

Geotechnical Engineering Foundation Design John Solution Manual

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Geomechanics in Soil, Rock, and Environmental Engineering - John Small 2018-09-03

Utilizes both Computer- and Hand-Based Calculations... Modern practice in geomechanics is becoming increasingly reliant on computer-based software, much of which can be obtained through the Internet. In *Geomechanics in Soil, Rock, and Environmental Engineering* the application of these numerical techniques is examined not only for soil mechanics, but also for rock mechanics and environmental applications. ... For Use in Complex Analysis It deals with the modern analysis of shallow foundations, deep foundations, retaining structures, and excavation and tunneling. In recent years, the environment has become more and more important, and so it also deals with municipal and mining waste and solutions for the disposal and containment of the waste. Many fresh solutions to problems are presented to enable more accurate and advanced designs to be carried out. A Practical Reference for Industry Professionals, This Illuminating Book: Offers a broad range of coverage in soil mechanics, rock mechanics, and environmental engineering Incorporates the author's more than 40 years of academic and practical design experience Describes the latest applications that have emerged in the last ten years Supplies references readily available online for futher research *Geomechanics in Soil, Rock, and Environmental Engineering* should appeal to students in their final undergraduate course in geomechanics or master's students, and should also serve as a useful reference to practitioners in the field of geomechanics, reflecting the author's background in both industry and academia.

Numerical Methods in Geomechanics - J.B. Martins 2012-12-06

Proceedings of the NATO Advanced Study Institute, Braga, Portugal, August 24-September 4, 1981

Drilled Shaft Design and Construction Guidelines Manual - Lymon C. Reese 1977

Geotechnical Engineering Design - Ming Xiao 2015-04-07

An accessible, clear, concise, and contemporary course in geotechnical engineering design. covers the major in geotechnical engineering packed with self-test problems and projects with an on-line detailed solutions manual presents the state-of-the-art field practice covers both Eurocode 7 and ASTM standards (for the US)

Hidden Aspects of Urban Planning - Fiona Chow 2002

Growing urban populations have resulted in the development of marginal land and brownfield sites as well as increasing the desirability of maximum utilisation of underground space. As a result, there is an increasing need for urban planners and developers to understand the geotechnical and geo-environmental issues involved in urban construction. Hidden aspects of urban planning aims to raise the awareness of geotechnical and geoenvironmental issues among urban planners and within the urban planning frameworks across Europe.

Civil Engineering Problems and Solutions - Donald G. Newnan 2004-05

Written by 6 professors, each with a Ph.D. in Civil Engineering; A detailed description of the examination and suggestions on how to prepare for it; 195 exam, essay, and multiple-choice problems with a total of 510 individual questions; A complete 24-problem sample exam; A detailed step-by-step solution for every problem in the book; This book may be used as a separate, stand-alone volume or in conjunction with Civil Engineering License Review, 14th Edition (0-79318-546-7). Its chapter topics match those of the License

Review book. All of the problems have been reproduced for each chapter, followed by detailed step-by-step solutions. Similarly, the 24-problem sample exam (12 essay and 12 multiple-choice problems) is given, followed by step-by-step solutions to the exam. Engineers looking for a CE/PE review with problems and solutions will buy both books. Those who want only an elaborate set of exam problems, a sample exam, and detailed solutions to every problem will purchase this book. 100% problems and solutions.

Geotechnical Engineering - Jean-Louis Briaud 2013-10-28

Written by a leader on the subject, *Introduction to Geotechnical Engineering* is first introductory geotechnical engineering textbook to cover both saturated and unsaturated soil mechanics. Destined to become the next leading text in the field, this book presents a new approach to teaching the subject, based on fundamentals of unsaturated soils, and extending the description of applications of soil mechanics to a wide variety of topics. This groundbreaking work features a number of topics typically left out of undergraduate geotechnical courses.

Design of Foundation Systems - N. P. Kurian 2005

This textbook first published in 1992 now appearing in its third edition retains the best features from the earlier editions and adds significantly to the contents, which include developments in the 1990s.

Geotechnical Engineering Investigation Handbook, Second Edition - Roy E. Hunt 2005-04-12

The *Geotechnical Engineering Investigation Handbook* provides the tools necessary for fusing geological characterization and investigation with critical analysis for obtaining engineering design criteria. The second edition updates this pioneering reference for the 21st century, including developments that have occurred in the twenty years since the first edition was published, such as: • Remotely sensed satellite imagery • Global positioning systems (GPS) • Geophysical exploration • Cone penetrometer testing • Earthquake studies • Digitizing of data recording and retrieval • Field and laboratory testing and instrumentation • Use of the Internet for data retrieval The *Geotechnical Engineering Investigation Handbook, Second Edition* is a comprehensive guide to a complete investigation: study to predict geologic conditions; test-boring procedures; various geophysical methods and when each is appropriate; various methods to determine engineering properties of materials, both laboratory-based and in situ; and formulating design criteria based on the results of the analysis. The author relies on his 50+ years of professional experience, emphasizing identification and description of the elements of the geologic environment, the data required for analysis and design of the engineering works, and procuring the data. By using a practical approach to problem solving, this book helps engineers consider geological phenomena in terms of the degree of their hazard and the potential risk of their occurrence.

