

Code Compliance Certificate 43044

Section 95, Building Act 2004

The Building

Street address of building: Alpha Street CAMBRIDGE 3434

Legal description of land where building is located: LOT 2 DPS 90225

Property id: 52710 Rating unit number: 04351/843.02

Intended use: Private Dwelling

The Owner

RV TAYLOR

PO Box 142

Cambridge 2351

First point of contact for communications with the council/building consent authority:

RV TAYLOR

PO Box 142

Cambridge 2351

Building Work

Building consent number (if different): 43044

Issued by: Waipa District Council

Proposed work: Erect 4 Storey Split Level Dwelling

Value of work: \$ 230,000 Intended life: 50 years

Code Compliance

The building consent authority named below is satisfied, on reasonable grounds, that –

(a) the building work complies with the building consent

Council Charges

Paid with receipt number/s: Amount outstanding: \$ 0.00

Form 7 WAIPA DISTRICT COUNCIL Private Bag 2402, TE AWAMUTU 3840

Phone: 0800 924 723

Document Set ID: 8216574 Version: 2, Version Date: 17/05/2007 Page 1 of 2

Jon Turney
Building Control Officer

On behalf of: Waipa District Council

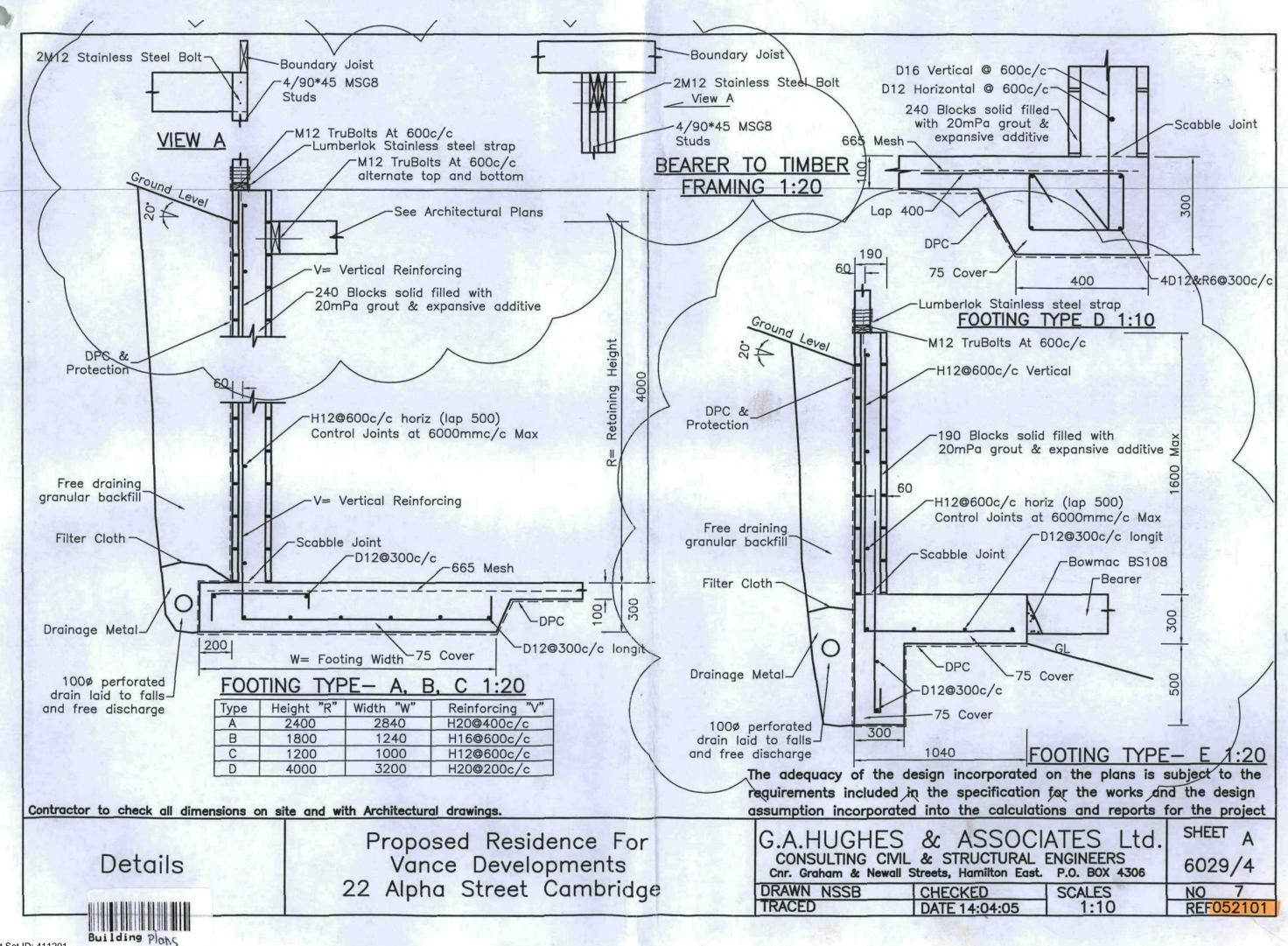
Date building consent received: 26/05/2005

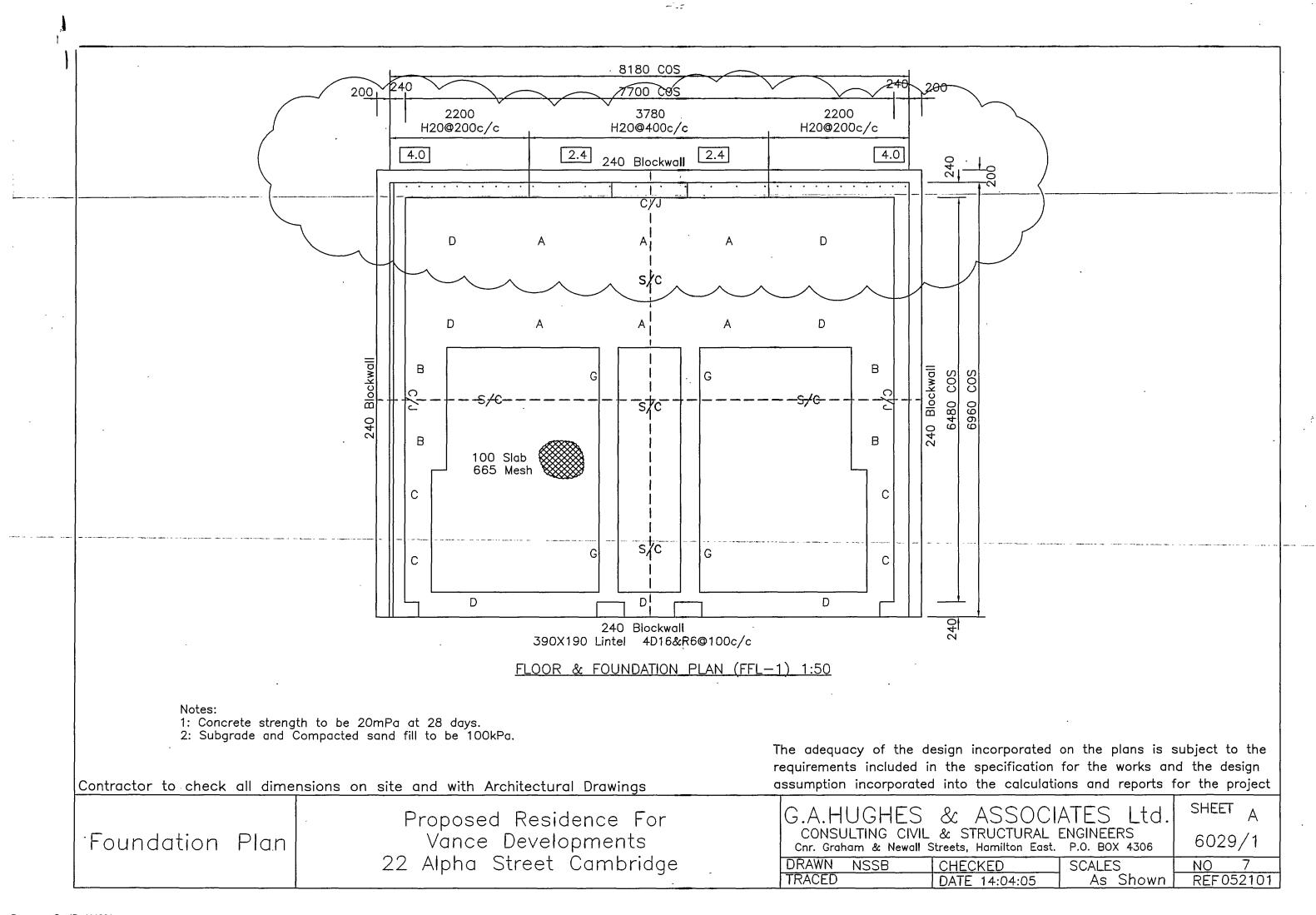
Date CCC issued: 17/05/2007

Form 7
WAIPA DISTRICT COUNCIL
Private Bag 2402, TE AWAMUTU 3840
Phono: 0800 034 733

Phone: 0800 924 723

Document Set ID: 8216574 Version: 2, Version Date: 17/05/2007





8180 COS 240 200 7700 COS 240 Blockwall Blockwall В В 240 Blockwall 6480 COS s/c 240 В В 100 Slab 665 Mesh C

FLOOR & FOUNDATION PLAN (FFL-1) 1:50

D!

240 Blockwall 390X190 Lintel 4D16&R6@100c/c D

- Concrete strength to be 20mPa at 28 days.
 Subgrade and Compacted sand fill to be 100kPa.

Contractor to check all dimensions on site and with Architectural Drawings

C

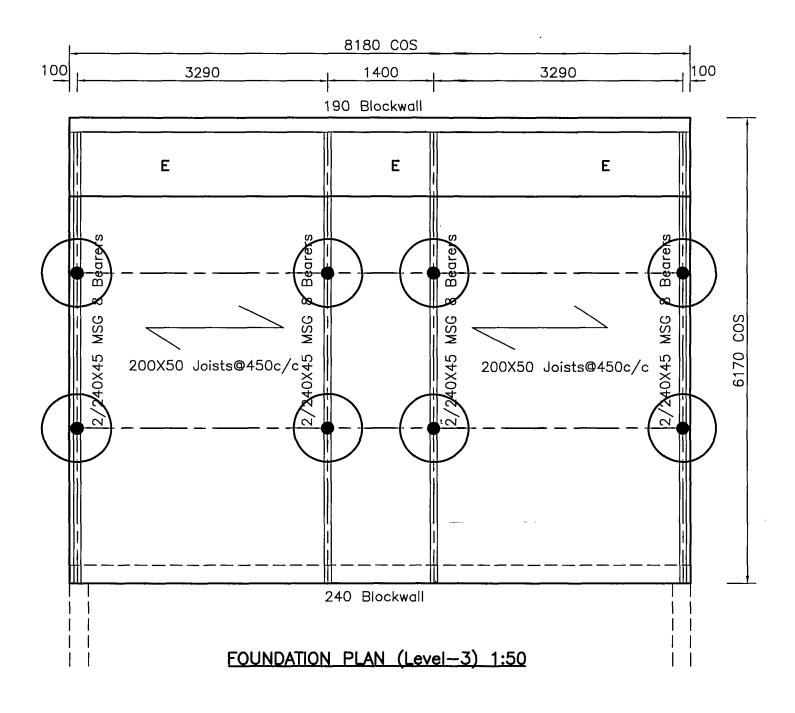
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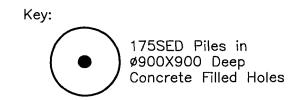
Foundation Plan

Proposed Residence For Vance Developments 22 Alpha Street Cambridge

The adequacy of the design incorporated on the plans is subject to the requirements included in the specification for the works and the design assumption incorporated into the calculations and reports for the project

G.A.HUGHES	& ASSOCI	ATES Ltd.	SHEET
CONSULTING CIVIL Cnr. Graham & Newall !			6029/1
	CHECKED	SCALES	NO 7
TRACED	DATE 14:04:05	As Shown	REF 052101



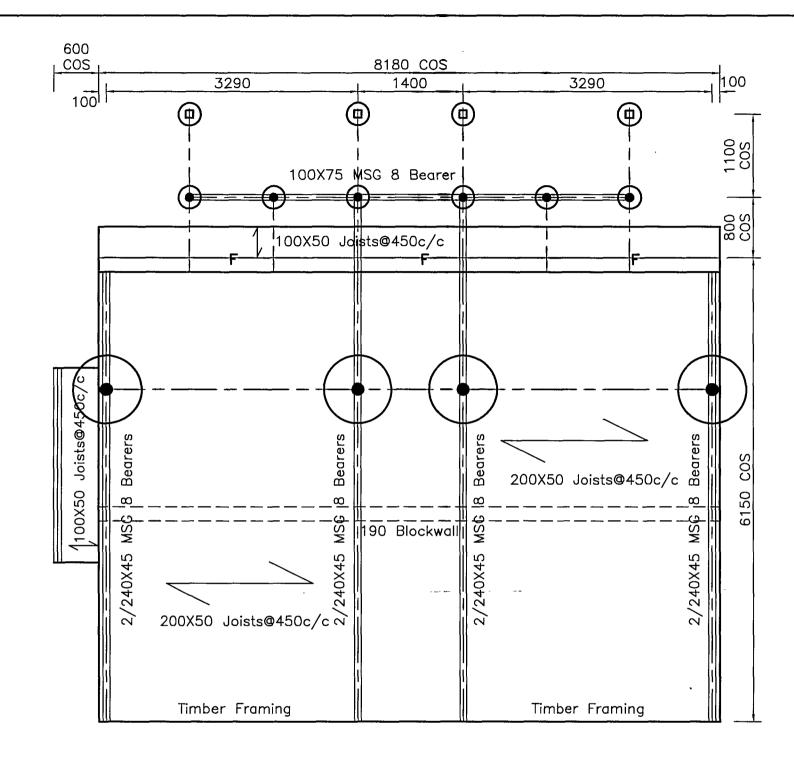


Contractor to check all dimensions on site and with Architectural drawings.

Foundation Plan

Proposed Residence For Vance Developments 22 Alpha Street Cambridge The adequacy of the design incorporated on the plans is subject to the requirements included in the specification for the works and the design assumption incorporated into the calculations and reports for the project

G.A.HUGHES	S & ASSOCI	ATES Ltd.	SHEET
• • • • • • • • • • • • • • • • • • • •	VIL & STRUCTURAL III Streets, Hamilton East.		6029/2
DRAWN NSSB	CHECKED	SCALES	NO 7
TRACED	DATE 14-04-05	l As Shown	RFF 052101



FOUNDATION PLAN (Level-4) 1:50

Key:

175SED Piles in

ø900X600 Deep

Concrete Filled Holes

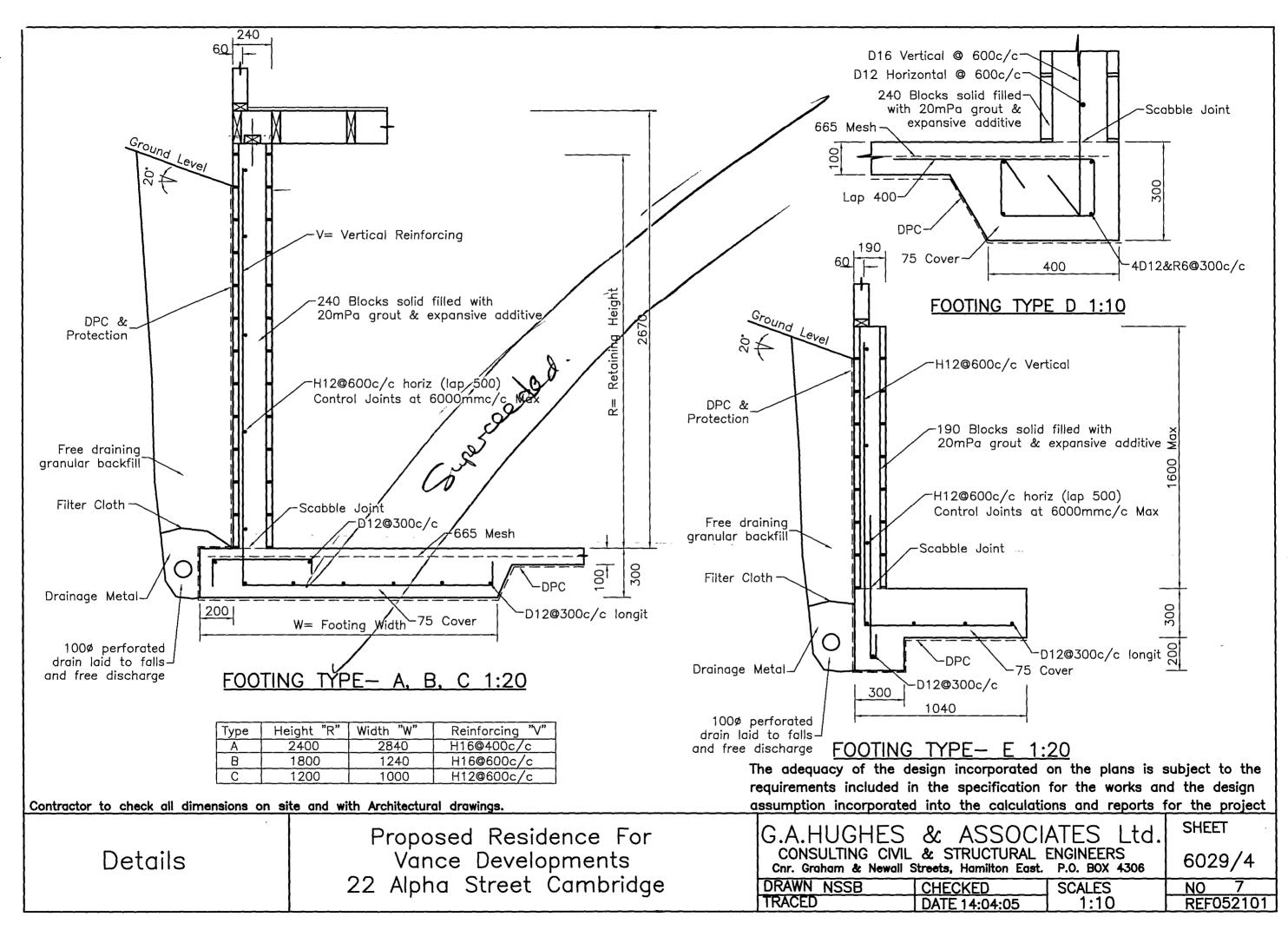
125SED Piles in ø300X600 Deep Concrete Filled Holes 100X100 Post in ø300X600 Deep Concrete Filled Holes

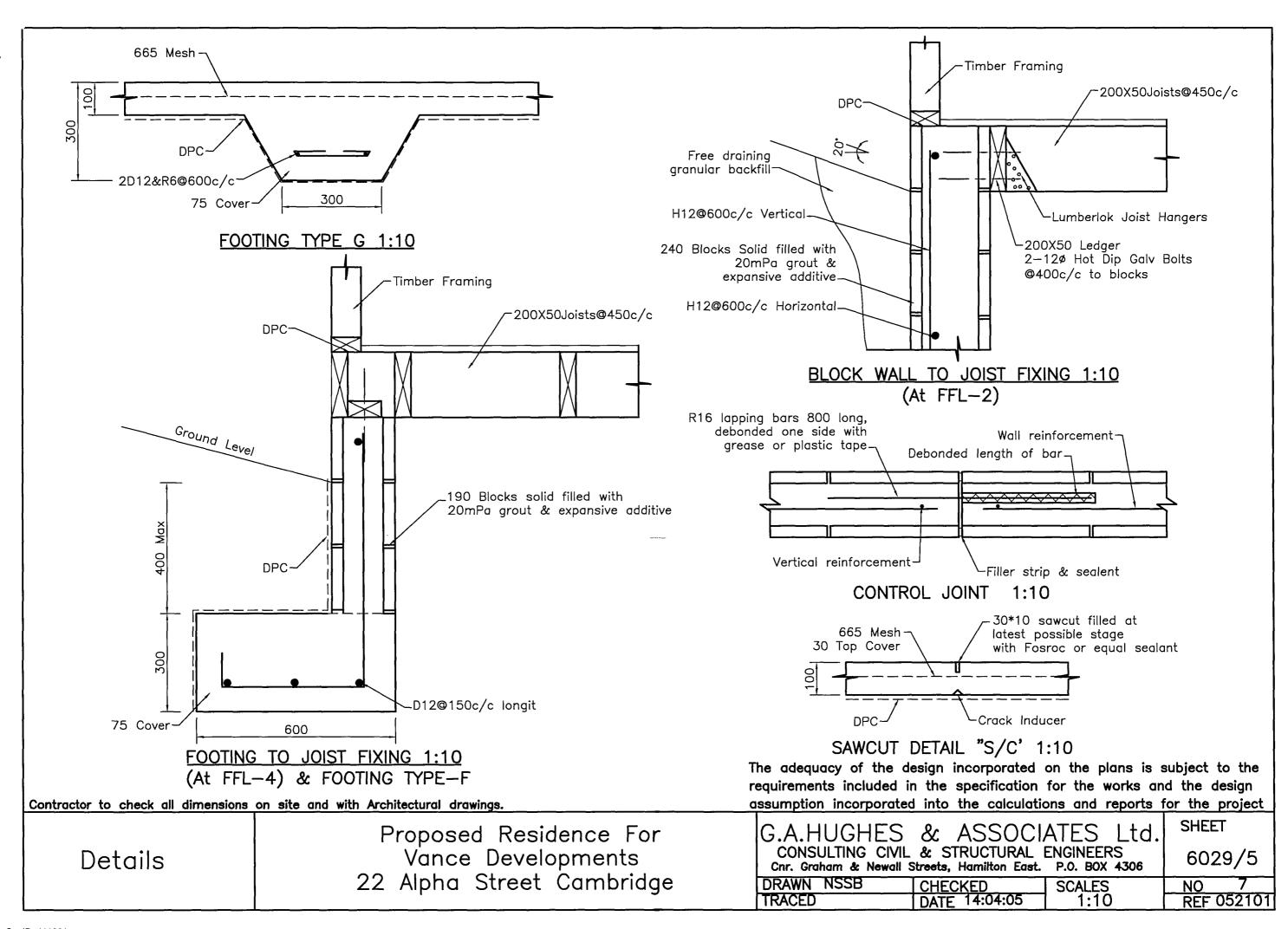
Contractor to check all dimensions on site and with Architectural drawings.

