Roof Construction
Concrete interlocking roof tiles (see site plan for details) on 38 x 25mm softwood treated timber battens on underfelt to BS747 (Type 1F) lapped 150mm horizontally and 100mm vertically. Prefabricated roof trusses at 600mm c/c and pitch as stated in accordance with BS5268, 1985. Provide 25 x 100mm timber bracing and fix in accordance with truss manufacturers instructions. All trusses and gable ladders (if any) to be strapped to 50 x 100mm timber wallplate, the gable wall at verges and ceiling level with 30 x 5mm mild steel anchor and lateral restraint straps to span minimum 3 no. trusses at a maximum of 1200mm c/c. At strap positions provide pack and noggins to trusses. Main contractor to supply local authority building control with roof truss calculations 28 days prior to erection on site. Provide concrete padstones at compound truss supports where required by roof design. Water storage tanks to be installed in accordance with Technical Bulletin No. 4I.T.P.A. with timber support members to span 4 no. trusses.

Ground Floor Construction
65mm sand/cement screed on 100mm Celotex insulation with perimeter insulation to screed on 1200 gauge polythene d.p.m. on 100mm concrete oversite on minimum 150mm, maximum 600mm well blinded and compacted hardcore. Wall d.p.c. to lap floor d.p.m. by a minimum of 50mm.

Lintels
All coded lintels as stated in Schedule or marked on plan to be by I.G. To be installed in strict accordance with manufacturers instructions. Form d.p.c. cavity tray above all lintels. To all exposed lintels i.e. not sheltered from overhanging eaves, etc. to have proprietary weepholes to joints of brickwork at approximately 450mm c/c. To be confirmed on site with Building Control Surveyor

Opening at eaves level to be L1/E lintels by I.G. or similar approved.

Sub-structure Walling
100 mm Class A dense concrete blocks. Bitumen felt d.p.c. to external walls 150mm above ground level. Weak mix infill to base of cavities to terminate 225mm below lowest d.p.c. level.

Provide a firm level approach to front entrance of minimum width 900mm. Gradient of approach to be no steeper than 1:20. At entrance to building threshold to be maximum 15mm high.

Foundations
As indicated on plan provide concrete strip foundations. To cavity walls provide 700mm wide x 225mm thick and to 100mm walls provide 450mm wide x 225mm thick, unless noted otherwise. To non-load bearing internal walls thicken out ground floor oversite concrete to 450mm wide x 200mm thick. Widen foundations at chimney breast accordingly and make 300mm thick. Foundations to be taken down to an approved firm base, subject to local authority specifications. Concrete to be ST3 grade unless noted otherwise. Proximity of existing and proposed trees are to be taken into account in accordance with N.H.B.C. chapter 4 when determining foundation depth.

External access door that serves as access to ground floor WC to have a minimum clear opening width of 775mm.

Ensure minimum 900mm corridor width, access to ground floor WC with no obstructions (radiators, etc.) to corridor area adjacent doors

Sockets, light switches, TV points, doorbells to habitable rooms to be positioned between 450mm and 1200mm above floor level.

Minimum width of corridors and passageways for a range of doorway widths

Doorway clear opening width (mm)	Corridor/Passageway width(mm)
750 or wider	900 (when approached head-on)
750	1200 (When approached not head-on)
775	1050 (when approached not head-on)
800	900 (when approached not head-on)

All windows to give minimum $1/20^{th}$ of floor area as ventilation and to be double-glazed.

Glazing
All windows and doors to be double-glazed with minimum 16mm spacing and to use Pilkington 'K' glass or similar approved, efficiency of 0.05.

Sound Insulation to single Dwelling
The intermediate floor should be provided with 100mm thickness mineral wool between the joists. In addition internal stud walls should be suitably sound resisting to walls around bedrooms, WC and en-suites (unless the wall contains a door).

To all domestic floors to external perimeter walls provide 25mm thick insulation dressed up walls to prevent cold bridging.

