

Appendix G Soil profiles for LPA assessment

As stated in section 11.3, constant strength parameters are required as input for the high-level LPA assessment. For estimating the required strength parameters for the different layers, the following procedure is used:

- For clay layers, the undrained shear strength is estimated for each individual layer by disregarding the highest and lowest 10% of the data. This is done to remove potential smaller outliers from the considered data sample from the layer. After, the average value from the remaining 80% of the measurements are determined and used as representative value for the layer.
- For sand layers, the undrained friction angle is estimated for each individual layer by disregarding the highest and lowest 10% of the data. This is done to remove potential smaller outliers from the considered data sample from the layer. After, the average value from the remaining 80% of the measurements are determined and used as representative value for the layer.
- For mix layers, the undrained shear strength is estimated for each individual layer by disregarding the lowest 10% and highest 70% of the data. The lower 10% limit is considered to remove potential smaller outliers from the considered data. The highest 70% of the data is removed as the mix layers have larger variations in the measured q_c value as the layer consist of both sand and clay. For estimating the undrained shear strength value, the lower q_c values trace corresponds to the intervals with clayish behaviour, hence the 70% limit aims of removing q_c values representing sand. The average value from the remaining 20% of the measurements are determined and used as representative value for the layer.

The soil profiles with derived strength parameters used as input for the LPA assessment is found in digital deliverables.