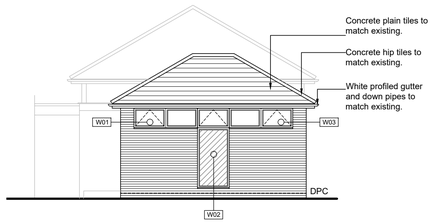
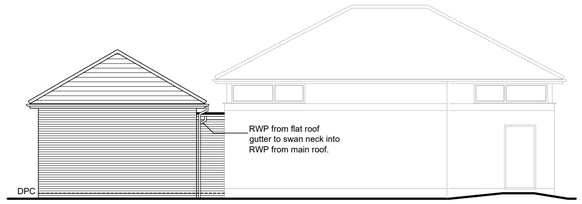
FRONT ELEVATION

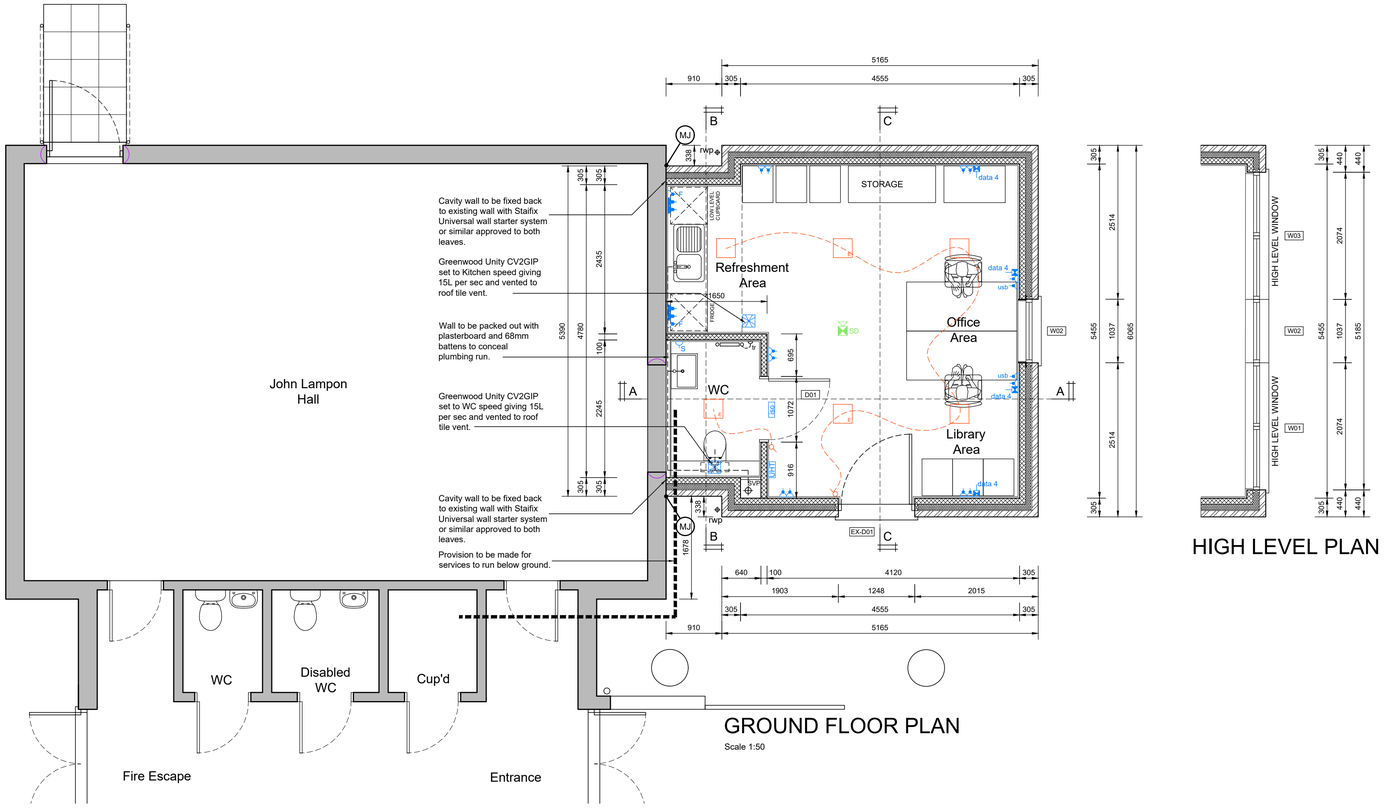
Scale 1:100



SIDE ELEVATION 01



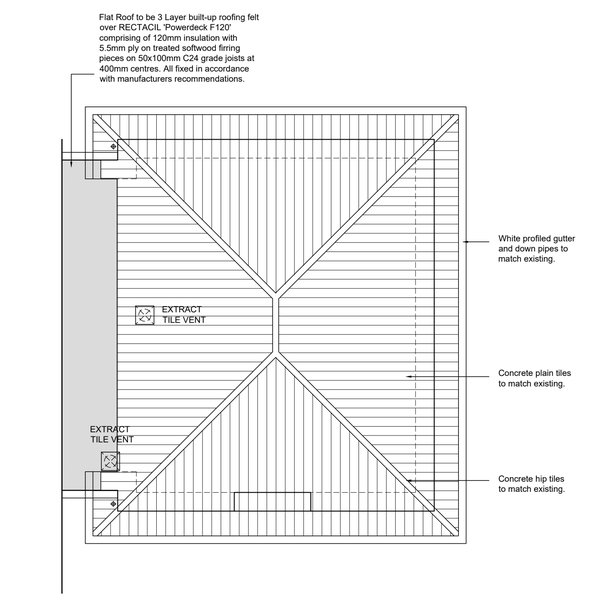
REAR ELEVATION



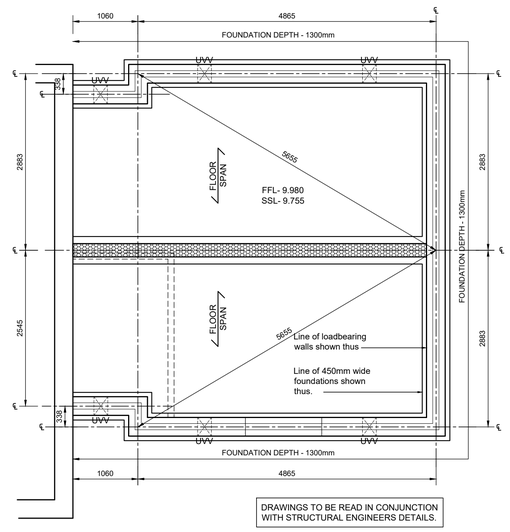
GROUND FLOOR PLAN

Scale 1:50

HIGH LEVEL PLAN



ROOF PLAN



STRUCTURE PLAN

SUB-STRUCTURE LEGEND

Indicates span of precast concrete floor units.

Underfloor voids to be vented by means of Proprietary PVC cranked under-floor void ventilators, providing ventilation area equivalent to 1500mm²/metre run of external wall or 500mm²/m² of floor area, which ever gives the greater opening area. Requirement will be satisfied by providing 225x75 plastic airbricks at max 2000mm centres (Based upon Glidevale MV250 or similar). Under-floor void ventilators not to be positioned more than 450mm from the end of any wall.

DUCT — 100mm dia. duct cast into/through foundation at 750mm below finished ground level to allow incoming water service pipe to pass through foundation.

Ventilated subfloor wall to provide adequate through ventilation. To be either honeycomb construction or via Air Bricks

Structural Opening

DDP — Direct drain outlet point

UVV — Underfloor Void Ventilator, 75mm concrete lintel with 600mm max openings to be provided over every vent.

