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Preface

This Geotechnical Special Publication (GSP) contains 49 technical papers in the area of deep foundations (traditional driven piles and drilled shafts as well as innovative deep foundation construction technologies) and in situ geotechnical testing and monitoring techniques. An invited keynote paper, prepared by Professor Maosong Huang of Tongji University and Mr. Weidong Wang of East China Architectural Design and Research Institute, presented recent advances in theory and analysis methods for characterizing load carrying capacity and deformation behavior of uplift piles in soft ground. The remaining 48 technical papers are grouped into four sections. The "Piled Raft System and Soil-Structure Interaction" section contains ten papers focusing on analytical study and field monitoring of piled raft foundation system and analysis techniques for soil-foundation-structure interactions. The "Deep Foundations" section contains eighteen papers on the topics related to traditional drilled shafts and driven piles. Twelve technical papers in the "Innovative Foundations" section cover a wide range of non-traditional foundation system, such as anchor piles, rammed concrete piles, SDCM piles, cast-in-place concrete pipe piles, and jacked piles, among others. Eight technical papers in the "In-Situ Testing" section present recent research findings and case studies on in-situ geotechnical testing techniques.

Each paper published in the ASCE Geotechnical Special Publication was peer reviewed in accordance with the standards of practice of the Geo-Institute of the American Society of Civil Engineers. Each paper in this GSP was evaluated by at least two anonymous, qualified, technical reviewers and selected for publication by the proceedings editors. The authors of the accepted papers have addressed the reviewers' comments to the satisfaction of the editors. All published papers are eligible for discussion in the ASCE Journal of Geotechnical and Geoenvironmental Engineering and are also eligible for ASCE awards.

We are thankful to Prof. Yongsheng Li, Chair of GeoShanghai, and Professors Maosong Huang and Imad Al Qadi, Co-chairs, and Professor Baoshan Huang and Dr. Xian Liu, General Secretaries, for their leadership in organizing this conference, and the local organizing committee for their diligent and tireless work for this conference.

The papers in this publication were presented during the GeoShanghai 2010 Conference held in Shanghai, China on June 3 to June 5, 2010. This conference was host by Tongji University, Chinese Institution of Soil Mechanics and Geotechnical Engineering, and Shanghai Society of Civil Engineering. The cooperating agencies include: ASCE Geo-Institute, Transportation Research Board (TRB) of the National Academies, East China Architectural Design and Research Institute Co., Ltd., Deep Foundation Institute, The University of Kansas, University of Illinois at Urbana-

Contents

Keynote Paper

Bearing Capacity and Deformation Characteristics of Uplift Piles in Soft Ground 1
Maosong Huang and Weidong Wang

Section 1: Piled Raft System and Soil-Structure Interaction

Settlement and Load Sharing of Piled Raft of a 162 m High Residential Tower 26
Kiyoshi Yamashita, Junji Hamada, and Yutaka Soga

Effect of Pile Configuration and Load Type on Piled Raft Foundations Performance 34
Meisam Rabiei

A Study on Time-Effects of Piled Raft System by Using Computational Methods 42
Chun-yi Cui, Mao-tian Luan, and Mu-guo Li

Structural Characteristics and Design Technical Keys of Wind Turbine Foundation in Shanghai Donghai-Bridge Offshore Wind Farm 52
Yifeng Lin and Xuan Zhou

Coupled Foundation-Superstructure Analysis and Influence of Building Stiffness on Foundation Response 61
Yat Fai Leung, Neil A. Hoult, Assaf Klar, and Kenichi Soga

Observation of Pile-Soil-Interaction during Cyclic Axial Loading Using Particle Image Velocimetry 67
Hans-Georg Kempfert, Sebastian Thomas, and Berhane Gebreselassie

Analysis of Bridge Response Considering Water-Soil-Pile-Structure Interaction under a Scoured Condition 73
Cheng Lin, Caroline R. Bennett, Robert L. Parsons, and Jie Han

Nonlinear Dynamic Soil–Micropile-Structure Interactions: Centrifuge Tests and FEM Analyses 81
Ahmad Mahboubi and Ali Nazari-Mehr

The Effect of Soil-Pile Separation on the Transfer and Impedance Functions 90
Kamran Panaghi and Ahmad Mahboubi

Numerical Simulation of Pile-Soil-Structure Interaction under Dynamic Loading 96
S. N. Moghaddas Tafreshi

Monitoring In Situ Soil Moisture Variations of Expansive Clay Using Neutron Probes 341
Jie Li and Gang Ren

Correlating Vane Shear Results with Undrained Strength Parameters for Slope Stability Analysis 347
Shuwang Yan, Xiaowei Feng, and Jinfang Hou

Soft Clay Erosion and Its Undrained Shear Strength Measurements 353
Hang Yin and Guoping Zhang

Estimation of In Situ Strength for Sandy Soils Using CPT Cone Resistance 361
Junhwan Lee, Doohyun Kyung, and Jungmoo Hong

Interpretation of Piezocone Tests in Venetian Silty Soils and the Issue of Partial Drainage 367
Laura Tonni and Guido Gottardi

Cylindrical Cavity Expansion from a Finite Radius 375
Haiying Huang and Emmanuel Detournay

Identification of Soil Stratigraphy of Soft Deposit in Shanghai from CPTU Test 384
Shui-Long Shen, Jun-Peng Wang, and Lei Ma

Indexes

Author Index 393

Subject Index 395