

Jun 1st

Past Proceedings: First International Conference on Case Histories in Geotechnical Engineering (1984): Vol. III

Multiple Authors

Follow this and additional works at: <http://scholarsmine.mst.edu/icchge>



Part of the [Geotechnical Engineering Commons](#)

Recommended Citation

Authors, Multiple, "Past Proceedings: First International Conference on Case Histories in Geotechnical Engineering (1984): Vol. III" (1988). *International Conference on Case Histories in Geotechnical Engineering*. 2.
<http://scholarsmine.mst.edu/icchge/2icchge/2icchge-past-proceedings/2>

This Article - Conference proceedings is brought to you for free and open access by Scholars' Mine. It has been accepted for inclusion in International Conference on Case Histories in Geotechnical Engineering by an authorized administrator of Scholars' Mine. This work is protected by U. S. Copyright Law. Unauthorized use including reproduction for redistribution requires the permission of the copyright holder. For more information, please contact scholarsmine@mst.edu.

Table of Contents

Guest Lecture

A Case History of Bridge Performance During Earthquakes in Japan	981
T. Iwasaki—JAPAN	

Theme I

Case Histories in Foundations of Structures and Failure Records

Lateral Pile Response from Model Tests in a Large Centrifuge	1011
Y. O. Barton, R. H. G. Parry, W. D. Liam Finn—U.K.	
Down Drag on an Instrumented Bored Pile in Soft Clay	1019
R. K. Bhandari, M. R. Soneja, Devendra Sharma—INDIA	
Stability of Suspension Bridge Anchorage System	1027
Gopal Ranjan, Shamsheer Prakash, Swami Saran, Bhawani Singh—INDIA	
Settlement of Three Grain Tanks on Alluvial Soils Exhibiting Desiccation Profiles	1033
S. R. Saye—U.S.A.	
Dynamic Precompression Treatment—A Case History	1041
F. J. Leon—U.S.A.	
Settlement Performance of a Mat Foundation on Unsaturated Loess.....	1053
Alan J. Lutenecker, Bernard D. Remmes, Leo D. Handfelt—U.S.A.	
Power Plant Construction on a Thick Sand Deposit.....	1059
A. Arcones, A. Soriano—SPAIN	

Theme II

Case Histories in Retaining Structures and Failure Records

Damage and Remedial Measures for Buildings on Hill Slopes	1071
Swami Saran, Gopal Ranjan, Bhawani Singh, A. S. R. Rao—INDIA	

Theme III

Case Histories in Dams, Embankments and Slopes

Slip Failure of Embankment on Soft Marine Clay	1079
K. Y. Yong, S. T. Ting—SINGAPORE	
Evolution of Design and Construction of Lornex L-L Tailings Dam	1083
M. D. (Dal) Scott, Robert C. Lo—CANADA	
Efficacy of Grout Curtain at Ramganga Dam	1089
M. C. Goel, B. N. Sharma—INDIA	
Earth Dams at Nuclear Power Plants	1093
R. Pichumani, D. C. Gupta, L. W. Heller—U.S.A.	
Performance of Some Embankment Dams in India	1097
T. Ramamurthy—INDIA	
Reconsideration of Failure Initiating Mechanisms for Teton Dam	1103
G. A. Leonards, L. W. Davidson—U.S.A.	

Theme V

Case Histories in Geotechnical Earthquake Engineering

Liquefaction of a Soil Deposit During an Earthquake	1117
M. K. Gupta, Shamsheer Prakash—INDIA	
Assessment of Seismic Stability of Earth Dams by Comparative Methods	1123
Rodney J. Huang, Marshall L. Silver—U.S.A.	
Post-Earthquake Failure of a Tailings Dam Due to Liquefaction of the Pond Deposit	1129
Kenji Ishihara—JAPAN	

Theme VI

Case Histories in Machine Foundations

Vibration Studies of Block Type Machine Foundations	1147
S. K. Guha—INDIA	
Forge Hammer Foundation on Dilative Soil	1155
S. J. Yang—CHINA	
Foundation-Rearing-Rotor Interaction Problem in Controlling Vibrations in a 20 mw Turbo-Generator	1157
Krishen Kumar, Shamsheer Prakash—INDIA	

Theme VIII
Case Histories in
Selection of Sites for
Industrial Structures and
Determination of Design
Soil Parameters

- Geotechnical Investigations for Foundation Design for Multi-storeyed Building.....1167
S. C. Handa, Swami Saran, G. Ramasamy, A. S. R. Rao, B. Parkash—INDIA

Theme IX
Miscellaneous
Case Histories

- A Case History of Chemical Attack of a Clay Shale1175
G. H. Glos, D. Hinkle—U.S.A.
- Design and Construction of a Railway Yard, Embankment and
Foundations Under Difficult Groundwater Conditions1183
Hari D. Sharma, S. Sengupta, Glen Harron—CANADA
- Preloading for Large Storage Building1191
A. C. Stamatopoulos, P. C. Kotzias—GREECE
- Densifying a Landfill for Commercial Development.....1195
S. B. Steinberg, R. G. Lukas—U.S.A.
- Dykes on Clay Foundation at Bersimis 21201
S. Z. Akber—CANADA
- Design of Road Cut Adjacent to Existing Structure1209
G. C. Whited, C. N. Laughter—U.S.A.
- A New Method of Stabilization of Soft Soils1215
M. A. Aziz—SINGAPORE
- Ground Movement Characteristics Above Mined Panels in Appalachia -
An Empirical Approach.....1221
M. Karmis, T. Triplett, P. Schilizzi, G. Hasenfus—U.S.A.
- Performance of Preload on Cohesionless Soils.....1229
A. F. Youssef, O. Erol—SAUDIA ARABIA
- Performance of Sand Drains in a Tidal Marsh1235
R. P. Long, W. H. Hover—U.S.A.
- Geotechnical Aspects of the Fort McHenry Tunnel - Design and Construction.....1245
S. K. Sarkar, G. A. Munfakh—U.S.A.

