



PROPOSED

BATHROOM

65mm sand/

cement screed

Oversite prép, concrete

foundation to separate

blinding and raft

engineer's desgin

270mm fibreglass

roof insulation laid in

two opposina lavers

PROPOSED SIDE ELEVATION 1:100

Roof trusses to BS

15268 Pt 3 1985

PROPOSED

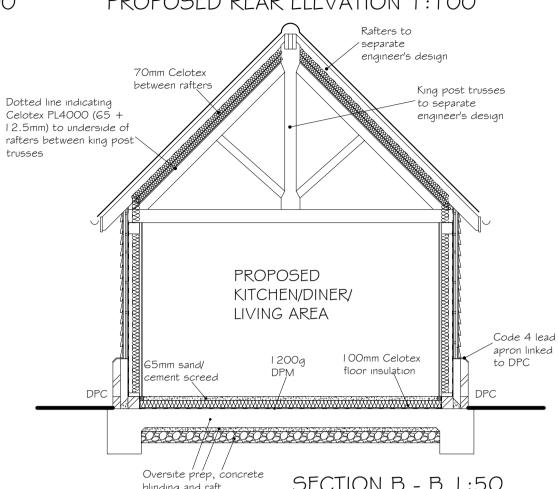
BEDROOM

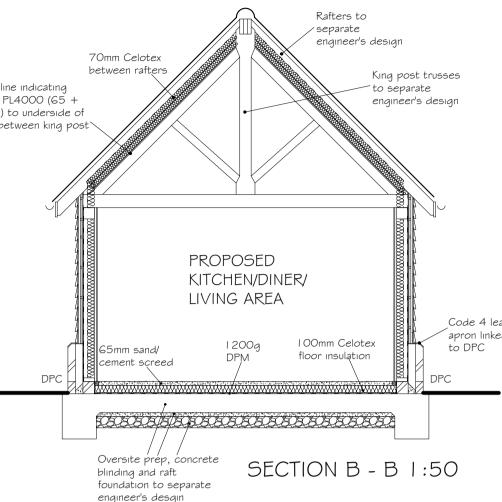
SECTION A - A 1:50

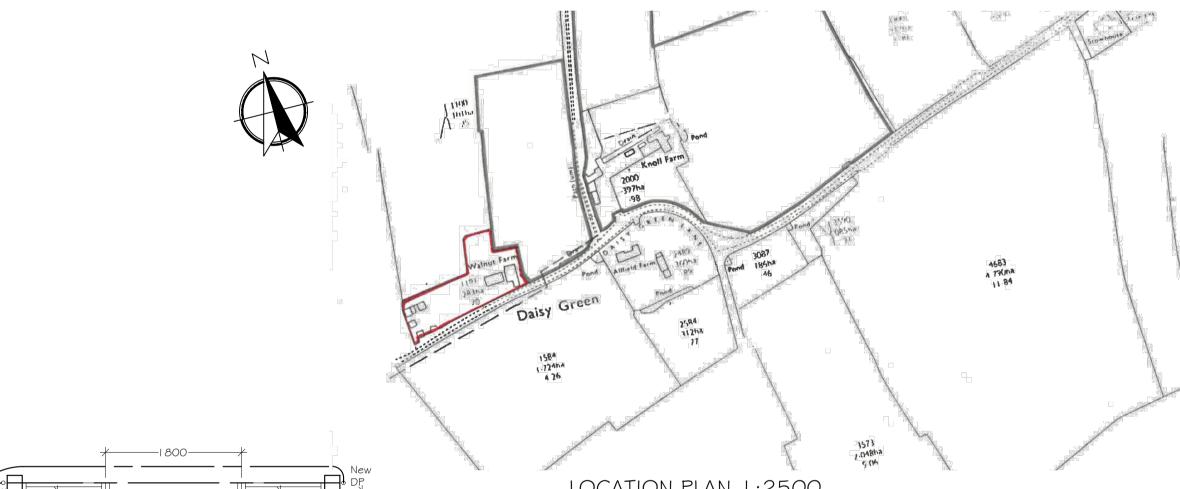
100mm Celotex

floor insulation

PROPOSED REAR ELEVATION 1:100







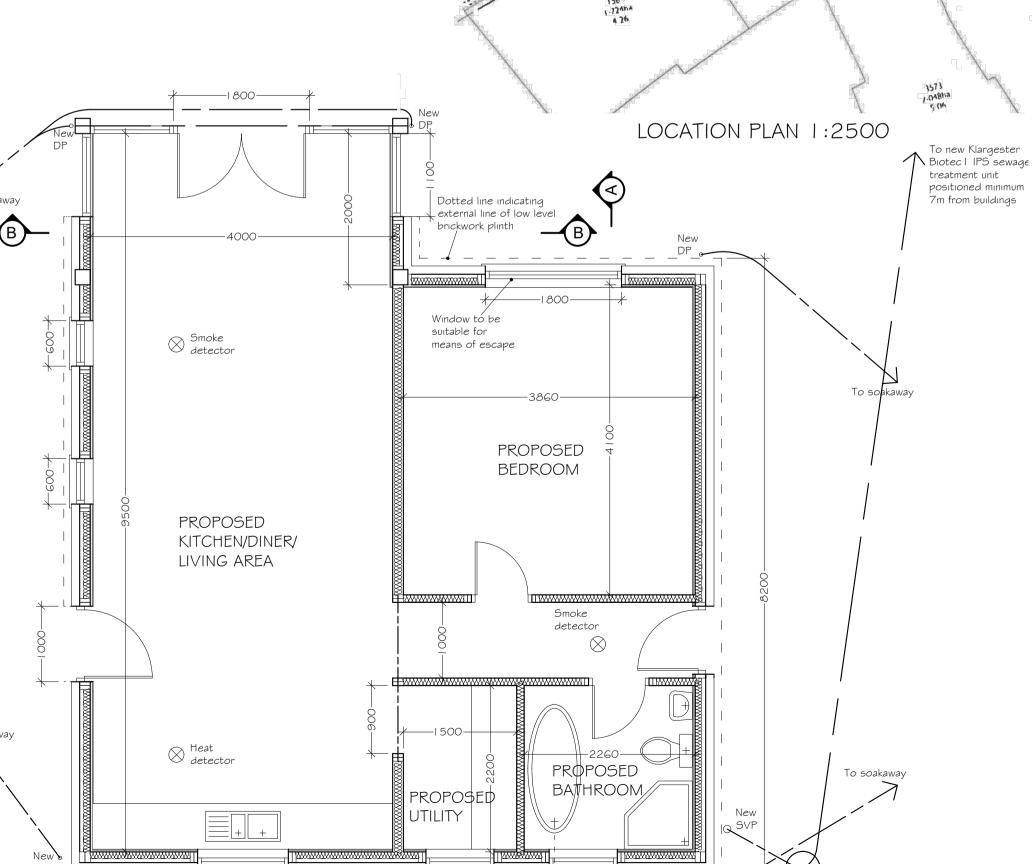
New 450mm

dia. UPVC

inspection

Code 4 lead

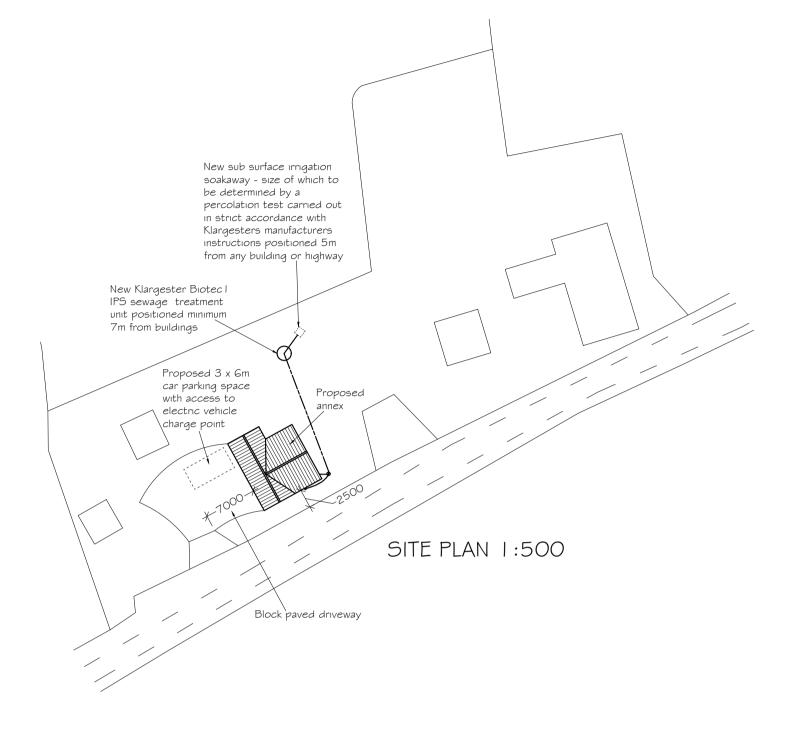
apron linked



NOTE - The following certification to be provided on completion:

- Air Pressure Test Notice / Certificate
- Final Part L compliance report
- Energy Performance Certificate
- Water Efficiency Notice
- Unvented Hot Water Cylinder Installers Card
- Commissioning Certificates Heating, Hot Water and Cooling
- BS767 I / Part P Electrical Certificate PAS 24 Certification (windows/doors)
- Certification for the total area of
- background trickle ventilation achieved
- Commissioning Certificate / inspection checklist for mechanical ventilation system

PROPOSED SIDE ELEVATION 1:100



Construction Notes Continued

VAULTED ROOF CONSTRUCTION OVER PROPOSED KITCHEN/DINER/LIVING AREA - Roof construction to comprise of licenses nufacturers prefabricated king post roof trusses to separate structural engineer's design. Provide rafters to engineer's design with roof finish to comprise of orange clay pantiles fixed to 50 x 25mm s/w treated tile battens fixed on one