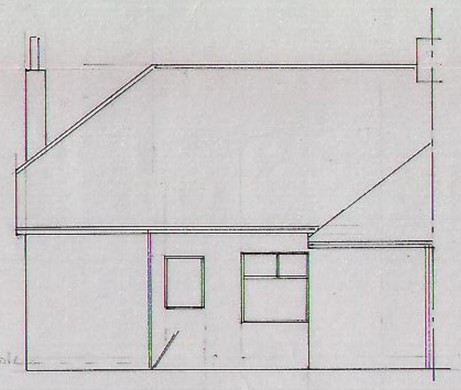
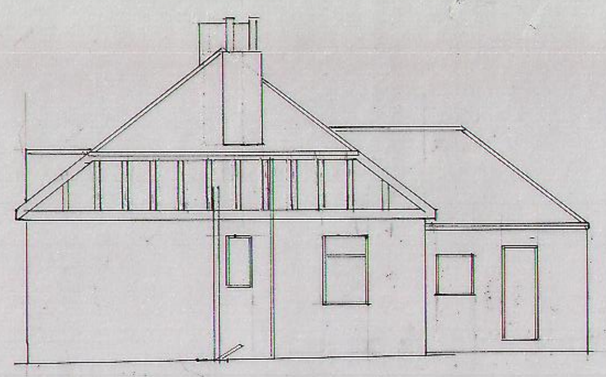
EXISTING



REAR

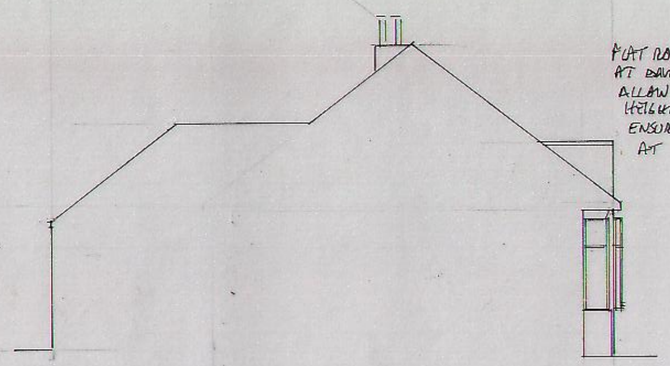


SIDE

EXISTING DRAINS TO BE CONFIRMED ON SITE

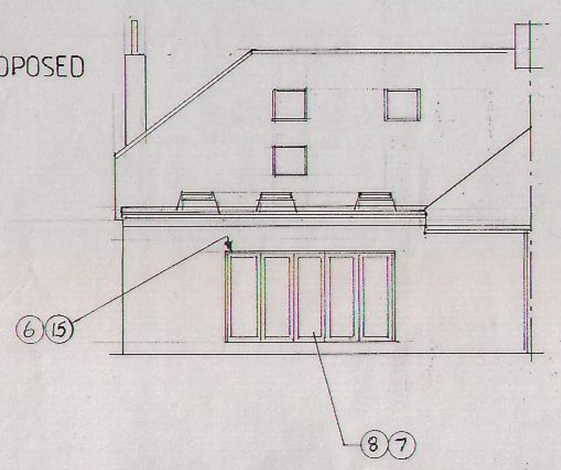


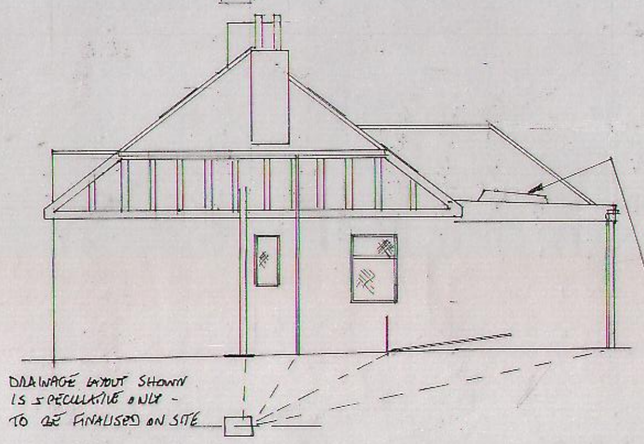
FRONT



SIDE (FROM ADJOINING)