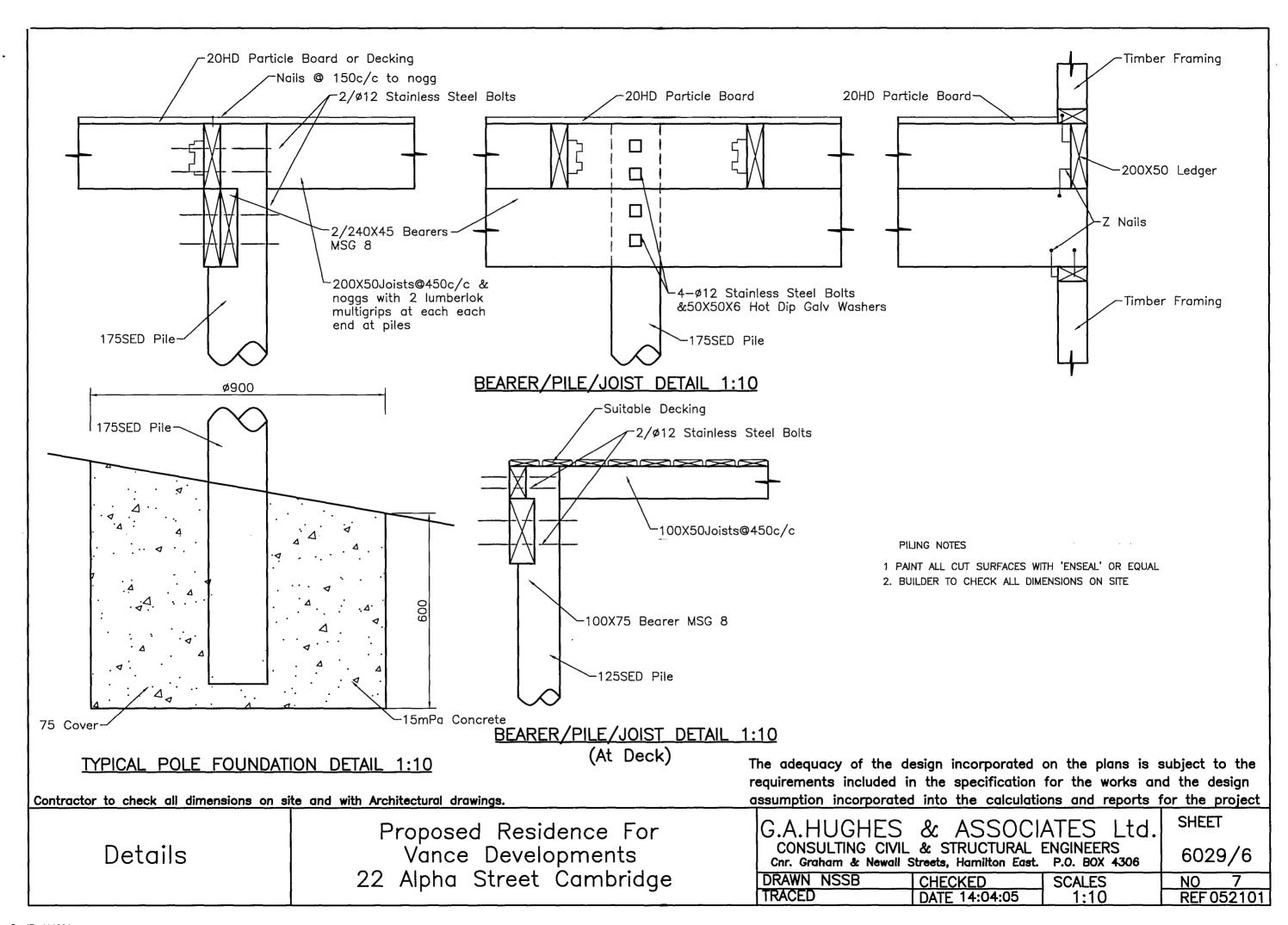
Foundation Plan

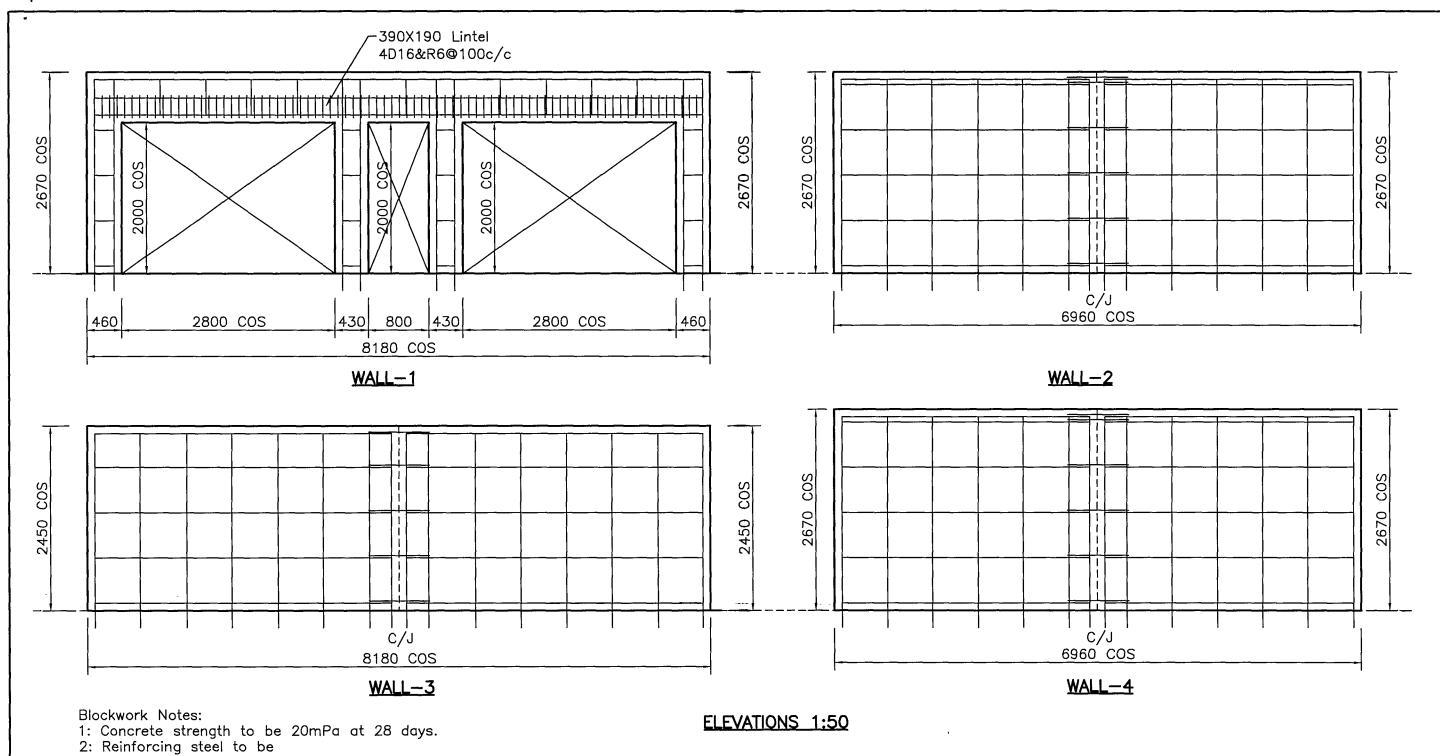
Proposed Residence For Vance Developments 22 Alpha Street Cambridge The adequacy of the design incorporated on the plans is subject to the requirements included in the specification for the works and the design assumption incorporated into the calculations and reports for the project

G.A.HUGHES	& ASSOCI	ATES Ltd.	SHEET				
CONSULTING CIVIL & STRUCTURAL ENGINEERS Cnr. Graham & Newall Streets, Hamilton East. P.O. BOX 4306 6029/3							
DRAWN NSSB	CHECKED	SCALES	NO 7				
TRACED	DATE 14:04:05	_ As Shown	REF 052101				









-H12@600c/c Horizontal or D12@600c/c

-H16@400c/c Vertical or H16@600c/c or H12@600c/c or D12@600c/c (Central)

- 3. 240 blocks solid fill with expansive additive
- 4. All Blockwork elevations are viewed from outside of building.
- 5. Lintel reinforcing to extend 400mm past edge of opening.
 6. Builder & Block layer to confirm all sizes & positions of blockwork openings with Architect prior to construction.
- 7. Control joints at 6000c/c max.

Contractor to check all dimensions on site and with Architectural drawings.

Blockwall Elevations

Proposed Residence For Vance Developments 22 Alpha Street Cambridge The adequacy of the design incorporated on the plans is subject to the requirements included in the specification for the works and the design assumption incorporated into the calculations and reports for the project

SHEET G.A.HUGHES & ASSOCIATES Ltd. consulting civil & structural engineers 6029/7 Cnr. Graham & Newall Streets, Hamilton East. P.O. BOX 4306 DRAWN NSSB CHECKED **SCALES** TRACED 1:50 REF052101 DATE 14:04:05

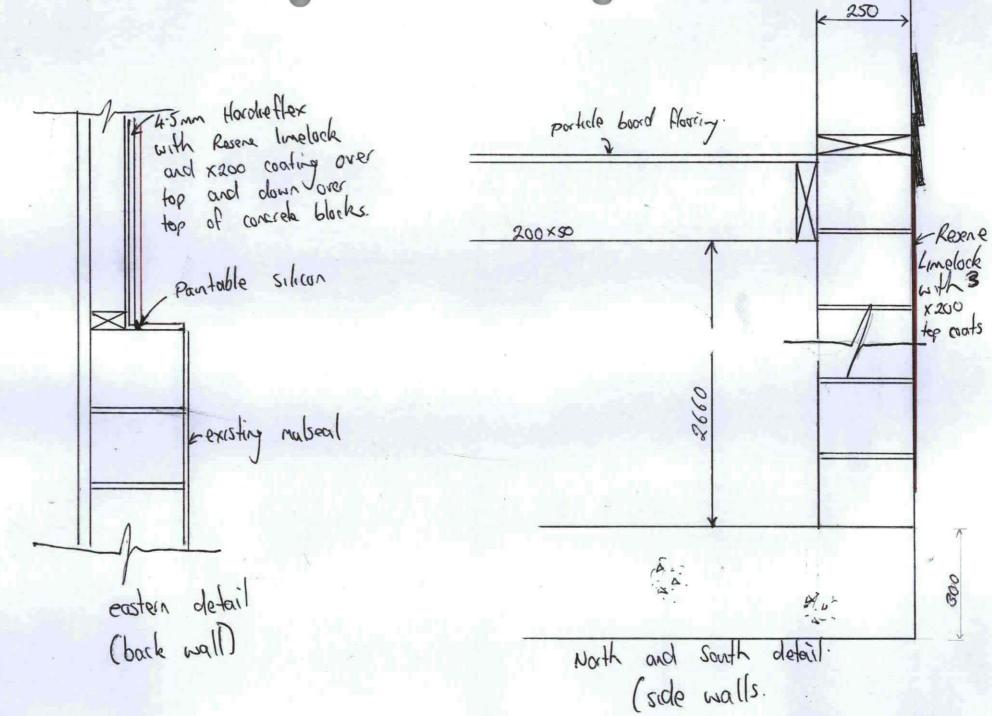
22 Alpha st Cambridge

The Detail between solid poured concrete blocks and timber is to be sealed using one coat of Resene limelock with 3 top coats of Resene x-200

By protecting the concrete from moisture from the external environment I believe this will satisfy clause 2.3.3 of NZS 3604: 1999.



Document Set ID: 3872900 Version: 1, Version Date: 09/05/2013



Document Set ID: 3872900 Version: 1, Version Date: 09/05/2013 SPECIFICATION

VANCE DEVELOPMENTS. DEVELOPMENT PROPOSAL. ALPHA STREET CAMBRIDGE.



PREPARED BY ULTERIORZ DESIGN

Document Set ID: 411 PGX 191

Version: 1, Version Date: 23/09/2010

CAMBRIDGE

PRELIMINARY AND GENERAL

Labour Only Contract.

This project shall be carried out on a Labour only basis with each contractor being directly employed by the Owner. The Builder will be the Main Contractor and shall be responsible for nominating preferred sub-contractors and gathering all labour and material prices to supply a completed tender price for the project, to the owner. The Main contractor shall also be responsible for primary management of the project, and subsequent reporting to the Owner, for which a management fee should be allowed. Sub-Contractors shall be obliged to co-operate with all other trades on the job and will be responsible for carrying out all the work of their trade and to ensure that preparatory work for their trade, if carried out be another trade, has been properly executed.

Site

The Site is Lot2/22B Alpha street, Cambridge and is to be visited by tenderers in order to ascertain actual site conditions, levels, soil types etc. as no extras will be allowed through lack of knowledge of the site.

<u>Permits</u>

The Owner shall arrange to obtain the Building Permit and pay the fee. However, each sub-contractor must apply for and pay fees for any permits required within their particular sub-contracts and as required by the various Local Authorities.

By Law

The whole of the work in this contract shall be carried out in strict accordance with the Building Act 1991, and Local Authorities regulations and to be of standards approved by the various Lending Institutions. Generally all work shall comply with the provisions of NZS 3604:99 and Builders must be conversant with this Standard.

Insurance

The Owner shall at all times keep the whole of the works fully covered by All Risk Insurance, but each sub-contractor must be covered for Public Liability, Accident Compensation, etc.

Extent of Work

This Contract comprises the erection and completion in the soundest and most workmanlike manner of all the works shown or reasonably implied on the accompanying drawings and in accordance with this specification, this includes the supply of all plant, tools, labour, materials, fixtures and fittings required for the due completion of the work.

Protection of Work

All parts of the work liable to damage or cause injury, and all adjoining property, existing work, footpath, trees etc, shall be protected throughout the currency of the Contract.

<u>Maintenance</u>

Each Sub-contractor shall maintain his work for a period of 90 days after completion, and any damage done, arising during that time through faulty workmanship or materials shall be made good at the Contractors expense.

Completion

On completion of respective sub trades and of the entire project, all trade debris shall be removed from the site and the building left clean and ready for occupancy, with all services and mechanical parts in good working order.

HEALTH AND SAFETY.

It shall be the responsibility of the builder, hereon in called the Main Contractor, to demonstrate that all practical steps are taken to ensure that Contractors, subcontractors, their Employees, and any members of the Public are not harmed whilst working on the contract work or being on or near the Contract site.

The Contractor shall be fully responsible for compliance with:

- 1 Health and Saftey in Employment Act 1992
- 2 New Zealand legislation and relevantlocal bylaws
- 3 National Standards or Codes of Practice
- 4 The Principal's safety rules and procedures.

Health and Safety Programme.

The Programme presented by the Contractor shall include, but not be restricted to, the following information specific to this contract:

- a) Management Responsibilty (within the contractors Organisation). The name of the person who will be responsible for Health and Safety at the place of work and details of the experience and training of that person.
- b) Hazards Identification and Control. Identification of all significant hazards that are, or likely to present, or may be created, at the place of workand confirmation that these significant hazards cannot be eliminated.

Details of what action will be taken to control the significant hazards. How the significant hazards will be isolated from the place of work or from the employees and others. If they cannot be isolated, how the significant hazards will be minimised and what procedures will be used to monitor the hazards and the health of employees and others.

The contractor will ensure that his/her staff have been trained for any emergencies and know where to go and what to do.

- c) Substances Health Risks.
 - An information sheet for products, chemicals or any substances that will be present at the place of work which may have a health risk for any person, detailling: - the substances and quantities anticipated.
 - the nature of the health risks associated with the substance and who is at risk.
 - any specific emergency procedure that may be required including first aid.
 - what action the contractor is going to take to eliminate, isolate or minimise the exposure to people and how they intend to monitor the risks.
 - the type of personal protective equipment to be used.
 - what action will be taken to protect the environment.
- d) Training Experience level of Employees. Confirmation that all Employees are trained in the safe use of all plant, equipment, chemicals, substances and products they will work with, including details of the training of specialised plant, equipment, chemicals, substances or products.
- e) Details of how subcontractors are to be included in the Health and Safety programme and controlled with regards to Health and Safety.
- f) Health and Safety Accident Reporting.
 - The contractor shall immediately notify the Authorities of all accidents resulting in: 1 - Fatalities and other lost time injuries to it's or any subcontractors employees.
 - 2 Non-employee injuries. (public)
 - 3 All actual or potential damage to the environment. (spills, emissions or discharge.)

Immediate notification shall be followed by an interim report within 24 hours and a full report within 1 week.

EXCAVATOR and SITE-WORKS.

Refer to Structural Engineers Drawings and Specifications.

REINFORCING STEEL.

General.

The following standards shall apply:

NZS 1900: 9.3a concrete, general requirements, materials and workmanship.

NZS 3402P: Hot rolled bars for reinforced concrete.

NZS 3421: Hard drawn mild steel for reinforced concrete. NZS 3422: Welded fabric of drawn steel wire for concrete.

<u>Materials</u>

Provide all supports, hangers, spacers and ties to approval where shown.

Plain and deformed bars shall be grade 27S to NZS 3402P. Welded wire fabric shall conform with NZS 3422.

Protection

Store steel clear of ground and mesh under cover. Brace adequately all reinforcement projecting from concrete. Cut out defects surrounding bars caused by movement before resuming concreting.

Fabrication

Fit ties and stirrups tightly around main reinforcement in accordance with the drawings. Bend deformed bars around rollers not fixed pins.

Tolerance and Protective Cover

Tolerances shall be as set out in clause 35.2 NZS 1900.

Minimum concrete cover shall be as follows: Concrete cast against ground 75mm.

Exposed concrete faces 50mm. Concrete not exposed to weather 38mm.

Welded wire fabric mesh 30mm top cover.

<u>Laps</u>

Where it is necessary to join bars, adjacent bars shall lap each other by not less than 40 diameters. Lap mesh at least 1 1/2 meshes plus end extensions but in no case less than 300mm. (not applicable if using Fibremesh MD)

Inspection

Before concreting reinforcement must be inspected by the Local Authority. Allow 24 hours notice to local authority prior to inspection.

CONCRETOR

Materials

Concrete shall be pre mixed with a test strength of 20 MPa after 28 days.

Reinforcement shall be MS rods and reinforcing mesh as detailed free from scale, loose rust, paint, grease, dirt etc.

Formwork shall be erected and braced in such a manner that concrete shall finish to the dimensions as indicated on the drawings and reinf. as shown or specified. The formwork is to be hosed out and kept wet before and while the concrete is being placed.

Concrete Work

Construct the various foundations as detailed on the Structural Engineers drawings and reinforce as shown. Construct the various floor slabs, steps and porch slabs as indicated on the drawings and reinforce as shown.

Hard filling to be 74mm down scoria or clean pit sand compacted in layers of 150mm max. depth. Overlay with Duroid Dampgard, DPC with 150mm taped laps. Tape round all penetrations and rips etc.

All floor slabs to be laid to true and straight surfaces, screeded, wood floated and finished with a power float to a fine finish.

Sawcut at 4.0m c/c min or as indicated on the drawings to minimise uncontrolled slab cracking.

Thickness and reinforcing as detailed on the drawings.

Allow to install all galv. steel posts and build in all Pryde bottom plate anchors, pipes, wire etc. as required prior to the pouring of the slab. Bottom plate fasteners to be 400mm from corners and at 800mm crs.

All exposed concrete work, except floors, to be roughened or scratched for subsequent plastering unless a suitable self finish can be obtained.

BLOCKLAYER.

Refer to Structural Engineers Drawings and Specifications.

CARPENTER.

Timber.

Timber throughout shall be true and straight, properly seasoned and free from shakes, large or loose knot edge or other defect and of the grades specified below: Internal Framing - No.1 LOSP/tan (H1+,H3) External Framing - No.1 tanalised (H3,H4,H5)

All plates shall be in as long lengths as possible, nail-plated at joints and junctions between walls in accordance with NZS 3604 (1999).

Spacing of fixing of bottom plate to floor to be halved at corners, at wall ends and large openings.

Wall framing shall be 100x50 generally, with 100x75 framing to selected overheight walls as set out in NZS3604.99 .

All corners and intersections are to be formed with a minimum of three studs lapping each other by approx 12mm and securely nailed together with blocks at 800mm c/s max. Provide solid nogs spaced at 800c/s measured from the floor in all wall frames.

In addition nogs are to be provided where necessary to provide fixing for joinery items and other fittings.

Cut-in and securely fix all angle bracing called for in the bracing schedule.

Roof Framing.

Frame up roof over dwellings with Pryda or similar Gangnailed trusses, purposemade and guaranteed by an approved manufacturer. Use nominated timber rafters, as detailed on the accompanying drawings, to frame up for specific roof areas. Trusses shall be fixed to framing at 900c/s and braced as called for in NZS 3604 (1999).

At gable-ends, trusses are to be fixed to framing with metal strap fasteners and the plate/stud/floor connections all reinforced to take the additional loads to be expected.

Generally, overhangs to roof areas are sloping and vary in dimension. Refer to the accompanying drawings.

Building Paper.

Fix over the exterior of framing an approved fire-retardant breather type building paper. Duroid Greenwrap.

Roof framing to be similarly covered with fire retardant self supporting building paper. Duroid Greencap.

Building paper where specified to be run horizontally and weather lapped a minimum of 150.

External Linings.

External linings shall be clad with Hardies Linea fibro-cement weatherboarding fixed in strict accordance with the manufacturers recommendations. Use patented jointing system with 100x25 tan timber boxed corners and window facings.

Insulation.

Exterior wall insulation shall consist of R1.8 (minimum) Dacron Insulite or equivalent, set between wall framing so that no voids are left.

Roof insulation shall consist of R2.2 (minimum) Dacron Insulite or equivalent, fixed over the ceilings in either roll or batts form in accordance with NZS 4218P.

Ceilings.

Generally, fix 9.5mm Gib Ultraline sheets directly to underside of ceiling strapping, to form all ceilings generally.

Fix all Gib board sheeting in strict accordance with the manufacturers requirements as set out in the GIB Solutions, Technical Manual.

Ensure correct moisture content to timber work, before attempting to fix ceilings. Pack true to level as necessary.

Interior Linings.

Interior wall linings generally to be purpose selected 9.5mm gibralter board sheets fixed in strict accordance with the GIB Solutions Technical information, with flat head galvanised clouts or screws. Ensure correct moisture content to all timber framing, before attempting to fix wall or ceiling linings.

Gibstopper to prepare all Gib board wall and ceiling surfaces for a Type 4 paint finish.

Linings to Ensuite shower/bath areas shall be selected 4.75mm Hardiglaze with PVC jointers and edge moulds.

Seal and flash bottom edges at junction with floor/bath.

Wardrobes shall be fitted with one ex.300x25mm shelf, 1.800m above floor level and with aluminium coat hanger profile fixed to front of shelf. Owner to supply patented wardrobe storage system.

Linen cupboard to be shelved with slatted shelves ex. 100x25mm as directed. Nog for and build in the various joinery fitments as supplied by the joiner and trim around as required.

Skirtings to be No 20 FJPine mould, or as directed by the owner, scribed to the floor and internal corners and mitred at external corners.

Co-operate with the Electrician in the building in of a meter box and switchboard recess lined with fire retardant material and trimed around as required.

All interior finishing timbers shall be sanded to remove machine marks and on completion shall be free from all hammer marks, splits or other defects. All nails in exposed work (interior and exterior) are to be punched and filled with an approved putty.

Sheet materials are to be fixed in accordance with their respective manufacturer's recommendations.

No wall linings are to be fixed until the framing is dry, straight and true. Straightening of study etc to be carried out in accordance with NZS3604 (1990)

Document Set ID: 411193

TIMBER JOINERY.

Interior Doors.

All interior doors are to be flush hollowcore plywood veneered timber.

Allow to hang all interior doors on 1.5 pr BMA loose-pin butts or Sylon sliding doortrack and runners, suited to the size and weights of the doors concerned.

Allow to fit all hardware as scheduled below.

Door furniture - Sopers NZ Devon collection/Valentina.

Kitchen & Vanity units.

Construct all bench and shelf unit carcases from selected 18mm Melteca, glued and screwed in the best tradesmanlike manner, to sizes as indicated on the drawings. Confirm all dimensions on site prior to commencement of work.

All bench tops, cupboard door & drawer fronts shall be clad in selected laminate, glue fixed to customwood substrate. Use also ex 150x25 solid rimu to form kickboard to toe space. Fit patented plastic clad wire baskets on drawerslides to all cupboards, and purposemade customwood drawers on patented drawerslides to bank as shown on the drawings.

Allow to fit all hardware as scheduled below.

Cupboard door handles - UNO cabinetware 2394.128 PC

Cupboard door hinges - Concealed self closing type.

Towel rails, toilet roll holders, etc from the JAECO York Manor range, to be supplied by the Owner.

ALUMINIUM JOINERY.

Window & Door Joinery.

All windows and most doors are to be selected powdercoat, glazed aluminium finished as noted, supplied and guaranteed by an approved manufacturer to

NZS 4211, NZS 4223 and all other relevant codes, complete with all locks, latches, handles, etc.

Allow for 20mm FJPine timber liners with selected architraves generally to all joinery fixed to timber framing.

