

PROPOSED TWO STOREY EXTENSION @ THE SIDE
OF NO 1 GOOSEACRE AVENUE

THURNS COE

ROTHERHAM S68 0JJA

FOR

MR + MRS S. J. GRAYBONS.

SHEET ONE :- LOCATION + SITE PLANS.

" TWO :- EX + PROPOSED FLOOR PLANS.

" THREE :- " + " ELEVATIONS.

" FOUR :- SECTION.

" FIVE :- CONSTRUCTION DETAILS

" SIX :- SUPPORTS FOR NEW OPENING.

SCALES @ 1:250, 1:500, 1:100 + 1:50 M.

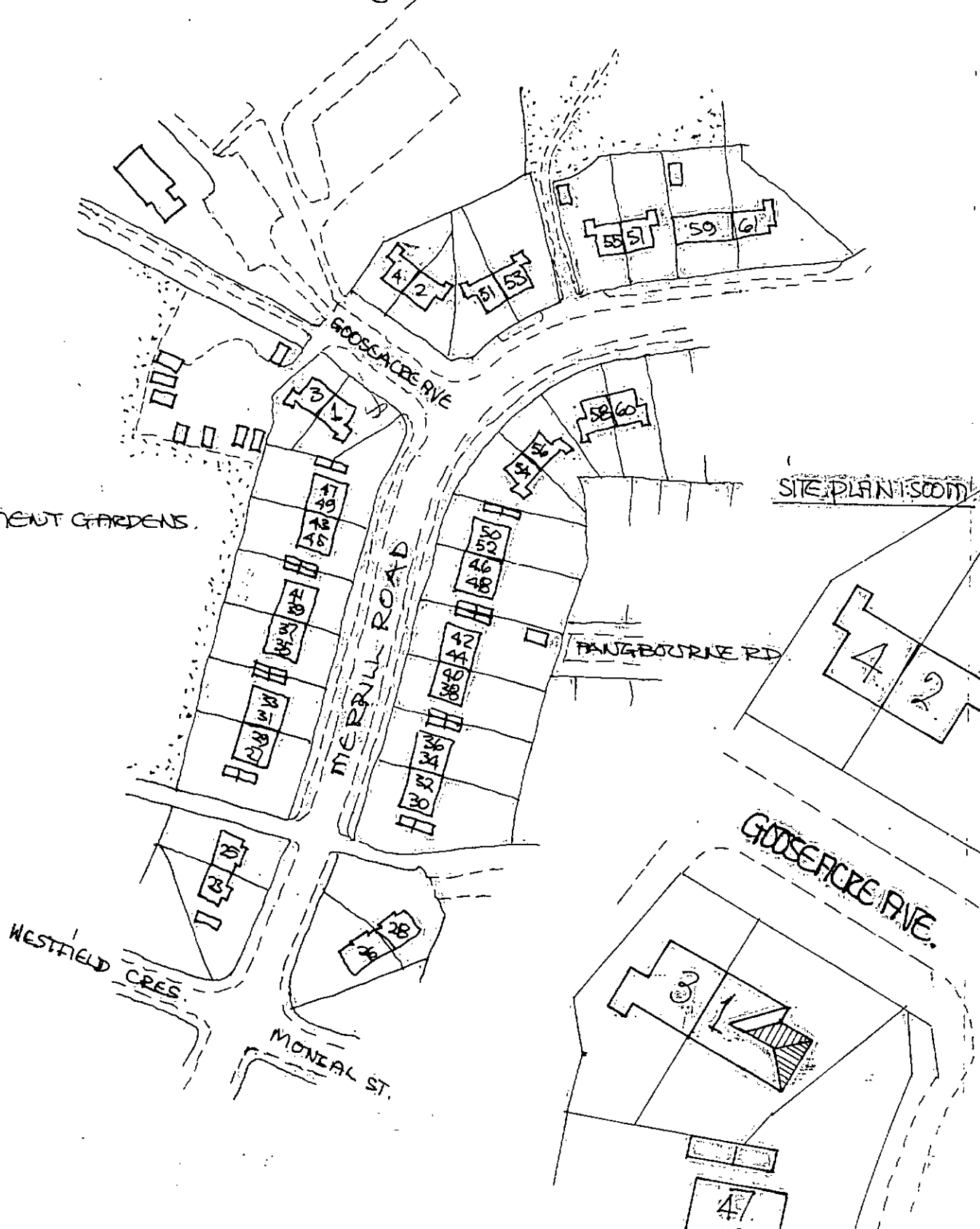
LOCATION PLAN SCALE 1:1250



GOOSECRE PRIMARY SCHOOL + NURSERY

ALLOTMENT GARDENS

SITE PLAN 1:500

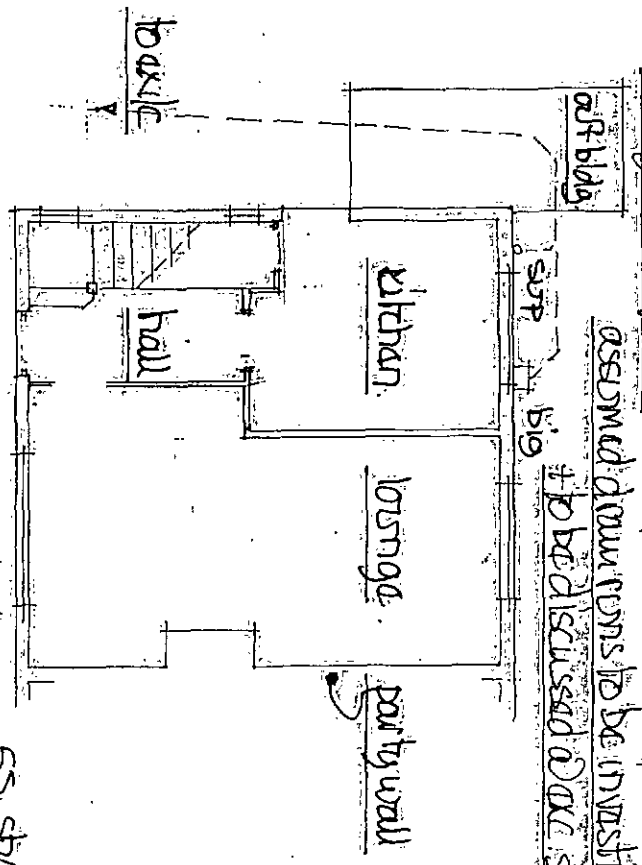


ax ground floor.

scale 100m.

ax first floor.

fence



off bldg

sup big

kitchen