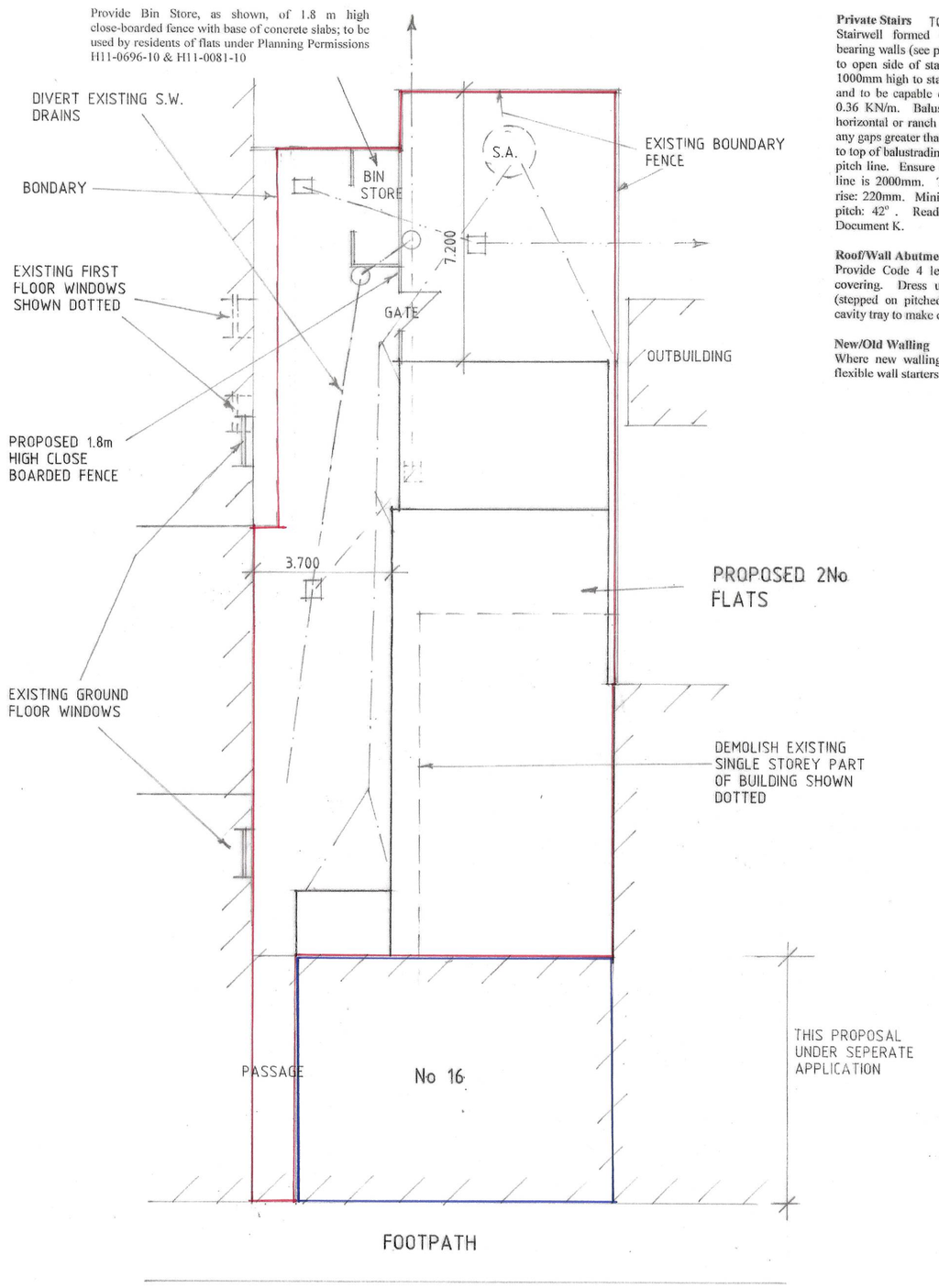
Seal all openings and joints to perimeter walls.

All doors, windows and any loft hatches to be effectively sealed and draught proofed.

Provide a fibrous separating member between floor screed and insulation and provide chicken wire between insulation and screed.

First floor habitable rooms shall have means of escape windows with openings of at least 450mm wide x 450mm high and a minimum area of $0.33m^2$. Escape windows to be within 1.1m of floor.

