

GLAZING.
Double glaze extension throughout. (minimum 12mm air gap) to all units with Low 'E' 0.9 Glass) max 'U' value 2.0 W/ sq.m. K. All glazing between F.F.L and 800mm high and between F.F.L and 1500mm high in doors and side lights to be safety glass to B.S. 6206. All windows/ doors to be draught sealed.

VENTILATION.
All windows to have opening lights to give the equivalent of 1/ 20th the floor area. Provide background ventilation to habitable rooms min. 8000mm sq permanent free air ventilation per room. To all other rooms provide min 4000 sq. To utility room provide Wall mounted mechanical extractor fan to extract min. 30 litres per second.

HOT WATER AND SPACE HEATING.
Extend and upgrade existing system as required. Ensure timer switch, suitable zone and boiler control interlocks, 11k thermostatic control valves to all radiators. Hot water system to be thermostatically controlled with timer switch and to be vented.

SMOKE DETECTORS.
Provide ceiling mounted mains operated self-contained smoke alarms to B.S. 5446: pt1.1990 in positions shown on plan. Where more that one detector is to be provided they will be interconnected. All permanently wired to a separate fused circuit at distribution board.

LIGHTING.
To Study provide energy efficient light fittings capable only of taking lamps having a luminous efficacy greater than 40 lumens per circuit.
External lighting to be fitted with Dawn-Dusk or movement sensors and capable only of taking lamps having a luminous efficacy greater than 40 lumens per circuit.

GENERAL
All electrical installations to be in accordance with the latest I.E.E. Regulations.
Provide hot & cold water supply to all wash basins.
All electrical switches, socket outlets, telephone and T.V. points to habitable rooms to be positioned at appropriate heights between 450mm & 1200mm from F.F.L

FOUNDATIONS.
Under walls as shown provide 700 x 225 strip concrete foundations GEN4 mix to B.S. 5328: pt1 1991. All foundations taken down to bear on load bearing strata min. depth of 600 to top of foundations: should shrinkable soil conditions be found on site then foundations shall be taken down to a minimum depth of 1 metre below ground level. Where internal walls are taken up off floor then thicken out slab to 225 x 450 or if considered necessary be taken down to 225 x 450 foundation.

STAIRCASE AND BALLUSTRADE.
Construct staircase as follows: 915 o/ a strings 15No. risers of 200mm ex 25 x 225: 225 going ex 32 x 250: pitch 42deg. Min. head room 2.0m measured vertical above pitch line. All in accordance with B.S. 5395:1977. Staircase to have ex 38 x 90 shaped hardwood handrail min. 900 above pitch line. 100 x 100 softwood newel post. Gap between vertical balusters not to exceed 99mm. Handrail and balustrade to be capable of resisting the appropriate load specified in B.S. 6399: Pt. 1. Balustrade to be min. 900mm high.

LINTELS.
All lintels to be manufactured by Messers. I.G. Codes LI/ S 75 and LI/ HD 75 all to be installed in accordance with makers' instructions, and to have min. end bearing of 150mm and at external positions to have cavity tray D.P.C. to CP. 121: Internal lintels to be I.G. 100 Blue type. Provide Perp-end weep holes and stop ends to cavity tray

FOUL DRAINAGE
Foul drainage pipes to be 110mm dia. UPVC, to B.S. 4660:1989 flexibly jointed and laid to makers' instructions to a fall of 1:70 bed and surround with 100mm pea gravel: Where pipes pass under floors encase in 150mm pea gravel: Where pipes pass under drives surround in 150mm concrete with flexel joints to correspond with joints in pipe work. Provide 65 x 100 pre-stressed concrete lintel bridging where pipes pass through walls, provide compressible filler around pipe, opening marked both sides of wall with ridged sheet material: Waste pipes to be generally 40mm dia. If over 3.0m long run increase to 50mm dia. All PVC to B.S. 5955: 1979 complete with rodding eyes at every change of direction: Sink to have 75 deep seal traps. All redundant drains to be grubbed out or filled with lean-mix concrete.

SURFACE WATER DRAINAGE.
115mm dia. half round rainwater gutters to 65mm dia. rainwater pipes: 110mm dia. underground pipes flexibly joined to a fall of 1:70 pipes bedded and surrounded in pea gravel and discharge to 1.2m dia. soak away min. 5.0m to edge from dwelling. All footpaths and drives to slope away from building.

