MSC Consulting Group Ltd
Civil & Structural Engineers

28 May 2019

Hum Hospitality Limited and Falling Apple Charitable Trust 40339T
123 Grafton Rd
Auckland, New Zealand

Attention: Rosanne Armitage

Dear Rosanne

123 Grafton Rd, Auckland-Piling and Leveling Work

Introduction and Expertise

1. In accordance with instructions from Rosanne Armitage, I provide this report on the re-piling and releveling work undertaken at 123 Grafton Road.

2. I have been asked to comment on whether the repiling and releveling work has been completed in accordance with the Building Consent for that work and whether the standard of the work provides a sufficient basis for the issue of a CCC in respect of that work.

3. MSC, which was established in 1984, is a firm of civil and structural consulting engineers with an office in Auckland. I am a member of our structural team which specialises in the structural design of buildings including multi-storey office buildings and apartments.

   I am a registered Chartered Professional Engineer with Engineering New Zealand (CPEngNZ). I have a Bachelor of Engineering (Civil) and graduated from Canterbury University in 1987. Since graduating, I have worked as a Consulting Engineer for various companies in Wellington, Sydney, London and Auckland.

   I have worked for MSC Consulting since May 1999 and my experience includes structural design and observation of construction of many projects in the areas of commercial, industrial, multi-level apartments, multi-level offices, hotels, education and residential buildings.

Property

4. The subject property is located on a moderately sloping site on the corner of Grafton Road and Grafton Bridge. The building is a two storey timber framed villa constructed circa 1900's. It would have been constructed as a residential dwelling and continues to provide this function at the time of this report alongside other community activities including a café. The quality of the dwelling would be regarded as average and poor to the external rear.

5. The building has Category B heritage status and had this status at the time the Building Consent application for Repiling and Releveling was made.

6. As part of our investigation we have undertaken the following:

Auckland: 12-14 Como Street, PO Box 33426 Takapuna, Auckland 0740 | 09 486 2210
Christchurch: 82 Oxford Terrace, Christchurch 8011, New Zealand | 03 379 8451
info@msc.co.nz
www.msc.co.nz

6.1 Site inspection by Anil Krishnan and Kevin Crowe of MSC on Monday 11th March in the presence of Rosanne Armitage of the sub-floor area and re-piling.

6.2 Site inspection and detailed review of faults by Kevin Crowe on 8th May in the presence of Rosanne Armitage.

6.3 Review of the Auckland Council Property File including:

6.3.1 Application for Building Consent dated 6 May 2009;

6.3.2 Handwritten Plans and Bracing Calculations provided for Building Consent undated but stamped as processed on 18 May 2009;

6.3.3 Building Consent No B/2009/2029 dated 18 May 2009;

6.3.4 Foundation Checklist dated 10 June 2009;

6.3.5 Foundation Checklist dated 25 June 2009;

6.3.6 Framing Checklist dated 29 June 2009;

6.3.7 Residential Final Checklist (Pre Code Compliance Certificate ("**CCC**") Findings) dated 18 September 2009;

6.3.8 Application for CCC dated 17 July 2009;

6.3.9 CCC dated 24/9/2009.

6.4 Review of Hum's Work Complete Debrief Report dated May 2014 which is a detailed account of work undertaken by Hum, with photographs, to that date;

6.5 Photos from website of Grace Repiling in 2013; and

6.6 A.J.Carmont letter dated 25th March 2013

6.7 Affidavit of Joel French dated March 2013

6.8 Affidavit of Noel Kay dated 26th March 2013

6.9 Affidavit of Rhys Phillips dated March 2013

6.10 Grace Repiling Email dated 5th April 2013

6.11 Lautrec Letter dated 15th March 2016

6.12 Tanya Wylie email dated 26th March 2013

6.13 Email Communication from Auckland Council 5th February 2014

Scope of Report

7. In this report I comment on the following:

7.1 whether the plans provided to the Council as part of the application for the Building Consent attached comply with the Building Code current at the time;

7.2 whether the repiling and releveling works:

7.2.1 comply with the plans attached; and/or

7.2.2 comply with the Building Code

7.3 whether there was a proper basis for the Council to issue the Code Compliance Certificate (CCC) issued on 24 September 2009;

7.4 explain what work a purchaser/lessee can expect to have been done given the issue of the CCC by the Council.

8. We have not undertaken a full structural condition survey of the dwelling but have extensively reviewed the subfloor space and report here on defects that relate to non-compliance with the Building Consent documentation and NZS3604:1999, which was the relevant Building Code that was current at the time of the Building Consent.

Plans Submitted

9. The plans submitted with the building consent application and attached as processed by the Council on 19 May 2009 are **attached "A."** (Building Consent Plans, "**BC Plans**"). The plans comprise four A4 pages each headed as follows:

9.1 "Bracing Calculations for Repile and Relevel at 123 Grafton Rd, Grafton: Scale 1:100" ("**Bracing Calculations**");

9.2 "Site Plan for Repile and Relevel at 123 Grafton Rd, Grafton: Scale 1:200" ("**Site Plan**");

9.3 "Cross Section Plan for Repile and Relevel at 123 Grafton Rd, Grafton: Scale 1:100"("**Cross Section Plan**"); and

9.4 "Foundation Plan for Repile and Relevel at 123 Grafton Rd, Grafton: scale 1:100" ("**Foundation Plan**").

10. These plans do not comply with either the Council requirements at the time or with the relevant Building Code current at the time for the following reasons:

10.1 All documents are A4 and not to scale. The Council requirement at the time, as recorded on the Pre-lodgement checklist at Step 15 on page 6 of the Residential building consent and/or project information memorandum application at "4" **attached "B."** was that plans submitted were required to be either "*A1, A2 or A3, plans numbered*" and "*should be to scale*".

10.2 The building width excluding the verandah is 11.5m not 13m as used for the bracing calculations written on the consented Cross Section Plan – see **attached "C."** to scale plan of ground floor at time of building consent with correct measurements.

10.3 The building length is 15.1m including the lean to addition at the rear, but excluding the bay window, yet the bracing calculations use a length of 10 meters. This significantly affects the bracing calculations as set out in further detail below.

10.4 The ground level is misrepresented as 1.0m on the south, when the ground level varies from approximately 300mm on the south-east corner to approximately 1.0m on the south-west. This difference impacts on whether braced or anchor piles should be used. The lower ground level has resulted in the change during construction to an anchor pile to the south-east corner (refer Council foundation inspection dated 25/6/09). We have not viewed this change on site as this area was not accessible.

10.5 The inaccurate ground level notation of 1m has resulted in an inadequacy in the required fixings as fixings within 600mm of the ground need to be stainless steel. This

is noted on the plans in different handwriting perhaps by Council but not evidenced on site.

10.6 There is no seismic bracing calculation included in the application or on the plans.

10.7 The plans do not correctly identify the areas of the house, the living area making up the sewing room running off the lean-to is referred to as existing verandah, yet this is an enclosed room making up the footprint of the dwelling. I note that the application for the building consent records that the application for consent is in respect of the whole house, 225m, with no reduced area included as is required if the building work is in respect of an area less than the total area.

10.8 No bracing has been provided to the verandah area. The plans note that the verandah is to be demolished but there is no condition on the Consent to ensure follow-up by the Council. Furthermore, the area marked as "verandah to be demolished separate permit" is actually an enclosed space, and so should have been included in the bracing calculations.

10.8.1 We believe the bracing calculations submitted for Building Consent are incorrect and the errors are:Incorrect building height used with reference to obtaining the wind bracing demand from table 5.5 (NZS3604). The height to the apex of 8.0m has been used instead of 10.0m.

10.8.2 Spacing between bracing lines should be a maximum of 6.0m, 8.0m between bracing lines is shown on the Building Consent plans.

The following is our bracing calculation for wind.

Bracing Calculation (NZS3604:1999)

(A) Wind Bracing

Low wind zone.
Height to apex is approximately 10.0m.
Roof height is approximately 2.0m.
Hip roof in both directions.
From Table 5.5:
Bracing demand in both across (North/South) and along (East/West) directions is 123 Bracing units per metre.

Therefore Bracing requirement is:

Across (North/South)
Windage width = 15.1m (as measured)
∴Bracing requirement = 15.1 x 123 = 1857 Bracing Units (BU)
Braced and anchor piles have a wind bracing capacity of 160 Bracing Units
∴number of Braced piles required = 1857 ÷ 160 = 11.6 (12 piles)

Along (East/West)
Windage width = 11.5 (as measured)
∴ Bracing requirement = 11.5 x 123 = 1415 BU

Number of Braced piles required = 1415 ÷ 160 = 8.8 (9 piles)

Seismic Calculations:

Our calculations based on a floor area of 155m^2 shows that the bracing required is:

Seismic Zone C
From table 5.9 (NZS3604) Seismic Bracing demand for Subfloor = 7.5 Bracing Units per square metre.
From table 5.8 seismic bracing demand for verandah area is half of 4.7 Bracing units per square metre.

155 x 7.5 = 1162 Bu

Add verandah bracing= 0.5 x 4.7 x 60 = 141Bu

Total bracing required for seismic is: 1303 Bu's

The seismic capacity of a braced pile is 120 bracing units therefore 11 piles are required in each direction.

Bracing Requirement Summary:

Based on our calculation the following braced piles are required:

Across (North/South)
Wind governs and the number of piles required is 12. The Building Consent documents show only 8 piles.

Along (East/West)
Seismic design governs and the number of piles required is 11.
The Building Consent documents show only 7 piles.

11. I note that the Building Consent is for a residential dwelling re-pile and re-level. If the intended future use was commercial, then the bracing would have to reflect an increase in demand due to increased live load.

Repiling and Relevelling Work

12. Having inspected the repiling and relevelling work actually completed, it is clearly deficient and does not comply with either the consented BC Plans or NZS 3604:1999.

13. I have attached an annotated copy of the BC Plans (**attached "D."**) with each pile numbered.

14. The issues arising with each pile are then set out for each pile in the "Piles – Defect Table" attached (**attached "E."**). I have colour coded the defects as follows:

    14.1 Red - Does not comply with NZS 3604: 1999;

    14.2 Yellow – Does not comply with the BC Plans;

14.3 Green – Complies with NZS 3604:1999 and BC Plans

In the following I summarise the issues arising with the work completed:

Pile Status

15. The BC Plans state that the piles will be 125mm x 125mm H5 piles set in 400mm x 400mm x 450 mm concrete filled holes, however not all the piles marked X on the Building Consent drawings have been installed. Some have been installed incorrectly, others positioned alongside old piles and/or rotten existing framing timber.The attached table itemises these issues. For example see photo of pile 25 – **attached "F.".**

Pile Fixing to Bearer

16. The required NZS3604 fixing for the pile to bearer and joist to bearer has not been used in all instances, example photo of pile 17 – **attached "G."**

17. A copy of the NZS3604:1999 details for bracing, Figure 6.6 – Braced Pile System, has been provided for reference, **attached "H.".**

18. All observed bearer to pile connections did not comply with NZS3604. They did not have either M12 bolt and washer or had only one nail plate not the required two.

19. Ordinary pile to bearer connection does not comply with NZS3604 because either wire dogs and screw nails were missing, incorrect number of wire dogs and/or screw nails.