Entry door only, shall be framed, ledged, braced and battened solid timber in aluminium frames. Allow to hang all 2000 high doors on 1.5pr, and all 2400 high doors on 2pr galv loose pin butt hinges, fitted with Legge Pacific Alpha 500 series furniture and keyed alike.

Fit all head flashings as required.

Ensure a permanent seal around all openings.

ROOFER.

Roof areas generally are to be covered with 0.4mm longrum corrugated ZR8 coloursteel roofing sheets, laid strict in accordance with the manufacturers recommendations.

The roofing sheets are to be fixed to timber purlins, with approved fasteners by competent tradesmen in accordance with best trade practice, this specification and the roofing manufacturer's recommendations.

Spacing of fixings is to be halved at gable roof verges, at eaves and at ridges. Roofing sheets are to be laid with the side-laps away from the prevailing winds. Where, because of conditions peculiar to the site, winds above normal for the area may be expected, then the frequency of fixing of the roofing must be increased.

Cleaning.

On completion of all other work on the roof the entire roof and gutters are to be cleaned of all dirt, debris, discarded nails etc and metal cuttings.

PLUMBER.

All plumber's work shall be carried out by certified tradesmen. Materials shall be the best available and must fully conform to all relevant codes, regulations and bye laws.

Flashings.

Flashings to coloursteel wall cladding and to openings in roofs shall be neatly formed and dressed to the contours of the roofing to form a weathertight seal. All coloursteel flashings shall be formed in as long lengths as practicable, machine bent and cut as necessary with neatly formed ends and joints. Prepare and fix all flashings necessary to complete the roof and walls, and make all weathertight.

Spoutings and Gutters.

All guttering shall be coloursteel 1/4 round external gutter system with falls to rainwater pipes. Use concealed fixing brackets and coloursteel external fascia.

Downspouts shall be 75mm diameter zincalume fixed to walls with three stand-off brackets per 2.4m drop and complete with formed swan-necks etc. Downspouts are to discharge over 90mm dia storm drains but not sealed to them.

Waste Pipes.

All wastepipes shall be PVC of the required sizes and grades complete with cleaning eyes at all accessible bends.

Inaccessible bends, where unavoidable, shall be securely supported swept bends of not less than 1200mm dia. or preformed swept bends.

All wastepipes from W.H.B.s, tubs, sinks, showers and baths shall discharge over gulley traps outside the building.

Cold Water Supply

Lay on cold water supply from the existing water connection serving the property to the proposed dwellings in 25mm UPVC piping.

All piping outside the building shall be buried at least 450mm below finished ground level.

Supply toilets, sinks, tubs, showers and handbasins in 15mm copper pipe.

Provide and install Rinnai Infinity 24, Gas operated califort Hot Water unit where directed. Lag all pipework from HWC.

Taps.

Supply and Install Polished Chrome taps from the Methven range,

as scheduled below.

Kitchen Sink - FU1200 mixer - LUBASF faucet Vanity basin - LUBATF faucet Bath Shower - LUSR rose - LUSL mixer

Supply and install also 2 No. brass hose taps per dwelling, where directed.

W.C Cisterns

Selected wall mounted, centre flush with syphonic valves and 20mm overflows to be piped to the outside. Flush pipes to be P.V.C. Install and connect to pans.

First quality standard grade P trap type floor mounted vitreous china pan, with timber double flap seat.

Completion.

The Plumber is to test and clean his installation, removing all labels from fittings and leaving all in a satisfactory condition.

He is to pass to the Main Contractor all manufacturer's guarantees for Document Set ID: 411193 in pment installed by him. Version: 1, Version Date: 23/09/2010

ELECTRICIAN.

The electrical Installation shall comply with the Electrical Wiring Regulations and the bye-laws of the Supply Authority.

Workmanship.

The installation shall be carried out by competent registered electricians in accordance with sound trade practice and all relevant regulations.

All wiring shall be concealed within walls. Where walls are unlined wiring shall be in conduit within the framing.

Where it is necessary to traverse a wall horizontally, the wiring shall be carried vertically to the top or bottom plate and the traverse made above the top or below the floor then a vertical rise or drop through noggings to the fitting. Note that all ceilings and intermediate floors are skillion type and special care is required to traverse these areas.

Materials.

Materials shall comply with N.Z.Standards and with the descriptions in this specification.

Lead-In Pipes.

The electrical sub-contractor shall supply and position lead-in pipes for mains wires and for telephone where concrete floors are to be laid. It is his responsibility to ensure that they are not damadged, dislodged or the draw cords lost during concreting.

Mains Supply.

Mains supply shall be installed to the requirements of the local supply authority. All mains shall be carried underground to the building from the existing connection point, and finished overlength. Surplus lead shall be neatly folded in the back of the meter box, not coiled.

The meter box shall be an approved enamelled steel semi-flush cabinet built in where shown on plan, mounted 1800mm above floor.

Switchboard.

Provide distribution board in meter box, where shown on plan. All circuit protection is to be by means of MCBs. All breakers and switches are to be clearly and permanently marked to indicate circuits controlled.

Light fittings.

Supply and install all light fittings as selected by owner, in accordance with the electrical layout. Allow a PC SUM of \$100.00 per fitting.

Light Switches.

All light switches shall be flush plateswitches from the PDL 500 series.

Generally light switches shall be mounted 800mm above floor level. Where a number of switches are located in the same area they shall be mounted on ganged plates, and where the number of switches exceeds the available ganging, plates shall be grouped in rectangular pattern of even numbers.

Socket Outlets

Socket outlets shall be switched flush plate units to match light switches. Generally socket outlets shall be mounted 200mm above floor, or where fixed benches occur then 200mm to bottom of plate from bench top.

Note use of specialised socket outlets required to be fitted to the Kitchen bench unit.

Fixed Outlets.

Fixed outlets are to be provided for water-heaters and all other heavy duty appliances of a fixed nature. All fixed outlets are to have isolating switches and indicating neon. Where a fixed-wired outlet is inaccessible

a remote flush-plate neon indicator is to be mounted at eye-level where it can be seen.

Electrical Fitments.

Allow PC Sums for the following items to be included in the contract.

STANDARD OVEN (double) \$ 1200.00 800.00 RANGE HOOD DISHWASHER (standard) s 1200.00

Aerial Sockets.

Provide and install where shown flush ivory plate-mounted co-axial aerial sockets. Mount plates as for socket outlets Connect aerial sockets to eaves mounted weatherproof connector block with TV/VHF aerial cable routed as far as possible from any mains cables. The electrical contractor is not responsible for the supply of aerials but must ensure the correct operation of the downlead and socket.

Earth Bonding.

Provide earth bonding to metal plumbing, cladding and to metal light fittings.

Completion and Testing.

On completion of his work the electrical sub-contractor is to test the installation to the satisfaction of the Supply Authority and to arrange and pay for the final connection to be carried out.

DRAINLAYER.

Drainlaying shall be carried out by, or under the supervision of a registered tradesman in accordance with the requirements of the Drainage and Plumbing Regulations, the requirements of the Local Authority and of "best Trade Practice".

Pipes.

Pipes for foul and storm drainage to be 100mm and 90mm min diam respectively, of unplasticised P.V.C. all as described in the Sixth Schedule of the Drainage and Plumbing regulations.

Foul drainage lines shall be laid to falls not less than 1:100 tabulated in the Second Schedule of the Drainage and Plumbing Regulations. All foul drains shall have inspection points at all changes in direction and at junctions.

Storm drains are to be laid similarly but swept bends will be permitted provided adequate access is provided for cleaning. Falls to be not less than 1:100.

Pipe barrels to be fully supported by the bottom of the trench, on undisturbed, firm sub-soil.

Backfilling.

Trenches are to be backfilled to within 200mm of finished ground level, with sand, well packed and consolidated around the pipe. The final 200mm is to be filled with top-soil, lightly packed, and finished proud of surrounding ground to allow for settlement.

Testing and Approval

The Drainlayer shall notify the inspector of the Local Authority when all drains have been laid and shall provide facilities for the testing of the system to the Inspector's satisfaction, and shall obtain his permission before proceeding with backfilling.

As Installed' Drainage diagram.

The Drainlayer is to provide an 'As Installed' diagram of the drainage systems dimensioned from the building with levels relative to floor marked at key points so that future alteration and/or repair work may be facilitated. A copy of this diagram is to be lodged with the local authority and a further copy Document Set ID: 411193 delivered to the Owner.

Version: 1, Version Date: 23/09/2010

Stormwater.

All off roof stormwater is to run to link with new connection as shown on the site plan. Confirm IL on site. Run all stormwater in 90mm dia. P.V.C pipe.

Sewerage.

All soil drainage is to run to link with new connection, as shown on the site plan. Run sewerage in 100mm dia. PVC pipe.

PAINTER AND DECORATOR.

The Painting and Decorating Sub-Contractor shall be responsible for the entire painting and decorating of the building.

All materials used shall be straight from the new unopened cans, and applied strictly in accordance with the manufacturer's instructions.

Any failure of the finishes in appearance or performance will require their being stripped and redone. The cost of such work shall be outside the scope of this contract and shall lie between the manufacturer of the materials and the sub-contractor who is responsible for ensuring the suitability of surfaces for the finish applied.

If the sub-contractor feels that a surface is unsuitable for finishing or for the finish specified he must inform the Owner in writing and obtain from him instruction on how he should proceed before carrying out work.

Completion

On completion of the works remove all trade debris, clean down windows and glass work and leave the building ready for occupancy.

Wall Bracing Calculation Sheet A

Job Details	LEUEL 2 box i
Name VANCE DEVELOPMENT	·
Street and Number 22 ALPHA ST	KEET
Lot and DP Number Lot 2 D	ps 90225
City/Town/District CAMBRIDGE	
Location of Storey: single uppe	er of two lower of two Floor load: 2kPa/3kPa
Building height to apex 4200 m	Roof weight [ight/heavy
Roof height above eaves 1-240 m	Cladding weights: Subfloor light/medium/heavy
Stud height 2.4 m	Lower Storey light/medium/heavy Upper Storey light/medium/heavy
Stud height 2.4 m Average roof pitch 15°	Room in Roof Space Yes No
Building length BL = 8.18, m	Gross Building
Building width $BW = 4.780 \text{m}$	Plan Area, GPA <u>39</u> · Im²
Note: When the average roof pitch is over 25 cBL and BW.	degrees, use the eaves length and width to determine
Wind Zone	hov. C
	box 2
	posure: Topography: eltered0 Gentle 0
R2 1 Coastal 1 Ex	posed 1 Moderate 1
	Extreme 3
Total points	•
Wind Zone: Low (0)	Very high, (3)
Medium (1)	Specific Design (4)
High (2)	
Footbarrates Tours	hav. 6
Earthquake Zone	box 3
From figure EQ1 select Earthquake Zone:	A (B) C
BUs required Wind box 4	BUs required Earthquake box 5
From Table W1A/W1B	From Table EQ1/EQ2/EQ3/EQ4/EQ5/EQ6
W along = _64_ BUs/m	E = 5.0 BUs/m²
W across = 54 BUs/m	Note: For a room in the roof space use E + 3
Total wind load,	Total earthquake load,
W ALONG:	EQ ALONG and EQ ACROSS
W along x BW = _ 3 = 6 _ BUs W ACROSS	E x GPA BUs = 196 BUs
Warran V Di - 447 Dila	

Document Set ID: 411193 W across x BL = ___ 442 BUs Version: 1, Version Date: 23/09/2010

Wall Bracing Calculation Sheet B

long	12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		· ; · · ·						LEVEL	- Ż
Well or Br	ecing Une	Brecin	g Elements	Provided		W	ind	X	Earth	queke
1	2	3.	. 4	5		6 W	7 W		6E	7 E
Label	Minimum BUs Required	Element	Bracing Type	Length Element (m) L		Rating BU/m W	BUs Achieved (BU/m.x.L) W		Rating BU/m £	BUs Achieved (BU/m x I E
		<u> </u>	GIL	2.4		75	190			
A :		i ii	GIRZ	2.2	F	න	165			
8 .		E	BR5	· 1. †		iis_	161			
; ; ;			BR4	· 1 · 1	-	100	110			
C .						······································				
َ م	· ·; ·					•••••••				
€	ide yeri			·		•				·
			•	I					L	
		Totals /	Achieved	616	W	<i>f</i>	616		Ε	
From Sh	eet A	Totals	Required	524	W	1	:306		E	195.5

*If Wreq/Ereq is 1 or less complete E column only If Wreq/Ereq is 1.5 or more complete W column only Otherwise complete both W and E

Across :

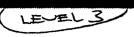
Wall or G	ecing Line	Bracin	g Elements	s Provided	W	Ind	Earth	cjuake
1 : :	2	3	4	5	6W	7 W	6E	7E.
Line Label	Minimum BUs Required	Bracing Element No:	Bracing Type	Length Element (m)	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m	BUs Achieved (BU/m x I E
M.		Μ	GIB	2.4	75	180	Sa	120
1 16		2	GIBZ	2.4	90	192	70	168
N	***	0	GIBL	1.6	75	99:	56	95
0					·			
Ρ,			***************************************					
Q								
The state of the s			 Achieved	471	W	[47]	E	1378
From Sh	eet A:	:Totals	Pequired	259	TW.	1442	(E 244)	1195.5

Wall Bracing Calculation Sheet A

Job Details	LEVEL 3 box 1
Name VANUE DEVELOPMENT	<u>·</u>
Street and Number 22 ALVIIA	STREET
	PS 90225
City/Town/District	r of two lower of two Floor load 2kPa/3kPa
Building height to apex 7.373 m	Roof weight ght heavy Cladding weights:
Roof height above eaves 2.110 m	Subfloor
Stud height 2-4 m Average roof pitch 15°	Lower Storey Upper Storey Room in Roof Space Ves / No
Building length BL = 8.18 n	Gross Building
Building width BW = 6-170m	Plan Area, GPA = 50.5m²
Note: When the average roof pitch is over 25 of BL and BW.	degrees, use the eaves length and width to determine
Wind Zone	box 2
Region: Terrain: Ex	posure: Topography: eltered 0 Gentle 0
R2 1 Coastal 1 Ex	
	Extreme 3
Total points	
Wind Zone: Low (0)	Very high (3)
Medium (1)	Specific Design (4)
High (2)	
Earthquake Zone	hou C
From figure EQ1 select Earthquake Zone:	
1 Toll rigging Earl Scient Lail rigging 2016.	, <u> </u>
BUs required Wind box 4	BUs required Earthquake box 5
From Table W1A/W1B	From Table EQ1/EQ2/EQ3/EQ4/EQ5/EQ6
Walong = 139 BUs/m	E = BUs/m ²
W across = 1 63 Us/m	Note: For a room in the roof space use E + 3
Total wind load,	Total earthquake load,
W ALONG: W along x BW = <u>858</u> BUs	EQ ALONG and EQ ACROSS
W ACROSS W across x BL =_) 334 BUs	E x GPA BUs = BUs

Wall Bracing Calculation Sheet B

Along



Wall or Br	acing Line	Bracin	g Elements	Provided		W	ind		Earth	Earthquake	
1	2	3	4	5		6 W	7 W		6E	7 E	
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L		Rating BU/m W	BUs Achieved (BU/m x L) W		Rating BU/m E	BUs Achieved (BU/m x L) E	
		B	GIB)	2.4		75 75	180				
Α			GIB	2.4		_75_	180	\vdash	·····		
B [.]		C	6182 BR9 6182	2.0		75 110 75	150 77 157				
C		D	BRS BRA	1.4		115	161				
D											
Ε											
 	·	Totals /	Achieved	كاحا] [w	1015	П			
From Sh		Totals	Required	භෙන		W	828			505	
Wreq/Er	eq =		•	1.7							

*If Wreq/Ereq is 1 or less complete E column only If Wreq/Ereq is 1.5 or more complete W column only Otherwise complete both W and E

Across

Wall or Br	racing Line	Bracin	g Elements	s Provided	W	ind	Earth	quake
1	2	3	4	5	6W	7 W	6E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m	BUs Achieved (BU/m x L E
···		٧-٦	BR9	0.6	110	66		•
М			BRS	2.4	115	276		
		~	8r4	1.1	100	100		
N	-	0	BRS	1.6	115	184		
			GIBZ	3.0	80	240		<u> </u>
0			6182	3.0	80	240		
þ.		Þ	BR4 BRS	1.1	115	276		
Q			-					
		Totals /	Achieved	الحمكا	W	1502	E	
From St	eet A	Totals I	Required	1334	W	13.34	E	505

Wall Bracing Calculation Sheet A

Job Details	LEVEL 4 box 1
•	
Street and Number 27 ALPHA ST	REET
Lot and DP Number Lot I DR	U 9022S
City/Town/District CAMBRIDGE	
Location of Storey: single upper	of two flower of two Floor load: 2kPa/3kPa
Building height to apex 7.373m	Roof weight light/heavy
Roof height above eaves 2.10m	Cladding weights: Subfloor <u>light/medium/heavy</u>
Stud height 2.4 m	Lower Storey <u>light/medium/heavy</u> Upper Storey <u>light/medium/heavy</u>
Stud height 2.4 m Average roof pitch	Room in Roof Space Yes 7 No]
Building length BL = 8.18 n	Gross Building
Bullding width BW = 7.480 m	Plan Area, $GPA = \frac{52 \cdot 4m^2}{m^2}$
Note: When the average roof pitch is over 25 de BL and BW.	egrees, use the eaves length and width to determine
Wind Zone	box 2
	osure: Topography: Itered0 Gentle 0
R2 1 Coastal 1 Expo	osed 1 Moderate 1
	Extreme 3
Total points	
Wind Zone: Low (0)	Very high (3)
Medium (1)	Specific Design (4)
High (2)	
Earthquake Zone	box
From figure EQ1 select Earthquake Zone:	A B C
BUs required Wind box 4	BUs required Earthquake box
From Table W1A/W1B	From Table EQ1/EQ2/EQ3/EQ4/EQ5/EQ6
W along = 78_BUs/m	E =S BUs/m²
W across = <u>78</u> BUs/m	Note: For a room in the roof space use E + 3
Total wind load,	Total earthquake load,
W ALONG: W along x BW = <u>6-2-3</u> BUs	EQ ALONG and EQ ACROSS
WACROSS	E x GPA BUs = 278 BUs
Wacross x RI = 639 RIIs	1

Wall Bracing Calculation Sheet B

											
Wall or Bracing Line		Bracing Elements Provided				Wind			Earthquake		
1	2	3	4	5		6 W	7 W		6 E	7 E	
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L		Rating BU/m W	BUs Achieved (BU/m x L) W		Rating BU/m E	BUs Achieved (BU/m x L) E	
		B	GIB)	2.4		75	180				
А			GBI	2.4		75	180				
В		С	6182 BRJ 6182	2.0		75 110 75	50 77 157				
С		D	BRS BR4	1.4		115 120	161				
D											
ε											

	Totals Achieved	كاحا	W	1015	E	
From Sheet A	Totals Required	628	W	පිදුපි	E	5-25-
Wreq/Ereq =	•	١.7				

*If Wreq/Ereq is 1 or less complete E column only If Wreq/Ereq is 1.5 or more complete W column only Otherwise complete both W and E

Across

Wall or B	racing Line	Bracing Elements		s Provided	Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6E	7 E
Line Label	. Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m	BUs Achieved (BU/m x L E
		*1	BR9"	0.6	110	66		
M			BES	2:4-	115	276		
N		2	Br4	1.1	100	10		
14	-	0	BRS	1.4	115	184		
			GIBZ	3.0	80	240		
0			6182	3.0	80	240		
r		Þ	BL4-	1.1	100	110		
P			BRS	2.4	115	276		
Q								
	,	Totals /	Ichieved	الاصكا	W	1502	E	
From SI	neet A	Totals I	Required	1334	w	1334	E	1505

Wreq/Ereq =

Page 003 PAGE 03





P.I.M. No 43044 Building Regulation Classe 81

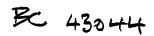
PRODUCER STATEMENT - P84 - CONSTRUCTION REVIEW

(Gridelice verse ou flie nee of the follil eth billnes ou nie (gazes serie)
は多り正ひ 数く
Q A Hughes & Associates Limited
(Colonial Chairm of the section of the Constant of the Section of
TO: Vance Davelopments / R Taylor To the Billion to Make States County
TO BE SUPPLIED TO: Weigh District Council (Commit Autority
IN RESPECT OF DWALLING
AT 22A Alpha Street- Cambridge
Lot 2 DP 890225
G A Hughes & Associates Limited has been engaged by the Owner
to provide Design & Observation for Dwelling as clause(s) B1
building work for Excevations and Compacted Pill, Concrete Blook Retaining Walls , Blookwork and Lintels for the work
as described by the drawings and specifications prepared by & A Hughes & Associates Ltd ~ References 0521C1 dated
14/12/2005, 82101,52485 and 07635 Authorized variation(s) No (copies attached) frave been
issued during the course of the works. I neve sighted Building Consent No COS4-/ 07
and the stadhed conditions of building consent.
As an Independent design protessional covered by a current policy of Professional Indemnity Insurance to a minimum.
value of \$200,000, I or personnel under my control have certied out periodic reviews of the work apprepriate to the
engagement and based upon these raviows and information supplied by the contractor during the course of the works
I BELIEVE ON REARDNABLE OROUNDS that Part only as specified in the attached particulars
of the building work under the above Building Consent with respect to Clause(s)61
the Building Regulations 1992 has been completed to the extent required by that Building Consent.
Date 25th April 2007
BE. MIPENZ (Civil & Structural) C P Eng #13402
Member IPENZ
1035 Whangaparaos Road, Whangaparaos HBO 0830,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Prince: This form to accompany Form 9 of the Suliding Regulations 1982 for the issue of a Code Compilance Certificate.
SrCetober %

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P.I.M. No. 43044 Building Regulation Clause 51

PRODUCER STATEMENT - PS4 - CONSTRUCTION REVIEW

(Guidance notes on the use of this form are printed on the reverse side)

ISSUED BY
Q A Hughes & Associates Limited
(Sulably quarked Draign Professional) TO: Vance Davelopments / R Taylor
TO BE SUPPLIED TO: Waipa District Council
IN RESPECT OF Dwelling
AT 22A Alpha Street- Cambridge
Lot 2 DP \$90225
G A Hughes & Associates Limited has been engaged by the Owner
to provide Design & Observation for Dwelling as clause(s) B: of the Building Regulations 1992 for the
building work for Excavations and Compacted Fill, Concrete Block Retaining Walls , Blockwork and Lintels for the work
as described by the drawings and specifications prepared by G A Hughes & Associates Ltd - References 052101 dated
14/12/2005, 52101,52485 and 07635 Authorised variation(s) No
issued during the course of the works. I have sighted Building Consent No 0344 / 07
and the attached conditions of building consent.
As an independent design professional covered by a current policy of Professional Indemnity Insurance to a minimum
value of \$200,000, I or personnel under my control have carried out periodic reviews of the work appropriate to the
engagement and based upon these reviews and information supplied by the contractor during the course of the works
I BELIEVE ON REASONABLE GROUNDS that Part only as specified in the attached particulars
of the building work under the above Building Consent with respect to Clause(s)81 of
the Building Regulations 1992 has been completed to the extent required by that Building Consent.
(Signature system) qualified Docign Professional) Date 26th April 2007
BE, MIPENZ (Civil & Structural) C P Eng #13402
Promisional Qualifornium
1036 Whangaparaoa Road, Whangaparaoa HBC 0930
This form to accompany Form 9 of the Building Regulations 1992 for the issue of a Code Compliance Certificate.

BrOctober 94

GUIDANCE ON USE OF PRODUCER STATEMENTS

This producer statement has been prepared by a combined task committee consisting of members of the New Zealand Institute of Architects, Institution of Professional Engineers New Zealand, Association of Consulting Engineers New Zeeland and the Building Officials Institute of New Zeeland.

