

IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2006 1590

FINDING INTO DEATH WITH INQUEST¹

Form 37 Rule 60(1)

Section 67 of the Coroners Act 2008

Inquest into the Death of: STEPHEN JAMES PEACE

Hearing Dates: 7 - 10 March 2011
Appearances: Mr Jason Gullaci of Counsel - on behalf of WorkSafe
Victoria

Police Coronial Support Unit: Senior Sergeant Jenny Brumby, Assisting the Coroner

Findings of: AUDREY JAMIESON, CORONER

Delivered on: 29 April 2015

Delivered At: Coroners Court of Victoria
65 Kavanagh Street
Southbank VIC 3006

¹ The Finding does not purport to refer to all aspects of the evidence obtained in the course of the Investigation. The material relied upon included statements and documents tendered in evidence together with the Transcript of proceedings and submissions of legal representatives/Counsel. The absence of reference to any particular aspect of the evidence, either obtained through a witness or tendered in evidence does not infer that it has not been considered.

I, AUDREY JAMIESON, Coroner having investigated the death of STEPHEN JAMES PEACE

AND having held an Inquest in relation to this death on 7-10 March 2011

at 222 Exhibition Street, Melbourne

find that the identity of the deceased was STEPHEN JAMES PEACE

born 5 September 1957

and the death occurred on 2 May 2006

at the rear of 186 Prospect Hill Road, Canterbury, Victoria, 3126

from:

1a. CRUSH INJURY TO THE CHEST

in the following summary of circumstances:

1. Mr Stephen James Peace died at a building site on a residential property at 186 Prospect Hill Road, Canterbury, when a near completed freestanding gazebo collapsed and fell on top of Mr Peace, who was the builder responsible for the gazebo construction.
2. The death of Mr Peace was *reportable* as defined in *Coroners Act 1985 (Vic)* (as it then was).
3. An Inquest was held into the death of Mr Peace on 7-10 March 2011 pursuant to section 52(1) *Coroners Act 2008 (Vic)* (the Act).

BACKGROUND CIRCUMSTANCES:

4. Mr Peace was born on 5 September 1957 and was 48 years old at the time of his death. He lived with his wife, Vikki Joy Peace, and their two sons in Box Hill.
5. Mr Peace was a qualified and registered builder having completed his building apprenticeship in 1978. He was the sole director of his building company, Laysar Pty Ltd (**Laysar**) and a member of the Housing Industry Association (**HIA**). Laysar was involved in renovations and construction of new homes and employed between three and five employees, depending on the size and complexity of the projects the company undertook.

Laysar also performed some underground installation of fibre optic cables for City Power and Optus.

6. In November 2005, Laysar commenced building work at a residential property at 186 Prospect Hill Road, Canterbury (**the building site**), the home of Mr Greg and Mrs Karen Roebuck. The work consisted of additions and alterations to the rear of the main house and reconstruction of a freestanding gazebo in the backyard. The old gazebo consisted of a corrugated iron roof supported by wooden posts on metal stirrups, which was to be demolished and replaced by a new structure with a tiled roof.
7. The work had been designed by architect, Ms Heather Wright, and the structural drawings and specifications had been prepared by Greg Schofield and Associates Pty Ltd (**Schofield**), consulting structural and civil engineers.
8. The architectural and structural (engineering) drawings used for the purpose of the permit application showed the new gazebo designed to be supported on five new posts which were specified under a general notation on the architectural drawings as being 125mm Cypress gold timber. Ms Wright also included a general notation on her working drawings that specified to refer to the structural drawing for boundary wall and support post design. The structural design specified the gazebo was to be supported on 5 x 125mm square hollow steel posts which were to be embedded 900mm deep into a 1000mm deep x 450mm square mass concrete footing. A new roof support beam had also been specified in the structural design and was to consist of 2 x 190 x 45mm F17 KDHW timber positioned directly over the new steel support posts.
9. Mr Peace completed the Application for Building Permit² in relation to the building site on 27 September 2005.³
10. On 28 November 2005, the project obtained building approval from independent/private Building Surveyor Mr Leonard Dowell of Fisher Dowell Pty Ltd (**Fisher Dowell**) in the form of a Building Permit of the same date.⁴ The building approval was based on the submitted documentation that included the architectural and structural drawings.
11. Schofield completed a Certificate of Compliance – Design dated 4 August 2005.⁵

² Form 1, *Building Act 1993* (Vic), *Building Regulations 1994* (Vic) (Regulation 2.1 (1) (a)).

³ Inquest brief, at page (p) 97.

⁴ Ibid, unpaginated.

⁵ Ibid, page 99, Form 11, *Building Act 1993*.

12. Ms Wright undertook a tender process to engage builders for the renovation project. Three building companies tendered for the work based on the drawings and plans prepared by Ms Wright and Schofield. Mr Peace was known to the Roebucks through their children's swimming activities, and Laysar became the successful tenderer.
13. On 18 December 2005, Mr and Mrs Roebuck formalised the relationship, signing a standard HIA building contract with Laysar.

SURROUNDING CIRCUMSTANCES:

14. By Tuesday, 2 May 2006, the old gazebo had been demolished and the new structure had been substantially erected. A terracotta tile roof had been fixed to the structure that was standing upon timber posts on metal stirrups, fixed to the existing concrete pavements, which measured approximately 75mm thick and were topped with slate tiles.⁶ The tiled roof structure was calculated to weigh 2.4tonnes.⁷
15. At approximately 7.30am, Mr Peace and other Laysar employees arrived at the building site, including Mr Daniel Fleming, a recently qualified carpenter. Mr Daniel Fleming had been a full time employee of Laysar since July 2002, when he commenced as an apprentice.
16. Mr Peace was carrying out work on the gazebo with four others including Mr Daniel Fleming, apprentice carpenters Mr Alex Gray-Caple, Mr Christopher Graham and labourer Mr Shane Cramer. Also present at the rear of the premises (but not working on the gazebo) was Mr Ivan Johnson, who at the time was repairing paving in the rear yard. Inside the home were Mr and Mrs Roebuck and painter Mr Michael Fleming.
17. At approximately 8.00am, Mr Peace instructed Mr Daniel Fleming to remove the temporary timber bracing that was in place at the northern end of the gazebo structure, as he was taking a scaffold down from underneath the gazebo with Mr Gray-Caple and wanted to rebuild it in the area from where the bracing had been pulled down. The temporary bracing consisted of 2 x 35mm square pine timber members nailed in a crossed formation at both the northern and southern ends of the structure. Whilst Mr Daniel Fleming commenced this task, Mr Peace was under the gazebo removing the timber bracing at the southern end of the gazebo. Mr Fleming removed the two braces as

⁶ Statement of Russell Keays dated 4 July 2006, Inquest brief page 72, together with Mr Keays' report dated 4 July 2006, Inquest brief page 72, form Exhibit; at p 74.

⁷ Ibid.

requested, and noticed no movement or creaks in the structure. The roof was approximately 90% complete at this stage. After pulling the braces off, Mr Fleming heard a loud cracking noise.⁸

18. The gazebo structure collapsed and fell in a forwards motion, towards the western side of the property, away from the boundary fence, falling to the ground and crushing Mr Peace. Mr Daniel Fleming was pinned under the front of the collapsed building for a short time. Mr Fleming suffered a dislocated hip and a crushed fifth lumbar vertebra.
19. Emergency Services were contacted, however upon their arrival they were unable to render medical assistance to Mr Peace as it was apparent that he was deceased.
20. WorkSafe engaged Structural Engineer Mr Russell Keays to attend the site later that day and to provide a technical report relating to the incident.

INVESTIGATIONS:

Identity of the deceased

21. The identity of Stephen James Peace was without dispute and required no additional investigation. I find that the identity of the deceased is Stephen James Peace.

Forensic Pathology

22. Dr Noel Woodford, Senior Forensic Pathologist at the Victorian Institute of Forensic Medicine, performed an autopsy on the body of Mr Peace, reviewed a post mortem CT scan and the Form 83 Victoria Police Report of Death. No natural disease was identified at autopsy that was likely to have caused or significantly contributed to death. Significant injuries to and within the chest cavity were identified and Dr Woodford attributed the medical cause of death to a crush injury to the chest. He commented that:

The mechanism of death has most probably been one of a combination of mechanical asphyxia (splinting of the chest rendering ventilation impossible) as well as injuries to the lungs and aorta.

23. Additional crush injuries to the abdomen, pelvis and left arm were also found at autopsy. Toxicological analysis of blood retrieved post mortem was negative for alcohol and did not identify the presence of commonly encountered drugs and toxins.

⁸ Statement of Daniel Fleming dated 31 May 2006, Inquest brief page 15, at pages (pp) 18-19, Exhibit 13.

WorkSafe Investigation

24. Mr Keays stated that the collapse occurred following removal of temporary bracing between the columns supporting the gazebo. He stated that a connection at the base of the central column on the western side probably failed first due to excessive eccentricity of the gravity load on the connection, resulting in bending of the base plate of the Post Anchor combined with pullout of the Dynabolt fixing the Post Anchor to the concrete floor. Mr Keays stated that the failure of this connection led to the failure of other connections in the roof supports, resulting in an overall sway-mode collapse of the entire structure.⁹
25. The gazebo had been roofed using second-hand terracotta tiles and was supported by battens and factory-made timber trusses at 560mm centres. The ceiling was lined with 12 inch pine boards. Mr Keays noted this to be a relatively heavy form of construction. Mr Keays stated that the Victorian Timber Framing Manual¹⁰ suggests a mass of 60 to 90kg/m², and that using 75kg/m², the overall weight of the roof was about 2.4 tonne.
26. The roof trusses were supported by a continuous stud wall along the east side, and three posts on the west side. The west edge of the roof between the three columns was supported by two timber bearers, each 290x45, bolted to the columns with two bolts. The two bearers butted at the middle column, with both bolted to the side of the column.
27. The northern section of the stud wall existed prior to construction of the gazebo and sat on a concrete wall. During construction, the stud wall was extended south, with the end supported on a post anchor similar to that used on the posts. The connections between the roof trusses and the supporting structures were nails and sheet-metal nail-plates.
28. The column bases were supported by "Centre Fix Post Anchor Bases". Mr Keays explained these are standard hardware items used to keep the bottom of a post clear of the floor, preventing the occurrence of rotting from the effects of water pooling on the floor or from rising damp. The floor was concrete of approximately 75mm thickness, topped with slate tiles. The Post Anchors were fixed to the floor by two masonry anchors,

⁹ Above no 6.

¹⁰ Published by the Timber Promotion Council, August 1980, based on the provision of Australian Standard AS1684 "SAA Timber Framing Code". Mr Keays notes that both the manual and code have been updated since 1980, but speaks to the 1980 editions as he considers them a more accurate relation of the knowledge of the workers involved in construction of the gazebo (Mr Keays' report, above no 6).

measuring 10mm in diameter, and assumed to be Ramset Dynabolts for the purpose of the Mr Keays' engineering assessment.¹¹

29. It is understood by Mr Keays that Mr Peace braced the columns with diagonal timbers nailed to the columns, and that the collapse happened when these braces were removed.
30. On review of copies of the architectural and structural/engineering drawings, Mr Keays noted that the structure as measured by WorkSafe was bigger than the structure in the architectural drawings, which measured 8000mm x 3000mm. The posts were noted in the architectural drawings as "New post. Allow for 125mm sq Cypress gold". No connection details were provided on this document, however there were several notes stating "refer to engineer's drawings".¹²
31. Mr Keays noted that the engineer's drawings showed the western side supported by three columns (as on the built structure), and the eastern side supported on the existing wall, and two further columns (unlike the built structure which instead had the existing wall extended). The columns (marked C1) were nominated as 125x124x4SHS (a steel section) with a footing (marked F1) as 450x450x1000 deep mass concrete pad footing. The built structure had 125sq Cypress gold timber columns, supported on Post Anchors resting on the existing concrete. No deep mass concrete pad footing had been laid.
32. The bearers supporting the roof between columns (marked RB1) were nominated as 2/190x45(F17) KFHW (timber). The built structure used 1/290x45 timber beams. Some connection details were provided in the documentation. In particular, the structural/engineer's drawings showed the bearer sitting on top of the column, which differed from the built structure which had the bearer lapped on the outside of the column, which Mr Keays opined resulted in a significant increase in the eccentricity of the load at the column base.¹³
33. Mr Keays concluded that the built structure bore little resemblance to the structural/engineering design in critical aspects.¹⁴ His assessment of the engineer's design determined that it would have been satisfactory for the anticipated loads imposed. Mr Keays opined that had the structure been built according to the design, the column

¹¹ Above no 6, at p 74.

