

### Construction Certificate Determination

issued under the Environmental Planning and Assessment Act 1979 Section 109C (1) (b), 81A (2) and 61A (4)

### Certificate No. 2007/2033

Council	Pittwater
Determination	Approved
date of issue	23 April 2007
Subject land	
Address	1 Kalinya Street, Newport
Lot No, DP No.	Lot 1 DP 72587 / Lot 1 DP 527172
Applicant —	
Name	Newport Arms Properties Pty Ltd
Address	PO Box 934, Mona Vale NSW 1660
Contact No. (phone)	9981 1166
Owner	
Name	Newport Arms Properties Pty Ltd
Address	PO Box 934, Mona Vale NSW 1660
Contact No. (phone)	
Description of Development	
Type of Work	Hotel Additions/Alterations
Builder or Owner/Builder	
Name	JFM Constructions
Contractor Licence No/Permit	-
Value of Work	
Building	\$366,570,00
Attachments	OOPY
<ul> <li>Copy of completed Construction</li> </ul>	Certificate Application Form
· Copy of Long Service Levy recei	and the contract of the contra
Fire Safety Schedule	
	Scheffers dated 19 April 2007
<ul> <li>Structural Engineer's Report by</li> </ul>	Lucas Molloy dated 16 April 2007

Suite 13/90 Mona Vale Road Mona Vale NSW 2103 PO Box 326 Mona Vale NSW 1660 ph: 9999 0003 fax: 9979 1555 email: info@insightcert.com.au ABN 54 115 090 456  $\mathcal{R}$  214230. 24/4/07

### Plans & Specifications certified

The development is to be carried out in compliance with the following plans and documentation listed below and endorsed with *Insight Building Certifiers* stamp.

- Architectural Plans by Gartner Trovato, reference nos. DA01A, DA02A, DA03A, DA04A, DA05A, dated November 2006.
- Structural Details by Northern Beaches Consulting Engineers Pty Ltd, reference 070308, dated April 2007.
- Landscape Details by Zenscapes, reference 060301, 1.01, dated 4 April 2007.

### Certificate

I hereby certify that the above Plans, documents or Certificates, satisfy:

- · The relevant provisions of the Building Code of Australia
- The relevant conditions of this Development Consent

and that work completed in accordance with the documentation accompanying the application for this Certificate (and any modifications as verified by me and shown on that documentation) will comply with the requirements of the Environmental Planning & Assessment Regulation referred to in Section 81A(5) of the Environmental Planning & Assessment Act, 1979.

Signed Date of endorsement Certificate No. **Certifying Authority** Name of Accredited Certifier Bruce Gaal Accreditation No. BPB0130 Accreditation Authority **Building Professionals Board** Contact No. (02) 9999 0003 Address 13/90 Mona Vale Road, Mona Vale NSW 2103 **Development Consent** Development Application No. NO 713/06 Date of Determination 4 April 2007 (modified 14 April 2007) **BCA Classification** 9b

### FIRE SAFETY SCHEDULE

Environmental Planning & Assessment Regulation 2000

23 April 2007 Construction Certificate No. 2007/2033 DA No. No 713/06

Property Address: 1 Kalinya Street, Newport

**Description of Development: Hotel Additions/Alterations** 

Existing Fire Safety Measures	Standard of Performance
Automatic Fire Suppression System (residential only)	AS 3786.1
Emergency Lighting (original building)	Ord. 70 Cl.55.12, AS 2293.1-1987
Exit Signs (original building)	Ord. 70 Cl.24.29, AS 2293.1-1979
Exit Signs (carpark)	BCA 90 Cl.4.5, 4.6, 4.8, AS 2293.1-1987
Fire Doors	Ord. 70 Cl. 22.7 CA 57
Fire Hose Reels (original building)	Ord.70 Cl. 27.2 Ministerial Specification 10, Division 3
Fire Hose Reels (additions - carpark)	BCA 90, Cl. E1.4, AS 2441 - 1988
Fire Seals	AS 1530.4-1997
Paths of Travel	EPA Reg.Cl.186
Portable Fire Extinguishers	AS 2444-2001
Self Closing Solid Core Doors	Ord.70 Cl.22.9
Smoke Alarms (residential only)	AS 3786-1993

Proposed Fire Safety Measures	Standard of Performance
Emergency Lighting	BCA CI. E4.2 & 4.4, AS 2293.1 - 2005
Exit Signs	BCA CI.4.5,4.6,4.8, AS 2293.1-2005
Mechanical Air Handling System (>1,000 1/s)	BCA CI. E2.2, NSW Table E2.2b







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	Given Names (or ACN)		Family Name				
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	9781 1166				Measure sures	Excessions to rem	MOSS STATE OF THE
2	Owner's conse	ent	MINISONALISM				
	Every owner of the land m	oust sign this form.					
	to the owner's signature, t	the common seal of	the body corporate m	ust be stamped on th	nis form over t		
	signed by the Chairman or	Secretary of the E	Body Corporate or the	appointed managing	agent.		
	Owner(s)					30.60	
	NEWPORT AR	Me PROPE	ERTIES P	<u> </u>			
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		N & BURNESS C			200		
	As owner(s) of the land to Certifying Authority and/a						
	Signature(s)						
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	Without the owner's conse on the owner's behalf as the						
	evidence (eg, power of atto	orney, executor, tr	ustee, company direct	or, etc)	20 =		
3.	Location of pro	operty			IN (		7
	Unit/Street no.	Street name	1	00	-		•
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	Suburb					Post cod	le
	HEWPOR	et .				20	04.
	Legal Property Description	(these details are	shown on your rate no	tices, property deed	s, etc)		
		DP no.					
	1	72587	7				
	to I was	#527	172				

4. Description of work		
What type of work do you propose to carry out?		
Please describe briefly everything that you want approved.		
SHOKIDG MICHS &	ADDITION	
of LEW COTRY.		
5. Estimated cost of work		
The estimated cost of the development or contract price may l	oe subject to review	
Estimated cost of work \$366, 570		
6. Development Consent		
Council Consent no. 713/06	Date of Determination	4,04.07,
7. Building Code of Australia classific	ation	
This can be found on the development consent	BCA Classification	9 ь,
8. Builder's details		
If known, to be completed in the case of residential building w	ork	
Name JA. JIM.	License no.	
Owner/builder p		
9. Applicant's declaration		
I apply for a Construction Certificate to carry out build the information in this application and checklist is, to th	ing works as described in ne best of my knowledge,	this application. I declare that all true and correct.
Signature		Date
11115		03.04.07.

### SUBMISSION REQUIREMENTS

### A. GENERAL

Are th	ne plans s	submitted with th	e Construction Certificate Application in accordance with the Development Consent?
			Yes No 🗌
Have	all the co	onditions of Deve	elopment Consent relating to the issue of the Construction Certificate been fully complied with?
			Yes No 🗆
		INSWERED NO to	o either of the above questions, then you will need to speak with the Accredited Certifier
1610XD - 05	H-1000 00000		has the following required information been submitted?)
		Not	In the case of an application for a Construction Certificate for
Yes	No	Applicable	building work:
20220-000-			
D			Three (3) copies of detailed architectural plans and specifications
<b>P</b>			The plan for the building must consist of a general plan drawn to a scale not less than 1:100 and a site plan drawn to a scale not less than 1:200. The general plan of the building is to:  a) show a plan of each floor section b) show a plan of each elevation of the building c) show the levels of the lowest floor and of any yard or unbuilt on area belonging to that floor and the levels of the adjacent ground d) indicate the height, design, and full construction details
1			<ul> <li>e) indicate the provision for fire safety and fire resistance (if any)</li> </ul>
Ø			Where the proposed building work involves any alteration or addition to, or rebuilding of, an existing building, all copies of the general plan are to be coloured or otherwise marked to the satisfaction of the Council to adequately distinguish the proposed alteration, addition or rebuilding with a separate letter listing the proposed changes being submitted.
			3 copies of a specification:     a) to describe the construction and materials of which the building is to be built and the method of drainage, sewerage and water supply     b) state whether the materials proposed to be used are new or second hand and give particular
			Where the proposed building work involves a modification to previously approved plans and specifications the general plans must be coloured or otherwise marked to the satisfaction of the Accredited Certifier to adequately distinguish the modification.
			If the proposed building work involves a modification to previously approved plans and specification which were subject of a Development Consent, has the original Development Consent been modified by Council?
			<ul> <li>Except in the case of an application for, or in respect of domestic building work:</li> <li>a list of any fire safety measures that are proposed to be implemented in the building or on the land on which the building is situated, and</li> <li>if the application relates to a proposal to carry out any alteration or rebuilding of, or addition to, an existing building, a separate list of such of those measures as are currently implemented in the building or on the land on which the building is situated. This list must specify the standard of design of each of those fire safety measures to which they were originally installed.</li> <li>c) This list must describe the extent, capability and basis of design of each of the measures concerned.</li> </ul>
			Copy of BASIX Certificate & Report.
Ø			All other documentation to satisfy conditions of Development Consent.

### HOME BUILDING ACT 1989 (as amended) OWNER/BUILDER REQUIREMENTS

Applicants for work at a residential property with a value of work over \$12,000 require insurance as specified in the Home Building Act 1989.

Owner Builders require Property Owner Builder's Permit issued by the Department of Fair Trading for all projects over \$5,000. In addition to this permit all projects valued in excess of \$12,000 may also require a contract of insurance under the provisions of the Home Building At 1989 as amended. This requirement will take effect should the property owner offer the property for sale in the ensuing period of 7 years.

Enquiries on any matters relevant to this section should be taken up with the Department of Fair Trading at Level 21, Astra House, 227 Elizabeth Street, Sydney (ph: 133220).

### LONG SERVICE LEVY (applies to all classes of buildings)

A Long Service Levy at 0.35% of the cost of works is payable on projects valued \$25,000 or more. This sum can be paid directly to the Long Service Payments Corporation or to Council acting as an agent to the Corporation. Partial exemption from the levy may be granted to non profit organizations, churches and to owner/builders. The levy may also be paid in instalments. Application forms for these exemptions are available from Council but all enquiries in this regard should be address to the Long Service Payments Corporation.

THE CONSTRUCTION CERTIFICATION CANNOT BE ISSUED UNLESS THE LONG SERVICE LEVY AND HOME BUILDING ACT 1989 INSURANCE (APPLICABLE TO RESIDENTIAL PROPERTIES) HAVE BEEN PAID, OR EVIDENCE OF THE EXEMPTION PROVIDED TO COUNCIL.

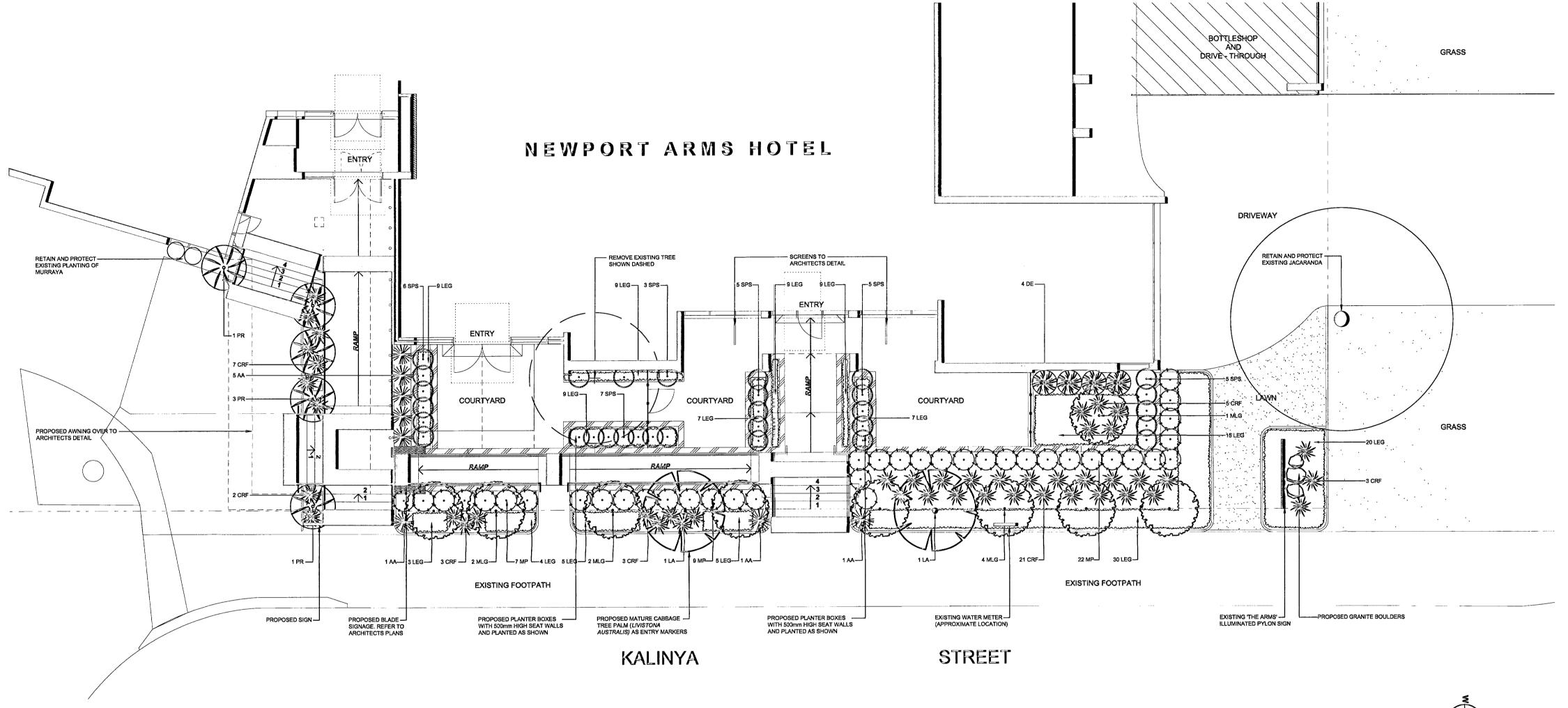
PARTICULARS OF THE PROPOSAL	
What is the area of the land (m2)?	Gross floor area of building (m²) as proposed:
What are the current uses of all or parts of the building(s)/land?	Location: Use:
Does the site contain a dual occupancy?	What is the gross floor area of the proposed addition or new building (sq metres)?
What are the proposed uses of all parts of the building(s land?	Number of pre-existing dwellings:
Number of dwellings to be demolished:	How many dwellings proposed?
How many storeys will the building consist of?	Will the new building be attached to the existing building?
1	Will the new building be attached to any new building?

