



visionstructures

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Geoff Ball Dip Tech Eng. BE MIE (Aust) CP Eng RPEQ NE

COAST LUXURY APARTMENTS
OWNERS CORPORATION SP81699
C/- ALL STRATA SERVICES
Attention: Cathy Pilarski
LOCKED BAG 2908
CC BUSINESS CENTRE
LISAROW NSW 2259

Attention: Mr Alan Perrott
Secretary, Executive Committee of Owners Corporation

3 April 2018
Our Ref: 5172R002.HB

**RE: COAST LUXURY APARTMENTS PLAN NO. 81699
WORK ORDER 33
STEEL FRAMED GLASS AWNING OVER THE PUBLIC WALKWAY at
35 - 37 CORAL STREET, THE ENTRANCE**

This is an Interim Report in response to further instructions issued by Mr Alan Perrott of Strata Committee following the initial inspection of the subject awning and report by Vision Structures (NSW) Pty Ltd dated 18 December 2017.

We confirm that Mr Geoff Ball of Vision Structures (NSW) Pty Ltd attended the offices of Lisarow Glass and conducted extensive discussions with Jeremie Hargreaves to determine, as best as possible, the type and origin of the existing glass on the awning and the method of fixing utilised by the contractors at the time the awning was constructed.

Vision Structures (NSW) Pty Ltd has also examined the appropriate Australian Standards and Amendments to those Standards in relation to the dates of approval and construction of the awning.

We confirm that the DA Consent was issued by Wyong Shire Council and the Construction Certificate was issued by Principal Certifying Authority, Blackett and Maguire in September 2007.

In consideration of the information currently before us, Vision Structures (NSW) Pty Ltd has formed the view that the awning is non-compliant and was non-compliant at the time of construction.

However, Vision Structures (NSW) Pty Ltd is yet to view and confirm the issue date of the Occupation Certificate.

The issues relating to the original non-compliance and also the remediation required to achieve compliance are not straight forward nor obvious.

In the first instance, it is agreed that the type of glass is 12mm thick clear toughened glass, although it is not stamped. For this type and thickness of glass to be satisfactory and supported on two sides only, the frame must provide support with maximum span of 700mm.

The existing glass is supported on two sides only with a span of 1150mm which is further exceeded at the corner street intersection.

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The method of support and fixing of the glass panels onto the frame is also unsatisfactory and non-compliant.

Therefore, the remedial works must include, either a new steel frame or modification of the existing steel frame, regardless of whether the existing glass can be re-used or new glass is installed.

The second issue of consideration is the strength of the frame and its fixing to the building. In order to maintain the existing anchor bolts, the mass/weight of the glass cannot be increased. Therefore the glass thickness is limited to 13mm.

The third issue of consideration is whether the existing glass can be re-used or new glass is required?

The over-riding factor which prevents the re-use of the existing glass is the Australian Standard AS1288 (2006)-Clause6.4, states that clear toughened glass (irrespective of its thickness) cannot be used as a street awning where the height from pavement to awning exceeds 3.0m.

The subject awning is generally 3.3m high but measures up to 3.45m in isolated locations.

However, the maximum height from pavement to awning was previously specified as 5.0m in AS1288-1994 but was amended to 3.0m (as best as we can determine) in January 2008. This date is significant as the Construction Certificate was issued in September 2007.

Clearly, there will be significant savings if the existing glass can be safely removed, cleaned, stored and re-installed onto a new framing structure.

The existing framing structure is definitely inadequate and needs to be removed and further investigated.

It may be possible to re-use the existing main cantilevered tapered steel beams, however it will be necessary to inspect the internal core of the hollow rectangular sections to ensure that the steel is not corroded.

Further, additional steel fabrication will be required to strengthen the frame and add additional structural members to ensure the glass is supported on two sides and the span does not exceed 700mm.

The next step of this assessment is to:-

1. Finalise the research relating to the historical data of Approvals and also the details of the Australian Standard AS1288 and the date and detail of the Amendments to ensure that the glass can be re-used and will be compliant when re-installed.
2. Obtain a quotation from Lisarow Glass to remove, clean, store and re-install the glass.
3. Design a new frame or alternatively design a strengthening modification to the existing frame which will support the glass in a compliant manner.
4. Obtain quotations or estimates from appropriate Structural Steel Fabricators to remove the existing frames, modify them accordingly and apply a suitable paint coating or galvanising and re-installation.