lounge

party wall

back

hall

formile as req.

30l/sec cold air hood
electric fan to discharge
to external air.

sup big

kitchen

lounge

prop ground floor.

ES shows ceiling mounted
smoke detectors wired
back to fuse box + interlinked
with battery back up.

fixed 300mm runiform
light fittings + wall
junctions.

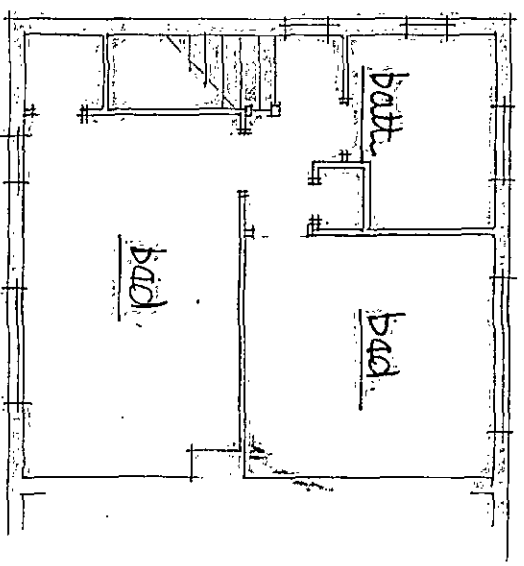
ES shows fire safety escape sash
750mm high, 450mm wide to
open thro 90° bottom of sash

between 800/1000
above floor.

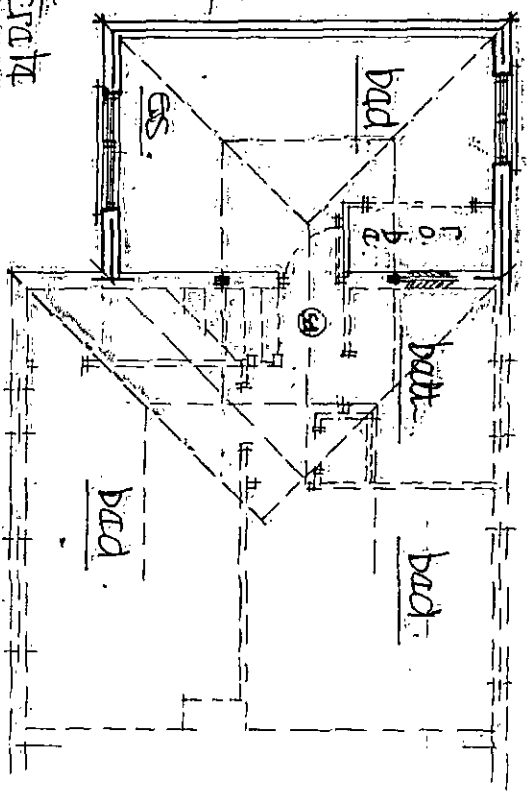
38mm Ø sink waste
38mm Ø whb "

out vac traps - wastes
to discharge to big pipes
og level - above trap line.

