

**VICTORIAN CIVIL AND ADMINISTRATIVE TRIBUNAL  
CIVIL DIVISION**

**DOMESTIC BUILDING LIST**

VCAT REFERENCE NO. D410/2007

**CATCHWORDS**

Application for review of VMIA's decision – effect of tree roots and soil shrinkage – zone of influence

<b>APPLICANT</b>	Joe Borg t/as Sunview Homes
<b>FIRST RESPONDENT</b>	Victorian Managed Insurance Authority
<b>SECOND RESPONDENT</b>	Adam Shakespeare
<b>THIRD RESPONDENT</b>	Karishma Jones
<b>WHERE HELD</b>	Melbourne
<b>BEFORE</b>	Deputy President C. Aird
<b>HEARING TYPE</b>	Hearing
<b>DATE OF HEARING</b>	18 - 21 February 2008
<b>DATE OF ORDER</b>	4 March 2008
<b>CITATION</b>	Joe Borg trading as Sunview Homes v Victorian Managed Insurance Authority (Domestic Building) [2008] VCAT 404

**ORDER**

1. The first respondent's decision is affirmed.
2. Costs reserved – liberty to apply. I direct the principal registrar to list any application for costs for hearing before Deputy President Aird for half a day.

**DEPUTY PRESIDENT C. AIRD**

**APPEARANCES:**

For Applicant	Mr J. Cyngler of Counsel
For First Respondent	Mr S. Stuckey of Counsel
For Second and Third Respondents	In person

## REASONS

- 1 In 1999 Joe Borg trading as Sunview Homes ('the builder') was contracted to build three units. Mr and Mrs Shakespeare purchased Unit 3/110 in 2004. There was no evidence of building distress until December 2006 when the owners first noticed the front wall beginning to detach from the side wall at the front door, cracks appearing in the main bedroom and the bathroom, and movement of walls and down pipes in the paved area to the east of the property. In February 2007 the owners obtained a report from a building consultant, and notified Mr Borg of the problems. Mr Borg inspected and prepared a report under the business name 'JPB Building Consultants' in which he reported that the builder ('he') was not responsible for the distress which he reported was caused by the drying effect of the large trees on the nature strip.
- 2 The owners then lodged a claim with VMIA under the HIH Recovery Scheme which was accepted by letter dated 28 May 2007. The Schedule of Works dated 28 May 2007 required the builder, in respect of each of the accepted items, to:
  - Items 1-4, 6, 8, 9 & 11** – rectify cause and effect of building distress.
  - Item 5** – clean excess mortar from the window channels.
  - Item 7** – eliminate premature rust from surface and construct box gutter along the east and west side of the unit to comply with the Building Code of Australia.
  - Item 10** – adequately secure show head pipe (sic).
- 3 Although a copy was not filed, I have since had Registry obtain a copy of the owners' Notice of Complaint and Statutory Declaration (their claim to the VMIA) from VMIA's solicitors so that I could identify what exactly Items 1-4, 6, 8, 9 & 11 referred to. It is helpful to set out the owners' description of each of those items as contained in Item 16 of the Notice of Complaint and Statutory Declaration:
  - 1 Serious brickwork cracking at front entry door. Front wall has become detached from side boundary wall. Cracks have also appeared at floor/skirting joints at front door.
  - 2 Evidence of front bedroom boundary wall rotation. Cornice on front bedroom wall has disconnected from wall, ceiling movement has now caused detachment from front wall exposing holes. Movement of bedroom boundary wall has now caused cracks in plaster and water leakage now apparent through cracks in ceiling.
  - 3 Evidence of movement of front bedroom at sliding door between bedroom.
  - 4 Evidence of subsided levels in bathroom & passage causing cracking of tiles in bathroom (floor), cracks in plasterboard in bathroom next to window. Crack in wall tile & bath detaching

from wall.

- 6 Severe cracking in brickwork adjoining bedroom & bathroom (external).
- 8 Excessive ground movement and downpipes out of sockets due to movement of footings.
- 9 Paving in side courtyard not done properly and hence not flush with boundary walls.
- 11 Front façade of house crumbling away (under pitch of roof) front gutter detaching from wall.