Pile Fixing to Existing Concrete foundation

20. Fixing of pile to existing concrete foundation is not in accordance with the Building Consent documents; "*10mm Galvanised 90 Steel brackets with 2 x 12 mm Dynabolts and 12mm galvanised Coach bolts*" as recorded on Foundation Plan. There exists no examples of proper securing. In some instances fixing is limited to a single wire dog, in others there is no fixing at all. For example, pile 37 is fixed neither top nor bottom and is simply "friction fit" in place, see photo of pile 37 **Attached "I."**

21. In a couple of instances where angle brackets are used they lack the "2 - M12 Dynabolts" as per the Foundation plan and are attached to existing bottom timber plates which bear on the existing concrete structure beneath see photo of pile 8 **attached "J.".**

Pile foundations

22. Foundation Depths: Four pile foundations were observed at the time of the inspection that indicated founding embedments of 320, 330, 350 and 380.

    The Foundation Plan recorded that the piles would be set in a depth of 450mm concrete filled holes. 4 out of 4 of the piles do not therefore comply with the Building Consent documents required depth of 450mm. An example photo of pile 42 is **attached "K."**

    Given that 4 out of 4 piles observed do not comply with the Building Consent further investigation needs to be carried out to establish how many more piles do not have the required founding embedment of 450mm.

23. Some piles observed were also in relatively loose material and do not appear to be founded into natural undisturbed ground (as NZS3604:1999 required).

Bearer to joist fixing

24. Bearers have been inadequately fixed to joists. In some instances there has been no fixing. The verandah area is particularly deficient. There are areas where joists are pulling away from the bearer due to the lack of fixing which could lead to above bearer movement. Example of deficient work and pulling away above pile 8 **attached "L."**

25. In some places the joist to bearer connection adjacent to new braced piles do not comply with NZS3604 because the required 6kN joist to bearer connection has not been installed. There are however some 6kN connections provided.

Bracing

26. Not all angle bracing has been installed as per the BC Plans requirements. There are instances where the bracing is installed on the old piles. However, the old piles are not 125mm x 125mm H5 and so they do not comply with either the BC Plan requirements or NZS3604:1999.

27. The foundation bracing observed on site is 8 braced piles in the North-South direction and 6 braced piles in the East-West direction, which matches the number of piles on the Building Consent plans if both the unconfirmed anchor pile and old piles with attempts to brace (which is not compliant as set out above) are accounted for. The bracing on both the old and new piles has also been installed incorrectly for the reasons that follow.

28. There are also instances where the brace angle is less than the minimum required 10 degrees.

29. In some places the brace connection points to the piles also do not comply because the location of the bolt is greater than 300mm from ground level. This occurs on an existing pile.

30. In some places the brace pile heights do not comply with respect to 3 times distance from lower connection to ground level. Anchor pile should have been used or brace relocated.

31. The angle bracing in most places has been coach screwed, rather than bolted. NZS3604: 1999 specifies either 12 Kn bearer to pile connection which can be achieved using Lumberlok nail on plates or M12 bolts and washers see photo of pile 17 **attached "G".**

Releveling

32. In general there appears to have been no releveling undertaken. The CCC certificate, the BC Plans and the BC Approval consent refer to the relevelling as being part of the work being completed.

33. Rotten timber remains in place and this would be the first thing that would be remedied when beginning the job. For example, rot to bottom plate has not been remediated by replacement as well the required 12kN pile to bearer connection has not been provided, A photo showing this rot is **attached "G".**

34. Bearer to pile rot still exists allowing the wood connections to separate which could lead to loss of support for bearer. A photo showing where the wood has started to separate is **attached "M".**

35. There are areas where no piles have been replaced, or any work undertaken at all, for example piles 1, 5, 7, 9, 11, 13, 19, 31, 36, 37 and 80 and there exists rotten framing timber.

36. The bearers in the Far North and South West Corner are both rotten. This rot could not have arisen in the period since the work was completed and is historic because it has similar aging and rot to that found in other areas.

Code Compliance Certificate

37. The CCC states that it is for the "*Re-pile and Re-level Existing Dwelling*" with an intended life of "*More than 50 Years*". The CCC is further described as "*A final Code Compliance Certificate issued in respect of all of the building work under the above Consent*". In the space where any conditions that the CCC is subject to are to be inserted, it states "*NIL*". " The CCC **attached "N"**

38. As noted above, the Building Consent Application recorded that it was for the full area of the house of 225m2. The CCC issued must relate to the whole footprint, including the lean-to and verandah areas.

39. If a Code of Compliance (CCC) has been issued, any person reviewing the CCC as part of pre-purchase or pre-lease due diligence would expect that the re-piling and re-levelling work for 123 Grafton Road has been completed in compliance with the building consent and to a standard sufficient for the next 50 years at least.

40. What about "verandah to be demolished".The issuing of a CCC by the Auckland Council confirms that the Building Consent work has been completed in accordance with the Building Consent requirements and that the work has been completed to an acceptable standard, and is compliant with the relevant Codes. It would be expected that any existing substandard elements, ie, decaying timber (rot) or fixings associated with the subject work would be upgraded to comply with the Code at the time.

41. The work on the subfloor does not reflect the CCC that was issued: rot remains, the house has not been re-leveled, areas of the house have not been touched, not all piles have been replaced as per the plan, the piles that have been replaced have not been installed to the correct depth and some have been positioned without any fixing. The work does not correspond in many respects to the plans submitted.

42. We point out that the basis for issuing the CCC is recorded on the CCC as being "*[t]he provision of Producer Statements in respect of Footings*" as well as *"[t]he inspection of the building works by Council Inspections Officers*". There are no copies of any producer statements on the Property File as far as we are aware.

Further Comments

43. I understand that the Council has also asked for the report to address the following questions:

    43.1 "*At 55.1 of the SOC you have not identified which areas you say were not repiled or releveled? – can your engineer identify these areas on a plan together with the areas that it considers were part of the building consent?*

    43.2 - *Your client has by her own admission undertaken significant works post the CCC (e.g. para ASOC 68.5) – those works should be identified/listed by her expert and excluded (if they can be) from causing the damage your client alleges is our client's responsibility.*

    43.3 - *What is the repiling and releveling work that now needs to be done?*

    43.4 - *What work does her expert think has to be redone and what remedial work has to be done allegedly as a direct result of the council's alleged negligence (ASOC para 1553/4)?"*

44. The first question is answered:

    44.1 by the provision of the table referring to each pile individually and whether it has been replaced or not and noting any other issues arising; and

    44.2 as stated above, in my view no areas of the property have been properly relevelled.

45. In answer to the second question, the substantial work undertaken by Hum has been limited to work above the bearer, except for the attachment of weather board and bevel back timber below this line. Hum has undertaken temporary work on the back door step foundation. None of the work done by Hum has altered or impacted the repiling and releveling work that was undertaken in 2009. The repiling and relevelling work is as it was.

46. In answer to the third question, the repiling and relevelling work needs to be entirely redone to ensure all rot is removed and all piles are installed to the correct depth.

47. In response to question four, there can be expected to be consequential damage to all areas above the foundation when the repiling and relevelling work is redone although it is difficult to say at this stage what the full extent of this remedial work will be. When repiling and releveling work is carried out you can expect some movement of the house, potentially windows and doors could come out of line, popping of wall plaster joints, skirting joints opening and other damage.

48. There has apparently also been a suggestion from one of the parties that the lack of downpipes on the villa has had an effect on the state of the foundations and piles and contributed to the movement of the property.

49. Any suggestion that the lack of downpipes on the property has resulted in the house movement is unfounded. Any movement would be due to the below standard workmanship; the piles not being installed to the depths specified, rot not being replaced and the lack of fixings as required by the BC and NZS3604:1999, all as noted above.

50. The site plan shows and states that there is a public stormwater 2.9m from the foundations running from a manhole at the front of the property to the rear. We believe that this is misnamed and that it is a private pipe which was converted from a combined sewer to a stormwater in 2005. We also understand that the new private sewer installed circa 2005 runs close to the existing foundations".

Summary

51. In my opinion, it is clear that the BC Plans and calculations presented for the Building Consent for repiling and releveling were deficient and did not comply with either the Council's requirements or NZS3604:1999. The building work undertaken in reference to those plans, not only did not comply with those plans but also did not comply with the Building Code that was operative at the time, NZS3604:1999. In my view, a CCC should not therefore have been issued for this work.

52. The CCC that was issued was in respect of a building consent application in respect of a whole dwelling, was described as a "Repile and Relevel Existing Dwelling", was unconditional and stated that it had an intended life of "More than 50 years". Any purchaser or lease of the property could reasonably expect that this Code of Compliance Certificate had been issued in respect of the repile and relevel of the whole dwelling, not some reduced section of it.

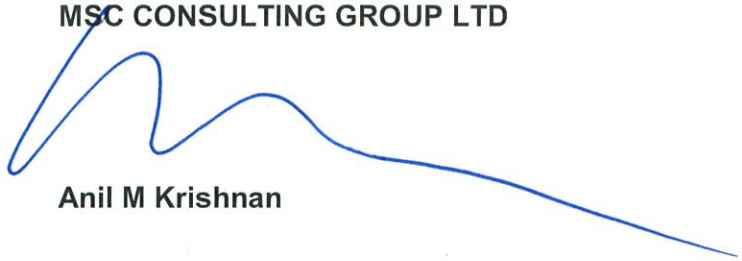
53. None of the work Hum has undertaken on the property has impacted the repiling or relevelling works. The foundation work will all need to be redone with proper footings, materials, fixings and with rot removal and releveling undertaken.

54. This report has been commissioned by Hum and Falling Apple Charitable Trust for their purposes only and is based on our site observation, review of the Building Consent documentation the requirements of NZS3604:1999.

55. We trust that this report satisfies your requirements at this stage of the proceedings.

Yours faithfully

MSC CONSULTING GROUP LTD



Anil M Krishnan

Attachment A

Building Consent 2009
2029

BRACING CALCULATIONS FOR
REPILE AND RELEVEL AT
123 GRAFTON RD GRAFTON.

LOW WIND ZONE.

HOUSE WIDTH:

13 METERS × 93 UNITS PER METER = 1209 UNITS.
÷ × 161 UNITS PER ANGLE BRACE OR ANCHOR PILE
= 7.5 BRACES SAY 8.

HOUSE LENGTH:

10 METERS × 98 UNITS PER METER = 980 UNITS
÷ × 161 UNITS PER ANGLE BRACE OR ANCHOR PILE.
= 6.08 BRACES SAY 6.

CALCULATIONS EX N.Z.S. 3604.

SIGNED.

PAUL GRACE.
D.P. GRACE LTD.