PITCHED ROOF CONSTRUCTION.
Interlocking concrete roof tiles to B.S. EN 490 / 491, on 25 x 38 softwood treated battens on under Felt to B.S. 747 (type 1F) and in all cases to be lapped by 150mm both vertically and horizontally. Tiles to be laid with min. head lap of 75mm and to be fixed in accordance with reagard to wind speed, roof pitch and exposure category as detailed in B.S 6399: Pt 2. Timberplate specialist made prefabricated roof trusses to comply with B.S. 5268 part 3 1988. TRUSS CALC'S TO BE SUBMITTED TO L/ A, MIN. 28 DAYS PRIOR TO ERECTION. Trusses to be at 600c/ c to a pitch of 30 deg. 38 x 100 ridge node binder 38 x 100 ceiling binders: All trusses to be strapped to wall plate by 50 x 5 galvanised metal straps acting as anchor and lateral restraint straps at max. 1.5m c/ c. Note: provide solid bridging beneath straps: 50 x 100 wall plate bedded on sand and cement: 25 x 175 fascia boards: 6mm ext. grade plywood soffit complete with 10mm wide continuous air gap and fly proof screen. All structural timber to be min.SC3 grade. stamped 'KD' or 'KD' to indicate moisture content of 20% or less all in accordance with BS. 4978. Where span of trussed rafter exceeds 5.0m provide additional bracing within the plane of the webb in accordance with Truss Plate Assoc. tech. bulletin sheet 4: Timber supports are to be provided beneath water storage tanks over 4No ceiling joists. At roof / wall abutments provide 150mm high code 4 lead flashing.

CEILINGS.
Flat ceilings bin 250mm glass fibre insulation total thickness. 100mm between joists & 150mm over Joists to provide max. 'U' value of 0.16 W/ sq.m.K. Ensure 50mm air gap over all insulation. 12.7mm Gyproc plasterboard 3mm skim finish: Provide min. 38 x 38 noggins to all plasterboard edges. All joints to be taped and filled. Provide access trap to roof spaces opening to be lined with 25 x 25 planted slope. Access panel to be 12mm ply with layer of 12.7mm Fireline board fixed to face. 100mm Jabilite to top surface. Provide slide bolt fastening & draught seal all round

WALLING.
280 cavity walling to consist of face brickwork to B.S. 5921:1974 for clay bricks and B.S. 187:1978 for calcium silicate bricks: 88 cavity: build into cavity Pritherm cavity wall batt insulation boarding in accord. with makers instructions and segment cert' No.84/1268 & 86/1584. 100mm Tarmac Hemelite solid insulation blocks or similar: Cavity walls tied together using galvanised iron twist ties set 750 horizontally and 450 vertically to B.S. 1245:1978 wall ties positioned at 500 vertical centres at all unbonded closures of cavity: Close cavities with "Thermabate" preformed closer and provide bitumen Felt DPC to CP. 121. All work to be carried out in accordance with BS Code of Practice 121
Part 1:1975. External walls to have max. 'U' value of 0.35 W/ sq.m.K : Internal walls of 100mm Tarmac Hemelite solid insulation blocks: All to receive 10mm S/ C render and 3mm. Stud walls to consist of 38 x 89mm c.l.o studs at 400mm c/ c, both sides to be clad with 12.7mm plasterboard and skim. 100mm glass fibre infill between studs. Movement joints to be installed in blockwork in accordance with B.S. 5628 pt. 3 1985.

SUB STRUCTURE WALLING.
100mm dense concrete blocks to B.S. 6073 pt.1 1981: DPC to external wall positioned in accordance with CP 102 min. 150 above finished ground level: Weak mix concrete infill to base of cavity no closer than 225 to DPC. All brickwork below DPC to be F.L. quality.

LEVEL ENTRY THRESHOLD
Provide "Jeldwen Ltd." Mobility door frame & threshold (FN29M-MOB) Principal entrance to building, All External doors to be 838mm wide. And in all cases to provide minimum 775mm clear opening width.

INTERNAL DOORS.
All internal doors to ground floor habitable rooms and toilet accommodation to be 838mm wide.

GROUND FLOOR CONSTRUCTION.
Strip all vegetable soil and lay floor as follows: 70mm sand and cement screed with chicken wire reinforcement on 500g polythene D.P.M. on 48mm "Celotex GA2048" insulation board, on 1200g polythene D.P.M. lapped continuous with D.P.C. by min. 100mm, lay 500mm wide D.P.M. strip into D.P.C. to lap floor D.P.M. All on 100 concrete over site: Concrete mix GEN4 to B.S. 5328: pt1 1991: 150 blinded and consolidated hardcore / Hilcrmaltner. Floor construction as above but 19mm T&G. floorings grade treated chipboard on 48mm "Celotex GA2048" insulation board laid on over site in lieu of screed and insulation board. Ensure 12mm expansion app to perimeter of boarding.

