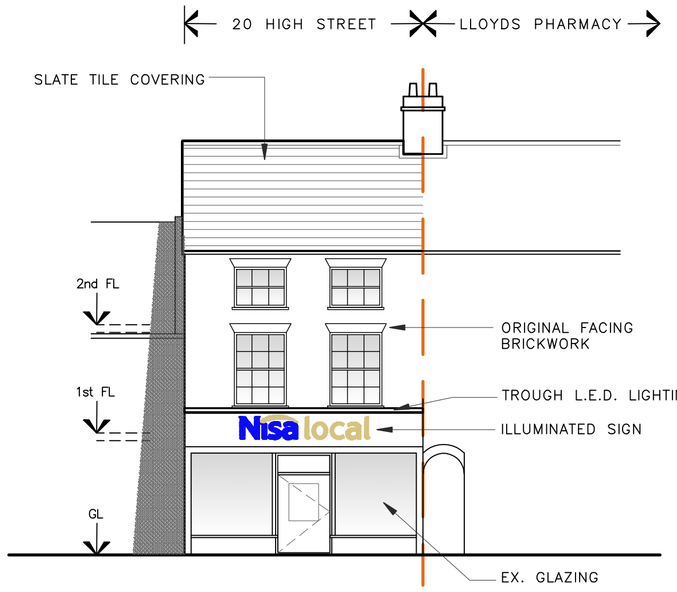
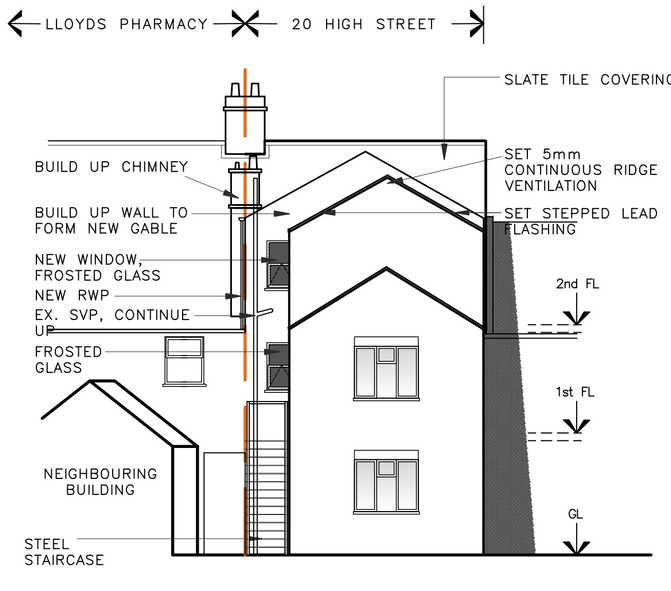
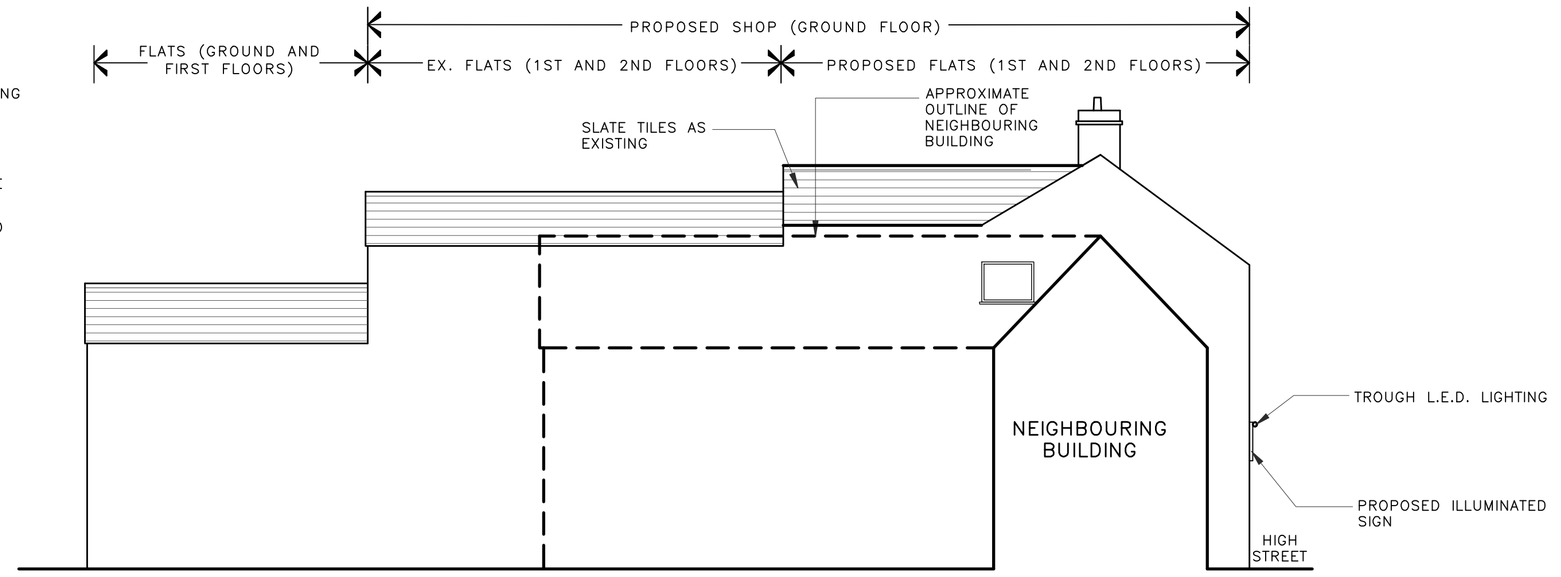