### MATERIALS TO BE USED

The following information must be supplied for the Australian Bureau of Statistics:

Place a tick (V) in the box which best describes the materials the new work will be constructed of:

WALLS Brick veneer	FLOOR Concrete	ROOF Aluminium	FRAME Timber	
Full brick	Timber	Concrete	Steel	
Single brick	Other	Concrete tile	Other	
Concrete block	Unknown	Fibrous cement	- Unknown	
Concrete/masonry		Fibreglass		
Concrete		Masonry/terracotta shingle		
Steel		Tiles		
Fibrous cement		Slate		
Hardiplank		Steel		
Timber/weatherboard		Terracotta tile		
Cladding-aluminium		Other		
Curtain glass		Unknown		
Other				
Unknown				



### LANDSCAPE NOTES (GUIDELINES)

- GENERAL
  THIS DRAWING HAS BEEN PREPARED FOR CONSTRUCTION CERTIFICATE PURPOSES ONLY.
  FOR EXISTING AND PROPOSED LEVELS, REFER TO ARCHITECT'S DRAWINGS AND SURVEY PLAN.
  FOR LANDSCAPE AREA CALCULATIONS, REFER TO ARCHITECT'S DRAWINGS.
  THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, ENGINEERING AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS.
  DO NOT SCALE FROM THIS DRAWING.

### EXISTING TREE PROTECTION MEASURES

- Existing Tree Protection of all existing trees to be retained, indicated on the plan, from any damage during construction works. Take necessary precautions, including the following:

  Prior to commencement of any construction works, install protective fencing. Maintain in place and in good order for the duration of the construction period.

  Storage / stockpiling of materials, soil or any debris shall not be carried out within the drip-line of existing trees.

  Rectify immediately any damage to, or destruction of, existing trees.

  Where excavation is necessary within the drip-line of trees, hand methods shall be used to preserve root systems intact and to minimise damage.

  Where it is necessary to cut tree roots, use a saw such that the cutting does not unduly disturb the remaining root system.

DRAINAGE
Ensure adequate drainage to all garden beds, gravel and lawn areas. Install 100mm agricultural pipe with 'sock' as required in garden beds and behind all retaining walls. Encase in 300 x 300mm of blue metal and cover with filter cloth. Agricultural pipes to drain to junction pits. Pits to connect to the new stormwater system. Ensure paved areas are free draining. Install pits if required and connect to stormwater (Refer to Hydraulic Engineering

### SITE PREPARATION Remove unwanted matter including stones exceeding 50mm, loose sticks and branches, damaged roots and building rubbish. Remove existing weeds / grass from all proposed garden bed areas. Where required, spray areas with an approved herbicide. Cultivate garden beds by hand to a depth of 200mm. Grade garden bed surfaces accordingly.

PLANTING
Carry out planting as per Landscape Plan and Plant Schedule. No substitutes will be accepted without approval by the landscape architect. Do not plant during extreme weather conditions. Thoroughly water plants before

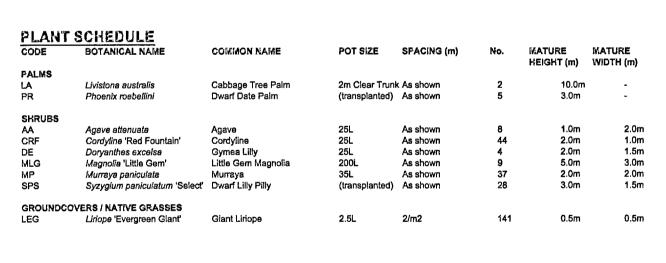
planting begins, immediately after planting and thereafter to maintain growth rates free of stress.

Fertilise exotic plants with 'Osmocote' "Plus" 8-9 month slow release fertiliser, and native plants with 'Osmocote' zero Phosphorus 5-6 month slow release fertiliser. Apply as per manufacturer's instructions.

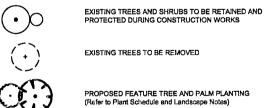
Generally, all garden bed areas are to be mulched to 100mm depth using fine Native Leaf Litter mulch, as supplied by Australian Native Landscapes Pty Ltd.

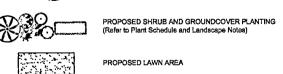
### PLANT ESTABLISHMENT / MAINTENANCE PERIOD Regular maintenance is to be carried out, including the following works: - Watering - to maintain healthy growth, adjusted on a regular basis to suit seasons.

- Weeding to all garden and gravel areas.
   Pest and disease control.
   Topping-up mulched areas as required.
- Tip pruning and fertilising as required
   Mowing and edging of all turf areas.

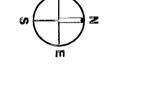


### **LEGEND**



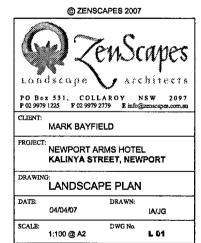


04/04/07 PROPOSED RETAINING WALL (Refer to Architects Detail) 1:190 @ A2





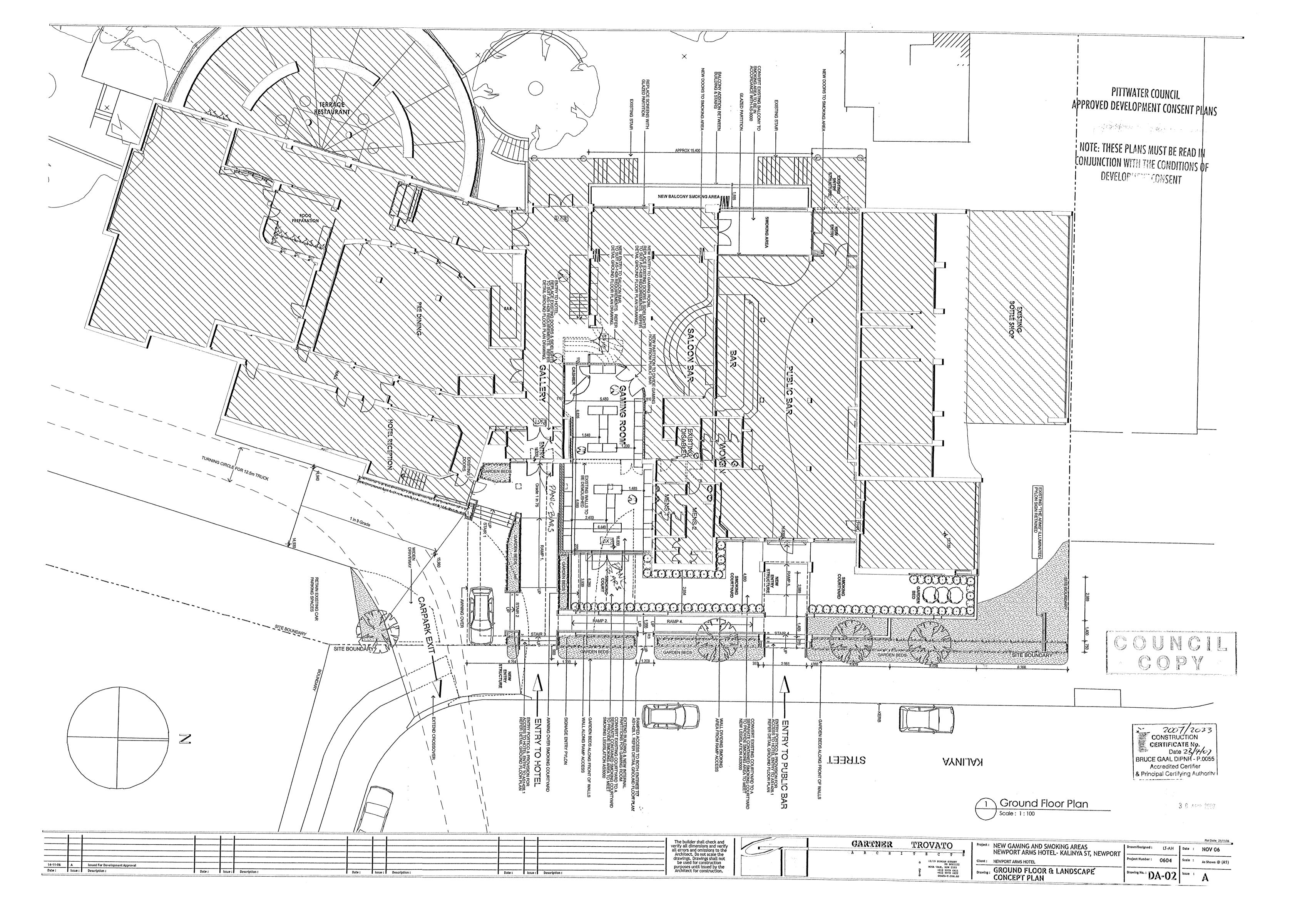
I, Ian Andraws, the undersigned, am a practicing landscape architect (AAILA), suitably qualified to certify this component of the project. This Landscape Plan has been prepared in accordance with Pittwater Council's Pittwater 21 DCP. DATE IAN ANDREWS