Provide Bin Store, as shown, of 1.8 m high close-boarded fence with base of concrete slabs; to be used by residents of flats under Planning Permissions H11-0696-10 & H11-0081-10



Hot Water Temperature
Where the operating temperature of the hot water storage vessel is capable of reaching 80°C it should be fitted with a safety device to ensure the temperature distributed does not exceed 60°C. The safety device from the hot water supply should discharge to a place where it will not pose a danger to any person. The hot water supply to the bath should be controlled so that it does not exceed 48°C

All easily accessible doorsets (including garage doorsets and communal entrance doorsets) that provide access into a dwelling or into a building containing a dwelling should be secure doorsets to the following:
a Manufactured to a design that has been shown by test to meet the security requirement of British Standard publication PAS 24:2012 or
b Designed and manufactured in accordance with Approved Document Q appendix B.

Ground floor, basement and other easily accessible windows (including accessible rooflights) should be secure windows in accordance with Approved Document Q paragraphs 2.2 and 2.3, windows should be made to a design that has been shown to meet the security requirement of the British Standards publication PAS 24:2012.

The building should have a provision that in the future copper or fibre-optic cables or wireless devices capable of delivering broadband speeds greater than 30 Mbps can be installed.

Consumer units should be mounted so that the switches are 1350 – 1450 mm above floor level.

Purge ventilation to windows
For a hinged or pivot window that opens 30° or more the height and width should be at least $1/20^{th}$ of the floor area of the room.
For a hinged or pivot window that opens less than 30° the height and width should be at least $1/10^{th}$ of the floor area.

Background Ventilation
Background ventilation is to be provided by trickle ventilators to the tops of windows. Use trickle vents offering $8000mm^2$ per window head. Ventilation for each flat to be $30,000mm^2$

For thermal bridging details refer to details: -

MC1-RE-01
MC1-WD- 03
MC1-WD-04
MC1-WD-05

Form opening from shops into new store as shown; support over with IG Box 200 lintel.

Foundations to suit boundary position.

Form suitable lead valley at abutment of new extension with adjacent property wall all to make completely watertight and to fall towards hopper head and down pipe.

Provide ½ hour fire protection to floor between flats.

Provide 4lb lead flashing at junction of new extension with existing wall, all to make completely watertight.

Make good to all disturbed and affected areas.

Private Stairs TO REAR FLATS
Stairwell formed by timber trimmers and load bearing walls (see plan). Provide timber balustrading to open side of stairs 900mm above pitch line and 1000mm high to stairwell opening to act as guarding and to be capable of resisting a horizontal force of 0.36 KN/m. Balustrading to be vertical type, not horizontal or ranch style. No parts of stairs to have any gaps greater than 99mm. Provide timber handrail to top of balustrading or independently 900mm above pitch line. Ensure minimum headroom above pitch line is 2000mm. Total rise: See plan. Maximum rise: 220mm. Minimum going: 220mm. Maximum pitch: 42° . Read in conjunction with Approved Document K.

Roof/Wall Abutments
Provide Code 4 lead flashings and lap over roof covering. Dress up wall a minimum of 150mm (stepped on pitched abutments) and provide d.p.c. cavity tray to make completely watertight.

New/Old Walling
Where new walling meets old provide proprietary flexible wall starters.

Soldier Coursing
Provide soldier course brickwork to all areas where shown on elevations.

Roof Ventilation
At eaves provide proprietary ventilation equivalent to a 10mm continuous gap along eaves.

Kitchen Ventilation
Provide proprietary mechanical extract ventilation unit capable of extracting 60 lt/sec. Alternatively provide proprietary cooker hood capable of extracting 30 lt/sec.

Bathroom/En-suite Ventilation
Provide proprietary mechanical extract ventilation unit capable of extracting 15 lt/sec. System to offer intermittent operation.

Heating System
Provide room thermostat or thermostatic radiator valves or similar approved to control the output from the heating system.

Insulated Pipes and Ducts
All pipes, which do not contribute to the heating of the building, will be insulated to BS5422 1977.

Safety Glazing
Provide safety glass to BS6206 to all windows to a minimum height of 800mm above floor level plus doors to a minimum height of 1500mm above floor level. Side screens to be same as doors if within 300mm of doors.

Smoke Detection
Provide mains operated self-contained smoke alarms to BS5839 Part 6, 2006 in accordance with Approved Document B1.

Rainwater Goods
PVC rainwater goods 110mm half round gutters and 68mm diameter downpipes.