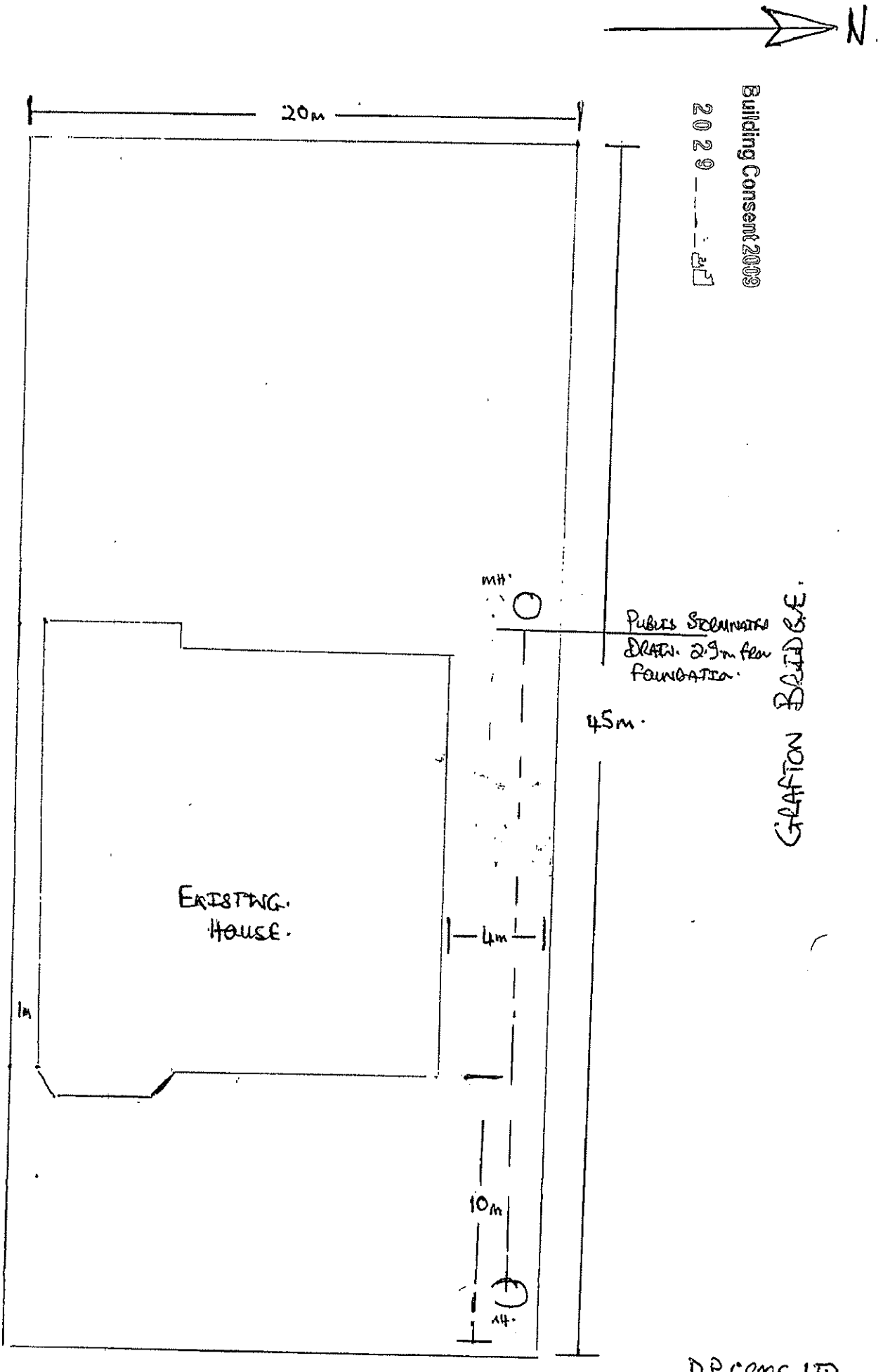
AUCKLAND CITY ENVIRONMENTS
18 MAY 2009
PROCESSED

1/4

D.P. GRACE LTD
2 CAPE HORN RD
HIMSBOROUGH.
09-6275172

SITE PLAN FOR KERRIE AND KELVENEL AT 123 GRAFTON RD; GRAFTON.

SCALE 1:200



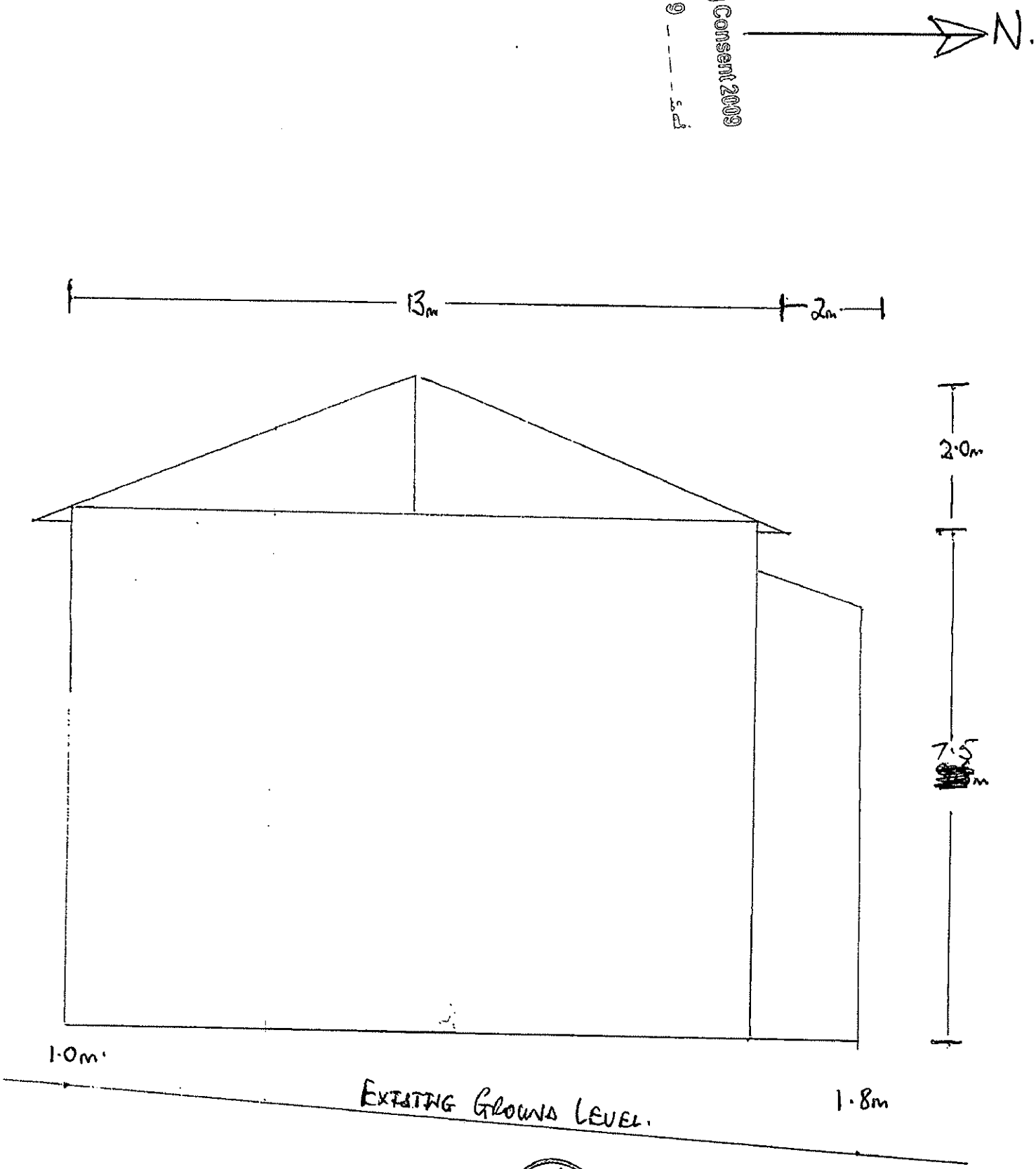
2

123 GRAFTON RD.

D.P. GRACE LTD
2 CAPE HORN RD
HELENSBOROUGH

CROSS SECTION PLAN FOR REPILE AND RELEVEL
AT 123 GRAFTON RD, GRAFTON:
SCALE: 1:100.

Building Consent 2009
2029



THIS BUILDING IS NOT TO BE LIFTED ABOVE THE ORIGINAL DATUM.

D. P. GRACE LTD.

AUCKLAND CITY ENVIRONMENTS
18 MAY 2009
PROCESSED

D.P. GRACE LTD
2 CAPE HORN RD
HILLSBOROUGH

FOUNDATION PLAN FOR REPILE AND RELEVEL AT
123 GRAFTON RD, GRAFTON.

SCALE 1 : 100'

Building Consent 2009
2029

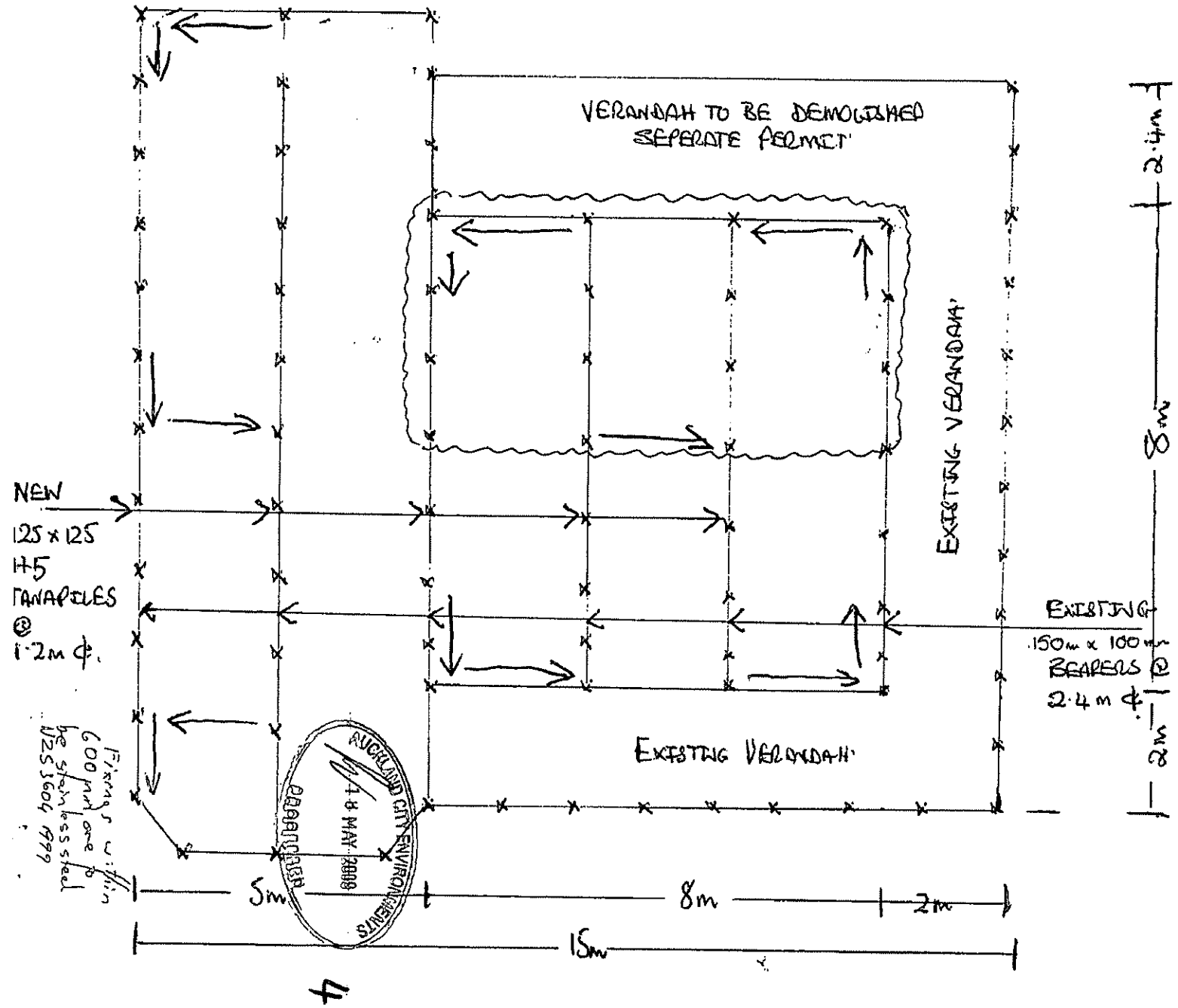
N

KEY:

X 125mm x 125mm H5 PILES SET IN ·400mm x ·400mm x ·450mm CONCRETE FILLED HOLES.

