



Proven experts in a geotechnical world

- [1] Higgins, K. G. (1983) Diaphragm Walling, Associated Ground Movements and Analysis of Construction. M. Sc. Thesis, University of London.
- [2] Mair, R. J., Taylor, R. N., Higgins, K. G. & Potts, D. M. (1988) Preliminary analysis of construction of the test drift in Boom clay at Mol using plasticity solutions and finite elements. Proc. of CEC Technical Session, Brussels, 1988, ed: B. Come, CEC Directorate-General Science, Research and Development, Report EUR 12027 EN/FR, pp 127-139.
- [3] Higgins, K. G., Potts, D. M. & Symons, I. F. (1989) Comparison of predicted and measured performance of the retaining walls of the Bell Common Tunnel. TRL Contractors Report 124, Transport Research Laboratory, Crowthorne, 1989.
- [4] Harris, D. I., Hight, D. W., Higgins, K. G., Potts, D. M. & BRADY, K. C. (1992) Finite element analysis of anchored earth retaining walls. Proceedings of the Conference on Retaining Structures, Cambridge. Thomas Telford, London, 1992, pp 599-608.
- [5] Higgins, K. G., Potts, D. M. & Symons, I. F. (1992) The use of laboratory derived soil parameters for the prediction of retaining wall behaviour. Proceedings of the Conference on Retaining Structures, Cambridge. Thomas Telford, London, 1992, pp 92-101.
- [6] Hight, D. W., Higgins, K. G., Jardine, R. J., Potts, D. M., Pickles, A. R., De Moor, E. K. & Nyirenda, Z. M. (1993) Predicted and measured tunnel distortions associated with construction of Waterloo International Terminal. Proceedings of the Wroth Memorial Symposium, Oxford. Thomas Telford, London, pp 317-338.
- [7] St John, H. D., Potts, D. M., Jardine, R. J. & Higgins, K. G. (1993) Prediction and performance of ground response due to construction of a deep basement at 60 Victoria Embankment. Proceedings of the Wroth Memorial Symposium, Oxford. Thomas Telford, London, pp 581-608.
- [8] Hight, D. W. & Higgins, K. G. (1994) An approach to the prediction of ground movements in engineering practice: background and application. Keynote Lecture, Proceedings of International Symposium of Pre-failure Deformation Characteristics of Geomaterials, Hokkaido, Sapporo, Japan, Balkema.
- [9] Higgins, K. G., Fernie, R. & Potts, D. M. (1995) Discussion on Watson, G. V. R. and Carder, D. R. Comparison of the measured and computed performance of a propped bored pile retaining wall at Walthamstow. Proceedings of the Institution of Civil Engineers, Geotechnical Engineering, 1995, Vol. 113, Issue 1, Jan, pp 58-59.
- [10] St John, H. D., Higgins, K. G. & Potts, D. M. (1995) Discussion on De Moor, E. K. An analysis of bored pile/diaphragm wall installation effects. Geotechnique, Vol 45, No 4, Dec, pp 753-755.
- [11] Fernie, R., Kingston, P. J., St John, H. D., Higgins, K. G. & Potts, D. M. (1996) Case history of a "Stepped Box" excavation in soft ground at the sea front, Langley Point, Eastbourne. Proceedings of the International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground, City University, London, Balkema, pp 123-129.
- [12] Kovacevic, N., Edmonds, H. E., Mair, R. J., Higgins, K. G. & Potts, D. M. (1996) Numerical modelling of the NATM and compensation grouting trial at Redcross Way. Proceedings of the International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground, City University, London, Balkema, pp 553-559.
- [13] Higgins, K. G., Potts D. M. & Mair, R. J. (1996) Numerical modelling of the influence of the Westminster Station excavation on the Big Ben clock tower. Proceedings of the International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground, City University, London, Balkema, pp 525-530.

