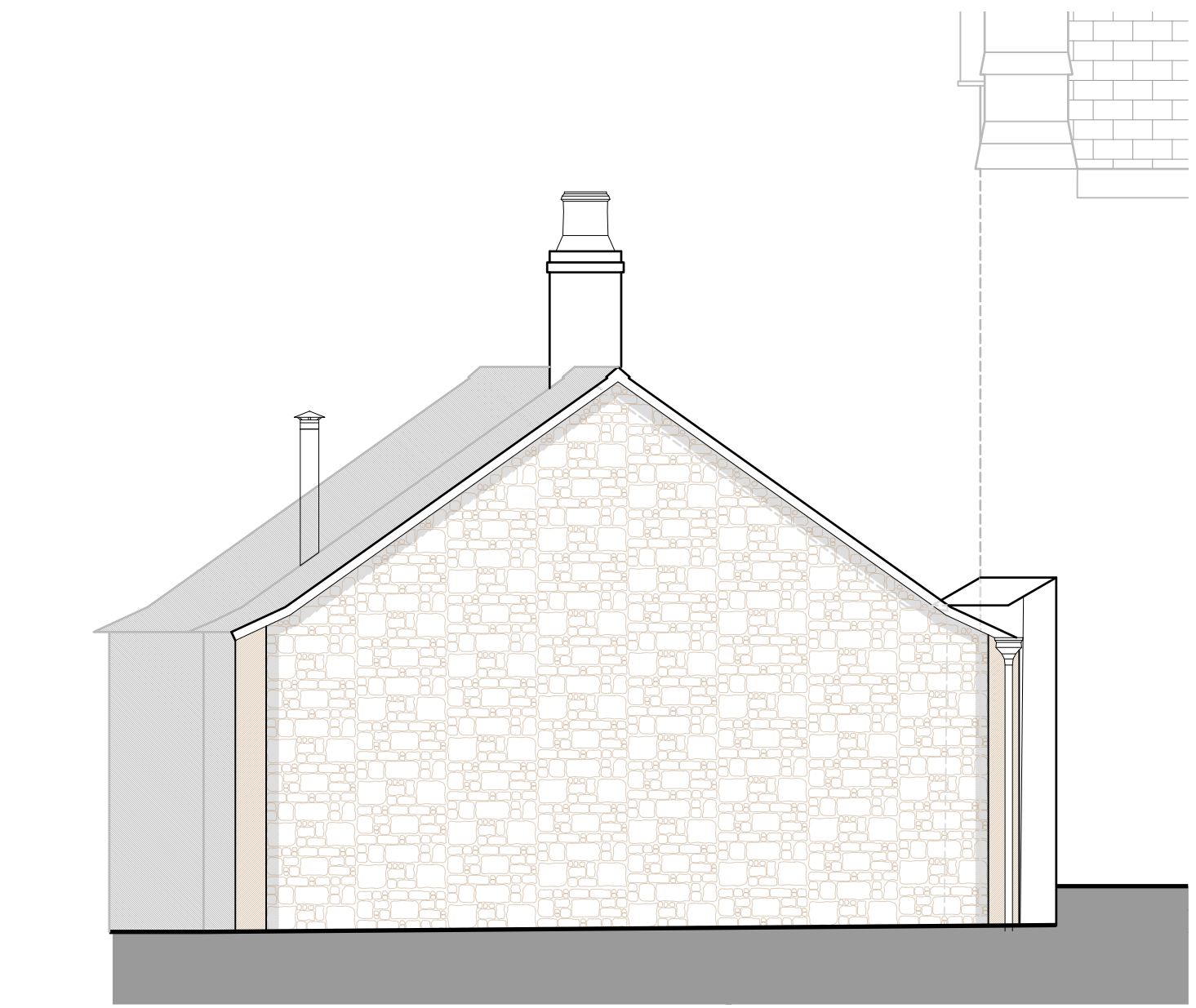


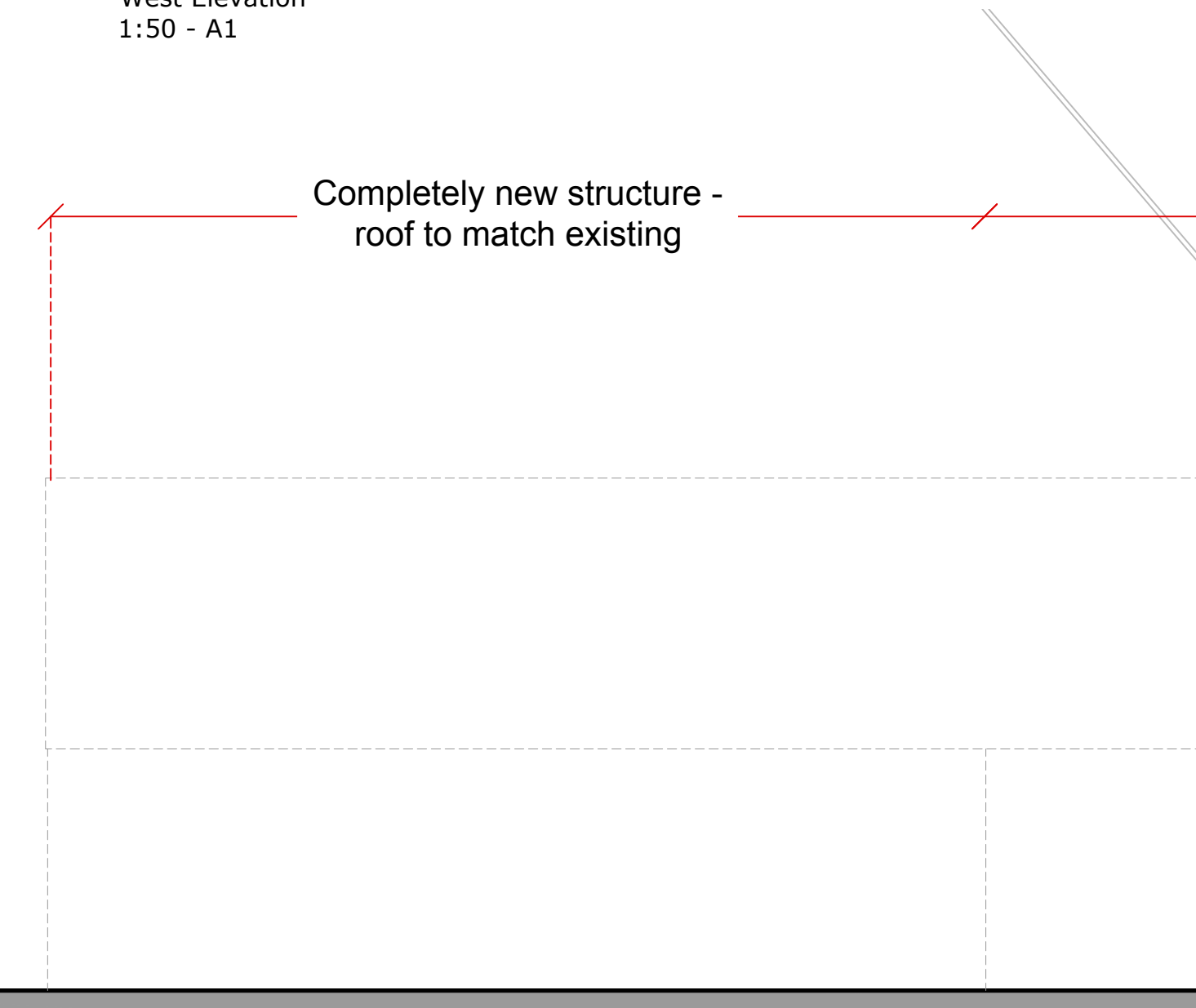
North Elevation  
1:50 - A1



West Elevation  
1:50 - A1



East Elevation  
1:50 - A1



South Elevation  
1:50 - A1

**EXTERNAL WALL CONSTRUCTION:**

New stone-faced external wall construction of the extension to be outer leaf of 100mm on-bed stone (to match existing), set about 100mm cavity with 100mm Dritherm Cavity slab R34 cavity wall insulation fixed in strict accordance with the manufacturers recommendations. Inner leaf of all new cavity walls to be load bearing lightweight aggregate masonry block (breeze) from Messrs Tarmac Topblock or Plasmor or similar supplier.