layer of Proctor Roofshield vapour permeable membrane, in accordance with BS5534. Insulate sloping ceiling with minimum 70mm insulation board (65 + 12.5mm) to underside of rafters with taped joints and a plaster skim coat finish to suit clients' choice. Provide open eaves with fascia board to accept guttering. Code 5 lead valleys.

SECURITY MEASURES - Provisions to be made to resist unauthorised access to new annex with all new entrance door sets and windows to be designed and tested to meet the security requirements of BS PAS24:2012 or designed and manufactured in accordance with Approved Document Q Appendix B for bespoke joinery with all frames mechanically fixed in accordance with manufacturers instructions. Entrance door should have a door viewer or other means such as a clear glass panel within door or an adjacent window next to the door set to see callers. The same door set should be fitted with a door limiter or chain. NOTE - Electronic audio-visual door entry systems can be used to identify visitors. Letter plates where provided to have an aperture of 260 x 40mm and be located/designed to hinder anyone attempting to gain access by a stick or hand incorporating a flap or other features restricting access.

INFRASTRUCTURE PROVISION FOR HIGH SPEED COMMUNICATION NETWORK CABLES - A suitable position for at least one network termination point should be identified within the annex with suitable underground/above ground ducting provided to connect network termination to an appropriate access point and terminal chamber located below ground.