The flow rates for the mechanical extractor must be tested and results given to Local Authority Building Control to show that the extraction rate is the same as that specified in 'Approved Document F – Means of Ventilation', no later than 5 working days after the final test.

Provide wholesome or softened wholesome water to any wash basin in or adjacent to any room containing a sanitary convenience and any wash basin, bidet, fixed bath and shower in a bathroom.

Provide heated wholesome water or heated softened wholesome water to any wash basin or bidet in or adjacent to a room containing a sanitary convenience and any wash basins, bidet, fixed bath or shower in a bathroom and any sink that is provided in an area where food is prepared.

The hot water supply to any fixed bath is to be designed and installed with measures to ensure that the temperature of the water that can be delivered to the bath cannot exceed 48°C.

All glazing to meet the requirements of 'Approved Document K – Safety Glazing' in relation to impact, opening and cleaning.

Water calculations are to be supplied to South Holland District Council Building Control showing how the water usage will be limited to 125 litres/per person/per day.

Demolish existing rear single-storey part of building to make way for proposed building.

Build on new rear two-storey building as shown to create 2 no. flats and shop store.

External Materials
Red facing bricks.
Slates to roof.

Screening
Provide 1.8m high close-boarded fence as shown
Existing boundary fences to remain.

Foul Dainage
Connect to foul sewer via existing foul drainage system.

For sound insulation between floors refer to H & H Acoustic Construction Division letter dated 30 July 2010.

Heating
First floor flat above shops to be by electric storage radiators.

Remaining 3 no. flats to be by gas balanced flue combi-boiler.

For corbelling of false chimneys in roof space maximum corbelling per course of 25mm.

Kitchen/Utility/Bathroom/WC Trickle Ventilation
Provide proprietary trickle ventilators to head of window giving a total opening area of not less than $4000mm^2$

Roof Insulation
To roof spaces provide proprietary 400mm thick fibreglass insulation laid as 200mm between joists and 200mm across joists or equivalent to give 0.11 U/value. Ensure a gap of 50mm between roof underfelt and quilt at all times.

Foul Water Drainage
Underground drainage to be proprietary 110mm diameter p.v.c. pipes flexible jointed to fall 1:70 bedded in 100mm pea gravel. Under building drains to be encased in 150mm pea gravel with lintel over pipes at wall abutments. Where drain passes through wall, provide suitable protection to prevent gas ingress to building. 110mm diameter soil and vent pipe to extend 900mm above window head and to terminate in balloon finial. Soil and vent pipe to be fitted with access plate at base. Provide suitably sized wastes from all appliances (in accordance with Approved Document H) complete with minimum 75mm deep sealed traps and rodding eye access points at every direction change. All above ground drainage to BS5582 and all underground drainage to BS8301. Provide seal plates both sides of pipe entry to avoid vermin entry.

Surface Water Drainage
To be proprietary 110mm diameter p.v.c. pipes flexible joined to fall 1:70 bedded in 100mm pea gravel. Pipes to discharge into 1200mm diameter soakaways sited 5000mm away from buildings.

Protection to Underground Pipes
Where pipes are not under road and have less than 600mm cover concrete paving slabs should be laid as bridging above the pipes on minimum 75mm pea gravel. If flexible pipes are under a road and have less than 900mm cover reinforced concrete bridging should be used instead of paving slabs. Provide compressible material below slab/concrete.

Inspection Chamber Construction
Proprietary polypropylene inspection chambers bedded on 150mm concrete. Form protective 255mm thick concrete collar around head of inspection chamber with 300mm projection from cover. Covers to be Grade C light duty unless inspection chambers are in driveways where Grade B medium duty covers are to be used.

Electrical Work
All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the council must be satisfied that either:-
a) an electrical installation certificate issued under a competent person's scheme has been issued
or
b) an appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

External Cavity Wall Lintels for 300mm Cavity Walls
IG type L1/S100 unless stated otherwise. To be confirmed on site with Building Control Surveyor.

Internal Lintels
IG type Internal 100mm lintels to openings in 100mm internal walls unless stated otherwise.

Brickwork below d.p.c. to be F.L. quality

Outlets from balanced flue boilers to be at least 300mm from any openings.

All soakaways to be minimum 1m deep.

Provide cavity trays above in situ meter boxes.

Provide area for provision of solid waste storage (rubbish bins).

