

Nylect Engineering Pte Ltd v BKB Engineering Constructions Pte Ltd and Another  
[2004] SGHC 245

**Case Number** : Suit 124/2003  
**Decision Date** : 02 November 2004  
**Tribunal/Court** : High Court  
**Coram** : Lai Kew Chai J  
**Counsel Name(s)** : Chua Boon Thien (David Siow Chua and Tan LLC) for plaintiffs; Lai Swee Fung (UniLegal LLC) for first defendants; Teo Weng Kie (Legalworks Law Corporation) for second defendants  
**Parties** : Nylect Engineering Pte Ltd — BKB Engineering Constructions Pte Ltd; AXA Insurance Singapore Pte Ltd

*Building and Construction Law – Damages – Liquidated damages – Sub-contractor tardy in completing works – Whether reasonable for main contractor to order sub-contractor to pay liquidated damages.*

*Building and Construction Law – Scope of works – Variations – Whether sub-contractor entitled to payment for variation works.*

2 November 2004

**Lai Kew Chai J:**

1 Under a sub-contract in writing dated 12 March 1999 (“the Sub-Contract”) the plaintiff was the sub-contractor of the first defendant for the electrical works (“the electrical works”) in respect of the project known as the Main Building Works including mechanical and electrical (M&E) services for a camp development at Sembawang, Singapore (Phase 1) (the “Construction Project”). The contract sum under the Sub-Contract between the plaintiff and the first defendant was \$3.1m. The other works such as the air-conditioning and mechanical ventilation works, the sanitary and plumbing works, and builders’ works such as brick-laying, plastering and painting was carried out by the first defendant and/or other sub-contractors.

2 The first defendant was one of the main contractors of the Construction Project. The employer was the Ministry of Defence (“Mindef”). The contract sum under the main contract between the first defendant and Mindef was \$23.49m. Obviously, there were substantial works which were carried out by other trades and the issue of who amongst the multitude of sub-contractors and the first defendant itself, or a combination of them, had caused the delays was acutely raised. I shall have to revert to this issue later.

3 For the completion of the entire development, Mindef employed three other main contractors working simultaneously on the camp site. They were Guan Choon Construction Pte Ltd (the work was subsequently assigned to Pillar Construction Pte Ltd) (Phase 2), Xin Hefeng Metal Engineering Pte Ltd (Phase 3), and SembCorp Engineers and Constructors Pte Ltd and SembCorp Construction Pte Ltd (Phase 4). They were engaged to complete the works in other demarcated zones within the camp site.

4 The second defendant, at the requests of the plaintiff, provided a performance bond for the sum of \$310,000 in favour of the first defendant (“the Bond”). It is a nominal party and has been brought in as a party in these proceedings as a result of the first defendant’s call on the Bond.

5 The architect employed by Mindef for the Construction Project was Alfred Wong Partnership

Pte Ltd ("the Architect"). It assisted the Defence Science and Technology Agency ("DSTA") which was the supervising officer ("the SO") in the Construction Project. Parsons Brinkerhoff Consultants Pte Ltd ("Parsons") was the mechanical and electrical consultant. It had professional oversight over the plaintiff's works. Its team of engineers was led by Mr Lim Ming Toon.

6 In this action, the plaintiff is claiming the sum of \$1,609,911.66 and/or damages. Apart from the balance unpaid, it is claiming variation works which are of two categories. The first category comprises variation works assessed by Parsons. They total \$450,335.17. This sum was agreed by both parties.<sup>[1]</sup> The plaintiff's claims under the other category for other variation works total \$370,983.63. These claims are disputed.

7 The first defendant, on the other hand, counterclaims against the plaintiff for the sum of \$1,995,687.06. The details of the claims will be set out later. It was not disputed that the first defendant had paid the plaintiff the sum of \$2,110,949.38.