100 Ø and runs 140 fall
to ax - bed + surround in
gravel bed + bedding - concrete
protection in drive area.



all fixtures + fittings to
clients choice + positioning



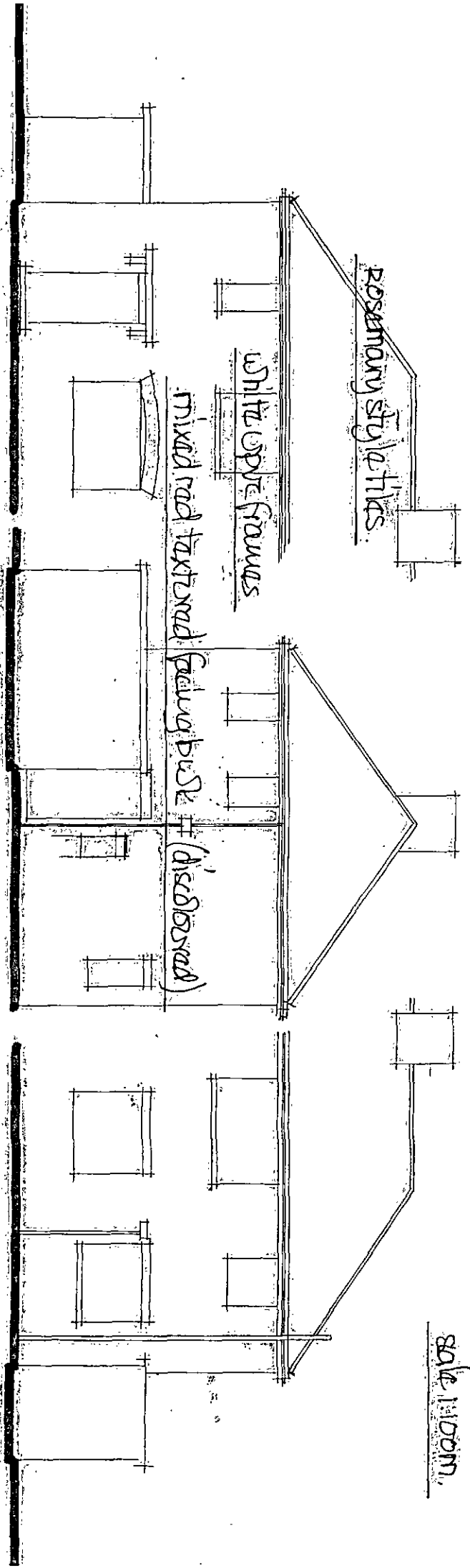
prop first floor

rosemary style tiles

white upvc frames

mixed red textured facing brick (discoloured)