→ 100mm x 75mm H4 ANGLE BRACES WITH 12mm ϕ GALVANISED BOLTS, WASHERS AND FIXINGS TO NZS 3604.

EXISTING CONCRETE FOUNDATION WITH 125mm x 125mm H5 PILES. ON DAMPROOF MEMBRANE FIXED WITH 10mm GALVANISED 90° STEEL BRACKETS WITH 2 x 12mm DYNABOLTS AND 12mm GALVANISED COACH BOLTS.



4

DP CRAGE LTD

Residential building consent and/or project information memorandum application

(Section 33 or section 45, Building Act 2004)

Attachment B

AUCKLAND City Council

AUCKLAND CITY ENVIRONMENTS RECEIVED 6 MAY 2009

Step 1: The application

I request that you issue a:

- [x] project information memorandum
- [x] building consent
- [ ] amendment to a building consent (original consent number):
- [ ] project information memorandum already issued for this project (PIM number): for the building work described in this application (tick one or more, as applicable).
- [ ] Is this a staged consent? If yes, what stage is this:
- [ ] Previous stage building consent no/s:

For office use

Date lodged: 6 · 5 · 09

Consent number: B/2009/2029

Receipt number:

PIM number: B/pim/2009/1723

Step 2: Building consent (do not fill in this section if the application is for a project information memorandum only)

Estimated value of the building work on which the building levy will be calculated including goods and services tax. State estimated value as defined in section 7 of the Building Act 2004: $ 4900 — 00

Step 3: The building

Famous Hatlem

Street address of building (for structures that do not have a street address, state the nearest street intersection and the distance and direction from that intersection): 123 GRAFTON RD, GRAFTON.

Legal description of land where building is located (state legal description as at the date of application and, if the land is proposed to be subdivided, include details of relevant lot numbers and subdivision consent):

Site area (if applicable): 913 sq m. m²

Building name (if applicable):

Level/unit number (if applicable):

Lot no: 1. DP: 77051

Area (total floor area; indicate area affected by the building work if less than the total area): 225 m²

Current lawful established use (include number of occupants per level and per use if more than 1 level):

RESIDENTIAL HOUSE.

Year first constructed (approximate date is acceptable, eg c1920s or 1960-1970): 1800 – 1900's

Step 4: The project

Description of the building work (provide sufficient description of building work to enable scope of work to be fully understood; continue on a separate page if necessary):

REPILE AND RELEVEL EXISTING BUILDING.

Will the building work result in a change of use of the building? ☐ Yes ☑ No

If yes, provide details of new use:

The project (continued)

Intended life of the building if less than 50 years (number of years):

List previous building consents issued for this project (if any, list who issued the consent, the date of issue and the consent number):

Step 5: The owner

Name of owner (include Mr, Miss, Dr, if an individual): STYLO MEDICAL SERVICES LTD.

Contact person (insert n/a if the applicant is an individual): SHEN GOH.

Mailing address: 123 GRAFTON RD GRAFTON.

Street address/registered office: "

Phone (home): (mobile:): 021 655668 (work): 021 655668.

Fax: Email:

Website:

The following evidence of ownership is attached to this application (ie copy of certificate of title, lease, agreement for sale and purchase):

Step 6: The agent

Name of agent (only required if application is being made on behalf of the owner; leave blank if not applicable): D.P. GRACE LTD.

Contact person (insert n/a if the applicant is an individual): PAUL GRACE.

Mailing address: 2 CAPE HORN RD HEMSBOROUGH.

Street address/registered office:

Phone (home): (mobile:): 0274 - 950451 (work): 09 - 6275172

Fax: 09 - 6275176 Email: amzng @ xtra.co.nz

Website:

Relationship to owner (state details of the authorisation from the owner to make the application on the owner's behalf):

BUILDER.

Step 7: Signature

Signature of ~~owner~~, or agent on behalf of and with the authority of the owner (cross out one):

Name of person signing (please print): D.P. GRACE LTD Date: 6.5.09.

Privacy information

The information you have provided on this form is required so that your building consent application can be processed under the Building Act 2004. The council collates statistics relating to issued building consents and has a statutory obligation to regularly forward these to Statistics NZ. The council stores the information on a public register which must be supplied (as previously determined by the ombudsman) to whomsoever requests the information.

Under the Privacy Act 1993 you have the right to see and correct personal information the council holds about you.

(Provide all details where known or relevant)

Designer/architect	
Business/name:	D.P. GRACE LTD.
Address:	2 CAPE HORN RD HOWICK
Daytime:	Mobile: 027 - 950451
After hours:	Fax:
Registration/qualification:	BUILDER

Engineer (identify practice college)	
Business/name:	
Address:	
Daytime:	
After hours:	Fax:
Qualification/college:	

Builder	
Business/name:	D.P. GRACE LTD
Address:	2 CAPE HORN RD HOWICK
Daytime:	Mobile: 027 - 950451
After hours:	Fax:
Registration/qualification:	

Main contractor/site manager	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Fax:
Registration/qualification:	

Structural engineer	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Fax:
Registration/qualification:	

Plumber	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Fax:
Registration/qualification:	

Drainlayer	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Fax:
Registration/qualification:	

Other	
Business/name:	
Address:	
Daytime:	Mobile:
After hours:	Fax:
Registration/qualification:	

Step 9: Project information memorandum

(Do not fill in this section if the application is for a building consent only)

The following matters are involved in the project (tick the matters relevant to the project).

- ☐ Subdivision
- ☐ New or altered connections to public utilities
- ☐ New or altered access for vehicles
- ☐ Disposal of stormwater and wastewater
- ☐ Alterations to land contours
- ☐ New or altered locations and/or external dimensions of buildings
- ☐ Building work over or adjacent to any road or public place
- ☐ Building work over any existing drains or sewers or in close proximity to wells or water mains
- ☐ Other matters known to the applicant that may require authorisations from the territory authority (specify):

Step 10: Fee payee

Name and address for refunds/accounts: D.P. GRACE LTD.
2 CAPE HORN RD. HOWICK.

Phone (business): 09 - 6275172 (home):

Fax: 09 - 6275176 Email: amzng@xtra.co.nz.

Signature of person responsible for payment of fees: D.P. GRACE LTD

Customer account no: Date: 6.5.09.

Step 11: Financial contribution and/or development contribution payments (where applicable)

Name and address for refunds/accounts:

Phone (business): (home):

Fax: Email:

Signature of person responsible for payment of financial contribution and/or development contribution:

Date:

Please note: some applications will be charged a financial contribution and/or development contribution or incur additional processing fees. For example, additional residential units on a site may require a development contribution under the Local Government Act 2002; additional floor area in some commercial buildings may require a financial contribution as set out in the district plan. In these circumstances the name and address of the person responsible for the payment of the financial contribution, development contribution or further invoices must be included, and their signature provided in this section of the application form. Please note that by signing this section of the application form you are agreeing to be responsible for payment of invoices or financial contribution, or development contribution payments that may validly be charged. In addition to meeting the costs of financial contribution, development contribution and/or other invoices, you will be liable to pay all costs and expenses of debt recovery and/or legal costs incurred by the council and incidental to enforcement of any debt.

Step 12: Building consent compliance

The building work will comply with the building code as follows (if you're not sure which clauses are applicable, talk to the building consent authority, designer or your architect). Ignore this step if this is an application for a project information memorandum only.

Clause (tick relevant clause numbers of building code)	Means of compliance (refer to the relevant compliance document(s) or detail of alternative solution in the plans and specifications; if not applicable, put n/a)			Proposed Inspections (state means of inspection. Note PS4s or certification may be required)
☐ B1 Structure	☐ B1/AS2	☑ NZS3604	☐ NZS4203	☑ Council ☐ Engineer
	☐ NZS4229	☐ Other_____ (specify)		☐ Other_____ (specify)
☐ B2 Durability	☐ B2/AS1	☐ NZS3101	☐ NZS3602	☐ Council ☐ Engineer
	☐ NZS3604	☐ Other_____ (specify)		☐ Other_____ (specify)
☐ C1 Outbreak of fire	☐ C/AS1	☐ Other_____ (specify)		☐ Council ☐ Engineer
				☐ Other_____ (specify)
☐ C2 Means of escape	☐ C/AS1	☐ Other_____ (specify)		☐ Council ☐ Engineer
				☐ Other_____ (specify)
☐ C3 Spread of fire	☐ C/AS1	☐ Other_____ (specify)		☐ Council ☐ Engineer
				☐ Other_____ (specify)
☐ C4 Structural stability during fire	☐ C/AS1	☐ Other_____ (specify)		☐ Council ☐ Engineer
				☐ Other_____ (specify)
☐ D1 Access routes	☐ D1/AS1	☐ NZS4121		☐ Council ☐ Engineer
	☐ Other_____ (specify)			☐ Other_____ (specify)
☐ D2 Mechanical installations for access	☐ D2/AS1	☐ NZS4332	☐ EN81	☐ Council ☐ Engineer
	☐ EN115	☐ Other_____ (specify)		☐ Other_____ (specify)
☐ E1 Surface water	☐ E1/AS1	☐ AS/NZS3500.3		☐ Council ☐ Engineer
	☐ Other_____ (specify)			☐ Other_____ (specify)

Step 12: Building consent compliance continued

Clause (tick relevant clause numbers of building code)	Means of compliance (refer to the relevant compliance document(s) or detail of altemative solution in the plans and specifications; if not applicable, put n/a)		Proposed Inspections (state means of inspection. Note PS4s or certification may be required)
☐ E2 External moisture	☐ E2/AS1	Specific design and testing	☐ Council ☐ Other_____ (specify)
	☐ Other_____ (specify)		
☐ E3 Internal moisture	☐ E3/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ F1 Hazardous agents on site	☐ F1/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ F2 Hazardous building materials	☐ F2/AS1	☐ NZS4223	☐ Council ☐ Other_____ (specify)
	☐ Other_____ (specify)		
☐ F3 Hazardous substances and processes	☐ F3/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ F4 Safety from falling	☐ F4/AS1	☐ FSP Act	☐ Council ☐ Other_____ (specify)
	☐ Other_____ (specify)		
☐ FS Construction and demolition hazards	☐ F5/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ F6 Lighting for emergency	☐ F6/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ F7 Warning systems	☐ F7/AS1	☐ NZS4S12 ☐ NZS4S1S	☐ Council ☐ Engineer
	☐ Other_____ (specify)		☐ Other_____ (specify))
☐ F8 Signs	☐ F8/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ G1 Personal hygiene	☐ G1/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ G2 Laundering	☐ G2/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ G3 Food preparation and prevention of contamination	☐ G3/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ G4 Ventilation	☐ G4/AS1	☐ AS1668.2	☐ Council ☐ Other_____ (specify)
	☐ Other_____ (specify)		☐ Council ☐ Other_____ (specify)
☐ G5 Interior environment	☐ G5/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ G6 Airborne and impact sound	☐ G6/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ G7 Natural light	☐ G7/AS1	☐ Other_____ (specify)	☐ Council ☐ Other_____ (specify)
☐ G8 Artificial light	☐ G8/AS1	☐ NZ6703	☐ Council ☐ Other_____ (specify)
	☐ Other_____ (specify)		

Step 13: Materials proposed to be used

Please indicate the type of material that is proposed in this project by identifying the brand names to be used.

