO 1461 and 14713.

All bolts to be grade 8.8, and spun galvanised unless otherwise stated.

All bolt holes to be 2mm clearance holes to suit size of bolt.

All welds shall be 8mm continuous fillet welds or full penetration butt welds unless otherwise stated.

All steel beams shall be pre-drilled for web packers and flange plate fixings for M10 bolts at 400mm staggered centres.

All pairs of beams to be space bolted together using M16 bolts with spacer tubes at max 400mm staggered centres.

Fabricator to issue fabrication drawings to Structural Engineer and Architect for comment a minimum of 5 days prior to fabrication. Final approval of fabrications drawings by Architect.

GENERAL NOTES

This drawing is to be read in conjunction with all other relevant Architects, Engineers & Specialist drawings, details and the relevant Health and Safety Plan (as appropriate.).

All dimensions, site setting out, finishes, damp proofing, insulation and radon protection to architects details and specification.

DO NOT set out from this drawing. Check all dimensions with Architects drawings and consult Engineer if any queries arise. Do not scale from drawings.

All dimensions to be checked on site. All details and dimensions relating the sub-contractors or suppliers work must be checked and agreed between the subcontractors or supplier and the general contractor.

Works to comply with current Codes of Practice, Eurocode, British Standards and Building Regulations.

Contractor to provide all necessary vertical and lateral restraint strapping in order to comply with The Building Regulations.

Existing wall construction, foundations, span directions of joists, rafters etc. all to be exposed and confirmed as adequate and in line with assumptions prior to commencement of work and ordering of materials. Structural engineer to be consulted if any differences are found.

Temporary Stability - Contractor to provide all necessary temporary propping to safely undertake the works.

Roof and Trimming - Design of roof structure, trimmers and connections to be prepared by suitably qualified persons prior to construction.

Party Wall - Works come under the Party Wall Etc. Act 1996. All appropriate notices and awards should be issued prior to work taking place.

Masonry Strength - Contractor to confirm strength of existing brick/blockwork and mortar class prior to commencement of works and ordering materials. Structural Engineer to be consulted if found to be different from values assumed.

New strip foundations to be cast on to solid virgin ground with 150kN/m² capacity - final depth and ground conditions to be confirmed on site by Building Control Officer and any soft spots to be filled with GEN1 concrete.

All DPC's, DPM's, fire protection, Finishes & radon protection to the Architect's specification or agreed on site with building control.

Part A3 Section V of the current Building Regulations.

This structure is in class _____ regarding Disproportionate collapse. The following measures are to be taken : _____

CONCRETE

All concrete to be specified in accordance with BS 8500:2015 parts 1 and 2, and BS EN 206:2013.

Unless detailed and scheduled the contractor is to provide all necessary reinforcement spacer chairs.

All concrete to be RC32/40 concrete, unless stated otherwise.

All shuttering to shuttered concrete to others details.

Plain concrete in foundations shall be placed in direct contact with the bottom of the excavation, the concrete being deposited in such a manner as not to be mixed with the earth.

The bottom of excavations for reinforced concrete works shall be covered with a blinding layer of C8/10 GEN 1 concrete not less than 50mm thick with a smooth surface.

No concrete shall be mixed or placed while the temperature is below 1° C on a rising thermometer or 2° C on a falling thermometer.

Newly placed concrete shall be protected by approved means from frost, rain, sun and drying winds.

All reinforcement to have minimum 40mm cover, 50mm to underside, unless stated otherwise.

Detailing of day work/construction joints by groundworks contractor. Positions to be agreed with engineer.

Bar annotation as set out below:

T1 T2 B1 B2

Abbreviations:-

T1/2 = Top Face (T1=Outer Layer, T2=Inner Layer)
B1/2 = Bottom Face (B1=Outer Layer, B2=Inner Layer)
NF = Near Face (NF=Outer Layer, N2=Inner Layer)
FF = Far Face (F=Outer Layer, F2=Inner Layer)
EF = Each Face; AB = Alternative Bars;
STG = Staggered Bars;
ABR = Alternate Bars Reversed

Services are not expected to exceed 150mm diameter and are to be suitably sleeved through reinforced concrete elements. Bars may be locally displaced to accommodate this.

All reinforcement to have minimum lap lengths set out below:

H10 - 400mm
H12 - 480mm
H16 - 640mm
H20 - 800mm
H25 - 1000mm
H32 - 1280mm

Reinforcement to be inspected & approved by the Engineer before concrete casting commences (min 24 hour notice).

Concrete shall be placed and fully compacted to avoid cold joints, honeycombing and to minimise segregation, excessive bleemishes or other defects in the concrete.

Designers Risk Assessment:

- Installation of heavy beams - Mechanical aids should be employed if required when installing beams.
- Temporary Support - The contractor is to provide all necessary temporary propping to safely undertake the work and maintain structural stability, including sides of excavations for sub structure and retaining elements.
- Confirmation of Structural Layout - The assumptions made within the calculations and drawing should be confirmed on site, prior to commencement of works. Any differences should be discussed with Structural Engineer, in order to check calculations.
- Working at height - Suitable scaffold to be provided in order to carry out works safely.
- Asbestos - Any suspected Asbestos containing materials should be tested and removed by specialist contractors in accordance with HSE guidance.

TENDER

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PROPOSED SECTION A-A

Scales: As indicated @ A1
Project No: 23505
Drawn By: JSK
Drawing No: 021
Checked: WMPS
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