Wall ties (all to be stainless steel) to all areas of all external walls to be provided at max. 750 horiz. and 450 vertical centres, increasing to 225vert. & horiz. c/s at jambs of openings. Generally, wall ties to be at min rate 7No. ties /m sq. wall area. All new walls to incorporate Hylod or similar approved dpc at min 150mm above local ground level, through all skins making up the wall construction. All wall ties to be Stainless steel to relevant B.S. Inner skin blockwork to be of 100mm on bed Tarmac Topblock, or similar approved aggregate concrete blockwork. Close all cavities at jambs and cills of openings with proprietary insulating dpc, or THERMABATE cavity closer, such that max. 'V' value across the cavity closing is not greater than 1.2w/mk.

NOTE: Mortar mix for all external skin masonry is expected to be a lime-cement based mortar utilising hydrated lime, white cement, and semi-sharp sand to best emulate the original mortar colour and texture used in the existing building. The exact proportions of these materials shall be agreed at the time of the construction of the test panel, and contractors shall be deemed to have included in their price for the outer skins of all walls to be constructed in such a mortar mix. NON-visible inner skins may be constructed in more common sand/cement mortar.

NOTE: All below ground masonry to be executed in sand/cement mortar, NOT in the mix prescribed above (no lime content below DPC).

**WALL LININGS**

Where shown, new thermal linings to walls in existing building to be formed using Celotex Internal Solid masonry lining system as described. Clean down internal wall surfaces and remove any protrusions, projections, etc. Brush off loose dust, etc and place 50mm thick Celotex PI-4000 insulation tight against inner wall face with the printed sheets side facing the outer wall. Fix 25x47mm lathes to wall at top and bottom of sheet and the grid-up to suit plasterboard fixing centres with lathes at no greater than 600mm in any direction. Provide additional battens at openings as required, including forming Celotex approved reveal details (see Celotex technical data sheets). Seal all joints in boards with proprietary foil tape as the works proceed. Seal all external perimeters of boards with silicone mastic up to adjacent wall/floor surfaces. Fix inner lining of 12.5mm foil backed plasterboard using suitable proprietary fixings in accordance with the manufacturer's recommendations. Slim internally paying attention to forming neat abutment with floor and adjacent wall/roof surfaces. Extent of thermal linings as indicated in the plan drawings for the scheme. All work utilising Celotex products to be executed in strict accordance with the technical guidance issued in their publication [https://www.celotex.co.uk/commercial/celexa-p4000\\_product-data-sheet\\_09y-21.pdf](https://www.celotex.co.uk/commercial/celexa-p4000_product-data-sheet_09y-21.pdf)

**LINTELS:**

Use Catnic / spanrite proprietary insulated lintels all external wall openings except where indicated otherwise. All lintels to have min. 150mm end bearing, and to incorporate standard thermal insulation specification. All lintels to be installed in strict compliance with the manufacturer's recommendations. Use supplementary cavity tray DPC over all reconstituted stone lintels, with weepholes at 450 vertical centres weeping at heads of all stone lintels.

Cavity trays at all abutments of roofs and walls - use proprietary cavity trays with stopped-ends and weepholes as required by the manufacturer's specifications.

**WINDOWS / DOORS:**

All windows and external doors to be to clients approved manufacturers details as approved in window/glazing details as submitted as part of the Discharge of Conditions Application. Main Contract to check with Architect prior to commencing the works. All such details to comply with any planning conditions/restrictions imposed by the LPA.

As an absolute minimum standard, all new glazing throughout the project to comply in all respects with the requirements of Part K of the Building Regulations, and with BS 6206. As a minimum specification all sealed unit double glazing to comprise 416/4 sealed units with low 'E' inner leaf of glass. Include to provide glazing manifestation to achieve compliance with the requirements of part K to all large glazed screens, all as determined necessary by the glazing supplier.