Exterior claddings (brand names, eg Insulclad, Rockcote etc):

Roof type (brand names, eg Monier, corrugated iron etc):

Type of foundations (brand names, eg Ribraft, strip, pad etc): 125 mm x 125 mm H5 PILES (TIMBER)

Type of insulation (brand names, eg Batts, polystyrene etc):

Step 14: Attachments

The following documents are attached to this application if required or necessary (tick as appropriate).

Plans and specifications – applications will not be accepted with incomplete documentation.

☐ Has the engineer provided a Producer Statement – Design? ☐ No ☐ Yes ☐ PS1 ☐ PS2

☐ Has the engineer been engaged to carry out site inspections on the job? ☐ No ☐ Yes (if yes, these must be specified on the producer statement)

☐ Disposal of stormwater and wastewater.

☐ Building work over any existing drains or sewers or in close proximity to wells or water mains.

☐ Other matters known to the applicant that may require authorisations from the territorial authority.

Please note: some information from this application form is deemed public information and may be used by other third parties.

Step 15: Prelodgement checklist

What we require	Comments	When required, and particulars
☑ Application form		Must be completed and signed by the applicant.
☑ Site plan Windzone	1:100 Zone 1 Sea spray zone	Include contour/spot levels, drainage details, levels of drains, clearly defined site boundaries, public connections and waste water outfalls.
☑ PLANS general	A1, A2 or A3, plans numbered	All plans should have a text that is clear and readable. The size should be equivalent to Microsoft Word text size 11 and plans should be to scale.
☐ Hazard details		For contaminated sites.
☐ Floor plan	1:50	Full floor plan (not just area being altered).
☐ Cross sections	1:50	Minimum of 2 cross sections – show roof to framing and framing to floor details. Show bathroom cross section showing membrane materials and waterproofing details
☐ Elevations	1:50	Include height in relation to boundary details cladding material and roof type.
☑ Foundation details		
☐ Plumbing schematic		If over one storey.
☐ Ridge and barge details		Provide relevant details.
☐ External and internal corners		Provide relevant details.

☐ Weatherproofing	1:5 details cross referenced to cross sections/elevations. Timber treatments to be shown on plans.	Plans to include clear 1:5 scale, job specific details of roof and wall junctions, eaves, balustrade, parapets, junctions, claddings and approvals, sill, head and/or jamb details for all openings and penetrations showing flashings, wraps, seals weatherproofing and durability (timber treatment). Stucco (ensure control joints on elevations).
☐ Waterproofing		For all wet areas, bathrooms, kitchens, laundries, show materials used. Any materials used must be tested to NZ conditions.
☐ Floor framing		Provide details/flooring and joist layouts for all levels.
☐ Insulation		Type = batts, polystyrene, etc.
☐ Roof framing		Truss layout and/or roof framing plan or layout.
☐ Solid fuel heaters		Floor plans showing location of the heater, Home Heating Association Certificate and heating installation instructions.
☐ Swimming pools		Fencing construction details, clearly show pool area and elevation of dwelling and window door compliance if used as part of the pool fence.
Drainage		
☐ Building over or near sewer		Video required for building within 2m of public drain and Engineer's calculations and foundation bridging design details.
☐ Soakage report	As per Auckland City 2003 Soakage Design Manual.	• Percolation testing – (not required for nominal soakholes draining < 20m² total) >20m² Is W1 or W2 included? Yes / No • Soakage calculations – W3 (Onehunga & Filter Strip type) Yes / No W4 (Rockbore) Yes / No W5 (Raingarden) Yes / No W7 (Nominal type) Yes / No W8 (except for rockbore and nominal) Yes / No W9 (rainwater tank if incorporated) Yes / No W6 Pretreatment requirements – (only applies to paved impermeable areas > 20m2 otherwise use catchpit). Yes / No • Site plan – Is it to scale with scaled dimensions of devices and areas to be drained clearly shown? Yes / No • Operation and Maintenance Forms Is "OSM – O&M – Plan" (Form D1) included? Yes / No Is "Device Specific O&M Detail" (Form DS to D24 as appropriate) included? Yes / No Remember the above is required where 20m² or more of additional impervious area is involved (includes driveways, roofs and sealed areas).
☐ Section 461 report		Neighbours approval required for drains entering other property.
☐ Public drainage	Engineering approval required before acceptance of building consent.	Engineering approval required where extension or changes are made to public lines.
☐ Public drains capped		When demolishing or relocating buildings.
☐ Drainage plan		When the impermeable area is over 10m²: • separation requirements included • stormwater disposal system showing the final connection to public drains.
☐ Overland flow paths	Floor levels referenced to LINZ datum.	Flood report addressing floor levels and overland flow issues.
Water supply		
☐ Water connection application	NZ fire risk classification.	4 units or over, and/or 4 storeys or over, and/or over 1600m² site. Applicant to contact Metrowater for water supply approval.
Other		
☑ Two specifications		Could be on plans for small projects.
☐ Producer statement – Design	Number	Drawings signed by Engineer. Producer statement in ACE format.
☐ Producer statement – Design review	Number	Except for residential and single storey commercial.

☐ Structural check		
☐ Risk matrix		For all external cladding work.
☑ Bracing calculations		Subfloor, walls and roof and shown on plans.
☐ Stairs		Risers, tread and handrail details.
☐ Decks		If deck over 1m in height above ground balustrade and connecting details.
☐ Fire report/summary	Required for all commercial work.	For all commercial work, dwellings over three storeys, and attached dwellings.
☐ Second-hand building report		When relocating a building.
☐ Geotechnical report		☐ Unstable ☐ Filled/weak ☐ Refuse tip ☐ Fill on neighbouring site ☐ Geotechnical report held
☐ Section 71		Where there is unstable ground or fill on site and flooding as identified.
☐ Section 75		New work over two or more lots (even if on same title or held by same owner).
☐ Section 112		Egress and disabled provisions shown.
☐ Section 115 ☐ Change of use	Existing use Proposed use Disabled provisions	Include the following items: • means of escape fromw fire • access and facilities for disabled persons • structural (including fire rating) behaviour • protection of other property • sanitary facilities.
☐ Authorisations		Authorisation letter required from owners on leased properties and/or any other property sales agreements.
☑ Certificate of title		Less than 90 days old.
☐ HP gas mains		
☐ Public safety		Traffic management report for all developments in the CBD and major arterial roads elsewhere.
☐ Lifts and/or escalators		Plans specifications and details of mechanical lifts and/or escalators.
☐ Ventilation and HVAC		Provide plans and specifications of HVAC and ventilation systems. Plans must clearly indicate how all areas are ventilated.
☐ Specialist systems		Plans specifications and details of specialist installations – smoke extract systems, pressurisation systems, hydrants, etc.
☐ Public safety and traffic management		Provide details of public safety provisions, hoardings, and gantries. Where footpaths are used or effected, Traffic and Roading Services (TARS) approval is be required. Traffic management also to be addressed.
☐ Traffic and roading		A road opening notification and traffic management plan to be approved by TARS prior to work commencing in any part of the public road reserve area (boundary to boundary).
☑ Comments and lodgement Officer name and date		Eamon Hallissey

Please note

- Any amendment must be accompanied by a copy of the original building consent plans that were issued.
- All commercial work must address sections 112 or 115 as applicable or formally show why not practicable.
- All work that requires a detention tank must have the form filled out and submitted with the building consent.
- Show all sub soil drainage on either the site plan or drainage plan.

All engineering design and fire report information is to be drawn onto the architectural plans, show fixings and connections.

Health and licensing

Yes (No) Food / Liquor / Hazardous substances / Other:

Yes (No) Hairdressing / Body piercing / Funeral parlour / Mortuary / Camp ground / Other:

Yes (No) Establishing a cellphone site

Step 16: Detailed guidelines

Plans

All plans must be satisfactorily drawn in black ink. All dimensions are to be given in metric terms with all plans drawn to an accurate scale to allow for dimensions to be checked. All plans should have a text that is clear and readable. The text size should be equivalent to Microsoft Word text size 11 and plans should be to scale.

a) **Building plans – two copies for building work**

Site plans are to be drawn to a minimum scale of 1 to 100 with any detail requiring clarification being drawn to a minimum scale of 1 to 5. (for large developments use scale 1 to 200).

The following information must be shown (use 1:50 scale).

- Floor plans. If proposed work is an alteration or an extension then existing as well as proposed floor plans are to be provided. The entire floor layout is required.
- Cross section through a major direction showing FFL (finished floor level).
- Elevation views of all exterior walls of the building to show ground levels, both existing and final.
- A foundation plan, showing all elements and bracing space, and sub-floor framing.
- Roof plan, showing all members and the bracing required (truss codes, lintel sizes etc).
- Details of wall bracing on plan and calculations to be provided (NZ 3604:1999).
- Structural elements specifically designed by an engineer must be recorded on the working drawings. Sketches contained in the engineering calculations are not accepted.

b) **Site plans – two copies for building work**

All site plans are to be drawn to a minimum scale of 1 to 100 (for large developments use scale 1 to 200).

The following information is required to be shown.

- Define on site plan all survey pegs to the lot/s involved. Show and calculate all areas of impermeable site coverage showing all trees over 6m in height and/or 600mm girth.
- The length and bearing of all boundaries.
- The existing site sanitary and stormwater drainage and the proposed method of sanitary and stormwater drainage to be shown.
- Permanent site datum, finished levels of ground and floors related to datum boundary levels sufficient to check height to boundary.
- Existing land contours at a maximum of 0.5 metre increments.
- Any existing or proposed buildings to be clearly defined and with dimensions from boundaries and other buildings.
- Provide details of vehicular access and where applicable car parking spaces and vehicle manoeuvring on the property.
- The north point.
- Excavation and site development and/or retention proposals. If a building platform is required, details of benching and fill compaction will be necessary.
- Hauraki Gulf islands only.
- Second-hand plans not to be submitted.

Position of sanitary drains and septic tanks to be shown on site plan. Distances to boundaries to be stated.