scale 1:100m



ex. front view

prop. front view

ex. side view

prop. side view

ex. rear view

prop. rear view

matching roof tiles

matching purpose made hip tiles

matching facing brick

matching frames

door style to clients choice s/glass and

safety glazing factory fitted

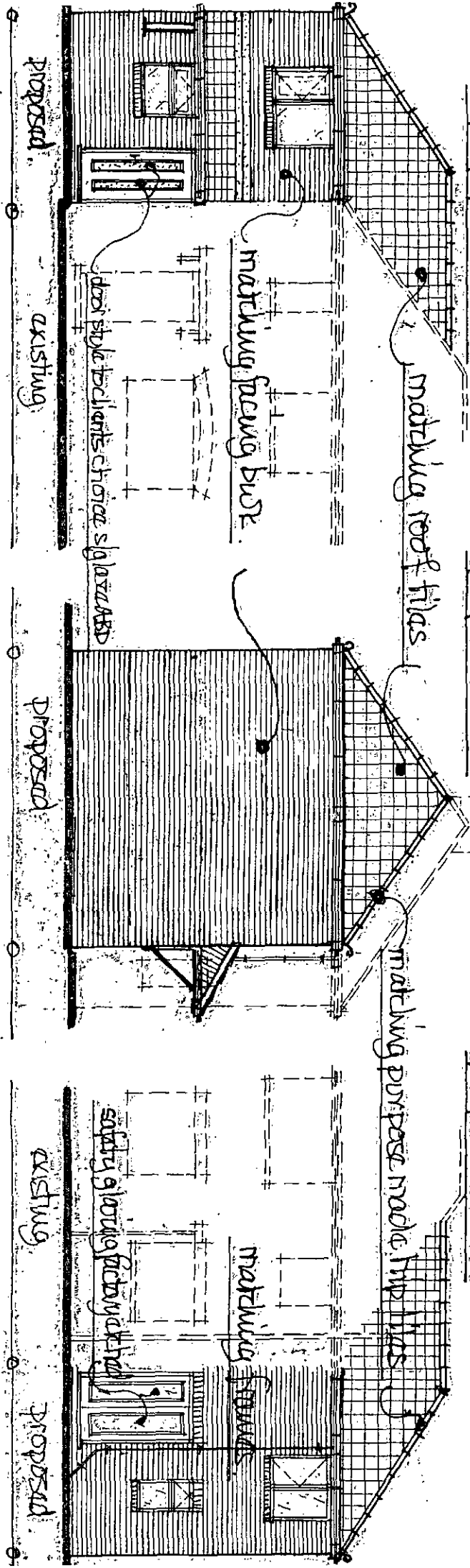
proposed

existing

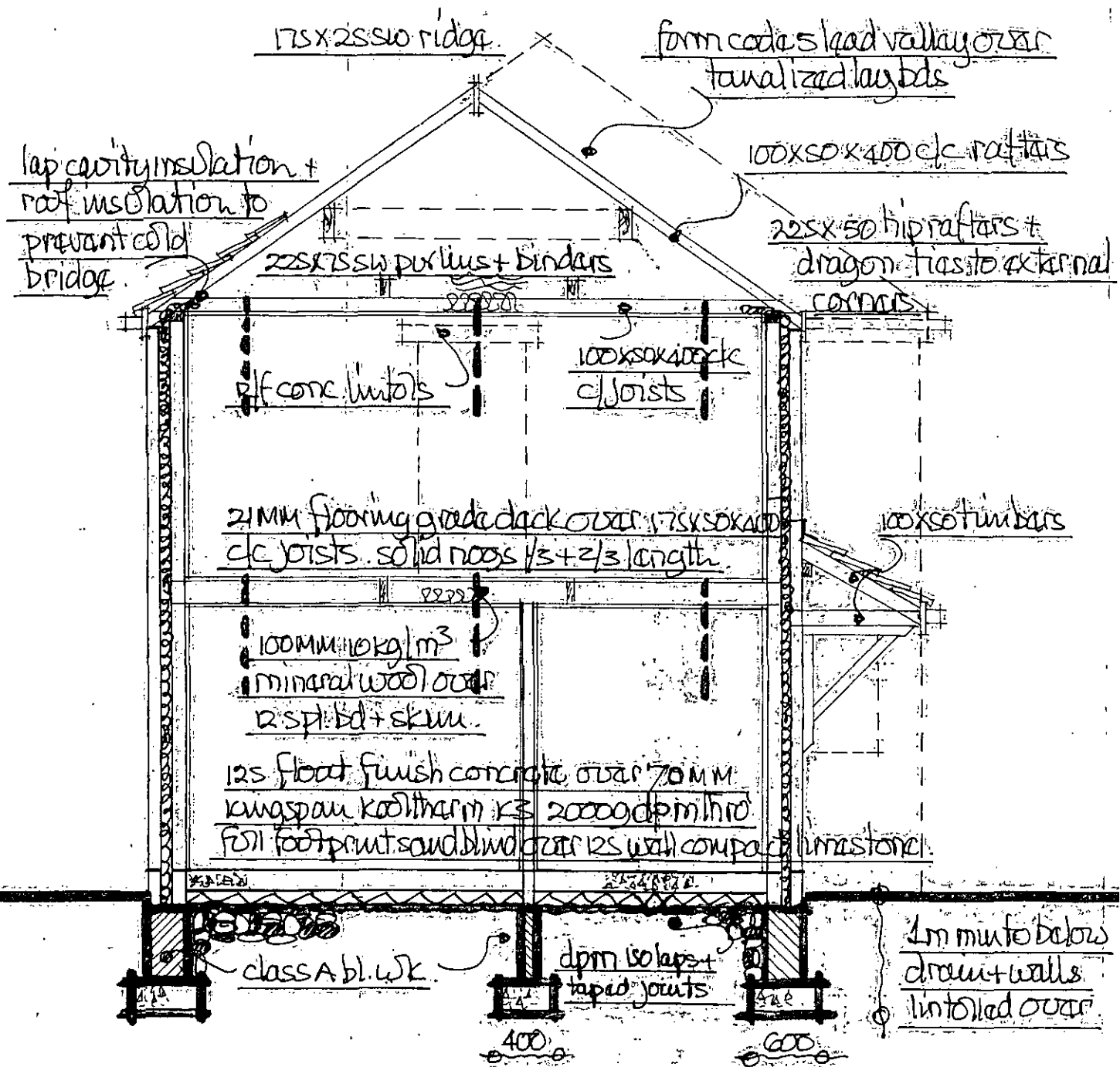
proposed

existing

proposed



section a) 1:50 m.



Pl/a $\frac{3.20 + 5.00 + 3.20}{3.20 \times 5.00} = \frac{11.40}{16.00} = 0.71$ use 70mm kingspan kooltherm
K3 to solid floor

* discuss drains (assumed thro' excavation) + agrae protection
with local BCO *

PROPOSED TWO STOREY EXTN @ THE SIDE OF NO 1 GOOSECREAVE THURNSCOE S63 - ONU.

* PLANS ARE TO BE SHOWN TO ADJ. PROPERTY OWNERS TO ENSURE COMPLIANCE WITH PARTY WALL ACT - NO PART OF EXTN TO PASS OVER BOUNDARY - MAKE GOOD ANY DISTURBED AREAS.
GENERAL:- ANY ELECTRICAL WORKS BY A PERSON REGISTERED ON A COMPETENT PERSONS SCHEME WHO SHALL PROVIDE A COMPLETION CERTIFICATE FOR LOCAL BCO.
 ALL HEATING WORKS ARE TO BE UNDERTAKEN BY A PERSON QUALIFIED UNDER THE CURRENT GAS SAFETY SCHEME.

WINDOWS:- UPVZ 20MM A/S SPACE DOUBLE GLAZE