- [14] **Higgins, K. G.**, Hight, D. W., Mair, R. J., Potts, D. M. & Jardine, R. J. (1996) Discussion: Comments on the use of non-linear elastic stiffness, Proceedings of the International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground, City University, London, Balkema, pp 633-634.
- [15] **Higgins, K. G.** & Jardine, R. J. (1998) Experience of the use of non-linear pre-failure constitutive soil models. Part 3, The Geotechnique Symposium in Print "Pre-Failure Deformation Behaviour of Geomaterials", Thomas Telford.
- [16] **Higgins, K. G.**, Fernie, R., Potts, D. M., Houston, C., Mair, R. J. & St John, H. D. (1998) The benefits of using advanced numerical methods throughout the design and construction of a road scheme. Proceedings of the AGS Seminar "The Value of Geotechnics in Construction", Institution of Civil Engineers, 4th November 1998, CRC, pp 101-113.
- [17] **Higgins, K. G.**, Edmonds, H. E., Silva, D., Vaughan, P. R. & Philpott, J. (1999) Ladbroke Grove Station: Investigations, monitoring and remedial work. Proceedings of the Institution of Civil Engineers: Transport, 1999, Vol. 135, Issue 3, Aug, pp 153-161.
- [18] **Higgins, K. G.**, Kovacevic, N. & Potts, D. M. (1999) Use of appropriate soil models in soil structure interaction analyses. Proceedings of the 2nd International Symposium on Pre-Failure Deformation Characteristics of Geomaterials, IS-Turino '99, Vol. 1, September 27-29, 1999, Balkema, pp 773-781.
- [19] **Higgins, K. G.**, Fernie, R., Potts, D. M. & Houston, C. (1999) The use of numerical methods for the design of base propped retaining walls. Proceedings of the International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground, IS-Tokyo '99, Japan, Balkema, pp 511-516.
- [20] **Higgins, K. G.**, Fernie, R., Edmonds, H. E., & Potts, D. M. (1999) A design study for a road tunnel: The effects of construction detail. Proceedings of the International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground, IS-Tokyo '99, Japan, Balkema, pp 105-109.
- [21] **Higgins, K. G.**, Chudleigh, I., St John, H. D. & Potts, D. M. (1999) An example of a pile tunnel interaction problem. Proceedings of the International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground, IS-Tokyo '99, Japan, Balkema, pp 99-103.
- [22] Chudleigh, I., **Higgins, K. G.**, St John, H. D., Potts, D. M. & Schroeder, F. C. (1999) Pile tunnel interaction problems. Proceedings of the International Symposium Tunnel Construction and Piling '99, Olympia, 8th - 10th September 1999, Brintex, pp 172-185.
- [23] **Higgins, K. G.** & Hight, D. W. (1999) The behaviour of engineering structures: Prediction and performance. Proceedings of the 2nd International Symposium on Pre-Failure Deformation Characteristics of Geomaterials, IS-Turino '99, Vol. 2, September 27-29, 1999, Balkema.
- [24] Chudleigh, I., **Higgins, K. G.** & Paterson, J. (2001) The Effects of Deep Foundations on Adjacent Metro Tunnels. Proceedings of the International Symposium Underground Construction 2001, ExCel 18th - 20th September 2001, Brintex.
- [25] **Higgins, K. G.**, Paterson, J., Moriarty, J., Potts, D. M. & Jardine, R. J. (2001) The effect of an excavation in a stiff fissured clay on existing tunnels in close proximity. Proceedings of the International Conference "Response of Buildings to Excavation - Induced Ground Movements". Imperial College, London, 17th - 18th July 2001, CIRIA.
- [26] **Higgins, K. G.**, (2001) Prediction of damage to buildings and subsurface structures from open excavations. Proceedings of the International Conference "Response of Buildings to Excavation - Induced Ground Movements". Imperial College, London, 17th - 18th July 2001, CIRIA.
- [27] Nuseibeh, G. M. **Higgins, K. G.** Cabarkapa, Z. & Zdravkovic, L. (2005) A numerical study of the behaviour of 19th century brick-lined tunnels in London', 11th International Conference of IACMAG, Torino, Italy, pp. 695-702
- [28] Kovacevic, N., **Higgins, K. G.** and Potts, D.M. (2007). Finite element backanalysis of trial bank at Empingham Dam. Proc 10th Int. Conf. Numerical Models in Geomechanics - NUMOG X, Rhodes, Greece, 587-593.
- [29] Kovacevic, N., **Higgins, K. G.**, Potts, D. M. & Vaughan, P. R. (2007) Undrained behaviour of brecciated Upper Lias Clay at Empingham Dam. Géotechnique - Symp. in Print on Stiff Clay – accepted for publication.

