Commission of Inquiry into the Diaphragm Wall and Platform Slab Construction Works at the Hung Hom Station Extension under the Shatin to Central Link Project

FIRST WITNESS STATEMENT OF IAN RAWSTHORNE

I, IAN RAWSTHORNE, of

say as follows:

- I was employed as a Project Manager with Leighton Contractors (Asia) Limited ("Leighton"), the main contractor for the Hung Hom Station Extension contract (Contract SCL 1112) ("Project") under the Shatin-Central rail link project. The project manager for the Project is MTR Corporation Limited ("MTRCL").
- 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.

My qualifications and experience

- I studied land and engineering surveying and have over 30 years of experience in construction. I have worked in Hong Kong for the past 25 years on the management of major infrastructure projects.
- 4. I joined Leighton as a Project Manager in April 2011, initially on the South Island Line SIL903 project at Wong Chuk Hang for MTRCL. In September 2014, I was transferred to the SCL1112 Project at Hung Hom, where I remained until November 2017, when I resigned from Leighton in order to take an extended break from work.

My role and responsibilities

Reporting lines

5. I initially reported to the Senior Project Manager (Piers Verman) until he left the project in February 2015. Thereafter I reported directly to the Project Director, Malcolm Plummer until he left the project in October 2016, following which I reported directly to the new Project Director, Anthony Zervaas.



Working hours

6. The normal working hours on the Project were from 8:00am to 6:00pm. However, I regularly worked longer hours in order to complete/progress necessary work.

Duties and responsibilities

- 7. My primary responsibility was to deliver the Project to MTRCL in accordance with the agreed programme, whilst ensuring the works were conducted safely and that the quality and budgetary requirements were met.
- At the time that I joined the Project, I was initially responsible for the Stabling and Sidings ("HHS"), the South Approach Tunnel ("SAT"), and the Northern Approach Tunnel ("NAT"). However, from March 2015 onwards, my responsibility was extended to cover the entire Project.
- 9. I was in charge of Leighton's engineering construction teams, which included construction managers, site agents, sub-agents and engineers. The teams were responsible for liaison with the MTRCL construction team, works planning and sequencing, works method statements, site safety, site co-ordination, progress monitoring, procurement, and quality inspections of the works.
- I had daily discussions with the construction managers and other members of the construction engineering team. An internal weekly meeting was also held with senior members of the team.
- 11. An important part of my job was liaising with MTRCL and ensuring that MTRCL's requests were satisfied. In my experience, MTRCL was fully aware of what was happening on site and were very quick to inform Leighton if they wanted something done. There was a formal weekly progress meeting with MTRCL, a weekly site walk (usually on Monday mornings) and many other ad hoc meetings or discussions in an average week.

Supervision and Inspections

12. The construction engineering team conducted the quality inspections of the works (including the formal inspections for rebar fixing and pre-pour checks). The teams



comprised experienced, qualified and competent engineers who I relied on to conduct the supervision / inspection process. I was not personally involved in the supervision / inspection process. I do not recall being informed of any issues arising with the supervision / inspection process. As far I was aware, the process ran smoothly and effectively.

- 13. I relied on my construction managers to instruct and manage the construction engineering teams. The construction managers (and the senior site agents, site agents and sub-agents below them) had substantial experience and were more than capable of instructing their teams.
- 14. The construction engineering team performed a different but complimentary role to Leighton's site supervision team. In summary, the engineering construction team was responsible for the technical, planning and quality assurance aspects of the works while the site supervision team was responsible for the safe onsite construction of the works. I had frequent interactions with the site supervision team to ensure effective coordination between the two teams.
- 15. I was not on site on a daily basis as my role required attending many meetings, as well as the overall planning and co-ordination of the Project. I did however frequently visit the site and would normally join at least three regular weekly inspections of the site:
 - (a) a weekly site walk on Monday mornings with Leighton's Construction Managers and both Leighton and MTRCL's senior management staff;
 - (b) a weekly Leighton "strive for life" safety walk with separate sections of the Leighton team; and
 - (a) a weekly safety walk with MTRCL. This was usually with one of the MTRCL's Senior Construction Engineers as well as with representatives of the safety, environmental, and construction teams
- 16. I would also conduct ad hoc visits to the site, sometimes with MTRCL staff, to check on progress, safety, technical and/or sequence issues, and to discuss these issues while looking at the relevant areas of the site.