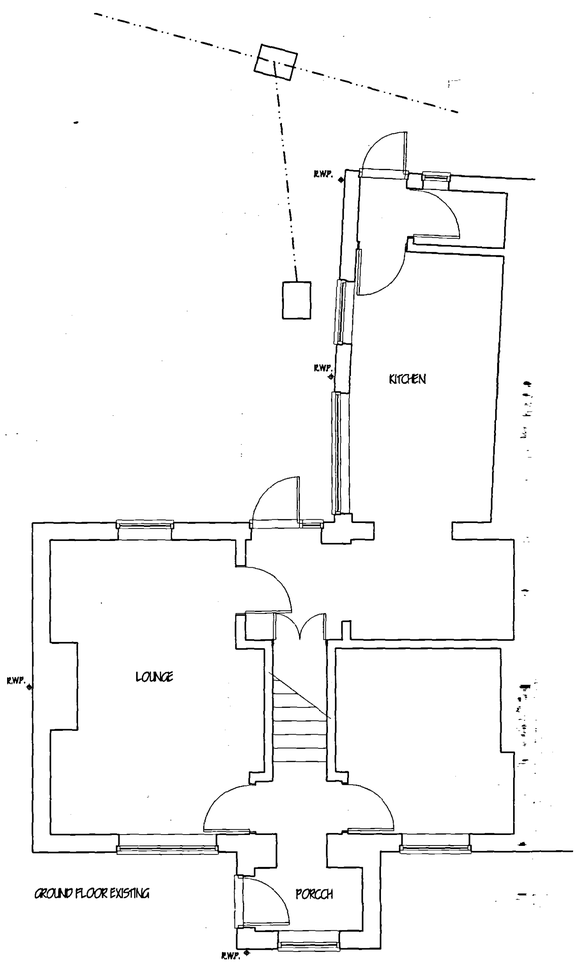
LIMITATIONS.
This drawing is limited in the amount of information contained and does not purport to contain a full specification of the works. It is solely for the purpose of obtaining Planning/ Building Regulation approval. The drawing must not be used as a contract document alone.
All dimensions shall be taken from site from actual work. Under no circumstances shall measurements be scaled from this drawing for construction or ordering purposes.
All open dimensions shall be checked by the Builder/ Contractor and will be his responsibility from commencement of site works.
The works will not be supervised or inspected on site by C.A.D. or any representative thereof. It is the client or their appointed agents responsibility to control workmanship, substitution of materials, adherence to specification, variations to contract etc.