 SOFT COATED LOW E" 1/20TH OPENING LITS
 DOUBLE ACTION SECURE CASEMENT FURNITURE
 TO PROVIDE 8000MM² BACKGROUND VENTS
 TO HABITABLE ROOMS 4000MM² TO KITCHENS/
 BATH ROOMS/UTILITY ETC.

SAFETY GLAZING TO DOORS + SIDE
 FRAMES + ANY WINDOW WITHIN
 800MM OF FLOOR LEVEL - TO BE
 FACEDLY ETCHED WITH MARKS ON
 SHOW WHEN FRAMED.
 GS SHOWS FIRE SAFETY SASH 150MM
 MIN HIGH X 450MM MIN WIDE TO OPEN
 THRO 90 BOTTOM OF SASH BETWEEN

ROOF:- MATCHING COLOUR/TEXTURE TILES (TAKING
 WEATHERING INTO ACCOUNT) NAILED/CLIPPED
 TO MAKERS SPEC OVER TANTALIZED LATHS
 + BREATHER FELT SW/ TRUSSES
 + WIND/WEB BRACING
 + RUNNER TO
 BS5262

30X6 GALV. MS LATERAL
 RESISTANT STRAPS SCREW
 NAILED OVER 3 MEMBERS
 CALCS FOR TRUSSES
 TO BE HANDLED TO
 BCO WHEN AVAILABLE

800/1000MM ABOVE FLOOR.
 (4) SHOWS CEILING MOUNTED
 SMOKE DETECTORS WIRED TO
 FUSE BD + INTERCONNECTED +
 BATTERY BACK UP

* ALL ELECTRIC LIGHT FITTINGS TO BE
 COMPATIBLE WITH LOW ENERGY BULBS
 + TUBES

1000 DEEP
 FLOW GUTTER
 TSP F. PIPES
 CAVITY INS. TO
 BE TAKEN THRO
 REVEALS + SEAL
 WITH PL BD
 + SKIM

LAP CAVITY INSULATION TO ROOF INSULATION TO
 PREVENT COLD BRIDGING 150MM ROCK WOOL
 BETWEEN TRUSSES + 150MM OVER @ 90° TO
 BASE LAYER 125MM PL BD + SKIM

