

By post and by fax at 2715 4015

7 February 2018

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Dear Ir WONG

Corrigendum of Port Works Design Manual

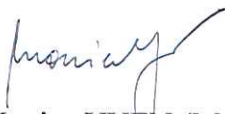
The Hong Kong Institution of Engineers (HKIE) agrees in general the draft Corrigendum of Port Works Design Manual (PWDM). Following the onslaught of typhoon Hato in August 2017 with some return period water levels exceeded, we consider that the revisions on the general design considerations for marine works and the tables as given in the PWDM are appropriate.

We are aware of the significant reduction in extreme event wind velocities in Tables 12 to 30 for wave generation, particularly in the event of likely more storminess due to climate change. However, it is found that the data in the concerned Tables may contradict with the new clause of Section 2.4.4, which discusses the increase in wind speed for wave generation instead of reduction. In particular, it is understood that the velocity at Waglan Island Station in Table 14 is used for offshore wave generation and appears to simulate extreme event offshore wave records provided within the PWDM to a reasonable accuracy.

Meanwhile, it is considered that the future increases in the velocity in Table 43 may be minor, even if a year-on-year increase, which is not defined, is applied. The reduced return period wind speeds will reduce return period design wave heights on projects which have already been tendered, and therefore it is possible that the contractors on recently tendered projects may claim for having to redesign relevant structures. As the Government will be responsible for such changes, the claims may be considered valid on both private and public contracts. Furthermore, if there is a category 5 typhoon in the future, the new return period wind speeds may well be exceeded.

Thank you for your attention.

Yours sincerely



Monica YUEN (Mrs)
Chief Executive and Secretary
The Hong Kong Institution of Engineers