Pre-sressed lintels over void vent openings
75mm deep lintel 450mm wide opening

Larger maximum opening requirements to be:
75mm deep lintel - 600mm wide
100mm deep lintel - 900mm wide

All to have min. 100mm bearing each side.

UNDERFLOOR VOID VENTILATION TABLE

PERIMETER	18.890m
REQUIRED VENTILATION	28,335mm²
REQUIRED NO. OF VENTS PROVIDING 6000mm²	5 AIRBRICKS
PROVIDED	6 AIRBRICKS

ELECTRICAL LEGEND

- CU — CONSUMER UNIT
- DOUBLE SOCKET OUTLET
- usb — DOUBLE SOCKET OUTLET WITH USB
- HIGH LEVEL SOCKET OUTLET
- FUSED SPUR
- S — 100 AMP SUPPLY
- ISO — TRIPLE POLE ISOLATION SWITCH
- TELECOM POINT
- data 4 — CAT 5e POINT - RJ45 DOUBLE PAIR
- UHT — UNDERFLOOR HEATING THERMOSTAT
- OIL FILLED HEATED ELECTRICAL TOWEL RAIL
- HOT WATER RADIATOR
- INFRARED HEATING PANEL
- CEILING MOUNTED MECHANICAL EXTRACT FAN INLET

LIGHTING LEGEND

- JCC LED LIGHTING PANEL - WITH BATTERY 600 x 600
- JCC LED LIGHTING PANEL 600 x 600
- LIGHT SWITCH
- MO — MOTION SENSOR LIGHT CONTROL
- PIR — SENSOR - PIR MOTION
- CCTV IP CAMERA - (CLIENT INSTALL)

SWITCHES AND SOCKET OUTLET POSITIONS TO COMPLY WITH PART M

(TO BE SET BETWEEN 450mm AND 1200mm ABOVE FINISHED FLOOR LEVEL) - DOOR HANDLES, SWITCHES, THERMOSTATS, DOOR BELLS (NOT WINDOW IRONMONGERY) TO BE SET AT A COMMON HEIGHT OF BETWEEN 900 & 1200mm ABOVE FINISHED FLOOR LEVEL. - SOCKET OUTLETS, TV & BT POINTS, RADIATOR CONTROLS TO BE SET AT A COMMON HEIGHT OF BETWEEN 450 & 450mm ABOVE FINISHED FLOOR LEVEL.

BACKGROUND VENTILATION - SYSTEM 3

SYSTEM 3 - CONTINUOUS MECHANICAL EXTRACT (MEV) TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS DETAILS AND RECOMMENDATIONS.

CONSTRUCTION & FINISHES NOTES

FOUNDATIONS

Foundations to be Mass concrete trench in accordance with Structural Engineers design. Foundations to be inspected and approved by the building control inspector.
Ready mixed concrete as - Concrete grade Gen 1 to BS:8500 and BS EN 206-1.
Site mixed concrete as - Concrete grade ST2 to BS:8500 and BS EN 206-1.

GROUND FLOOR (Pre-cast suspended slab)

Floor construction to give U value no worse than 0.18 W/m² deg C.

Ground floor construction to be 75mm thick sand/cement screed incorporating under floor heating pipes reinforced with A142 steel mesh fabric on 1200 gauge polythene dpm on 150mm thick Recticel Eurothane GP insulation on 1200 gauge polythene dpm on suspended precast concrete floor system with 150mm void and 150mm thick suitable well consolidated granular fill.

Cavity Walls below ground to have cavities filled with lean mix concrete up to Finished Ground Level. Perpends to be omitted in outer leaf at approximately 1500mm centres.

All walls below d.p.c. to be in FL quality brickwork (BS:3921) including facings in external walls or dense concrete foundation blocks.

EXTERNAL WALL - CAVITY WALLS

Cavity wall construction to give U value no worse than 0.28 W/m² deg C.

