VICTORIAN CIVIL AND ADMINISTRATIVE TRIBUNAL

CIVIL DIVISION

BUILDING AND PROPERTY LIST

VCAT REFERENCE NO. BP249/2018

CATCHWORDS

Domestic Buildings Contracts Act 1995 – s.8 - implied warranties – contract to supply and install plastic in-ground swimming pool – engineering design including work not within builder's scope of works – not builder's responsibility – variation at applicants' request to include surrounding concrete slab – builder laying slab at low price – implied warranties apply to work regardless of price – slab defectively laid – swimming pool moving and out of level after installation – possible causes – onus of proof on applicants to prove defective workmanship – alternate explanation of movement without fault of builder – onus not discharged – evidence of loss – quotations - assessment of damages on available evidence.

APPLICANTS	Kenneth Fraser and Katrina Fraser
RESPONDENT	Melbourne Pools Pty Ltd (ACN 168 743 502)
WHERE HELD	Melbourne
BEFORE	Senior Member R. Walker
HEARING TYPE	Hearing
DATE OF HEARING	18 - 19 October 2018
DATE OF ORDER	2 November 2018
CITATION	Fraser v Melbourne Pools Pty Ltd (Building and Property) [2018] VCAT 1721

ORDERS

- 1. Order the Respondent to pay to the Applicants \$28,160.00.
- 2. Costs reserved.

SENIOR MEMBER R. WALKER

APPEARANCES:

For the Applicants	Mr N.J Philpott of Counsel
For the Respondent	Mr L.P. Wirth of Counsel

REASONS

Background

- 1. The Applicants ("the Owners") are the owners of a dwelling house and land in Taylors Hill, Victoria ("the House"). The Respondent ("the Builder") carries on business supplying and installing in ground swimming pools.
- 2. By a domestic building contract dated 31 October 2015, the Builder agreed to supply and install a fibre reinforced plastic swimming pool in the backyard of the House for a price of \$38,500.00, including GST.
- 3. The pool was installed by the Builder in December 2015 and January 2016. Immediately following the installation of the pool, the Builder laid concrete around the pool at the request of the Owners for an additional price.
- 4. After the Builder had completed its work and left the site, the Owners engaged another contractor who laid pavers on the pool bond beam and also on the concreted area around the pool.
- 5. In about June 2016, the Owners noticed that the paving around the pool was beginning to crack and, upon receiving advice, they concluded that both the pool and the surrounding paving had moved and required replacement. A resolution could not be reached between the parties and this proceeding was issued by the Owners on 6 March 2018, claiming damages of \$90,170.00.

The hearing

- 6. The matter came before me for hearing on 18 October 2018 with two days allocated. Mr N.J. Philpott of counsel represented the Owners and Mr L.P. Wirth of counsel represented the Builder.
- 7. Evidence was given as to contractual matters by Mr Fraser and by the director of the Builder, Mr Romeo. Expert engineering evidence was given concurrently by Mr Irwin on behalf of the Owners and Mr Brown on behalf of the Builder. I also heard evidence from a building inspector, Mr Moran, who found that the cracking, and the levels and movement of the paving and the pool were beyond the tolerances allowed for in the Guide to Standards and Tolerances, and so he concluded that the work was defective.
- 8. As to rectification, the Owners called a landscaper, Mr Tucker, who gave evidence as to the cost of relaying the paving around the pool and relandscaping the surrounding area including laying a new lawn. They also called two other pool builders, Mr Martin and Mr Burrows, each of whom who gave evidence concerning possible rectification and what he would charge to replace the pool.

Mr Romeo

9. Mr Romeo said that, in the course of excavating for the pool, he removed 18 m³ of rock and lined the base of the excavation with 7 mm screenings called "quarter minus". He said that he then screeded and levelled the screenings, using a laser level. He said that there was no need to compact it.