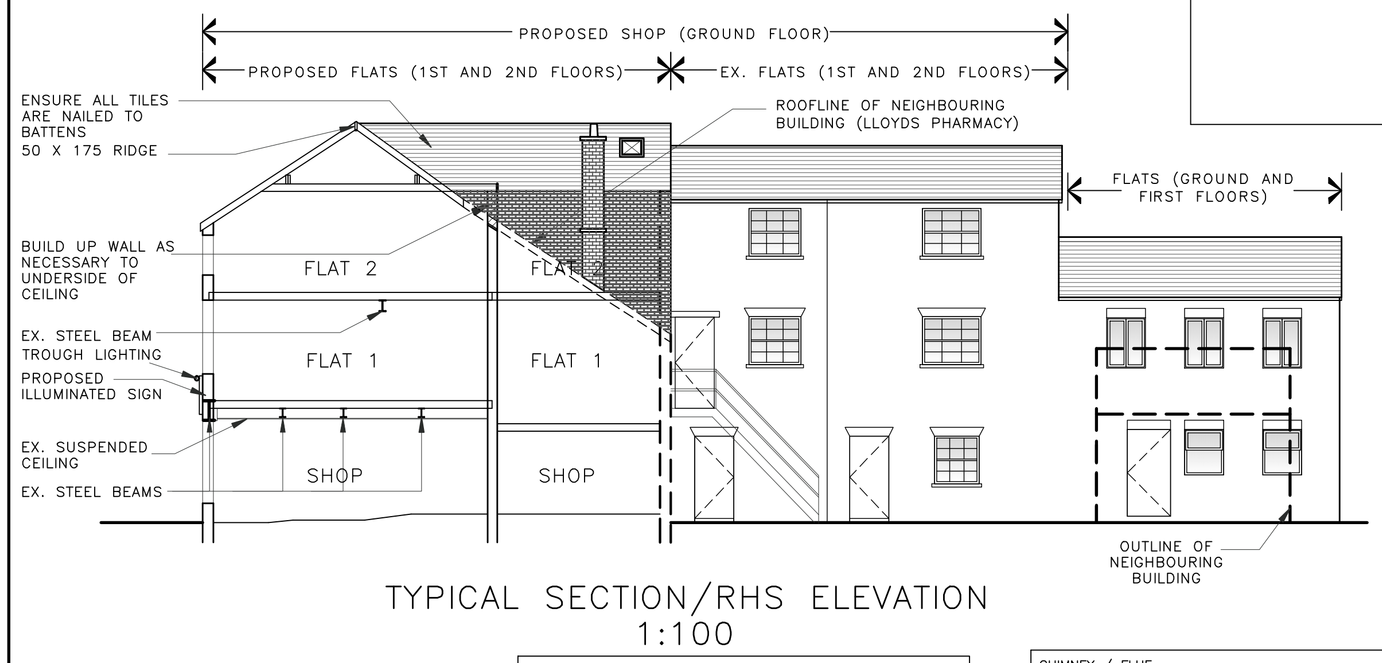
PROPOSED FRONT ELEVATION
1:100



PROPOSED REAR ELEVATION
1:100



PROPOSED LHS ELEVATION
1:100



TYPICAL SECTION/RHS ELEVATION
1:100

ILLUMINATED SIGN DETAIL
1:20

ELECTRICAL

All electrical first and second fixings to be installed by NICEIC registered electrican and certified on completion. A certificate is then to be sent to the Local Authority and Client.
Installation to be inaccordance with IEE Regulations and in accordance with manufacturers recommendations.

All electrical work is to be carried out to meet the requirements of Part P. Electrical certificate to be signed by a person competent to do so.

Internally all light switches and electrical sockets to be positioned between 450mm and 1200mm above floor level as per detail. New lighting to be fixed of that only taking lamps having a luminous efficiency greater than 40 lumens per circuit watt.

Energy efficient lighting as shown on plan.

Contractor to liase with Client with regard to number of sockets etc.

External lighting about the dwelling is to be of the same specification and to be operated by motion sensors to limit there use.

Do not fit electrical sockets back to back.

LEADWORK

Any lead work should be carried out inaccordance with the "Lead Development Associations Design Guide."

Code 5 lead to be used for all valleys. Allow for building lead into brickwork by 150mm upstand. Lead to be taken under tiles of roof by a minimum of 400mm.

Lead flashings to BSEN 12588:1999.

All leadwork to be carried out to the Lead Development Associations Design Guide.

Wall/Roof Junction: DPC with cavity tray and code 4 lead stepped as necessary.
Lead to be to BS:1178 1982.

EMERGENCY LIGHTING