- 4 In early June 2007 the owners contacted VMIA about their concerns that the ceiling in the main bedroom, which was holding water, might collapse. VMIA carried out an urgent inspection and recommended that the water be released, and a support beam installed. The builder attended in late June and carried out some works including the erection of a temporary ceiling support which is still in place.
- 5 The builder lodged an application, on 25 June 2007, seeking a review of VMIA's decision, other than in respect of Items 5 and 10. During the hearing, Mr Cyngler of counsel, who appeared on behalf of the builder, said the builder was not proceeding with his application in relation to Item 7. Mr Borg gave evidence and relied on expert evidence from Mr Gibney, a geotechnical and structural engineer; Mr Thyer, an arboriculturist; and Mr Scammell, a plumber. A witness statement for Mr Scissere of MacGregor Soil Engineering Pty Ltd was filed and, although he attended for part of the hearing, Mr Stuckey of Counsel, who appeared on behalf of VMIA, indicated he did not seek to cross examine him.
- 6 VMIA relied on the expert evidence of Ray Rodwell and Rod Neil both of whom are geotechnical and structural engineers, and Robert Quick, a plumbing expert. Mr and Mrs Shakespeare have both filed Witness Statements. Mrs Shakespeare was excused from attending the hearing after the first day, and Mr Shakespeare's evidence was generally uncontested.

#### **The severe distress to the south east corner of the house**

- 7 There are two areas of damage to be considered – the severe distress to the south east corner of the house, and the damage to the kitchen area. I will consider the former first.
- 8 The builder purchased the copyright in the plans from the draftsman and obtained a soil report from MacGregor Soil Engineering Pty Ltd which gave the site an H classification. Enrik Engineering Pty Ltd was engaged to prepare engineering drawings. There is a notation on the engineering drawing:

‘Where existing or proposed trees are within the zone of influence of any footings (i.e. within 1.0 x mature height), then the footings are to

be deepened and founded directly onto weathered bedrock if present, or 2000 mm deep, whichever is shallower. Alternatively these trees should be removed or tree root barriers placed.'

The strip footing is approximately 1200mm deep.

- 9 Although the architectural site plan and the engineering drainage plan provide for downpipes on the south east and south west corners of the property – the one on the south east corner has not been installed. Mr Shakespeare gave evidence that he first noticed the gutter over the front verandah was holding water, when cleaning the gutters. He had put a brick in the gutter hoping this would help the water to flow towards the gutter on the south west corner of the house.
- 10 At the time of Mr Neil's inspection in August 2007, the south east corner had dropped by approximately 45mm. When measured again in January 2008, it had dropped a further 10mm to approximately 55mm. The builder accepts these measurements. Mr Neil assessed the movement and cracking at the south east corner of the property, and the east sides of the main bedroom as Category 4 (the highest indicator of significant distress); and the cracking and movement in the bathroom and kitchen as category 2.

#### The expert evidence

- 11 Evidence was heard concurrently from the experts with all experts being sworn in, qualified and asked to briefly summarise their opinions in relation to the three main issues:
  1. the effect, if any of the trees,
  2. the source and effect of moisture,
  3. whether the footings comply the engineering drawings.
- 12 All experts agree that there has been significant movement and distress caused by tree drying shrinkage settlement exacerbated by the drought and primarily attributable to the suckers and tree roots from the Dutch Elm ('the Elm') on the nature strip outside 114. It is 11m high and approximately 14.6m (if measured from the centre of the trunk) or 14.2m, if measured from the side of the trunk, from the south east corner of the house. There is a Norfolk Island Hibiscus ('the Hibiscus') outside 108. There are extensive suckers, from the Elm, in the front yard of the neighbouring property at 108. Those in the main 'lawn' area have been mown, but others along the fence line are shrubby. The largest of these is directly adjacent to the south east corner of 3/110 and is approximately 1m high. Mr Rodwell reported that he had detected tree roots under the footings of 3/110 at a depth of 1800mm. However, he was unable to identify whether they were Elm or Hibiscus roots, although the consensus was that they were more likely to be Elm roots.
- 13 Mr Thyer said he considered the extent of these suckers to be abnormal. Whilst they are consistent with there having been a significant amount of

water in the front yard of 108, he was unable to make any comment about the source of the water, this being outside his area of expertise. He confirmed that once tree roots 'find' water they proliferate which is what seems to have happened here. The engineers agree there must have been significant water in the front yard of 108 but are unable to agree its source.