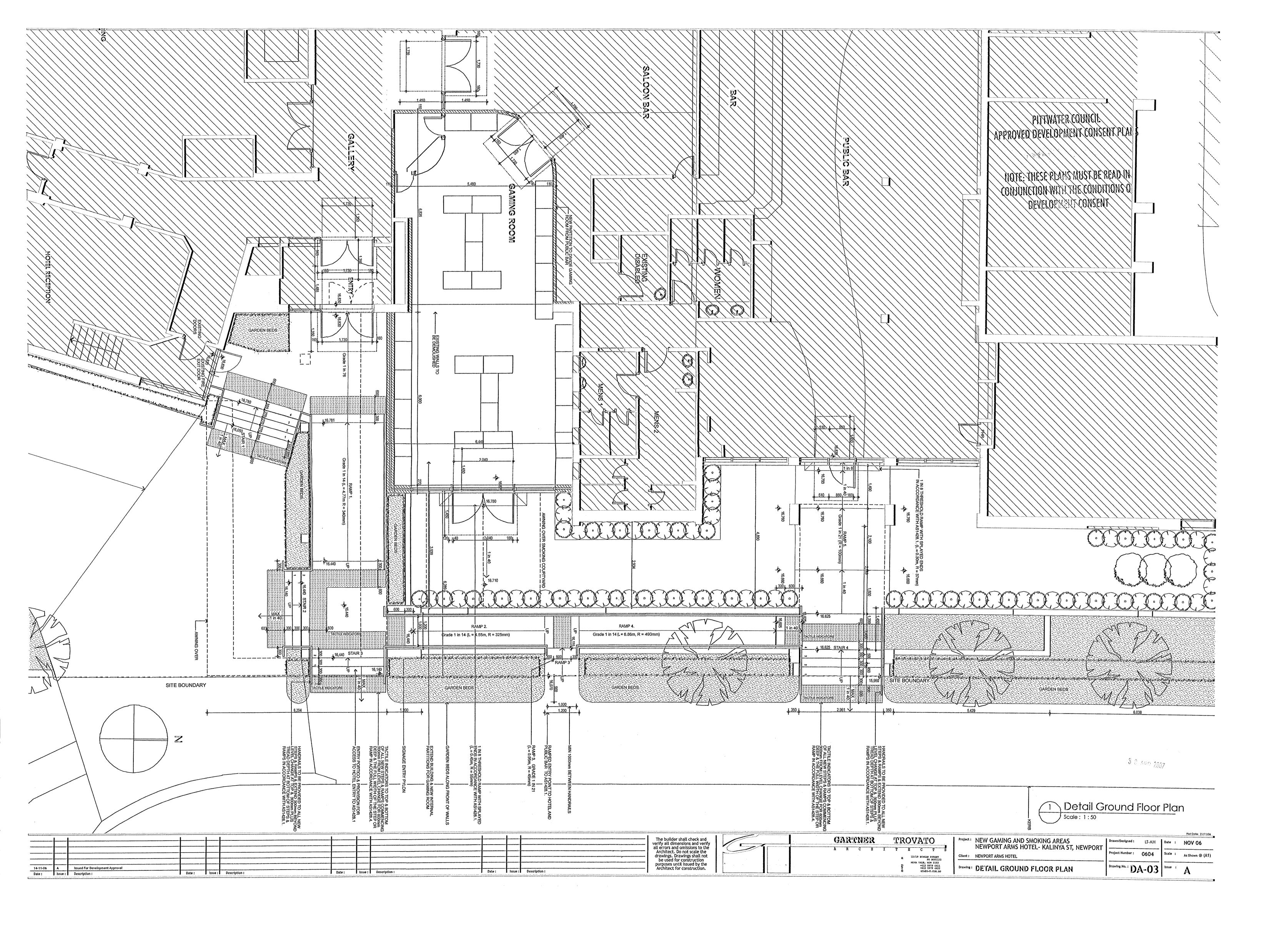




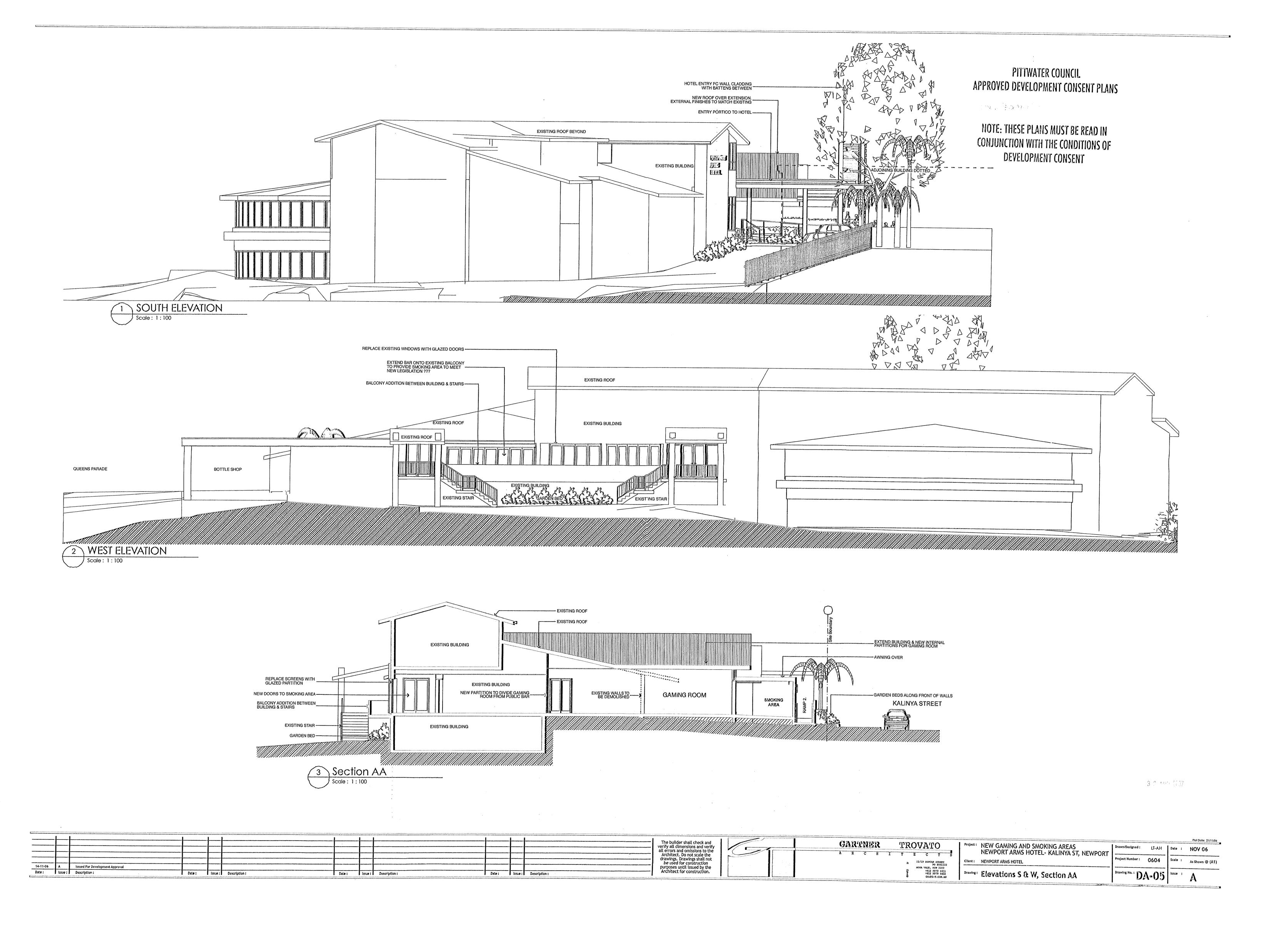
2007/2033 CONSTRUCTION CERTIFICATE No. Date 23/4/07 BRUCE GAAL DIPNA - P.0055 Accredited Certifier & Principal Certifying Authority

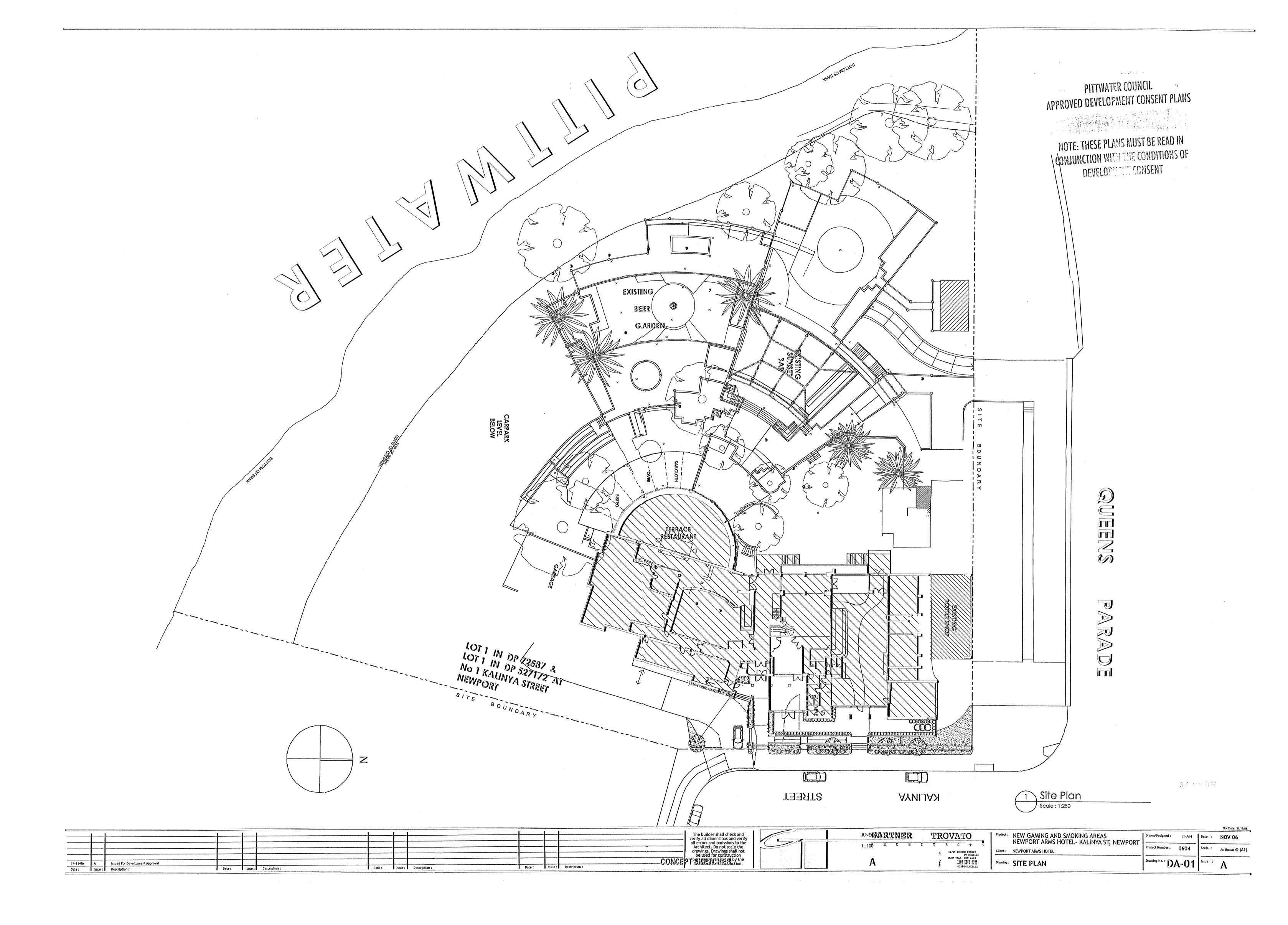
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PO Box 402, Dee Why • NSW • 2099 Mobile: 0417 247 447

Fax: 9972 9221

19 April, 2007

Gartner Trovato Architects 12/19 Bungan Street Mona Vale NSW 2103 Attention: Sean Gartner

Dear Sean,

Re: BCA Part J - Energy Efficiency Requirements

### Newport Arms Hotel, Kalinya Street, Newport

The attached specification outlines the provisions considered necessary to meet the requirements of BCA Part J – Energy Efficiency for the development that is based on the following:

<u>Development Description</u>: Alterations and additions to the existing Newport Arms Hotel, Newport that incorporates works including relocation of the gaming lounge to the existing salon bar and extending this area towards Kalinya Street by approximately 6m. Relocated windows and doors are also proposed to the existing public bar.

<u>Documentation</u>: The architectural documentation used for the assessment includes Drawing Nos. DA-01 to DA-05, Revision A prepared by Gartner Trovato Architects dated November 2006.

BCA Classification of works: 3 (Residential Rooms), 4 (Residential – Managers residence), 6 (Restaurant & Retail bottle shop), 7a (Carpark), 9b (Assembly Building – Hotel including gaming lounge, public bar).

Method of Assessment: The building portions have been assessed for the purposes of the provisions of BCA Part J as follows:

 The building fabric & glazing provisions have only been assessed for the Gaming Lounge area only on the basis that this area is to be provided with its own system of air conditioning and is separated by walls and glazing from the remainder of the adjoining conditioned spaces within the building.

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 The external glazing to the public bar incorporates relocation of existing window/ door units and replacement of existing units. This has not been assessed on the basis of the nature of the works only.

This method of assessment has been discussed and agreed with Insight Building Certifiers therefore for the purposes of the provisions of Part J of the BCA the conditioned space assessed is the Gaming Lounge area only.

· The assessment relates to the new works only.

Trusting this information is to your satisfaction. Should you have any queries regarding this matter please do not hesitate to contact the undersigned.

Yours faithfully,

GRS Building Reports Pty Ltd.

**Graham Scheffers** 

### **SPECIFICATION**

### 1.0 Application

This specification relates to the Newport Arms Hotel building alterations and additions areas as specified in each section.

### 2.0 Roof and Ceiling Construction

The Gaming Room Addition is to be constructed with tiled roof and plasterboard ceiling throughout having a total R-Value of 3.2 for a downwards direction of heat flow. This may be achieved with:

- Reflective insulation blanket below the roof tiles of minimum R-Value of 1.5 including air space in accordance with Section 4 below, and
- Bulk insulation to the ceiling of minimum R-Value of 1.5, and
- Construction as proposed (not including insulation), ie plasterboard ceiling below metal roof on timber rafters to achieve combined R-Value of 0.27 including allowance for outdoor/ indoor air film.
- (Note: The R-value of each component above will need to be determined as a Total R-Value for the entire roof/ceiling construction)

### 3.0 Wall Construction

The external walls incorporated in the proposed Gaming Room Addition are to be constructed with a total R-Value of 1.8. The cavity brick external walls having a total R-Value of 1.8 This may be achieved with:

- Reflective insulation to the walls of minimum R-Value of 1.5, and
- Wall linings as proposed to achieve combined R-Value of 0.36 including allowance for indoor air films.
- (Note: The R-value of each component above will need to be determined as a Total R-Value for the entire wall construction).

It is considered that there are no requirements for internal wall construction in relation to the proposed works.

### 4.0 Insulation Construction – general

- (a) <u>Insulation\_where\_specified\_is\_to\_comply\_with\_AS/NZS\_4859.1</u>, be\_installed\_in accordance with the Manufacturers Specification and so that it—
  - (i) abuts or overlaps adjoining insulation; and
  - (ii) forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barrier; and
  - (iii) does not affect the safe or effective operation of a service or fitting.

### (b) Reflective insulation where specified is to be installed with—

- (i) the necessary airspace to achieve the required R-Value between a reflective side of the reflective insulation and a building lining or cladding; and
- (ii) the reflective insulation closely fitted against any penetration, door or window opening; and
- (iii) the reflective insulation adequately supported by framing members; and
- (iv) each adjoining sheet of roll membrane being overlapped not less than 50 mm; or taped together.

### (c) Bulk insulation where specified is be installed so that-

- (i) it maintains its position and thickness, other than where it crosses roof battens, water pipes, electrical cabling or the like; and
- (ii) in a ceiling, where there is no bulk insulation or reflective insulation in the wall beneath, it overlaps the wall by not less than 50 mm.

### 5.0 Roof lights

It is understood that there are no roof lights or skylights proposed as part of the works.

### 6.0 Glazing

The glazing to the Gaming Room Addition only has been assessed using Glass Calculator - Method 2 based on the design drawings assessed. The printout detailed at Appendix A shows that this glazing satisfies Clause J2.4 of the BCA with the use of single 5mm toned glass in timber frame external doors and windows.