This should be inaccordance with BS:5266, clause 6.7. siting at each exit door, outside fire exit and at the change in direction in corridors.

EMERGENCY LIGHTING

The emergency lighting design should provide the minimum levels of illuminance approriate for the area, uses and routes to be illuminated.

The escape/emergency lighting to be installed to the escape route(s) should be designed to provide an illumance level of 0.2lx, at floor level, in accordance with BS: 5266: part 1 1988 code of practice for emergency lighting. The emergency lighting design engineer should satisfy these requirements.

Upon completion of the work, the installing engineer for the emergency lighting should provide a completion certificate to the occupier of the premises as required by BS: 5266 code of practice for emergency lighting. A copy of this certificate should also be sent to the building control division of the council.

The completion certificate should certify that the system has been installed in accordance with BS: 5266 code of practice for emergency lighting, and should include verification of testing and measurement of lighting.

Recommendations on the measuring of illumance of emergency lighting are given in appendix A of BS: 5266 code of practice for emergency lighting. A model completion certificate is given in appendix B of BS: 5266.

Doors on escape routes, both within and at the final exit from the building, should be readily operated from the side approached by the persons making an escape.

STAIRCASES

Stairs to BS:585, maximum pitch to be 42°, maximum rise to be 220mm, minimum going to be 220mm, 810mm clear between hand rails, vertical headroom 2m above pitch line. Contractor is to check all stair dimensions on site prior to ordering.

Minimum going for winders to be 50mm.