¹² Ibid, at p 76.

¹³ Ibid, at p 77.

¹⁴ Ibid.

base connection would have been more than adequate to resist the eccentric gravity load, and accordingly opined it is reasonable to assume the incident would not have occurred.¹⁵

34. Mr Keays noted that the engineer's drawings included some General Notes, including "All timber construction shall comply with AS 1684 Light Timber Framing Code". The Timber Framing Manual (based on this Code) includes Section 5.2.4 "Bracing" in Chapter 5, "Roof Framing". In Mr Keays' opinion, the design detail on the engineer's drawings complied with the bracing requirements of AS 1684, but the built design did not. Mr Keays explained that the primary purpose of AS 1684 and the Timber Framing Manual is to provide builders with guidance relating to domestic timber structures, and provides arrangements and details that will be satisfactory in the absence of an engineer's intervention. Mr Keays explained that a builder may deviate from the engineer's drawings where the alternative design complies with the Timber Framing Manual, but in this case, the deviation did not comply.¹⁶
35. Mr Keays concluded that the gazebo was not constructed in accordance with the engineer's drawings, in particular, the column base connections were modified in a way that reduced their ability to resist eccentric gravity loads, and the column top connections were modified to increase the eccentricity of the gravity load on the base.¹⁷

Police Investigation

36. The circumstances of Mr Peace's death have been the subject of investigation by Victoria Police, specifically Coroner's Investigator Detective Senior Constable (DSC) Rod Smith, on my behalf.
37. Issues identified requiring further exploration included:
 - a. the work practices of Laysar in relation to Occupational Health and Safety (OH&S);
 - b. whether Mr Peace had been provided with the architectural and engineering drawings and if so, whether the drawings had been shown to the other Laysar workers;
 - c. whether there had been any changes to the architectural and/or structural designs and drawings and if so, how were these changes communicated;

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid, at p 72.

- d. whether Mr Peace had deviated from the drawings in the construction of the 'gazebo, and if so, why;
- e. the building permit process; and
- f. the function of the mandatory inspection process.

Further investigation

38. In July 2007, the Work-related Liaison Service (WRLS)¹⁸ reviewed the circumstances of Mr Peace's death on my behalf. The WRLS confirmed Mr Keays' opinion that the gazebo structure had not been built in accordance with the approved plans and building permit.
39. Following the WRLS review, further statements were obtained through DSC Smith to ascertain if any previous complaints had been made against Mr Peace in relation to his building practices to either the Building Commission or the HIA. DSC Smith was also asked to ascertain from Mr Geoffrey Goddard (Municipal Building Surveyor at the City of Boroondara at the time of the incident) and the Building Commission what processes (if any) are in place to ensure inspections are conducted on buildings where permits have been issued.

Email from Mr Goddard dated 16 November 2009

40. Mr Goddard explained the relevant statutory provisions relating to mandatory notification. Section 33 of the *Building Act 1993* (Vic) (**the Building Act**) states that the person in charge of carrying out building work must notify the relevant building surveyor, who issued the building permit, after each mandatory notification stage of the buildings works.
41. The mandatory notifications stages as stated in regulation 901 of the Buildings Regulations 2006 are:
- a. prior to the placing of footings;
 - b. prior to pouring an in situ reinforced concrete member nominated by the relevant building surveyor;

¹⁸ The WRLS was set up in 2005 as a joint venture within the Victorian Institute of Forensic Medicine (VIFM) and the State Coroner's Office (as it then was). The unit was established to assist with coronial investigations into work-related deaths in an attempt to identify prevention opportunities. In October 2007, the WRLS ceased its investigative role but continued to perform research into work-related deaths on behalf of the State Coroner's Office and VIFM. In 2008, the establishment of the Coroners Prevention Unit took over the role of the WRLS.

- c. completion of framework; and
 - d. final, upon completion of all building work.
42. Mr Goddard further explained:
- a. that a relevant building surveyor may vary a mandatory notification stage, if it is appropriate for the particular works;
 - b. the mandatory notification stages must be set out in the building permit issued by the relevant building surveyor;
 - c. the relevant building surveyor may cause the building work, for which he or she had issued a building permit, to be inspected at any time, whether or not a mandatory notification stage has been completed;
 - d. the relevant building surveyor may cause building works to be demolished, opened or cut into or tested, if it is reasonably required to facilitate the carrying out of an inspection; and
 - e. a person must not carry out building works unless a building permit has been issued and the works is carried out are in accordance with the building permit.

Email from Investigator with the Audit and Investigation Unit of the Building Commission, Mr Mick Jones, dated 13 November 2009

43. Mr Jones confirmed that there had been no complaints lodged with the Building Commission or the Building Practitioners Board regarding Mr Peace or his company.¹⁹

JURISDICTION

44. At the time of Mr Peace's death, the *Coroners Act 1985* (Vic) (**Old Act**) applied. From 1 November 2009, the *Coroners Act (2008)* (Vic) (**the Act**) has applied to the finalisation of investigations into deaths that occurred prior to its introduction.²⁰
45. The role of the coronial system in Victoria involves the independent investigation of deaths to determine the cause of death, to contribute to the reduction of the number of preventable deaths and for the promotion of public health and safety and the administration of justice.

¹⁹ The Building Practitioners Board only registers natural persons and not companies.

²⁰ The Act, section 119 and Schedule 1.

46. Section 67 of the Coroners Act sets out the statutory role of the Coroner in that a Coroner must find, if possible, the identity of the deceased, the cause of death and, in some cases, the circumstances in which the death occurred.
47. A Coroner may comment on any matter connected with the death and may also report to the Attorney-General and may make recommendations to any Minister, public statutory authority or entity, on any matter connected with the death, including recommendations relating to public health and safety or the administration of justice.²¹

Determination to hold an Inquest

48. Pursuant to section 52(1) of the Act, I determined that an Inquest was warranted in the circumstances, as I had identified a number of public health and safety issues requiring further examination.
49. A Directions hearing was held on 25 June 2010, at which a number of issues were identified that required exploration at Inquest, including:
 - a. the difference(s) between the architectural and engineering plans for the gazebo construction;
 - b. the actual gazebo construction;
 - c. who was responsible for the apparent deviation from the structural design set out by the engineer;
 - d. the relevant legal and regulatory framework surrounding building inspections for the gazebo and whether these requirements were adequate and adequately followed; and
 - e. whether the gazebo would have passed an inspection in the manner it was constructed.
50. The investigation into Mr Peace's death raised concerns regarding residential building construction that occurs contrary to the engineer's drawings and specifications, in the context of the broader public interest issues for all onsite workers and occupants of residences undergoing building works, and whether like deaths can be prevented in the future.

²¹ Ibid, section 72(1) and (2).

INQUEST

51. An Inquest was conducted on 7, 8, 9 and 10 March 2011. Senior Sergeant Jenny Brumby of the Police Coronial Support Unit acted as counsel assist.

Evidence at Inquest

52. *Viva voce* evidence was obtained from the following witnesses at Inquest:

- a. Ms Heather Wright, Registered Architect;
- b. Mr Greg Schofield, Structural Engineer;
- c. Mr Geoffrey Goddard, Municipal Building Surveyor;
- d. Mr Leonard Dowell, Director of Fisher Dowell Pty Ltd;
- e. Mrs Karen Roebuck, home owner;
- f. Mr Greg Roebuck, home owner;
- g. Mr Russell Keays, Structural Engineer;
- h. Mr Daniel Fleming, carpenter;
- i. Mr Steven Zmak, WorkSafe Inspector; and
- j. DSC Rod Smith.

53. The following general themes were identified at Inquest:

Architect involvement in building projects

54. There are four stages of architectural involvement in a project as follows:

- a. first stage – schematic drawings or diagrams initially discussed with the client;
- b. second stage – design development, the schematic diagrams are developed into a final design for the project;
- c. third stage – preparation of the architectural drawings, from which builders can price the job, including input from structural engineers; and
- d. fourth stage – contract administration, including onsite inspections through to project completion.²²

²² Transcript, at p 183.

55. Ms Wright explained that a consulting engineer is appointed at the end of the second stage of the architect engagement process. There would be consultation between the architectural office and the engineer during the third stage of the working drawing.²³
56. Ms Wright clarified that both the architectural and engineer's drawings and specifications are provided to all builders involved in the tender process to enable them to provide a cost estimate.²⁴
57. A letter from Mr Peace to Ms Wright dated 29 May 2005²⁵ identifies the Specifications and Plans, including the Engineer's Structural Drawings and the Engineer's General Notes. Ms Wright stated that the successful tenderer specified that his price included all works detailed on the structural drawings.²⁶ The Particulars of Contract²⁷ signed by Mr Peace and Mrs Roebuck dated 18 December 2005 clearly identifies nine pages that were prepared and supplied by the owner and architect, and 26 sheets of plans that were prepared by the engineer and architect. It would appear from this evidence that Mr Peace was in possession of architectural and structural/engineering drawings, however it was unclear whether the drawings he possessed were the latest versions.
58. Ms Wright described that the purpose of the architectural drawings are to show the aesthetics of the structure, the general function of the structure in terms of sizing and location,²⁸ and the structural engineer then designs an appropriate structural system.²⁹ In this regard, Ms Wright stated that Mr Schofield's work is entirely independent of any input from her.³⁰
59. Ms Wright's working drawings for the gazebo are referred to as WD103 (T 9),³¹ and make no reference to any structure around the foundations, it indicates that the posts are to go into the ground, but does not specify a method of support above ground, which is deferred entirely to engineering.³² Ms Wright stated that architectural drawings cannot be used without involvement and input from the engineering documents.³³ She stated that

²³ Transcript, at p 6.

²⁴ Transcript, at p 30.

²⁵ Above no 3, at page 94.

²⁶ Statement of Heather Wright dated 8 May 2006, Inquest brief page 59 at page 60, Exhibit 1.

²⁷ Above no 3, at page 92.

²⁸ Transcript, at p 6-7.

²⁹ Transcript, at p 9.

³⁰ Ibid.

³¹ Ibid.

³² Ibid, at p 10.

³³ Ibid.

one would not be able to determine the composition of foundations from looking at the architectural drawings.³⁴

60. Ms Wright stated that she had examined her file and noted there had been an amendment made to her Working Drawing number WD103, which relates to the new gazebo structure. She stated that on this amendment, the new gazebo posts are described to be 125mm square gold Cypress pine. This amendment makes no reference to any alteration to the method of support for these posts. The notations provided on this drawing still make the following reference (at notation 3): *Allow for new posts and boundary wall ref Eng's drawings.*³⁵
61. Although Ms Wright could not recall why the change made at point three of the WD103 document occurred, which allowed for 125mm square Cypress gold timber posts, Ms Wright conceded that only she would have made these alterations to the document, and that the changes would have resulted from some discussion that prompted the particular change.³⁶ Ms Wright pointed out that even when the architectural drawings stipulate a particular material to be used, there is still a requirement to comply with the engineer's drawings.³⁷
62. Ms Wright stated that she has no recollection of discussions with the builder, premises owner or structural engineer regarding this amended notation to the gazebo post size as shown on the working drawing. Ms Wright opined that the change to the posts was made at the request of Mr Peace. Ms Wright stated that she did not recall any discussion regarding amendments to the structural engineer's specifications for the gazebo structure.³⁸
63. Although Ms Wright could not specifically recall, she stated her practice is to refer a builder to the engineer to directly discuss any proposed changes.³⁹ Despite her normal practice, Ms Wright conceded that it would not have been difficult for her to have directly contacted the engineer or sent the amendments directly to them had she been approached

³⁴ Ibid, at p 11.

³⁵ Supplementary statement of Heather Wright dated 12 May 2006, Inquest brief page 62; I note the WD103 document states further "*Allow for 125mm Cypress gold timber posts*", Exhibit 2.