Windows to be designed to incorporate Trickle vents to provide 8000mm sq. free airflow ventilation to meet building regulations requirements. NOTE that larger windows and doors may require a thicker glazing to achieve compliance with regulations applying - this matter shall remain the responsibility of the window/glazing supplier or the main contractor.

Provide background ventilation to the entire property in general accordance with Approved Document F, and specifically in accordance with table 1.2a for systems incorporating intermittent mechanical extraction systems. On this occasion, provide background ventilation equivalent to a minimum of 205.000sq mm free airflow spread evenly throughout the property.

All glazing throughout the project to comply in all respects with the requirements of Approved Document Q of the Building Regulations, and with BS 6206.

**ESCAPE WINDOWS:**

All windows which will serve as means of escape in case of fire (as defined by the issuing building control authority) to have an opening light of min. 0.33m sq. clear area, with no dimension in either direction to be less than 450mm. Cills of such openings to be no more than 1100mm above adjacent floor level. All such windows to be non-key operated.

**ROOF CONSTRUCTION:**

Existing roof structure over Eastern wing of the property to be retained, with the existing tie raised at the request of the client. This is to be assessed by the appointed structural engineer prior to commencement on site.

**New roof construction over Western wing and garage to comprise of raised tie trusses as detailed by Messrs Lindner. The garage roof construction is to be assessed by the appointed structural engineer prior to commencement.**

NOTE: Roof structure is complex and Contractors should pay specific attention to the supporting columns, beams, rafters, etc. (all to be designed by the appointed Structural Engineer). The main contractor is advised to resolve all such details at an early stage in the construction process to allow time for any changes required to be accommodated.

Where new trussed rafters are used, these shall be to BS 5268 BS 1988, made-up, fixed and braced in very strict accordance with the installation details and calculations provided by the truss supplier acting as designer as well as supplier. Trusses must be delivered to site complete with full set of installation and bracing details for the use of the installers. Trussed rafters to be supplied to site as treated timber, and certificate of authenticity to be provided with trusses to this effect. All trussed rafters laid on 100 x 50 timber wall plate (or other size as required and as agreed on site) tied down to walls at max. 2000c/s with 40 x 5mm x 1000mm galv. steel straps screwed twice to walls, and screw fixed to wall plate. Similar straps apply to abutment between ceiling joists and gable walls, with straps at max. 2000mm centres taken over min. 4No. ceiling joists with solid nogging in between, and taken down cavity wall min. 450mm, and built-in.

These straps taken over min. 3 rafters, with screw fixing to each. Also, provide solid strutting between rafters under straps, using timber of same dimension as rafter. All trussed rafters to be designed and detailed by the manufacturer acting as the roof designer. All details relating to bracing, centres, fixings, and full installation instructions and copy calculations for the use of the Local Authority to be provided to site when trussed rafters are delivered. All such straps to ensure that the roof structure is adequately secured down at the post positions and at the front wall of the overhanging section to the satisfaction of the building inspector.

**THERMAL INSULATION**

Thermal insulation to all horizontal ceiling sections to be mineral wool quilt of minimum overall thickness 400mm laid in 2 layers as follows: 1st layer laid between ceiling joists and fitted snugly to all perimeters. Second layer laid over head of ceiling joists and on top of first layer at counter-panels to first layer, with full and careful attention being paid to workmanship of the installation of this insulation at all perimeters and throughout the works generally.