305mm cavity wall comprising 102.5mm Brickwork outer leaf to match existing , 100mm Cavity comprising of 90mm RECTACIL Eurowool+ (K value 0.022 W/mK), 100mm Celcon Standard (3.6N/mm²) block inner leaf.

D.p.c's. to comply with BS 743 and laid in accordance with CP. 102 and set a minimum of 150mm above finished ground.

Cavities to be closed around window/door jambs with Thermabate 100mm Cavity Closers to prevent cold bridging to jambs.

Vertical twist type stainless steel wall ties spaced 750mm centres horizontal, 450mm centres vertical and 300mm centres around windows and doors. Ties to be of adequate size to provide 50mm bed minimum in each leaf.

Walls finished internally with 15mm Gyproc wallboard on plaster dabs (25mm O/A thickness) with skim coat finish.

INTERNAL WALLS

100mm blockwork with 15mm Gyproc wallboard on plaster dabs .

ROOF CONSTRUCTION - PITCHED - TRUSSED RAFTERS

Roof construction to give U value no worse than 0.16 W/m² deg C.

Roof tiles (fixed in accordance with BS:5534) on roofing felt type 1F to BS:747 on trussed rafters supplied by roof manufacturer in accordance with BS:5268-2.

Trussed rafters to have max 600mm c/c spacing and connected to wall plate with proprietary truss clips.

Wall Plates to be half lapped at joints and tied with 30x2.5mm thick galvanised ms straps at max 1600mm c/c plugged and screwed to inner wall face (3no 50mm x 10 gauge screws). Softwood noggins fixed at 600mm c/c between trussed rafters as necessary for support to stud partitions.

450mm thick mineral wool insulation quilt to roof space comprising 1no layer 150mm thick laid between ceiling joists and 2no layer 150mm thick cross laid.

Roof void ventilation achieved with Klober 'Permo Air LR Open Air Underfilling membrane applied to roof in accordance with BS:5250. Roof ventilation maintained using Glidevale RV601 rafter ventilators between rafters and Glidevale FV100 over fascia ventilator installed continuously, providing 10,000mm²/m ventilation.

All roof access doors are to be insulated and draught stripped.
Roof pitch as noted on detail drawings.
40mm min gap between trussed rafters and masonry. 100x25mm binders, rafter and ceiling bracing to BS5268-2:2002. Walls parallel to trussed rafters tied with 30x5mm thick galvanised m.s straps at 2000mm max c/c at ceiling and rafter level built into cavity face of inner leaf min 150mm and screw or nail fixed over 3no trussed rafters to solid noggins. Minimum 6no fixings to trussed rafters and noggins.

ROOF CONSTRUCTION - FLAT

Roof construction to give U value no worse than 0.18 W/m² deg C.

Refer to schematic roof layout plans.

All timber to be Stress Graded when 'dry' or 'kiln dry' (moisture content below 20%) and stamped accordingly unless specified otherwise on drawings.

All structural, external and embedded timbers to be treated in accordance with BS:1282 and NHBC recommendations.

Flat Roof to be 3 Layer built-up roofing felt over RECTACIL 'Powerdeck F120' comprising of 120mm insulation with 5.5mm ply on treated softwood firring pieces on 50x100mm C24 grade joists at 400mm centres. All fixed in accordance with manufacturers recommendations.

12.5mm plasterboard and skim to all ceilings.

SMOKE AND HEAT DETECTORS

Smoke detectors shall be installed at each floor level and interlinked, as shown on the floor layouts.
Where Kitchen/dining area is provided heat detector to be used.
All alarms permanently wired into a separately fused circuit and to incorporate mains power failure backup in accordance with an L2 system as described in BS:5839:part1 (standby electrical supply is not required) or a Grade A type LD2 system as described in BS:5839:part6.

Alarms positioned maximum 7000mm from kitchen or lounge doors, maximum 3000mm from bedroom doors and minimum 300mm from any light fitting.

