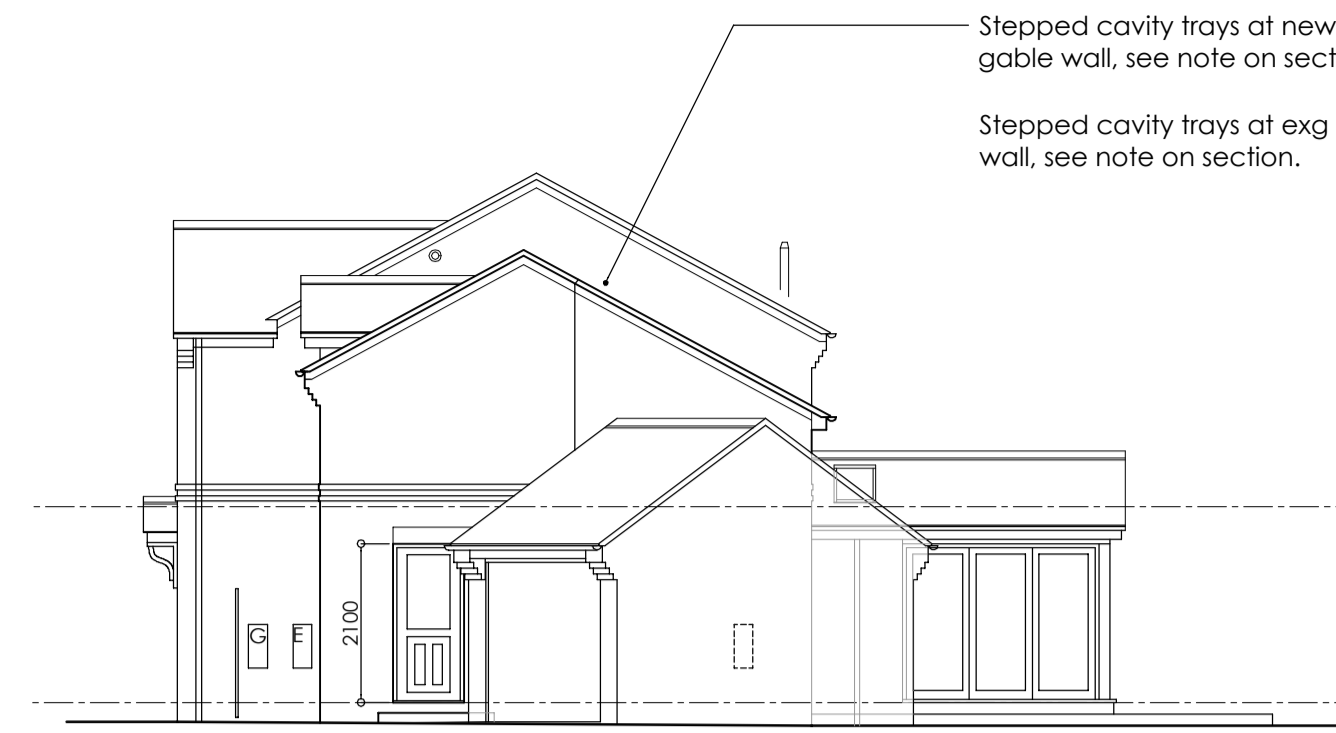




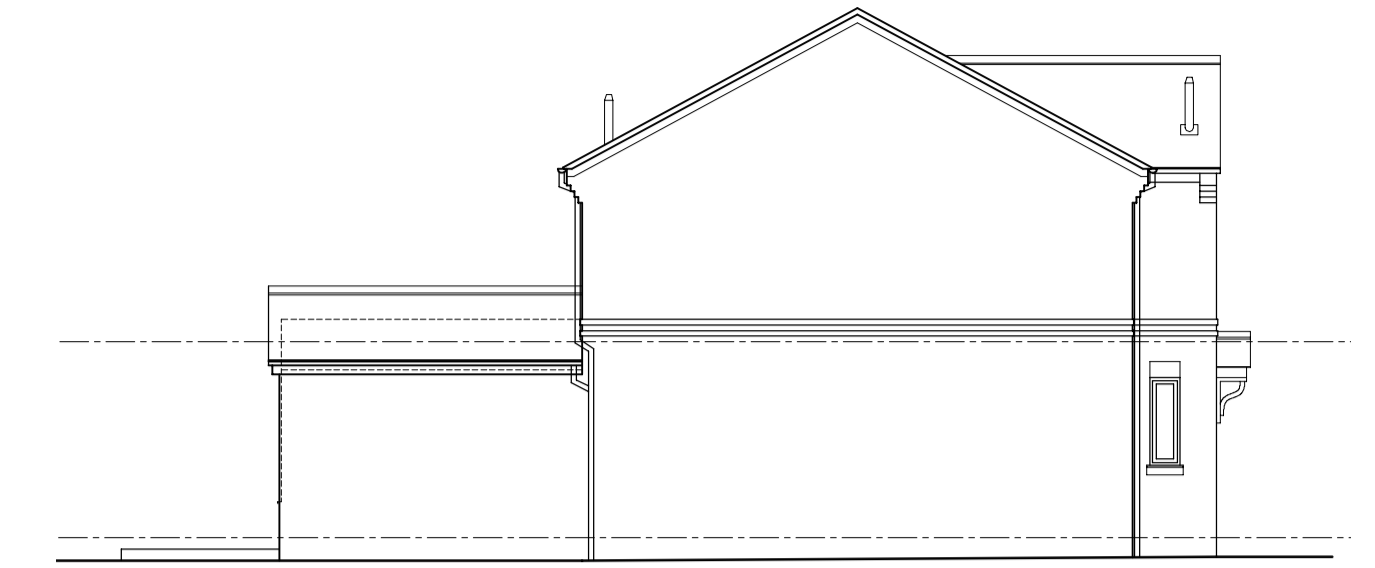
East Elevation



North Elevation



West Elevation



South Elevation

Stepped cavity trays at new roof abutment to existing gable wall, see note on section.
Stepped cavity trays at exg roof abutment to new cavity wall, see note on section.

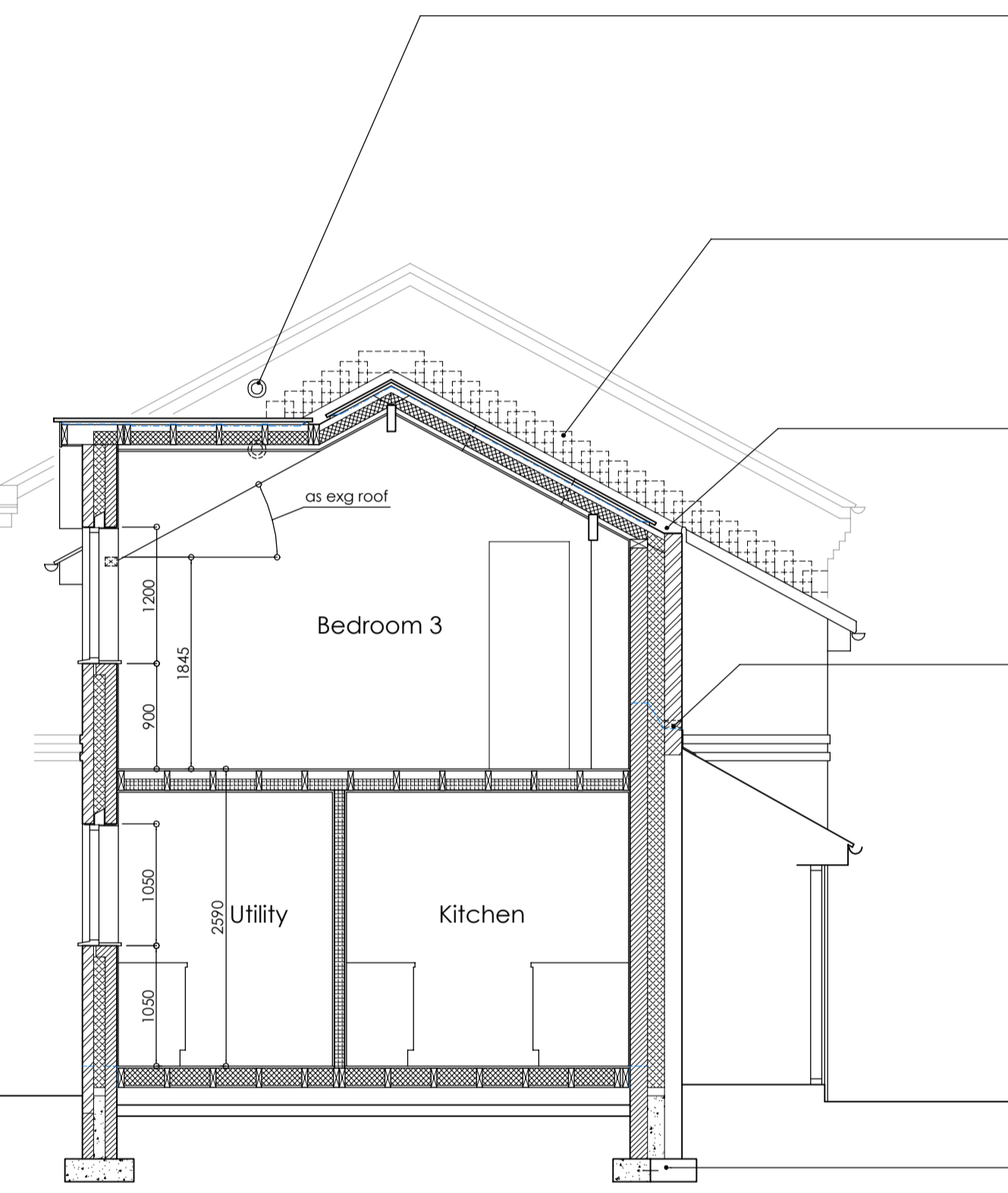
Boiler flue to be repositioned above extension cavity tray.
Pre-formed plastic stepped remedial cavity trays to be installed within existing gable wall at abutment of new roof with single step cover flashings under dressed over tiled roof covering. Weepholes installed at each step. Ridge cavity tray installed at head and stop-end trays as base of roof slopes.