DISABLED PROVISIONS - Provide hard paved level approach to principle entrance door with a gradient not steeper than 1:20 and with no cross falls more than 1:40. Principle entrance door to have a min. clear opening width of 775mm with a level threshold. Ground floor internal doors to have min. clear opening width of 750mm with ground floor WC having 775mm clear

VENTILATION - Mechanical ventilation to be provided to bathrooms, shower rooms, utilities, kitchens and WC accommodation where present. Mechanical vents to be generally manually operated fans with 15Litres/second discharge rate to bathrooms. shower rooms and WC accommodation, 30Litres/second to utilities and 60 Litres/second to kitchens all ducted directly to outside. Windowless WC and other wet area accommodation fans to be linked to light switch and have a 15 minute overrun. All new internal doors serving accommodation to have a 10mm air transfer gap at bottom.

BEAMS - Provide timber beams in positions indicated on plan bearing on new timber posts to separate structural engineer's

SMOKE/HEAT DETECTION - Provide mains operated, interlinked smoke/heat detection system in accordance with BS5839-6:2019 permanently wired to a separately fused circuit at distribution board with all detectors fitted with a capacitor or battery back up. Smoke detectors to be provided in hall and in open plan living area and heat detector to be provided to proposed kitchen. Detectors to be situated at least 300mm from any wall and light fitting and within 7m of doors to habitable rooms. Heat detector to be mains powered with battery back up, interlinked with other units within annex.