³⁶ Transcript, at pp 11-12. Ms Wright although not having a clear recollection believed that these changes resulted from a suggestion/request from Mr Peace following his successful tender. Ms Wright also stated she considered there would have been a cost difference between using steel posts (as stipulated in the engineer's design) and the timber posts, with timber being less expensive; transcript, at p 13.

³⁷ Transcript, at p 13.

³⁸ Above no 26 and 35.

³⁹ Transcript, at p 13.

by the builder.⁴⁰ She also stated that in the absence of approval from the engineer, the structural engineering drawings must be followed regardless of her amendments to the architectural plans.⁴¹

64. Ms Wright considered the actual dimensions of the built gazebo (compared with the dimensions stipulated in her drawings) and the presence of three supporting posts (compared with five stipulated in her drawings) to be significant deviations.⁴²
65. Ms Wright stated that had she been involved in all four stages, and therefore been on site as an inspecting architect, she would have been in a position to point out that the structure was not built in accordance with the relevant documents, that most of her projects include involvement in the fourth stage, and that she has no record of why her service was terminated at the third stage.⁴³ Ms Wright stated that in the absence of her involvement in the fourth stage, the only parties who could monitor the building progression, aside from mandatory/scheduled building inspections, would be the homeowners and the builder.⁴⁴ In the absence of supervision in this context, Ms Wright stated that she did not consider self-regulation (that is builder-initiated inspections) to be sufficient.⁴⁵ Ms Wright opined however that targeted building surveyor inspections at the footing stage, the framing stage and at the practical completion stage should be sufficient to identify any discrepancies (assuming these inspections occur).⁴⁶

Structural Engineer involvement

66. Mr Schofield explained that standard practice is for the Structural Engineer to make their offer of engagement directly to the home owner through the Architect's office.⁴⁷
67. Mr Schofield first received the gazebo design concepts from Ms Wright on 27 January 2005, and the architectural drawings for the gazebo on 7 February 2005.⁴⁸ Mr Schofield

⁴⁰ Ibid, at p 27.

⁴¹ Ibid, at pp 27-28. In this context, Mr Gullaci of counsel on behalf of WorkSafe suggested that there be a regulation or section of the Building Act that requires consultation between architects and structural engineers when amendments are made to architectural drawings at the request of the builder; transcript, at p 28.

⁴² Transcript, at pp 23-24.

⁴³ Ibid, at pp 17-18. Ms Wright indicated that the original client and architect agreement indicated that she was employed for the four stages.

⁴⁴ Ibid, at p 19.

⁴⁵ Ibid, at p 34.

⁴⁶ Ibid, at p 35.

⁴⁷ Ibid, at p 37.

⁴⁸ Ibid, at p 39.

only had the one set of architectural drawings from Ms Wright on file,⁴⁹ meaning that he only had the preliminary architectural plans and never saw the final architectural plans.⁵⁰

68. Mr Schofield's understanding is that a builder would normally need to refer to both the architectural and the engineering plans in order to build a structure.⁵¹

69. Mr Schofield stated that the steel posts were used in the structural drawings to ensure the structure's lateral stability by plugging the posts into the concrete footing. He stated that he could not recall any specific discussions with any party regarding whether the posts should be steel or timber,⁵² and that he would have expected to have been contacted by the architect regarding such a change.⁵³ Mr Schofield conceded that he does not always practically expect notification of such a change, and referred to:

...building judgement about whether you notify...when you're making a gross change you need to get an engineer involved on a gazebo, plainly, if there was a lot more loads coming down, you would probably want to get an opinion about checking...⁵⁴

70. Mr Schofield considered that strictly, any change contemplated by a builder should be first run past the engineer responsible for the plans.⁵⁵

71. Mr Schofield stated that he was not consulted regarding the change to Cypress timber posts⁵⁶ and generally does not recall contact with the builder or builder's representative regarding the gazebo.⁵⁷

72. Mr Schofield presented a new set of his drawings during his oral evidence. The new drawings were dated 7 August 2006, but were also marked as February 2005.⁵⁸ Mr Gullaci, counsel appearing on behalf of WorkSafe, pointed out that these new drawings

⁴⁹ Ibid, at p 47.

⁵⁰ Ibid, at p 65. I note in this regard that both architectural drawings provided to the Court retain the existing back stud wall (transcript, at pp 49-50).

⁵¹ Ibid, at p 61.

⁵² Ibid, at p 40.

⁵³ Ibid, at p 71.

⁵⁴ Ibid, at p 75 L22.

⁵⁵ Ibid, at pp 75-76.

⁵⁶ Ibid, at p 54.

⁵⁷ Ibid, at p 56. Statement of Greg Schofield dated 8 May 2006, Inquest brief, page 64, at p 66, Exhibit 3. There is correspondence from Greg Schofield to Mrs Roebuck and Mr Daniel Fleming regarding inspection at the property on 24 January 2006 dated 25 January 2006, Inquest brief, page 110.

⁵⁸ Transcript, at p 42.

were dated after the incident, which Mr Schofield explained as an error, pointing to a transmittal log to support his position.⁵⁹

73. The first set of Mr Schofield's drawings (February 2005) show five posts supporting the gazebo structure, and Revision A on those drawing show an extra (total of six) post with no other material changes.⁶⁰ Mr Schofield stated that this change did not affect the stability of the structure,⁶¹ as the greater amount of weight is distributed through the two middle posts which were found in both versions.⁶² Although Mr Schofield could not recall the details of who communicated the need for this change, he explained it was based on a decision not to retain the back stud wall in the new structure.⁶³ Mr Schofield stated that he would not have made the amendment independent of being asked to do so.⁶⁴
74. Mr Schofield stated that he would expect any revised drawing he sent to Ms Wright would in turn be distributed to the builder.⁶⁵
75. Mr Schofield stated that the ground to the post was to be a fixed connection,⁶⁶ and that instead there was a method of connection that included a pin at the roof and a pin in the ground, which he opined effectively provided a mechanism for the structure to move, and a propensity to collapse.⁶⁷
76. Mr Schofield said, when viewing photos of the actual construction, that the "tragedy of it was the he didn't use the steel posts...that would be the big deviation".⁶⁸ Mr Schofield stated that there would have needed to be a number of modifications to the gazebo to make it safe.⁶⁹ Mr Schofield did not consider the discrepancy in the size stipulated in the drawings compared with the size of the structure built would have made any difference to its stability had it been fixed according to his design.⁷⁰ He considered that the type of material used for the posts was similarly not as important as the details relating to the

⁵⁹ Ibid, at pp 45-46; exhibit 6. There was extensive reference to this document in relation to its content and date (including transcript at pp 63, 64, 66, 68, 79, 80-81, 91 and 267).

⁶⁰ Transcript, at pp 42-43.

⁶¹ Ibid, at p 43.

⁶² Ibid, at p 50.

⁶³ Ibid, at p 48.

⁶⁴ Ibid.

⁶⁵ Ibid, at p 78.

⁶⁶ Ibid, at p 43.

⁶⁷ Ibid, at pp 52 and 73.

⁶⁸ Ibid, at p 51 L3.

⁶⁹ Ibid, at p 57.

⁷⁰ Ibid, at p 60.

base.⁷¹ Mr Schofield estimated the cost of providing the five new concrete footings to support the new gazebo structure as specified in his drawings would have been approximately \$500 per footing, a total of \$2,500.⁷²

77. Mr Schofield confirmed that the structural/engineering drawings take precedence with regards to structure.⁷³ He noted that as the architectural drawings were “silent” on foundations, if someone was to build the gazebo with reference only to the architectural drawings, that “they would pretty much have to make up the foundation part of it themselves” as well as how to fix the structure to the ground.⁷⁴
78. Mr Schofield stated that there was a clear failure by the builder to follow the engineer’s specifications as set out in the structural drawings.⁷⁵
79. Mr Schofield stated that he is not required to provide any form of Certificate of Compliance although he can if specifically asked,⁷⁶ however noted that most people are not prepared to pay the associated professional costs.⁷⁷
80. Mr Schofield considered that there would be some reduction in general risk if random Council inspections occurred, as these might put more pressure on builders to adhere to engineers’ drawings.

Municipal Building Surveyor

81. Mr Geoffrey Goddard was the Municipal Building Surveyor (**MBS**) at the City of Boroondara at the time of the incident, with 34 years experience in this role.
82. Mr Goddard explained the standard practice for obtaining a building permit for new works or alterations to existing buildings. He stated that the owner appoints an agent, usually an architect or builder, but can be any other person, who on their behalf appoints a Building Surveyor to obtain the relevant Building Permit for the works including the inspection of these works. The agent can either lodge a permit with the relevant Council’s MBS, or appoint a Private Building Surveyor (**PBS**).

⁷¹ Ibid, at p 74.

⁷² Supplementary statement of Greg Schofield dated 12 May 2006, Inquest brief, page 68 and above no 57.

⁷³ Transcript, at p 56.

⁷⁴ Ibid, at p 56 L22.

⁷⁵ Ibid, at p 73-74.

⁷⁶ Ibid, at p 83.

⁷⁷ Ibid, at p 84.

83. If the agent appoints a PBS, the PBS is required to notify the relevant Council in writing of their appointment within seven days pursuant to section 80 of the Building Act.⁷⁸
84. Mr Goddard explained that there is no requirement for the PBS to notify the Council of the date of inspections as they are carried out, however upon completion of works, a Certificate of Final Inspection is required to be lodged with the Council together with the dates of inspection for the mandatory notification stages.⁷⁹
85. Mr Goddard explained that the Building Surveyor may at any time inspect on site works irrespective of any mandatory inspection notification.⁸⁰ He stated that the Council has no role other than the recording of the Building Permits and storage of all documentation relevant to that project.⁸¹
86. Mr Goddard confirmed that the gazebo's footings and frame had been completed without any inspection.⁸²
87. Mr Goddard stated that a building surveyor, whether private or municipal, relies on the person in charge of the building works to notify them when certain (mandatory) stages of the works are ready for inspection.⁸³ He stated "most builders will get their mandatory inspections, they know it's a requirement, it's always been a requirement, this is not new legislation".⁸⁴ He stated that any previous inspections that were missed should be picked up at any inspection or at the end of the project prior to the issuing of the final certificate or occupancy permit.⁸⁵
88. Mr Goddard explained that there are permits issued for buildings that surveyors are never called to inspect, mostly because they are never built. He suggested there should be a system that alerts surveyors of a job that has been dormant for two years.⁸⁶
89. Mr Goddard did not consider it necessary to amend relevant legislation to promote random site inspection by building surveyors. He explained that the workload associated

⁷⁸ The legislation that covered building works in Victoria at the time of the Mr Goddard's statement (4 July 2006) was the *Building Act 1993* (Vic); *Building (Interim) Regulations 2005* (Vic); *Building Code of Australia*; and *Standards & Codes called up under the Building Code of Australia*.

⁷⁹ Section 102 *Building (Interim) Regulations 2005*.

⁸⁰ Statement of Geoffrey Goddard dated 4 July 2006, Inquest brief page 51, at page 52, Exhibit 8.

⁸¹ *Ibid*.

⁸² Transcript, 119.

⁸³ *Ibid*, at pp 96-97. Mr Goddard explained that builders should cease work until the inspection is carried out.

⁸⁴ *Ibid*, at p 104 L21.

⁸⁵ *Ibid*, at pp 96-98. Options of what building surveyors can do in the instance of missed inspections discuss at transcript, at p 100.

⁸⁶ *Ibid*, at pp 101-102, two years being the time in which they have to complete any building works.

with random inspections would be onerous, especially without a financial incentive to complete them.⁸⁷

90. Mr Goddard stated that if approved plans are amended, there is a consequent obligation to obtain an amended permit, a copy of which needs to be forwarded to the Council.⁸⁸
91. Mr Goddard, when asked if the Council should follow up permits lacking a final inspection within the designated time-period, pointed out that the owner pays a fee to the PBS to carry out these works, and it therefore should not be the responsibility of the Council's MBS to follow the permits up at no fee.⁸⁹
92. Mr Goddard noted that more illegal buildings were detected by MBS in the 1970s and 1980s when Councils generally had more resources, and surveyors tended to know their municipality better (with presumably less building works).⁹⁰

Private Building Surveyor

93. Mr Peace had engaged Fisher Dowell on previous occasions, without any difficulties from Mr Leonard Dowell's perspective.⁹¹
94. Mr Dowell received an application from Laysar on behalf of Mr Peace to act as the relevant PBS on 27 September 2005.⁹² The application and relevant documentation included architectural drawings, engineering drawings and computations for the project and were received by Mr Dowell's office on or about this date. As part of his requirements under the Building Act, Mr Dowell notified the City of Boroondara of his appointment by mail dated on or around 29 September 2005.⁹³

⁸⁷ Ibid, at p 107.