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This additional work can only be undertaken on a time charge basis in accordance with our Standard Conditions of Engagement, Paragraph 3.0 Scale of Fees copy attached.

Please find our Tax Invoice attached for this stage of the works.

Yours faithfully,

VISION STRUCTURES (NSW) PTY LTD

Geoff Ball MIE (Aust) CP

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ACN 151 517 314

CONDITIONS OF ENGAGEMENT

Revised June 2013

1.0 INTRODUCTION

For the purpose of these conditions of engagement Vision Structures (NSW) Pty Ltd shall hereinafter be referred to as "the Company".

"The Client" shall represent and include the body or person with whom this agreement is made.

2.0 SCOPE OF RESPONSIBILITIES

The Company undertakes to exercise reasonable care normally exercised by other consultants in similar circumstances.

The Client shall provide to the Company all relevant information and assistance needed to carry out the agreement in such reasonable time so as not to delay the Company's work.

3.0 SCALE OF FEES

All time spent on an assignment including, but not limited to, consultations, inspections, assessment, calculations, drafting, interpretation, report and all administration matters, waiting and travelling (vehicle mileage is not charged) will be charged at the following rates per hour:

Principal Engineer	\$200.00
Senior Design Engineer / Architect	\$175.00
Design Engineer	\$150.00
Senior Technician	\$ 95.00
Technician	\$ 75.00

An increased rate will apply where time is spent as an Expert Witness in Court, mediations, arbitrations or the like and charged on a time basis. The increased rate will apply to all aspects of work including preparation, attendance, waiting and travelling. This will be subject to agreement with the Client.

For additional services provided by the Company that are not stated in this agreement, the fee shall be on a time charge basis.

4.0 DISBURSEMENTS

Expenses incurred by the Company or its employees in the course of, or attributable to, a particular assignment will be charged as set out below:

4.1 Amounts paid by the Company to third parties for specialist services (this includes Surveyors, Geotechnical Engineers, etc.) and fees to Statutory Authorities such as Council will be charged at cost.

4.2 Internal Expenses will be charged at the following rates:

Photographs – standard	\$1.00 each
Photographs – panoramic	\$3.00
Express Post – C5 small envelope	\$8.00
Express Post – 500g Satchel	\$10.00
Express Post – 3kg Satchel	\$13.00
Courier	\$20.00
Plan Printing – A1 size	\$4.00
Plan Printing – A2 size	\$3.00
Plan Printing – A3 size	\$1.00
Photocopying – A4/size	\$0.85
Written Documentation A4	\$0.85

Council maps (Sewer, water, etc)	\$30.00
Council Deposit Plan (DP) only	\$35.00
Motor tolls/ Car Parking	at cost
Vehicle per kilometre	\$0.89
PDF Drawing Issue	\$15.00
CD Drawing Issue	\$20.00
CD Project Set Issue	\$100.00

5.0 GOODS & SERVICES TAX (GST)

All fees and disbursements quoted above are nett and exclusive of GST.

The GST payable on all goods and services provided by the Company is 10%.

6.0 TERMS OF PAYMENT

Invoices will normally be issued at the end of any particular phase of work or on a monthly basis for work in progress. The invoices will be due and payable within 7 days of being issued. Should the invoice remain unpaid 7 days or more after the issue date, interest will be payable at the current general bank overdraft rate. The Client shall pay any legal costs incurred in recovery of any unpaid invoice.

The Company will retain possession of all the Client's documentation while ever an invoice issued by the Company remains unpaid. This will include the issue of certification for works constructed.

7.0 TERMINATION

The Company will not carry out any work whatsoever associated with the agreement where accounts issued remain unpaid for a period in excess of twenty-eight (28) days.

The Client's instructions to the Company can be terminated at any time. However, the Client remains responsible for any Professional Charges, disbursements and expenses incurred up to and including the time of termination. Works in progress must be left in a safe manner and the Client is therefore responsible for any costs incurred which result in finalising works in a safe and secure manner which naturally flow on from a consequence of the Client's instruction.

File Ref: **5172R002**

Signed
by:

On behalf
of:

Dated