Balustrades to BS: 6399 capable of resisting horizontal of 0.74kN/m at top. Vertical members to be 1100mm high space between to be less than 100mm. Ensure staircase is not easily climbable by children.

Staircase to be manufactured by Specialist and installed to there recommendations.

Ensure handrail is also positioned around the winders with the greatest going.

WINDOWS, DOORS AND GLAZING

Windows as drawing with timber framed double glazed Pilkington k low E with a 16mm argon filled gap. Windows fixed 150mm from end of jamb, adjacent to each opening jamb and 600mm centres. Openings lights minimum 1/20th of floor area with part at least 1.75m above floor level.
Habitable rooms to have trickle vents in top of window frames with controllable and secure ventilation of minimum 8000mm2. U value to be not more than 1.6w/mk.
Window frames to overlap cavity closers by not less than 30mm.

All units to BS:5713 and ISO:9002.

Frames to BS: 7412 with draught proofing to all frames and gun grade sealant provided between the frame and all surface finishes.

Glazing laminated or toughened glass to BS: 6206. Class B in the following locations:–

(a) Windows 800mm or less above floor level.

(b) Windows within 300mm of a door and 1500mm or less above floor level.

Exception, small panes of maximum 250mm wide not exceeding 0.5m² may be 6mm thick annealed glass.

All new ground floor internal doors are to be 838mm wide. Radiators to be positioned to give 750mm clear distance in corridor.

First floor windows for bedrooms to be between 800–1100 from floor level for escape purposes. Minimum openable are to be 0.33m² clear of hinges, minimum dimension 450mm.

Where opening sizes are shown on drawings/schedules these are nominal and must be checked on site before any doors/windows are ordered or fitted.

All windows to be fitted in accordance with manufacturers recommendations. All openable sections to be lockable and quick release.

All hinges to PAS001 stainless steel high security.

All window openings to open in excess of 30° for purge ventilation rates equivalent to 5% of the floor area.

Ensure 10mm undercut to all doors throughout dwelling to give good air transfer throughout dwelling

EXTERNAL AND INTERNAL MASONRY WALLS

Masonry bricks and blocks to BS: 3921, BS:6073 Part 1 and BS: 5628. Bricks to be minimum strength 15N/mm² and blocks above ground to be 3.5N/mm² unless stated otherwise.

Walls below ground to be 7N/mm² blocks, 1:0.5:4 cement:lime: sand mortar. Bricks below DPC level to be engineering bricks.

All engineering bricks to be 50N/mm² compressive strength to BS: 3921.

Junction with the existing building to be firfix with ties at 225mm vertical centres. Movement joint filled with 12mm wide Marley Willseal compressible foam. Mastic sealant over.

Cavity wall 100mm facing brickwork, 100mm cavity with 100mm Dri–Therm insulation, 100mm Celcon Solar blocks, (Max 1100kg/m³)
Mortar to be 1:1:6 cement:lime:sand with air entraining agent.
Stainless steel wall ties to BS: 1243 at 900mm horizontal and 450mm vertical, and 225mm centres at all jamb openings.
Internal finish to be 12.5mm plasterboard on dabs with plaster skim finish. Ensure mortar droppings do not bridge cavity.

Cavity wall insulation is to be taken down below DPC level finishing at the same level as the underside as the floor slab taking care to avoid all floor vents. The cavity wall insulation and roof insulation must meet at the top of the wall. Gable wall fully insulated to top.

DPC to BS: 6515 to be hyload type, 150mm minimum above outside ground level and around all openings. Cavity to be closed with vertical Damcore insulated DPC and insulation continued behind. Lean mix concrete, grade ST1 up to 230mm below the lowest DPC. DPC installed to manufacturers recommendations.

All necessary precautions are to be taken by the Contractor to avoid thermal bridging or gaps in the insulation.

Sand for mortar to BS: 1200 of uniform colour obtained from one source.

All bricks/blocks should be stored clear of ground and stable. Prevent chipping and protect from adverse weather.