Thermal insulation to any sloping ceiling sections to be Celotex rigid board insulation fixed in strict accordance with the manufacturer's recommendations. Basic specification to be as follows: (Minimum specification) Fix 90mm Celotex GA4000 tight between rafters and aligned to underside of rafter face - where required use off-cut wedges of insulation to ensure board is trapped level with underside of rafter. NOTE: that rafter must have sufficient depth to allow a minimum ventilated airspace over of 50mm. If this is not possible, consult Architect for alternative specification. Line under rafter with second layer of Celotex PI4000 insulation nailed with approved fixings to underside of rafters. Line under second layer of Celotex with 12.5mm plasterboard for skin finish. Provide thermal lining to any vertical inner wall faces also as described for sloping ceiling sections. Take care to ensure that rigid board insulation extends above level of mineral wool quilt to horizontal roof sections as indicated in the section drawings. Ensure 50mm minimum clear air path is maintained at all abutments of rigid-board and loose laid thermal insulations.

New Roof coverings throughout (including replacement of existing) to match the existing as specified by client (in accordance with any planning conditions prevailing), laid on lathes/lime tiles min. 38x50mm, with head laps, etc. all in strict accordance with the manufacturer's / supplier's instruction and specification. New roofing membrane (felt) to all roof areas to be single layer Tyvek HD Plus vapour permeable roofing membrane installed in strict compliance with the manufacturer's recommendations.

All roofs formed in loose-timbers shall be the subject of a structural engineer's design, and shall be constructed in strict accordance with that design information.

NOTE: Calculations for any proprietary trussed rafters shall be submitted to the Local Authority 28 days in advance of the trusses being ordered.

**SURFACE WATER:**

All surface water from the building shall drain via 100mm half round gutters and 63mm dia downpipes to 110mm below ground drains installed as generally described for foul drainage. Minimum falls to surface water drainage to be set at 1 in 80, with all surface water being piped to discharge via soakaways as agreed appropriate on site with the building inspector.

NOTE: Any soakaway positions shown herein are indicative only - such items must be sited min 5m away from the nearest point of the building.

**AIR INFILTRATION AND PERMEABILITY OF THE BUILDING FABRIC:**

The entire construction works are to be executed using techniques which will limit the extent to which air permeates the buildings fabric. The main principle here is to provide a continuous barrier to air movement around the areas of habitable space which are in contact with the insulated wall areas. Tested air permeability must not exceed 10 cubic metres per hour per square metre of external surface area at an applied pressure of 50 pascals. See also 'Limiting thermal bridging and air leakage. Robust construction details for dwellings and similar buildings' TSO 2002'

**ACCESS AND USE:**

Reasonable provision should be made for most people, including wheelchair users, to approach and enter the dwelling, and to access habitable rooms and sanitary facilities on the entrance storey, as set out with Approved Document M.

Approach routes should be level, gently sloping, ramped or (where unavoidable) stepped. All external parts of the approach route should have a suitable ground surface (a gravel approach is generally not acceptable).

The approach route should be a minimum of 900mm wide with a maximum cross fall of 1 in 40. Where a driveway forms all, or part of, the approach route, an additional allowance of at least 300mm wide should be provided so that a wheelchair user can pass a parked car.

All ramped approaches should have a minimum clear width of 900mm, and a minimum length of 1200mm, clear of the swing of any door (or gate). Every flight should have a top and bottom landing, and an intermediate landing between individual flights and at any change of direction. Gradients up to 1:15 should be no more than 10m long, and gradients up to 1:12 should be no more than 5m long.

Where it is not possible to achieve step-free access, a stepped approach should have a minimum clear width of 900mm, and no individual flight should have a rise of more than 1800mm between landings. Steps should be uniform with a rise of 75-150mm and a minimum going of 280mm, with suitable tread nosings. Every flight should have a top and bottom landing (and an intermediate landing between individual flights) with a minimum length of 900mm. Any flight with three or more risers should have a suitable handrail to one side, 850-1000mm above the pitch line of the flight and extend a minimum of 300mm beyond the top and bottom nosings.

**CDM NOTE:**

The Construction (Design and Management) Regulations may apply to these works.

Domestic and commercial projects are notifiable to the HSE under CDM 2015 if the construction work on site is scheduled to:

- a) Last longer than 30 working days and have more than 20 workers working simultaneously at any point in the project; or
- b) Exceed 500 person days

The 2015 CDM Regulations impose duties on domestic clients as well as commercial clients.