8 At the conclusion of the trial, which lasted ten days, and after considering the lengthy submissions and additional arguments, I gave judgment to the first defendant in the sum of \$519,368 on its counterclaim and costs. I awarded interest to the first defendant from the date of the filing of its Defence and Counterclaim (*ie* 4 March 2003) until the date of judgment at the rate of 6% per annum. An interim injunction was earlier ordered restraining the first defendant from receiving the moneys under the Bond. A stay was also ordered in relation to the suit where the first defendant sought to enforce the Bond. I discharged both orders. I also ordered an inquiry as to the damages that the first defendant might have suffered by reason of the injunction order together with consequential orders as to the payment of damages as are found payable. I set out the facts and my findings of facts where there were issues of facts between the parties and, in addition, the reasons for the orders I made.

## **The facts**

9 Prior to the Sub-Contract which was dated 12 March 1999, the plaintiff's director, Mr Alan Sim, negotiated with the first defendant's finance and administration manager, Madam Tan Gek Koon. The plaintiff indicated its agreement that it would undertake the first defendant's electrical works on a strictly back-to-back basis. Its scope of work was to include the frequency converter, the temporary installation and materials to the site during the contract period. Because of the expanded scope, the plaintiff revised upwards the quoted sum from \$3m to \$3.2m. These broad points of agreement prior to the Sub-Contract were reached on or about 4 March 1999. On 9 March 1999, the plaintiff and the first defendant met through their representatives. The plaintiff was represented by Mr Alan Sim. The first defendant was represented by its managing director, Mr Yan Siew Heng (who gave substantial evidence for it at the trial) and Madam Tan Gek Koon. Mr Yan showed Mr Alan Sim the first defendant's tender documents and correspondence in relation to the electrical works. After further negotiations, the representatives of both parties finally agreed on a lump sum of \$3.1m. On the evidence, it was clear that the plaintiff, having provided an increase of \$200,000 from its original quote for this substantial item, was fully aware that the provision of a frequency converter was required.

10 The terms of the Sub-Contract which are material for present purposes provided as follows:

1A. Scope of Works

[The plaintiff's works are] all electrical works as specified in the Tender Contract and Drawings and as required by the Consultants...

1D. Completion of Works

(i) All works must be completed within 18 months from [12 March 1999] or as required by the Consultants/ LEO whichever is earlier.

(ii) Liquidated Damages shall be charged at \$4,000 per day to the plaintiffs if the delay arises from the plaintiffs' works and the plaintiffs are not following closely to the first defendants' schedule.

1E. Omissions and Additions

(a) Any omissions by the Clients and not payable will similarly not be paid to you and the deduction shall be based on the Consultants' valuation.

(b) Any additions payable by the Clients will be paid to you accordingly less Profit and Attendance fee due to the first defendants, which was provided to be at the rate of 15% if "Star" rate applies or 7% in other cases.

1F(b). Payment

Only payment certified and payable by the Client is similarly payable to [the plaintiff].

1G. Performance Bond

[The plaintiff] shall provide [the first defendant] with a performance bond of \$310,000.00 equivalent to about 10% of the contract sum.

1J. Relevant Documents and Drawings

All relevant documents and drawings have already been given to [the plaintiff] and [it is] deemed to have in possession of the same. However, if [it so requires], all documents and drawings are available at [the first defendant's] office for [the plaintiff's] reference during office hours.

1P. All Other Terms and Conditions

All other terms and conditions are strictly back to back with Tender Contract which [the first defendant has] signed with Consultants/LEO. A copy of the Tender Contract is available at [the first defendant's] office for [the plaintiff's] reference at any time during office hours.

2. This document will be the only prevailing subcontract terms and conditions and will supersede all other terms and conditions which [the plaintiff] and [the first defendant] might have made earlier.

11 It should be noted that the first defendant signed its main contract with Mindef on 26 February 1999. The form of contract used was the Singapore Public Sector Conditions of Contract for Construction Works (July 1995) ("PSSCOC") with additional Particular Conditions to PSSCOC (updated in November 1998). By way of background it is also noteworthy that it was, at the material time, a normal practice in the construction industry for a main (building) contractor to appoint a specialist electrical and fire engineering contractor to carry out these specialist works. That specialist contractor would be responsible for all aspects of the work, including material, labour, and plant and machinery supply, and would have overall responsibility for the programming of the specialist works

within the agreed contract period.