- 17. I always got the strong impression on my walks with MTRCL's staff that they were very well informed of what was happening on site and that they knew the details of the works thoroughly. They would often ask questions of Leighton's team and put considerable pressure on us to respond to their queries very quickly.
- 18. I understand that all formal inspections on the diaphragm walls and platform (track) slabs were completed and approved. If an inspection did not take place and the works proceeded without approval, I believe that MTRCL would have raised the issue with us very quickly, either during daily discussions or at the weekly progress meetings with MTRCL. I have no recollection of such issues being raised by MTRCL or anyone else.
- 19. As above, I understand that Leighton obtained MTRCL's acceptance of the reinforcement works on diaphragm walls and track slabs, and approval to cast concrete. This approval would have been given verbally by MTRCL's staff on site and confirmed in writing at a later date when the RISC (inspection request) form was returned to Leighton.
- 20. If the concreting works had proceeded without approval, I believe we would have received strong complaints from MTRCL's senior site staff. I do not recall this happening on the Project.

Allegation that the threaded ends were cut off reinforcement bars

- 21. I understand the Commission of Inquiry is concerned about the connection between reinforcement bars ("rebars") and couplers, in particular relating to allegations that the threaded ends of rebars were cut off, instead of the bars being screwed into couplers.
- 22. On 17 December 2015, Leighton issued Non-Conformance Report No: 157 ("NCR 157") to Fang Sheung Construction Co Ltd in relation to the identification of 5 rebars with the threaded ends cut off (produced and marked Exhibit "IR-1"). According to NCR 157, these bars were identified in Area C of the East West Line platform slab ("EWL Slab").
- 23. NCR 157 was raised by the relevant construction engineering team and will have been passed to me for signing and subsequent issue by document control. I have signed



NCR 157 but do not specifically recall the document. I also do not recall anyone discussing NCR 157 with me or raising concerns about the incident with me at the time.

- 24. The fact that 5 defective rebars were identified and documented in NCR 157 indicates to me that project quality system was working effectively. This is the type of issue that the system is intended to pick up and rectify to ensure that defective works were not included in the permanent works.
- 25. In early January 2017, I saw a copy of an email from Jason Poon (the principal of one of the subcontractors for the Project, China Technology Corporation Ltd ("China Technology")) to Anthony Zervaas and our construction manager alleging that threaded bars had been cut short, and not properly fixed to the diaphragm wall couplers on the EWL Slab. This email referred to works that had been completed almost a year earlier.
- 26. In the months leading up to this email, payment disputes between Leighton and China Technology had been increasing. When this email was received, I believe the consensus opinion at both Leighton and MTRCL was that Jason Poon had raised the allegations in order to negotiate a better deal for his company. I also believed this to be the case.
- 27. After these allegations were received, I recall that an internal investigation into the allegations raised in this email was conducted by Leighton's head office engineering team, the results of which I believe were shared with MTRCL. Whilst I was not involved in the investigation, I do recall that no further investigations or remedial actions were instructed following this report
- 28. Other than as noted above and as reported in the media from early June 2018, I confirm that:
 - I have not seen or heard of the threaded ends of any rebars being cut off or shortened; or
 - (b) I have not seen or heard of any loose threaded ends of rebars; and



(c) I did not give any instructions to any person to cut off or shorten the threaded ends of any rebars or allow such threaded ends to be cut off or shortened. I am also not aware, and have not heard, of any Leighton staff who gave or would have given such instructions or would have allowed any person to cut off or shorten the threaded ends of rebars.

The works are safe

29. While I was Project Manager, I was satisfied with Leighton's supervision of the Project. Based on my knowledge and experience of the Project, I have no reason to believe that the platform (track) slabs and diaphragm walls are not safe and properly constructed.

Dated the 2nd day of October 2018. -X Signed: Ian Rawsthorne