Pre-formed plastic stepped remedial cavity trays to be installed within existing wall at abutment of new roof with single step cover flashings under dressed over tiled roof covering. Weepholes installed at each step. Ridge cavity tray installed at head and stop-end trays as base of roof slopes. Cavity trays to be adapted around existing window.

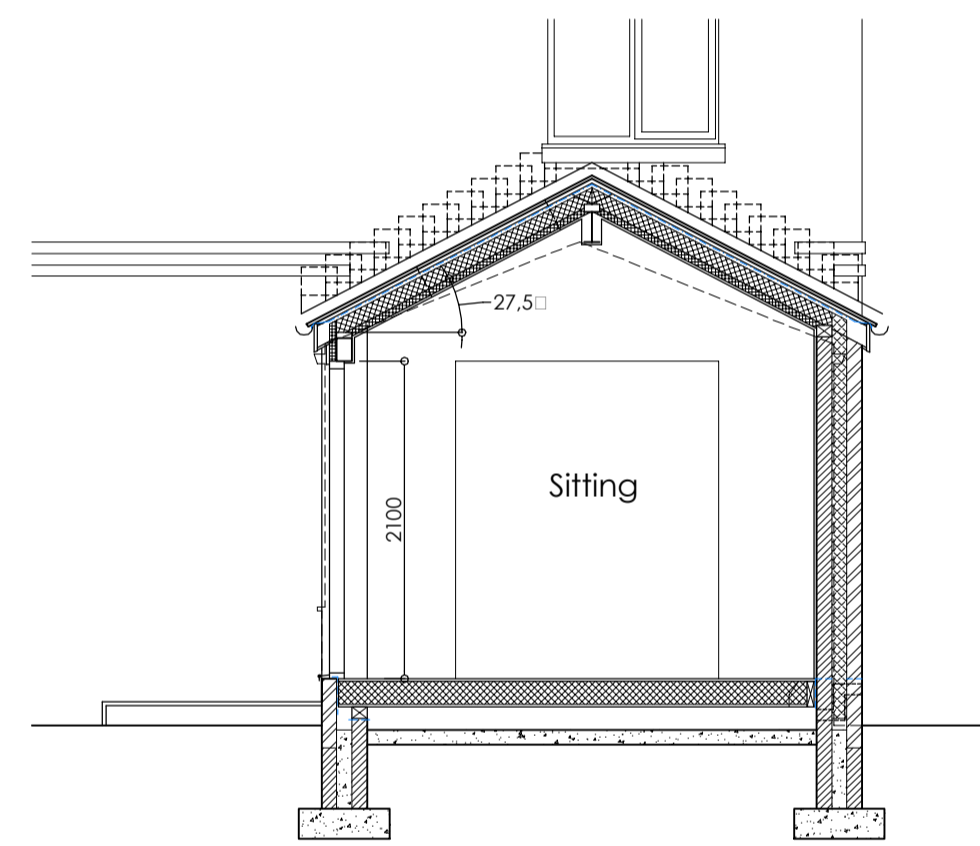
Gutter formed to verge of angled wall on plan comprising lead sheet on building paper underlay on 18 mm thick class 3 plywood. Lead dressed over tilt fillet under tiles with single welt finish and roofing underlay lapped over. Lead dressed over wood cored roll upstand to direct water to eaves gutter.

