## UNIVERSITY OF THESSALY School of Engineering - Department of Civil Engineering

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# Methodology for the Analysis and Design of Combined Piled Raft Foundations

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#### Abstract:

With the aim of bridging the gap between full 3-D and simplified analyses and provide a straightforward simplified 3-D design methodology for piled foundations under combined loadings the findings of previous research works, allowing for group effect, the raft contribution and the location effect, have been incorporated in an efficient methodology. The proposed method is fully compatible with structural software codes and has been implemented in the F.E. code SOFISTIK. The application allows for numerous loading combinations associated with an immediate process for establishing the envelopes for both displacements, stresses, forces providing the design of structural members at the same time.