⁸⁸ Ibid, at pp 114.

⁸⁹ Ibid, at pp 116-117. Mr Goddard did mention that under section 212 of the *Building Act 1993* (Vic) the Council is responsible for administering and enforcing certain parts of the building regulations within its municipality, and accordingly the Council is still potentially involved in the system even when private building surveyors are engaged. Mr Goddard explained that a system of random inspections from the Council would be practically difficult to implement. He provided an example of a certain Melbourne municipality that has 2,500 permits issued annually for building works, with works varying from starting the day the permit is issued, to starting 12 months later; transcript, 119-120.

⁹⁰ Transcript, at p 122.

⁹¹ Ibid, at p 125. Mr Dowell stated that on one occasion, Mr Peace had asked if they would accept photographs in lieu of an inspection (which was rejected), however stated that in his experience, nearly all builders will try that at some stage; transcript, at pp 125-126.

⁹² Statement of Leonard Dowell, dated 8 June 2006, Inquest brief page 55, Exhibit 9.

⁹³ Ibid, at page 57; Statement of Geoffrey Goddard, above no 80, at page 52.

95. Mr Dowell had inspected the site on 12 January 2006,⁹⁴ 23 January 2006⁹⁵ and on 31 January 2006.⁹⁶ No building works had been commenced on the new gazebo at this stage. Mr Dowell's office at no stage received any notification of commencement of buildings works in relation to the gazebo structure.⁹⁷ Mr Dowell's attendance following the incident on 2 May 2006 was the first time he had observed that the new gazebo structure had been built on metal stirrups fixed to the existing slab, contrary to building design, structural drawings and computations.⁹⁸
96. During Mr Dowell's inspection of the architectural and engineering drawings since the collapse, he noted that a difference exists between the architectural and engineering drawings in respect of the gazebo posts, however explained that the engineering drawings preclude in relation to the structural components whilst the architectural drawings are representative of the aesthetics of the project. Mr Dowell stated however that either method of construction is acceptable provided the footing design remained unaltered.⁹⁹
97. Mr Dowell did not have the structural engineer's drawing that stipulated six posts,¹⁰⁰ and had no recorded discussions or recollection of discussions relating to the variations of having six posts and no stud wall.¹⁰¹ Mr Dowell stated that he would expect any subsequent drawings (aside from originals received at time of permit approval), would come from the builder most often (as the builder is the one who has the permit with the surveyor), or directly via the engineer to expedite matters, or at times from the architect if they are still involved.¹⁰²
98. Mr Dowell stated that he would have expected to be notified of these variations, which would have required a variation of permit.¹⁰³
99. Mr Dowell stated that the method of ground fixation employed by Mr Peace was not appropriate and "it wouldn't work, it just wouldn't work",¹⁰⁴ that the deep footings in the

⁹⁴ Inspection of two large veranda pads excavations at the rear of the premises.

⁹⁵ Frame inspection to alterations to the existing premises – not approved due to a number of issues which were to be rectified by the builder, specifically relating to engineering design changes within the project which were different to the approved engineering details. These amendments were justified by the engineer on 25 January 2006.

⁹⁶ Inspection of the frame after the adjustments, which was approved; statement of Leonard Dowell, above no 92, at page 56.

⁹⁷ Statement of Leonard Dowell, above no 92, at page 57.

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Transcript, at pp 128-129.

¹⁰¹ Ibid, at p 134.

¹⁰² Ibid, at p 162.

¹⁰³ Ibid, at pp 133-134.

structural drawings would have provided lateral restraint, stopping the structure from falling sideways.¹⁰⁵ Mr Dowell stated he was surprised when he inspected the site following the incident, that Mr Peace perched the structure on the steel brackets, which he stated was “just unsuitable with a tiled roof on it”.¹⁰⁶ He stated “...it can’t stand up like that, and it didn’t. Not even a lightweight carport I doubt would stand up like that”.¹⁰⁷

100. Mr Dowell opined that either the steel or Cypress gold timber would have worked “satisfactorily”,¹⁰⁸ and would have been safe as long as the footing structures used reflected those detailed in the engineering plans.¹⁰⁹
101. Mr Dowell stated that had he known that Mr Peace was at the framing stage, he could have put a ‘stop work order’ in place.¹¹⁰ He could have asked Mr Peace to justify why there were no footings, and immediately assess whether the structure was temporarily braced adequately to prevent collapse.¹¹¹ He could have then directed the tiles were to be removed, and the structure rectified or removed. Mr Dowell stated he did not know work on the gazebo had commenced,¹¹² and that he expected to be called back to inspect the gazebo footings, again for the frame and again for completion as an independent building/structure.¹¹³ Mr Dowell confirmed it is the builder’s responsibility to alert the building surveyor that they are at an inspection stage.¹¹⁴
102. Mr Dowell stated that he was not aware of any time pressure in relation to the project, however noted that this information would have been between the owner and the builder.¹¹⁵ Mr Dowell agreed that the potential cost saving of not using the foundations and methods of attachments described in the structural engineer’s drawings would be approximately \$2,500.¹¹⁶ Regarding the possibility of financial pressure, Mr Dowell

¹⁰⁴ Ibid, at p 132 L11.

¹⁰⁵ Ibid, at p 136.

¹⁰⁶ Ibid, at p 135 L12.

¹⁰⁷ Ibid, at p 143 L8.

¹⁰⁸ Ibid, at p 133, L3.

¹⁰⁹ Ibid, at p 133.

¹¹⁰ Mr Dowell stated that if surveyors go onsite and see something that looks unsafe, he considers it their duty to notify the Council, who he considered the overall ruling body; transcript, at p 160.

¹¹¹ Transcript, at p 137. Mr Dowell stated that the non-compliance with the engineer’s drawings that occurred at the site prior to the incident in relation to the main residence was not a cause for concern, and something that occurs relatively frequently with builders in general; transcript, at p 153.

¹¹² Transcript, at pp 135, 138.

¹¹³ Ibid, at p 158.

¹¹⁴ Ibid, at p 140.

¹¹⁵ Ibid, at p 138.

¹¹⁶ Ibid, at p 166.

commented that it is not unusual for a PBS to return to a site for different parts of a project, and that they do not charge for additional inspections.¹¹⁷

103. Mr Dowell suggested the gazebo was built in haste, and also suggested that an inspection was bypassed because it would have held construction up for a day.¹¹⁸
104. Mr Dowell did not agree with Mr Goddard's suggestion of a system where PBSs issue permits and MBSs increase their inspections.¹¹⁹ Mr Dowell further stated that the onus of self-regulation must be on the builder, given the timeframe of 12 months to commence work and two years to complete works. Timeframes are subject to many variables, such as finance, tradesmen availability, landscaping and material.¹²⁰ Mr Dowell stated that in a sense, random inspections do occur in response to complaints received by Councils from neighbours.¹²¹ Mr Dowell stated that the Building Commission essentially performs random inspections via their audit system.¹²²
105. Mr Dowell could not offer a suggestion of how to avoid a like situation from occurring (that is, a builder's failure to self-regulate) other than pecuniary penalties that he believes are already in place.¹²³

Homeowners

106. Mrs Roebuck stated that she was not aware that Ms Wright had initially been engaged for all four stages.¹²⁴
107. Mrs Roebuck had the architectural plans that incorporated the 125mm Cypress gold timber posts, and the engineering/structural design with the five-post design. It was Mrs Roebuck's understanding that these were the final documents upon which the

¹¹⁷ Ibid, at p 145.

¹¹⁸ Ibid, at p 150.

¹¹⁹ Ibid, at pp 162-163. Mr Dowell also noted the difference in resources available to MBS, that MBS do not perform out of hours work, are not free to prioritise permit applications and generally have bigger backlogs.

¹²⁰ Transcript, at p 165.

¹²¹ Ibid, at p 149. Mr Dowell stated that other than mandatory inspections, and aside from responding to complaints/requests, he does not carry out random inspections; transcript, 152.

¹²² Transcript, 154.

¹²³ Ibid, at p 165. See section 33 of the *Building Act 1993*.

¹²⁴ Transcript, at pp 183-185. Mr Gullaci took Mrs Roebuck to her statement which read "We decided not to engage Heather Wright to oversee the construction phase of the building and this decision was made with the agreement of Stephen Peace". Mrs Roebuck explained that she recalled that her and her husband decision was based on her doing the project managing of the renovation, that they had never planned to have an architect do what she herself could (as she was not working at the time) and the decision was made independent of any input from Mr Peace; transcript, at p 185. Mrs Roebuck stated that Mr Peace did not persuade them not to have an architect for the fourth stage; transcript, at p 186.

construction was to proceed.¹²⁵ Mrs Roebuck recalled that Mr Peace wrote the letter to them dated 7 July 2005 regarding possible cost cutting strategies *after* he received the plans/documents that he had been sent upon commencement of the tender process.¹²⁶

108. Mrs Roebuck did not recall further discussions relating to any changes that were to be made in respect of the gazebo,¹²⁷ however noted that she did not take any notice of structural drawings.¹²⁸
109. Mrs Roebuck stated that she was aware that the gazebo would have a tiled roof, however did not recall discussions relating to material to be used for the gazebo construction. Mrs Roebuck stated there were no discussions beyond the decision to match the gazebo to the rest of the house.¹²⁹ Mr Roebuck did not recall any discussions or revised drawings relating to the gazebo.¹³⁰ He also stated that neither the stirrup supports nor the material to be used for the posts would not have been something that was discussed. From their perspective it was about what they wanted built and how they wanted it to look.¹³¹
110. Mr Roebuck stated that he had confidence in Mr Peace, that when Mr Peace suggested a structural change for the residence (that had an aesthetic purpose), it is his recollection that Mr Peace indicated that such a change would involve the engagement of the engineer.¹³² Mr Roebuck was not aware that a frame inspection for the main residence failed because it did not comply with the engineering detail.¹³³
111. Mrs Roebuck and her husband were not constrained by a budget,¹³⁴ and Mrs Roebuck described the budget as "...pretty much open ended...".¹³⁵ Mr and Mrs Roebuck were not aware of any time constraints/issue, and did not think construction was significantly behind the anticipated time schedule, and that they had not lost many days with weather hold ups.¹³⁶

¹²⁵ Transcript, at p 177.

¹²⁶ Ibid, at pp 172-173. A variation of costs letter from Mr Peace to Mr and Mrs Roebuck dated 7 July 2005 states numerous changes, including, relevant to the gazebo: "larger posts to gazebo area so as to match back porch area \$600.00"; Inquest brief, page 96.

¹²⁷ Transcript, at p 177.

¹²⁸ Ibid, at p 178.

¹²⁹ Ibid, at pp 174-175.

¹³⁰ Ibid, at pp 195-196.

¹³¹ Ibid, at pp 197-198.

¹³² Ibid, at pp 193, 200 and 202.

¹³³ Ibid, at p 201.

¹³⁴ Ibid, at p 173.

¹³⁵ Ibid, at p 174 L10.

¹³⁶ Ibid, at pp 179, 191 and 199.

112. Mr Roebuck confirmed that he and his family were living at the property during construction and were able to access the gazebo area as it was being constructed.¹³⁷

Laysar work systems

113. Apprentice carpenter Mr Graham stated that he had quickly skimmed over the plans on one occasion whilst looking at other work inside. He never saw the engineer's drawings for footings for the gazebo. He also did not recall footings ever being discussed in relation to the gazebo. Mr Graham stated that there was no Job Safety Analyses (JSA) completed in relation to this job. Mr Michael Fleming, painter, did not work in the gazebo and did not see any specifications for the gazebo. He had not seen any risk assessment or JSAs for the gazebo. Apprentice carpenter Mr Gray-Caple and labourer Mr Cramer do not recall having seen a JSA on any of Mr Peace's worksites.

