

<i>Name of Witness</i>	Emma Kaleena SCRAGG
<i>Date of Birth</i>	[REDACTED]
<i>Address and contact details</i>	[REDACTED]
<i>Occupation</i>	Architect
<i>Officer taking statement</i>	Det Insp Mark Ainsworth
<i>Date taken</i>	24/8/11

Emma Kaleena SCRAGG states;

1. I am a Registered Architect by occupation employed by Nomamere Pty Ltd trading as Riddel Architecture situated at 620 Wickham Street, Fortitude Valley. I have been with Riddel for approximately 12 years and worked in the Architecture Industry for the past 18 years after completing my studies at the Queensland University of Technology in 1995. I currently hold a Bachelor in Architecture and a Bachelor in Applied Science Built Environment Architecture.
2. My current role at Riddel Architecture includes design and documentation of new and adaptive reuse projects, administering contracts for construction, in-house sustainability research and assisting with Management strategies. The practice specialises in sustainable architecture design and outcomes achieved through conservation and adaptive re-use projects in working with existing buildings as well as new projects such as the Hill End Ecohouse, which endeavours to incorporate sustainable design through all aspects of the project.

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3. In 2005, Riddel Architecture was appointed architect for the Hill End Ecohouse situated at [REDACTED] West End. As a result of this appointment I became involved in the project in 2005. The Hill End Ecohouse is a new home with sustainability at the core of the design brief, addressing: energy generation and conservation, water collection, reticulation and recycling; recycled content in construction materials; specifically for low-toxicity, durability and low maintenance. The design intent was to incorporate sustainable design into all aspects of the house in both construction and use. The house is designed to address and integrate with its site, context and climate as well as to provide a flexible home for changing household uses. Products, materials and design features utilised in this house have undergone rigorous assessment of their environmental, social and economic sustainability.
4. The client had purchased the land with an existing house on it around 2004. The existing house was dismantled and approximately 80% of this house was recycled for use in the ecohouse. The dismantlement of the existing house was done with an element of care in order for material to be recycled and utilised in the new house. The client brief was to provide the most sustainable home possible with specific inclusions relating to family needs. A project information sheet was completed. The design was based on client requirements, the local environment and local character. It was not based on any other construction.

I now produce a 9 page Project Information Sheet relating to the ecohouse.

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5. The Ecohouse has also been constructed with a great deal of thought and strategy in considering flooding events, due to its close proximity to the Brisbane River. The lower floor of the house was always designed with the assumption that flooding would occur at some point. Some of the key design considerations taken into consideration for a flooding event include:

- No built in furniture in the downstairs area of the residence. All furniture in these locations were mobile and easily moved in times of flood.
- Most walls are of rendered block work with cement render and lime wash finish which is extremely durable. In the 2011 floods when cleaned down as the waters subsided it was virtually unmarked.
- The small amount of lightweight walls had recycled hardwood framing which is very dimensionally stable. The framing was sheeted with Powerscape which is a highly water resistant plasterboard alternative. The paint finish to these walls was water based acrylic which cleaned down easily after the floods. During the recent floods only minor damage was sustained to a small corner in the enclosed stair where the water managed to get in. The pressure of the water managed to lift the paintwork on the one small corner.

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- The internal doors were veneered solid core doors and on one of the doors, the ply started to delaminate. This damage is far less than would have occurred if the doors had been typical hollow core construction with a cardboard core and mdf outer.
- The stair was solid timber so it would have swelled with moisture but has dried out now.
- Floors are all of polished concrete so very easy to clean.

6. During the January, 2011 floods the ecohouse was slightly flood affected. Water came inside the lower rear section of the house up to about 600 mm. This section of the house consists of a bedroom, bathroom, hallway, media room, storeroom and outside entertaining area and an in ground pool. The owners cleaned as the waters subsided and apart from a damp base and slightly swollen timber doors the place looks relatively unscathed.

7. Knowing that the future was likely to hold many extreme weather events and sea level rising, we selected materials for the ground floor which could survive inundation. I was pleased to see that they did surprisingly well. The Powerscape wall sheeting was completely intact. The lime wash wall finish survived the grime and hosed down relatively unblemished.

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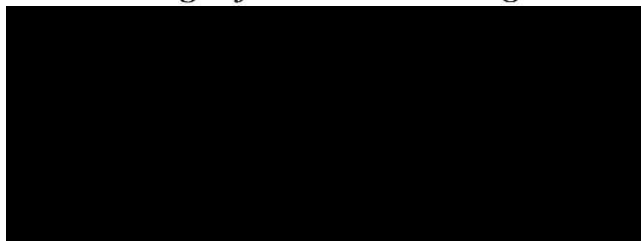
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8. In designing the house the lower floor height was in compliance with Brisbane City Council requirements. Council also required us to retain the riparian zone which is a 20 metre strip on the river side of the house. This zone protects the river edge. No building or construction was to occur on this zone. This restriction was complied with.

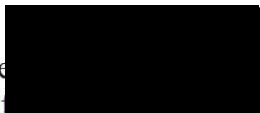
9. Storm water run off was directed into storm water tanks on the property for future use for the residents. All roof run off was captured and retained on the property.

10. In reviewing the effects of the flooding on the ecohouse in future I would consider two further issues in relation to flood mitigation. These issues would be perhaps the raising of heights of power points and utilising lift off hinges for doors.

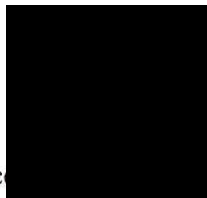
I now produce a series of photos of the ecohouse as well as a brochure outlining information relating to the ecohouse.



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Justices Act 1886

I acknowledge by virtue of section 110A(5)(c)(ii) of the Justices Act 1886 that:

- (1) This written statement by me dated 24.8.11 and contained in the pages numbered 1 to 6 is true to the best of my knowledge and belief; and
- (2) I make this statement knowing that, if it were admitted as evidence, I may be liable to prosecution for stating in it anything that I know is false.

[Redacted Signature]

Signature

Signed at BRISBANE this 25th day of AUGUST 2011

Witness Signature
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Signature of official

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