Cement above ground to BS:12 Part 2 OPC and sulphate resisting portland cement to BS: 4027 below ground. Any lime should be free of lumps.

Do not carry up work higher than 1.5m per day. Ensure that no mortar encroaches on face when laying keep face clean.
Do not lay when temperature is below 3°C on a falling thermometer. Do not use frozen materials or lay onto frozen surfaces.

Type of brick to be agreed with Planning Officer prior to ordering and Construction.

All damp proof courses around openings to be insulated.

FIRST FLOOR

Provide 22mm chipboard type C4 to BS: 5069. Joist to be stress graded in accordance with BS: 4978 and stamped when dry. Glue all joints and screw nail fix sheets to joists.

Double up joists under bath and shower.

Where joists are built into walls, ensure these are of a tight fit and seal around with silicone. Where hangers are to be used, these should be suitable galvanised type to BS: 6178 Part 1 1980 and fixed in accordance with manufacturers recommendations.

Ceiling to have 15mm plasterboard to BS: 1230 Part 1, fixed at 150mm centres with timber noggings to edges of board and skim finish.

First floor to have 100mm of rockwool insulation laid between joists for sound resistance.

Strap joists back to walls with 5 x 30mm galvanised steel straps, screwed to joists and nogged between joists where at 90° to joists.

Fix herringbone strutting at mid span of 2.5m plus spans and at third points for spans of 4.5m.

Any doubled up joists to be bolted together at 600mm centres with 2 m12 bolts.

GENERAL NOTES/WORKS/OBLIGATIONS

Contractor to check all dimensions on site before work starts or materials are ordered. Do not scale, if in doubt ask. All dimensions are in mm unless stated otherwise.

Where materials, products and workmanship are not fully specified they are to be of the standard appropriate to the works and suitable for the purpose stated in or reasonably to be inferred from the drawings and specification. All work to be in accordance with good building practice and BS 8000 to the extent that the recommendations define the quality of the finished work. Materials products and workmanship to comply with all British Standards and EOTA standards with, where appropriate, BS or EC marks. Tolerances to BS:5606.

All products and materials to be handled, stored, prepared and used or fixed in accordance with the manufacturers current recommendations.

The contractor is to arrange inspections of the works by the BCO (or NHBC) as required by the Building Regulations and is to obtain completion certificate and forward to Client.

The Contractor shall do everything for the proper execution of the works even if not shown on the drawings

The Contractor shall establish the position of all existing services over or below the site prior to work commencing.

Prior to appointment the Contractor should visit the site to be fully acquainted by his own independent observations as to the extent and nature of the work. eg existing buildings, services, storage etc

The Contractor shall afford all reasonable facilities for all other Contractors employed and thier workpeople.

The Contractor shall take all necessary precautions to ensure no trespassing on adjoining owner's property.

All necessary fencing should be provided by the Contractor to ensure the safe keeping of property and workforce.

No Public right of way should be blocked and all necessary precautions taken to ensure the General Public are not inconvenienced by the works of the Contractor.

Any adjacent public and private roads, pavements shall be kept clear of dirt and mud by the Contractor. If any damage is caused, the Contractor is to put this right at there own expense including for any charges in connection with.

Where working adjacent to sewers, overhead cables, ducts etc the Contractor is to ensure no damages occurs.

Working hours are to be within the normal hours defined within National Working Rule 6 for the Building Industry.

All precautions should be taken to control the problems caused by dust as a result of the Works.

The works are to be in accordance with Sections 60 & 61 of the Control of Pollution Act 1974. The Contractor is to comply with all requirements and restrictions imposed. Any necessary consents must be obtained by the Contractor.

The Contractor should allow for Transporting workforce to the site.

All necessary scaffolding should be erected, maintained and serviced before being removed, scaffolding should be secure from the general public

Any temporary site offices/storage sheds should be erected within the site boundaries. Any rates payable to the local Authority for temporary buildings should be allowed for. Once removed the areas should be made good. Any cement stores shall have raised floors from ground and oil and petrol containers should be kept in suitable containers.