PROPOSED

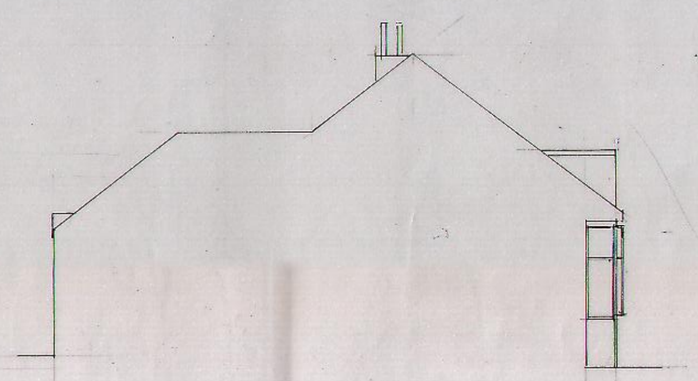


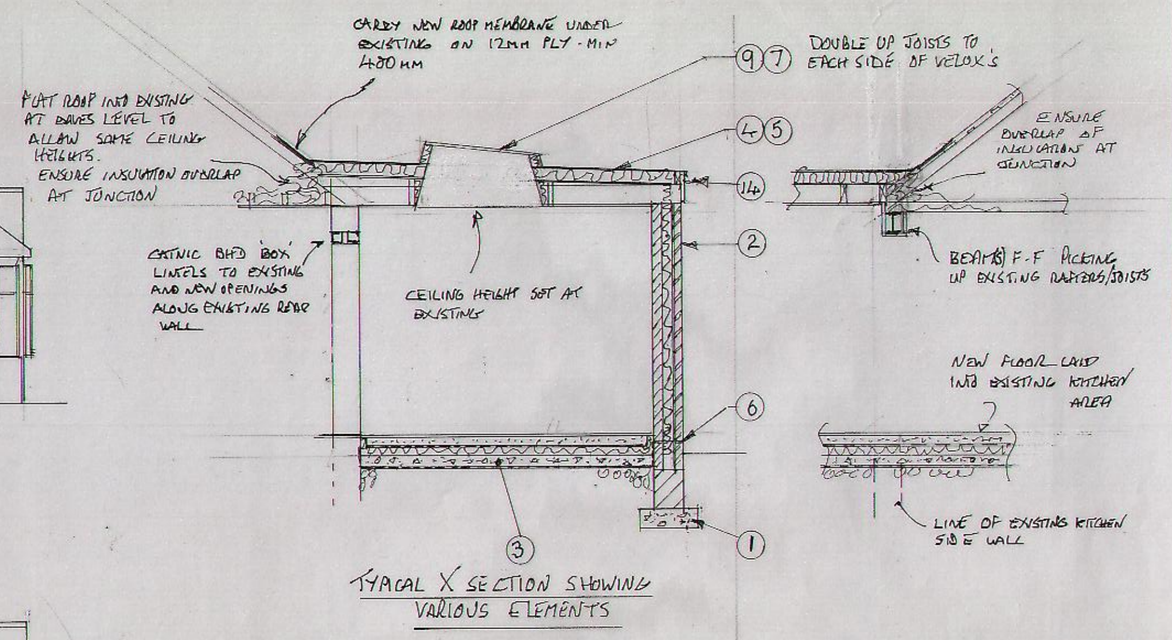


DRAINAGE LAYOUT SHOWN IS SPECULATIVE ONLY - TO BE FINALISED ON SITE



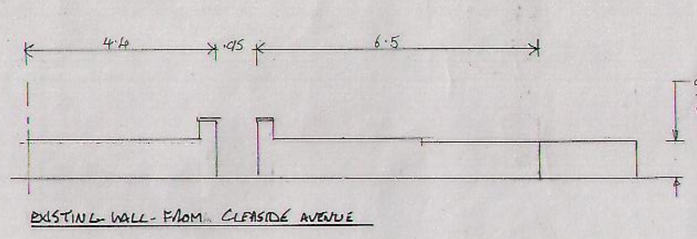
VELUX KERBS - ECX-0007 TO SUIT MK06 WINDOWS.