114. Mr Gray-Caple stated that he had not seen the plans or engineer's drawings in relation to the gazebo, rather he was told by either Mr Daniel Fleming, carpenter, or by Mr Peace what works he was expected to undertake. Mr Johnson stated he had a "quick look"¹³⁸ at the plans to see to cabinet set-up, but did not take notice of the structural information. Mr Johnson did not work on the gazebo construction.

115. Mr Daniel Fleming stated that the only plans he saw for the gazebo were the architect plans.¹³⁹

116. Mr Graham described Mr Peace as "safety conscious"¹⁴⁰ in that he ensured his employees had the safety equipment they required. Mr Cramer described Mr Peace as "b[y] the book as far as safety goes".¹⁴¹

117. Mr Graham stated that Mr Peace was on site almost every day, and would arrive at approximately 9.00 or 10.00am. He stated that when Mr Peace was not on site, Mr Daniel Fleming would determine what needed to be done.

Daniel Fleming's knowledge and experience

118. Mr Fleming had completed a three and a half year apprenticeship, most of which was with Mr Peace.¹⁴²

¹³⁷ Ibid, at p 194.

¹³⁸ Statement of Timothy Johnson dated 1 June 2006, Inquest brief at p 31.

¹³⁹ Statement of Daniel Fleming, above no 8.

¹⁴⁰ Statement of Christopher Graham dated 25 May 2006, Inquest brief, p 24 at p 26.

¹⁴¹ Statement of Shane Cramer dated 31 May 2006, Inquest brief, p 28 at p 30.

¹⁴² Transcript, at pp 219-221.

119. Mr Daniel Fleming stated that Mr Peace had purchased all of the materials before the old gazebo had been demolished, that Mr Peace went through with labourer Mr Shane Cramer and himself what all of the materials were for – three Cypress posts at the front and the frame at the neighbour’s boundary fence. He stated that after the old gazebo had been demolished, he asked Mr Cramer to start digging footings on the tennis court end of the gazebo, closest to the swimming pool. Mr Daniel Fleming stated that he thought a footing would have been dug to hold the post in position. He stated that Mr Peace arrived while Mr Cramer was digging the stump hole and said “no, no the[y’re] going on stirrups”. Mr Daniel Fleming stated that there were no stirrups on site, and Mr Peace said he would use the same stirrups that were on the old gazebo. Mr Daniel Fleming stated that the old gazebo had a timber pitched roof covered with tin, while the new gazebo roof was tiled. Mr Daniel Fleming stated he picked up a number of stirrups for Mr Peace and had no discussions with Mr Peace regarding whether there was to be footings in place. Mr Daniel Fleming stated that it was mainly himself and apprentice carpenter Mr Chris Graham that erected the gazebo frame¹⁴³ with assistance from Mr Peace and apprentice carpenter Mr Gray-Caple.¹⁴⁴
120. Mr Daniel Fleming stated that they essentially did not refer to the architect’s drawings after the set out for the gazebo was complete. He checked the document on one occasion to determine whether extra bracing was required between the posts before asking Mr Peace about extra bracing. Mr Daniel Fleming could not see any extra bracing or footing details on the document.¹⁴⁵ He had not seen the structural drawings until after the incident.¹⁴⁶
121. After the frame, posts and trusses were stood, Mr Daniel Fleming noticed that the gazebo structure was slightly unstable to work on when standing on the trusses. He suggested to Mr Peace that they should place extra bracing between the posts. Mr Peace declined and suggested waiting to see what it is like when finished, and to then place extra bracing if needed.¹⁴⁷ Mr Daniel Fleming next expressed concerns relating to the structure’s stability

¹⁴³ Statement of Daniel Fleming, above no 8, at p 16.

¹⁴⁴ Transcript, at p 223.

¹⁴⁵ Statement of Daniel Fleming, above no 8, at p 17.

¹⁴⁶ Ibid, at p 18.

¹⁴⁷ Ibid, at page 17.

after the roof battens were in place, and Mr Peace decided to address this by running two sets of cross braces under the trusses.¹⁴⁸

122. Mr Peace had not instructed Mr Daniel Fleming to organise an inspection in relation to the gazebo, nor did Mr Daniel Fleming ask Mr Peace if one was required.¹⁴⁹ Mr Daniel Fleming had never completed a JSA whilst working with Mr Peace in relation to a building site, however stated that Mr Peace conducted safety improvement discussions at least weekly.¹⁵⁰
123. In reference to a drawing titled “footing slab plan for proposed gazebo”, which Mr Daniel Fleming viewed after the incident, he noted that the drawing indicates five posts in position, however only three posts were supplied for the gazebo. Mr Fleming agreed the structure built differed from the architectural plans with respect to the number of posts used (three rather than five).¹⁵¹ Mr Fleming stated this discrepancy occurred as Mr Peace had instructed it be built in this way; using only three timber posts.¹⁵² Mr Fleming stated that he “never really questioned him [Mr Peace] at all”.¹⁵³
124. Mr Fleming explained that instead of placing the two other timber posts, stirrups were placed down and a bearer was placed across. Mr Fleming further explained that the reason Mr Peace wanted it constructed this way was because he wanted the cupboards off the ground, to avoid water damage.¹⁵⁴
125. The “footing slab plan for proposed gazebo” drawing also shows that the posts are right beside the existing brick wall on the neighbour’s side of the fence, however Mr Peace wanted the wall 100mm away from the brick wall to accommodate a new bench top.¹⁵⁵ Mr Daniel Fleming stated that he became angry upon seeing the engineer’s drawings when he saw the posts were to be embedded into a substantial concrete footing one metre deep. He also looked at the doubling up on the beams atop the posts, also questioning why this was not done. Mr Daniel Fleming stated he thought the gazebo would not have collapsed had the engineer’s drawings been adhered to.¹⁵⁶

¹⁴⁸ Ibid.

¹⁴⁹ Ibid, at p 18

¹⁵⁰ Ibid, at p 19.

¹⁵¹ Transcript, at p 225. Mr Fleming confirmed that Mr Peace had instructed him to deviate from the architectural plans; transcript, at p 226.

¹⁵² Transcript, at p 225.

¹⁵³ Ibid, at p 225 L17.

¹⁵⁴ Ibid, at p 225.

¹⁵⁵ Statement of Daniel Fleming, above no 8, at pp 17-18.

¹⁵⁶ Ibid, at page 20.

126. Mr Fleming confirmed that it took approximately five to six weeks to progress the gazebo to the state it was in when it collapsed.¹⁵⁷
127. Mr Fleming stated that Mr Peace had discussed placing knee bracing at the top corners of the gazebo, that they always placed knee braces in similar structures. Mr Fleming thought the knee bracing was going to be done the day of the incident, however Mr Peace wanted the bracing taken off so that he could set up the scaffolding.¹⁵⁸ Mr Fleming considered it would have been possible to put the knee braces on with the temporary bracing in situ.¹⁵⁹ Mr Fleming stated it was usual in similarly designed structures for the knee bracing to go in last.¹⁶⁰
128. Mr Fleming stated that although he had been exposed to the Victorian Timber Framing Manual as part of the theoretical part of his apprenticeship training, there was never any reference material available on site with Laysar jobs. Mr Fleming stated that it was "...just his word..." (referring to Mr Peace), "...he'd instruct on how everything was to be built".¹⁶¹
129. Mr Fleming confirmed that he had seen the engineering plans for the main residence but was not aware of any such plans for the gazebo.¹⁶² Mr Fleming could not recall noticing the reference to the engineer's drawings on the architectural drawings.¹⁶³ Mr Fleming stated that in similar jobs he had completed with Laysar (pergolas/carports etc.), he had not been privy to both the architectural and engineer's drawings.¹⁶⁴
130. Mr Fleming stated that when he raised concerns with Mr Peace about the gazebo's stability and informed Mr Peace that he wanted to make some changes to increase the stability, Mr Peace happily allowed the suggested changes to occur.¹⁶⁵
131. Mr Fleming said in evidence that he was unaware that three inspections were required for the gazebo, and only knew there was going to be a final inspection on the property as a whole.¹⁶⁶ Mr Fleming stated that some safety issues are foreseeable, and acknowledged a

¹⁵⁷ Mr Fleming explained that they were not working on the gazebo full time in that period; transcript, at p 222-223.

¹⁵⁸ Transcript, at p 227.

¹⁵⁹ Ibid, at p 228.

¹⁶⁰ Ibid.

¹⁶¹ Ibid, at pp 229 L30, 230 L14.

¹⁶² Ibid, at p 231.

¹⁶³ Ibid, at pp 231-232.

¹⁶⁴ Ibid, at p 241.

¹⁶⁵ Ibid, at p 235. Mr Fleming stated he felt Mr Peace listened to him whenever he made safety suggestions; transcript, at p 235.

¹⁶⁶ Transcript, at pp 246-247.

JSA's role in trying to anticipate particular risks associated with a particular project.¹⁶⁷ Mr Fleming considered that reference would have been made to both the architectural and engineering plans in completing a JSA.¹⁶⁸ Mr Fleming had been taught that JSAs should be completed on every construction site,¹⁶⁹ including private residential premises.

132. Mr Fleming stated there had never been a JSA completed on residential construction sites in the entire time he worked at Laysar.¹⁷⁰ Mr Fleming recalled having concerns about this, which he and others expressed to Mr Peace. He could not recall Mr Peace's exact response, but formed the impression that Mr Peace did not consider JSAs were necessary.¹⁷¹ Mr Fleming stated that at the time, having worked with Mr Peace for many years, he trusted him and his work. He stated that his lack of experience might have held him back from asking Mr Peace more probing questions relating to drawings and inspections.¹⁷²
133. Mr Fleming stated that it was out of character for Mr Peace to deviate from the plans and he had never known him to do that in the past.¹⁷³
134. Mr Fleming suggested that with the benefit of hindsight, the deviations occurred due to time constraints, but could not recall whether there was a pressure to finish the job and move onto another job.¹⁷⁴ Similarly, Mr Fleming was not aware of any financial pressures that might have led Mr Peace to deviate from the structural plans.¹⁷⁵

Mr Russell Keays, engaged by WorkSafe

135. Mr Keays was provided with a set of revised engineering plans relating to the gazebo prior to giving *viva voce* evidence. The essential difference between the plans he originally had and those received prior to giving evidence was that the revised plans indicated six posts as opposed to five posts in the original design, and that part of the rear boundary wall originally to be retained had been removed (according to the revised

¹⁶⁷ Ibid, at p 253.

¹⁶⁸ Ibid, at pp 237 and 248.

¹⁶⁹ During his red card training, which indicated that a person completed the previous Victorian Construction Industry Basic Induction Course which existed prior to 1 July 2008. This training is now referred to as construction induction training/card; <http://www.worksafe.vic.gov.au/safety-and-prevention/your-industry/construction/how-to-comply/induction-training> accessed 20 February 2015.

¹⁷⁰ Transcript, at p 247.

¹⁷¹ Ibid, at p 248.

¹⁷² Ibid, at p 249. Mr Fleming stated that he would now, with the benefit of more experience, ask those probing questions.

¹⁷³ Ibid, at pp 238 and 250.

¹⁷⁴ Ibid, at p 238-240.

¹⁷⁵ Ibid, at p 239.

plans). References to the method of fixation of the timber roof trusses to the posts and the foundations specifications remained unchanged.¹⁷⁶

136. Mr Keays stated that had either version of the plans been followed, the structure would have been safe, as it had solid footing with the ability to resist any sway motion that was seen in the collapse.¹⁷⁷ Mr Keays stated that the addition of the sixth post and the removal of part of the existing boundary wall made no difference to his conclusion, and went further to say that if the builder had done only two of the columns the way the engineer had designed, that would have been sufficient to hold up the building.¹⁷⁸ Mr Keays stated that the roof was offset; the bearer was offset from the column, and was therefore less stable, however if this had been the only deviation, and the foundations had been maintained pursuant to the structural design, it's likely the structure would have been "okay".¹⁷⁹ Mr Keays similarly stated that had the footing design been followed and modifications to the roof truss area had remained, it would have been considered a safe structure.¹⁸⁰
137. Mr Keays stated that the crucial element was the deviation in the footings.¹⁸¹ He stated that placement of angular timber bracing across the diagonal on the top corners would have provided greater support to the roof itself that would have stopped the sway motion occurring at the top, and reduced some of the load of the footings, and would have been in keeping with the architecture.¹⁸² Mr Keays stated that the structure, having been built in an unsafe manner, would have failed at some point.¹⁸³
138. Mr Keays stated that the increase in the structure's dimension (compared with the design documents) alone would not have compromised the structure, nor would have the use of timber rather than steel posts. Mr Keays stated that timber is a reasonable substitution provided it is braced in some way and protected from the environment.¹⁸⁴ He stated that the use of timber posts had no direct correlation to the failing of the gazebo.¹⁸⁵

¹⁷⁶ Ibid, at p 208.