All general plant should be allowed for to complete the works and removed on completion. Include for silencers on drills etc.

The Contractor should comply with all necessary police and traffic regulations.

No burning of materials and rubbish is permitted on site.

ABOVE GROUND DRAINAGE

All above ground drainage to BS: 8000–13 and BS: 5572. 75mm deep sealed traps to all applicanes unless over 3m, then fit with anti–vac traps. Soil vent pipe to be taken at least 900mm above any opening windows within 3m.
Pipe to be terminated with a suitable preformed cover.

New shower to be formed on 100mm raised plinth. It is essential that that there is access at all changes of direction.
Pipes from appliances to be:–

Machine wastes	40mm diameter pvc
Sink wastes	40mm diameter pvc
Bath wastes	40mm diameter pvc
Shower wastes	40mm diameter pvc
Basin wastes	32mm diameter pvc
Bidet wastes	32mm diameter pvc
Toilet wastes	100mm diameter pvc

Wastes exceeding 2m in length to be 50mm.
Also 50mm diameter where common waste pipes are installed to serve more than one appliance.

All plumbing to be carried out to BS: 5572 1978.

Amended bathroom plumbing is to be connected into the existing svp

Pipes, fittings and joints should be capable of resisting a air test of positive pressure. Every trap should maintain a water seal.

A branch pipe must not discharge into the stack in a way which could cause cross flow in other branch pipes.

Discharge branch pipe should not discharge into stack lower than 450mm above invert level of the tail of the bend at the foot of the stack.

STUD PARTITIONS

Within new stud walls construct insulation to achieve U value 0.35W/m2K. Insulation to be 75mm Superglass or 100mm Crown wool, between 40 x 90 studs at 400mm centres with noggings at 1200mm horizontal centres.

Fix 15mm gyproc wall board either side, fill and tape all joints and skim over. Ensure that 75mm head and sole plates are fixed to structure.

Plasterboard to BS: 1230.

All joints at floor and ceiling are to be sealed.

VENTILATION

Proposed bathroom and wc to have a minimum extraction rate of 15l/s, control to allow intermitent operation via an extractor fan with a 15 minuite over run linked to light switch.

Kitchen extractor fan to be 60l/s or 30 l/s if in cooker hood.

Fans to be installed within shower cubicle to be inline type specifically designed for this purpose.

All ducted to external air

These should include all necessary switch controls, pull cords, sensor, humidity control etc, installed to manufacturers recommenddtions.

All habitable rooms to have and openable area of not less than 5% of the room floor area.

CHIMNEY / FLUE

No combustable material in roof space is to be placed within 50mm of stack.

STAGE APPROVALS

Stage approvals are sought for the following items which are to be provided by a Specialist.

(i) Heating System
(ii) Timber trussed rafters

FOUL DRAINAGE

All underground drains to comply to BS:8301: 1985 and BS: 8000–14
Drains to be 110mm diameter with flexible joints in 150mm pea gravel surround. Minimum fall to be 1:40 or 1:80 for W.C
Inspection chambers to be 250mm diameter to maximum 600mm deep with 150mm gravel bed and to have screw down cover.
Where chambers are located in driveways, heavy duty covers to be used. Chambers can either be 225mm class B engineering bricks on 200mm thick concrete base or a preformed type such as OSMA. 450mm diameter chambers to depth of 1000mm.

Where drains pass through external walls, provide precast concrete lintels to BS: 5977 part 2 and drain to be in 50mm annular sleeves packed with compressible material.
Lintel to have minimum 150mm end bearing.

New gullies to be back inlet type with a pull out stopper for access, fit with metal or plastic grid cover. Wastes pipes must discharge below grid.

Existing drains connect to main sewer in road subject to Approval.

RAINWATER DRAINAGE

Gutters to be 115mm upvc with 65mm diameter upvc downpipes to BS: 4514, to be fixed at maximum 2m centres. Connect and seal pipes to below ground drains.