12 It is undisputed that the SO indicated that the substantial completion date for the *entire* main contract works undertaken by the first defendant was on 15 February 2002. Accordingly, the 12-month defects liability period expired on 15 February 2003. Under the Sub-Contract the plaintiff was contractually bound to complete the electrical works by 12 September 2000. As will be seen later in this judgment, there were substantial delays by other sub-contractors and by the plaintiff. In the event, it was not at all clear that the plaintiff had caused such delays which could be causally linked to liquidated damages compromised and paid by the first defendant to Mindef.

13 The other aspect of the progress of work which has to be noted has to do with the numerous and substantial delays during the course of the project.

14 The first defendant's counterclaim of \$519,368, for which judgment was entered, was derived as follows:

(a)	Contract sum	\$3,100,000.00
<i>Add</i>		
(b)	Variation works assessed by Parsons	\$450,335.17
<i>Less</i>		
(c)	Profit and attendance (ie, 15% x \$450,335.17)	<u>(\$ 67,550.28)</u> \$3,587,268.44
<i>Less</i>		
(d)	Payment made	(\$2,110,949.38)
(e)	First defendant's deduction forms 1 to 19	<u>(\$1,995.687.06)*</u> <u>(\$ 519,368.00)</u>

\* Item (e) includes liquidated damages of \$1.042m.

### **The claims**

15 The plaintiff asserts that it is entitled to payment for various additions and omissions which are listed as items 1 to 14 in the plaintiff's Scott Schedule. Under the Sub-Contract, the first defendant would profit from taking a portion of any additions allowed as "profit and attendance". But claims for additions and omissions must be justified. The plaintiff's claims for variation were as high as \$1.03m and they were whittled down to \$450,335.17. In relation to the 14 items of claims in the plaintiff's Scott's Schedule, these are dealt with as follows.

16 Item 1 refers to the fuel tank pump upgrading. The plaintiff claims that the fuel pump was relocated from inside to outside Block 38, for which the plaintiff incurred additional costs. Its claim is \$82,200. According to the tender contract drawing no 6177/EL-L/126, the tanks were to be erected inside Block 38. However, there is another tender contract drawing no 6177/EC-001 which shows the tanks to be located outside the building. As there was a discrepancy in the two drawings, the plaintiff ought reasonably to have requested a clarification at the tender stage, as provided under cl 4.4.1 of the Sub-Contract. No clarification was sought by the plaintiff, and I am of the view that this variation should not be not allowed.

17 Item 2 of the Scott Schedule sets out the claims of the plaintiff for \$68,300 which the plaintiff says is for an upgrading of the automatic fire alarm system. It claims that an addressable fire

alarm system is a variation to its contract works and that it should be paid for it. The relevant specification clauses call for a "conventional" fire alarm system and an "addressable" fire alarm system. As there was a discrepancy, the plaintiff should have obtained clarification at the tender stage. In my view, the plaintiff decided unilaterally to supply and install a better system.

18 Item 3 is a claim for \$32,127.28 in respect of the ACMV power supply. The plaintiff claims that the additional works required in the provision of a power supply to the ACMV system were not provided for in the plaintiff's contract documents and/or drawings. It was provided for in the air-conditioning drawings. But, as pointed out by Mr Henrik Hansen who gave evidence as an expert for the first defendant, the tender and contract specifications clause 6177/El/B24 states that "the Sub-Contractor shall refer to and comply with the contractual obligations and responsibilities of the Main Contractor and the Sub-Contractor as set out in the Main Contract Document". It bears reminder that under para "E.a" of the first defendant's letter of award of 12 March 1999 it was provided that "any omissions by the Client and not payable will similarly not be paid to you [the plaintiff] and the deduction shall be based on the Consultant's valuation". As the plaintiff failed to agree with the valuation by Parsons, with whom the plaintiff dealt with and who assessed the valuation as merely \$301,239.67, it is not entitled to seek further payment from the first defendant.

19 Item 4 has to do with the relocation of the riser at Block 12. The plaintiff claims that an instruction was given to it to relocate the cables within a riser after it had completed its work in the area. In relation to this claim for variation, there was no formal notification that the instruction would result in additional and abortive works, as required by cl 19 of the Sub-Contract. There was no documentary evidence by way of photographs to show that the works had been completed. The first defendant's site representative did not authorise any additional or abortive work. This item is therefore disallowed.