- 14 Mr Gibney maintains that the stormwater system on the house on 108 was faulty and this was the source of much of the water, and further that it has been repaired (although there is no evidence as to when and if this happened). However, this would not explain the suckers in the front yard. Mr Neil noted that the level of the front yard of 108 was low and suggests that water may have been ponding. There is evidence of 'dried moss' in the front yard (which I accept was lush when Mr Gibney inspected in September 2007) and, at the view, there was a build up of soil and moss along the outside of 108's front fence.
- 15 Although VMIA has identified the Elm and the Hibiscus as the cause of the distress, the builder has concentrated on the Elm which is the furthest of the two from 3/110. The Elm is approximately 11m high and is 14.5m from the footings, and therefore outside the zone of influence. The Hibiscus which has divided – one trunk is 7m and the other 8m is 7.8m from the footings on the south east corner if measured to the centre of the tree (as by the engineers), less if measured to the side of the tree which Mr Thyer indicated was the method use by arboriculturists. I am not persuaded that Mr Gibney's suggestion that the mean of the two trunks of the Hibiscus – one of which is at 7m and the other at 8m, is the appropriate way of determining the mature height of the tree. This was not put to Mr Thyer, the most qualified of the experts to express an opinion. Mr Thyer did say that the mature height of a Hibiscus can be in the range of 6-12m but that in his opinion it was close to its mature height given the prevailing conditions.
- 16 The 'CSIRO Guide 10-91, Guide to Homeowners on Foundation Maintenance and Footing Performance' provides that trees should be 'd=1h' (i.e. the distance of the tree from the footings should be at least the same as its mature height). Whilst the Elm is outside the zone of influence, the Hibiscus is clearly within it.
- 17 Mr Neil considers that the distress has been significantly exacerbated by the overflow of water from the south east corner of the roof, depositing large amounts of water into the area below it. The drawings provide for a downpipe which was not installed. The general consensus seems to be that if the only problem had been the trees, the building would still have suffered distress but it would not have been anywhere near as extensive. Once the building started to move, the lie of the verandah roof gutter changed and water poured over the south east edge depositing significant amounts of water into the area which then dried, and when coupled with the effect of the tree shrinkage caused significant distress.

- 18 When Mr Rodwell first inspected the footings in April 2007, the inspection pit was very dry. Yet in August when Mr Neil inspected, and September 2007 when Mr Gibney inspected it was very wet – Mr Gibney reports the clay as being ‘wetter than plastic’. This is, of course, consistent with ponding of the water overflowing from the south east corner. Mr Neil reported that when he inspected on 13 February 2008, the owners were collecting the overflow in a large bucket, and the soil was once again dry.

#### Mr Borg’s evidence

- 19 Mr Borg adopted the content of his witness statement, and leave was granted for him to give additional evidence arising from the experts’ conclave.
- 20 I accept that Mr Borg is an experienced builder. At the time of construction he had 42 houses/units under construction. He said many of these were unit developments and he was unable to say how many different sites there were – perhaps ten.
- 21 Mr Borg confirmed that although he had supervisors working for him, he always attended site to carry out the initial inspection, and satisfy himself as to the prevailing conditions. I cannot be satisfied that, in this instance, he took proper notice and account of the trees. It is apparent that he did not know the species of either tree – he described the Elm as an Oak tree on the original drawings, and also on the ‘report’ he prepared for the owners after visiting the property in early 2007. He confirmed during cross examination that he did not know that the closer tree was a Hibiscus – how then could he have given due consideration as to whether the trees were within the zone of influence? If he did not know their species he could have no idea what their mature height might be.
- 22 Although the experts agree that, with the benefit of hindsight, the CSIRO Guidelines were inadequate they were not followed in this instance. They required a distance of 1 times the mature height of the tree. Mr Borg did not measure the height or the distance – he said he ‘stepped out’ the distance, although this would have been difficult given the location of the front fence on 108 relative to the position of the Hibiscus.
- 23 Mr Borg said he had believed the Hibiscus was at its mature height at the time of construction, particularly taking into account the height of the power lines. At that time, he said the Hibiscus had obviously been lopped and was sitting below the power lines. Although he said that he understood that it was a requirement of the electricity authorities that trees be kept clear of powerlines, and referred to Mr Thyer’s evidence in this regard, there is no evidence that this was his understanding at the time of construction.
- 24 Further, even had he been aware of the species of tree, was the pruned height a true indicator of the expected mature height of the tree? Mr Thyer gave evidence that regular pruning of trees will have a ‘bonsai’ effect on the roots. However, there is no evidence before me as to the frequency or

extent of pruning over the past seven years. Whilst it might well be that the relevant regulations require the pruning of trees so that they remain clear of powerlines, this has obviously not occurred here, and further, when driving around Melbourne suburbs it would seem this is a regulation which is frequently honoured in the breach. In my view, the pruned height would not seem an accurate or reliable assessment of the likely mature height of a tree.