WATER EFFICIENCY - A water efficiency calculation to be provided upon completion of the property with sufficient information for the building owner to maintain water efficiency of the building. Submit to Building Control for approval confirming that the total water usage will not exceed a maximum of 125litres/person/day.

HEATING SYSTEM - Provide Daikin Altherma air source heat pump whole house heating system providing hot water and space heating. System comprises of an outdoor air source heat pump convertor connected to an indoor Hydrobox providing heat via an exchanger unit supplying hot water to radiators and a domestic hot water tank. Space heating to be controlled by programmer and thermostats. Hot water cylinder to have factory-applied coating of 35mm thick PU-foam having a minimum density of 30kg/m3. Altherma heating system to be designed and installed by registered Daiken contractor in strict accordance with manufacturers instructions.

PLUMBING - All appliances to have pvc waste systems with 75mm deep seal anti-syphon traps with cleaning eyes on all waste pipes on changes in direction. Where indicated basins to have 32mm waste pipes, baths, showers and sinks to have 38mm waste pipes all discharging into new or existing 100mm dia. soil and vent pipes, trapped gullies or 100mm dia. stub stacks. New or extended SVP's where present to terminate 900mm above any opening within 3m and fitted with a vermin proof cage. Above waste pipes where exceeding permitted lengths (Up to 1.7m for 32mm dia. wastes and 3m for 38mm) to be increased to 50mm dia. Where permitted lengths exceeded including common wastes where indicated on plan. Any bends within wet part of a SVP to be provided with rodding access points. Any waste pipes in excess of 40mm in diameter passing through fire separating walls or floors to be fitted with half hour fire collars where passing through roof/floor or encased in two layers 15mm plasterboard to give half hour fire resistance.

DRAINAGE - New drains where indicated to comprise 100mm dia. upvc pipes bedded on and surrounded in 150mm pea shingle. Pipes laid generally to 1:40 falls with a max 1:80 fall where a WC is connected at the head of the run. Provide new drains, gullies and upvc inspection chambers in positions where indicated on plan all discharging to New Klargester Biotec I IPS sewage treatment unit positioned minimum 7m from buildings discharging to new sub surface irrigation soakaway - size of which to be determined by a percolation test carried out in strict accordance with Klargesters manufacturers instructions positioned 5m from any building or highway. Inspection chambers fitted with medium duty covers in gardens and foot paths and heavy duty covers in drives. Inspection chambers in drives to be bedded on and surrounded in 150mm of concrete.

SURFACE WATER DRAINAGE - I OOmm half round upvc guttering fixed to fascia board and discharging into new or extended/existing upvc downpipes (positions as indicated on plan). New down pipes where indicated to discharge into rain water shoes connected to 100mm dia. upvc drains, bedded and surrounded in 150mm pea shingle, laid to 1:40 fall discharging by priority to 1.2m cubed soakaways positioned 5m from any buildings or highway. Size of soakaway to be determined by a percolation test in accordance with BRE Digest 365. Where the ground conditions do not permit the use o a soakaway then the surface water should then be discharged into the existing drainage system ensuring all gullies are trapped and drain runs accessible for rodding purposes with the final layout discussed and agreed on site with Building Control.

ROBUST CONSTRUCTION - Robust Construction should be utilised throughout the proposed works ensuring the wall insulation is taken 150mm below damp proof course level to overlap with the floor perimeter insulation upstand and meets at eaves level with the roof insulation to maintain continuity.

Construction Notes

GENERAL SPECIFICATION - All works are to comply with the current Building Regulations, British Standards and Codes of ractice referred to herein but not specifically mentioned. The works shall be carried out to the full satisfaction of the local authority Building Control Officer, Approved inspector or other body including submission of all necessary notices and payment of fees. All products referred to on the drawing and this specification are to be used strictly in accordance with the manufacturer's recommendations. Before starting any works, all site conditions and dimensions are to be checked and verified by the builder and any discrepancies reported to the Client. Allow to supply and fix/apply all new finishes/fittings to match existing unless otherwise specified, eq. doors/frames, windows, door and window furniture, skirtings, architraves, dado/picture rails etc. All softwood used in a structural capacity to be FSC or PEFC certified, min C16 grade (to BS 5268 pt 2, 1991) unless otherwise specified

STRUCTURAL DESIGN - Construction specification to be read in conjunction with any structural calculations relating to project.