He said that after installing the pool shell, the hole was backfilled around it with fine dust which included 5% cement. He then constructed a concrete bond beam around the outside rim of the pool using two layers of three-bar trench mesh. He described the system he installed to remove groundwater from the excavation.

10. He said that, during construction, Mr Fraser told him that he could not get a concreter to concrete the area around the pool. Mr Romeo said that he told Mr Fraser that the concreters that he had on site would lay the concrete but that, after it was done, the Owners would have to cut the bond beam so as to separate it from the surrounding paving. He said he then told his concreters that if they laid the concrete around the pool they would be paid extra. After the pool was in place, the Builder laid the concrete slab. There does not appear to have been any plans for this concreting work but Mr Romeo said that the slab that he laid was between 75 mm to 100 mm thick and it was reinforced with F72 steel mesh. The Builder was paid for this additional work, although Mr Romeo said that he only charged for it at cost.

Mr Fraser

- 11. Mr Fraser gave evidence as to contractual matters and produced photographs that he took during the construction which showed the excavation and the screenings that lined it. These were referred to by the engineers in their evidence. Mr Brown confirmed that the quarter minus screenings did not need to be compacted.
- 12. Mr Fraser said that when the pool was completed there was a handover by a pool maintenance contractor who showed him how to operate the equipment. He said that the contractor did not tell him of the necessity to pump water out of the standpipe, although he was told that it could be done if he intended to lower the level of water in the pool.
- 13. He said that he had difficulty obtaining a tiler to lay tiles on the surrounding concrete because of the way the Builder had laid it, but that he engaged a tiler that Mr Romeo recommended who did the work for him. He said that, when the paving began to crack a few months later, he contacted the tiler who returned and carried out some repairs and then, when it cracked again, the tiler said that he could not do anything about it because the concrete underneath the pavers had moved.

Mr Moran

14. Mr Moran's evidence was largely uncontroversial. It is not disputed that the pool and the surrounding paving are out of level or that the cracking exceeds the tolerances specified in the Guide to Standards and Tolerances. The issue to be determined in each case is whether that is due to defective workmanship by the Builder.

Mr Martin

15. Mr Martin said that he quoted \$51,750.00 to remove and replace the pool and attach it to the existing equipment the Builder has supplied. He said that

drainage around the pool is critical. He said that he does not contract to install drainage himself for his own pools but, as part of his service, he provides a drainage plan to his customers so that someone else can do it in accordance with that plan. He described a system that he puts under the pools that he installs in order to remove groundwater.

Mr Burrows

16. Mr Burrows said that he quoted \$52,000.00 to remove and replace the pool. He said that he would not know if the pool shell could be reused until it was taken out, but he told the Owners that if the shell was re-used he would not warrant it. He had a different system himself to drain the excavation of groundwater.

Mr Tucker

- 17. Mr Tucker quoted \$35,200.00 inclusive of GST to carry out the following scope of landscaping work:
 - Clear the site of all existing grass and debris. Prepare levels for landscaping;
 - Spread crushed rock to a depth of approximately 100 mm;
 - Pour F62 steel reinforced concrete base for paving. Tie into concrete ring around pool;
 - Lay pavers over concrete base and copers around pool. Copers to be laid on tile glue and polyurethane sealant. Remaining pavers to be laid on Bondcrete mortar mix. Grout all pavers and caulk expansion joints.
 - Spread soil for lawn area approx. 100 mm thick and Buffalo instant turf. Spread light layer of washed sand.
- 18. The need to relay the lawn area relates to the likelihood of that being destroyed in the course of carrying out the extensive work involved in replacing the paving and the swimming pool. He acknowledged that relaying the lawn using seed would be slightly cheaper. He gave no breakdown of the price between the various elements of work.
- 19. The engineering evidence was clear that the concrete slab should not be "tied into" the bond beam of the pool. The cost of doing that was not specified.