Footpaths and driveways should be allowed to drain to vegetation or a specifically laid pea gravel surround french drain.

Connect new rainwater pipes to existing soakaways/drain runs.

PLANNING / BUILDING CONTROL / SIGNING OFF

No work is to begin on site until full Planning and Building Regulation Approval has been granted in writing.

It is at the clients own risk if work commences before all necessary approvals are gained.

The client is advised to employ a suitably qualified person to carry out stage inspections during the works and to provide a guarantee on completion.

PARTY WALL

The Party Wall Act 1996 has effect from 1st July 1997 throughout England and Wales. If you intend to carry out Building Works which involve works on a party wall shared with another property. Notices need to be served on the adjoining owner and condition surveys carried out prior to works commencing.

SMOKE ALARMS

Smoke alarms are to be installed in the landing with a heat detector interlinked.

Smoke alarms to BS:5446 Part 1 1990, self contained are to be located as shown on drawings. These are to be positioned within 3m of bedroom doors and 7m of habitiable room doors. All alarms are to be ceiling mounted. Alarms to be battery backed up and interconnected to a separate fuse box. BS: 5839 Parts 1 and 6 recommend that operation and maintenance instructions should be given to the clients.

Alarms should be at least 300mm from wall and light fittings

SERVICE PROVISIONS

Any new service ducts to comply with service providers specifications for installation and to be of appropriate colour, size and material deemed for the purpose. Colours to be generally as follows:

Electricity	–	Black
Water	–	Blue
Gas	–	Yellow
Telecom	–	Grey

Service pipes in trenches to be marked with ID tape.

Where new supplies to the site are requested, the Contractor is to gain the relative approval from the Authority/Supplier prior to work commencing.

Any holes in the building are to be agreed with the client and Sub Contractor.

LINTELS

Install all lintels to manufacturers details and lintels to BS: 5977

Lintels to external walls to be IG unless stated otherwise.
All lintels to have a minimum of 150mm end bearing. Cavity tray over IG lintels. Internal void of lintel to be filled with insulation. Internal face of steel lintels to be covered with insulation to minimise thermal bridging.

Provide a minimum of 2No weepholes per opening at approximate 675mm centres. Cavity trays are to be drained to weep holes.

If a alternative lintel type is to be used, notify the Local Authority of change prior to installation.

The block course above all openings in external walls should be provided with expanded metal reinforcement to prevent cracking.

Where precast lintels used below ground for bridging a service drain pipe, ensure minimum 150mm end bearing.

HEATING SYSTEM

New heating system by a Specialist Contractor.
A Certificate is then to be provided to the Local Authority and Client on completion. Installation to be carried out by a GAS SAFE registered Engineer and installed to manufacturers recommendations.

The plumbing and heating Engineer is to design the appropriate system for the proposals. Details are to be approved by the client and local authority prior to work commencing.

Balanced flue outlet (with guard) minimum 600mm from any opening door or window, 75mm below gutter line and 300mm soil vent pipe and 300mm from corner of building.

Boiler to have SEDBUK rating of 91% for gas.
Fit necessary timing controls to boiler to allow switching off when no heat is required. Instant hot water required from boiler.

The operating and future maintenance instructions must be provided to the Owner of the property and these should then be kept in a appropriate place for future use.

Pipe insulation to be provided to all exposed pipework and hot water pipework below floors and in the roof space to be insulated with preformed foamed plastic type with a minimum 18mm wall thickness.

Any pipe runs within floor screed to have galvanised steel ducts with continuous screw down access covers.

Thermostat required to control air temperature and located in appropriate place. Provide electronic time clock should be fitted to boiler/system.

It is essential that the radiators in each room give a temperature of 21°C when the outside temperature is –5°C.

The system must work efficiently for the conservation of fuel and power. The responsibility for this is with the person carrying out the work. A certificate should then be provided to the owner and the local authority. The Contractor is to demonstrate compliance with Approved document J.
The checklist should then be given to the Owner and the local authority. The owner should then fix this in a appropriate place for reference.