Four producer statements are available and brief details on the purpose of each are as follows:

Design:

Intended for use by the person responsible for the design in circumstances where the Territorial

Authority will rely on the producer statement to issue a Building Consent.

Design Review:

Intended for use by a suitably qualified independent design professional where the Territorial

Authority does not undertake an internal review and relies on the independent design

professional's review to issue the Building Consent.

Construction: requires

Intended for the use by the contractor of the building works where the Territorial Authority

a producer statement at the completion of construction.

Construction Review: Intended for use by the person required by the Building Consent to undertake construction monitoring of the building works in circumstances where the Territorial Authority will rely on

the producer statement to issue a Code Compliance Certificate.

The producer statements system is intended to provide Territorial Authorities with reasonable grounds for the issuing of a Building Consent or Code Compliance Certificate without having to duplicate design or construction checking by others.

The following criteria are recommended to Territorial Authorities with respect to the use of the producer statements.

Definition of Suitably Qualified Design Professional

A suitably qualified design professional should have recognised qualifications and experience for the work undertaken and should be either:

- an active member of the Association of Consulting Engineers New Zealand (ACENZ) or,
- a member of the Institution of Professional Engineers New Zealand (IPENZ) having a current policy of (ii) Professional Indemnity Insurance for a sum not less than \$200,000 or;
- a member of the New Zealand Institute of Architects (NZIA) having a current policy of Professional Indemnity (iii) Insurance for a sum of not less than \$200,000.

Design Build Contracts

if the design professional is engaged by the contractor, the territorial authority should satisfy itself that it is appropriate for the territorial authority to rely upon a producer statement from the design professional.

Consulting Services during Construction Phase

There are several levels of service which a design professional may provide during the construction phase of a project. The territorial authority is encouraged to require that the service to be provided by the design professional is appropriate for the project concerned.

Requirement to provide Producer Statement

Territorial Authorities should ensure that the applicant is aware of any circumstances in which there may be a requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the design professional's engagement.

Attached Particulars

Attached particulars referred to in this producer statement refer to supplementary information appended to the producer statement.

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Version: 1, Version Date: 09/05/2013

PRODUCT DATA FOR RCHITECTURAL AND SPECIALIST COATINGS

\$120.50

Resene X-200

Acrylic Waterproofing Membrane

Resene X-200 an acrylic waterproofing membrane incorporating the most recent advances in polymer and paint technology. Shows significant lvances in the areas of film adhesion, penetration, application and durability.

Exterior/Interior

Typical Uses

- Concrete Blocks
- Concrete Surfaces
- Fibre Reinforced Cement

Physical Properties

Vehicle Type Pigmentation

Pure Acrylic

Titanium Dioxide/Mineral and Fibre Reinforcement

Solvent Water

Eggshell, Very Fine Texture Finish

Colour Selected Total Colour System, including BS2660, BS5252, Multi-Finish, Whites & Neutrals and The

Range.

Dry Time Recoat 1 hour at 18°C

3 hours

Primer Required

Yes, dependent on surface Theoretical Coverage 1st Coat: 5 sq. metres/litre 2nd Coat: 7.5 sq. metres/litre

Dry Film Thickness Usual No. of Coats 2; Blockwork - 3 Abrasion Resistance Chemical Resistance

2 coats 180 microns

Very Good

Heat Resistance

Very Good Thermoplastic

Solvent Resistance

Good

Toxicity Durability No added lead or chromate

Excellent

Thinning & Clean Up

Do not thin. Clean up with water. 4 and 10 litre

Pack Size VOC

c. 89 grams per litre

Performance & Limitations

Performance

1. Remarkable ease of application.

2. Superior void and crack filling properties.

Excellent durability. Requires no further 'weathering' coats.

An Environmental Choice approved product.

- Limitations 1. Old, weathered concrete requires surface conditioning with Resene Sureseal (Data Sheet
 - 2. Do not apply at temperatures below 10°C, or when it is liable to drop below 10°C during the drying period.
 - 3. Not designed to be used under ponded water.

Information contained in this Data Sheet is re-validated every two years following issue date. Please ensure the current Data Sheet and Material Safety Data Sheet are consulted prior to specification or application of product. If in doubt contact Resene.





D809

365.00

Resene Limelock

Cure and Seal

Resene Limelock is a new preparatory coating used for the curing and sealing of cementitious substrates. Promotes cure by producing a water barrier, which, unlike traditional curing membranes, can be overcoated with acrylics at any stage.

Its ability to cure and seal the substrate eliminates the need to leave the plaster to cure for 7 days before painting. When dark, heat-absorbing topcoats are planned, it is still prudent to wait 7 days before painting.

Resene Limelock traps free lime in the cementitious substrate protecting the paint finish against the appearance of unsightly lime staining, and providing a perfect base for subsequent Resene finishes.

Exterior

Typical Uses

- Cementitious Surfaces, including:
 - Renders
 - Stucco
 - Thin Layer, Polymer Modified Plasters
 - Concrete

Information contained in this Data Sheet is re-validated every two years following issue date. Please ensure current Data Sheet is consulted prior to specification or application of Resene products.

Physical Properties

Vehicle Type Pigmentation

100% Acrylic TiO₃

Solvent

Water

Finish Colour Semi-transparent Gloss

White

Dry Time Overcoat 30 minutes at 18°C Dependent on final colour planned

No

Primer Required
Theoretical Coverage

10-12 sq. metres per litre

Usual No. of Coats

1

Heat Resistance Chemical Resistance Thermoplastic Good

Abrasion Resistance

Very Good

Solvent Resistance Toxicity Good No added lead or chromate

Durability
Thinning & Clean Up

Excellent Water 10 litre

Can Size V.O.C.

c. 80 grams per litre

Performance

- (1) Promotes early cure of fresh cementitious surfaces minimising downtime between the completion of plastering and commencement of painting.
- (2) White pigmentation increases the albedo of the system to retain moisture.
- (3) Seals in free lime to protect against the unwanted appearance of lime staining.
- (4) Good adhesion to fresh cementitious substrates.
- (5) Provides an excellent base for a wide range of Resene coatings.

Limitations

- (1) Do not apply at temperatures below 10°C, or when it is liable to drop below 10°C during the drying period.
- (2) Resene Limelock is designed to be overcoated.
- (3) Resene Limelock is considered to be part of the surface preparation process and should be applied as soon as possible over plaster systems to achieve maximum potential.

Limelock Cure and Seal

Surface Preparation

If Resene Limelock is applied immediately following plastering, no surface preparation is necessary. If the surface has been allowed to weather, some surface preparation may be required, as for Old Work.

Old Work

Ensure surface is clean and free from all contaminants. Waterblasting is the preferred preparation over older weathered surfaces.

Surface rust stains may indicate a deeper problem of carbonation and re-bar corrosion. Contact Resene if surface rust is present.

Application and Precautions

Apply to spray plasters immediately after spraying. Apply to trowelled plasters immediately after final trowelling. Apply to poured concrete, including slabs, as soon as the surface water has evaporated or as soon as the boxing is removed.

Application

Apply by knapsack, spray, long pile roller or brush. Apply one coat of Resene Limelock over the fresh substrate and allow to dry.

Evenly coat all fresh cementitious surfaces to ensure uniform curing and that free lime cannot be transferred through weak points.

Precautions

When dark, heat-absorbing topcoats are planned, it is prudent to wait 7 days before painting.

If the surface that you propose to coat is not referred to by this Data Sheet, please contact Resene Paints for clarification on one of the numbers provided.

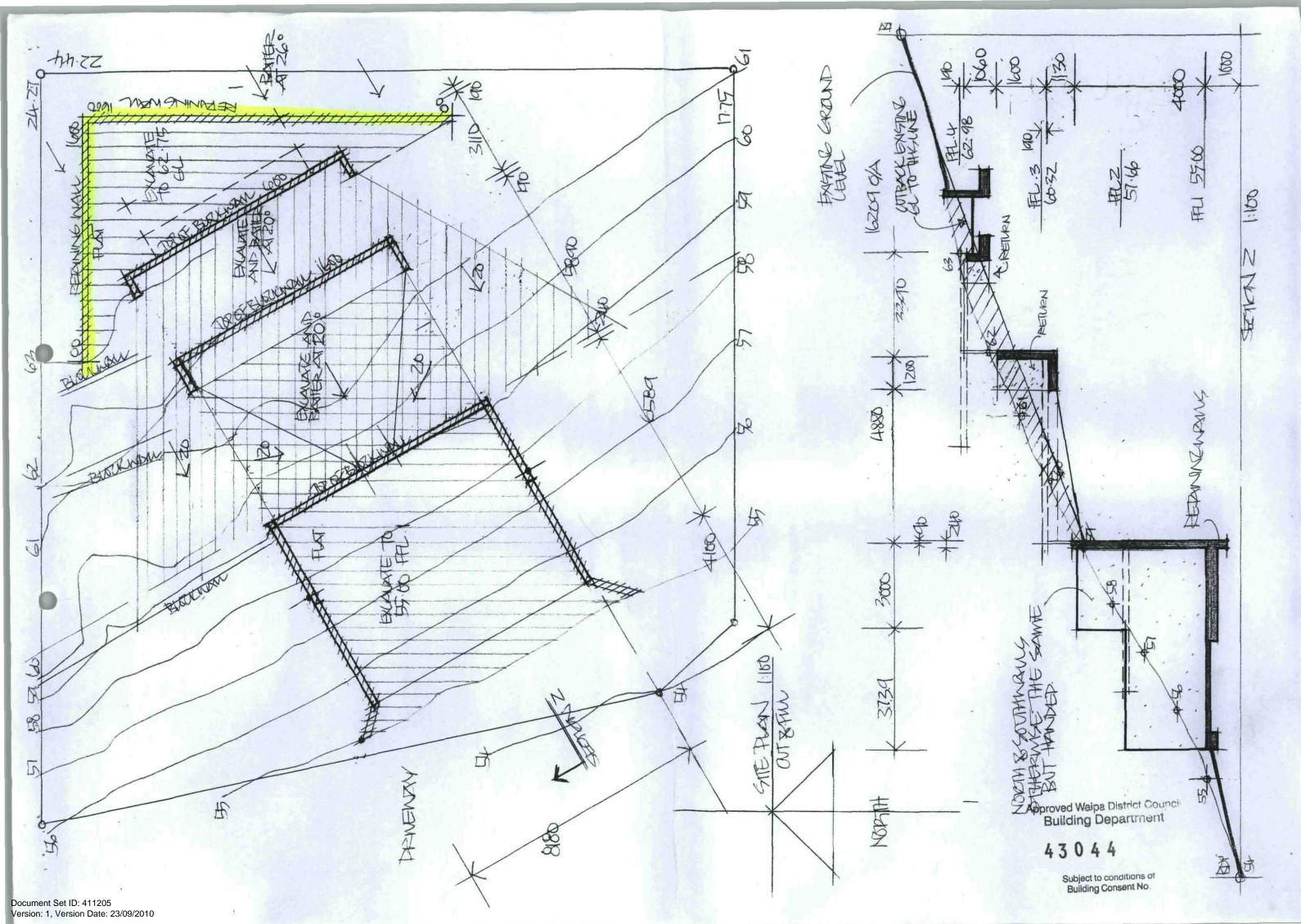
In New Zealand: 32-50 Vogel Street, Lower Hutt, PO Box 38-242, Wellington Mail Centre Call 0800 RESENE (0800 737 363)

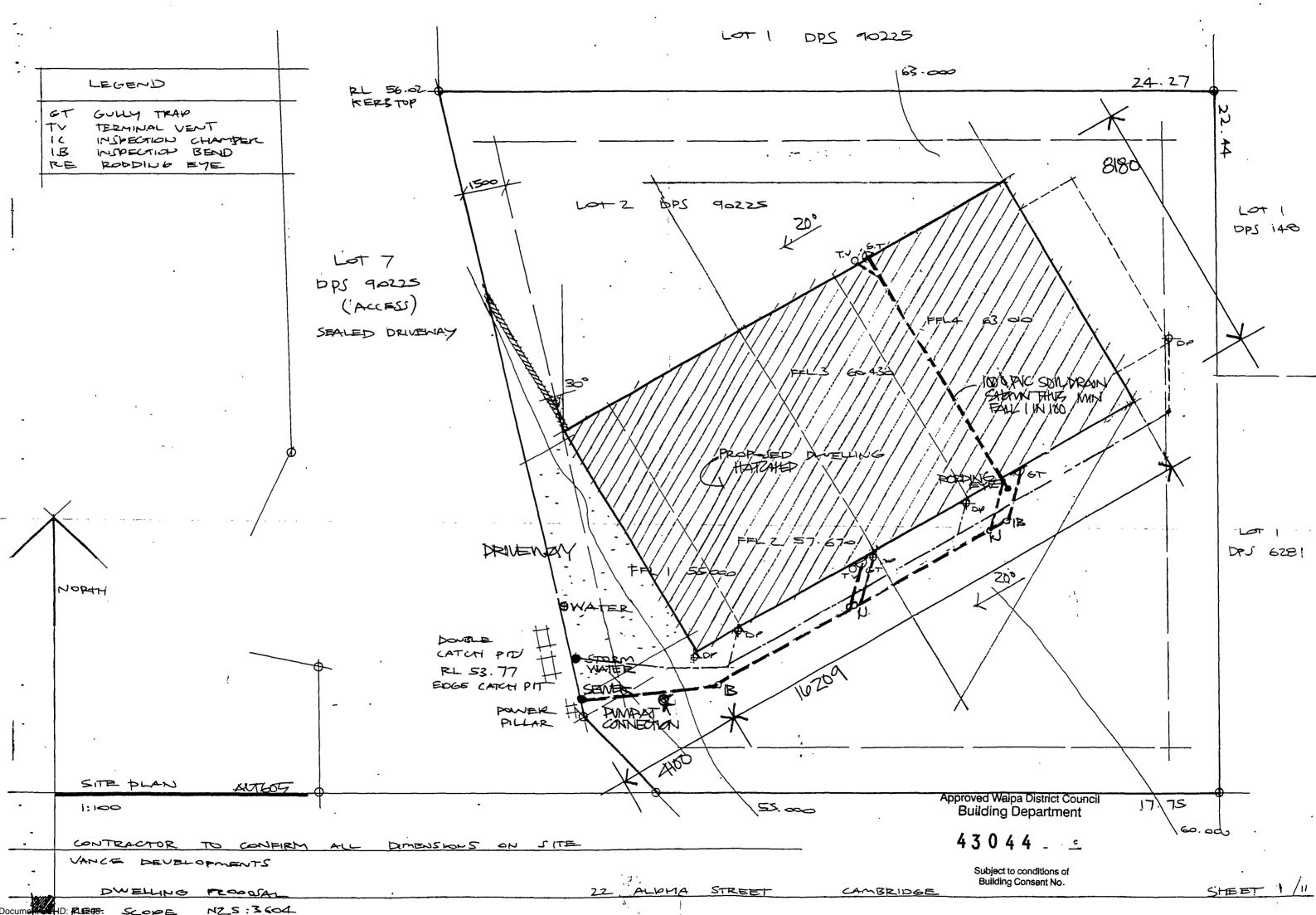
In Australia: 7 Production Avenue, PO Box 785, Ashmore City, Queensland 4214

Call 1800 738 383

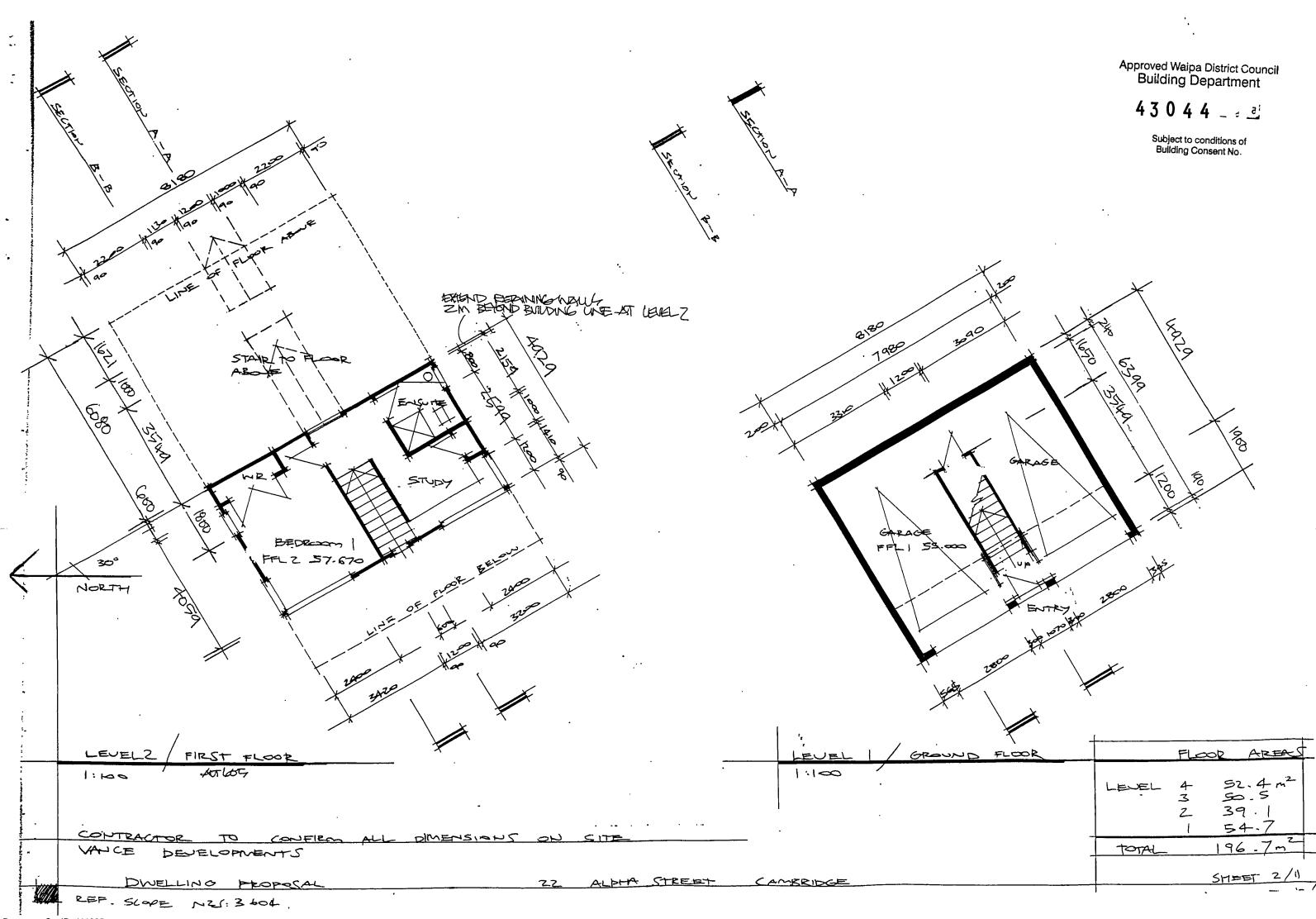
the paint the professionals use

BDY Timber pole retaining NEGHBORS GARDON SHED ON BOY Newatt EXISTING SITE CONTOURS BUCE LATTER 63.0 HEN REVAINING WOUS BY ENGINEER 610 600 CORNE THE 50 £4.6 <u>58</u>.0 \$7.0 Approved Waipa District Council Building Department 56.0 43044 _ = 3 0.58 Subject to conditions of Building Consent No. Cta Document Set ID: 411205 Version: 1 Version Date: 23/09/2010

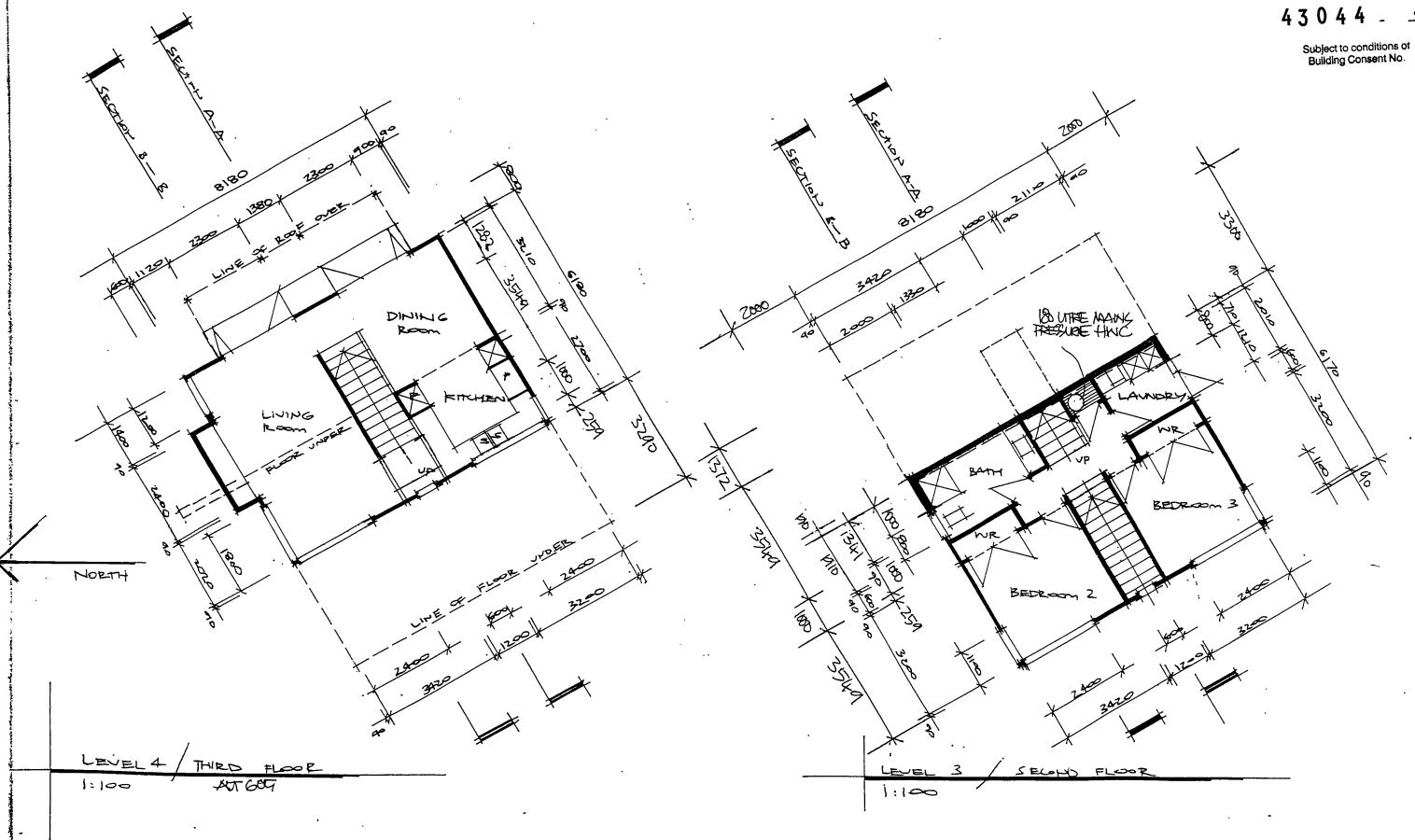




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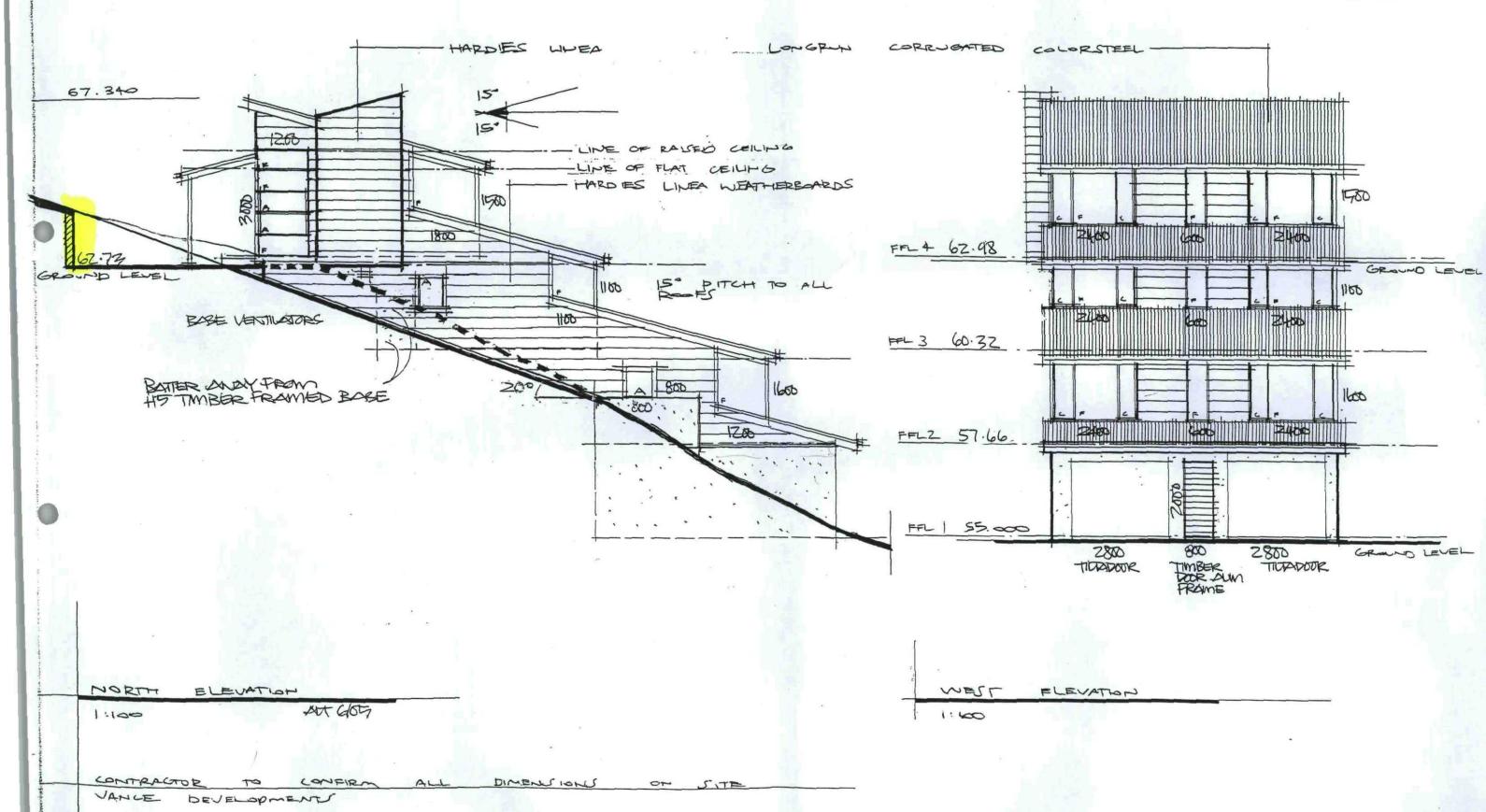
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Approved Waipa District Council Building Department

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Subject to conditions of Building Consent No.