The engineering evidence

- 20. Mr Irwin inspected the pool on 23 May 2018. In his report, dated the following day, he noted that:
 - (a) the paving surrounding the pool on the eastern side does not drain away from the pool as required, although it does on the other three sides;

- (b) the paving between the pool and the House drains towards the House, which is not recommended for houses such as this one, which are on a reactive clay site;
- (c) although there are a few very small pits, there are none towards which the pavement usefully grades;
- (d) the pavement is not effectively isolated from the House and has gaps, so that water is being diverted to the edge of the House foundation;
- (e) the internal part of the House on that side is high and it appears likely that the poor pavement drainage is causing the foundation to wet up and for the slab of the House to heave in this area;
- (f) there are extensive minor cracks and gaps of mortar joints on the paving;
- (g) there is extensive distress around the skimmer box on the west side;
- (h) pavers around the south edge of the pool are irregular with cracks and gaps of up to 6 mm;
- (i) there are no effective articulation joints in the paving;
- (j) the grout in the paving can be seen to be breaking up;
- (k) the pool was 68 mm out of level, with the south-east corner being the highest and the south-west corner of the lowest;
- (1) tapping the east wall and the base of the east end of the pool reveals drumminess behind and under the pool at that end. He said that this had potential structural implications as the shell is dependent upon the sub-base and backfill to support it. He said there were no structural defects identified in the pool shell but his opportunity to inspect was limited by the pool being full and the poor light conditions;
- (m) the bond beam of the pool and the surrounding pavement were composite; that is, poured together without any gap between them. He said that this was more of an issue for the pavement rather than the pool.
- 21. In the conclusion of his report, he said that the pool had moved out of level and it was not being adequately supported. He said that it could not be remedied without removal and reinstatement. He said that the common reason for pools moving is foundation heave from water getting under them, but since the heave in this instance is under the shallow end of the

pool, he attributed the movement to sub-base settlement which he said was a construction defect.

- 22. He recommended removing all of the pavement and specified how it should be reconstructed. He also said that the pool must be removed and reinstated and suggested that an expert opinion be sought as to the feasibility of reusing the pool shell.
- 23. Mr Brown inspected the property on 10 August 2018.
- 24. His observations as to the levels of both the paving and the pool agreed with those of Mr Irwin. He said that all of Mr Irwin's observations appeared to be accurate and that any difference between those and his own observations could be attributed to the different times at which they visited the site.
- 25. He noted the presence of an agricultural pipe that had been laid around the edge of the paving by someone else, and said that it had the potential to introduce water to the soil.
- 26. He excavated a borehole close to the end of the pool where the heave is greatest and said that from 300 mm down to 750 mm from the surface where he hit rock, he picked up a very reactive material which was very wet, particularly at depth, sitting on the rock with 36% moisture. He said that this level of moisture in the soil cannot be achieved by natural rainfall and indicates another source of water.
- 27. He said that as the only source of water at this depth and this distance away from the House is the agricultural drain, that must be assumed to be the major causation of water at that depth. He suggested that the water was running across the top of the rock and initiating a flotation effect at the bottom of the pool. He said that one cannot discount the concept of a leak from either a stormwater drain or sewer but he considered that the relevance of the location of the borehole adjacent to the agricultural drain appeared to be conclusive.
- 28. Mr Irwin commented on Mr Brown's report in a letter dated 24 September 2018. He pointed out, and Mr Brown subsequently agreed, that the rock that he encountered might have been a "floater"; that is, a single rock rather than part of a general layer of rock. He referred to Mr Brown's findings on the borehole and agreed that the area around the east side of the pool was poorly drained. He said that agricultural drains typically make drainage problems such as this worse and that he shared Mr Brown's concerns about the agricultural drain. He agreed that the current evidence suggested that the site was wet in that area and that this would have been associated with some expansion of the pool foundation clays. Since the pool is high in this area he also agreed that a "heave" mechanism was likely.
- 29. He concluded that it appears that the pool was placed in inappropriate conditions, or surrounding conditions were developed inappropriately for the poor foundation, or both. He said those issues could be better explored

in the light of more information about the sequence of works and better detail of the scope of works of the parties involved. He said that it was unfortunate that Mr Brown did not do additional boreholes to greater depths as these might have been more informative.