Pre-formed plastic stepped cavity trays to be installed through new cavity wall at sloping abutment of existing roof with single step cover flashings under dressed over tiled roof covering. Weepholes installed at each step. Ridge cavity tray installed at head and stop-end trays as base of roof slopes.

Connection of new foundation to existing, as required, to SE design.



Section A - A



Section B - B

ROOF CONSTRUCTION
Pitched roof construction comprising interlocking concrete tiles to match existing on 50 x 25 mm treated SW battens on breathable roofing underlay draped by 10 mm between 125 x 47 mm (sitting room extension) and 150 x 47 mm (kitchen / bedroom extension) C16 class treated SW rafters at max. 400 mm cts. Rafters to be birdsmouthed and mechanically fixed to purlins, eaves beam and wall plate at head of wall (see wall construction notes).
Roof structure to sitting room extension to SE design. Purlins to kitchen / bedroom extension to be 225 x 75 mm C24 class SW.
Roof to be insulated and finished following the line of the underside of the rafters using 12.5 mm thick plasterboard and skim finish on VCL on 50 mm thick PIR insulation board (thermal conductivity 0.022W/mK) to soffit of rafters. 100 mm PIR insulation board (thermal conductivity 0.022W/mK) to be friction fitted between rafters.
Roof achieves 0.18 U-Value.
First 3 no. rafters at verge to be strapped together using 30 x 5 galv. m.s. straps at max. 1.2 m cts, with timber noggins between under strap line, taken through inner leaf and turned down cavity. Timber fascia and soffit board to end and underside of projecting rafters at eaves, with tilt fillet behind fascia. Breathable roofing underlay to be lapped over UV resistant strip over tilt fillet into gutter.
Clipped verge with overhanging tile and undercloak to match existing, dormer with gable ladder and flying rafter / bargeboard forming overhanging verge.
Ridge tiles attached using dry-fix system.

EXTERNAL WALL CONSTRUCTION
Cavity wall construction comprising 100 mm wide dense concrete 7.3 N/mmsq blockwork inner leaf, 100 mm wide cavity and 102.5 mm wide facing brick outer leaf. Cavity to be fully insulated using 100 mm thick mineral cavity batt insulation (thermal conductivity 0.032W/mK).
Interior finished using 12.5 mm thick plasterboard and skim dry-lining.
Walls achieve 0.28 U-Value.
Brickwork to match appearance of existing and to be F2/S2 durability.
100 x 75 mm wall plates to be strapped to inner leaf using 30 x 5 mm x 1000 mm long galv. m.s. straps at max. 1800 mm cts. Cavity closed at reveals and cills using inner block return to outer skin and insulated vertical DPC fixed.
Stainless steel cavity wall ties to be installed at 900 mm horizontal and 450 mm vertical cts, 225 mm vertical cts within 250 mm of openings. Embedment of ties to be nominal 62.5 mm (min. 50 mm).
Factory insulated galvanised steel lintels over opening heads, size to suit cavity width with 150 mm long end bearings.
Hyload DPC installed through both skins at FFL, with DPC link to blockwork course below to allow fixing of timber joist bearer. Substructure as superstructure supported off foundations with weak mix concrete fill at ground level.

FIRST FLOOR CONSTRUCTION
Suspended timber construction comprising 22 mm thick P5 particleboard with glued I&G edges screw fixed to 170 x 47 mm C16 class treated SW floor joists at max. 400 mm cts. Joists to bear onto inner skin of cavity wall by 100 mm.
Soffit to be finished using 12.5 mm thick plasterboard and skim finish. Floor achieves 30 minute fire resistance.
100 mm thick sound deadening quilt installed between joists.
First 3 no. joists parallel to walls to be strapped together and to inner leaf using 30 x 5 mm galv. m.s. straps at 1.2 m cts, noggins installed between joists under strap line and strap end bent and turned down cavity.
Where partitions run parallel with joists, joists to be doubled beneath.

GROUND FLOOR CONSTRUCTION
Suspended timber construction comprising 22 mm thick P5 particleboard with glued I&G edges screw fixed to 170 x 47 mm C16 class treated SW floor joists at max. 400 mm cts. Joists to be attached via joist hangers to 170 x 63 mm timber bearer fixed to inner skin (above lower DPC link) using M12 resin anchors at 400 mm cts.
Floor to be insulated using 120 mm PIR insulation board (thermal conductivity 0.022W/mK) to be friction fitted between joists and supported via timber battens. Floor achieves 0.22 U-Value.
First 3 no. joists parallel to walls to be strapped together and to inner leaf using 30 x 5 mm galv. m.s. straps at 1.2 m cts, noggins installed between joists under strap line and strap end bent and turned down cavity.
Where partitions run parallel with joists, joists to be doubled beneath.
Min. 150 mm clear cross ventilated void under joists and insulation to 100 mm thick oversite concrete.
Ventilation provided by through / telescopic sub-floor vents providing 1500 mmsq equivalent area ventilation per metre run of wall.