20 The next group of claims numbering 5 to 11 can be conveniently dealt with together. They were claims for damages to the monitoring well, costs of repairs for the crane at Block 2, and costs of repairs of copper tape and damaged cables. Under cll 4.3 and 18.2 of the Sub-Contract, the plaintiff was obliged to make good any damage due to the fault of third party contractors and bear the costs. Under the Sub-Contract, it undertook the responsibility to adequately protect its works. These claims therefore fail.

21 Under item 12 the plaintiff claims the sum of \$40,040 which it says was wrongfully omitted from its final accounts, and the sum of \$89,880 which it says was additional. On the evidence, the motion detectors were included in the tender amount. As they were not installed as advised by Parsons, they should be omitted from the final accounts. The additional works were in fact within the plaintiff's contractual scope of works: see drawing no 6177/EL/001, notes 1A, B and C.

22 Item 13 is the plaintiff's claim that multi-cable transits ("MCTs") were not indicated on the tender drawings and should not be omitted from their final account. The plaintiff's tender submitted to the first defendant on 2 February 1999 confirmed that MCTs are included as item (a) in the Tender and Contract Technical Specification for Electrical Works at Protected Spaces.

23 The omission of self-luminous exit light fittings amounting to \$2,157.75 is not accepted by the plaintiff. On the evidence, however, this item is within the plaintiff's contractual scope of works under the Electrical Contract Document.

24 I now turn to the first defendant's claims under items 16 to 27 which are all items not carried out by the plaintiff in breach of the Sub-Contract and which are quantified in the first defendant's Scott Schedule. The claims are supported by documents in the first defendant's second core

bundle.<sup>[2]</sup> The plaintiff, on the evidence, had approved deductions 1 to 14 mentioned in the particulars set out in [14] of this judgment. It had issued its tax invoices. The rest of the items from item 15 to 27 are set out in the first defendant's Scott Schedule in terms of the description of the items, such as the frequency converter where the amount in dispute is \$232,710, and the respective contentions of the plaintiff and the first defendant. The entries in those items in the Scott Schedule are incorporated into this judgment by reference. On the evidence, I accept the contentions of the first defendant and find that it had made the proper deductions in its accounts with the plaintiff. In the result, the accounts set out in [14] of this judgment are correct and the plaintiff is therefore ordered to pay the first defendant the sum of \$519,368.

### **First defendant's claims for liquidated damages**

25 The Sub-Contract required the completion of the works by 11 September 2000. Completion took place on 15 February 2002, some 521 days later. Unusually, the plaintiff had not made any formal request for an extension of time, with adequate supporting documentation. Therefore, no formal extension of time was granted by the SO for this area of the contract works.

26 The first defendant told the court that DSTA had granted an extension of time of 171 days. Accepting that there were delays by the first defendant and other sub-contractors, the first defendant contended that the plaintiff be responsible for half of the liquidated damages, namely \$1,042,000.

27 It should be noted that 75% to 80% of the plaintiff's works were internal. It was free to complete the electrical works without any interference from any third party. The plaintiff rather belatedly submitted its extension of time application ("EOT") in August 2002. The project architect could not factor in any of its reasons for the EOT. It should also be noted that the 171-day extension granted by Mindef did not relate to the plaintiff's scope of work.

28 On the question of the delays in the M&E works, I found the evidence of Mr Yan Siew Heng ("Mr Yan"), the managing director of the first defendant, far more accurate and fair than the evidence of Mr Leong Kim Teck, the project manager of the plaintiff who had joined when the project was already underway. Mr Yan had practised as a civil engineer from 1978. He incorporated the first defendant's company and ventured into construction works. He was at the Sembawang campsite as the project director. Usually he was there from 9.00am, leaving at about 8.00 to 9.00pm.