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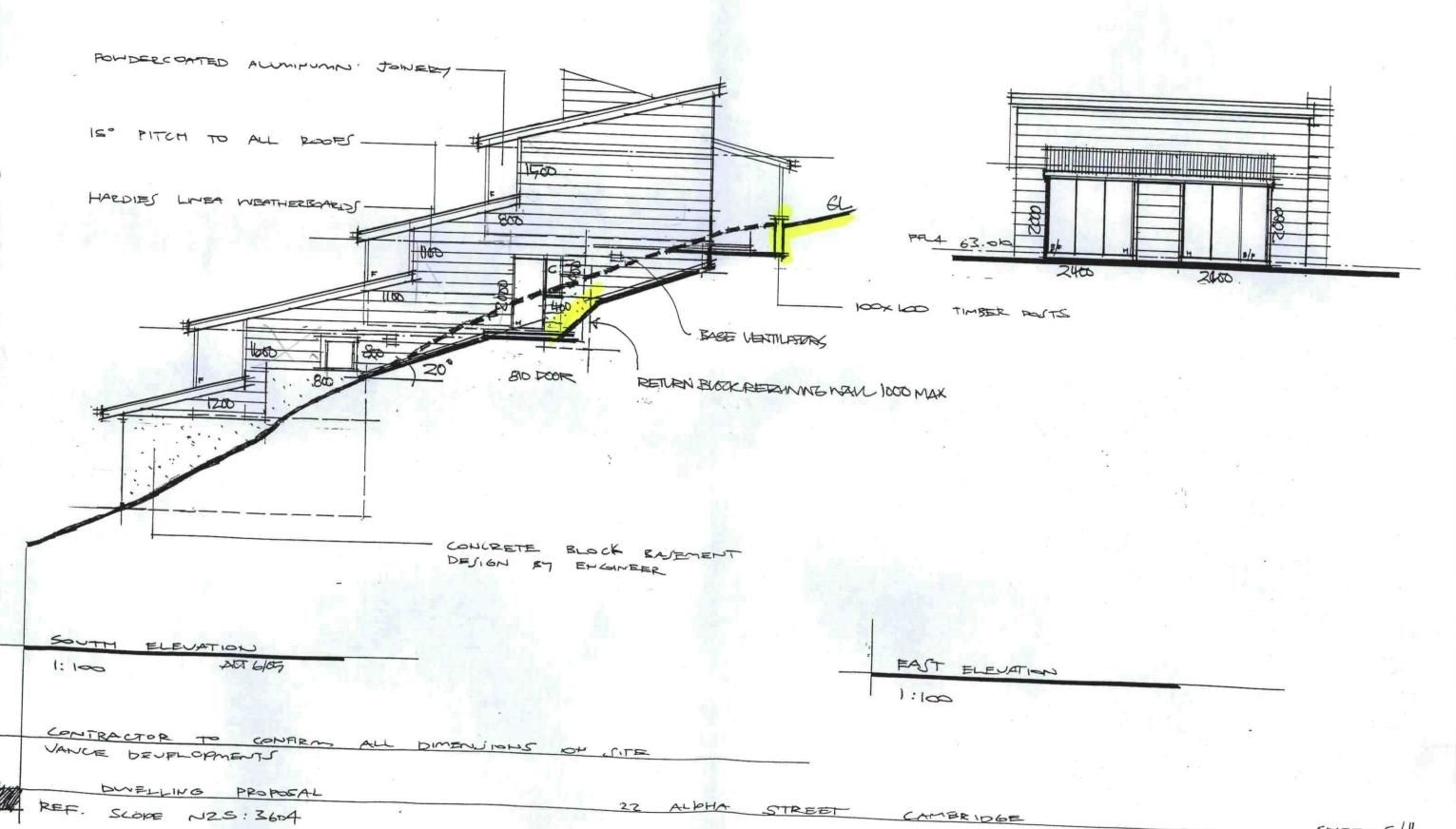
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Approved Waipa District Council Building Department

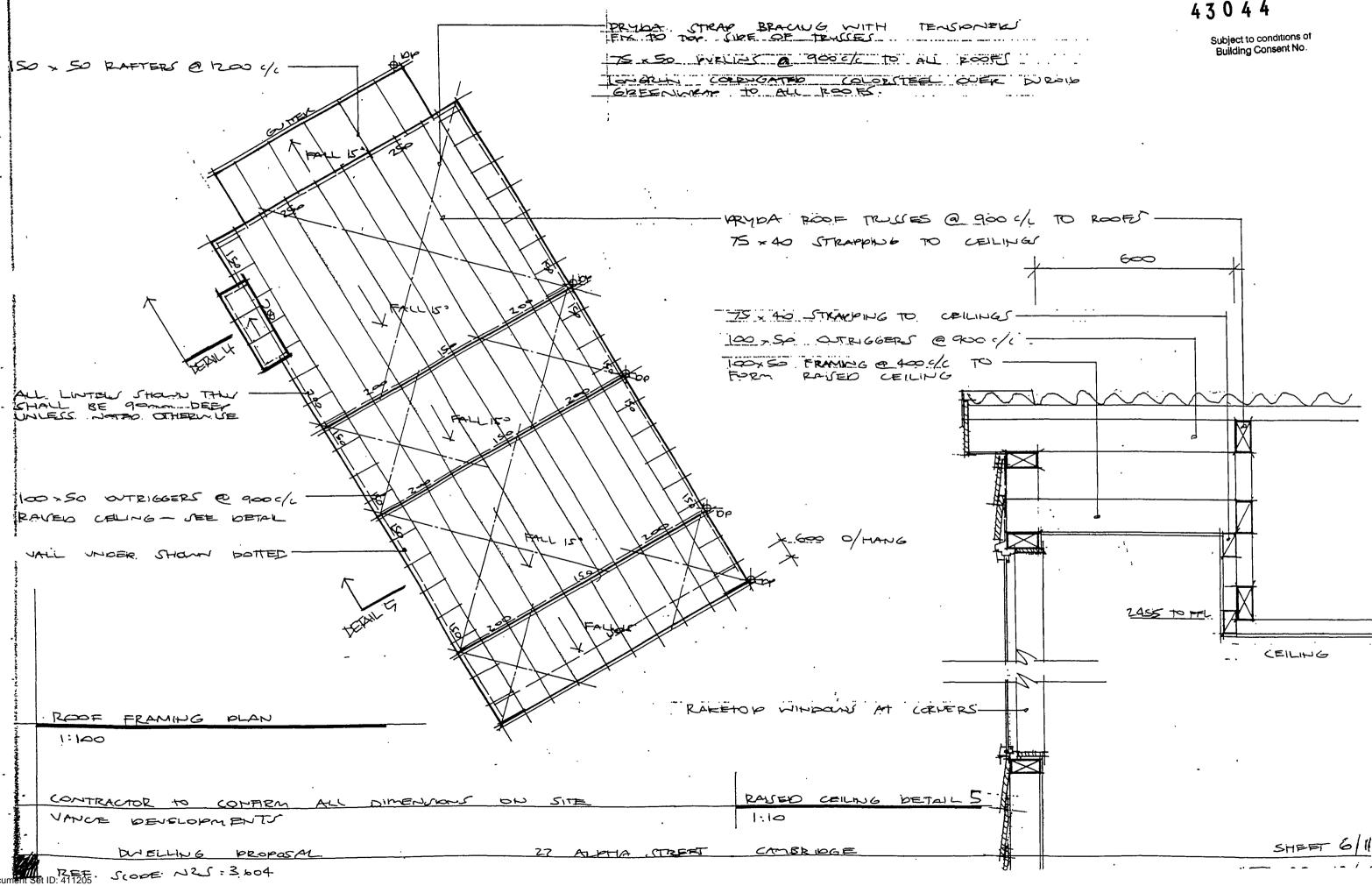
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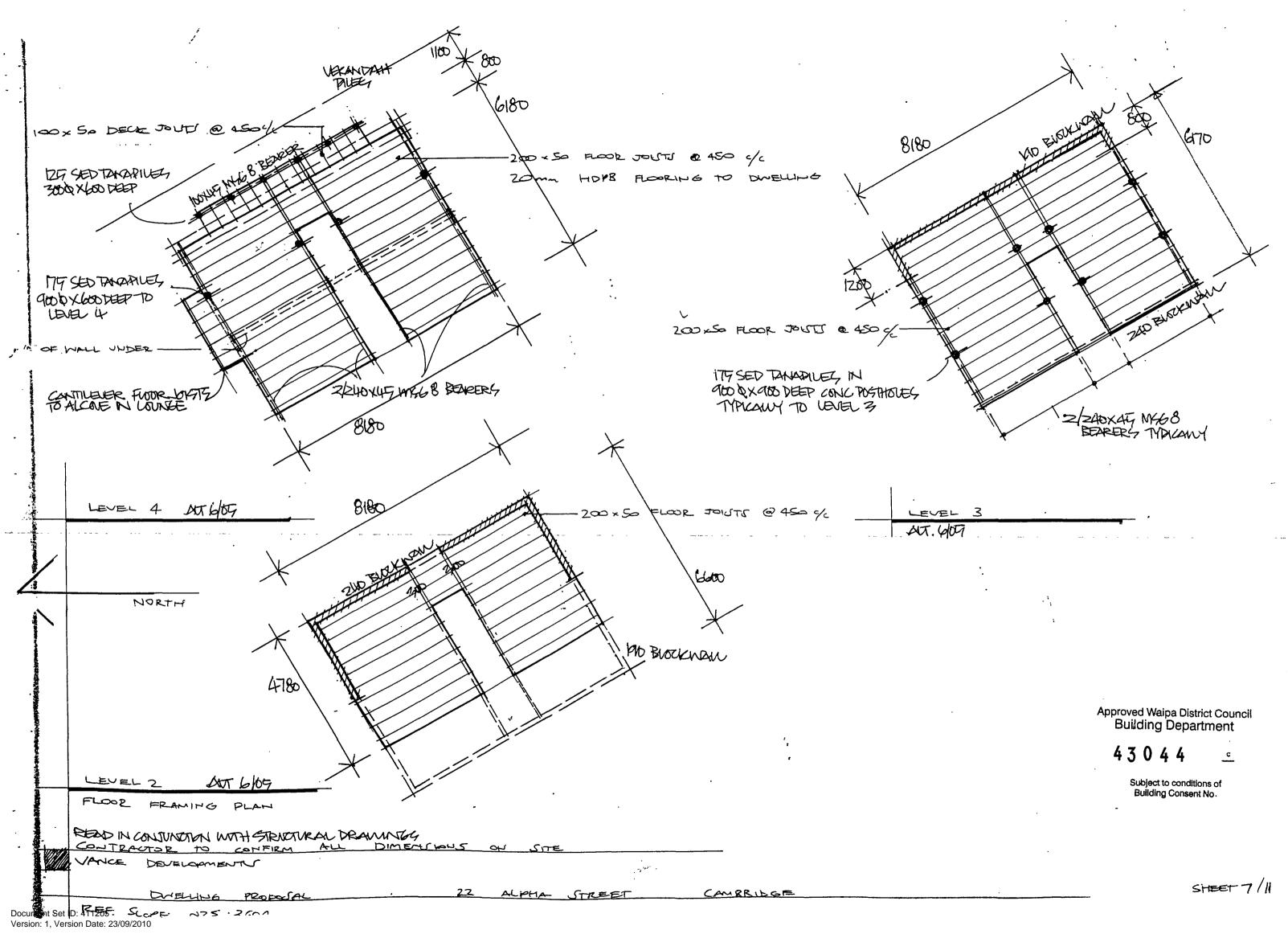


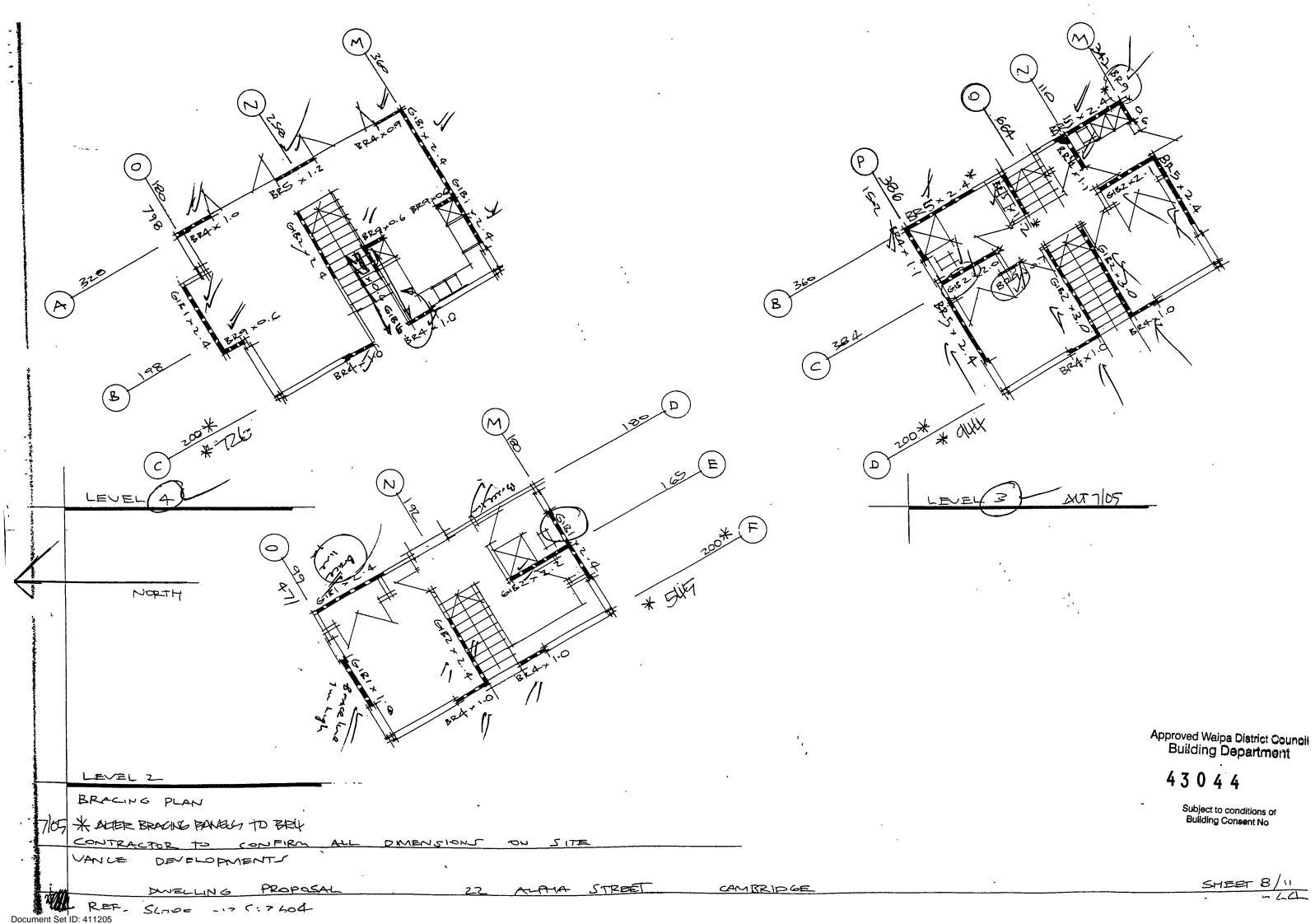
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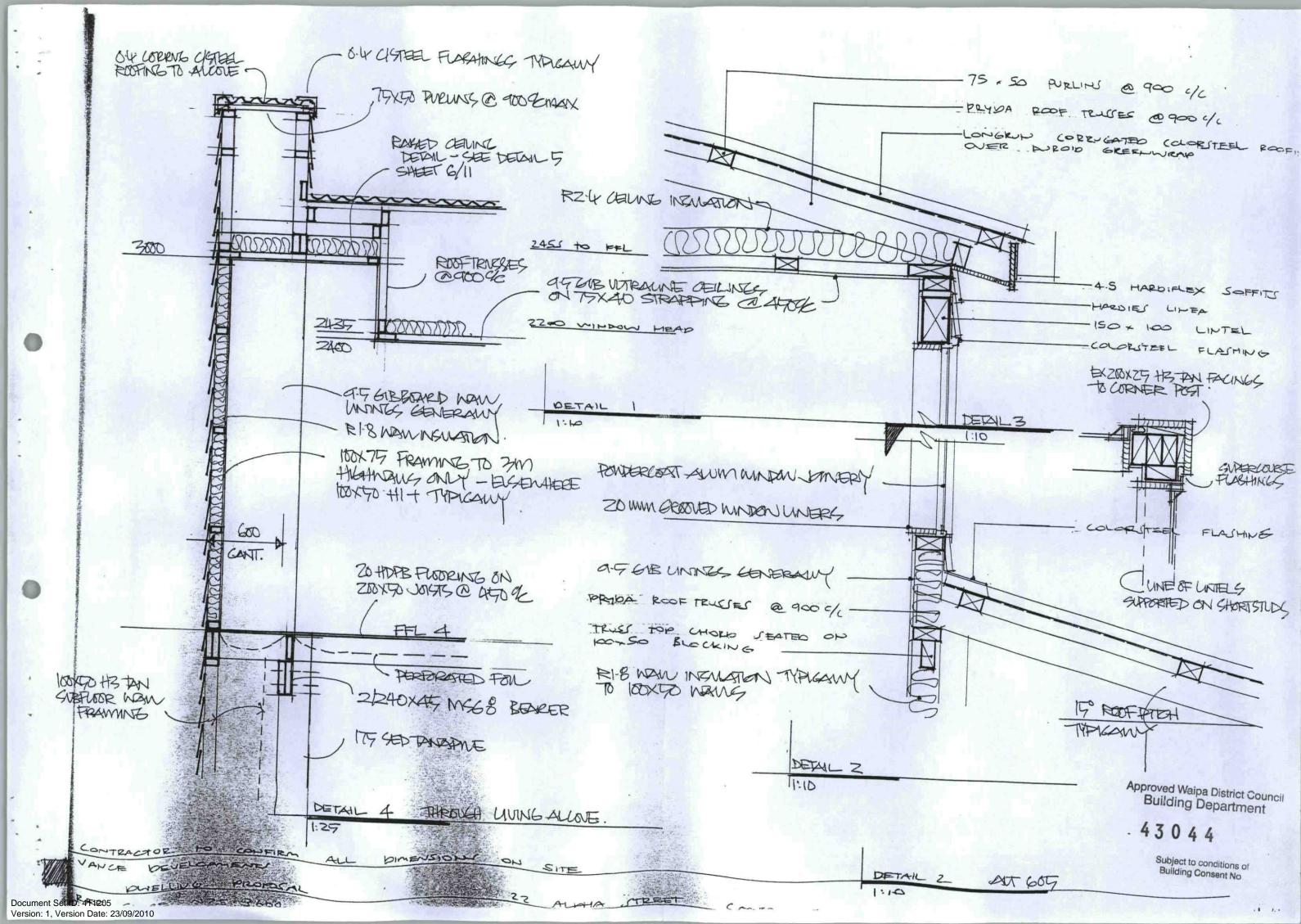