ELECTRICS - All electrics to be wired in accordance with latest IEE Regulations. Power outlets and light fittings to be located as directed by applicant. Provide I 00% Efficient lighting to have an efficiency of 45 lumens per circuit-watt. Examples of suitable lamps include fluorescent tubes and compact fluorescent lamps (not GLS tungsten lamps with bayonet cap or Edison screw bases). Fixed external lighting to be controlled via. sensors which automatically turn off lights when not required and when there is sufficient daylight. Each external light fitting should not have a lamp capacity exceeding 150W. All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a registered person competent to do so. Prior to completion the Council should be satisfied that Part P has been complied with This will require an appropriate BS 7671 electrical installation certificate to be issued for the work by a registered person competent to do so. All switches and sockets to be positioned in a zone between 450mm and 1200mm above finish floor level. NOTE - Consumer unit to be sited 1350-1450mm above finished floor level and to be easily accessible.

METERS - Gas and electric meters to be located in positions as agreed by client and installed in strict accordance with service providers instructions. Connection of services to be carried out by gas and electric providers nominated contractors. Water meters to be installed by Anglian Water.

HEALTH AND SAFETY - The client is to be aware that the work shown should only be executed by competent builders who are iully proficient in all forms of safety procedure relating to all aspects of building, demolition and temporary shoring and the safe operation of all plant and equipment including personal protection. The Principal Contractor is responsible for preparing a Construction Phase Health and Safety Plan before commencing work, which shall include all necessary method statements and risk assessments and details of welfare facilities relating to the work shown on the plans and detailed in the specification. This document shall be made available to the Client if required. For domestic clients, the Principal Contractor is responsible for notifying the HSE if the project is to last more than 30 working days or involve more than 20 workers working simultaneously at any point in the project or exceed 500 person days. Upon completion of the work, if there has been more than one contractor involved in the project, the Principal Contractor shall provide a Health and Safety File to the Client. This shall contain as-built information, details of underground services, any hazardous materials used, health and safety maintenance instructions, maintenance manuals, all certificates and consents and details of any residual hazards that remain

PARTY WALL ACT - Main contractor to ensure that there will be no undermining of foundations to adjacent properties and where applicable new works of any nature that are within 3 meters of adjacent owners property and boundary walls, the main contractor is to ensure all relevant notices are served, and agreements obtained in accordance with the Party Wall Act 1996, before any works are commenced

ENCROACHMENT - No part of the structure above or below ground is to encroach over the boundary of adjacent properties without written consent from owners.

RAFT FOUNDATION - See separate engineer's foundation design.

SUB-STRUCTURE - Solid walls below ground level where present to consist of solid fletton brickwork to correspond with thickness of walls/plinth above dpc including any piers indicated. Cavity walls below ground level to consist of two skins of fletton or similar frost resistant brickwork built off foundation concrete with 100mm cavity between filled to within 150mm of the external ground level with lean mix concrete ensuring cavity extends a minimum of 225mm below dpc level. Both skins are to be tied together with stainless steel wall ties. The outer face of the wall is to be built using facing bricks from external

GROUND FLOOR CONSTRUCTION - 65mm Sand Cement screed on 500 gauge vapour check barrier on 100mm Celotex flooring grade insulation on 1200g polythene DPM on raft foundation to separate engineer's design. Provide perimeter insulation upstand (Min. R-value 0.75m2KW) on edges of floor screed adjacent external walls and semi-exposed walls. I 200g polythene dpm to have min. 600mm laps and taped joints. DPM to unite with DPC in internal and external walls.

DAMP PROOF COURSE - 'Hyload' or similar approved damp proof course to full thickness of all solid walls, individual skins of cavity walls, partitions and cills, all having a minimum of a 100mm sealed lapped joints. Continuous damp proof course to be provided around the building/extension and lapped onto the existing dpc's, positioned in all external walls at least 150mm above surrounding ground or paving level.