- [30] Franzius, J. N., Schroeder, F. C., Grammatikopoulou, A., Cabarkapa, Z., **Higgins, K. G.** & Potts, D. M. (2007) Comparison of different approaches to model compensation grouting. Proc. 10th Int. Conf. on Numerical Models in Geomechanics - NUMOG X, Rhodes (eds G.N. Pande & S. Pietruszczak), Taylor & Francis Group, pp 359-364
- [31] Schroeder, F. C., **Higgins, K. G.**, Wright, P. & Potts, D. M. (2011) Assessment of overbridge openings on the London Underground tunnel network. Proc. 15th Eur. Conf. on Soil Mech. and Geotech. Engng- XV ESMGE, pp 1733-1738
- [32] O'Brien A., **Higgins, K. G.** & Hsu Y. S (2013) Checking and validating numerical software. Geotechnical issues in construction short paper series and 4th conference held on 7th November 2011 at CIRIA London CRIA, X526. RP929. ISBN 978-0-86017-926-9.
- [33] **Higgins, K. G.** (2016) Thermal Piles. Geotechnical issues in construction short paper series and 5th conference held on 3rd December 2012 at CIRIA London CRIA. X530. RP929. ISBN 978-0-86017-929-0.
- [34] **Higgins, K. G.**, Smith, P. & Gasparre, A. (2016) Domestic basements: the need for control & guidance. Geotechnical issues in construction short paper series and 7th conference held on 2nd March 2015 at CIRIA London CRIA.
- [35] O'Brien, A S and **Higgins, K. G.** (2020). The management of advanced numerical modelling in geotechnical engineering - good practice guide, C791, CIRIA, London, UK (ISBN: 978-0-86017-896-5)
- [36] Gasparre A, Crilly M. S. and **Higgins, K. G.** (2021). Developing a simplified model for the design of rafts with settlement reducing piles. Piling 2020: Proceedings of the Piling 2020 Conference. Eds. Higgins K.G, Ainsworth Y., Toll D.G. and Osman A. ICE Publishing: ISBN 978-0-7277-6363-1.
- [37] Kovacevic N., **Higgins K. G.** and Potts D. M. (2023). Resilience of Old British Embankment Dams. Geo-Resiliance: Proceedings of the Geo-Resilience 2023 Conference. (awaiting publication).

CONTRIBUTIONS TO BOOKS

- [38] **Higgins, K. G.** Finite Element Analysis in Geotechnical Engineering, Volume 2, Application. Eds Potts and Zdravkovic. Thomas Telford, London.
 Chapter 3: Earth Retaining Structures.
 Chapter 8: Benchmarking
- [39] Institution of Civil Engineers. Manual of Geotechnical Engineering Vols 1 & 2. ICE Publishing. ISBN 978-0-7277-6685-4. Eds Brown, M. J., Burland, J. B., Chapman, T., **Higgins, K. G.**, Skinner, H. D., & Toll, D. G.

CONFERENCE PROCEEDINGS

- [40] Advances in Geotechnical Engineering, Proceeding of the Skempton Memorial Conference Eds Jardine R., Potts D. M. and **Higgins, K. G.** London, UK, 2004.Thomas Telford, ISBN 0-7277-3264-1
- [41] Piling 2020: Proceedings of the Piling 2020 Conference. Eds. **Higgins, K. G.**, Ainsworth Y., Toll D. G. and Osman A. ICE Publishing: ISBN 978-0-7277-6363-1.