29 He told the court that the plaintiff had delayed the execution of the M&E works. Up to 9 November 2000, the original completion date, the plaintiff had only completed \$1,438,195 worth of M&E works. This was only 41.33% of the Sub-Contract sum of \$3,479,271 which was the first defendant's contract sum with Mindef. In contrast, the builder's (*ie*, the first defendant's) works to the 18 buildings had already reached 86%. The consultant valuation certificate no 19 for works done by the first defendant and its other sub-contractors showed that, as at 15 November 2000, the works had been 86% completed. The remaining builders' works consisted essentially of the architectural finishing works like ceiling works, painting, wall and floor tiling, and the final fixing of sanitary wares, fittings and floor carpeting. Most of these items could not be proceeded with until the plaintiff had completed its trunking, conduit and wiring works above the ceiling panel and/or concealed in the brick walls and concrete floors. There were produced ample documentary proofs of this state of affairs.

30 The plaintiff's delays had a knock-on effect on the progress of the works of other sub-contractors of the first defendant. The Kone overhead crane supplier and the Epex fuel pump supplier, Meiden generator set supplier and other MCB, DB suppliers held back their deliveries as most of the

on-site electrical power cable and wiring system for the buildings, lightings, fans and equipment were not installed yet. The plaintiff itself had employed its own sub-contractors to carry out electrical and wiring works. Those parties delayed tremendously.

31 The consultants and DSTA through their engineers had objectively observed the delays, as shown by the Architect's SOI dated 7 August 2000 and Parsons' assessment of \$101,258.65. As a result, a new sub-contractor, Xin HeFeng Metal Engineering Pte Ltd, which was the Phase 3 Main Contractor working at the other zones in the camp site, was appointed to take over. As M&E works were taken over to the extent of \$101,258.65, the same was deducted from the credit side of the plaintiff's account by way of deduction form no 15A.

32 Mr Leong Kim Teck, the plaintiff's project manager, admitted that the completion dates of the M&E works were as follows:

<i>Old block number</i>	<i>Date when plaintiff claimed substantial completion</i>	<i>Date of handover to the client/DSTA</i>
Block 12	7 August 2001	15 November 2001
Block 20	6 August 2001	15 November 2001
Block 21	7 August 2001	15 November 2001
Block 32	7 August 2001	26 November 2001
Blocks 33, 35	15 September 2001	26 November 2001
Block 34	7 August 2001	15 November 2001
Blocks 37/38	15 September 2001	15 November 2001
Blocks 27, 36	20 July 2001	15 November 2001
Block 1	26 December 200	24 December 2001

Block 2	26 December 2001	24 December 2001
Block 10	3 December 2001	27 December 2001
Block 22	15 February 2002	15 February 2002
Block 23	15 February 2002	15 February 2002
Block 24	15 February 2002	15 February 2002
Block 25	15 February 2002	15 February 2002

33 The plaintiff's witnesses have given a number of excuses, claiming essentially that their work had to wait for the completion of the civil and other works which had to be done by the first defendant and the other sub-contractors before they could proceed with the M&E works. Generally, these were not made out in evidence. There was a dearth of any documentary evidence of complaints.

34 The plaintiff alleged at the trial that the first defendant was attempting to profit by levying liquidated damages on ten other sub-contractors. It alleged that the first defendant had claimed in excess of \$4m. This was a reckless allegation. In fact, those sub-contractors had sued the first defendant. Mr Yan produced a list to the court which set out the outcome of the ten claims. Far from profiting, the first defendant suffered losses. The estimated liquidated damages recovered were only about \$180,000.

35 The plaintiff, in my view, was ordered to pay liquidated damages reasonably, taking into account all possible delays by the first defendant and other third-party sub-contractors. My task was to assess the liquidated charges caused by them and them alone. The information extracted from DSTA's engineers' monthly reports and graphs plotted based on them show that the plaintiff was not following closely to the first defendant's schedule. The divergence in the work progress showed the tardiness of the plaintiff's progress of work. Further, the plaintiff's denials that several items were outside the scope of the Sub-Contract delayed matters unnecessarily. Its project manager, Mr Leong Kim Teck, admitted its mistake in refusing to carry out the variation works required by the consultants.

36 In view of my findings, I gave judgment based on the accounts set out in [14] herein.

*Claim dismissed. Counterclaim allowed.*

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[1] See Core Bundle pp 97 and 101.

[2] Tabs 1 to 27.



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