### Discussion

25 VMIA contends there was an absolute obligation on the builder to build a house that was fit for purpose. In *Barton v Stiff* [2006] VSC 307 Hargrave J said:

...I hold that the warranties of fitness for purpose in this case required the builders to provide materials, and a completed house, which would be proof against any groundwater conditions likely to be encountered at the land. As the presence of salty groundwater at the land was "highly unusual", the failure of the bricks for this reason does not constitute a breach of those warranties. (emphasis added) para 39

26 If applied to this case – the conditions likely to be encountered were the impact of trees within the zone of influence. Elm tree suckers and roots could not have been likely to be encountered – there is no evidence of suckers and roots from the Elm on 3/110 or 108 at the time of construction, and it could not have been regarded as likely that there would be a severe drought.

27 However the builder has failed to build the house in accordance with the plans – which as discussed above, included a notation to the effect that where there were trees within the zone of influence, the footings should *'be be deepened and founded directly onto weathered bedrock if present, or 2000 mm deep, whichever is shallower. Alternatively these trees should be removed or tree root barriers placed'*. This did not happen. It is immaterial, in my view, whether it is the Elm or the Hibiscus which has caused the damage – the Hibiscus is clearly within the zone of influence, and had the builder complied with the notation on the engineering drawings and deepened the footings, or installed a root barrier, the damage may well not have occurred.

28 Although Mr Thyer said that regular pruning would have a bonsai effect on the roots, it was not reasonable to rely on the power lines as an indicator of the mature height of the tree. When Mr Borg made the assessment that the Hibiscus was outside the zone of influence he took upon himself a task that he did not have the expertise to carry out and he is responsible for having made the wrong assessment. I am therefore satisfied there has been a breach of the statutory and contractual warranties to which the policy responds (s8 (a) of the *Domestic Building Contracts Act 1995*).

29 Further, whilst identification of the source of the water which has attracted the Elm roots may be important in determining the appropriate method of

rectification and preventative works, it is not relevant, in my view, in determining whether the builder has breached his statutory and contractual warranties.

### **The kitchen/bathroom damage**

- 30 In September 2005 Lochland Plumbers reported that the stormwater drain outside the laundry had collapsed. When the rectification works were being carried out, it was discovered that there was a 20mm gap in the stormwater pipe and differential movement of 60mm. The plumbing experts have since agreed that the installation of the stormwater pipe did not comply with AS 3500 – there is neither a sleeve nor any lagging which would have provided a flexible joint as required. After the builder refused to repair the stormwater drain, the owners arranged to have the works carried out with the intention of claiming the cost of those works from the builder (they have not done so in this proceeding).
- 31 As a result of the failure of the stormwater drain, water flowed into the surrounding soil causing heave of the unit along the east side. Movement is evident in the kitchen and bathroom adjacent to the light court, where the storm water drain collapsed. The pavers in the light court (which were removed when the stormwater drain works were carried out) had settled, and moved away from the wall.
- 32 The builder concedes that the stormwater pipe in the light court was not installed correctly by the plumber but, relying on Mr Gibney’s expert opinion, denies any liability for rectification of the movement to the kitchen area which has heaved as a result of the leaking stormwater pipe. The engineers agree that the internal cracking in the kitchen and bathroom is Category 2 and, relying on this, the builder asserts it is within tolerances and rectification works are not required. I reject this. The failure to properly install the stormwater pipes is a ‘Prescribed Cause’ within the terms of the policy of warranty insurance being a breach of the implied warranties in s8 of the *Domestic Building Contracts Act 1995*. The damage to the kitchen and bathroom is clearly damage resulting from the failure of the stormwater drain (for which the builder has now accepted liability) to which the policy responds (the Ministerial Order s122 (1998) and the Indemnity Section Clause A of the policy).

### **Conclusion**

- 33 The builder’s application for a review of VMIA’s decision is therefore unsuccessful, and the decision will be affirmed. I will reserve the question of costs with liberty to apply.

**DEPUTY PRESIDENT C. AIRD**