30. During concurrent evidence, he agreed that there was a significant heave component and possibly some settlement component earlier on.

The source of the water and its significance

- 31. Mr Philpott criticised Mr Romeo for not obtaining a soil report, pointing out the requirements of s.30 of the *Domestic Building Contracts Act* 1995 ("the Act"). Nothing turns on that because it is common ground that the soil is classified as "Class H", meaning that it is highly reactive, and that was assumed in the engineering design that the Builder worked to.
- 32. During the concurrent evidence, Mr Brown said that a moisture content in the soil of 30% or more suggested a source of water. It was acknowledged by both experts that the greatest heave was close to where the borehole was and where the agricultural drain travelled towards the House. However he said that it was possible that the stormwater system or sewerage system was the source.
- 33. Although Mr Brown identified the agricultural drain as the most likely source of the water that he found, both experts agreed that the source of the water discovered by Mr Brown could not be identified with any certainty because there had been no excavation of the area except for the one borehole referred to in Mr Brown's report. It is not known how the agricultural drain has been connected to the stormwater system. Mr Irwin said that the trench for the agricultural pipe would likely be damper. He said that it was not clear what the path of water was under the pavement and around the pool.
- 34. In his submission, Mr Philpott criticised Mr Brown for not having taken more boreholes but that criticism can be levelled at both sides. The experts appeared to acknowledge that further boreholes might have provided more information, but there were none taken and so I must proceed on the basis of the limited evidence that I have.

The Contract

35. The Contract is in the form of the Swimming Pool & Spa Association of Victoria Ltd Copyright contract. It comprises 26 pages. On page 6 it says that the "Contract documents" are:

"The Contract Specifications, comprising 26 pages provided by the Builder/Building Owner".

36. No documents were provided by the Owners and no other documents have been identified, apart from engineering plans, and those were prepared after the Contract was signed. I therefore find that the "Contract Documents" were the 26 page contract document provided by the Builder.

The engineering design

- 37. Mr Romeo was cross-examined extensively on the engineering design and whether or not he had done everything that it required. The design included surrounding paving, the installation of a perimeter drain and an articulation joint separating the bond beam from the surrounding paving.
- 38. When I suggested to Mr Phillpott that the engineering design was not a Contract document, he pointed out that it was part of the building permit and that the Builder was therefore obliged to follow it. I accept that any work a builder does must be in accordance with the relevant building permit, but that does not mean that all of the work authorized to be done by a permit must necessarily be done by the builder. The scope of a builder's work is not determined by the permit but by the terms of the contract.
- 39. In the present case, the Contract provided for the supply and installation of the pool and equipment in accordance with the terms written in it. There is no requirement in those terms for the Builder to construct surrounding paving or a perimeter drain.

The cause of the movement

- 40. Mr Brown's explanation of the likely cause of the pool being out of level was heave at the shallow end caused by the presence of water. In his report, Mr Irwin said that that is a common reason for pools moving on their foundation but that he would have expected to have seen the greater movement at the deep end rather than the shallow end. He initially attributed the movement to sub-base settlement. Various methods of draining the area were recommended.
- 41. There is no evidence of any deficiency in the placement of the screenings under the pool. It was acknowledged that the screenings were not compacted but the evidence does not establish that this was necessary.
- 42. However, there is evidence of the presence of an unusually large amount of water in the ground near the place where the pool appears to have lifted. I also note from the levels that Mr Irwin took, that the pavement of the eastern side is virtually flat whereas on the other three sides it falls away from the pool, raising the possibility of heave in that area also.
- 43. There was some discussion during the evidence as to the extent, if any, to which the presence of excess water might be attributed to the failure of the Owners to pump out excess water from under the pool. I am satisfied that the equipment the Builder installed permitted that to be done. At the time that the pool was inspected by Mr Brown, there was 850 mm of water measured in the standpipe. Mr Brown said that, although that would induce buoyancy, it was not enough to counteract the dead weight of the pool and its own water. However, he said that it did provide a source of moisture into the reactive clays around the perimeter of the pool and was a probable cause of swelling in those clays.