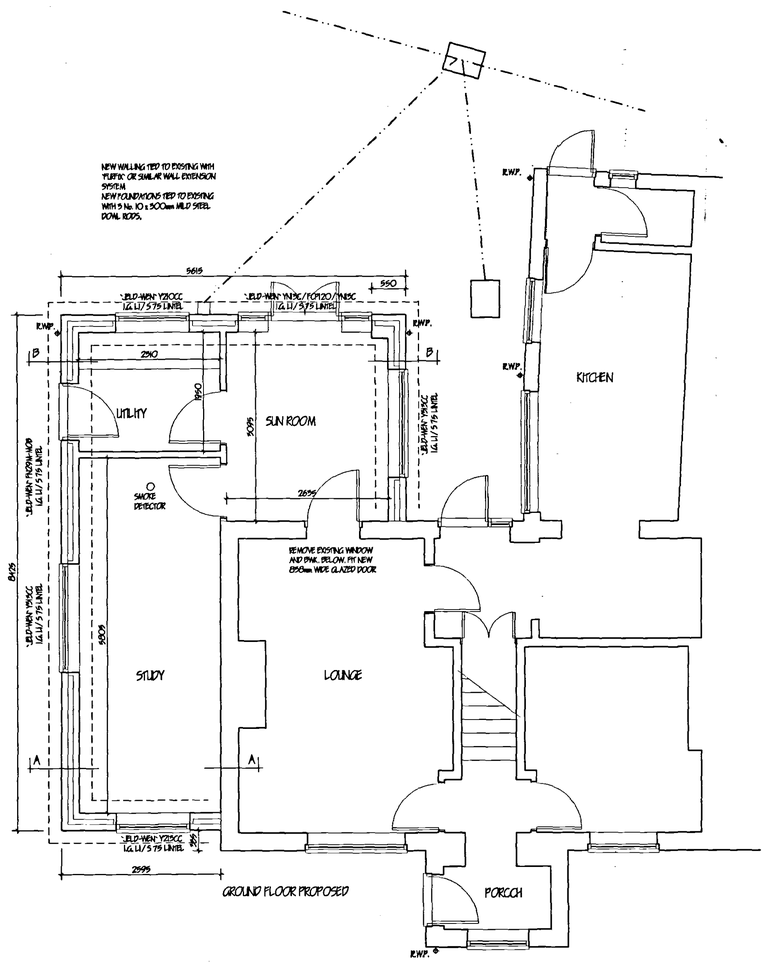
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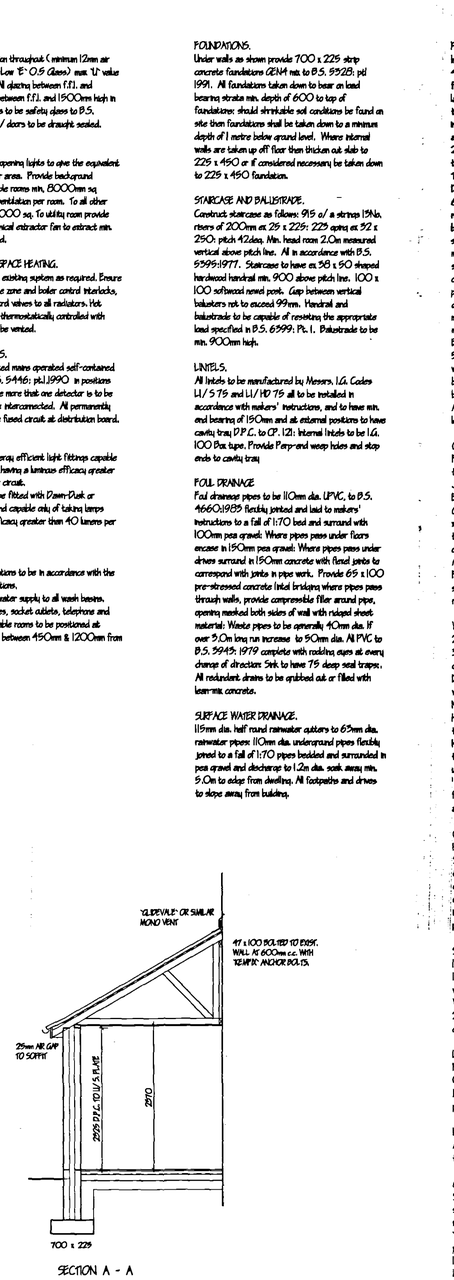
STANDARDS.
All materials to be new unless otherwise stated and all components and materials etc. to be used fitted and installed etc. in strict accordance with manufacturers instruction and relevant Code of Practice.
Materials shall conform to appropriate British Standard Specification or BBA Certificate or European Code equivalent.

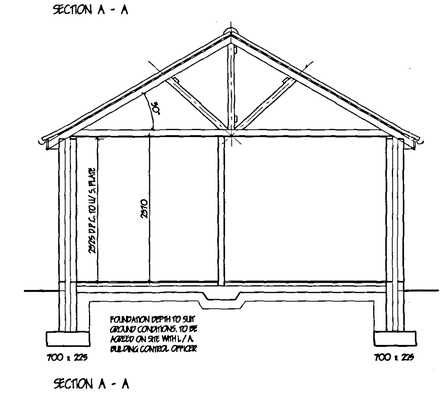
HEALTH & SAFETY.
The Employer/ Client shall ensure that the selected contractor is conversant with and adopts all measures necessary to achieve compliance with Health & Safety legislation for Building Sites and Work Places.
The Employer / Client is advised that should the works need to comply with the Construction Design and Management Regulations an independent Planning Supervisor will be required.

SCOPE OF THE WORKS.
The works shall comprise of all that is shown on the drawing and details. Work that may not be specifically shown but may be reasonably inferred as necessary to carry out the works shall be deemed to be included.









revision	date	init.	revision details.

COOPER ARCHITECTURAL DESIGN
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Client.
MRS CASTLEY

Project.
PROPOSED EXTENSION
2 THORPE AVENUE
PENGATE
MOULTON CHAPEL
SPALDING LINC'S.

Drawing.
DETERMINED PLAN

Scale 1:50 1:100	Drawing No. 0217-01
Date. MAY '03	Drawn. J.C.

South Holland District Council
Planning Department
16 JUN 2003
Ref 0763/03