

Summary of Decisions of the Structural Engineering Committee  
SEC 12/2011 held on 27.10.2011

(a) Case 12/2011

Issue: Use of jacking method to install four trial steel H-piles (Grade S450J0, 305x305x180kg/m) founded on soil

Recommendation:

- (a) To accept the use of jacking method to install steel H-pile (Grade S450J0, 305x305x180 kg/m with yield stress,  $f_y$ , taken as 430MPa) with working load design capacity of 2,950kN and F.O.S of 3.0 for the proposed Integrated Elderly Community Project at Yuen Long, subject to the given proof tests to four trial piles in compliance with the acceptance criteria stipulated in the CoP for Foundations; and
- (b) To accept the given installation method and criteria for installation.

Decision: After considering RSE's justifications and making reference to precedent cases, members endorsed the recommendation provided that the following information would be submitted and found satisfactory:-

- (a) the required pile length would be evaluated by recognized static formulae taking into account of any negative skin friction that may be produced by the soft layers;
- (b) the frictional resistance provided by soft layers, such as ponds and marine deposits, would be ignored in assessing the vertical load carrying capacity, and
- (c) a performance review report should be conducted upon completion of works, which would be made reference to in future working pile submission.