Structural calculations – two copies

Commercial, industrial and residential building work requiring specific design will require structural calculations to be provided for checking. Structural calculations are still to be provided when a producer statement – design is submitted.

Note: a structural check may not be required for residential dwellings up to three storeys in height, having specifically designed elements, providing an acceptable producer statement – design form is received with the application documents together with calculations and drawing signed by a design engineer. Design of foundations will not be accepted for residential dwellings that are to be sited on land for which a soil investigation is necessary. Nor will a producer statement – design form be accepted for bridging details of public sewers.

Specifications – two copies

The specification covers the standards of quantity of work and quality of materials, which only relates to the work to be carried out. For small projects these maybe included on the plans.

Copy of current certificate of title (less than 90 days old)

Design of on-site wastewater disposal system (Hauraki Gulf islands only)

A site assessment and design for the property's waste water septic tank and effluent system by a registered drain-layer or waste water engineer. (Dependant of the nature of the property, certain applications are to be undertaken by an engineer. Discuss with a building officer your project).

Other documents

Attach any producer statements.

Fees and charges

In many cases, the cost of this application will be calculated and due for payment at the time of lodgement. This will be the only fee charged unless the application and/or development differs from that originally represented or assessed, in which case additional fees will be charged. In all other cases where a deposit only is paid, this may not cover the total costs incurred by Auckland City Council and you may receive a refund or an account for additional costs. Please note that any refund of the street damage deposit will not be made until after the code compliance certificate has been issued. Refer to the street damage deposit form for refund requirements.

Claim for confidentiality

Please discuss with a council officer if there is any claim for confidentiality of a plan or specification to safeguard its copyright or because of any requirements of the owner relating to the security of the building. In practice, confidentiality rarely applies to private residences.

Operations in the street

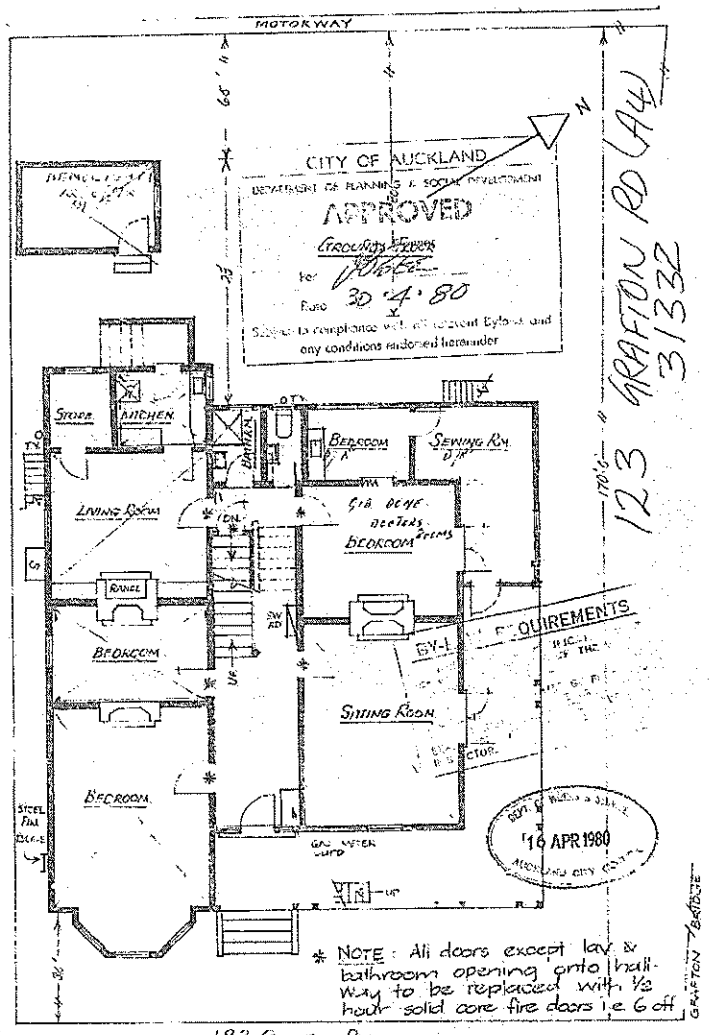
An "operations in the street" permit is required before any rubbish skip, container, portacom, portaloo may be placed within the road reserve.

Attachment C

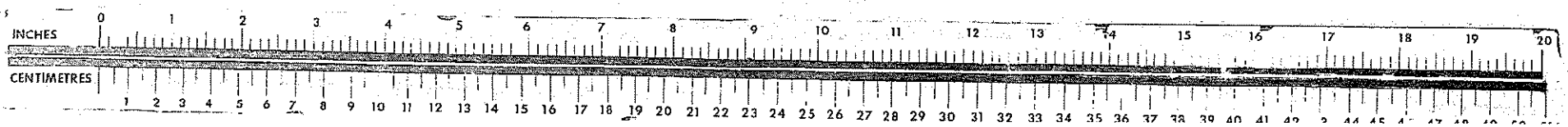


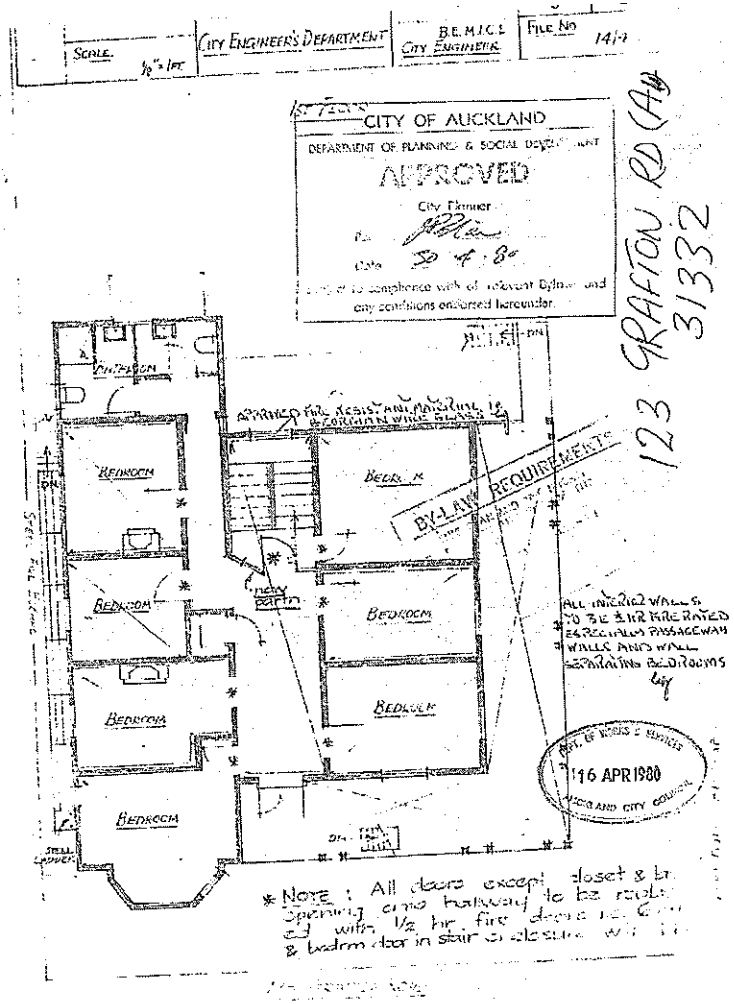
GROUND FLOOR PLAN AT TIME OF BUILDING CONSENT - REPILING AND RELEVELING - B/2009/2029

SCALE 1 : 100 @ A3

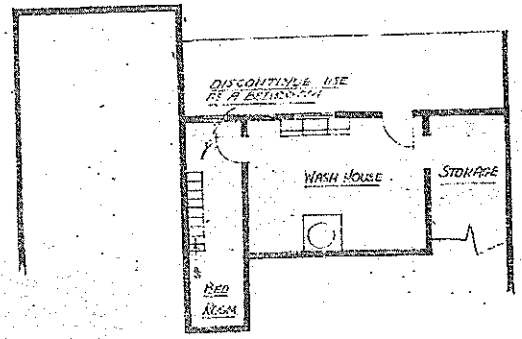


123 GRAFTON ROAD.



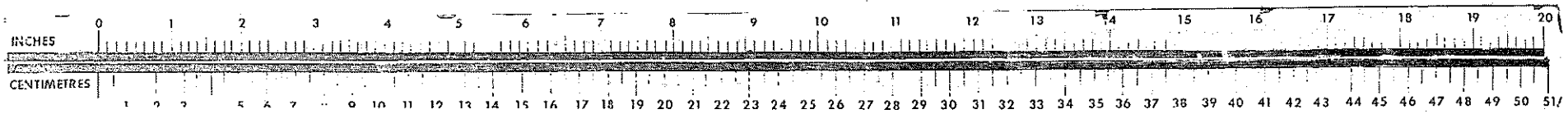

SCALE 1/8" = 1 FT
CITY ENGINEER'S DEPARTMENT
B.E. M.I.C.E. CITY ENGINEER
FILE No 14/4
CITY OF AUCKLAND
DEPARTMENT OF PLANNING & SOCIAL DEVELOPMENT
APPROVED
City Planner
Date 30 4 80
Subject to compliance with all relevant Bylaws and any conditions endorsed hereunder.
123 GRAFTON RD (A)
31332
BEDROOM
BEDROOM
BEDROOM
BEDROOM
BEDROOM
BEDROOM
BEDROOM
BEDROOM
BY-LAW REQUIREMENTS
ALL INTERIOR WALLS TO BE ½ HR FIRE RATED ESPECIALLY PASSAGEWAY WALLS AND WALL SEPARATING BEDROOMS
16 APR 1980
* NOTE : All doors except closet & br. opening onto hallway to be rated with ½ hr fire doors
& bedrm door in stair is closure

123 GRAFTON RD
(AW) 68



PROPOSED ALTERATIONS

BASEMENT PLAN
123 GRAFTON ROAD.



Attachment D

Building Consent 2009 2029

FOUNDATION PLAN FOR REPILE AND RELEVEL AT 123 GRAFTON RD, GRAFTON.