### 7.0 External windows and doors

A seal to restrict air infiltration is to be fitted to each edge of the external doors, openable external windows or the like. These requirements do not apply to a window complying with AS 2047. The seals may be a foam or rubber compressible strip, fibrous seal or the like.

Main entry doors to each of the Conditioned Spaces are to be provided with an air lock, self closing devices or the like.

### 8.0 Sealing of Roofs, Walls and Floors

Roofs, external walls, external floors and any opening such as a window, door or the like to the Gaming Room must be constructed to minimise air leakage when forming part of the external fabric. This necessitates construction to be:

- enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions; or
- sealed by caulking, skirting, architraves, cornices or the like.

### 9.0 Air conditioning and Ventilation Systems

- 9.1 The air-conditioning unit or system provided to heat and cool the Gaming Room must—
  - (i) be capable of being inactivated when the Room is not occupied; and where the air-conditioning unit or system has motorised outside air and return dampers, close the dampers when the air-conditioning unit or system is inactivated.
  - (ii) have any supply and return ductwork insulated and sealed in accordance with Section 10.1 below; and
  - (iii) when the air flow rate is greater than 1000 L/s, be designed so that the total motor shaft power of the fans in the system does not exceed 12 W/m² for a building of not more than 500 m² floor area; and
  - (iv) the requirements of (iii) do not apply to-
    - (A) fans in package air-conditioning plant complying with 9.5 (c) below; and
    - (B) the input power for an energy reclaiming system that preconditions outdoor air; and
    - (C) the input power for process related components such as high efficiency particulate air filters.
- 9.2 A mechanical ventilation system provided to serve the Gaming Room must—
  - (i) be capable of being inactivated when the Room is not occupied; and
  - (ii) not provide mechanical ventilation in excess of the minimum quantity required by ASS1668.2-1991 by more than 50% other than where there is—
    - (A) additional unconditioned outside air supplied—
      - (aa) to provide free cooling; or
      - (bb) to balance required exhaust ventilation such as toilet exhaust; or
      - (cc) to balance process exhaust such as from a health-care building or laboratory; or
    - (B) additional exhaust ventilation needed to balance the required mechanical ventilation; or
    - (C) an energy reclaiming system that preconditions outside air; and
  - (iii) when the air flow rate is more than 1000 L/s,
    - (A) have a fan motor shaft power to air flow rate ratio, or fan motor input power to air flow rate ratio, in accordance with Appendix B, Table B1; and
- 9.3 The requirements above must not inhibit the <u>smoke hazard management</u> operation (ie auto-shutdown of the system if > 1000 L/s) of air-conditioning and mechanical ventilation systems.

- 9.4 Time switch. Power supply to-
  - (a) the system of more than 10 kWr used to heat and cool the Gaming Room; or
  - (b) the ventilation system with an air flow rate of more than 1000 L/s serving the Gaming Room; or
  - (c) heating systems to the Gaming Room of more than 10 kWheating, must be controlled by a time switch in accordance with Section 14 below.

### 9.5 Heating and chilling systems

- (a) Systems that provide heating or chilling for the Gaming Room airconditioning systems must—
  - (i) have any piping, vessels, heat exchangers or tanks containing heated or chilled fluid insulated in accordance with Section 10.2 below; and
  - (ii) where water is circulated by pumping at greater than 2 L/s—
    - (A) be designed so that the total of the motor shaft power to the air-conditioning pump does not exceed 3 W/m² for a building; and
    - (B) have the pump capable of varying its speed when it is-
      - (aa) operating for more than 3,500 hours per year;
      - (bb) is more than 11 kW of motor shaft power, except where the pump is needed to run at full speed for safe or efficient operation; and
  - (iii) if the system contains more than one boiler, chiller or coil, be capable of stopping the flow of water to those not operating.
- (b) A boiler must achieve a thermal efficiency complying with Appendix B, Table B2 when tested in accordance with BS 7190.
- (c) Package air-conditioning equipment, including a split unit and a heat pump, must have an energy efficiency ratio complying with Appendix B, Table B3 when tested in accordance with AS/NZS 3823.1.2 at test condition T1.
- (d) A refrigerant chiller over 125 kWr capacity, must have an energy efficiency ratio complying with Appendix B, Table B4 when determined in accordance with ARI 550/590.
- (e) An air cooled condenser fan motor, other than one that is part of package air-conditioning equipment in (c), must not use more than 15 W of motor shaft power for each kW of heat rejected from the refrigerant when determined in accordance with ARI 460.
- (f) The fan of a cooling tower must not use more than-
  - (i) if a propeller or axial fan, 310 W of motor shaft power for each L/s of cooling water circulated; and

- (ii) if a centrifugal fan, 590 W of motor shaft power for each L/s of cooling water circulated.
- (g) The fan of a closed circuit cooler must not use more than-
  - (i) if a propeller or axial fan, 500 W of motor shaft power for each L/s of cooled fluid circulated; and
  - (ii) if a centrifugal fan, 670 W of motor shaft power for each L/s of cooled fluid circulated.
- (h) The fan of a evaporative condenser must not use more than-
  - (i) if a propeller or axial fan, 18 W of motor shaft power for each kW of heat rejected; and
  - (ii) if a centrifugal fan, 22 W of motor shaft power for each kW of heat rejected.
- (i) The spray water pump of a closed circuit cooler or evaporative condenser must not use more than 150 W of pump motor shaft power for each L/s of spray water circulated.

### 10.0 Air conditioning and Ventilation Systems - Insulation

10.1 This section contains the requirements for the <u>sealing and the insulating</u> of supply and return ductwork used in a system that heats or cools.

### 10.1.1 Ductwork sealing

- (a) Heating or cooling ductwork and fittings must be sealed against air loss—
  - by closing all openings in the surface, joints and seams of ductwork with adhesives, mastics, sealants or gaskets in accordance with the duct sealing requirements of AS 4254 for the static pressure in the system; or
  - (ii) for flexible ductwork at an operating static pressure of less than 500 Pa, with a sealant and draw band encased with adhesive tape.
- (b) The requirements of (a) do not apply to ductwork and fittings located within the last conditioned space served.

### 10.1.2 Ductwork insulation

- (a) Ductwork and fittings for heating or cooling must be thermally insulated with insulation complying with AS/NZS 4859.1 to—
  - (i) achieve the Total R-Value specified in Appendix B, Tables B5 and B6; or
  - (ii) for flexible ductwork of not more than 3 m in length from an outlet or the like, achieve a minimum Total R-Value of 1.0.
- (b) Insulation on ductwork conveying cold air must be protected by-
  - (i) a vapour barrier on the outside of the insulation; and

- (ii) where the vapour barrier is a membrane, overlapping adjoining sheets of the membrane by 50 mm and bonding or taping the sheets together.
- (c) Ductwork insulation must-
  - (i) be protected against the effects of weather and sunlight; and
  - (ii) abut adjoining insulation to form a continuous barrier; and
  - (iii) be installed so that it maintains its position and thickness, other than at flanges and supports.
- (d) The requirements of (a) do not apply to heating and cooling ductwork and fittings located within the last conditioned space served.
- 10.2 This Section contains the requirements for the <u>insulating of piping</u>, vessels, heat exchangers and tanks containing heated or chilled fluid.
  - (a) Insulation must-
    - (i) be protected against the effects of weather and sunlight; and
    - (ii) be able to withstand the temperatures within the piping; and
    - (iii) for piping, achieve the Total R-Value in Appendix B, Table B7; and
    - (iv) for vessels, heat exchangers and tanks, achieve a minimum Total R-Value of—
      - (A) 2.5 if the content is low temperature brine or glycol; or
      - (B) 1.8 if the content is chilled water; or
      - (C) 1.3 if the content is heated water; or
      - (D) 2.5 if the content is steam.
  - (b) Insulation on piping, vessels, heat exchangers and tanks containing chilled fluid must be protected by a vapour barrier on the outside of the insulation.
  - (c) The requirements of (a) do not apply to heating water piping—
    - (i) located within the space being heated where the piping is to provide the heating to that space; or
    - (ii) encased within a concrete floor slab which is part of a floor heating system.

### 11.0 Exhaust Fans

Miscellaneous exhaust fans where proposed are to be fitted with a sealing device such as self closing damper or the like when serving a conditioned space.

### 12.0 Interior Artificial Lighting

The internal artificial lighting for the Gaming Room must not exceed an aggregate design illumination power load of 1.919W. This is based on;

- (a) fixed dimmers being installed to 75% of the floor area that reduce the overall lighting and power consumption of the lighting by 90%, and
- (b) manual dimmers being installed to 75% of the floor area controllable by staff only.

These requirements do not apply to the following:

- Emergency lighting required by the BCA.
- · A heater where the heater also emits light.

### 13.0 Artificial lighting around the perimeter of the building

Artificial lighting around the perimeter of the building must:

- (a) be controlled by either a daylight sensor or a time switch in accordance with Section 14 below; and
- (b) when the total perimeter lighting load exceeds 100 W
  - have an average light source efficacy of not less than 60 Lumens/W; or
  - be controlled by a motion detector in accordance with Section 14 below,
  - when used for decorative purposes, such as facade lighting or signage lighting, have a separate time switch in accordance with Section 14 below.

### 14.0 Lighting and Power Control Devices

This Specification contains the requirements for lighting and power control devices including timers, time switches, motion detectors and daylight control devices where reference by Section 13.

- 14.1. Corridor lighting timer. A corridor lighting timer must—
  - (a) be located within 2 m of every entry door to the space; and
  - (b) have an indicator light that is illuminated when the artificial lighting is off; and
  - (c) not control more than 95% of the lights in spaces of area more than 25 m²; and
  - (d) be capable of maintaining the artificial lighting-
    - (i) for not less than 5Â minutes and not more than 15 minutes unless it is reset; and
    - (ii) without interruption if the timer is reset.
- 14.2. Time switch. A time switch must be capable of—
  - (a) switching on and off electric power to systems—

- (i) at variable pre-programmed times and on variable preprogrammed days; and
- (ii) limiting the period the system is switched on to 2Â hours beyond the time for which the building is occupied; and
- (b) being overridden by a manual switch for a period of up to 2 hours, after which the time switch must resume control.

### 14.3. - Motion detectors

In the Gaming Room, a motion detector must-

- (i) be capable of sensing movement such as by infra-red, ultrasonic or microwave detection or by a combination of these means; and
- (ii) be capable of detecting—
  - (A) a person before they have entered 1 m into the space; and
  - (B) movement of 500 mm within the useable part of the space; and
- (iii) not control more than-
  - (A) in other than a <u>carpark</u>, an area of 500 m<sup>2</sup> with a single sensor or group of parallel sensors; and
  - (B) 75% of the lights in spaces using high intensity discharge; and
- (iv) be capable of maintaining the artificial lighting when activated--
  - (A) for a minimum of 5 minutes and a maximum of 30 minutes unless it is reset; and
  - (B) without interruption if the motion detector is reset by movement; and
- (v) have a manual override switch which—
  - (A) enables the lighting to that area, or a greater area, to be turned off; and
  - (B) is not capable of switching the lights permanently on.

When outside a building, a motion detector must-

- (i) be capable of sensing movement such as by infra-red, ultrasonic or microwave detection or by a combination of these means; and
- (ii) be capable of detecting a person within a distance from the light equal to twice the mounting height; or 80% of the ground area covered by the light's beam; and
- (iii) not control more than five lights; and
- (iv) be operated in series with a photoelectric cell or astronomical time switch so that the light will not operate in daylight hours; and
- (v) be capable of maintaining the artificial lighting when the switch is on for a minimum of 1 minute and a maximum of 10 minutes unless it is reset; and

(vi) have a manual override switch which is reset after a maximum period of 4 hours.

### 14.4. - Daylight sensor and dynamic lighting control device

A daylight sensor and dynamic control device for artificial lighting must-

- (a) for switching on and off-
  - (i) be capable of having the switching level set point adjusted between 50 and 1000 Lux; and
  - (ii) have a delay of more than 2 minutes; or a differential of more than 50 Lux, and
- (b) for dimmed or stepped switching, be capable of reducing the power consumed by the controlled lighting in proportion to the incident daylight on the working plane either—
  - (i) continuously down to a power consumption that is less than 50% of full power; or
  - (ii) in no less than 4 steps down to a power consumption that is less than 50% of full power; and
- (c) have a manual override switch which enables the lighting in an area to be turned off but is not able to switch the lights permanently on or bypass the lighting controls.

### 15.0 Maintenance

The components of services must be maintained to ensure that they perform to a standard not less than they were originally required to achieve, including but not limited to:

- Time switches, and
- · Room temperature thermostats, and
- · Plant thermostats such as boilers or refrigeration units, and
- · Motorised air dampers and control valves, and
- Motion detectors, and
- · Reflectors, lenses and diffusers of light fittings, and
- Heat transfer equipment.