- 44. I think that Mr Brown's explanation is plausible; that is, that the likely cause of the pool being out of level is heave caused by the wetting of the reactive soil under the pool by water from an unknown source, the presence of water being indicated by the very wet soil that he discovered in his borehole.
- 45. In submissions, Mr Philpott suggested that the source of that water might be run-off from the paving that the Builder constructed around the pool. That does not accord with Mr Irwin's levels because the greatest run-off would be where the paving falls away from the pool and yet, although there appears to have been some heave of the House foundation, the pool has not lifted there, but on the eastern end.
- 46. I am unable to conclude on the balance of probabilities that the movement of the pool is due to defective work by the Builder. It appears more likely to be due to the presence of water in the ground at the eastern end of the pool which has caused the reactive clays underneath to heave.

Conclusion as to defective work

- 47. There was no dispute between the experts that the slab and paving are defective and have to come up. It was also acknowledged that, since the Builder had constructed the surrounding concrete slab, he should have isolated it from the bond beam of the pool as specified in the engineering design. I accept that is the case. Although the engineering design was not a contract document, it was part of the building permit under which the construction was being carried out and, if the Contract was varied to include additional work, that work had to be done in accordance with the permit documents.
- 48. Mr Romeo suggested that he did the surrounding paving at cost as a favour for the Owners and that Mr Fraser assisted in the laying of the slab by barrowing in some concrete. Whatever the motivation and however little the Builder might have charged, if it undertook the paving work, it was required to perform it in a proper and workmanlike manner and in accordance with the implied warranties set out in s.8 of the Act. The fact that Mr Fraser might have assisted the Builder does not negate those warranties or lessen the Builder's liability unless a particular defect could be identified as having been the work of Mr Fraser, and that is not the case. Having carried out the work under a domestic building contract, the Builder is liable to the Owners if it is defective.
- 49. As to the pool, although Mr Fraser gave evidence that part of the paving was out of level at about the time that it was laid, there is no evidence that the pool was installed out of level. The onus of proof is on the Owners to establish that the movement in the pool is caused by defective workmanship of the Builder. It seems to me that the reason the pool is out of level is not sufficiently established by the evidence, but it is more likely to be due to the

presence of excess water in the ground rather than to defective workmanship of the Builder.

Cost of rectification

- 50. As well as the cost of replacing the concrete slab that it laid, the Builder is also responsible for replacing the pavers that were laid on top of it which will have to be discarded. I have no expert evidence as to the reasonable cost of simply replacing the concrete and paving. Indeed, the only evidence that I have concerning the cost of rectification are the various quotations referred to.
- 51. In general, a quotation is not drawn up as an assessment of the reasonable cost of carrying out work but rather, is a document prepared by a potential contractor setting out what he is prepared to do and what he would want to be paid for doing it. One would expect that the author of such a document would offer a competitive price but that is not always the case. It might be that a tradesman is not be particularly interested in doing the work but would be happy to do it if he received a high enough price.
- 52. Nevertheless, I have no other evidence and it was not put to Mr Tucker that his price was inflated. I accept that it will cost the Owners \$35,200.00 to carry out the work for which he has quoted.
- 53. It would seem from the quotation that the majority of the work relates to the concrete slab and the pavers. Doing the best that I can with the evidence that I have and making an allowance for the fact the Builder's defective workmanship is only the replacement of the concrete slab and the paving and any consequential damage, I will assess the damages at 80% of Mr Tucker's quotation, which is \$28,160.00.

Orders to be made

54. There will be an order that the Builder pay to the Owners \$28,160.00. Costs will be reserved for further argument.

SENIOR MEMBER R. WALKER