The employer/client is reminded of their duties under the Construction (Design and Management) regulations 2015, including, specifically, their obligation to ensure the appointment of a Principal Designer for the construction phase of the project.

Where Steven Dunn Architects Ltd input is completed on a plans-only basis, their duty as Principal Designer ends at completion of the pre-construction phase. Thereafter, this duty must be assumed by a third party, instructed by the employer/client, or by the employer/client themselves. Steven Dunn Architects Ltd, hereby bring the employer/client's attention to this fundamental matter.

As an overriding prerequisite, it has been assumed that only a competent contractor(s) will be employed to undertake the works, and that contractors will, at all times in the duration of construction works, comply with all current legislation relevant to the works (and nature of the works) in hand. The employer/client is reminded of their fundamental responsibility to ensure that this is the case. Contractors are reminded of the overriding requirement under general Health and Safety legislation for them to execute all works at all times in a professional, workmanlike, and appropriate manner which respects any and all health and safety legislation in place.

The drawings to which this note is affixed have been the subject of a designers risk assessment during the design phase and, where feasible, foreseeable health and safety risks have been designed-out of the project. Where contractors (or client/employers) require any specific advice or assistance in respect of the construction-phase role, or for that matter assistance with identification of any specific hazards likely to occur within the construction-phase, they are at liberty to request this from any of the pre-construction phase design team. An additional cost may apply to any such input. Once the construction phase is commenced, responsibility shall remain with the main contractor for management of the general health and safety of the execution of the project works.

**GENERAL NOTES:**

NOTE: Various elements of this scheme are complex in nature, and will require a great deal of understanding by the people responsible for the execution of the construction activities concerned. As described elsewhere within these drawings, it is fundamentally essential that prior to commencement of construction activities on site, the Main Contractor familiarises themselves with the complexities of this scheme, and raises any queries they have with the relevant party (Architect, Structural Engineer, or similar) prior to commencement of works on site. It is the instructing client's express wish that the designing Architect is not retained for on-site activities on this project therefore this responsibility is not retained with the Main Contractor for the resolution of any and all post-commencement details of the construction works after handover of the project.

NOTE: These drawings have been prepared for use as a Building Regulations Application package only. No responsibility will be accepted for their use beyond this level. These drawings are NOT intended to be either a full tender package or Working Drawings package for this scheme, and no such reliance shall be placed upon these drawings under any circumstances.

NOTE: All materials arising from subsoil excavations and all debris from the works generally shall be removed from the site at the contractor's expense, unless otherwise instructed by the employer.

NOTE: No trial hole has been carried out to establish the above foundation/depth specification, and as such, contractors must ensure, prior to concreting that Local Authority approval has been given for the proposed depths, etc.

NOTE: This project may be the subject of stringent planning conditions. The builder shall ensure that all works are carried-out in accordance with all such conditions, and that any pre-start conditions are complied with/discharged in full prior to commencement on site.

NOTE: Structural stability and integrity. The entire overall structural integrity of the building (including foundations) shall be the subject of a structural engineer's assessment. In addition to the calculation of steel beam/column supports where indicated in these drawings, the overall stability of the entire project will panel stability, wind load resistance, foundations, etc. shall be the subject of a comprehensive structural engineer's check. This work shall be initiated at the outset by the employer, and any recommendations or requirements arising out of this check shall be incorporated into the works carried out on site.

NOTE: Ground conditions on site shall be the subject of a structural engineer/specialists investigation and report to determine the presence of any potential contaminants (sulphates and the like) which may affect foundation design, materials or construction.

**PRELIMINARY**

Amendments:  
a) 23.08.23 - Door switched to window (WG05)

**SDA**

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**PROPOSED DETAILS**

**Proposed Development of the Annex at The Manor House, Potterhanworth Road, Heighington, Lincoln**

**CLIENT**  
Mr. R. Schofield-Bezer

**DRAWING TITLE**  
Building Regulations Drawing:  
Annex - Elevations

DATE	DRAWN
January 2022	EB
SCALE	DRNG No.
1:50 @ A1	2649-A1-24a

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