All external lintels to be insulated type.

All external joinery to be fully draught proofed.

Loft hatch to be draught sealed and latched shut.

Insulation in roof space to meet with insulation in external cavity walls to prevent cold bridging.

First Floor Walling
Provide 50 x 75mm timber vertical studs at 400mm c/c to be constructed of 50 x 75mm timber head and sole plates. Provide 12.5mm Gyproc plasterboard of $10kg/m^3$ density and skim finish to both sides. Provide to airspace proprietary acoustic insulation. Timber stud partitions running parallel to joist direction to be built off 2 no. floor joists fixed together. Provide 1 no. joist either end of stud partiion joist beam to fix flooring.

First Floor Construction
19mm flooring grade moisture resistant decking on timber joists as stated on plan. To external walls joists to be supported on joist hangers (not built into wall). Provide 30mm x 5mm mild steel restraint straps to joists running parallel with wall securely fixed to walls and to span minimum 3 no. joists at maximum 1200mm c/c. At strap positions provide pack and noggin to joists. Solid strutting to be installed mid-span where span of joists between 2.5m and 4.5m. For spans in excess of 4.5m position of struts at 1/3 rd span. Double up floor joists locally under bath feet and hot water cylinder where applicable. All doubled up joists to be bolted together at 600mm centres. Provide 75mm fibreglass insulation between floor joists.

Boiler
Provide balanced flue condensing type gas boiler of required rating in position indicated on drawing to be either a wall hung type or free standing on 125mm high concrete hearth above oversite. Boiler outlet to have protective guard cover and to be a minimum 300mm from any opening into the building which is wholly or partially above the terminal. Read in conjunction with Approved Document J1/2/3. At completion of works commissioning of heating system to be provided to the local authority Building Control by a competent Corgi registered person. Boiler to have a rating of 89.7%

Fascia and Bargeboards
To be 25 x 75mm PSE with 6 mm groove to accept 6mm thick exterior grade plywood soffit.

Header Tank Support
Water tank in roof space to be supported on bearers to spread the load to BS5268 Part 3 1985.

Ceilings
To all insulated roof ceilings provide 12.5mm Gyproc Duplex plasterboard of $10kg/m^3$ or similar and either 5mm skim or Artex finish. To remaining ceilings provide 12.5mm Gyproc plasterboard or similar with finishes as above.

Commissioning of Heating and HWS Systems
A competent person, i.e. the main contractor or sub-contractor shall supply a Certificate of Satisfactory Compliance with Building Regulations Part L. A copy of which shall be made available to both the client and the Building Control body.

A suitable set of operating and maintenance instructions are to be made available to the client to explain to the householders how to operate the systems so that they can perform efficiently and what routine maintenance is advisable for the purpose of the conservation of fuel and power.

Internal Lighting
Provide energy efficient lights that only take lamps having a luminous efficiency greater than 40 lumens per circuit watt. Examples of lamps are fluorescent tubes and compact fluorescent lamps (note GLS tungsten lamps with bayonet cap or Edison screw bases).

Method of determining number of locations:

Provide energy efficient lights of one per $25m^2$ of floor area or one per four fittings whichever is the largest.

Excludes garages, lofts and outhouses.

External Lighting Fixed to the Building
External lights include lights in porches but not lights in garages and carports.

External lights should be made to enable effective control and/or the use of efficient lamps as follows:

a) Automatically extinguish when there is enough daylight and when not required at night.

b) Have sockets that can only be used with lamps having an efficiency greater than 40 lumens per circuit watt.

Stud Walls between Habitable Rooms
To have 15mm plasterboard finish to both sides of 50mm x 100mm studs with 100mm fibreglass between to reduce sound transmission.

Mechanical Ventilation
Mechanical ventilation systems are to be commissioned in accordance with Regulation 44 (where they can be tested and adjusted to provide adequate ventilation) and a copy of the commissioning notice is to be given to the local authority not more than 30 days after completion of the works.

External Wall Construction (300mm cavity)
100mm facing brickwork (see site plan for details)
100mm Cavity with ISOVER, Hi-CAV 32 insulation
100mm inner skin of tarmac Hemalite blocks
Cavity wall ties to be stainless steel type spaced 900mm horizontally and 450mm vertically to BS1243:1978. Internal block walls to receive 10mm sand/cement render and skim. Robust details in accordance is T50,2001

General Notes

Do not scale from this drawing.