¹⁷⁷ Ibid.

¹⁷⁸ Ibid, at p 209.

¹⁷⁹ Ibid, at p 215, L29.

¹⁸⁰ Ibid, at p 209.

¹⁸¹ Ibid. Mr Keays agreed that the existing "paving slab" covered with slate was not suitable for building structures on; transcript at p 211.

¹⁸² Transcript, at pp 209-210.

¹⁸³ Ibid, at pp 214-215.

¹⁸⁴ Ibid, at p 210.

¹⁸⁵ Ibid, at pp 210-211.

139. Mr Keays confirmed that the architectural drawing is silent regarding how the structure should be fixed to the ground, and agreed that it is essential for a person constructing the gazebo to have both the architectural and structural engineering plans in order to construct it consistent with the intended design.¹⁸⁶ Mr Keays stated that if someone did not have access to the structural engineering design, they would need to consult another source, for example the Timber Framing Manual.¹⁸⁷ Mr Keays confirmed that the engineering plans take precedence over the architectural plans on the structural aspects.¹⁸⁸

Steven Zmak, WorkSafe

140. Mr Zmak explained that WorkSafe had investigated the incident with the view to considering a prosecution against Laysar under the *Occupational Health and Safety Act 2004* (Vic) (the **OH&S Act**) relevant to an employer's duty to their employees and persons other than their employees.¹⁸⁹
141. Mr Zmak explained that charges did not proceed on the basis that they would have had to have been brought against the Director of Laysar, being Mr Peace, who had died in the incident. Considerations of specific deterrence and public interest were taken into account in WorkSafe's decision not to proceed with charges.¹⁹⁰
142. Mr Zmak stated that the WorkSafe investigation was unable to determine why Mr Peace decided to deviate from the structural plans.¹⁹¹

Oral Submissions at the conclusion of *viva voce* evidence

143. Senior Sergeant (S/S) Brumby submitted that despite the discrepancy between the two engineering plan versions, the evidence was that either version would have resulted in a safe structure, if built according to the plans.¹⁹² There was similarly evidence that the use of timber instead of steel posts did not in itself compromise the gazebo's structural integrity as long as the structural plan's foundation design was adhered to.¹⁹³

¹⁸⁶ Ibid, at p 212.

¹⁸⁷ Ibid, at pp 212-213, see above no 10. Mr Keays stated that a builder's experience should encompass having read this manual at some stage in the working life.

¹⁸⁸ Transcript, at p 213.

¹⁸⁹ Ibid, at pp 255-256. Section 21 and 23 of the OH&S Act were of particular relevance in this respect.

¹⁹⁰ Ibid, at p 256. Mr Zmak explained that there was no one else to prosecute; transcript 256. Mr Zmak explained that the WorkSafe Legal Services Department makes the final decision on whether there is enough evidence to proceed with a prosecution in the context of the prosecution guidelines, transcript, at pp 260-261.

¹⁹¹ Transcript, at p 257.

¹⁹² Ibid, at p 272.

¹⁹³ Ibid, at pp 272-273.

144. S/S Brumby submitted that the evidence regarding the existence of plans and amendments made by different parties highlights the ease in which communication can break down when multiple parties are involved in a project at different stages, and how a lack of continuity across the duration of the project can lead to confusion and mistakes.¹⁹⁴
145. S/S Brumby noted that Mr Peace's reason for his decision to construct the gazebo on stirrup braces remains unclear. He had access to architectural and engineering plans for the gazebo design. He was an experienced builder and would have known that the gazebo was legally required to be inspected at various construction stages. There was evidence that he was a competent tradesman, and witnesses were surprised to learn that he had sanctioned the gazebo construction in the manner it was done.¹⁹⁵
146. S/S Brumby submitted that the inspection process itself is adequate for detecting unsafe structures if followed, however the failing in this process appears to be the self-regulatory manner in which the onus rests with the person responsible for the construction to ensure the inspection is conducted.¹⁹⁶ She submitted that had the gazebo been inspected at either the foundation or framing stage, it would have been likely that the problems with the structure would have been identified, and the tragic outcome potentially averted.¹⁹⁷
147. Mr Gullaci on behalf of WorkSafe did not make submissions.
148. At the conclusion of the witnesses, Mrs Vikki Peace addressed me in relation to her husband, who she described a safety-conscious, meticulous craftsman builder.¹⁹⁸
149. Following the closing submissions by S/S Brumby, I indicated that my statutory role in relation to Findings was to, if possible, find the identity of the deceased,¹⁹⁹ the cause of death²⁰⁰ and the circumstances in which the death occurred.²⁰¹ The identity of the deceased had never been in question. Similarly, the cause of death as identified by Forensic Pathologist Dr Noel Woodford, was not in question and I indicated my intention to adopt his conclusions regarding the medical cause of death.

¹⁹⁴ Ibid, at p 273.

¹⁹⁵ Ibid, at p 275.

¹⁹⁶ Ibid, at p 276.

¹⁹⁷ Ibid, at pp 276-277.

¹⁹⁸ Ibid, at p 270.

¹⁹⁹ Section 67(1)(a) Coroners Act 2008.

²⁰⁰ Section 67 (1)(b).

²⁰¹ Section 67(1)(c).

150. In relation to the circumstances of Mr Peace's death, I indicated that the evidence was compelling that if Stephen Peace had not deviated from the engineering structural plans for the construction of the gazebo, the collapse of the gazebo would not have occurred. The evidence also suggested that this deviation appeared to be out of character for an otherwise respected builder. I indicated that before completing my written Findings, my intention was to review the evidence before me and to explore through the assistance of the Coroners Prevention Unit (CPU),²⁰² the exact nature of the Building Commission's (then) current enquiry into building permit final inspections that had been raised in evidence.

Coroners Prevention Unit

151. The CPU looked into recent developments in the Victorian building permit process on my behalf. The CPU specifically sought to identify any changes in process for lapsed building permits and detection of non-compliance during the building process.

152. At July 2011, the Building Commission²⁰³ advised that they were in the process of developing a revised Practice Note for registered building surveyors (RBS)²⁰⁴ concerning the management of lapsed building permits. Mr Jeff Calderbank²⁰⁵ of the Building Commission advised that a project of consultation with the building industry was underway to develop recommendations for the Victorian Government, and that a revised Practice Note would be produced thereafter.²⁰⁶

153. The Building Commission subsequently released an updated Practice Note regarding lapsed building permits, containing several additions from the previous version, including reinforcing the RBS' obligations to ensure that the administration of permits occurs in such a way as to avoid lapsing.²⁰⁷

²⁰² The Coroners Prevention Unit (CPU) was established in 2008 to strengthen the prevention role of the coroner. The unit assists the coroner with research in matters related to public health and safety and in relation to the formulation of prevention recommendations, as well as assisting in monitoring and evaluating the effectiveness of the recommendations. The CPU comprises a team with training in medicine, nursing, law, public health and the social sciences.

²⁰³ As it then was.

²⁰⁴ RBS include both Municipal Building Surveyors (MBS) employed by local Councils and Private Building Surveyors (PBS) working in private practice.

²⁰⁵ Then Director, Industry and Regulatory Compliance, Building Commission.

²⁰⁶ The CPU also consulted with the Australian Institute of Building Surveyors (AIBS) Victorian Chapter, however at the time, no information was available regarding potential changes to the lapsed building process.

²⁰⁷ http://www.buildingcommission.com.au/resources/documents/PN_2011-35.pdf; access on or around July 2011, no longer available.

154. The CPU identified that Small Business Victoria (SBV)²⁰⁸ developed a business case for a \$50million strategy for “Online services to reduce the regulatory burden in the building and construction industry”. The strategy sought to streamline the existing regulatory framework by establishing an online business portal that connects the 67 different regulatory entities who oversee the Victorian building industry. It was envisaged that this portal would manage the regulatory process from the time an application is made for a building permit, through to compliance inspections, final inspection and certification of works.
155. SBV at the time had been undertaking stakeholder engagement and measuring the degree of support for the project prior to submission to the Department of Treasury and Finance for review and possible consideration by the Victorian Government.
156. The CPU advised that this system would have offered several points of intervention that may have led to the discovery of the significant non-compliance issues associated with Mr Peace’s building works at the building site. The CPU highlighted that mandatory compliance inspections are required to occur at the time footings are laid, frames are erected and for issuing certificates of occupancy prior to final certification. Under a centralised online system, owners, builders and regulators would be able to review the status of the compliance inspections compared to the progress of the construction. The CPU suggested that this would significantly increase the transparency of the building process and the accountability of building practitioners in Victoria.

Victorian Auditor-General’s Office

157. The CPU advised that the Victorian Auditor-General’s Office (VAGO) undertook a review of building permit compliance in the 2011-2012 financial year. It was anticipated that this audit should address a range of issues relevant to the circumstances of Mr Peace’s death. It was not known at the time whether the VAGO would consider the proposal from SBV.
158. The VAGO audit sought to examine how effectively Councils enforce compliance of approved works with building permits and the provision of the Building Act generally. It

²⁰⁸ Department of Building and Innovation (DBI).

also sought to determine how effectively the Building Commission regulates the activities of municipal and private surveyors.²⁰⁹

159. The CPU revisited these issues in January 2012 on my behalf. The CPU reported that the VAGO's audit findings were contained in a publication: *Compliance with Building Permits*,²¹⁰ with the final report from the audit tabled in Parliament on 7 December 2011.²¹¹ The report included criticism of the Building Commission's execution of its statutory functions and recommended comprehensive evaluation of the effectiveness of the permit system.²¹²
160. The VAGO's *Compliance with Building Permits* audit was the third review of the permit system since 1994.²¹³ The VAGO audited the documentation for 401 approved building permits lodged at various local Melbourne Councils. The objective of the audit was to examine the effectiveness of the building permit system in assuring approved works met requisite building and safety standards. In particular, the audit examined how effectively the Building Commission regulates the activities of MBSs and PBSs.²¹⁴ The VAGO examined the following aspects of the building permit process:
- a. the building surveyor's level of compliance with the Building Act and *Building Regulations 2006*;
 - b. the registration system for building practitioners;
 - c. the Building Commission's oversight of building surveyors through:
 - i. performance audits; and
 - ii. complaint handling and risk management; and

²⁰⁹ <http://download.audit.vic.gov.au/files/20110524-2011-12AnnualPlan.pdf>; accessed 14 June 2011. The Building Commission also mapped its administrative and compliance functions to inform the development of policies governing the performance of the Commission's statutory responsibility with respect to the administration of the *Building Act 1993*; http://www.vba.vic.gov.au/_data/assets/pdf_file/0015/18051/Annual-Report-Building-Commission-2011-12.pdf; accessed 19 February 2015.

²¹⁰ Auditor-General's Report on Compliance with Building Permits, December 2011,

²¹¹ http://www.vba.vic.gov.au/_data/assets/pdf_file/0015/18051/Annual-Report-Building-Commission-2011-12.pdf; accessed 19 February 2015.

²¹² *Ibid.*

²¹³ In 2000, the VAGO examined how building practitioners operated under the system and were critical of, in very general terms, the professional standards of practitioners, the Building Commission's complaint handling procedures, the ad hoc nature of the performance audits conducted by the Building Commission and the structure of the building industry. In 2005, the Victorian Competition and Efficiency Committee (VCEC) looked at the effect of change to the competition in the building industry. The VCEC found that the legislation and regulatory framework was appropriate but be implemented in a more efficient way to reduce compliance costs. They also noted they were unable to determine whether the Commission was meeting the objectives of the *Building Act 1993* due to difficulties in measuring performance in the system.

