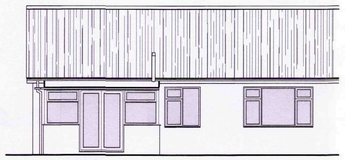
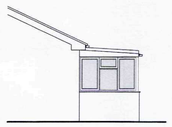


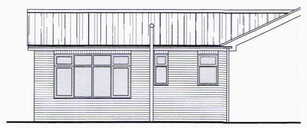
NORTH ELEVATION - EXISTING



WEST ELEVATION - EXISTING



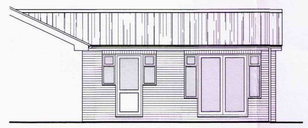
SOUTH ELEVATION - EXISTING



NORTH ELEVATION - PROPOSED



WEST ELEVATION - PROPOSED



SOUTH ELEVATION - PROPOSED

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 given 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.

PITCHED ROOF CONSTRUCTION.
Interlocking concrete roof tiles to B.S. EN 490 / 491. Laid in accordance with B.S 5534:2014 on 25 x 38 softwood treated battens on tyvek® supro BBA certificate: 08/4845 or similar over rafter unsupported breather membrane fitted in full accordance with manufacturers instructions in all cases to be lapped by 150mm vertically and 300mm 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 catecaory as detailed in B.S 6399. Pt 2. Twinaplate specialists made prefabricated roof trusses to comply with B.S. 5268 part 3 1988. TRUSS CALCS TO BE SUBMITTED TO L/ A. MIN. 28 DAYS PRIOR TO ERECTION. Trusses to be at 600c/ c to a pitchto match existing (Approx. 25 deg.) 38 x 100 ridge node binder. All trusses to be strapped to wall plate by 30 x 2.5 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 u.p.v.c. Fascia boards. 6mm u.p.v.c. soffit complete with 10mm wide continuous air vent and fly proof screen. All structural timber to be min.SC3 grade. stamped "DRY" or "KD" to indicate moisture content of 20% or less all in accordance with BS. 4978. Timber supports are to be provided beneath water storage tanks over 4No ceiling joists. At roof intersections provide 25 x 100 lay boards and diminishing trusses at 600 c/ c. : Install GRP valley liner.

WALLING.
300 cavity walling to consist of Face brickwork to B.S. 3921:1974 for clay bricks and B.S. 187:1978 for calcium silicate bricks: 100mm cavity. Build into cavity 100mm Knauf Earthwool Dritherm 32cavity wall batts insulation boarding in accord. with makers instructions and agreement cert.' No.84 / 1268 & 86 / 1984. 100mm Tarmac Toplite Grl. 2.9 N/ mm2 (Thermal Conductivity 0.11W/ mK) solid insulation blocks or similar: Cavity walls tied together using stainless steel vertical twist ties set 750 horizontally and 450 vertically all to B.S. EN 845 wall ties positioned at 300 vertical centres at all unbonded closures of cavity. Close cavities with "Thermabate" preformed closer and provide bitumen fels DPC to C.P. 121. All work to be carried out in accordance with BS Code of Practice 121 Pt.1. 1973. Internal walls of 100mm Tarmac Toplite Standard solid insulation blocks. Movement joints to be installed in blockwork. in accordance with B.S. 5628 pt. 3 1985.
All to receive 12.5mm Plasterboard on dabs with skim finish.
"U" value 0.25 W/ m2K
Stud walls to consist of 38 x 89 C.S. timber studs at 400mm c/ c, both sides to be clad with 12.5mm Gyproc SoundBloc and skim. 25mm Isowool Acoustic partition roll infill between studs.