ROOF STRUCTURE/COVERINGS

Roof to be covered with tiles to be agreed, fixed in accordance with manufacturers recommendations. 38 x 25 tanalised softwood battens on breathable felt with 150mm horizontal lap. Half round ridge tiles bedded in 1:3 cement:mortar. Clips to ridge and verges to BS: 1470 (Aluminium), nails to be aluminum clout head to BS:1202 part 1 to provide 20mm penetration. All tiling to comply with BS: 5534. NAIL EVERY TILE TO BATTEN.

Exact type of tiles to be used are to be agreed with the Planning Officer and Conservation Officer prior to ordering.

Roof trusses to be designed, braced and manufactured by a Specialist. Calculations are to be provided to the Local Authority before work/manufacturing commences.

Bracing to be 25 x 100 c16 diagonal both under rafters and over ceiling members, nailed to each rafter with 2No 10 gauge galvanised wire nails. Binders to be 25 x 100 c16 below ridge and next to node points. Web bracing to be 25 x 100 C16. Brace in accordance with manufacturers recommendations

Trusses fix to 75 x 100 wall plate with galvanised mild steel truss clip. Plate fixed to wall with 5 x 30mm galvanised steel straps at 1.8m centres

Finished timber sizes to BS: 4471–softwoods and BS: 5450 for hardwood.

Loft insulation within ceiling void and extension to be 300mm thick fibre glass/mineral wool, any tanks are to be lagged.
Insulation to be layered in 150mm and 150mm layers at 90° to each other. At eaves level pay particular attention to avoiding the formation of cold spots. Ensure insulation is placed between last truss and gable.

Strap trusses back to gable walls with 5 x 30mm galvanised steel straps screwed into trusses and nog between over a minimum of 3No trusses.

Insulation is to be provided to any expansion and overflow pipes. Seal around all pipes. All pipes contained within the bedroom roof space are to be insulated with pre–formed foam insulation, maximum 40mm.

Tank stand within roof to be 19mm plwood surface on 2No 50 x 200 C16 bearers and then onto 2No 50 x 200 C16 bearers

Advise truss manufacturer of tank position prior to manufacturing.

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Please read, if in doubt ask. Change nothing without consulting the Engineers.

Contractor to check all dimensions on site before work starts or materials are ordered. Do not scale, if in doubt ask. All dimensions are in mm unless stated otherwise.

Where materials, products and workmanship are not fully specified they are to be of the standard appropriate to the works and suitable for the purpose stated in or reasonably to be inferred from the drawings and specification. All work to be in accordance with good building practice and BS 8000 to the extent that the recommendations define the quality of the finished work. Materials products and workmanship to comply with all British Standards and EOTA standards with, where appropriate, BS or EC marks.

All products and materials to be handled, stored, prepared and used or fixed in accordance with the manufacturers current recommendations.

The contractor is to arrange inspections of the works by the BCO (or NHBC) as required by the Building Regulations and is to obtain completion certificate and forward to the Engineer

F	PLANNER'S COMMENTS	Nov. 13
E	PLANNER'S COMMENTS	Oct. 13
D	PLANNER'S COMMENTS	Oct. 13
C	UPDATED FOR BUILDING REGS.	Sept. 13
B	CLIENT'S COMMENTS	Sept. 13
A	CLIENT'S COMMENTS	Sept. 13
	REVISIONS	DATE

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LABC Warranty — LABC Building Excellence Awards — Winner
Fenland District Council — Building Design Awards — Building Excellence in Fenland

CLIENT
Mr I. Benney

PROJECT
20 High Street, Chatteris, Cambs.

TITLE
Proposed Elevations and Section

DRAWN	A.M.
CHECKED	
DATE	August 2013
SCALE	1:50
DATE OF ISSUE	
DRAWING NUMBER	H3438/03F