Case History on Dewatering Problems in Shanghai	1255
L. X. Shi—CHINA	
In Situ Stabilization of Two Industrial Sites by Dynamic Compaction	1259
John F. O'Brien, Charles P. Gupton—U.S.A.	
The Behavior of House on Seasonally Frozen Ground	1265
Xu You Zai, Wang Zheng Qiu—CHINA	
Settlements Induced by Soft Ground Tunneling	1269
Miguel P. Romo—MEXICO	
Unplanned Construction of a 210 Ft High Temple	1281
Gopal Ranjan, Shamsheer Prakash—INDIA	
Slurry Trench Wall Replaces Structure Underpinning	1287
E. J. Zeigler, J. L. Wirth, J. R. Miller—U.S.A.	
Ground Improvement for Oil Tank Farm in Indonesia	1297
A. F. Abbs, J. M. Cognon, R. W. N. Kelsey—U.K.	
Twenty-Year Performance of Soil-Cement Dam Facings	1307
T. J. Casias, A. K. Howard—U.S.A.	
Foundation Movement Monitoring of Heavy Structures - A Case History	1313
M. R. Lewis, A. Sanver—U.S.A.	
Dewatering of the Construction Site for a 200-Foot Diameter Clarifier Tank Founded on Sand and Gravel	1319
Grover C. Cox—U.S.A.	
Failure of Salt-Aragonite Storage Pad	1329
Yong S. Chae—U.S.A.	
Performance of Diaphragm Walls in Deep Foundation Excavations	1335
Z. C. Moh, T. F. Song—CHINA	
Stabilization of the Oudenberg Hill in Geraardsbergen	1345
R. De Paepe, M. Wallays—BELGIUM	
Movements Around Transit Tunnels in Mixed Ground	1351
L. Edgers, D. E. Thompson, J. S. Mooney, L. W. Young, Jr.—U.S.A.	
Effectiveness of a Slurry Cutoff Wall at Loeffel Site	1361
G. W. Lee, Jr., S. K. Bhatia, G. A. Swenson, III, S. P. Clemence—U.S.A.	
Improvement of a Dumped Rockfill Foundation by Dynamic Consolidation	1365
Adrian Wightman, Nelson F. Beaton—CANADA	
Upgrading Existing Footings with Micro-Piles	1373
Surinder Singh, E. Itzig Heine—U.S.A.	

Highway Interchange Constructed with Slurry Walls	1385
E. Itzig Heine, Frank A. McDonough, Surinder Singh—U.S.A.	
Construction of Key Lake Tailings Facility	1393
R. B. Knight, J. P. Haile—CANADA	
India's First Venture Relating to Subsurface Drainage by Horizontal Drains	1401
T. K. Natarajan, A.V.S.R. Murty, Deep Chandra—INDIA	
Uranium Mill Tailings Geotechnical Investigations—A Case History	1405
V. Singh, J. B. Berry, D. F. Kapral—U.S.A.	
Dewatering, Hydraulic Failure and Subsequent Analysis of a Sheeted Excavation.....	1415
G. E. Bauer—CANADA	
Expansive Soil Pavement Design Using Case Studies	1421
G. R. McKeen, R. L. Lytton—U.S.A.	
Soft Ground Tunnel Failures in Michigan.....	1429
Jerome C. Neyer—U.S.A.	
Case History—Hyperbolic Cooling Tower Foundation	1435
L. J. Almaleh—U.S.A.	
Subsidence Affects Due to Gypsum Solution in Syracuse, New York	1439
G. W. Lee, S. P. Clemence, S. K. Bhatia, S. Anagnost—U.S.A.	
Direct and Indirect Influence of Mining Related Subsidence on Structural Damages—A Case Study	1443
H. J. Siriwardane, L. K. Moulton—U.S.A.	
The Creation of Additional Space for the Storage of Dredged Materials— A Case History	1447
Nicholas Chryssafopoulos—U.S.A.	
Ground Response, Baltimore Lexington Market Tunnels	1451
J. G. Engels, S. J. Calabrese—U.S.A.	
Mechanism of Dynamic Consolidation and Its Environmental Effect.....	1459
Wang Zhong-qi, Deng Xiang-lin—CHINA	
Pretreatment of a Soft Soil by Surcharging—A Case History	1467
D. Lakner, I. K. Lee, E. Armstrong, O. G. Ingles—AUSTRALIA	
Instrumentation of a Sewer Tunnel in Weak Singapore Soils.....	1473
K. W. Lo, G. P. Karunaratne, S. L. Lee—SINGAPORE	