GROUND FLOOR CONSTRUCTION.
Strip all vegetable soil and lay floor as follows: 50mm sand and cement screed, on 100mm concrete over site: Concrete mix GEN1 in non aggressive soils and FND2 mix in sulphate bearing soils to B.S. 5328: pt 1997, on 500g polythene D.P.M. on 120mm "Celotex PIR 5000" insulation board on 1200g polythene D.P.M. lapped continuous with D.P.C. by min. 100mm on 150 blinded and consolidated hardcore.
Garage floor to be as above except sand cement / screed and insulation:
Alternative: Floor construction.
19mm T&G. flooring grade chipboard on
120mm "Celotex PR 5000" insulation board on 500g polythene D.P.M. laid on 100mm concrete over site: Concrete mix GEN1 in non aggressive soils and FND2 mix in sulphate bearing soils to B.S. 5328: pt 1997, on 200g polythene D.P.M. lapped continuous with D.P.C. by min. 100mm on 150 blinded and consolidated hardcore.
Ensure 12mm expansion gap to perimeter of boarding. Use treated chipboard to kitchen and bathroom.
"U" value 0.14 W/ m2K

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 120mm "Celotex XR4000" insulation board, on 1200g polythene D.P.M. lapped continuous with D.P.C. by min.100mm All on 100mm concrete over site: Concrete mix GEN1 in non aggressive soils and FND2 mix in sulphate bearing soils to B.S. 5328: pt 1997, on 150 blinded and consolidated hardcore.
Garage floor to be as above except sand cement / screed and insulation:
"U" value 0.19 W/ m2K

FOUNDATIONS.
Under walls as shown provide strip concrete foundations as follows: Under 300 cavity walls provide 225 x 600 and under 100 walls provide 225 x 450 all GEN3 mix to B.S. 5328: pt 1997. All foundations taken down to bear on load bearing strata min. depth of 450mm below ground level to top of foundations: should shrinkable soil conditions be found on site then foundations shall be taken down to a minimum depth of 1000mm below ground level. Where internal walls are taken up off floor then thicken out slab to 225 x 450 dia. or if considered necessary be taken down to 225 x 450 foundation. In all cases foundations are to be designed in accord with N.H.B.C. Foundation Practice Guidance Notes where localised trees and shrubs are present.

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 around level: Weak mix concrete infill to base of cavity no closer than 225 to DPC. All brickwork below DPC to be F.L. quality.

LINTELS.
All lintels to be manufactured by Messrs. I.G. Codes L1/ S 100 and L1/ H2 100 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 Box type. Lintels in aprace to be underlined with 12.7 fire line board or receive 12mm render and skim. Provide Perp-end weep holes and stop ends to cavity trau.

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 flexi 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 masked both sides of wall with rubbed sheet material. Soil and vent pipes to be 110mm dia. PVC to B.S. 4514: 1969 and to extend 900mm above window head terminating with PVC balloon. Waste pipes to be generally 40mm dia. 1" over 3.0m long run increase to 50mm dia. All PVC to B.S. 5255: 1979 complete with rodding eyes at every change of direction: Basins and sink to have
75mm deep seal traps:
SURFACE WATER DRAINAGE.
115mm dia. half round rainwater gutters to 65mm dia. rainwater pipes: 110mm dia. underground pipes flexibly jointed 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.

GLAZING.
Double glaze property throughout with p.v.c.u windows BFRC rating in BAND C or better.
All windows and doors to have min. "U" value of 1.9 W/ m2K. or better. i.e. "Saint-Gobain Glass UK Ltd PLANITHERM TOTAL + with 16mm air gap.
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 that open to
30 degrees or more and to provide the equivalent of 1/ 20th the floor area of each room. Should opening lights be to less than 30 degrees provide the equivalent of 1/ 10th the floor area of each room. Background ventilation to windows to provide a minimum total of 60,000 mm. sq. permanent free air ventilation per dwelling. Based upon a minimum of 5,000 mm. sq per habitable room and 2,900 mm. sq per kitchen, utility room, bathroom, en-suite, wet room and cloak room.
The following rooms to have in addition to the above wall mounted mechanical extractor fan (Specific Fan Power (SFP) to be no worse than 0.9W.L/ s) Recommended extract rates:
Kitchen min. 60 litres per second.
Utility rooms min. 30 litres per second.
Bathroom/ En-suite min. 15 litres per second, which may be operated intermittently.
W.C. min. 6 litres per second with 15 minute over-run.
Electrical Engineer to provide L/ A. Building Control with a suitable Commissioning Certificate upon completion.