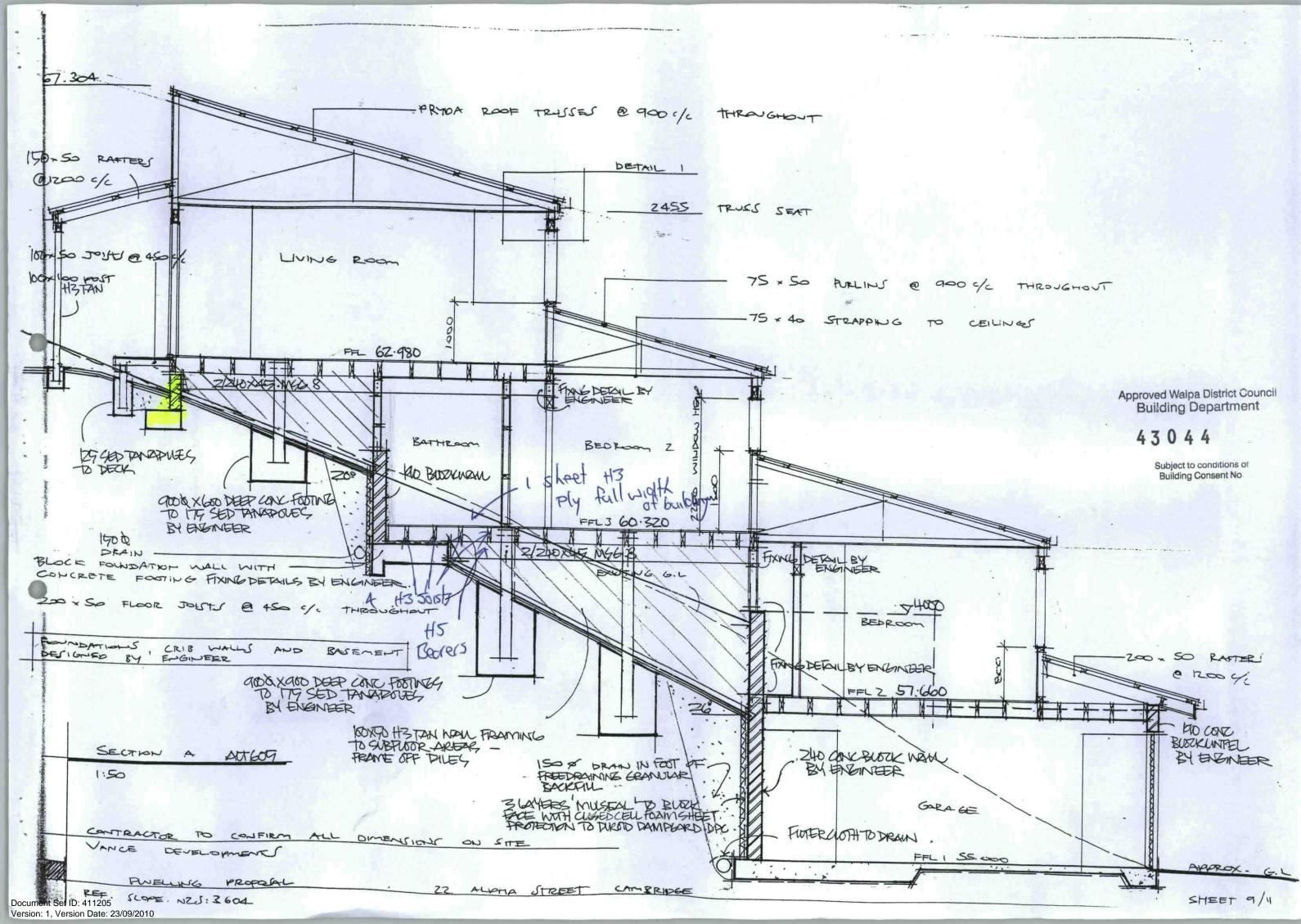
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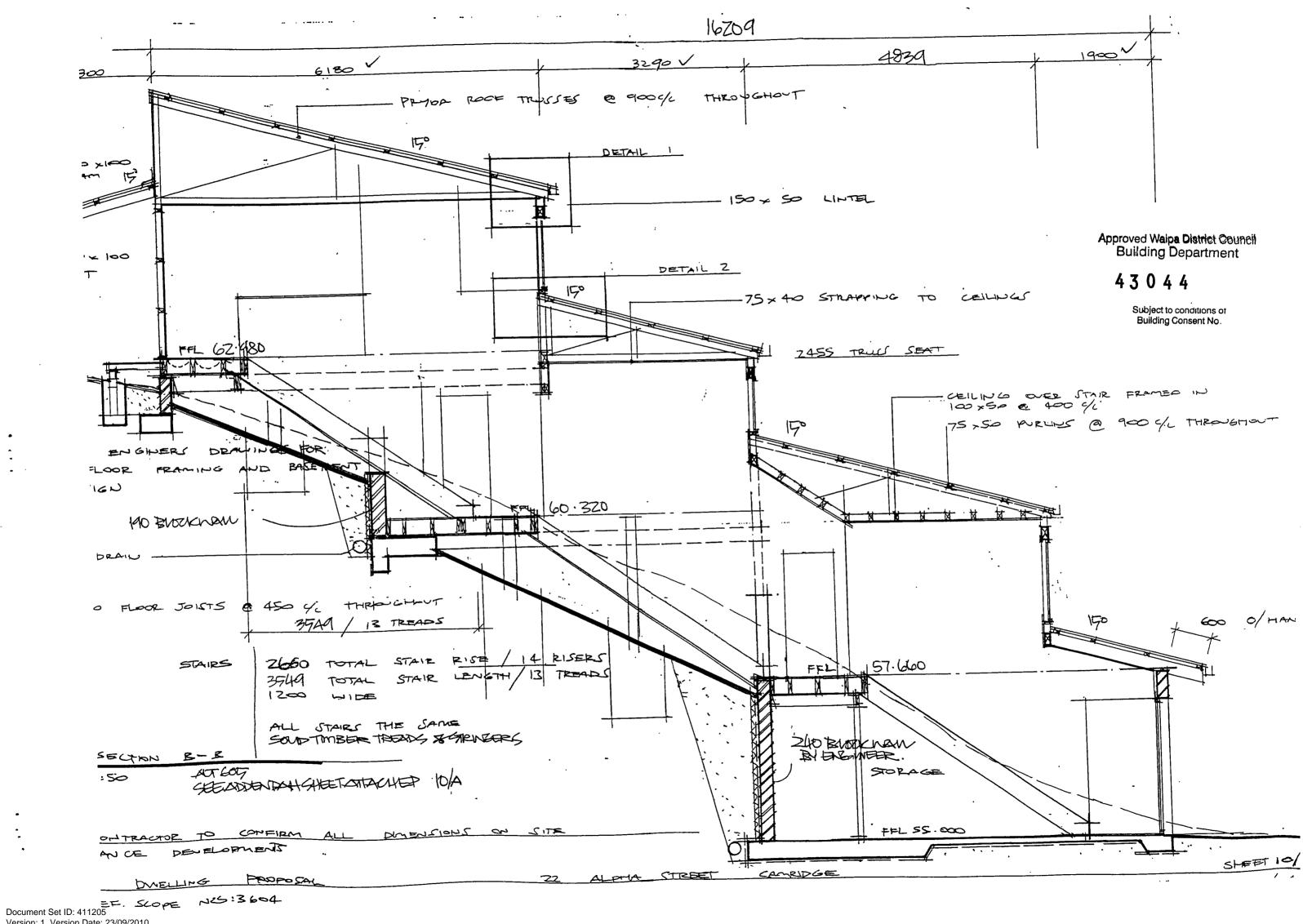




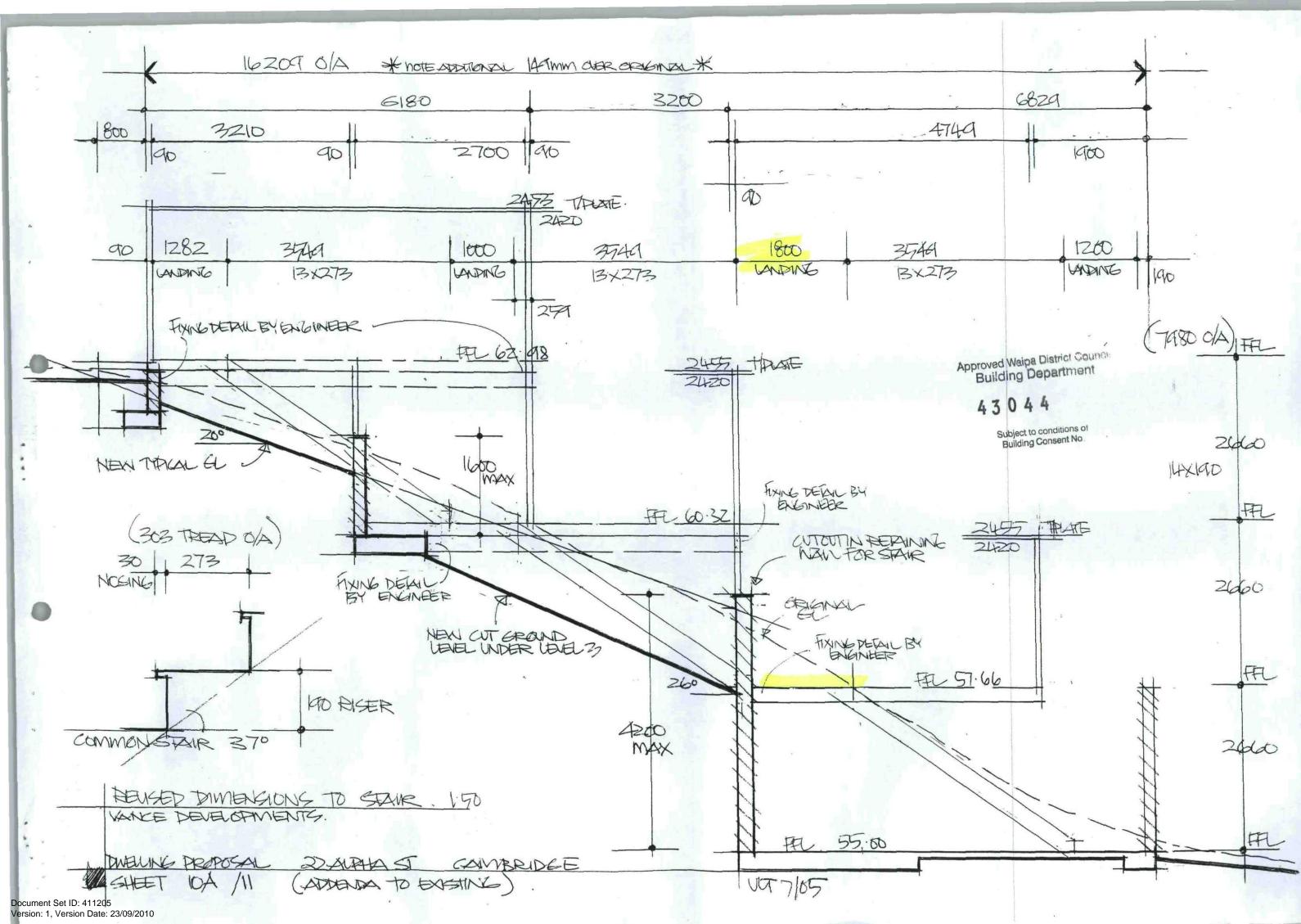
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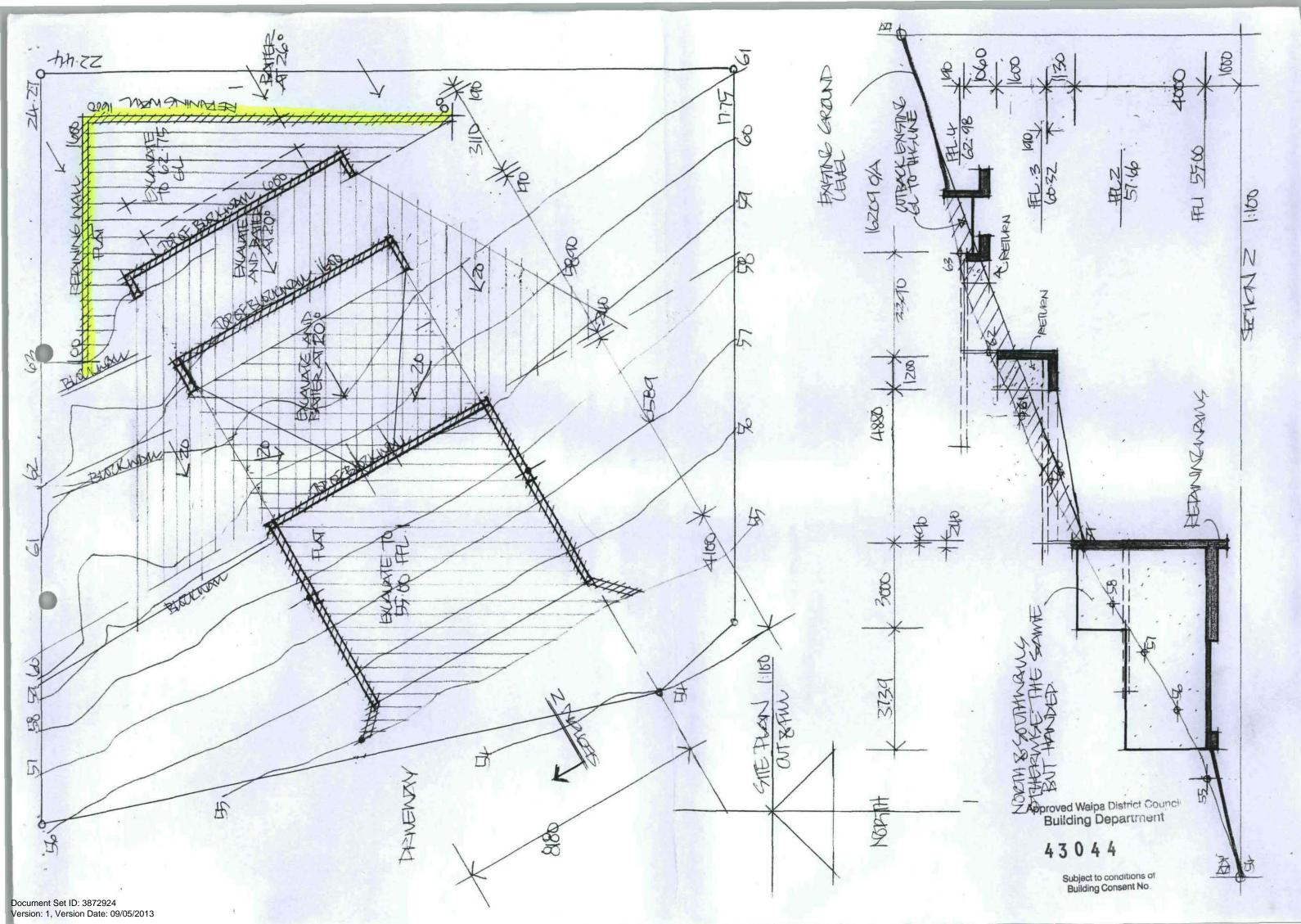


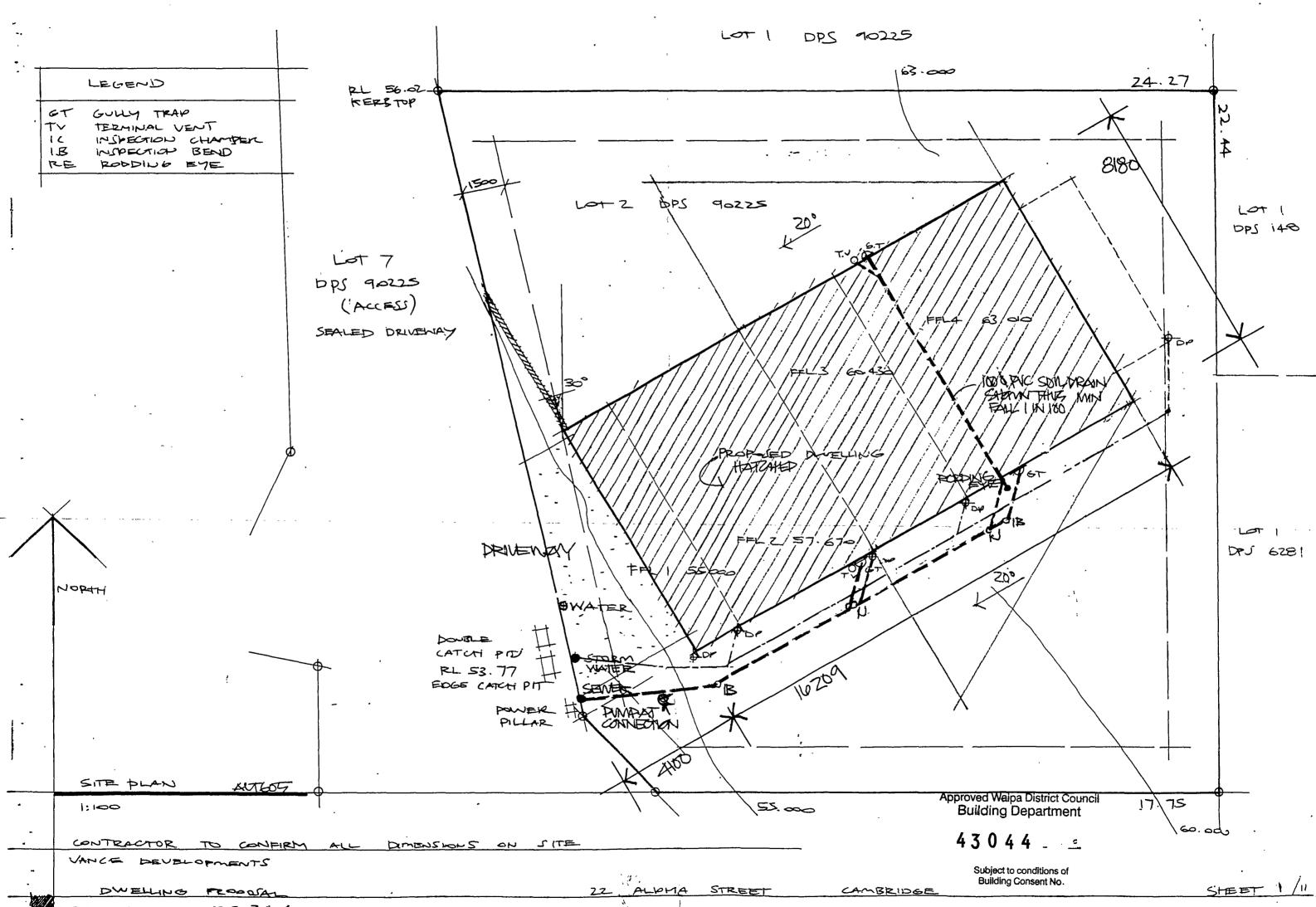


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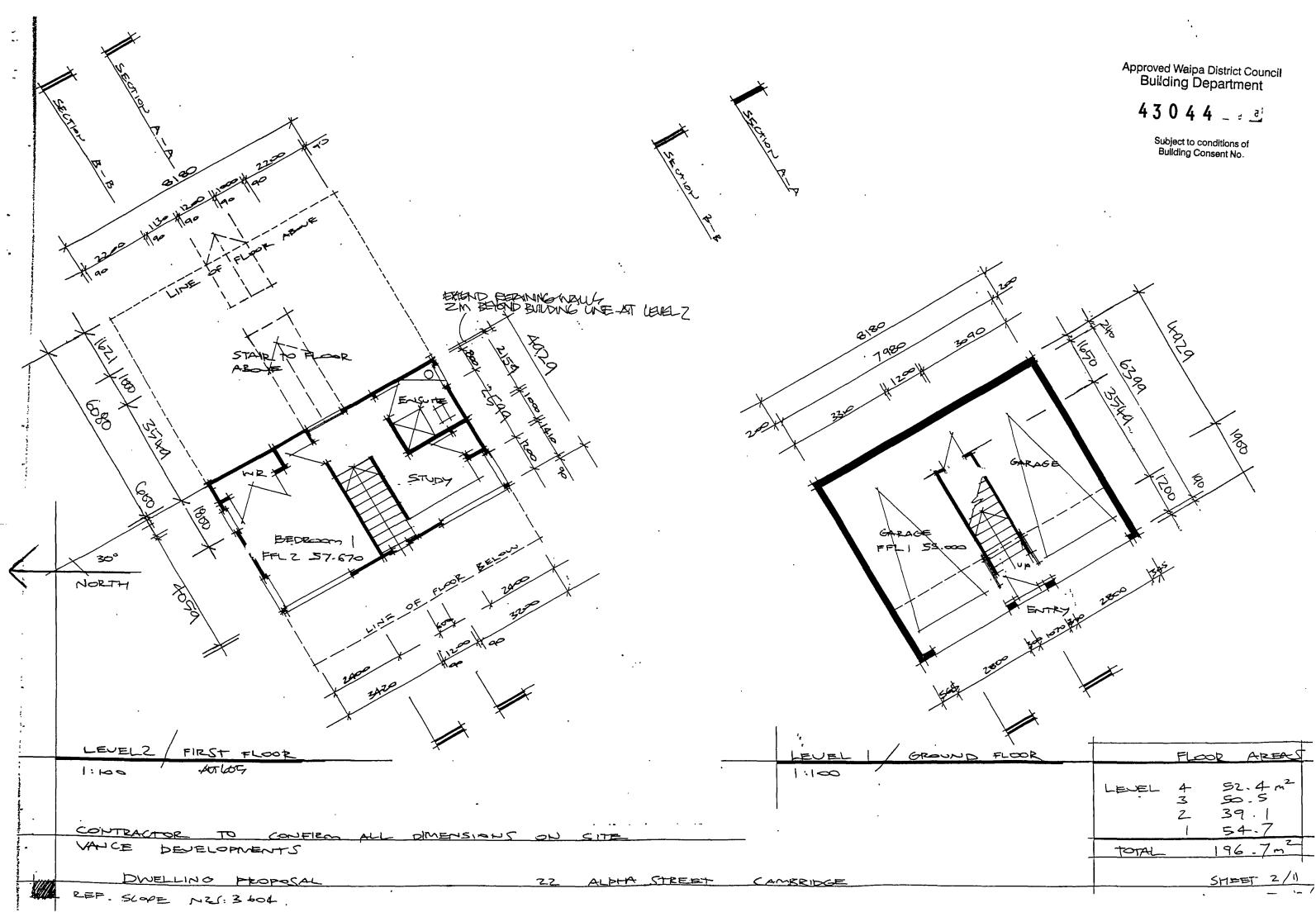
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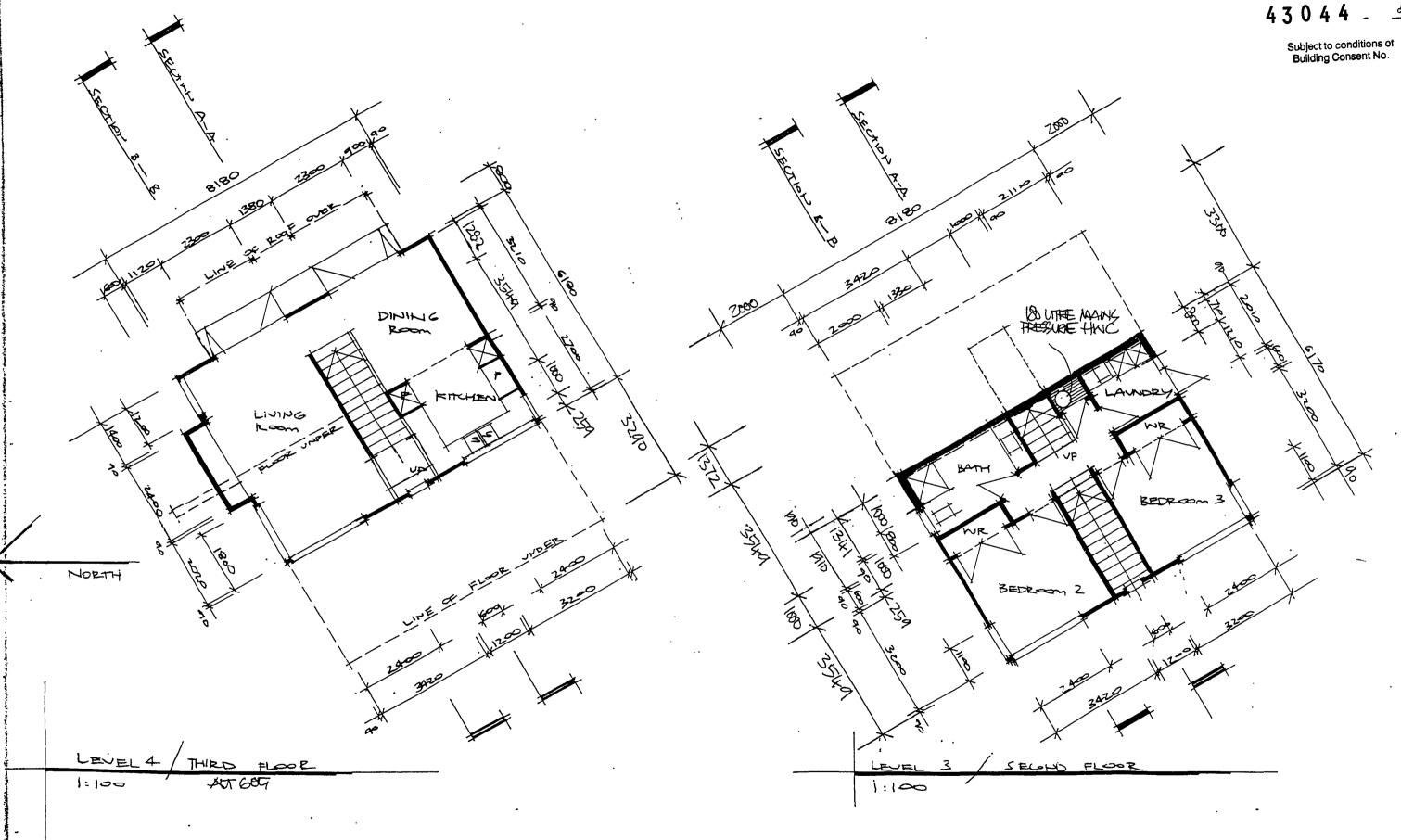