WASTE PLUMBING

All waste fittings to be UPVC with minimum 75mm deep seal traps.
Basin waste to be:
32mm (up to 1.7m max length)
40mm (up to 3m max length)
Sinks, showers and baths to be 40mm (up to 3m max length)
50mm (up to 4m max length)
Anti-syphonic traps will be installed where waste runs are in excess of above dimensions.
Any combined waste pipes to be at least 50mm diameter

S.V.P's to be 100mm reducing to not less than 75mm in roof space and discharge through ROOF TILE vents. Base of stack to have easy bend 450mm minimum below lowest connection. Access plates to be fitted to stack 300mm above FFL and above highest connection. Suitable access points to be fitted to waste plumbing.

All plumbing to comply with relevant Water Authority Regulations for supply and storage.

DOMESTIC DRAINAGE NOTES

Drains are to be 100mm nominal diameter laid at a gradient not flatter than 1/80, unless otherwise shown. Lateral drain connections beneath adoptable highway are to have a minimum diameter of 150mm. Foul drains serving more than nine dwellings are to be 150mm nominal diameter laid not flatter than 1/150. Foul drains without at least one WC connected are to be laid not flatter than 1/40.

Drains are to be constructed using vitrified clay pipes to BS:65 or uPVC pipes to BS:4660, all with flexible joints, bedded and backfilled in accordance with the manufacturers recommendations and BS:EN:752 100mm rigid pipes with less than 300mm cover or pipes of 150mm or greater diameter with less than 600mm cover, are to be surrounded by 150mm of concrete with movement joints provided at every pipe joint. Flexible pipes with less than 600mm of cover are to be surrounded with concrete or to have concrete paving slabs laid as bridging above the pipe. Pipes under buildings are to be surrounded with 100mm of granular material. Pipes with less than 1.2m cover beneath access drives or roads are to surrounded by 150mm of concrete as above.

Access to drains may be provided by vitrified clay, GRP or polypropylene inspection chambers to BS:7158; or manholes constructed using class B engineering bricks to BS:3921, or precast concrete sections to BS:5911; surrounded with 150mm of C20P concrete. Minimum dimensions to conform to table 8 of BS:EN:752 Covers and frames for manholes/inspection chambers must comply with the appropriate loading grade of BS:497 or BS:5911. Manholes within buildings shall be fitted with sealed bolt down covers and frames.

A ventilating pipe should be provided at or near the head of each main drain, any branch longer than 6m serving a single appliance or 12m serving a group of appliances. Elsewhere, discharge stacks may be terminated with air admittance valves. Gullies and rainwater pipes should be provided with rodddable access.

If any visible oil contaminated soils are encountered to sides of excavations or service trenches, they are to be removed and replaced with clean approved material.

Foul drainage to be connected to sewer via existing on site connection.

Surface water drainage shall discharge to soakaway.
Stone filled soakaway 6m from any building. Soakaway to be in accordance to current guidelines and regulation and capable of taking roof surface area of 50m2. Minimum size of stone filled soakaway to be 2mx1m in size.

ELECTRICS

All switches, electrical sockets, TV sockets and telephone points will be set between 450mm and 1200mm above finished floor level.

External light fittings shall incorporate daylight switches or infra red detectors.

PART P
All Electrical work required to meet the requirements of Part P (Electrical Safety)
must be designed, installed, inspected and tested by a registered competent person to do so.

Prior to completion the council should be satisfied that Part P has been complied with. This may require an appropriate BS:7671 electrical installation certificate to be issued for the work by a person competent to do so.

HEATING AND HOT WATER - GAS

Heating system and associated work to be in accordance with the:
'Domestic Building Services Compliance Guide'.

Underfloor heating to be provided. Zone will be controlled individually on a programmer on a 7 day, 24 hour time clock with operated by room stat. Connected to existing system.

ROOM VENTILATION

All windows to be provided with trickle ventilation.