SPACE HEATING.
Provide water filled underfloor heating system to extension. Upgrade existing Boiler as required. Ensure timer switch Zone and temperature controls to minimum two zones, boiler control interlocks, Fit thermostatic control valves to all radiators. Hot water system to be thermostatically controlled with timer switch. All hot water pipes work to be insulated to B.S. 5422:2001.
Heating Engineer to provide L/ A. Building Control with a suitable Commissioning Certificate in accordance with that published as part of the Benchmark Code of Practice upon completion.
All unvented hot water systems and packages to be fitted with a minimum of two independent safety devices, these shall be in addition to any thermostats provided on the system.
The system or package shall be indelibly marked with the following details, which shall remain visible after installation.
a. The Manufacturers name and contact details.
b. The Model reference details.
c. The rated storage capacity of the storage water heater.
d. The operating pressure of the system and the operating pressure of the expansion valve.
e. Relavant operating data on each of the safety devices fitted.
f. The maximum primary circuit pressure and flow temperature of indirect hot water storage system units or packages.

SMOKE/ HEAT DETECTORS.
Provide ceiling mounted mains operated self-contained Smoke Alarms to BS 5839-6-2004 in positions shown on plan.
Provide ceiling mounted mains operated self-contained Rate of Rise Alarms to BS 5445-5 Type "R" in positions shown on plan.
Where more than one detector is to be provided they will be interconnected. All permanently wired to a separate fused circuit as distribution board.

ELECTRICAL INSTALLATIONS.
All electrical work to meet the requirements of "Approved Document Part P (Electrical Safety)" and must be designed, installed, inspected and tested by a person competent to do so.
Prior to completion of the works the Local Authority must be satisfied that either:-
An electrical installation certificate issued under a competent persons scheme has been issued.
OR
An appropriate installation certificate has been issued for the work and that it has been signed by a person competent to do so.

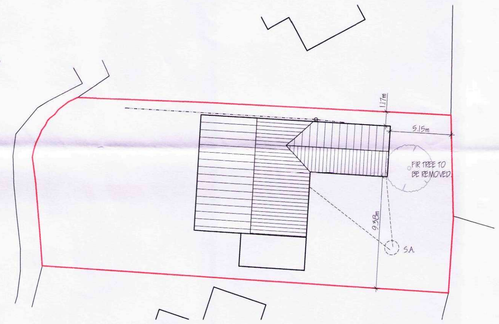
LIGHTING.
To all habitable rooms provide energy efficient light fittings capable only of taking lamps having a luminous efficacy greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens.
External lighting is to be fitted with Dawn/Dusk or movement sensors and capable only of taking lamps having a luminous efficacy greater than 45 lumens per circuit.
All lighting to be in accordance with the Domestic Building Services Compliance Guide.

WATER
Provision is to be made for wholesome water to be drawn off wherever drinking water is drawn off. Also to any wash basin, bidet, fixed bath or shower in any room containing a sanitary convenience.
Water of suitable quality is to be provided to all sanitary fittings with flushing devices. Pressure, flow rate and reliability to be sufficient for operating all sanitary appliances.
Potable water is to be supplied by any statutory water undertaker or licensed water supplier.
Potential consumption of wholesome water is to be limited to be not more than 125 litres per person per day. Water efficiency calculations are to be submitted to L/ A Building Control not later than 5 days after work is completed.
Recommendations:
W.C. Dual flush Full 6litre Half 4 litre
Taps Flow Rate 5 litres/ minute
Hot water supply to any fixed bath to be regulated to ensure maximum temperature of delivered water will not exceed 48 deg.C. by the use of an in-line blending valve or other appropriate device.

