

1. Record Nr.	UNINA9910350318303321
Autore	Zhu Hanhua
Titolo	Controlling Differential Settlement of Highway Soft Soil Subgrade : A New Method and Its Engineering Applications // by Hanhua Zhu, Zhijun Wu, Mengchong Chen, Yongli Zhao
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-13-0722-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XI, 106 pages, 63 illustrations)
Collana	SpringerBriefs in Applied Sciences and Technology, , 2191-530X
Disciplina	624.15
Soggetti	Engineering geology Engineering—Geology Foundations Hydraulics Transportation engineering Traffic engineering Mechanics Mechanics, Applied Geoengineering, Foundations, Hydraulics Transportation Technology and Traffic Engineering Solid Mechanics Classical Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index
Nota di contenuto	Analysis of Differential Settlement of Highway Soft Soil Subgrade -- Overview of Highway Soft Soil Subgrade Differential Settlement Treatment Method (Including Bridgehead Bumping) -- Enlightenment of Stability in Ancient Structures -- Exploration of Rational Structure and Solution Method of Highway Soft Soil Subgrade -- Contrast Test and Calculation Analysis of Stability and Looseness of Highway Soft Soil Subgrade -- Comparative Experimental Study on Strength and Rheological Characteristics of Soft Soil Foundation -- Basic Characteristics and Design Method of Highway Soft Soil Subgrade -- Practical Design Method of Highway Soft Soil Subgrade -- Construction

Practice of Cement Mixed Lime Soil Subgrade in Jiaying -- Treatment
Practice of "Bridgehead Bumping" of Existing Highway in Taizhou --
Treatment Practice of Bumping at Bridgehead of Wenzhou Highway --
Treatment Practice of Bumping at Bridgehead of Ningbo Highway.

Sommario/riassunto

This book presents a new method for controlling the "bridge-head bumping" in soft soil ground based on years of practical on-site experience, which will be a valuable guide for engineers in Civil Engineering and Geotechnical Engineering. The soil properties of soft soil ground have the characteristics of big void ratio, high compressibility, high water content, low impermeability, low strength, strong structure and strong sensitivity. As a result, the soil ground presents very high rheological property. Therefore, controlling the "bridge-head bumping" in soft soil ground is essential for controlling the amount of the soil rheology induced unstable successive settlement. Based on the deformation compatibility and control theory of structure, this book proposes strategies to improve the design method of soft soil ground and the effective "bridge-head bumping" control method. .