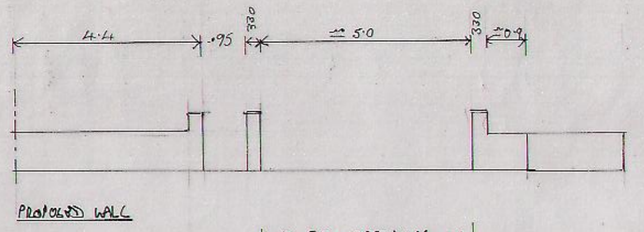


TYPICAL X SECTION SHOWING VARIOUS ELEMENTS

ELEVATIONS



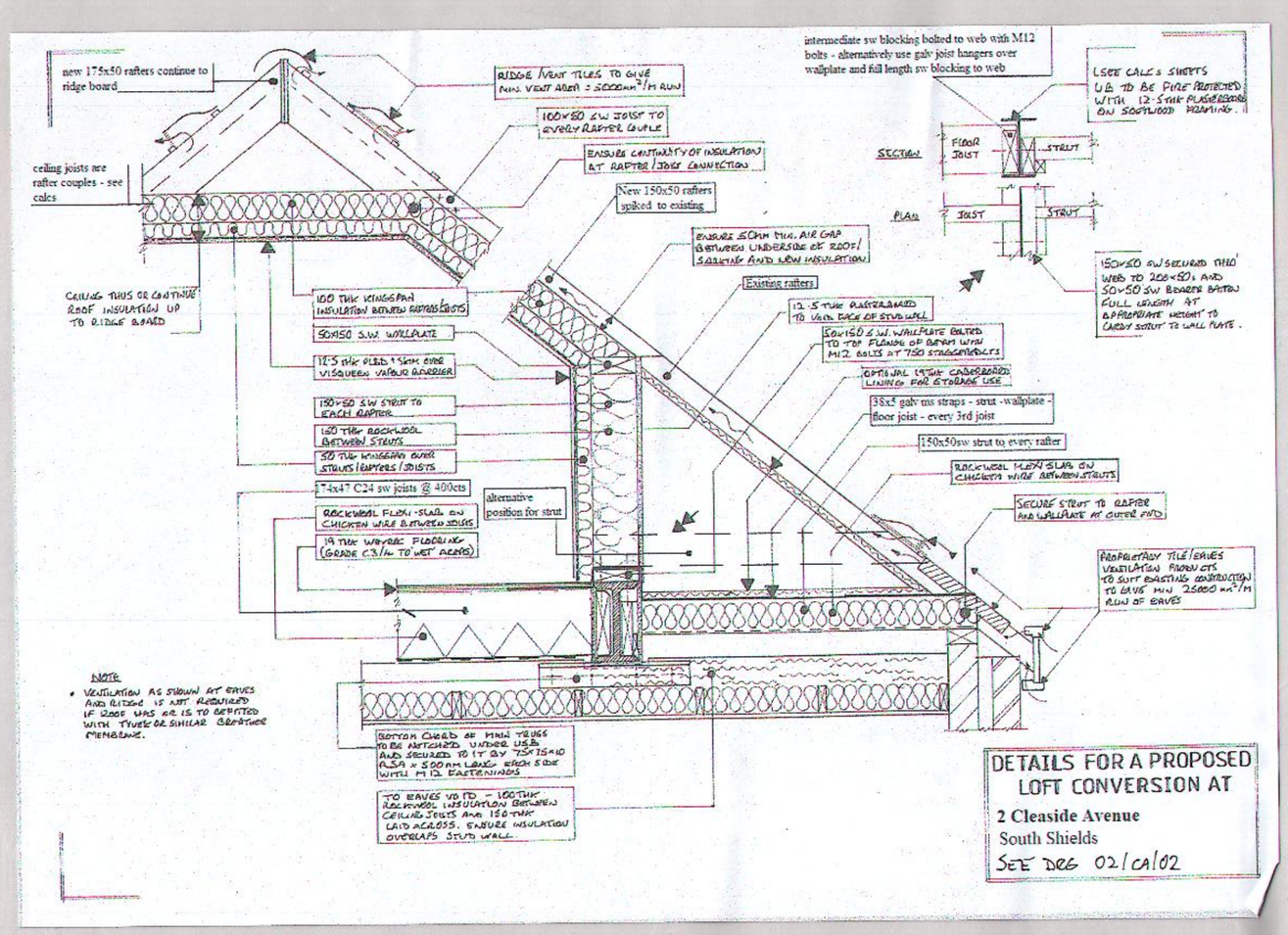
EXISTING WALL - FROM CLEASIDE AVENUE



PROPOSED WALL

≈ 5·0m DEPENDING ON TREE ROOTS AFFECTING THE KERB.