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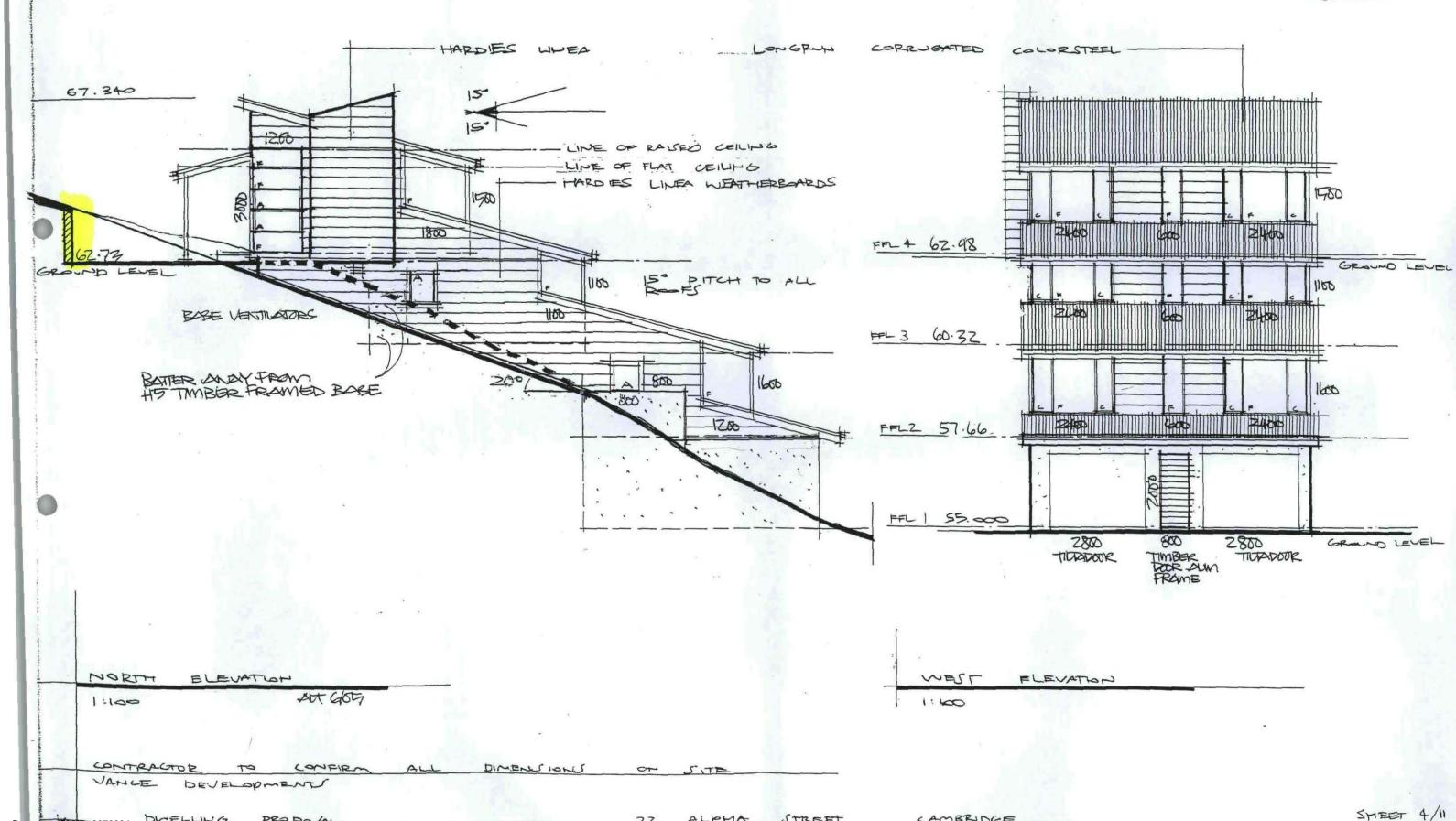
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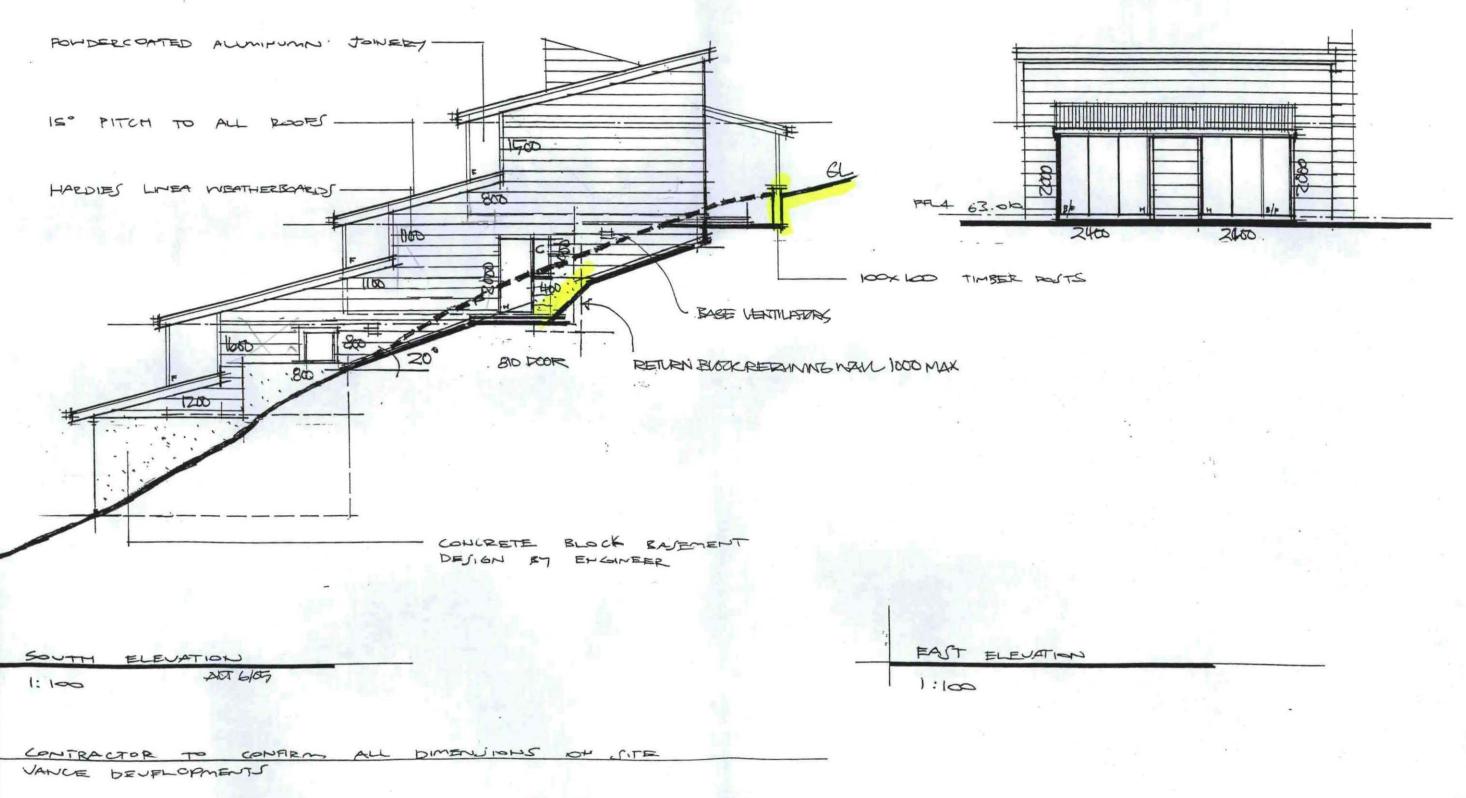
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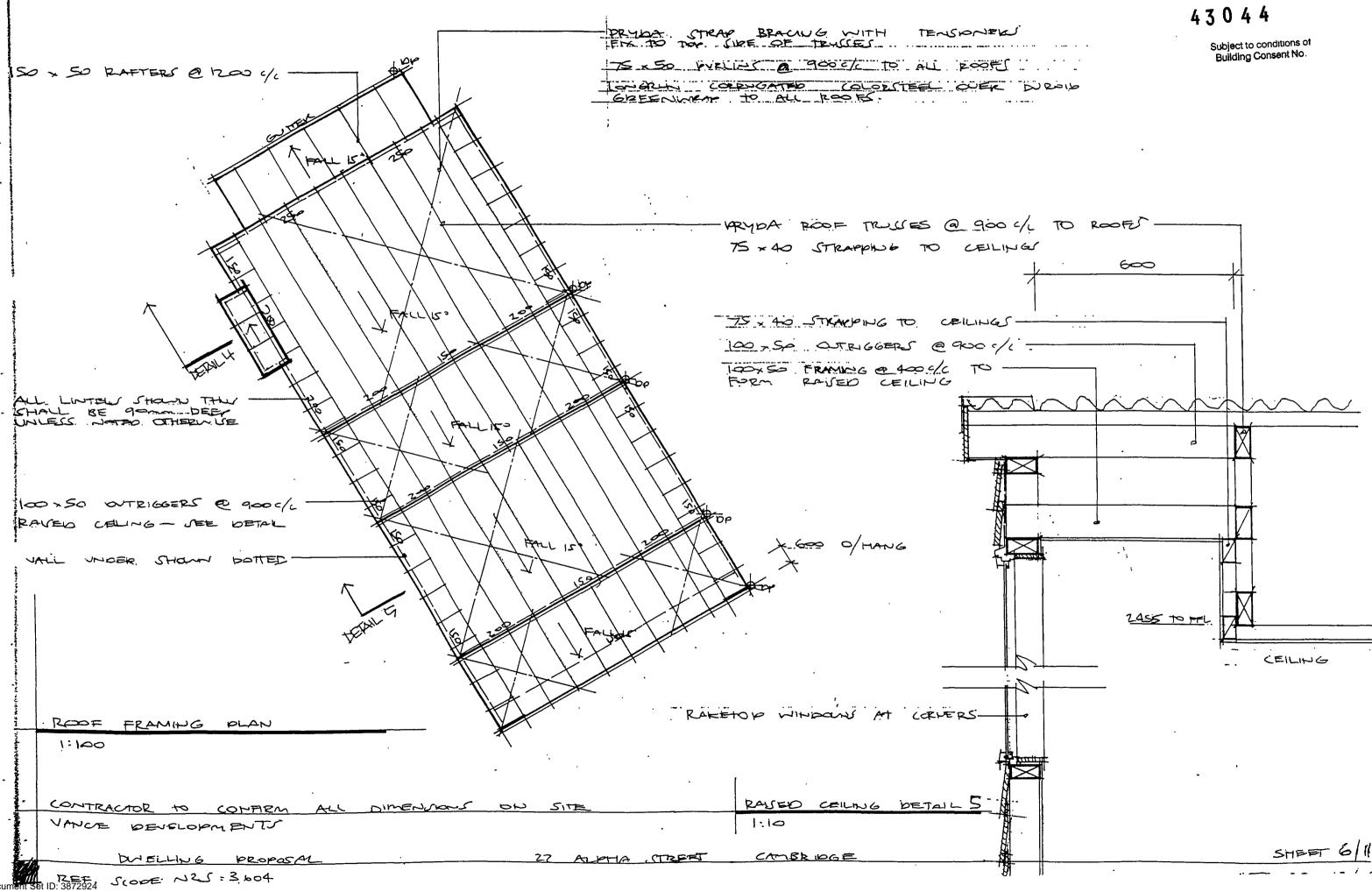
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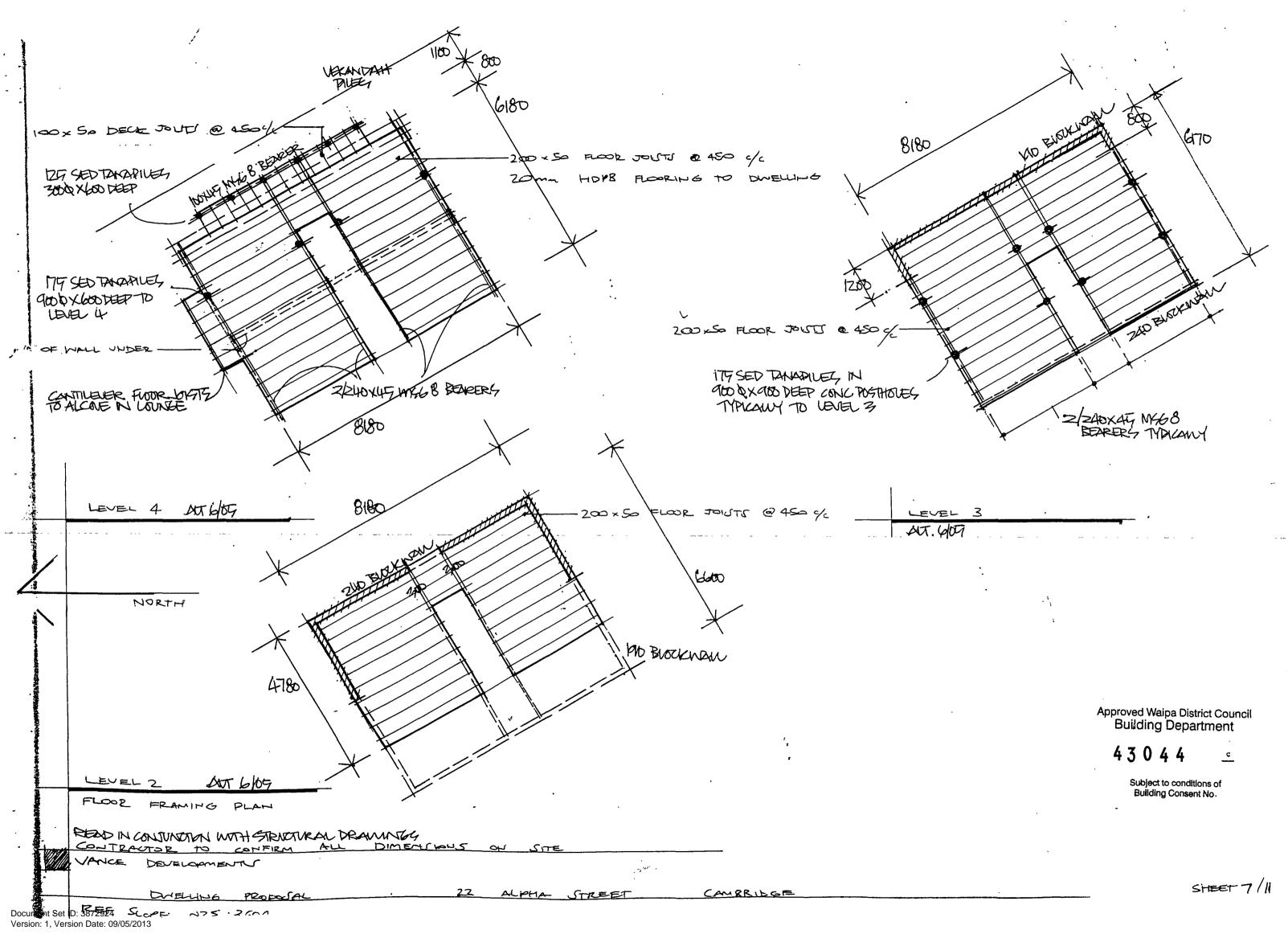
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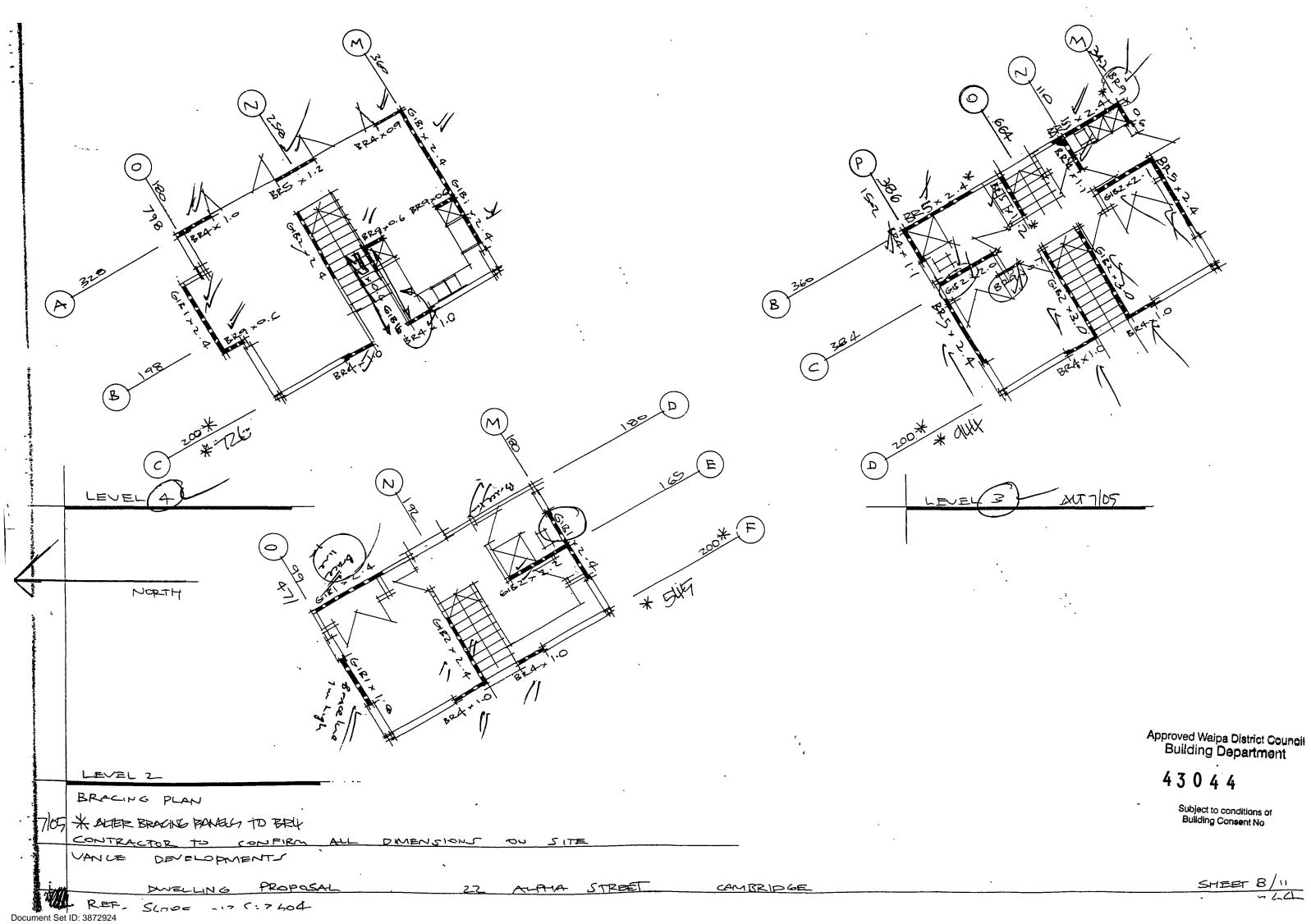
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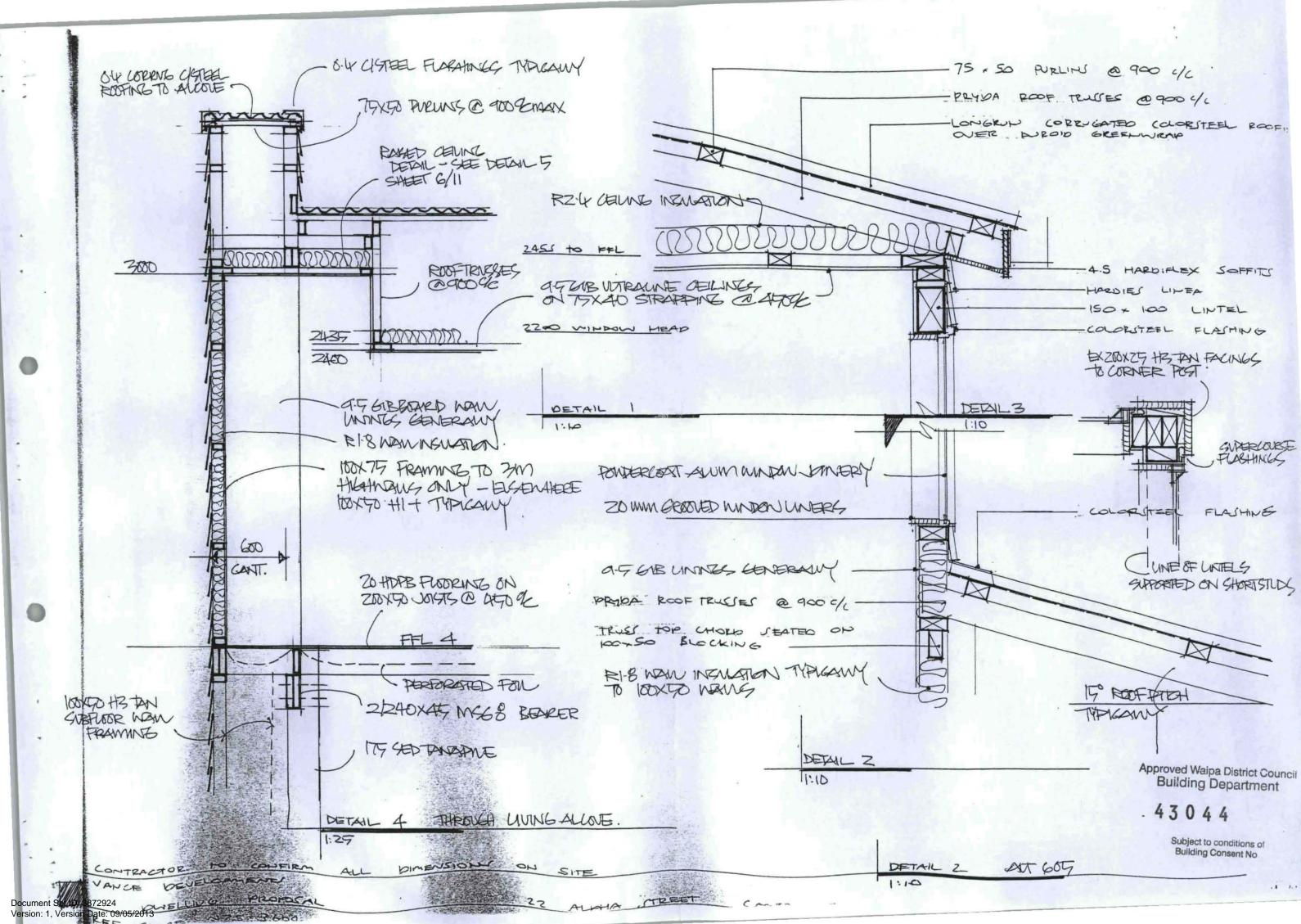
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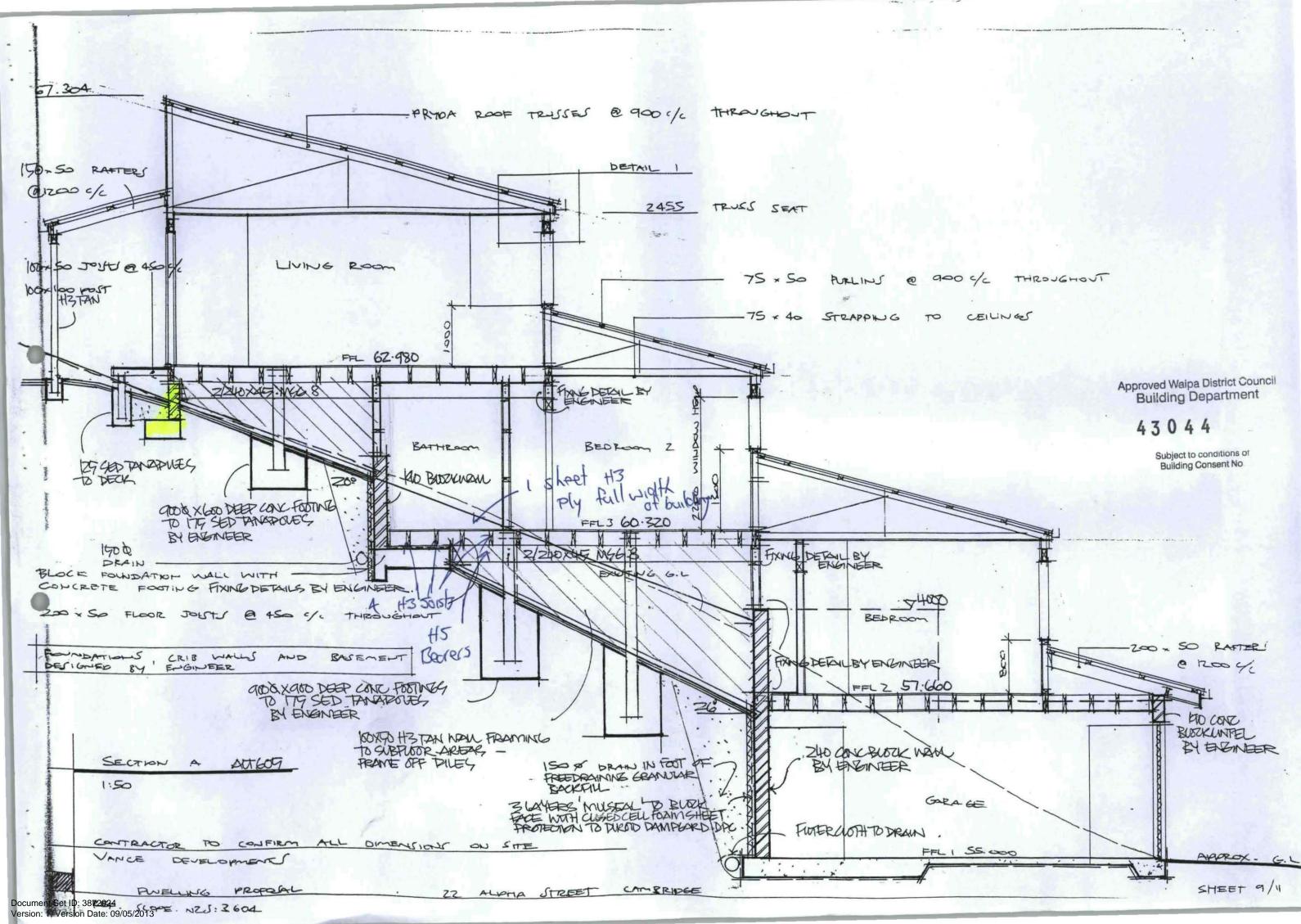
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Building Department