System 3 continuous mechanical extract (MEV) to be installed with background ventilators having a minimum equivalent area of 2500mm² fitted to each room. Except wet rooms from which air is extracted.

Greenwood Unity CV2GIP system to be provided to wet rooms, set to relevant speed based on room use. Extract routed to discharge through external wall vent or vented roof ROOF TILE as indicated on plan.

A 10mm gap should be maintained under all internal doors to provide adequate air transfer.

WINDOWS AND GLAZING

All window frames to be set back 30mm minimum within cavity

All Doors and Windows to be double glazed with 4-16-4 LOW E glass and ARGON filled cavity to achieve U-Value of 1.6 W/m² deg C.

Toughened or laminated type glazing complying with BS:6206 to be applied to the following:
Windows below 800mm from finished floor level. Doors 1500mm above finished floor level and within 300mm either side of doors.

ALL ROOFLIGHT GLASS TO RECEIVE SOLAR REFLECTIVE AND THERMAL EMITTANCE COATINGS

If you require clarification of any dimensions please contact:
Mclean Architectural Limited

NOTE:
When printing from PDF, ensure print scaling is set to none.
(File ⟶ Print ⟶ Page Handling ⟶ Page Scaling ⟶ None)

A1 SHEET

WALL LEGEND

EXTERNAL WALL

BRICKWORK: 305mm thick cavity wall comprising:
102.5mm thick facing brickwork outer leaf.
100mm cavity with 90mm RECTACIL Eurowool+
100mm Celcon Standard (3.6N/mm²) block inner leaf.
15mm Gyproc wallboard on plaster dabs.

OTHER ITEMS

WP — WIND POST
MJ — MOVEMENT JOINT

GENERAL

ELECTRICAL LAYOUT IS SCHEMATIC ONLY - INSTALLATION TO COMPLY WITH I.E.E REGULATIONS AND ALL RELEVANT CODES OF PRACTICE

FURNITURE POSITIONS ARE SHOWN AS AN INDICATIVE LAYOUT AND SHOULD NOT FORM PART OF ANY CONTRACT

ALL WATER SUPPLIES TO BE INSTALLED AND INSULATED IN ACCORDANCE WITH THE 'WATER INDUSTRY ACT 1999' AND 'THE WATER SUPPLY (WATER FITTINGS) REGULATIONS 1999.

SMOKE ALARM SYSTEMS

THE POWER SUPPLY FOR A SMOKE ALARM SYSTEM SHOULD BE DERIVED FROM THE DWELLING'S MAINS ELECTRICITY SUPPLY. THE MAINS SUPPLY TO THE SMOKE ALARMS SHOULD COMPRISE A SINGLE INDEPENDENT CIRCUIT AT THE DWELLING'S MAIN DISTRIBUTION BOARD (CONSUMER UNIT). IF THE SMOKE ALARM INSTALLATION DOES NOT INCLUDE A STAND-BY POWER SUPPLY, NO OTHER ELECTRICAL EQUIPMENT SHOULD BE CONNECTED TO THIS CIRCUIT.

SAFETY GLAZING

TOUGHENED OR LAMINATED TYPE GLAZING COMPLYING WITH BS:6206 TO BE APPLIED TO THE FOLLOWING:
WINDOWS BELOW 800mm FROM FINISHED FLOOR LEVEL.
DOORS 1500mm ABOVE FINISHED FLOOR LEVEL AND WITHIN 300mm EITHER SIDE OF DOORS.

Gross Internal Area

Office	30 Sq.M	322.2 Sq.Ft.

ISSUE FOR COMMENT V2

rev	date	by	description
T1	17/06/24	SMc	Issued for Tender.
R1	14/06/24	SMc	Revised building regulations issue.

PLANNING

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drawing title: West Bergholt Community Hub and Office
Floor Plan, Sections and Elevations

scale: 1:50, 1:100 — drawn by: SMc

date: March 2024 — checked:

drawing no: 1649/C/02 — revisions: T1

CIAT