



The Hong Kong University of Science and Technology
Department of Civil and Environmental Engineering

SEMINAR

Downdrag on Uncoated and Bitumen Coated Piles

By

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Abstract

Downdrag on piles occurs when the soil surrounding the pile settles more than the pile. This leads to an increase in load in the pile and an increase in settlement of the pile top. The following topics will be addressed in this lecture

1. What is downdrag
2. When should one design for downdrag?
3. Predicting the behavior of piles subjected to downdrag
4. Does bitumen coating help and how to select the best one?
5. How to apply the bitumen?
6. Environmental impact of bitumen.
7. What about group effect?

This lecture is the result of a very large research project which lasted 7 years. The topics will be addressed in light of field test data gathered on 20 piles at two sites; one in Edmonton, Canada and one in the New Orleans, USA. Example calculations will be presented and a simple computer program will be distributed.

Date : 21 May 2011, Saturday
Time : 10:30 a.m. – 11:30 a.m.
Venue : Leung Yat Sing Lecture Theatre (LTF)
Civil Engineering Departmental Conference Room
Chia-Wei Woo Academic Concourse
The Hong Kong University of Science and Technology
Clear Water Bay

Biography

Professor Jean-Louis Briaud is Professor and Holder of the Spencer J. Buchanan Chair in the Zachry Department of Civil Engineering at Texas A&M University and the President of Briaud Engineers. He received his Bachelors degree from the Ecole Speciale des Travaux Publics in France in 1972 and his Ph.D. degree from the University of Ottawa in Canada in 1978. His expertise is in foundation engineering and more generally geotechnical engineering. He has served as President of the Association of Geotechnical Engineering Professors in the USA, President of the Geo-Institute of the American Society of Civil Engineers, and is the current President of the International Society for Soil Mechanics and Geotechnical Engineering. Among other awards, he has received the ASCE Ralph Peck Award, the CGS Geoffrey Meyerhof Foundation Engineering Award, the ASTM Hogentogler Award, the ASCE Huber Research Prize, and the ASCE Martin Kapp Award. Over the last 30 years, Dr. Briaud has conducted about 8.5 million dollars of research most of which was on foundations and retaining walls. He has supervised 37 PhD students and 81 Master students. He is the author of a book on the pressuremeter, has published about 300 articles, manuals, reports, and has lectured worldwide in geotechnical engineering.

***** ALL ARE WELCOME *****

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