FLOOR:- 18MM FLOORING GRADE BD LEVEL WITH
 EX OVER SW JOISTS 125MM PL BD +
 SKIM 100MM 10KG/M³ MINERAL WOOL
 INFILL

STAINLESS STEEL DOUBLE TRAILGLE
 250 LITRES @ 750CK/H 450C/EV
 EVERY BLOCK DEPTH TO REPAIRS
 TO BS 1243 - LUTOLS FACTORY
 INSULATED TRAY DPC OVER +
 150MM MIN ENDBEARING FROM
 CHAINIC OR I/G RANGES DPC'S
 ALL HEADS REVEALS

* ALL INSULATION TO BE USED + FIXED TO MAKER SPEC

WALLS:-
 MATCHING FACING BLK
 100MM CROWN CAVITY BATS
 100MM LT. WT THERMAL BLK
 PLASTER FINISH

FLOORS:- SUSPENDED TIMBER:-

18MM FLOORING GRADE BD LEVEL
 WITH EX OVER 100X50X400CK
 JOISTS + HCS WALLS 18MM MAX CG
 150MM A/S SPACE TO 125MM @ 1500
 OR ABOVE PATH LEVEL 1200G
 DTS QUEEN OVER 125MM WELL
 COMPACT CLEAN W/ME STONE

SOLID FLOOR:-
 125MM FLOAT FINISH CONCRETE
 OVER RIGID INSULATION DPTH
 H/CORE A/B/D

DPC 150MM
 ABOVE PATH
 LEVEL

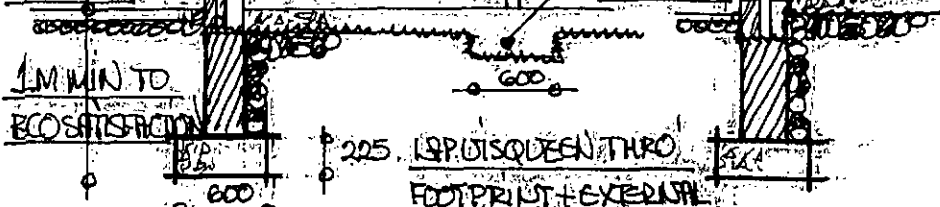
1M MIN TO
 ECO SATISFACTION

SEE P/A CALCULATION

13P DTS QUEEN THRO
 FOOTPRINT + EXTERNAL

WALLS FOUNDATION GRADE
CONCRETE

DEPTH TO LOFT BEARING
 GROUND



Beam check for new g/floor opening

span 2.25m loading udl

$$bwk = 2.25 \times 2.50 \times 2.00 = 11.25$$

$$\text{floor} = 2.25 \times 1.40 \times 2.00 = 6.30$$

$$\text{roof} = 2.25 \times 0.85 \times 1.90 = 3.63$$

$$\text{total} = 21.18 \text{ kN}$$

$$mbm = wL/8 = 21.18 \times 2.25/8 = 5.96 \text{ kNm}$$

try 152x89x16kg UB

$$stress = M/Z = \frac{5.96 \times 10^6}{110 \times 10^3} = \frac{5.96}{0.110} = 54.15 \text{ N/mm}^2$$

$$p/f = 18240/7.70 = 19.80$$

$$w/ply where h = 2.25 + 0.18 + 0.18 + 0.18 \times 1.20 = 3.25$$
$$= 3.25 \times 100/2.10 = 155$$

from table 3a BS449 p/b = 98 N/mm² ∴ acceptable
check deflection

$$\text{allowed} = L/360 = 2.25 \times 1000/360 = 6.25 \text{ mm}$$

$$\text{actual} = \frac{5wL^3}{384EI} = \frac{5 \times 21.18 \times 2.25^3 \times 10^3}{384 \times 210,000 \times 838 \times 10^4}$$
$$= \frac{1207}{676} = 1.79 \text{ mm} \therefore \text{acceptable}$$

$$\text{check p/s load} = \frac{21.18}{2} + \frac{11.25 + 3.63}{2} = 10.59 + 7.44 = 18.03 \text{ kN}$$

$$= \frac{18.03 \times 10^3}{300 \times 250} = \frac{18030}{75000} = 0.24 \text{ N/mm}^2$$

∴ use 2 no 152x89x16kg UB over 300x250x1800 concrete padstone.

as an alternative use 2 no galvanic CN6XB box lintels.

NO 1 G. COSSACRA QUENNE THUYUS COC.