### Appendix A - Glass Calculator Printout

Report from glazing calc	ing calc									·	printed 18:04/2007
GL,	AZING C	ALCL	JLATC	OR FO	R USE	= WITI	HCLA	USE.	12.4, 1	GLAZING CALCULATOR FOR USE WITH CLAUSE J2.4, BCA VOLUME ONE (METHOD 2)	00 2)
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Newport Arms Hotel - Gar	lotel - Gaming	ming Room addition	dditon							ning Room addition	2
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Ground Floor	A upday A			18.5m²							
	Option B										
	Clasing area (A)			10.5m²							

Nead	Number of rows preferred in table below		7	(so cumend)	2 (so currently displayed)										
Ц	GLAZING ELEMENTS, ORIENTATION, SIZE and PERFORMANCE CHARACTERISTICS	ORENTAT	ON SIZE	ING PERFOR	MANCE CH	ARACTER	STICS		SHADANG	S S		ALC:U	CALCULATED OUTDO	- = 100	ğ
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-	Gaming Room Doors	E		2.40	2.20		5.4	0.50	3.900	3.900 2.400	1.63	000	0.05	88.0	,
~	Gaming Rm Windows	3		1.90	2.75		5.4	0.50			Ī	000	1,00	8	1
											١				į

If Inputs are valid

page 1 of 1

### Appendix B – Air Conditioning and Mechanical Ventilation

Table B1 - MAXIMUM FAN MOTOR POWER TO AIR FLOW RATE RATIO

System static pressure (Pa)	Maximum fan motor shaft power to air flow rate ratio W/(L/s)	Maximum fan motor input power to air flow rate ratio W/(L/s)
Up to 200	0.55	0.73
300	0.75	1.0
400	0.95	1.27
500	1.15	1.5
600	1.4	1.9
700	1.6	2.1
800	1.8	2.4
900	2.0	2.7
1000	2.2	2.9
Greater than 1000 2.5		3.3
Notes:		
1.	The maximum fan motor power to air flow rate rat system resistance where a fixed pitch and fixed sp	
	The system static pressure includes all the resincluding integrated fan cowls, flaps and grilles.	istance against which the fan must operate

Table B2 - MINIMUM THERMAL EFFICIENCY OF BOILER

Fuel type	Rated capacity (kWheating)	Minimum gross thermal efficiency (%)
	Less than 90	75
Gas	90 to 750	80
•	More than 750	83
Oil	Less than 90	76
	90 to 750	78
	More than 750	80

### Table B3 - MINIMUM ENERGY EFFICIENCY RATIO FOR PACKAGED AIR-CONDITIONING EQUIPMENT

Equipment	Equipment capacity		
	65 kWr to 95 kWr	More than 95 kWr to 125 kWr	
Air-conditioner — cooling	2.7	2.8	
Heat pump — cooling	2.6	2.7	

Table B4 - MINIMUM ENERGY EFFICIENCY RATIO FOR REFRIGERANT CHILLERS

Equipment	Minimum energy efficiency ratio		
Equipment	For full load operation	For integrated part load	
Water cooled chiller	<u> </u>	<u></u>	
More than 125 kWr but not more than 525 kWr	4.2	5.2	
More than 525 kWr but not more than 1000 kWr	4.5	5.6	
More than 1000 kWr	5.5	6.1	
Air cooled or evaporatively cooled chiller			
More than 125 kWr but not more than 525 kWr	2.2	3.0	
More than 525 kWr	2.5	3.1	

Table B5 - DUCTWORK - MINIMUM TOTAL R-VALUE (For systems of no more than 65 kWr and 65 kWheating capacity)

	Location and element		Minimum Total R-Value	
			Evaporative cooling	Heating system or refrigerated cooling system
1.	Under an enclosed suspended floor; or	Ductwork and cooling fittings	0.6	1.0
•	in a roof space with insulation installed directly beneath the roofing.	Heating fittings	N/A	0.1
All	other locations including—	Ductwork, cooling and heating fittings		
1.	external to the building; or			
ř.	under an unenclosed suspended floor; or		0.6	1.0
	in a roof space with insulation installed at the ceiling level.			

### Table B6 DUCTWORK - MINIMUM TOTAL R-VALUE (For systems greater than 65 kW, and 65 kW<sub>heating</sub> capacity)

Location	Minimum <u>Total R-Value</u>		
	Evaporative cooling	Heating system or refrigerated cooling system	
Within a conditioned space other than where the space is the only or last space served.	Nil	1.0	
Under an enclosed suspended floor; or			
2. in a roof space with insulation installed directly beneath the roofing; or	0.9	1.5	
3. in a plant room.			
All other locations including—			
external to the building; or			
under an unenclosed suspended floor; or	0.9	1.5	
3. in roof space with insulation installed at ceiling level.			

### **Table B7 PIPING - MINIMUM TOTAL R-VALUE**

<u> </u>		Location	Minimum <u>Total R-Value</u>
1.	Heat	ting water piping for systems of no more than 65 kW <sub>heating</sub> capacity	
[	(a)	Located internally	0.2
	, ,	Located within a wall space, an enclosed sub-floor area or an enclosed roof space	0.3
		Located outside the building or in an unenclosed sub-floor area or an unenclosed roof space	0.3
2.	Heat	ting water piping for systems of more than 65 kW <sub>heating</sub> capacity	
Γ	(a)	Located internally	0.5
	3	Located within a wall space, an enclosed sub-floor area or an enclosed roof space	0.6
		Located outside the building or in an unenclosed sub-floor area or an unenclosed roof space	0.7
3.	Cooling water piping for systems of more than 65 kW capacity but less than 250 kW, capacity		
	(a)	Located internally	0.8
	(b)	Located within a wall space, an enclosed sub-floor area or an enclosed roof space	0.9
		Located outside the building or in an unenclosed sub-floor area or an unenclosed roof space	1.0
4.	Cooling water piping for systems of more than 250 kW, capacity		
	(a)	Located internally	1.0
	1 '	Located within a wall space, an enclosed sub-floor area or an enclosed roof space	1.1
	(c)	Located outside the building or in an unenclosed sub-floor area or an unenclosed roof space	1.3
No	te: ،		
D: -		he included includes all flavour descriptions and vector apply piping with	- F00 f Al Hi

Piping to be insulated includes all flow and return piping, cold water supply piping within 500 mm of the connection to the heating or cooling system and pressure relief piping within 500 mm of the connection to the heating or cooling system.

### **Certificate of Existing Structural Adequacy**

Date: Client: 16<sup>th</sup> April 2007

Bayfield Family

Job No.

070308

Engineer: LM

Site: NEWPORT ARMS HOTEL

NB Consulting Engineers P/L carried out a site inspection at the above commercial premises on the 2<sup>nd</sup> April 2007. The purpose of the visit was to inspect and comment on the capacity of the existing structure to support the proposed additions and alterations as per approved Architectural plans as prepared by Gartner Trovato Architects.

The assessment consisted of a walk over visual inspection of the building.

In summary, the building is considered sound and provides an adequate structure for the proposed works, provided that engineering plans are complied with and that all structural works are certified during construction. However, some minor cracking may occur as the building adjusts to the new load distribution. This is not expected to adversely affect the buildings overall structural integrity.

Note: This certification does not cover any defects to the structure that were not accessible at the time of inspection. If in the event that defects are uncovered during construction or become apparent after construction is complete, then the engineer should inspect the areas of concern and prepare a specification for remedial works. (These works will be carried out at hourly rates.)

We trust that this certificate meets with your requirements. Please contact the author if further clarification is required.

NB CONSULTING ENGINEERS

COUNCIL.

Per Lucas Molloy
BE CPEng NPER Director

N:\ENG NBC\2007\070308\SA001.doc

### Pittwater Council

### OFFICIAL RECEIPT

19/04/2007 Receipt No 214061

To GARINER TROVATO ARCHITECTS

FO BOX 1122 MONA VALE

Applic Reference.

GL Re GLSL-Buil \$1,283.00 1 % NO713/06 1 KALINYA ST

Total:

\$1,283.00

Amounts Tendered

Nett \$1,283.00

> Printed 19/04/2007 3:26:29 Cashier KWay

### GENERAL NOTES: GENERAL

- GI. The drawings are to be read together with all Architects drawings and specifications.
- G2. Dimensions shall not be obtained by scaling from the drawings. All setting out dimensions shall be verified and discrepancies shall be referred to the Engineer prior to commencement of work.
  G3. Care is required during construction so that structural elements are not over stressed and that the works and excavations required therefore are kept stable at all times.
- G4. Design, moterials and workmanship are to be in accordance with current S.A.A standards and statutary authority regulations except where varied by these documents.
- G5. Design live loads are in accordance with AS 1170.1
- G6. Builder to ensure stability of existing structures in the vicinity of excavation works.

### FOOT INGS

- FI. FOUNDATION STRATA IS ASSUMED FOR DESIGN PURPOSES IN ACCORDANCE AS 2870. SEE FOOTNOTE, CLASSIFICATION TO BE VERIFIED BY A GEOTECHNICAL ENGINEER CONTISSIONED BY THE CLIENT FOR CERTIFICATION OF FOUNDATIONS.
- F2. Footings to be constructed and back filled as soon as possible following excavation to avoid softening by rain or drying out by exposure.
- F3. Footings must bear into andisturbed natural ground clear of arganic material. Refer to details. F4. If rock or variable bearing strata is encountered during excavation of the footings all footings/piers are to be excavated to similar material of
- F5. Footings to be cast in approved material having on allowable capacity greater bearing capacity.

  The Engineer is to be contacted at that time for approval or review.
- SAI. Required bearing capacity 100 kPa.
  SA2. Trenches must be cleaned of all debris and hand compacted prior to placement of reinforcement. Clay Foundations:
- Required bearing capacity 150 kPa.
  Trenches must be cleaned of all debris. Soft spots must be out out and filled as per compacted fill notes, prior to placement of reinforcement.
- Required bearing capacity 400 kPa.

  Excavation for footings into shale must be cost or capped with plain concrete on the same day as excavation.
- Refer adjacent for assumed Design bearing strata. Required bearing capacity 600 kPa.
   Scrape weathered surface to remove cleaved sandstone under footings
- Future development of neligiboring properties may effect ground water conditions on this site. Consequently, reactivity in subgrade beneath footings may be locally altered therefore putting footing at risk of differential settlement. He recommend that, particularly in clay subgrades, agricultural drainage is installed to the unstream perimeter of the building at a distance from the building which is outside the time of influence of the footings. The agricultural drain must be installed below the fluctuating seasonal tone which should be identified by geotechnical investigation.

- Cl. All workmarship and materials shall be in accordance with AS 3600
- C2. Concrete quality shall be as follows and shall be verified by tests.
- C3. All concrete unless otherwise noted shall have a slump of 80mm at point of placement, a max, aggregate size of 20 mm.
  No water shall be added to the mix prior to an during placement of concrete. Strength as specified on plans.
- C.4. Clear concrete cover to reinforcement shall be as follows unless

P	ELEMENT	INTERIOR	EXTERIOR	AGAINST GROUND
FO	FOOTINGS	1		50
8	COLUMNS/PEDESTALS 30 UNO	ONU OE	REFER TO PLAN	ı
75	SLABS/WALLS	25	REFER TO PLAN	40 ON MEMBRANE
38	BEAMS	25 UNO	REFER TO PLAN 50	80
-	BLOCKWORK	55	55 FROM APPROPRIATE FACE	FACE

# C5. Sizes of concrete elements do not include thickness of applied finishes

- C6. All Construction Joints locations shall be approved by the Structural Engineer
- 9 Beam depths are written first and include slab thickness, if any
- CB. No holes or choses other than those shown on the structural drawings shall be made in concrete elements without the prior approval of the engineer.
- C9. Shrinkage reducing admixtures such as 'Eclipse' or approved equivalent, if specified, must be added to mix prior to pour.
- CIO. Mater reducing agents, if specified, must be added to mix prior to No extra water is to be added to increase slump. pour.
- CII. Where vertical slab/beam surfaces are formed against a majorry (or other) wall, provide 10 mm styrene separation material.
- Hater must not be added to concrete mix prior to placement of concrete
- Cl3. Above covers may have to be adjusted if fire rating is a requirement.

- RI. All reinforcement specified is Grade D500 unless noted otherwise.
- Reinforcement is represented diagrammatically it is not necessarily shown in true projection.
- Top reinforcement is to be continuous over supports. Bottom reinforcement to be lapped at supports.

3

- R4. Melding of reinforcement shall not be permitted unless shown on the
- structural drawings.
- 33 Pipes or conduits shall not be placed within the zone of concrete cover the reinforcement without the approval of the engineer.
- R7. 8 All reinforcing bars and fabric shall comply with AS 4671-2001.
- Reinforcement symbols:
- N Grade 500N deformed bar (D500) Normal Ductility R Grade 250N plain round bar (R250) Normal Ductility. SL Grade 500L welded deformed ribbed mesh (D500) Square Low Ductility. RL Grade 500L welded deformed ribbed mesh (D500)
- 9
- Rectangular Low Ductility.

  The number immediately following these symbols is the number millimeters in the bar diameter.