²¹⁴ Above no 211.

d. local Council oversight of building surveyors.

161. The audit's key findings included:

- a. 84% of permits were issued by PBS, 16% by MBS
- b. inadequate information was lodged for 96% of the 401 permits; and
- c. there was a lack of information lodged to demonstrate compliance with building technical or safety standards.

162. The VAGO's other findings and recommendations included but are not limited to:

- a. building surveyors' level of compliance with building regulations;
- b. the limited scope of the Building Commission's auditing and monitoring powers under the Building Act;
- c. while the Building Act does not explicitly oblige Councils to monitor building works and PBSs, it does enable them to monitor whether building surveyors have adequately discharged their functions. The VAGO recommended that Councils should review and where relevant strengthen their monitoring and enforcement strategies.

Response to the VAGO report

163. The Victorian Government accepted the VAGO report's recommendations and committed to reforming the operations of the Victorian building permit system.²¹⁵

164. The reform program comprised a broad range of strategic and operational projects, such as a monitoring and evaluating framework, performance audit program, a legislative review, and organisational restructure.²¹⁶

165. A key strategic project resulting from the VAGO report was to develop a monitoring and evaluation framework that enables the Building Commission to effectively oversee and continuously improve the performance of the Victorian building permit system.²¹⁷

²¹⁵ Ibid. The reform program is founded upon accepted, contemporary principles of good regulation, in particular, those pertaining to monitoring, evaluation and risk-based targeting of administration and compliance activities. These principles are complemented by ongoing benchmarking against comparable regulators within Victoria and interstate.

²¹⁶ Above no 211; page 2.

²¹⁷ Ibid; page 5.

166. Phase one was completed by 30 June 2012 and included the preparation of a detailed tender specification for the development of a new technology platform that included detailed high-level business requirements for each phase of the building permit lifecycle, and helps ensure that contractual, legal and legislative requirements are met.²¹⁸

Further developments

167. The Victorian Government reformed the oversight of building industry regulation by establishing a new authority as the single over-arching body responsible for setting and enforcing building industry regulation, following an extensive review of the existing structures. The new authority provides a single point of governance for builders, plumbers and designers.²¹⁹
168. On 1 July 2013, amendments to the *Building Act 1993* established the Victorian Building Authority (VBA) as a new statutory authority, reporting to the Minister for Planning. The VBA replaced the Building Commission and Plumbing Industry Commission (**the former Commissions**).²²⁰ The structure of the VBA differs from the former Commissions and is designed to enable the VBA to focus on its core regulatory responsibilities. The central aim of the VBA is to aid the achievement of efficient and competitive building and plumbing industries, within a strong regulatory framework.
169. This change reflected a new era of regulation of Victoria's building and plumbing industries, following the VAGO's 2011 report and the Victorian Ombudsman's 2012 reports that similarly contained criticism of the regulation of the Victorian building system, and recommended monitoring the building permit system to ensure building permits comply with statute. Since its establishment, the VBA has taken steps to address the matters in both reports and act on their recommendations.²²¹

²¹⁸ Ibid.

²¹⁹ <http://www.propertyoz.com.au/library/Securing%20Victorias%20Economy%20Planning%20Building%20Delivering.pdf>; pages 42-43, accessed 27 February 2015. This change was also based on the Victorian Ombudsman's 2012 report that also contained criticism of the regulation of the Victorian building system.

²²⁰ The VBA has continued to support the operations and statutory responsibilities of the Building Advisory Committee, the Building Practitioners Board, the Building Appeals Boards, the Building Regulations Advisory Committee and the Plumbing Advisory Committee; http://www.vba.vic.gov.au/_data/assets/pdf_file/0005/25817/Annual-Report-VBA-2013-14.pdf; page 4, accessed 23 February 2015.

²²¹ http://www.vba.vic.gov.au/_data/assets/pdf_file/0009/27378/Building-Permit-Levy-and-Building-Information-Reference-Guide.pdf; http://www.vba.vic.gov.au/_data/assets/pdf_file/0005/25817/Annual-Report-VBA-2013-14.pdf; accessed 23 February 2015.

170. The VBA additionally was in the process of implementing the State Government's wider reform agenda as at the 2013-2014 Annual Report by strengthening the performance audit program with an in-house Building Audit Program that conducts risk-based audits of building permits issued by PBSs and MBSs.²²²
171. Many of the VAGO recommendations are more comprehensively addressed within the State Government's Victorian Domestic Building Consumer Protection Reform Strategy.²²³
172. It is envisaged that the VBA will continue to effectively monitor the performance of the building permit system and determine interventions as needed.²²⁴ The VBA was to implement the State Government's wider reform agenda by also closer monitoring of building (and plumbing) practitioners.²²⁵
173. The VBA established a new Building Audit Program and a dedicated Field Based Compliance Program , which will, respectively:
- a. monitor registered building practitioners compliance; and
 - b. inspect building sites where non compliance with the Building Act and Building Regulations has been identified as a risk.²²⁶
174. The Victorian Government also sought to accelerate and streamline the planning approval process by modernising the building permit system by introducing electronic applications and approvals to reduce the record-keeping burden on building surveyors and increase the accuracy of information collected through the permit applications process, increasing compliance with the building permit requirements.²²⁷

The VBA

175. On 25 September 2014 the VBA released its building permit audit findings. The VBA audited 1,000 building permits files at 20 local council offices to monitor building

²²² http://www.vba.vic.gov.au/data/assets/pdf_file/0005/25817/Annual-Report-VBA-2013-14.pdf; page 2, accessed 23 February 2015.

²²³ Ibid.

²²⁴ Ibid.

²²⁵ Ibid.

²²⁶ Ibid; page 3. While the Building Audit Program focused on building permits issued by building surveyors where safety concerns were identified, this year the program will focus on draftsperson and demolishers. The Field Based Compliance Program focused on construction of sheds by owner-builders and registered domestic building managers overseeing building work.

²²⁷ <http://www.propertyoz.com.au/library/Securing%20Victorias%20Economy%20Planning%20Building%20Delivering.pdf>; pages 42-43, accessed 27 February 2015.

surveyors; compliance with the Building Act and Building Regulations. The VBA assessed each building permit against a detailed checklist of items relating to legislated administrative and technical requirements. Across all items tested, the permit files were largely compliant, with an average of eight percent of items assessed in each file found to be non-compliant with the legislative framework.²²⁸

176. After completing this audit, the VBA carried out a further review of 450 files held by the relevant building surveyor (**ReBS**) with a focus on health and safety. The VBA found that, of the health and safety compliance item assessed, 95 percent posed no risk to health and safety, with errors being largely administrative or procedural.²²⁹
177. The VBA was, at the time of the media release, working with the ReBS to ensure any outstanding issues were fixed with no detriment to consumers. Any instances of serious non-compliance are being managed through the VBA's compliance process.
178. Following the audit, the VBA issued several compliance actions, including encouraging building surveyors and those involved in the building permit process to improve their record management and documentation. The VBA is engaging directly with industry to communicate the audit's results and share these recommendations.
179. The VBA considered that the audit findings will provide a basis for ongoing monitoring of the building permit system.²³⁰

Legislative framework

180. Under the *Building Act*, building surveyors who hold a current registration with the Building Practitioners Board are required to lodge a monthly periodic *Building Work Commencement, Completion or Permit Lapse Return*.

*Practice Note 2014-35*²³¹

181. The VBA published a Practice Note in July 2014 titled *Lapsed Building Permits (2014-35, updating the previous Practice Note 2011-35 issued June 2011)*. This Practice Note,

²²⁸ http://www.vba.vic.gov.au/_data/assets/pdf_file/0007/25594/VBA-releases-building-permit-audit-findings.pdf, accessed 5 February 2015. I note that the scope of the audit objective included to measure the compliance of RBS' working during the building permit process, specifically focusing on material the RBS receives, considers, records and submits to council; http://www.vba.vic.gov.au/_data/assets/pdf_file/0009/25587/VBA-Building-Permit-Audit-Summary-of-findings-and-actions.pdf; accessed 27 February 2015.

²²⁹ http://www.vba.vic.gov.au/_data/assets/pdf_file/0007/25594/VBA-releases-building-permit-audit-findings.pdf, accessed 5 February 2015.

²³⁰ Ibid.

²³¹ http://www.vba.vic.gov.au/_data/assets/pdf_file/0017/21086/PN-35-2014-Lapsed-Building-Permits.pdf, accessed 23 February 2015.

amongst other things, states that the ReBS must follow proper administrative procedures for lapsed building permits and those approaching their expiry date. The ReBS and the building owner each have specific responsibilities, depending on the status of the permit and the building work.

182. The Practice Note relevantly states that where building work approved under a building permit has been completed, the person who is in charge of carrying out the building work must request the ReBS to carry out a final inspection of the completed building work. Failure to notify the ReBS after the completion of a mandatory notification stage listed in the permit, including the completion of building work, is an offence and may attract a fine of up to 120 penalty units.²³²
183. To assist proper administration of building permits and inspections and reduce the number of lapsed building permits the Practice Note suggests the following procedures, including:
- a. at the time of issuing the building permit, it is recommended that the ReBS highlights the important information and requirements relevant to the building permit for which the owner and builder have responsibility during construction; and
 - b. some matters to be highlighted may include: commencement and completion dates, *mandatory inspections and procedures to request an inspection*, party responsibility, any additional fees arising from permit lapses, enforcement and appeals process, and any other compliance matters of which the owner or applicant is expected to be aware.

Building Legislation Amendment Bill 2014

184. The *Building Legislation Amendment Bill 2014* (Vic) was introduced to Parliament and passed its First Reading on 6 May 2014, with the second Reading on 8 May 2014.²³³ The

²³² Section 33 of the *Building Act 1993* states: (1) a person who is in charge of the carrying out of building work for which a permit has been issued under Part 3, must notify the relevant building surveyor without delay after completion of each mandatory notification stage (**penalty 120 penalty units**) and (2) a person who is carrying out building work for which a permit has been issued under Part 3 must stop carrying out that work or any part of that work on completion of a mandatory notification stage if direction to do so by the relevant building surveyor (**120 penalty units**). This section was amended by the *Building Amendment Act 2010* (Vic) No 33/2010, section 7. The Building Act version 064 effective date 1 February 2006, which was in place at the time of Mr Peace's death had a **10 penalty unit** maximum fine.

²³³ The Acts to be amended by the Bill included the Building Act, the *Architects Act 1991*, the *Domestic Building Contracts Act 1995*. The Bill also sought to provide the VBA with the power to issue "rectification orders" requiring

amendments proposed by the Bill were to cause the most significant changes to the building industry since the introduction of the *Building Act* in 1993 and the *Domestic Building Contracts Act* in 1995. The Government at the time stated the purpose of the amendments were to improve and strengthen efficiency, fairness, accountability and confidence in the building industry. The amendments were to effect building surveyors, architects, building practitioners among others. The bill sought to improve the protections offered to domestic building consumers through amendments to building practitioner registration requirements, strengthened and expanded disciplinary measures and sanctions and a focus on early intervention and dispute resolution. The bill also sought to provide easier access to information about building practitioners to consumers. Measures that responded to the recommendations of the VAGO and the Victorian Ombudsman included improvements to the building permit application process, the regulation of building surveyors, and clarification of the roles and responsibilities of building surveyors and local government and improved powers of regulation.²³⁴

185. Bodies that were to be abolished included the Building Practitioners Board, the Building Appeals Board, the Architects Registration Board of Victoria, the Buildings Regulations Advisory Committee, the Building Advisory Council and the Plumbing Advisory Council. The functions of these bodies were to be transferred to the Victorian Building Authority, the Victorian Civil and Administrative Tribunal and a Technical Accreditation Committee.
186. The Australia Institute of Building Surveyors (AIBS) welcomed the introduction of the Building Legislation Amendment Bill 2014 into the Parliament of Victoria.
187. There were aspects of the proposed legislation that the AIBS considered needed further work, including the amount of notification required of by PBSs and MBSs. The AIBS

a range of actions including rectification or completion of domestic building work. The Bill proposed a number of changes to building practitioner registration, including corporations and partnerships were to be eligible for registration. The registration requirements were to be extended to include personal and financial probity test, replacing the subjective 'good character' test. These tests were to consider prior convictions for breaches of legislation, disciplinary action, solvency and whether insurance or fund cover has been declined or cancelled. Registration was to be limited to five years when renewal would be required (as opposed under the current legislation where once a practitioner is registered they are so unless the registration is cancelled).