WALL CONSTRUCTION - The masonry walls above dpc level are to be constructed in cavity work comprising of an outer skin of 02mm facing brickwork forming plinth up to a course of plinth stretchers and Code 4 lead apron. I 00mm cavity fully filled with 'Dritherm 32' fibreglass insulation batts. The inner skin to comprise 140 x 50mm C24 Grade studs at 400mm centres. Brickwork and timber skins to be tied together using specialist stainless steel wall ties, spaced at 450mm centres vertically and 900mm centres horizontally staggered and doubled up at reveals. The cavities are to be closed at all window and door openings with insulated cavity closers overlapping frames by 30mm. Masonry returns and piers less than 550mm to be reinforced with 'Brik-tor' reinforcement provided in each block course and every third brick course. Fill voids between timber studs with 90mm Celotex insulation and finish internally with Celotex PL4000 (25 + 12.5mm) with plaster skim coat. The wall construction is to attain a min. 'U' Value of 0.28 W/m2K. Provide externally timber weatherboarding fixed to treated vertical battens and counter battens fixed through 12mm exterior quality plywood and Tyvec breather membrane into timber studs. Internal partition walls to be constructed in timber stud work built off new floor construction where indicated. Studwork partition walls constructed of regularised IOO x 50mm CIG grade timbers at 400mm centres with IOO x 50mm head plate, sole plate and noggins to suit plasterboard joints. Provide fibreglass insulation to infill voids and finish both sides with 15mm plasterboard with taped joints and a plaster skim coat. Provide oak frame supporting structure designed by separate structural engineer in general living area.

LATERAL RESTRAINT - Restraint straps to be provided at 2m c/c at roof level and floors above ground level where present.

LINTELS - Provide 2 No. 150 x 70mm C24 Grade timber lintels over window/door openings in timber framed wall construction where present ensuring a full 100mm end bearings on double studs.

MINDOWS/DOORS - Provide upvc/powder coated aluminium/timber windows and doors where indicated with trickle vents to give 8000mm2 (5000mm2 equivalent area) to each habitable room and 4000m2 (2500mm2 equivalent area) to bathrooms, ensuites, shower rooms, utilities, cloakrooms and kitchens. NOTE - Background ventilation and intermittent extract fans to be provided to annex to achieve a total of 75,000mm². The windows and doors are to provide a minimum of 5% of floor area in openable window area to each room. The windows and doors are to be double-glazed with sealed units with a 16mm argon gas filled air gap and low-E glass (Emmissivity value = 0.05) to achieve a max. 'U' value of 1.8 for doors and 1.6 for windows fitted with draught seals and frames sealed at junction with walls with a flexible sealant. Provide emergency egress window to proposed bedroom. Emergency egress window to have an opening casement fitted to allow an unobstructed area minimum 750mm x 450mm. Bottom of openable area of egress window to be not more than I I 00mm above finished floor level. All new internal doors serving accommodation to have a 10mm air transfer gap at bottom.

SAFETY GLASS - All glazing in windows within a distance of 800mm above finished floor/ground floor level and glazing in doors and adjacent sidelights within a distance of 1500mm to be safety glass to comply with BS 6206 1981

PITCHED ROOF CONSTRUCTION - Roof construction to comprise of licensed manufacturers prefabricated roof trusses at max. 600c/c all designed, installed and braced in accordance with BS 5268. Pt 3. 1985. Final design layout and truss calculations to be submitted to Building Control for approval prior construction of roof. Trusses fixed top of studwork walls. Roof finish to comprise of orange clay pantiles fixed to 50 x 25mm s/w treated tile battens fixed on one layer of Proctor Roofshield vapour permeable membrane, in accordance with BS5534. Roof to be insulated with 270mm fibreglass quilt laid in two layers 90 degrees to each other I 00mm between joists and I 70mm over joists. Provide open eaves with fascia board to accept guttering. Ceilings to comprise I layer of 12.5mm foilbacked plasterboard with taped and filled joints to receive finish to suit clients' choice. Code 5 lead valleys.





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Unit 15

Ipswich

Suffolk

Epsilon House

West Road

Client Name and Site Address Mrs A Dance Walnut Tree Farm Daisy Green Lane Wickham Skeith Eye Suffolk

IP23 8NB

Drawing Number

Proposed detached annex

Scales 1:50, 1:100, 1:500, 22/03/0130 1:2500

Revisions

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