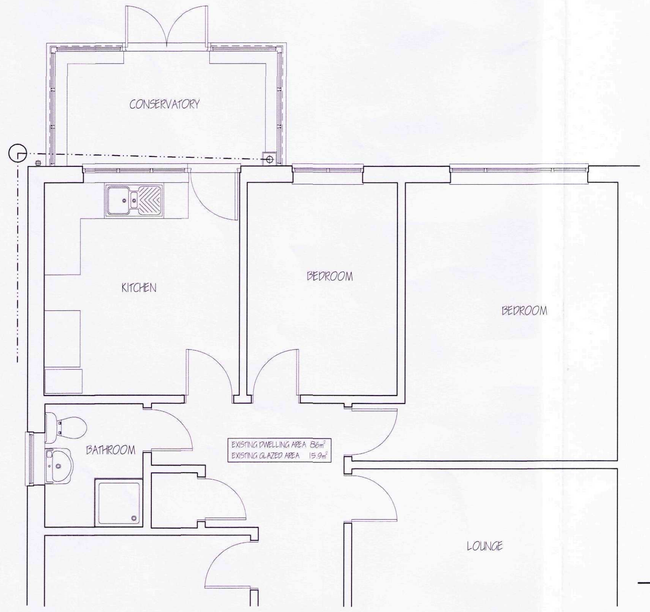
GENERAL
Provide hot & cold water supply to all wash basins.
All electrical switches, socket outlets, telephone and T.V. points to habitable rooms to be positioned at appropriate heights between 450mm & 1200mm from F.F.L.



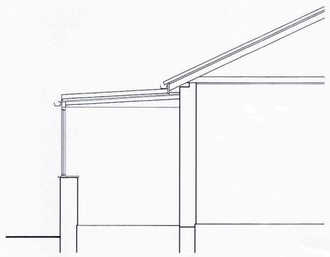
LOCATION PLAN 1:2500



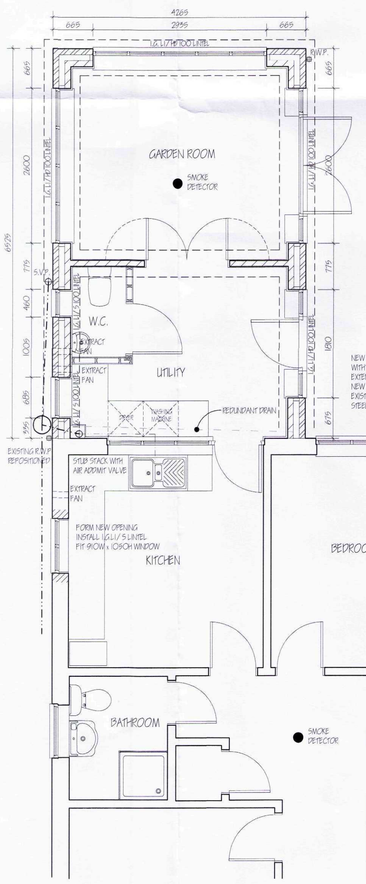
BLOCK PLAN 1:250



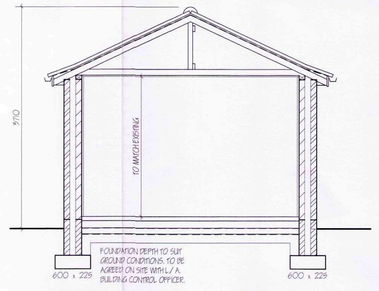
FLOOR PLAN - EXISTING



SECTION - EXISTING



FLOOR PLAN - PROPOSED



SECTION - PROPOSED

ROOM DIMENSIONS ARE INTERNAL OF WALL FINISHES

revision	date	init.	revision details.
A	JUNE '15	J.C.	WINDOWS TO GARDEN ROOM ENLARGED

COOPER ARCHITECTURAL DESIGN
90 WINSOVER ROAD
SPALDING, LINC'S PE11 1HA
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Client.
MR & MRS A LARGE

Project.
PROPOSED EXTENSION
28 WOODLANDS
LONG SUTTON
LINCS
PE12 9LY

Drawing.

Scale 1:50 1:100	Drawing No. 1531-01-A
Date. JUNE '15	Drawn. J.C.