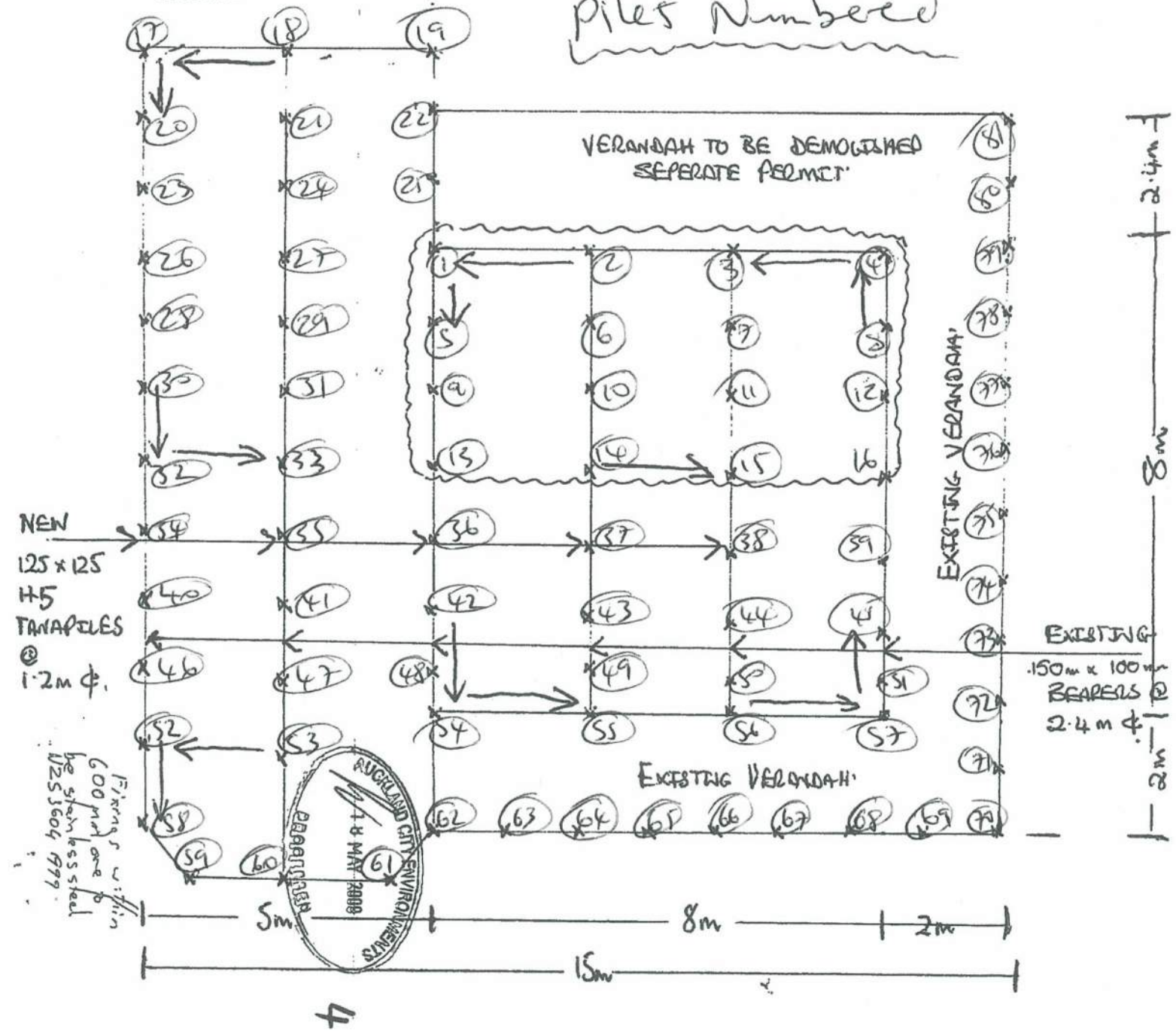
SCALE 1:100

KEY:

X 125mm x 125mm HS PILES SET IN .400m x .400m x .450mm CONCRETE FILLED HOLES.

→ 100mm x 75mm H4 ANGLE BRACES WITH 12mm ϕ GALVANISED BOLTS, WASHERS AND FIXINGS TO NZS 3604.

EXISTING CONCRETE FOUNDATION WITH 125mm x 125mm HS PILES. ON DAMPROOF MEMBRANE FIXED WITH 10mm GALVANISED 90° STEEL BRACKETS WITH 2 x 12mm DynaBolts AND 12mm GALVANISED COACH BOLTS.



D.P. GRACE LTD. 2 CAPE HORN RD. HILLSBOROUGH. 09-6275172.

Attachment E

PILES - Defect Table

Does not comply with NZS3604, fundamental fault

Does not comply with the Building Consent Drawings, fundamental fault

Complies with NZS3604 and follows plans

Pile No.	Pile Type	It is installed?	Comply to 3604?	Complies with BC Drawings?	Issue	Footing Excavated Depth?	Photo
1	Ordinary	No	-	N	Not installed		
2	Ordinary	Yes	Y	N	Not used as bracing pile as shown on plan		
3	Ordinary	Yes	N	N	Connection does not comply with NZS3604 ordinary pile requirements		
4	Ordinary	Yes	Y	N	No brace installed as per drawings		
5	Ordinary	No	-	N	Not installed		
6	Ordinary	Yes	Y	Y	-		
7	Ordinary	No	-	N	Not installed		
8	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements		Attached "J" & "L"
9	Ordinary	No	-	N	Not installed		
10	Ordinary	Yes	Y	Y	-		
11	Ordinary	No	-	N	Not installed		
12	Ordinary	Yes	N	Y	Connection does not comply with NZS3604 ordinary pile requirements		
13	Ordinary	No	-	N	Not installed		
14	Ordinary	Yes	N	N	Connection does not comply with NZS3604 ordinary pile requirements		
15	Ordinary	Yes	N	N	Connection does not comply with NZS3604 ordinary pile requirements		

16	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements			
17	Braced	Yes	N	Y	Connection does not comply with NZS3604 braced pile requirements		Attached "G"	
18	Braced	Yes	N	Y	Connection does not comply with NZS3604 braced pile requirements			
19	Ordinary	No	-	N	Not installed			
20	Ordinary	Yes	Y	N	No brace installed as per drawings			
21	Ordinary	Yes	Y	N	Footing Depth does not comply with BC Drawings.	320		
22	Ordinary	Yes	Y	Y	-			
23	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements			
24	Ordinary	Yes	Y	Y	-			
25	Ordinary	No	-	N	Not installed		Attached" "F"	
26	Ordinary	Yes	Y	Y	-			
27	Ordinary	Yes	N	Y	Footing Depth does not comply with NZSC3604 or BC Drawings.		Attached "K"	
28	Ordinary	Yes	Y	Y	-			
29	Ordinary	Yes	Y	Y	-			
30	Braced	Yes	N	Y	Connection does not comply with NZS3604 braced pile requirements			
31	Ordinary	No	-	N	Not installed			
32	Ordinary	Yes	Y	N	No brace installed as per drawings			
33	Ordinary	Yes	Y	N	No brace installed as per drawings			
34	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements			
35	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements			

36	Braced	No	N	N	Brace installed to old pile - inadequate footing and connections. Brace installed greater than 300mm from CGL			
37	Braced	No	N	N	Brace installed to old pile - inadequate footing and connections		Attached "I"	
38	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements			
39	Ordinary	Yes	Y	N	Footing Depth does not comply with BC Drawings.	350		
40	Ordinary	Yes	Y	Y	-			
41	Ordinary	Yes	Y	Y	-			
42	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements, Footing depth does not comply with NZS3604 or BC Plans.	330		
43	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements.			
44	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements			
45	Braced	Yes	N	N	Connection does not comply with NZS3604 braced pile requirements, Footing depth does not comply with NZS3604 or BC Plans.	380		
46	Ordinary	Yes	Y	Y	-			
47	Ordinary	Yes	Y	Y	-			
48	Ordinary	Yes	Y	Y	-			
49	Ordinary	Yes	Y	Y	-			
50	Ordinary	Yes	Y	N	Used as braced pile not ordinary pile			
51	Ordinary	Yes	Y	Y	-			
52	Ordinary	Yes	Y	N	No brace installed as per drawings			
53	Ordinary	Yes	Y	N	No brace installed as per drawings			
54	Braced	Yes	N	Y	Connection does not comply with NZS3604 braced pile requirements			
55	Braced	Yes	N	Y	Connection does not comply with NZS3604 braced pile requirements			

56	Braced	Yes	N	Y	Connection does not comply with NZS3604 braced pile requirements			
57	Braced	Yes	N	Y	Connection does not comply with NZS3604 braced pile requirements			
58	Ordinary	Yes	Y	N	No brace installed as per drawings			
59	Ordinary	Yes	Y	Y	-			
60	Ordinary	Yes	Y	Y	-			
61	Ordinary	not sighted	not sighted		-			
62	Ordinary	not sighted	not sighted		-			
63	Ordinary	not sighted	not sighted		-			
64	Ordinary	Yes	N	Y	Connection does not comply with NZS3604 ordinary pile requirements			
65	Ordinary	Yes	Y	Y	-			
66	Ordinary	Yes	Y	Y	-			
67	Ordinary	Yes	Y	Y	-			
68	Ordinary	Yes	Y	Y	-			
69	Ordinary	Yes	Y	Y	-			
70	Ordinary	Yes	Y	Y	-			
71	Ordinary	Yes	Y	Y	-			
72	Ordinary	Yes	Y	Y	-			
73	Ordinary	Yes	Y	Y	-			
74	Ordinary	Yes	Y	Y	-			
75	Ordinary	Yes	Y	Y	-			

76	Ordinary	Yes	Y	Y	-			
77	Ordinary	Yes	Y	Y	-			
78	Ordinary	Yes	N	Y	Connection does not comply with NZS3604 ordinary pile requirements			
79	Ordinary	Yes	N	Y	Connection does not comply with NZS3604 ordinary pile requirements			
80	Ordinary	No	-	N	Not installed			
81	Ordinary	No	-	N	Not installed			