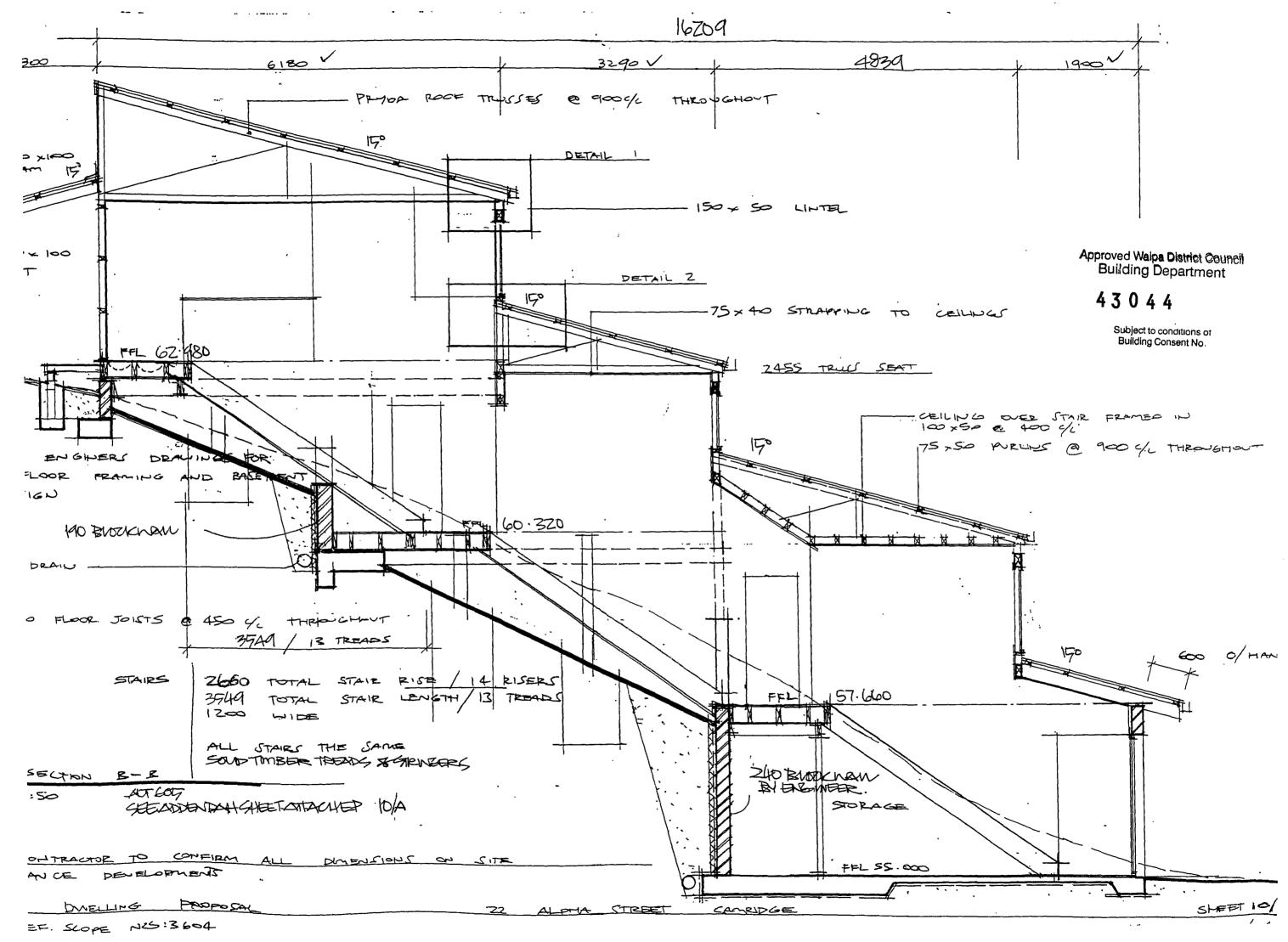


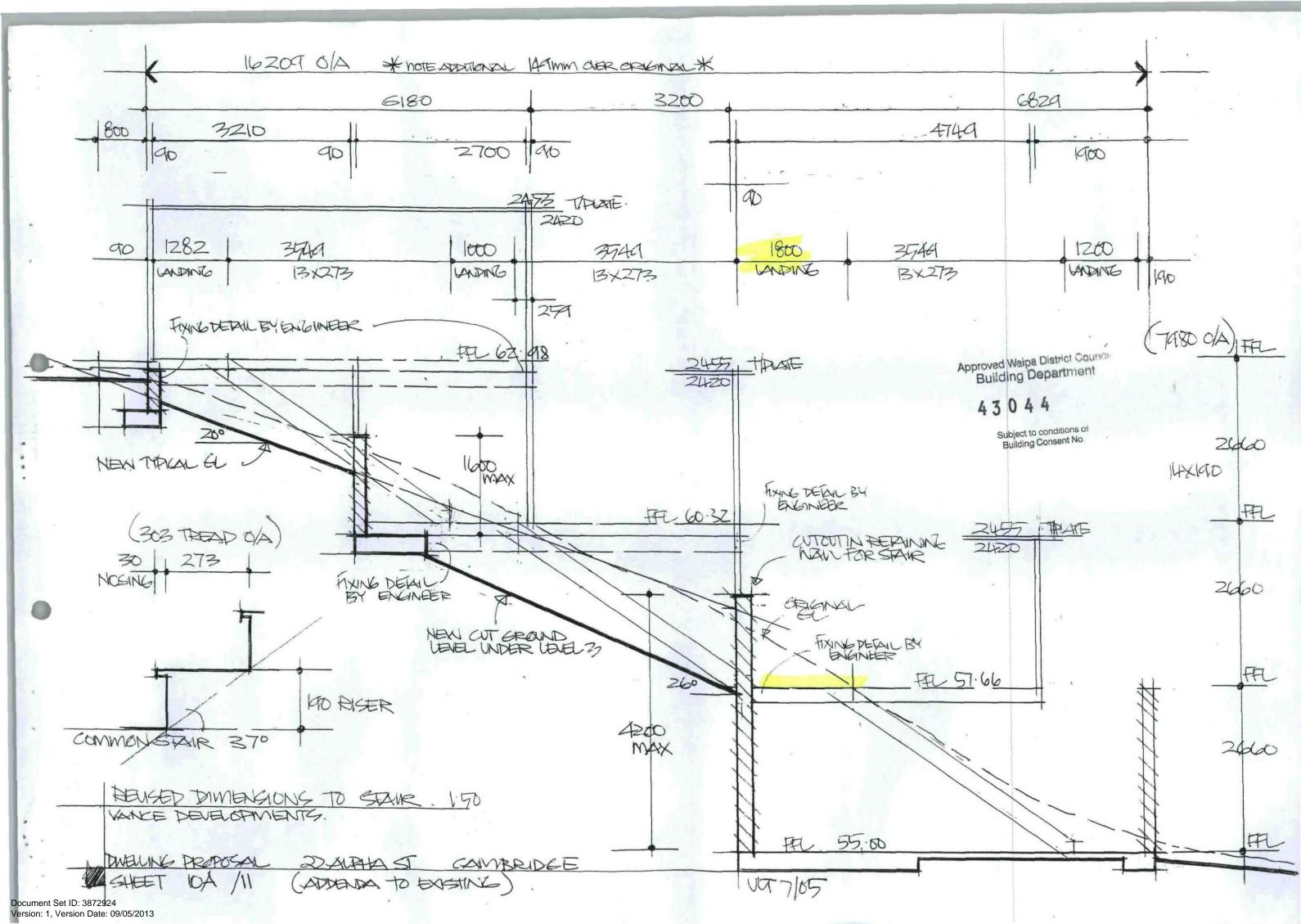












nent Set ID: 411141



Electrical Certificate of Compliance

for prescribed electrical work that is carried out on electrical installations and involves the placing or positioning or the replacing or repositioning of conductors (including fittings attached to those conductors).

To be completed whether or not an Inspection is

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EWRB 551

No. of attachments

rec	quired.				
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Postal address of	customer (if not as above)		Page 1		
WORK DETAILS	No. 2		1. 12. 1	7117	
41 No. of lig	hting outlets	No. of ranges	Please ti	ck (✓) as appropria	te where work includes:
27 No. of so	cket outlets	No. of water h	eaters	Mains	Main earthing system
Was any installation by the homeown	on work carried out er?	Yes N	lo S	Switchboard	Electric lines
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Version 1 V

Version: 1, Version Date: 23/09/2010





Code Compliance Certificate CCC/1714/08

Section 95, Building Act 2004

The Building

Street address of building: Alpha Street Cambridge 3434

Legal description of land where building is located: LOT 2 DPS 90225

Property id: 52710 Rating unit number: 04351/843.02

Intended use: Private Use

The Owner

JD Owen, KM Owen 22 A Alpha Street Cambridge 3434

First point of contact for communications with the council/building consent authority:

JD Owen

22 A Alpha Street

Cambridge 3434

Building Work

Building consent number: BC/1020/08
Issued by: Waipa District Council

Proposed work: Install New Window

Value of work: \$ 3200 Intended life: 50 years

Code Compliance

The building consent authority named below is satisfied, on reasonable grounds, that –

(a) the building work complies with the building consent

Form 7
WAIPA DISTRICT COUNCIL
Private Bag 2402, TE AWAMUTU 3840

Phone: 0800 924 723

Building(((

Page 1 of 2

Council Charges

Amount outstanding: \$ 0

Brent Montague

Building Control Officer

On behalf of: Waipa District Council

Date building consent received: 04/09/2008

Date CCC issued: 23/09/2008

Form 7 WAIPA DISTRICT COUNCIL Private Bag 2402, TE AWAMUTU 3840 Phone: 0800 924 723 Page 2 of 2

G.A.Hughes & Associates Ltd.

Consulting Civil & Structural Engineers

1036 Whangaparana Road, Whangaparana, Hibiscus Coast 1463. Ph. (09) 424-4253 Fax (09) 424-4258 email: gordon@gabughes.co.nx

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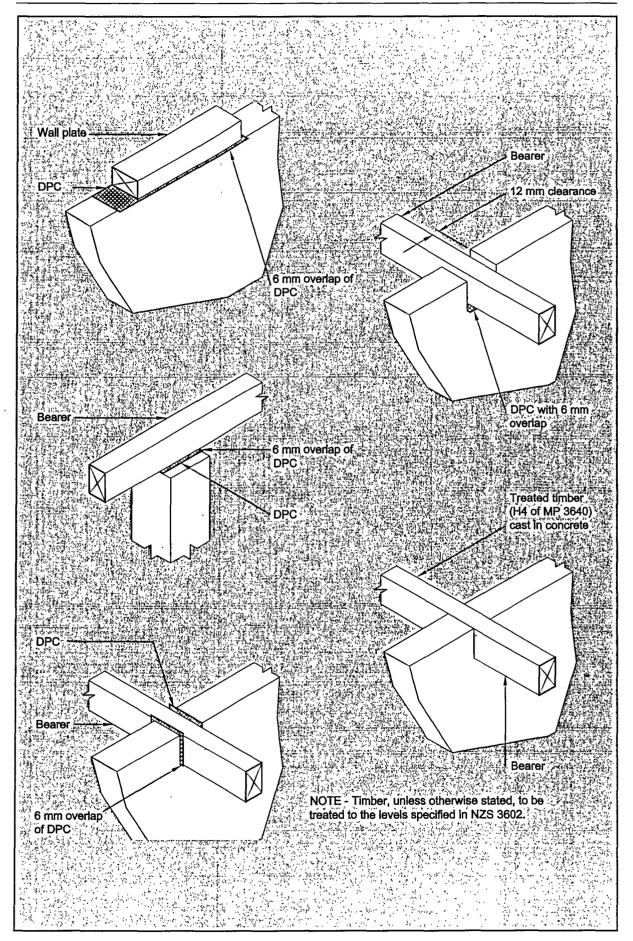


Figure 2.1 - Protection of subfloor framing timber from direct contact with concrete (see 2.3.3)

2.3.3

As shown in figure 2.1 framing timbers shall be separated from direct contact with concrete or masonry by either:

- (a) A free-draining air space of not less than 12 mm; or
- (b) A bituminous damp-proof course (DPC) or other suitable impervious material overlapping the timber by at least 6 mm;

This clause need not apply to:

- (c) Timber treated to Hazard Class H4 of MP 3640;
- (d) Situations where the concrete or masonry is protected from moisture by a DPM or by virtue of its position in a building. Included are bottom plates of internal walls on concrete floors with a DPM and wall framing, or stringers fixed to concrete, or concrete masonry walls which are not exposed to moisture from the external environment, or from wet areas within a building.

C2.3.4

The call dimensions are the nominal dimensions to which the timber is sawn. Structural timber is normally machined to uniform dimensions after sawing, and installed in a wet condition, either preservative treated or untreated. Thus timber of call size 100 mm x 50 mm is machined (gauged) to 94 mm x 47 mm and will be smaller after drying in use. There is increasing use of kiln dried framing in New Zealand, and the installed dimensions for 100 mm x 40 mm after kiln drying and machining are 90 mm x 35 mm. Tests of kiln dried F5 machine stress graded framing indicate that it is equivalent to green gauged No. 1 Framing. NZS 3601 lists the green gauged and dry dressed dimensions for other commmon timber sizes

2.3.4

Unless specifically stated otherwise in this Standard, cross-sectional dimensions of timber shall be the *call dimensions* as specified in NZS 3601. Gauged or kiln dried timber can be used provided the finished dimensions of the timber are no less than as follows:

	Call dimension	Gauged	Kiln dried
Member depth (= timber width)	D	D – 6 mm	D – 10 mm
Member breadth (= timber thickness)	В	B – 3 mm	B – 5 mm

2.4 Fastenings and fabrication

2.4.1

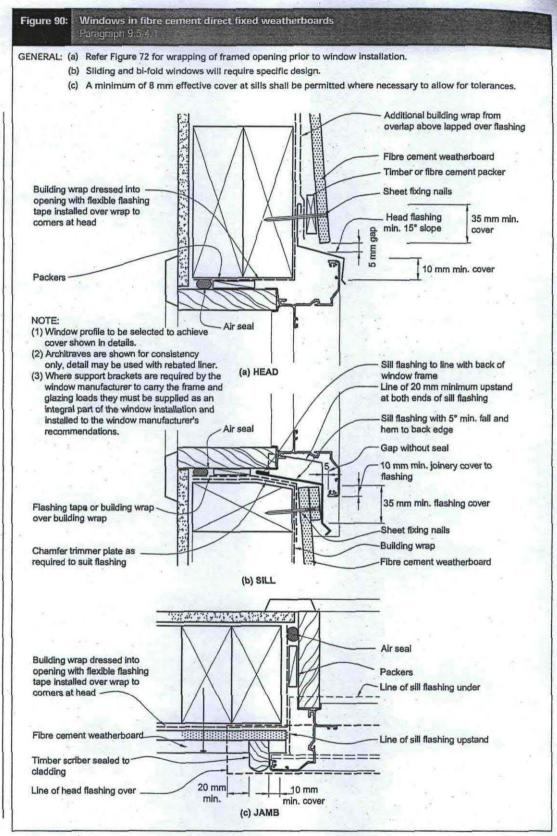
All parts of the building shall be securely fastened in accordance with 2.4.2, in order to resist all forces likely to be encountered during construction, or during the expected life of the building and to ensure that the building as a whole acts as a single structural entity.

2.4.2

Fastenings and connections shall be as specified in the relevant clause of this Standard or have a *capacity* as specified in the relevant clause of this Standard.

2.4.3

All timbers shall be set true to the required lines and levels with all mitres, butts, laps, housings, and other functions cut accurately so as to provide full and even contact over all bearing surfaces. Timber framing tolerances shall be as given in table 2.1.



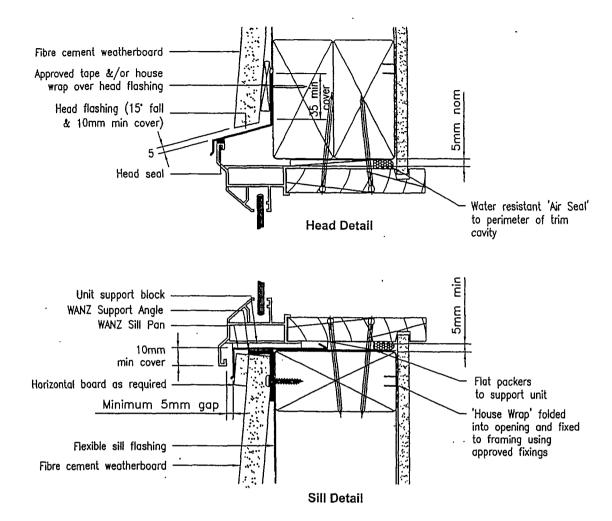
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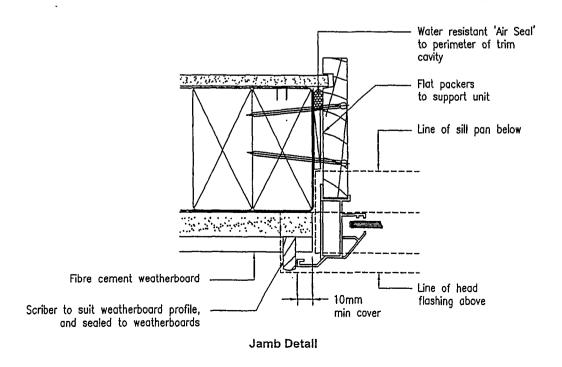


WANZ WIS WANZ WINDOW INSTALLATION SYSTEM Direct Fix — Fibre Cement Weatherboard

Date 1 July 2005

> Scale NTS .





--- THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL AND ONLY WITH PRIOR WRITTEN PERMISSION ---

X-200 Acrylic Waterproofing Membrane

Surface Preparation

Cracked Surfaces

Due to its high film build, Resene X-200 (Data Sheet D62) will completely fill cracks up to 1mm. For cracks larger than this, apply 1 coat of Resene Sureseal (Data Sheet D42) before filling the crack with a suitable elastomeric sealant.

New Cementitious Surfaces

Clean down thoroughly to remove all dirt, dust and loose material. Ensure surface is free from oil, grease, form release and curing agents. Glossy surfaces require an additional treatment of Resene Smooth Surface Sealer (Data Sheet D47).

Old Cementitious Surfaces

If moss and mould are present, treat with Resene Moss & Mould Killer (Data Sheet D80). Waterblasting at 21,000 kps (3000 psi) is the best surface preparation method prior to painting weathered cementitious surfaces or galvanised steel. If waterblasting is not possible, remove all loose powdery material by thorough wire brushing. Allow to dry and apply 1 coat of Resene Sureseal (Data Sheet D42).

Sanding dust from old lead or chromate based paints or old building materials containing asbestos may be injurious to the health if inhaled or ingested. Seek expert advice if the presence of these materials is suspected.

Application

Airless Spray

Use Titan-tip adjustable tip, number 341-041 or similar. Use a coarse filter in the system as the fibre reinforcement of X-200 may clog finer filters. Apply 2 coats as for Brushing.

Brush

Apply 2 coats at specified rate (to equal 3 sq. metres/litre total).

Roller

Use a 12-20mm synthetic fibre roller or texturing roller depending on surface. Apply 2 coats as for brushing.

Standard Spray

Use a De Vilbiss JGA Gun with a D Tip DEX Needle and 107J Air Cap or equivalent.

Concrete Blocks

Due to regional variations in concrete block standards, 2 coats may be sufficient to waterproof. Waterproofing can only be assured when all voids are filled, therefore 3 coats over block is a safer specification. Brush or roller application is preferred over block and essential for at least the first coat.

Precautions

- 1. Do not thin.
- 2. Ensure correct pre-treatment is used.

Information contained in this Data Sheet is re-validated every two years following issue date.

Please ensure current Data Sheet is consulted prior to specification or application of Resene products.

If the surface you propose to coat is not referred to by this Data Sheet, please contact Resene for clarification.

In New Zealand: 32-50 Vogel Street, Lower Hutt, PO Box 38-242, Wellington Mail Centre Call 0800 RESENE (0800 737 363)

In Australia: 7 Production Avenue, PO Box 785, Ashmore City, Queensland 4214 Call 1800 738 383

Visit our website www.resene.com or email us at advice@resene.co.nz