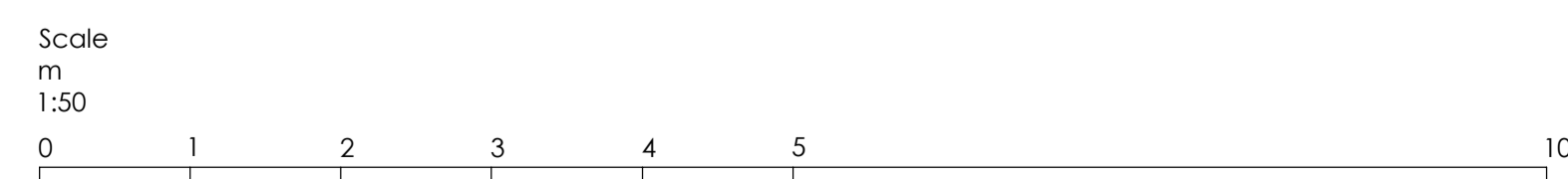
FOUNDATIONS
600 x 200 mm plain concrete strip foundations to cavity walls. All foundations at min. 750 mm bearing depth. Foundation type and depth are assumed and dependent on ground conditions and are subject to site inspection and approval by Building Control, see also SE.

ABOVE GROUND DRAINAGE
Sinks, washing machine, dishwasher with 40 mm diameter wastes, 50 mm where combined or runs are in excess of 2 m length. All with 75 mm deep seal traps.
Wastes connected to external gulleys.
Min. 115 mm wide guttering discharging to min. 68 mm dia downpipes discharging to gullies.

BELOW GROUND DRAINAGE
Foul water and storm water to discharge into existing mains drainage (separate or combined, depending on existing system) via 100 mm diameter pipes laid at max. 1:40 and min. 1:80 falls with PPIC's at each change of direction, each connection (foul only) and at start of runs (foul only).

VENTILATION
Intermittent extract system comprising:
Utility - Through wall extract fan of 30L/sec rate.
Kitchen - Through ceiling / ducted / through roof with lead slate / upstand and rain proof cowl terminal extract fan of 60L/sec rate or 30L/sec if cooker hood.
Purge ventilation provided to all habitable rooms via openable windows / doors equivalent to 1/20th of the room floor area. Background ventilation provided to all habitable rooms via trickle vents of 8000 mmsq equivalent area per room.

GENERAL
Windows and doors generally to be uPVC framed and double glazed. Double glazing to include Low-E soft coating to inner pane and argon gas filled cavity. Windows and rooflights to achieve whole element of 1.6 U-Value and doors 1.8 U-Value.
Any glazing within 800 mm of FFL, within doors or within 300 mm of doors to be safety glass. Any glazing acting as guarding / providing containment to be designed by supplier / manufacturer to resist the forces in accordance with BS6399-1:1996 and BS6180 for domestic activities.
Ceiling mounted smoke and heat detectors to be mains powered, interlinked and with battery back-up, sited max. 7.5 m away from habitable rooms and min. 300 mm away from any door swing or light fitting.
Dedicated low energy fixed lighting installed throughout extended dwelling to have a luminous efficacy greater than 45 lamp lumens per circuit-watt and a total output greater than 400 lamp lumens. Any external lighting to include daylight sensor control.
Primary space heating to be via extension of existing wet radiator system served by existing gas fired boiler. Extended system to include boiler interlocks to prevent cycling. All radiators to include thermostatic radiator valves.
DHW to be extended from existing gas fired boiler system. Capability of existing gas boiler to serve extended dwelling to be determined by Plumber.
Plumbing to be installed by an GAS SAFE registered installer also part of the Building Control Competant Persons Scheme, certificates to be forwarded to Building Control for approval.
All electrical work to be carried out by Part P registered persons certified to BS7671 and a member of a third party accredited scheme (eg NICEIC, NAPIT etc).



PROJECT	REVISION	DATE	DESCRIPTION
Extension and Alterations			
CLIENT			
Mr and Mrs P Layton			
ADDRESS			
4 Ferguson Way, Huntington, York, YO32 9YG			
DRAWING NAME			
Stage 4 - Building Regulations - Elevations and Sections			
SCALE			
1:50			
DATE			
19/05/2022			
DRAWN			
mp			
DRAWING NO.			
21074			
REVISION			
GA02			