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COMMENTS/DISCUSSIONS AND REPLIES

Comment on "Behavior of Shallow Strip Footing on Twin Voids" Published in Geotech. and Geol. Eng. (2016), 34(6): 1791–1805

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Please allow me to humbly comment on an attention grabbing paper published by Lavasan et al. (2016) based on points below.

1. The original article has been published inadvertently with some errors in section 5. At the end of the second paragraph in section 5, authors mentioned, "it seems that increasing the width of footing further than about $\frac{B}{D} = 0.5$ has no significant effect on the ultimate bearing capacity". Based on next explanation in original article, firstly $\frac{B}{D} = 0.75$ is correct not $\frac{B}{D} = 0.5$. Secondly according to figure 16, Variation of bearing pressure ratio $\frac{q_v}{q_{nv}}$ even for $\frac{B}{D} > 0.75$ is not constant and the critical value for footing width on twin voids located at shallow depth is about $B_{cr} = D$.

2. At third paragraph in section 5, authors have concluded based on Fig 17, the influence of voids on the bearing capacity of shallow foundation is disappeared at about $\left(\frac{Z}{D}\right)_{cr} = 4$. This conclusion is based on linear equation of $\left(\frac{q_v}{q_{nv}}\right) = 0.14\left(\frac{Z}{D}\right) + 0.405$ that is estimated for $0.2 < \frac{Z}{D} < 1$. This equation is not extensible for larger amounts of this period, as it may behavior of data at higher values not be linear.

Lastly, this is not my intention to offend the authors of the published paper but just my honest comments in a constructive way as an old saying goes 'Nothing is perfect'.

Reference

Lavasan AA et al (2016) Behavior of shallow strip footing on twin voids. Geotech Geol Eng 34(6):1791–1805

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