FRONT WALL



NOTE
- VENTILATION AS SHOWN AT EAVES AND RIDGE IS NOT REQUIRED IF ROOF HAS OR IS TO BE FITTED WITH TYVEK OR SIMILAR BREATHER MEMBRANE.

DETAILS FOR A PROPOSED LOFT CONVERSION AT
2 Cleaside Avenue
South Shields
SEE DRG 02/CA/02

• The Works as drawn require the approval of the **Local Authority Planning** and **Building Control** departments. Works should not commence until such approvals are in place.
• **Methods/materials shown are indicative only, others may be used subject to their fitness for purpose and approval by the Client and Building Inspector**
• **Do not scale** from this drawing for Construction purposes.
• **Builder is to check all dimensions**, pitch angles etc – designated or not - prior to pricing, buying or building.
• All works adjacent to, on or over a common boundary to have the written approval of the adjoining owner(s)
• All references to Building Regulations, Codes of Practice, British Standards etc., refer to latest editions and amendments
• All documents, drawings and calculations are to be read together
• All dimensions in millimetres unless stated otherwise

BEAMS

A-A	SPAN	4·3	203×133×30 UB
B-B	SPAN	4·3	203×133×30 UB
C-C	SPAN	4·2	203×102×23 UB
D-D	SPAN	1·8	150×75×18 PFC
E-E	SPAN	3·7	178×102×19 UB
F-F	SPAN	3·6	152×89×16 UB

THE BUILDER IS RESPONSIBLE FOR CHECKING ALL SPANS AND OVERALL LENGTHS PRIOR TO ORDERING STEELWORK.

BEAMS AND BEARINGS

UNIVERSAL BEAMS (UBS) ON CONCRETE PADSTONES EACH END ON BRICK ASSUMED TO BE 2·7N/mm² WITH CLASS III MORTAR GIVING A CHARACTERISTIC STRENGTH OF 7·1 N/mm²

BEAM B-B HAS HIGHEST END REACTION AT 32·4kN -

TRY PADSTONE 200×100×100 ∴ STRESS = $\frac{32·4\times10^3}{200\times100}$ = 1·08 N/mm²

1·08 < 1·6 N/mm² ALLOWED ∴ BEARING OK

USE THIS PADSTONE SIZE FOR ALL BEARINGS EXCEPT WHERE BEAMS B-B AND C-C MEET ON LOADBEARING WALL

COMBINED REACTION = 32·4 + 22·5 = 54·9kN

TRY 440×100×100 PAD ∴ STRESS IN BEARING = $\frac{54·9\times10^3}{440\times100}$ = 1·25 N/mm²