  Example : 8 NI2-250

  Denotes 8, Grade 500N deformed bars, 12 mm diameter at 250 cts.
- Rô. Fabric reinforcement to be lapped I complete square + 25 mm unless noted otherwise,
- R9 All reinforcement shall be firmly supported on bor chairs spaced at a maximum of 750 centres both ways under rod and fabric reinforcement. Reinforcement shall be tied at alternate intersections

### FORMWORK

- FWI. Formwork must be cleaned of all debris prior to casting of concrete.
- FW2. Minimum stripping times for form work shall be as recommended in AS 1509 or as directed by the engineer.
- FW3. 1. The finished concrete shall be a dense hornogeneous mass, completely filling the form work, thoroughly embedding the reinforcement and free of stane packets. All concrete elements including slabs on ground and factings shall be compacted with mechanical vibratures.
- FW4. Curing of all concrete is to be achieved by keeping surfaces continuously uest for a period of 3 days, followed by prevention of loss of moisture for seven days followed by a gradual drying out. Approved sprayed on curing compounds may be used where no floor finishes are proposed. Polythone sheeting or wet hession may be used if protected from wind and traffic

### BRICKWORK

- Brickwork is to be constructed to AS 3700.
- BR2. Two layers of approved greased metal based slip material shall be used over all load bearing walls that support concrete slabs and placed on smooth brickwark or browelled morter finish. Non load-bearing walls shall have 10 mm compressible material and ties to the slab soffit.
- No brickwork shall be constructed on suspended slabs until all propping has been removed from the underside of the slob and the concrete has the specified 28 day cylinder strength verified by tests.
- BR4. Central joints to be placed at a maximum of 8m centres or in accordance with AS 3700.
- BR5. Exposure grade bricks to be used below damp proof course.

Vertical control joint moterial where specified on plan between and brick walls shall be: 10 mm Spandex External UNO.

Bitumostic fibreboard internal UNO.

### ACAL 076 121 516 ABM, 24 076 121 618 Suite 277, 30 FISHER ROAD DEE WHY N.S.W. 2099 Ptt. (02) 9594 7000 Fax: (02) 9894 7444 e-mail: nb@nbooxsulting.com.au NORTHERN BEACHES Consulting Engineers P/L.

BE(Civil), CPErg, MIEAust., NPER. Institute of Engineers Membership No. 788184 om a qualified Structural/Civil Engineer, held the following qualifications:

> BLOCKWORK BR7. Provide stainless steel wall ties below DPC to AS 3700. Provide galvanized wall ties above DPC to AS 3700 t Local Council Specifications

- BLI. Concrete blacks shall have a minimum compressive strength of IS MPa and conform to AS 1500. Masorry to be constructed to AS 3700.
- BL2. Where cores of hollow blocks are to be filled, properly compacted 2011Pa concrete with 10 mm aggregate and 230 mm slump shall be used. Clean out openings must be utilized for all cares.
- BL3. Location of actual starters is critical to suit black cores, allow 55 mm cover from the outside face of blackwork. All reinforcement lap lengths to conform to AS 3600.
- BL5. Vertical control joint material where specified on plan between and brick walls shall be: 10 mm Spandex External UNO.

  Bitumastic fibreboard internal UNO. BL4. Control joints to be placed at a maximum of 8 m centres or in accordance with AS 3700. between
- BL6. Retaining walls or any reinforced and concrete core filled block walls to be of Double 'U' Block Construction.
- BL7. No blockwork shall be constructed on suspended slabs until all propping has been removed from the underside of the slab and the concrete has the specified 28 day cylinder strength verified by tests, unless approved by the Structural Engineer.
- BLB. Max. pour height for unrestrained blockwork is 2000

- All Structural steelwork to be Grade 300 or greater.
   Design, Fabrication and erection to be in accordance.
- Design, Fabrication and erection to be in accordance with AS 4100.

  Materials and workmanship shall comply with AS 1250 1981, SAA Steel Structures Code and the specification for Structural Steel.

  Rolled steel sections including steel plates shall comply with AS 3678 1990.

53

- Cold formed steel sections shall be Grade 450 Zinc coated in accordance with AS 1538-1988.
- Melded and seamless steel hollow sections shall camply with AS 1163. Grade 350.

- A.65 Commercial botts Grode 4.6, snug tightened.

  8.65 High Strength structural botts Grade 8.8, snug tightened.

  8.65 High Strength structural botts Grade 8.8, fully tightened to AS 1511

  8.67 High Strength structural botts Grade 8.8, fully tensioned to AS 1511

  and acting as a Bearing Joins.

  8.67 High Strength structural botts Grade 8.8, fully tensioned to AS 1511

  2. A 15 and acting as a Bearing Joins.

  9.67 Unless roted otherwise, all botts will be 8.85.

  57. Unless shown atherwise, all botts will be 2016 botts, 10 thick gusset plates, form continuous fillet welds.

  58. Load indicating washers shall be used in all fully tensioned joints.

  (8.67 + 8.67 8.
- a. Thereughly cleaned wire brushing, followed by two coats of zinc phosphate primer equivalent to Dulux Luxaprime applied by hand using brushes to achieve a total dry film thickness of 70
- EXTERNAL ELEMENTS, & ELEMENTS WITHIN SITHER SKIN OF EXTERNAL CAVITY WALLS b. Proporation Blost clean to a minimum attended of the control of
- Preparation Blast clean to a minimum standard Class accordance with AS 1627 Part 4.
- Primer 2-pack epoxy phosphate at dft 75 microns

  (Dulux Durepon P14)

  Barrier Coat 2-pack epoxy microous iron oxide, dft 100 microns

  Finish Coat 2-pack epoxy high gloss acrylic to dft 75 microns

  (e.g. Dulux Acrathane I F) in an approved colour.

  C. Hot dipped galvanized to A5 4680.

  Where the galvanic (Hot Dip Galvanized) cooking is apmpromised by welding, bolling or damage, inorganic sinc-rich point (minimum 95% zinc content) is to be applied ofter wire brushing affected area (use 3 coats minimum), or Hot Metal Spray in occordance with A5 4680.
- Workshop drawings shall be prepared and two copies submitted to the angineer for review prior to fabrication commencement.

- All workmanship and materials to be in accordance with AS 1684, AS 1720 and as 3959. All soft wood to be Grade F7 unless noted otherwise. All hardwood to be minimum Grade F14 unless otherwise noted. Exposed timber to be CCA treated (to AS 1604) redried after full impregnation, or durability class 1 or 2.
- T2. All and at a maximum 3000 centres. joists deeper than 150 to have blacking over support bearers
- J Roof trusses to be designed by the manufacturer to the relevant standards. Pre camber to be an amount egual to dead load
- 7
- All holes for bolts to be exact size. Washers to be used under all heads and nuts and to be at least 2.5 times the bolt diameter. Bolts to be 1116 grade 4.6 unless noted otherwise.
- 76 35 Treat all exposed out ends with Reseal by Protim to manufacturers specification to achieve required Hazard Level Exposure Classification.
- Battens for T 4 G to be Kin Dried to 12 X. 36mm minimum deep treated pine or as recommended by supplier. Flooring to be installed no scarer than 28 days after slab powr.
- Hot dip galvarized nails/clouts/screws to be used with all timber connections.
- 78. AI Continuous nailing must not be used for any timber connections. All exposed CCA treated pine to have an application of penetrating sealer to reduce warping and twist of the timber due to varying, maisture cantent in service.

### COMPACTED FILI

- CFI. Only to be used with approval Engineer 4 to be certified by geotechnical Engineer
- CF2. Clear organic material and topsail under proposed slabs/footings.
- CF3. Filling shall be granular material compacted in not more 200 mm layers to a minimum dry density ratio (AS 1289/E4.2 1982) of 98 percent.
- CF4. D During cleaning and excavation for slabs and factings cut out soft spots and fill as above.

## INSPECTIONS BY ENGINEER

- 48 HOURS NOTICE IS REQUIRED BEFORE ANY SITE INSPECTION I. Bearing strata of all footings prior to concrete pour.

- Any reinforcement prior to concrete pour.
   Timber and Steel framing prior to cladding or lining.
   Steel Intels ofter installation.
   CONTACT YOUR PCA (Principal Certifying Authority) AS TO REGUIREMENTS FOR MANDATORY CRITICAL STAGE INSPECTIONS IN ACCORDANCE WITH REVISED EP4A ACT REGULATIONS EFFECTIVE JULY 1, 2004.

# DRAMING SCHEDULE:

- SOI GENERAL TO SOZ SLAB FOUNDATION P SOS SECTION I SOA SLAB RAN SOA SLAB RAN - GENERAL NOTES AND DRAWING SCHEDULE PLAN
- CERTIFICATE CONSTRUCTION
- 506 SUSPENDED SCAB 507 ROOF/SIGN PLAN 508 SIGN STRICTURE 509 DRINE PLAN BRUCE GAAL DIPNR Accredited Co Date 2 -P.0055 ē
- NS ISSUED BRICIPAL Certifying uthority

CONSTRUCTION CERTIFICATE 5 BMISSION. FURTHER

NO STAILING Rev. TO BE ISSUED Amendment

ASSUMED FOUNDATION CLASSIFICATION FOR DESIGN PURPOSES - A + M
ASSUMED BEARING STRATA FOR DESIGN PURPOSES - ROCK + CLAY
CONTRACTOR TO ENGAGE GEOTECHNICAL CONSULTANT TO VERIFY FOUNDATION GLASSIFICA SCHEDULE MR of 070308 L Design: Drawing No. 7

ALTERATIONS - ADDITIONS AND DRAWING GENERAL

for . BATFIELD FAMILY

NEWPORT ARMS HOTEL

<u>8</u>

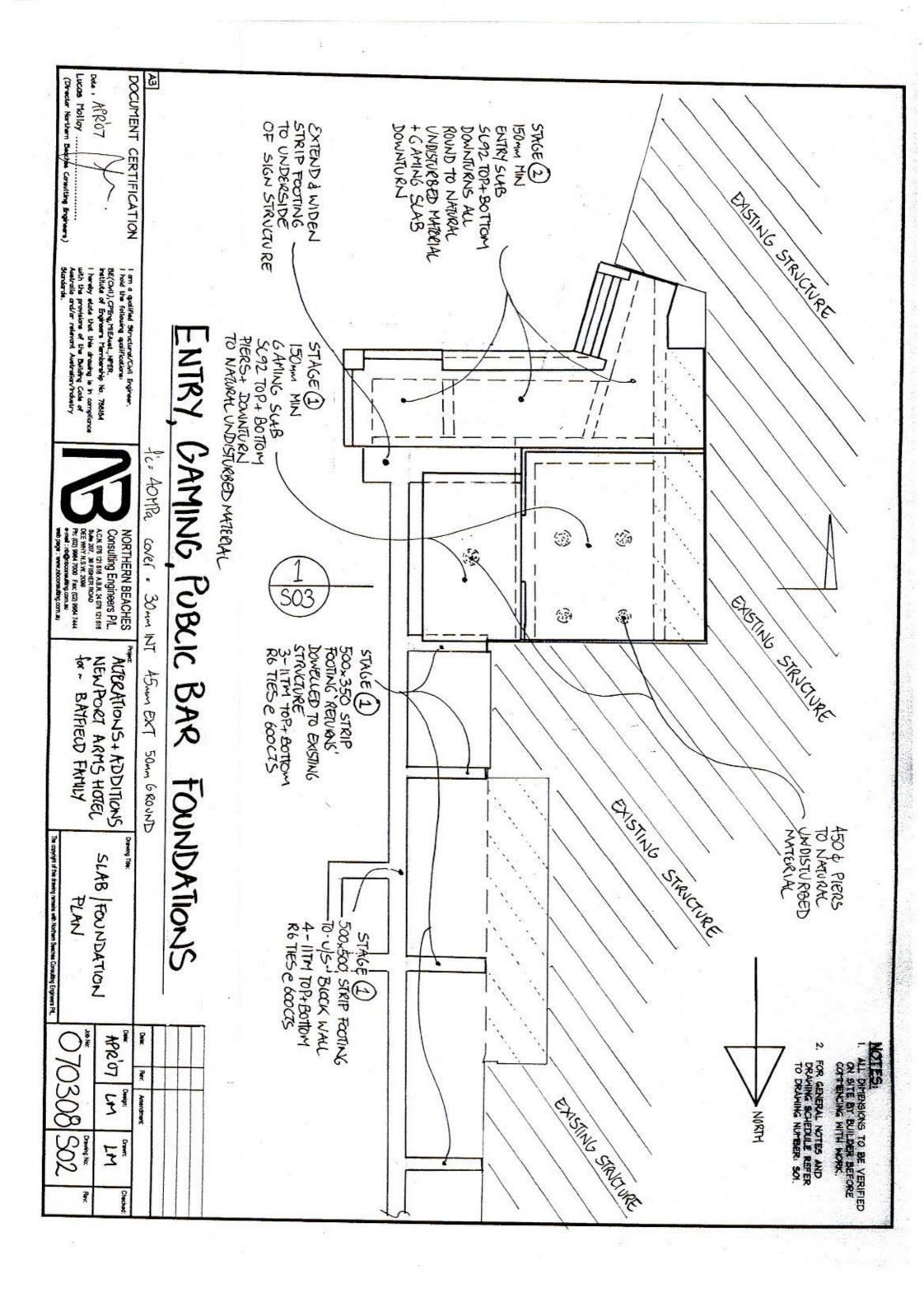
I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry

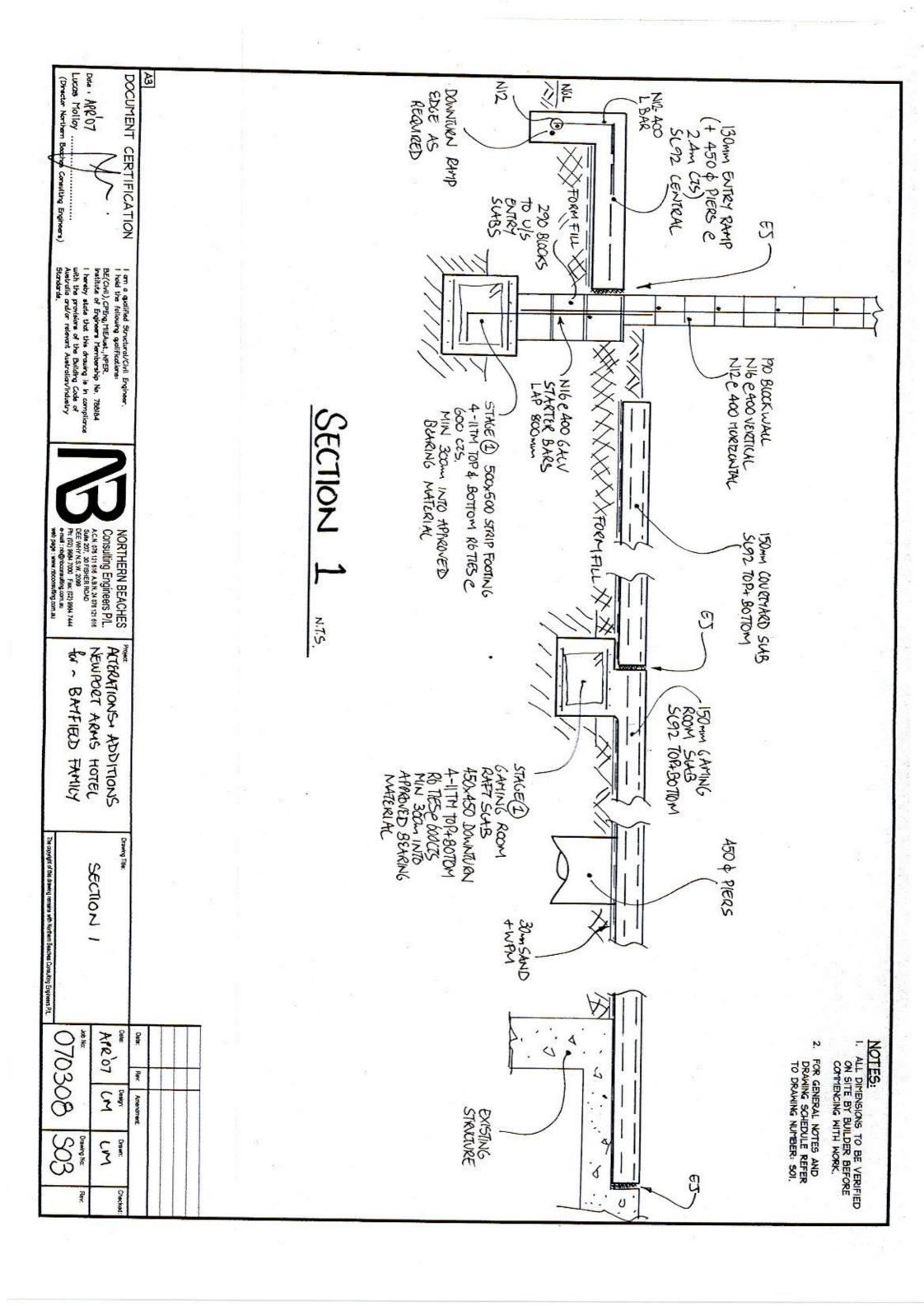
Date : APR 07

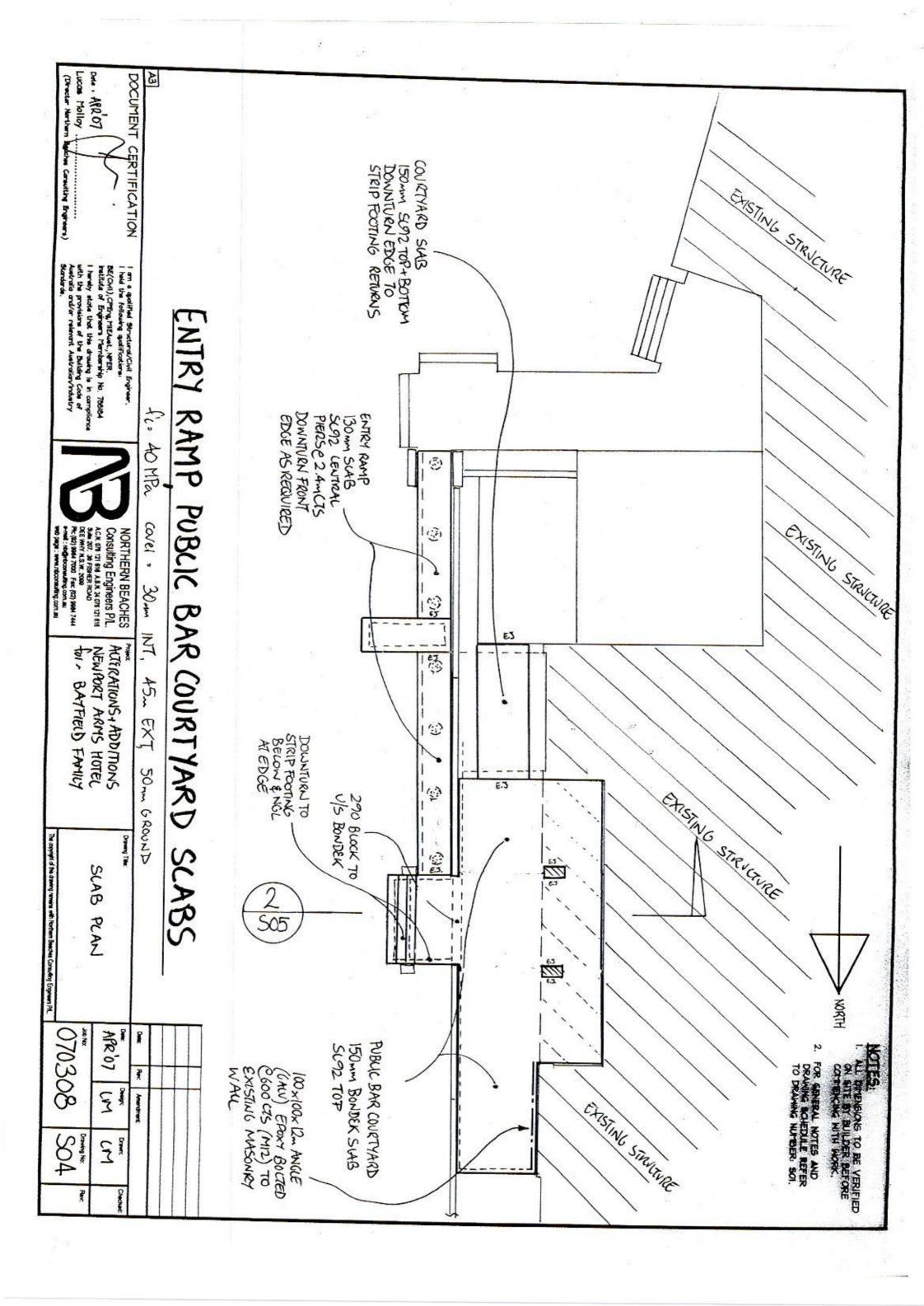
Lucas Molloy

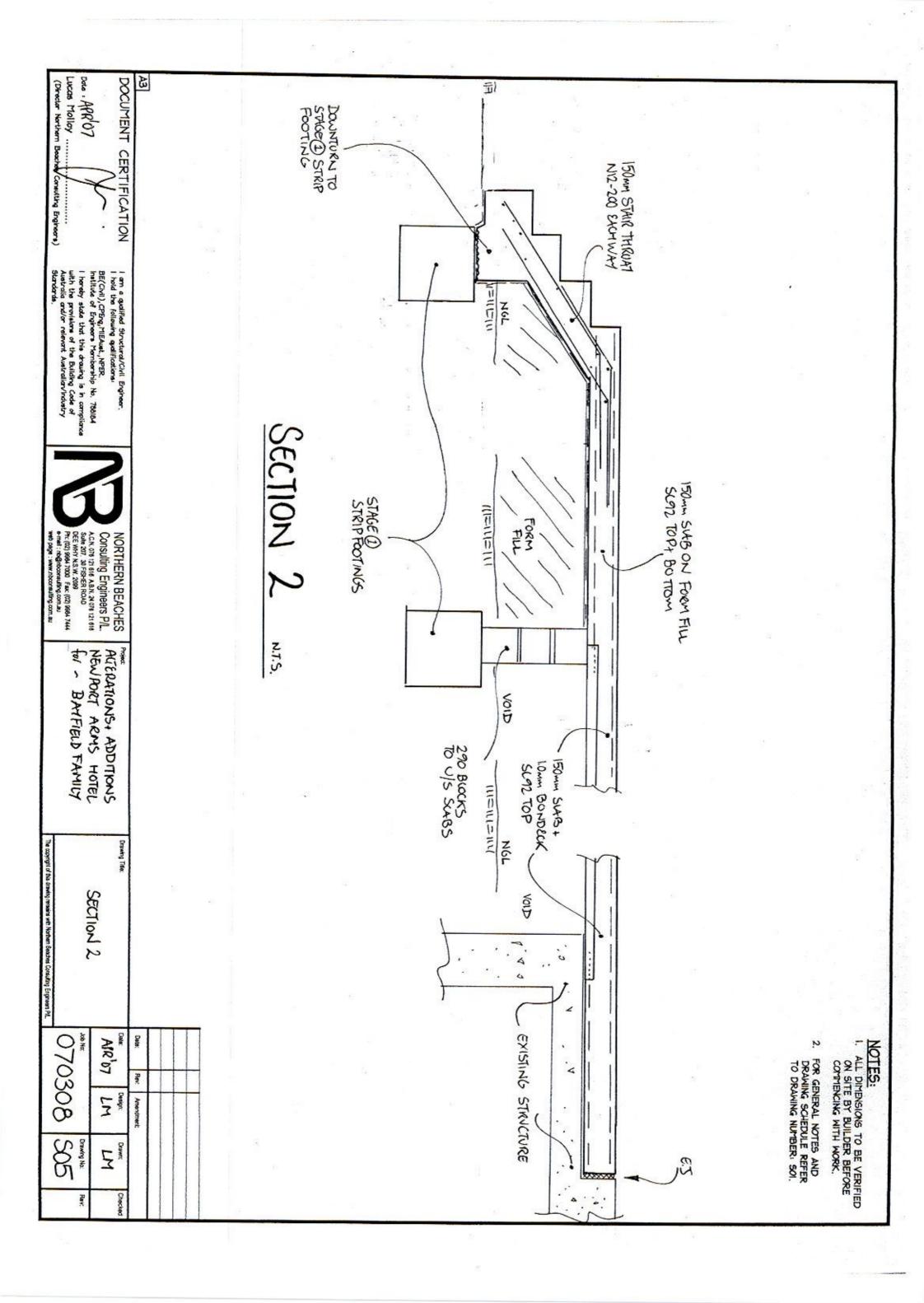
(Director Northern\Beaches Consulting Engineers)