²³⁴ Victoria, *Parliamentary Debates*, Legislative Assembly, 8 May 2014, 1545-52, (Louise Asher). The bill also introduced the ability for the VBA to establish or approve a code of conduct for building surveyors, and sought to abolish the Building Practitioners Board and transfer its responsibilities for registration of building practitioners to the VBA, providing the VBA with the tools to properly regulate and deliver its statutory obligations to monitor and enforce compliance with the Building Act and regulations providing better outcomes for consumers and better support for the industry.

considered this would result in greater imposts being thrust upon both local Government and the private sector. Other parts of the proposed legislation potentially placed higher obligation on Councils to monitor the conduct of PBSs, or undertake enforcement action, which the AIBS considered is clearly the role of the VBA. The AIBS considered that Council monitoring enforcement action of private permits could create issues of liability and additional costs to the Council/community. The AIBS considered that the roles and responsibilities of building surveyors and Council are still not clearly addressed.²³⁵

188. I understand that the former Liberal State Government in 2014 backed away from the key building reforms in the face of opposition from the building industry, with the legislation initially delayed.²³⁶ I understand the building industry was critical of proposed changes to dispute processes, builder's registration, and reforms to the domestic building insurance scheme, arguing it would worsen affordability.²³⁷

National Construction Code

189. The Australian Building Ministers' Forum agreed in principle to make the 2015 National Construction Code (NCC) and future editions freely available online, significantly contributing to reducing the burden of building regulation. The decision to eliminate costs associated with purchasing the code will allow greater accessibility to both small business and the building and plumbing industries encouraging them to remain well-informed of current changes.²³⁸ On 3 February 2015, the NCC was announced as free to download, with the online edition covering the 2015 version of the NCC, which will come into effect on 1 May 2015.²³⁹ The NCC provides the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new building (and new building work in existing building) throughout Australia. The NCC was developed to incorporate all on-site construction requirements into a single code, covering the Building

²³⁵ <https://aibs.com.au/images/stories/documents/chapter-vic/aibs-vic-news-20140602-WelcomesBuildingIndustryReformPackage.pdf>; accessed 24 February 2015.

²³⁶ Victoria, *Parliamentary Debates*, Legislative Assembly, 24 June 2014, 2174-7 (Jacinta Allan and Anthony Carbines); Victoria, *Parliamentary Debates*, Legislative Council, 25 June 2014, 2082 (Brian Tee).

²³⁷ <http://www.theage.com.au/victoria/the-naphthine-government-has-backed-away-from-key-building-reforms-designed-to-better-protect-home-owners-20140621-3a187.html>; accessed 24 February 2015.

²³⁸ <https://aibs.com.au/newsroom/aibs-news/32-in-the-spotlight/353-national-building-regulation-reform>; accessed 24 February 2015.

²³⁹ <https://aibs.com.au/newsroom/aibs-news/32-in-the-spotlight/345-national-national-construction-code-2014>; accessed 23 February 2015; <http://www.business.gov.au/news-and-updates/News-and-features/Pages/national-construction-code-2015-now-available-free-online.aspx>; accessed 1 April 2015.

Code of Australia and the Plumbing Code of Australia and is managed by the Australian Building Codes Board.²⁴⁰

Concluding summary

190. The vast amount of changes, both actual and proposed, demonstrate the complex and multi-faceted nature of the domestic building industry. This is because, in part and as demonstrated in this matter, of the number of professionals involved in any one project, in different capacities and at different stages. I recognise the inherent complexities involved in attempting to regulate such situations, and to monitor the efficacy of any such regulation.

FINDINGS:

1. **I find** that the identity of the deceased is Stephen James Peace.
2. **I find** that Mr Peace died from a crush injury to the chest consequent to the collapse of the gazebo he was responsible for constructing.
3. And **I further find** that the cause of the collapse of the gazebo correlates to Mr Peace's deviation from structural engineering drawings of the said structure which **I find**, were in his possession.
4. **I find** that the death of Stephen James Peace could have been prevented if he had not deviated from the structural engineering drawings in relation to the number of posts used, the use of stirrups instead of footings and the absence of knee braces in the line of the roof at the time the temporary cross braces were removed.
5. **I find** that Stephen Peace as sole director of Laysar Pty Ltd and contracted builder to renovation and construction site at 186 Prospect Hill Road, Canterbury suffered the fatal consequences of his own departure from reasonable building practice.

COMMENTS:

Pursuant to section 67(3) of the **Coroners Act 2008**, I make the following comments connected with the death:

1. In light of the confusion that was apparent throughout my investigation regarding which was the latest document version and which party had the latest document version, I consider it

²⁴⁰<http://www.business.gov.au/news-and-updates/News-and-features/Pages/national-construction-code-2015-now-available-free-online.aspx>; accessed 1 April 2015.

would be more appropriate for structural engineering drawings to be based only on final architectural drawings, however I recognise that this does not routinely occur, as illustrated by the facts of this matter.²⁴¹

2. As indicated during the Inquest, I am satisfied that nobody else had the documents presented by Mr Schofield during the Inquest other than Mr Schofield, and although I am at a loss to understand how they could have appeared seemingly for the first time at Inquest,²⁴² I do not think this was causally linked to the outcome and therefore make no further comment. As explained by Mr Keays in evidence, had the plans been followed, both the five and six post structures would have been considered sound structures from an engineering perspective.
3. Although Mr Keays also determined that the use of pine instead of steel was not in itself fatal to the gazebo's structural integrity (see paragraph 138 above), I consider this particular deviation to be isolated to the facts of the situation. It is easy to imagine a situation where a change in material can in fact undermine a building's structural integrity, and it is alarming that this change was essentially affected by a professional concerned with the aesthetics rather than a professional concerned with the structural integrity of the gazebo. This issue is further exacerbated by an apparent lack of documented communication between the architect and the engineer, and the lack of a requirement to communicate in these circumstances.
4. Mr Dowell stated that updated plans/drawings are expected to come from one of three possible sources – the builder, the structural engineer or the architect, assuming they are still involved (see paragraph 97 above). The number of possible sources of this important information and the lack of a designated (and perhaps legislative) process for communications surrounding this information can at best be confusing, and at worst, have possible fatal consequences, as demonstrated by the death of Mr Peace. There were numerous versions of numerous documents from two sources with no clear documented reasons for making or communicating amendments. It is a “system” that lacks clarity and as this inquiry has demonstrated, is confusing for the professionals involved as well as for the homeowners. It would be preferable for there to be a “best practice” or industry guidelines about marking key documents as drafts, draft version numbers (including dates) and final versions to avoid confusion.

²⁴¹ Transcript, at p 70.

²⁴² Ibid, at p 269.

5. It is clear that no inspections were carried out on the gazebo on the evidence of Mr Dowell even though this was required to be done. It is also clear the gazebo deviated significantly from the structural design in the lack of foundations, and the mechanism of fixing the roof section to the posts, deviations which I am satisfied led to the collapse.
6. In the absence of Mr Peace referring directly to the structural engineer's documentation when setting out or erecting the gazebo, it would appear that he would have to instead rely on his own knowledge and experience regarding these types of structures, which, while I recognised is beyond the knowledge base of a lay person or even an avid DIYer, is still not sufficient to ensure a safe structure is built.
7. I commend the changes proposed in the *Building Legislation Amendment Bill 2014*, that although did not pass through Parliament, proposed building practitioner registration changes that appeared to address the possible complacency permitted by unlimited registration, with competency only needing to be demonstrated on initial registration. I consider that a system requiring the demonstration of ongoing competency would be preferable, since many building practitioners work in the industry for many decades, where knowledge can fade with the ebb of time, and best practice developments can go unnoticed.
8. There is no clear evidence as to why Mr Peace deviated from the structural plans. No clear evidence was adduced to indicate that Mr Peace was under substantial time pressure to complete the gazebo structure; the building permit was issued on 28 November 2005, with building work to commence by 28 November 2006 and was to be completed by 28 November 2007.²⁴³ Similarly there was no evidence to indicate that Mr Peace was under any financial pressure to cut costs.
9. I agree with Mr Gullaci that random inspections should be carried out on building sites to ensure builders are complying with the relevant plans.²⁴⁴ I also note the comments made by Mr Schofield in evidence, that while it would be ideal to have more "watchdogs" at various stages of construction, unfortunately the economic reality is that homeowners are rarely prepared to pay for it, creating a difficulty in balancing the risks with the costs of mitigation.²⁴⁵ Whilst I acknowledge a lack of municipal resources in this regard, this matter has demonstrated that the level of self-regulation required of builders is fraught with complacency and allows for non-compliance at critical mandatory notification stages.

²⁴³ Ibid, at p 156.

²⁴⁴ Ibid, at p 29.

²⁴⁵ Ibid, at p 58.

10. Mr Dowell opined that a problem of the building industry is the lack of tradespeople availability, leading to situations where builders want to, for example, put a roof on due to impending inclement weather and availability of tilers, whilst not necessarily having the framework approved.²⁴⁶ Whilst I acknowledge this aspect of potential practical frustration, this does not outweigh the importance of builders complying with their mandatory inspection obligation under section 33 of the *Building Act 1993*. I commend the increase in pecuniary penalty from 10 to the current 120 penalty units in this regard and hope this would act as a sufficient deterrent to other builders who, for whatever reason, fail to notify the relevant building surveyor after completion of each mandatory notification stage of work. It is unclear however, from all of the past and possible future industry changes discussed above, how compliance with this aspect of construction is monitored, such to inform whether this increased pecuniary fine is having its desired deterrent effect.

RECOMMENDATIONS:

Pursuant to section 72(2) of the **Coroners Act 2008**, I make the following recommendation connected with the death:

Although Mr Peace's death can be viewed as being isolated on its own facts, I considered there to be a broader public interest in determining what went wrong, why it went fatally wrong and how it could be prevented in the future. Mr Peace's deviation from the structural engineer's plans resulted in his own tragic and untimely death. I cannot however ignore that the consequences could have been far worse, given his employees who were working alongside him, and the homeowners and their family who were able to access the gazebo during the weeks over which it was constructed.

With the aim of minimising risks associated with builders failing to notify building surveyors after completion of each mandatory notification stage of work, and with a view to ongoing education and compliance with legislative requirements, I **recommend** that the Victorian Building Authority, in consultation with relevant stakeholders, develop a standalone practice note to alert and reinforce to builders their obligations under section 33 of the *Building Act 1993*.

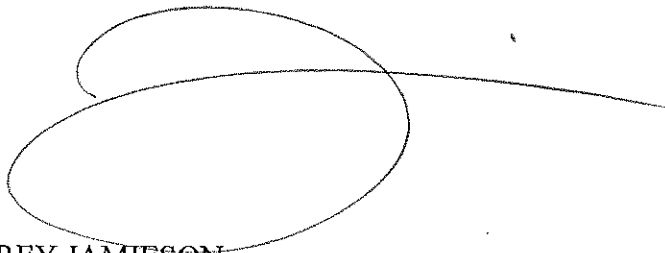
To enable compliance with sections 72(5) and 73(1) of the *Coroners Act 2008* (Vic), I direct that the Findings will be published on the internet.

²⁴⁶ Ibid, at p 157.

I direct that a copy of these Findings be provided to the following:

- Ms Hayley Hunter, Robinson Gill Lawyers on behalf of Mrs Vikki Peace
- Ms Cassandra Collier, WorkSafe Victoria
- Mrs Karen Roebuck
- The Hon. Richard Wynne, MP, Minister for Planning
- Victorian Building Authority
- Master Builders Association of Victoria
- Australia Institute of Building Surveyors
- Australian Building Codes Board
- Municipal Association of Victoria
- Housing Industry Association
- Ms Emily Hayden, Moray & Agnew Solicitors on behalf of QBE Insurance
- Senior Sergeant J Brumby, Police Coronial Support Unit; and
- Detective Senior Constable Rodney Smith

Signature:

A handwritten signature in black ink, consisting of a large, stylized loop followed by a long horizontal stroke extending to the right.

AUDREY JAMIESON

CORONER

Date: 29 April 2015