1·25 < 1·6 N/mm² ALLOWED ∴ BEARING OK

REAR EXTENSION and GENERAL NOTES

1) **Foundations** - 650x225 concrete to BS8004 – 1985, minimum 900 below GL on good loadbearing strata. 2nd Eng bwk / trenchblocks below DPC - lean mix concrete to any void to 225mm below lowest DPC. See 14) Drainage below
2) **Wall Construction** –Dense sand/cement or resin render to match existing to 100thk conc blwk - 150 cavity full filled with Dri-Therm 32 cavity wall batts– 100 thk aerated blwk inner leaf – stainless steel wall ties to BS 1243 at max. centres 750 horizontal, 450 vertical (block height at jambs). Cavity maintained to existing and closed at eaves. Note: insulation to full height of gables - Internally 12.5thk plbd and skim (dot and dab)
3) **Floor Construction** – 65 thk dense sand/cement screed on 120thk **Kingspan K103** insulation over 125 thk concrete on Visqueen separation layer over 1200G DPM on sand blinded well compacted hardcore sub-base – Min 25thk insulation upstand to screed/concrete perimeter – DPM lapped to wall DPC. Where necessary install ducts to vent any existing underfloor voids
4) **Roof Construction** – Hi-performance single ply membrane laid strictly as manufacturer's/suppliers instructions over 150mm thk Kingspan Thermaroof TR27 insulation on vapour control layer over 18thk exterior grade ply on 125>25x50 sw firrings to give falls over 195x47 C24 sw joists at 400cts. Underline with 12.5thk plbd and skim over vapour control barrier
5) **Straps** – Structural timbers secured to bwk with 38x5 section galvanised mild steel clips/straps at max 2.0m centres. Laying across timbers straps to span minimum 3no with softwood noggin infills under/over.
6) **Damp proof courses** – DPC's to BS 743, minimum 150 above G.L. and lapped to existing and floor DPM's. DPC's laid horizontally and vertically to all new external openings. Cavity trays to new roof /existing wall junction, with lead flashings over minimum 150mm roof membranc upstand. DPC under parapet copings with flashings over roof membranc
7) **Ventilation** — Purge ventilation via external doors/windows opening 30° or more, combined openings to be minimum 1/20th floor area – plus minimum 8000mm² permanent, controllable trickle ventilation through door/ window head vents + for wc – opening window to give 3 air changes/hour.
Plus – intermittently operable mechanical ventilation to bathroom and kitchen giving 15ltrs/sec discharge to bathroom and 60ltrs/sec discharge to kitchen (30ltrs/sec via cooker hood) – all discharging to open air
8) **Door/window glazing** –White uPVC/solid timber frames – to clients' choicc c/w double glazing units with 16mm Argon filled air gaps and soft 'low E' coating to give minimum 1.2W/m²K. All doors/windows to have safety glazing as required by Document K of the current Building Regulations.
9) **Flat roof windows** – Velux type and size as drawing c/w all necessary kerbs, fixings, fittings, and flashings for flat roof with minimum 150mm upstand to kerb
10) **Services** –Lighting, plumbing, heating and ring main from existing circuits, all to the latest codes and clients' approval. All sockets, switches etc. to be between 450 and 1100mm above floor. Builder to ensure that existing services are sufficiently robust to supply the additional requirements.
11) **Conservation of Energy – Robust Construction**
Insulated cavity closers to be used throughout - All pipework to be insulated (minimum10mm thk) Low voltage, high efficiency lighting throughout, thermal shielded if inset in ceilings. Heating system to have thermostatic valves on any new radiators
12) **Electrical Safety – Part P** – All electrical installations 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 the Council should be satisfied that Part P has been complied with, this will require an appropriate BS7671 Certificate to be issued for the works by a person competent to do so. Reasonable provision shall be made in the design and installation of electrical installations to protect persons operating, maintaining or altering the installations from injury or firc.
13) **Drainage** – Existing drainage system is to be 'mapped' on site during demolition and site clearance to enable new drainage runs to be ascertained. All new and retained drainage under new works to be exposed, tested and surrounded in 150thk concrete with foundations stepped below invert level and reinforced concrete lintel over with voids filled with expanding foam sealant – All new drainage is to be 100 dia, flexible jointed, laid to minimum 1:80 falls in approved granular surround and backfilled.
14) **Rainwater goods** – in white uPVC to match existing discharging into new BIGs
15) **Lintels** – Catnic CG/CX 150/100s c/w cavity trays, stop ends and full insulation – perps every 900mm– rendered 1/2hr fire resistant with 12.5thk plbd and skim over sw framing

16) **Wastes** – whb, sink –32dia – bath/shower 50dia – all upvc through deep seal anti syphon traps to new external SP or gullies as required – no connection to SP within 200mm of WC connection.
17) **Smoke detection** – shown **S.D.** – self- contained mains operated interconnected units to BS5839 Pt 6 – 2004 – all on dedicated CU circuit – with battery back-up. Fit Heat Detector – shown **HD** – in kitchen

DRAWING 1 – REAR EXTENSION

PROPOSAL FOR A FLAT ROOFED REAR EXTENSION, LOFT CONVERSION AND DRIVE WITH NEW HIGHWAY CROSSING AT 2 CLEASIDE AVENUE, SOUTH SHIELDS, NE34 8DQ

Drg No 02/CA/01	Scales 1:100, 1:50	Date 06/01/2023