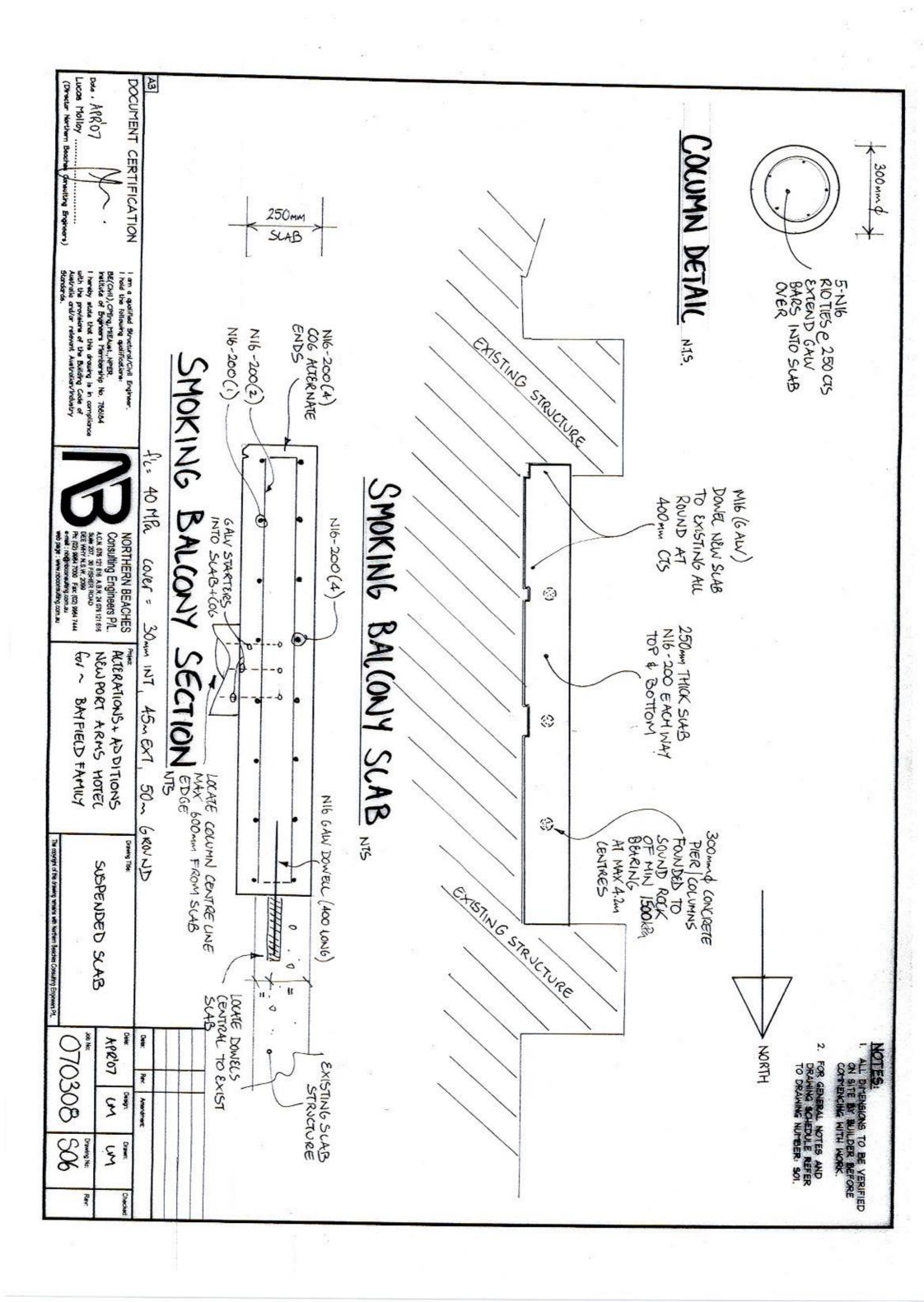
DOCUMENT CERTIFICATION

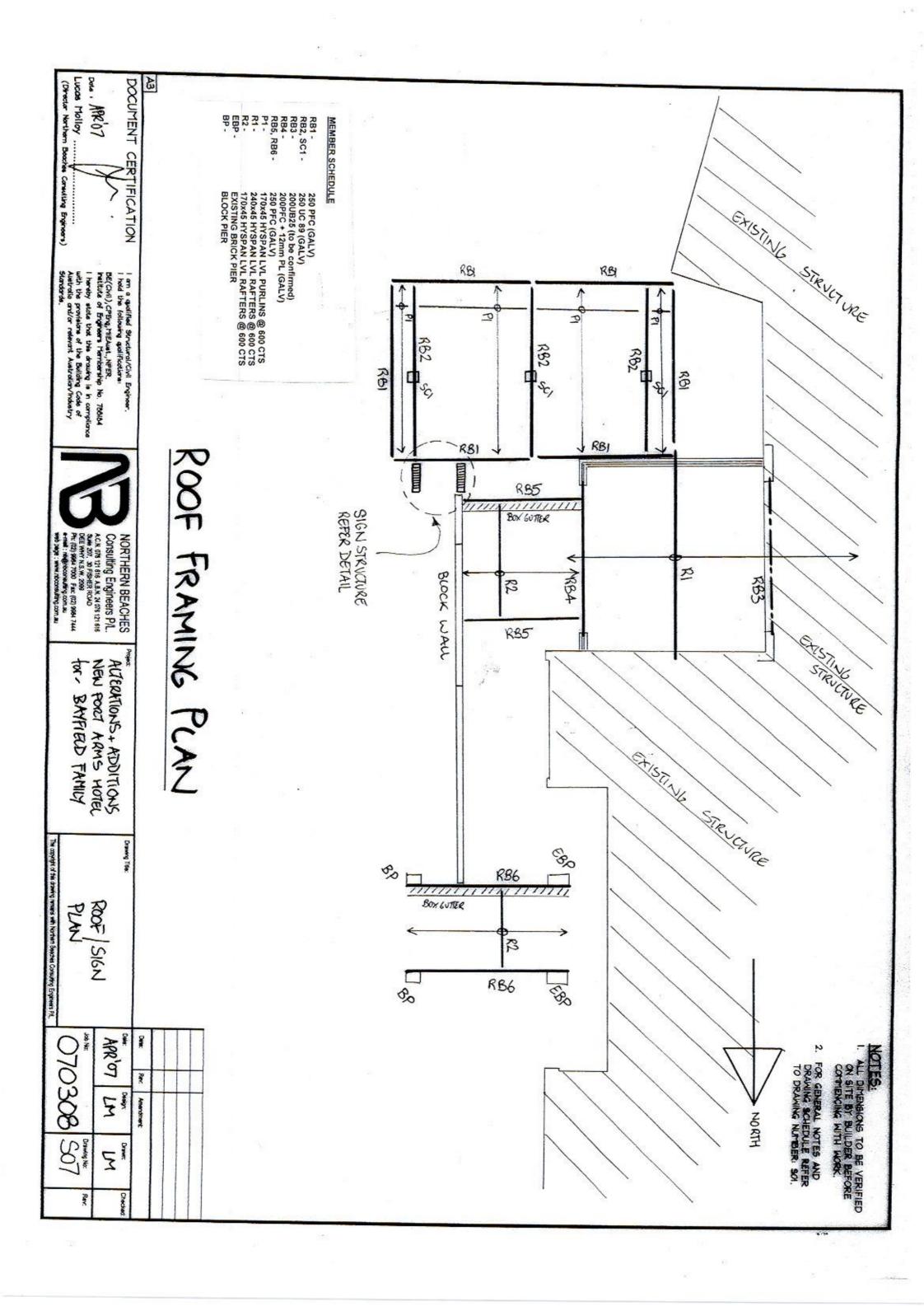


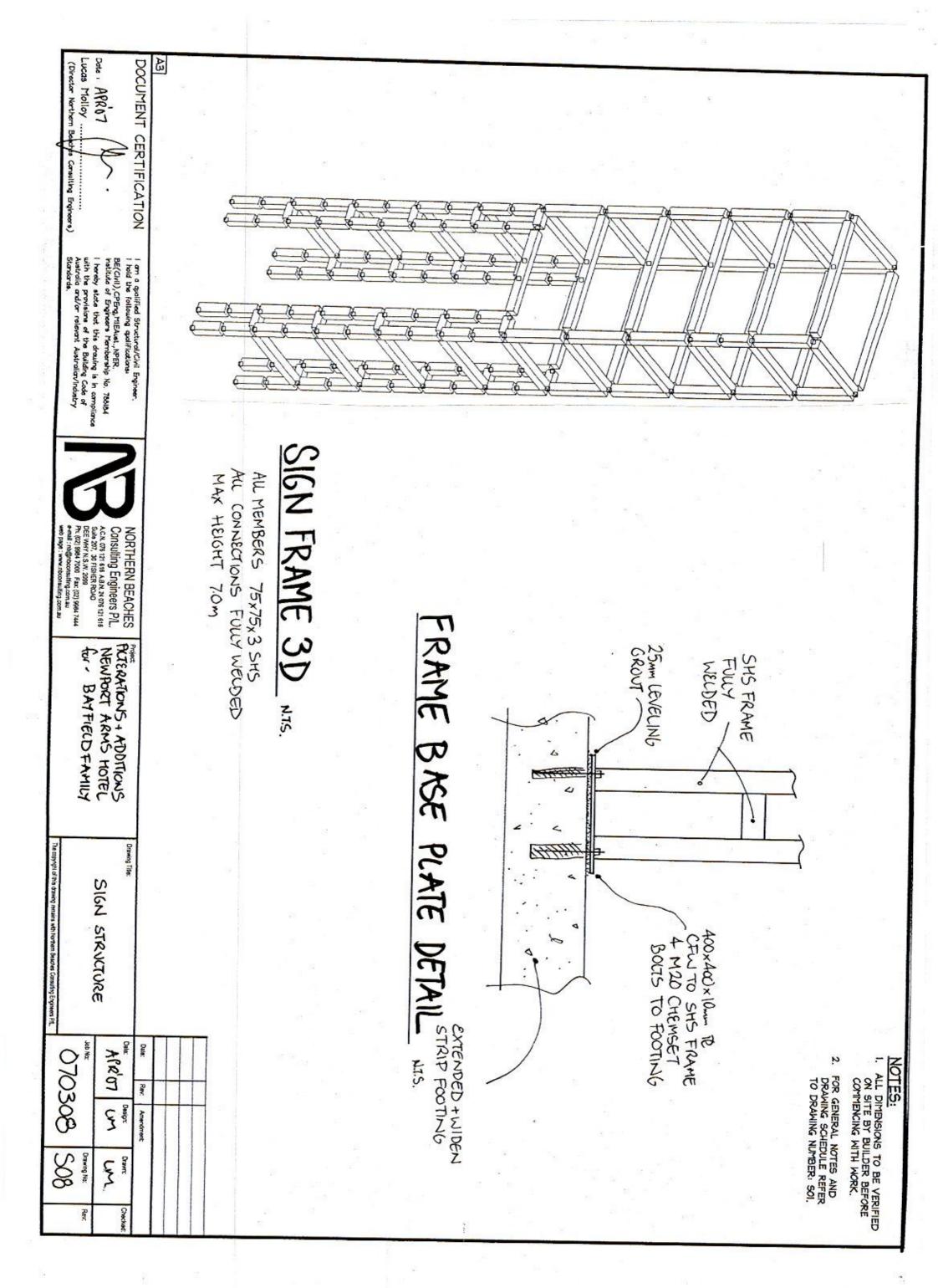


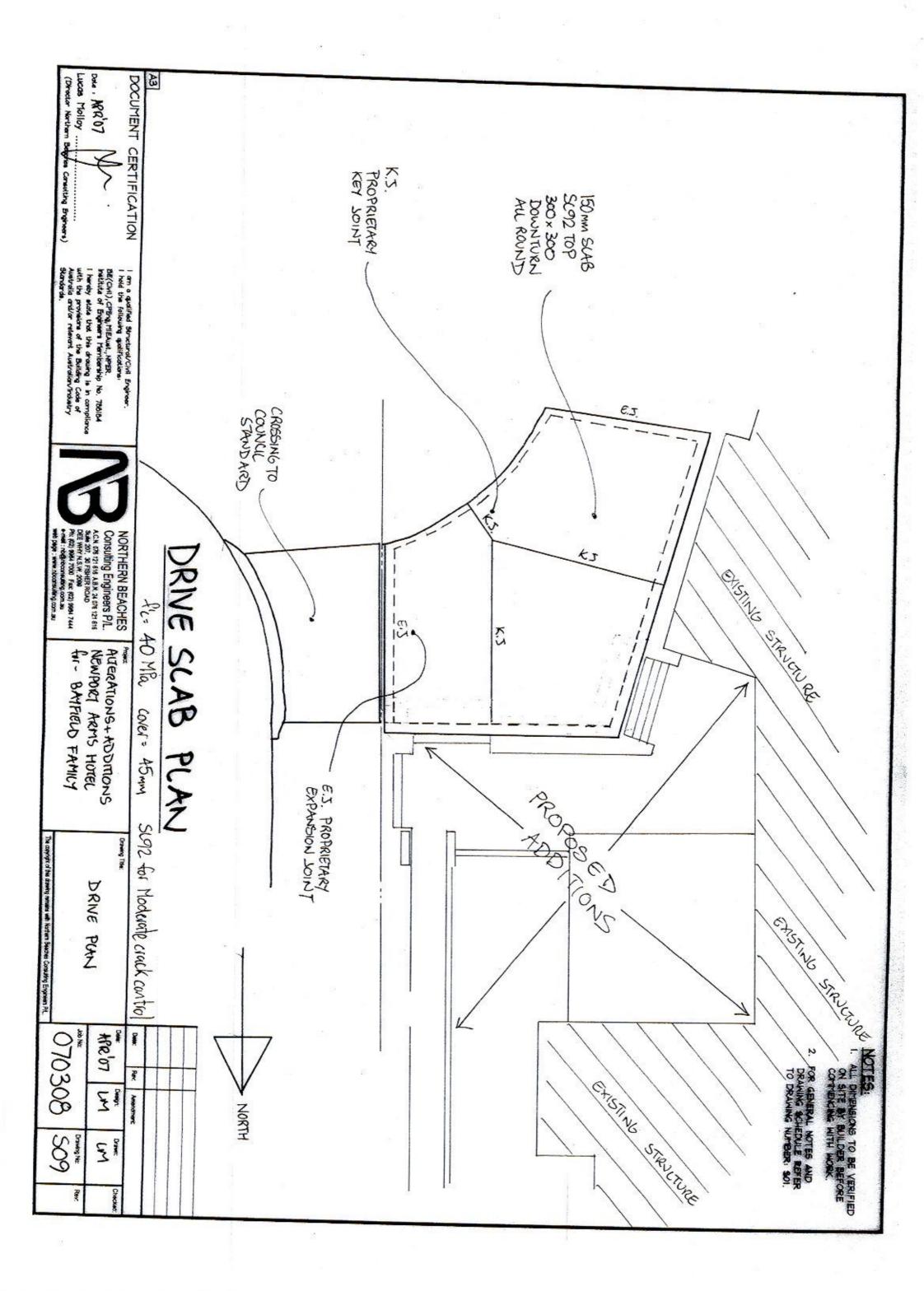












### Pittwater Council

### OFFICIAL RECEIPT

24/04/2007 Receipt No 214230

TO INSIGHT BUILDING CERTIFIERS

PO BOX 326 MONA VALE 1560

Applic	Reference	Amount
GL Re	PRVC-Priv 1 % 1 KALINYA ST	\$30.00 N0713/06

Total:	#30,00
Amounts Tendere	d
Cash	\$0.00
Cheque	#30,00
Db/Cr Card	\$0.00
Maney Order	\$0.00
Agency Rec	\$0.00
Total	\$30,00
Rounding	\$0.00
Change	\$0.00
Nett	#30.00

Printed 24/04/2007 11:39:25 Cashier KWay