

**Commission of Inquiry into the Construction Works at and near the Hung Hom Station
Extension under the Shatin to Central Link Project**

SECOND WITNESS STATEMENT OF HENRY LAI

I, **HENRY LAI** of 39/F Sun Hung Kai Centre, 30 Harbour Road, Hong Kong, will say as follows:

1. I refer to my first witness statement dated 2 May 2019 (“**My First Statement**”). Unless otherwise stated or the context otherwise requires, any abbreviations shall bear the same meaning as in that statement.
2. Unless otherwise stated, the facts stated herein are within my personal knowledge and are true. Where the facts and matters stated herein are not within my own knowledge, they are based on the stated sources and are true to the best of my knowledge, information and belief.
3. I refer to paragraphs 1 and 3 of My First Statement and understand that I qualify as a Technically Competent Person (TCP) of grade T3 for the Project.

RISC forms

4. For each concrete pour, there were two “hold points” when formal joint inspections would need to be conducted. These formal joint inspections, and MTRCL’s approval of the works, were recorded in RISC forms. Please refer to paragraphs 28 to 30 of My First Statement, which explain these formal joint inspections and the issuing of RISC forms.
5. Leighton has disclosed a table summarising the records of the formal joint inspections for rebar fixing checks and pre-pour checks for the NAT (numbered **LCAL.NAT.10.01** in the Index). This table indicates that for the first few concrete pours in the NAT, I issued the RISC forms to document the request for formal joint inspections. The details are as follows:
 - (a) I did not submit a RISC form for 51 out of the 53 rebar fixing checks; and
 - (b) I did not submit a RISC form for the 53 pre-pour checks.

6. Later on my workload got very heavy and I did not have time to complete some of these RISC forms for the formal joint inspections with MTRCL. While I intended to complete those RISC forms shortly after the inspections, my workload never eased up and I did not have the time (and later forgot) to complete the RISC forms for the rebar fixing checks and pre-pour checks for the NAT.
7. I confirm that the relevant MTRCL's construction engineers (Chris Chan and Kappa Kang) and Inspectors of Works (Tony Tang and Chung) were always contacted when a "hold point" was reached.
8. I confirm that I jointly conducted all of the formal inspections (rebar fixing checks and pre-pour checks), for which I was the responsible engineer during the period when I worked in the NAT, with the MTRCL's construction engineers and Inspectors of Works respectively.
9. MTRCL's site diary records recorded the rebar fixing works and the preparation work for the pouring of concrete for the NAT that were undertaken before, and were inspected by MTRCL during, the rebar fixing check and the pre-pour check. The rebar fixing check was conducted on the day of the completion of the rebar fixing work or soon after in order to avoid any delay in progress, while the pre-pour check was conducted on or shortly before the day of concrete pour. The site diaries also recorded the concrete pours including the volume poured. In addition, there are concrete test results which prove the date of the concrete pours in the relevant areas and confirm that MTRCL was aware of those pours. These site diary records and concrete test results have been disclosed to the Commission under section **LCAL.NAT.10.02** in the Index.
10. I would also generate a request for a TW4 (permit to load), to the extent that they were required for the formwork, before the pouring of concrete in the NAT. The TW4 would be signed and issued upon the TWC's satisfaction after inspection. I would then provide a photocopy of the issued TW4 to the MTRCL's Inspector of Works to indicate that the formwork had been approved. A copy of the TW4 forms have been disclosed to the Commission under section **LCAL.NAT.10.02** in the Index. Please also refer to paragraphs 31 to 45 of My First Statement for more details.

11. The MTRCL's Inspector of Works would not allow concrete to be poured, unless he and the MTRCL's construction engineer had approved the works and given permission to proceed after every rebar fixing check and pre-pour check in the NAT. I would only allow work to proceed after a rebar fixing check or pre-pour check in the NAT if the MTRCL's construction engineer or Inspector of Works had given verbal approval respectively. Please refer to paragraphs 33, 34, 43 and 44 of My First Statement regarding the formal joint inspections.
12. No issues were discovered at the time of all those formal joint inspections in the NAT that were not rectified. I do not believe that the works could have proceeded without the knowledge and approval of MTRCL's construction engineers and Inspector of Works.

Use of couplers on the Project

13. I am aware that there were instances when couplers were used at construction joints at certain locations in the NAT. I understand that this was permissible and necessary to accommodate limitations that were present on site during construction. For example, the use of couplers (rather than laps) to connect rebar was necessary to deal with physical space constraints due to ongoing site conditions and to maintain access routes to all areas of the site which were required for safety and logistics (as installing continuous lapped bars would have blocked such routes) at the time of construction.
14. MTRCL's staff was well aware of, and agreed to, the use of couplers instead of continuous lapped bars in such circumstances. The MTRCL's construction engineers / Inspectors of Works were on site for many hours each day and would have seen the couplers being installed. They would also be aware of, and would have inspected, such couplers during formal joint inspections.

Testing of rebar

15. Please refer to paragraphs 14 to 16 of My First Statement in relation to the process of rebar ordering and testing.

16. After the rebar was delivered to the site, the rebar fixing subcontractor would cut samples of the rebar for testing. For the rebar that I ordered for the areas that I was responsible for in the NAT, I arranged for the sampling and testing of 103 out of the 159 batches of rebar, and did not arrange for the sampling and testing of the remaining 56 batches, because my workload got very heavy later on and I did not have time to arrange for the testing of the remaining batches. I was constantly busy supervising the works in order to meet the progress, completing inspections and attending to other necessary tasks to avoid causing delay to the works. While I intended to arrange for the testing when I had time, my workload never eased up and I did not get round to arranging the tests.
17. All batches of rebar that I ordered passed the tests conducted by the manufacturer and came to the site with a Mill Test Certificate confirming that they were satisfactory. I am not aware of any rebar that I ordered for the Project that was not acceptable and did not meet the relevant requirements.

Non-compliance reports

18. During the time when I worked on the Project, I was not aware of non-compliance report ("NCR") being issued by MTRCL in relation to the matters set out in my statement. I was only made aware of the NCR regarding the RISC forms in 2018. I have been involved in collating information in response to the NCR issued by MTRCL.

Dated the 17 day of May 2019.

Signed: 

Henry Lai