Soil Mechanics - 1982

The Civil Engineering Handbook - W.F. Chen 2002-08-29

First published in 1995, the award-winning *Civil Engineering Handbook* soon became known as the field's definitive reference. To retain its standing as a complete, authoritative resource, the editors have incorporated into this edition the many changes in techniques, tools, and materials that over the last seven years have found their way into civil engineering research and practice. The *Civil Engineering Handbook, Second Edition* is more comprehensive than ever. You'll find new, updated, and expanded coverage in every

section. In fact, more than 1/3 of the handbook is new or substantially revised. In particular you'll find increased focus on computing reflecting the rapid advances in computer technology that has revolutionized many aspects of civil engineering. You'll use it as a survey of the field, you'll use it to explore a particular subject, but most of all you'll use The Civil Engineering Handbook to answer the problems, questions, and conundrums you encounter in practice.

Geotextile Testing and the Design Engineer - Joseph E. Fluet 1987

This publication, *Geotextile Testing and the Design Engineer*, contains papers presented at the international symposium of the same name held in Los Angeles, California on 26 June 1985. The symposium was sponsored by ASTM Committee D-35 on Geotextiles, Geomembranes, and Related Products. Joseph E. Fluet, Jr., of GeoServices Inc. Consulting Engineers, presided as symposium chairman and was editor of this publication.

Analysis, Design and Construction of Foundations - Y M Cheng 2021-02-22

Analysis, Design and Construction of Foundations outlines methods for analysis and design of the construction of shallow and deep foundations with particular reference to case studies in Hong Kong and China, as well as a discussion of the methods used in other countries. It introduces the main approaches used by geotechnical and structural engineers, and the precautions required for planning, design and construction of foundation structures. Some computational methods and computer programmes are reviewed to provide tools for performing a more realistic analysis of foundation systems. The authors examine in depth the methods used for constructing shallow foundations, deep foundations, excavation and lateral support systems, slope stability analysis and construction, and ground monitoring for proper site management. Some new and innovative foundation construction methods are also introduced. It is illustrated with case studies of failures and defects from actual construction projects. Some advanced and modern theories are also covered in this book. This book is more targeted towards the understanding of the basic behavior and the actual construction of many geotechnical works, and this book is not dedicated to any design code or specification, though Euro codes and Hong Kong code are also used in this book for illustration. It is ideal for consulting geotechnical engineers, undergraduate and postgraduate students.

Bridge Engineering Handbook - Wai-Fah Chen 2014-01-24

Over 140 experts, 14 countries, and 89 chapters are represented in the second edition of the *Bridge Engineering Handbook*. This extensive collection highlights bridge engineering specimens from around the world, contains detailed information on bridge engineering, and thoroughly explains the concepts and practical applications surrounding the

Foundations & Earth Structures - 1986

Soil Properties and their Correlations - Michael Carter 2016-07-21

An essential guide to improving preliminary geotechnical analysis and design from limited data *Soil Properties and their Correlations, Second Edition* provides a summary of commonly-used soil engineering properties and gives a wide range of correlations between the various properties, presented in the context of how they will be used in geotechnical design. The book is divided into 11 chapters: Commonly-measured properties; Grading and plasticity; Density; Permeability, Consolidation and settlement; Shear strength; California bearing ratio; Shrinkage and swelling characteristics; Frost susceptibility; Susceptibility to combustion; and Soil-structure interfaces. In addition, there are two appendices: Soil classification systems; and Sampling methods. This new, more comprehensive, edition provides material that would be of practical assistance to those faced with the problem of having to estimate soil behaviour from little or no laboratory test data. Key features: Soil properties explained in practical terms. A large number of correlations between different soil properties. A valuable aid for assessing design values of properties. Clear statements on practical limitations and accuracy. An invaluable source of reference for experienced professionals working on geotechnical design, it will also give students and early-career engineers an in-depth appreciation of the appropriate use of each property and the pitfalls to avoid.

Foundations and Earth Structures - 1982

Modeling in Geotechnical Engineering - Pijush Samui 2020-12-01

Modeling in Geotechnical Engineering is a one stop reference for a range of computational models, the theory explaining how they work, and case studies describing how to apply them. Drawing on the expertise of contributors from a range of disciplines including geomechanics, optimization, and computational engineering, this book provides an interdisciplinary guide to this subject which is suitable for readers from a range of backgrounds. Before tackling the computational approaches, a theoretical understanding of the physical systems is provided that helps readers to fully grasp the significance of the numerical methods. The various models are presented in detail, and advice is provided on how to select the correct model for your application. Provides detailed descriptions of different computational modelling methods for geotechnical applications, including the finite element method, the finite difference method, and the boundary element method Gives readers the latest advice on the use of big data analytics and artificial intelligence in geotechnical engineering Includes case studies to help readers apply the methods described in their own work

Foundation Engineering Handbook - Hsai-Yang Fang 2013-06-29

More than ten years have passed since the first edition was published. During that period there have been a substantial number of changes in geotechnical engineering, especially in the applications of foundation engineering. As the world population increases, more land is needed and many soil deposits previously deemed unsuitable for residential housing or other construction projects are now being used. Such areas include problematic soil regions, mining subsidence areas, and sanitary landfills. To overcome the problems associated with these natural or man-made soil deposits, new and improved methods of analysis, design, and implementation are needed in foundation construction. As society develops and living standards rise, tall buildings, transportation facilities, and industrial complexes are increasingly being built. Because of the heavy design loads and the complicated environments, the traditional design concepts, construction materials, methods, and equipment also need improvement. Further, recent energy and material shortages have caused additional burdens on the engineering profession and brought about the need to seek alternative or cost-saving methods for foundation design and construction.