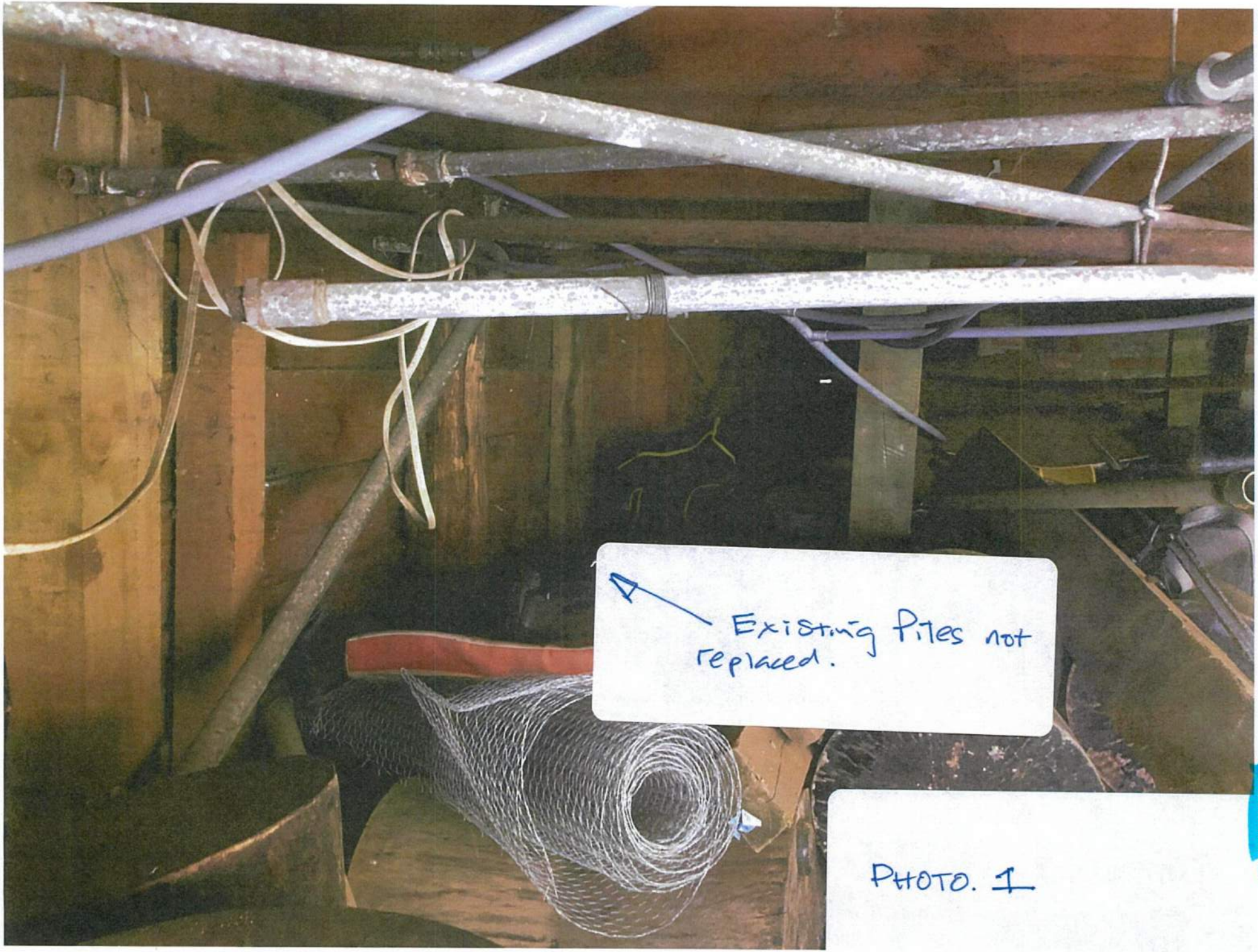


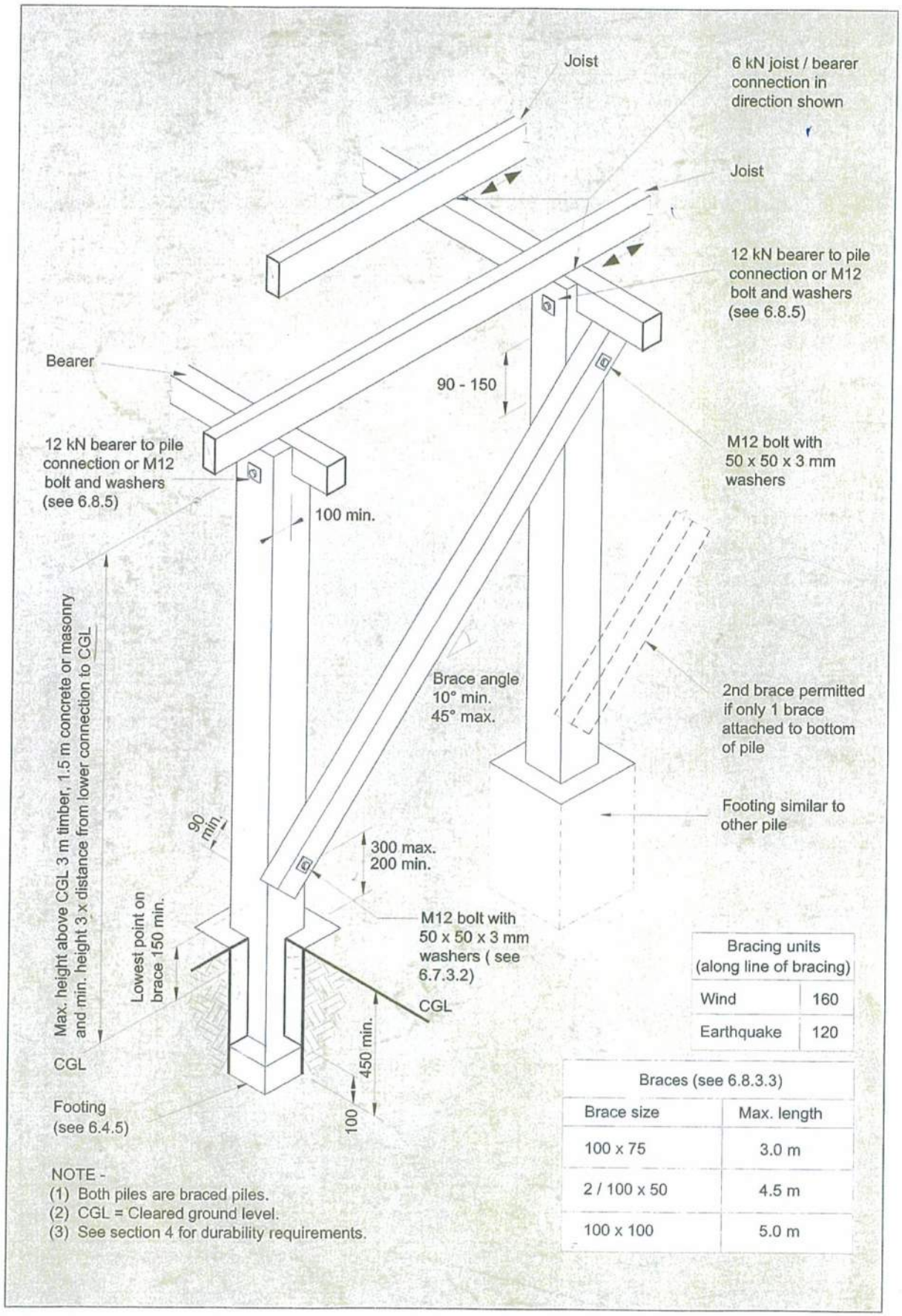
PHOTO. 1

Attachment F



. PHOTO 2

Attachment G



Bracing units (along line of bracing)	
Wind	160
Earthquake	120

Braces (see 6.8.3.3)	
Brace size	Max. length
100 x 75	3.0 m
2 / 100 x 50	4.5 m
100 x 100	5.0 m

NOTE -
(1) Both piles are braced piles.
(2) CGL = Cleared ground level.
(3) See section 4 for durability requirements.

Figure 6.6 – Braced pile system – Brace connected to pile (see 6.8)

Attachment I



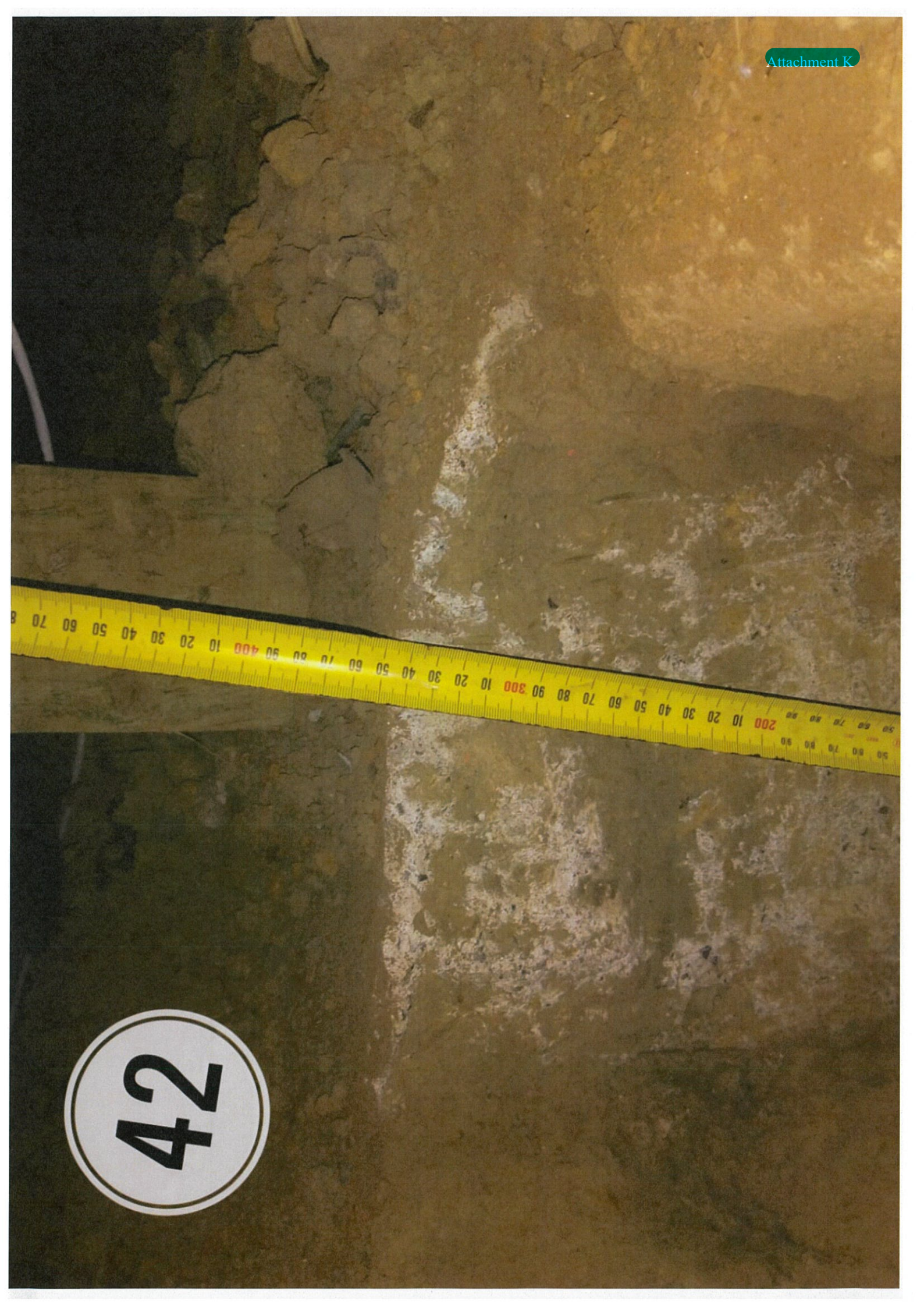
Attachment J

MSC

MSC Consulting Group Ltd
Civil & Structural Engineers



PHOTO 3.


Attachment K
42

Attachment L



Attachment M



Attachment N

CODE COMPLIANCE CERTIFICATE

SECTION 95, BUILDING ACT 2004

Application No:	B/2009/2029
Issued By:	Auckland City Council
PROJECT:	
Use:	Re-Pile And Re-Level Existing Dwelling
Class:	House Not Attached **Intended Life:** More Than 50 Years
PROJECT ADDRESS:	123 Grafton Road, Grafton, Auckland 1010 LOT 1 DP 77051 CT-33C/89
Name of Owner	Stylo Medical Services Limited 123 Grafton Road, Grafton, Auckland 1010

This is: A final Code Compliance Certificate issued in respect of all of the building work under the above Consent.

This Code Compliance Certificate is issued subject to the following conditions:

NIL

The Building Consent Authority named below is satisfied, on reasonable grounds, that:

(a) The building work complies with the building consent; and
(b) The specified systems in the building are capable of performing to the performance standards set out in the building consent

This Code Compliance Certificate is based on the Council Officer's opinion that the building work inspected complies with the Building Consent. The reasonable grounds for the Council Officer's belief are:

The provision of Producer Statements in respect of Footings
The inspection of the building works by Council Inspections Officers

Signed for and on behalf of Council

Ian McCormick
Manager Building Control

Date: 24 September 2009