This drawing is copyright and may not be altered, traced, copied, photographed or used for any purpose other that that for which it is issued without written permission from Messrs Status Design.

The General Contractor is to check all dimensions on site and report discrepancies to the Architect.

All details shown on this drawing are based upon typical site conditions related to the area. No responsibility can be accepted for abnormal conditions unless reported to the Architects so that design amendments may be considered. Site soil surveys are recommended in respect of foundations to establish specific site conditions before foundation work is undertaken.

Please note this drawing is not a conveyance drawing.

Proposed on-site soakaways to be maintained by the owner for the life duration of the property.

This drawing is limited in the amount of information contained and does not purport to contain a full specification of the works. It is solely for the purpose of obtaining Planning and Building Regulations approvals. This drawing must not be used as a contract document alone. The works will not be supervised or inspected by Status Design unless specifically contracted to do so. It is the client or their agent's responsibility to control workmanship, substitution of materials, adherence to specification, variations to contract, etc.

All materials to be new unless stated otherwise and all components and materials, etc. to be used, fitted and installed, etc. in strict accordance with manufacturers' instructions and relevant Code of Practise. Materials should conform to appropriate British Standard specification or BBA Certificate or European Code equivalent.

The Employer/Client shall ensure that the selected contractor is conversant with and adopts all measures necessary to achieve compliance with Health and Safety Legislation for Building Sites and Work Places. The Employer/Client is advised that should the works need to comply with the Construction Design and Management Regulations 1994 (CDM) and Health and Safety at Work, etc., Act 1974 (HSW Act) an independent Planning Supervisor will be required, whom should be supplied with a set of all relevant drawings, etc.

The works shall comprise of all that shown on the drawings and information, etc. Works that may not specifically be shown but may be reasonably inferred as necessary to carry out the works shall be deemed to be included.

These notes relate to this drawing and all associated drawings

External walls abutting adjacent property to have blocks of density 1850 to 2300 kg/m^3.

Roof insulation to be 400mm minimal wool to achieve "U" value of 0.11W/m^2K.

Windows and glazed doors to achieve a U Value of 1.40W/m^2K or less.

Solid doors to achieve a U Value of 1.20W/m^2K or less.

Concrete Block Association and Accredited Construction Details have been specified to reduce the effects of linear thermal bridging. Please note completed thermal bridging worksheets shall be required to achieve "as built" compliance.

Heating and hot water provided by mains gas combi boiler with passive flue gas heat recovery system, efficiency not less than 89.7% (SAP2009) (ATAG iC Economiser 27 or equivalent) supplying radiators.

The heating system should be controlled by a programmer, delayed start thermostat and thermostatic radiator valves.

An Air Tightness Test result of $5.00m^3/hr.m^2$ (@50Pa) or less is required.

All fixed light fittings should be fitted with low energy lamps.

The new heating and hot water system will require commissioning by the person carrying out the work and provided to the Local Authority as set out in the Non-Domestic Building Services Compliance Guide.

K – B.R. ALTS – 8.6.18
J – ALTS – 19.3.18
I – ALTS – 26.10.10
H – B.R. ALTS – 11.8.10
G – B.R. ALTS – 28.6.10
F – BIN STORE ADDED – 14.6.10
E – IMF. ADDED – 10.2.10
D – DESIGN ALTS – 29.4.08
C – IMF. ADDED – 26.9.07
B – IMF ADDED – 8.5.07
A – ALTS – 6.3.07

THIS DRG. TO BE READ IN CONJUNCTION WITH SD06-030/3, SD06-030/9, SD06-030/13

H&H ACOUSTIC LETTER DATED 30.7.10 PAGES 1 TO 7

THERMAL DETAILS - MC1-RE-01, MC1-WD-03, MC1-WD-04 MC1-WD-05

Status DESIGN
CONSULTANTS IN ARCHITECTURE & PLANNING

PROPOSED 2No FLATS & SHOP STORE TO REAR OF 16 MARKET PLACE, LONG SUTTON FOR

MR. P. FLOWER.

SITE PLAN AS PROPOSED

1:100	SD06-030/7
JAN-07	B.GILHAM.

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