Using the Engineering Literature, Second Edition - Bonnie A. Osif 2016-04-19

With the encroachment of the Internet into nearly all aspects of work and life, it seems as though information is everywhere. However, there is information and then there is correct, appropriate, and timely information. While we might love being able to turn to Wikipedia® for encyclopedia-like information or search Google® for the thousands of links on a topic, engineers need the best information, information that is evaluated, up-to-date, and complete. Accurate, vetted information is necessary when building new skyscrapers or developing new prosthetics for returning military veterans While the award-winning first edition of *Using the Engineering Literature* used a roadmap analogy, we now need a three-dimensional analysis reflecting the complex and dynamic nature of research in the information age. Using the *Engineering Literature, Second Edition* provides a guide to the wide range of resources available in all fields of engineering. This second edition has been thoroughly revised and features new sections on nanotechnology as well as green engineering. The information age has greatly impacted the way engineers find information. Engineers have an effect, directly and indirectly, on almost all aspects of our lives, and it is vital that they find the right information at the right time to create better products and processes. Comprehensive and up to date, with expert chapter authors, this book fills a gap in the literature, providing critical information in a user-friendly format.

Structural Concrete - M. Nadim Hassoun 2020-02-26

The leading structural concrete design reference for over two decades—updated to reflect the latest ACI 318-19 code A go-to resource for structural engineering students and professionals for over twenty years, this newly updated text on concrete structural design and analysis reflects the most recent ACI 318-19 code. It emphasizes student comprehension by presenting design methods alongside relevant codes and standards. It also offers numerous examples (presented using SI units and US-SI conversion factors) and practice problems to guide students through the analysis and design of each type of structural member. New to *Structural Concrete: Theory and Design, Seventh Edition* are code provisions for transverse reinforcement and shear in wide beams, hanger reinforcement, and bi-directional interaction of one-way shear. This edition also includes the latest information on two-way shear strength, ordinary walls, seismic

loads, reinforcement detailing and analysis, and materials requirements. This book covers the historical background of structural concrete; advantages and disadvantages; codes and practice; and design philosophy and concepts. It then launches into a discussion of the properties of reinforced concrete, and continues with chapters on flexural analysis and design; deflection and control of cracking; development length of reinforcing bars; designing with the strut-and-tie method; one-way slabs; axially loaded columns; and more. Updated to align with the new ACI 318-19 code with new code provisions to include: transverse reinforcement and shear in wide beams, hanger reinforcement, bi-directional interaction of one-way shear, and reference to ACI certifications Includes dozens of worked examples that explain the analysis and design of structural members Offers updated information on two-way shear strength, seismic loads, materials requirements, and more Improves the design ability of students by explaining code requirements and restrictions Provides examples in SI units in every chapter as well as conversion factors from customary units to SI Offers instructors access to a solutions manual via the book's companion website Structural Concrete: Theory and Design, Seventh Edition is an excellent text for undergraduate and graduate students in civil and structural engineering programs. It will also benefit concrete designers, structural engineers, and civil engineers focused on structures.

Bridge Engineering Handbook, Five Volume Set - Wai-Fah Chen 2014-01-24

Over 140 experts, 14 countries, and 89 chapters are represented in the second edition of the Bridge Engineering Handbook. This extensive collection provides detailed information on bridge engineering, and thoroughly explains the concepts and practical applications surrounding the subject, and also highlights bridges from around the world. Published

Numerical Methods in Geotechnical Engineering - Michael A. Hicks 2014-05-29

Numerical Methods in Geotechnical Engineering contains the proceedings of the 8th European Conference on Numerical Methods in Geotechnical Engineering (NUMGE 2014, Delft, The Netherlands, 18-20 June 2014). It is the eighth in a series of conferences organised by the European Regional Technical Committee ERTC7 under the auspices of the International

Geotechnical Engineering Handbook - Braja M. Das 2010-03

The Geotechnical Engineering Handbook brings together essential information related to the evaluation of engineering properties of soils, design of foundations such as spread footings, mat foundations, piles, and drilled shafts, and fundamental principles of analyzing the stability of slopes and embankments, retaining walls, and other earth-retaining structures. The Handbook also covers soil dynamics and foundation vibration to analyze the behavior of foundations subjected to cyclic vertical, sliding and rocking excitations and topics addressed in some detail include: environmental geotechnology and foundations for railroad beds.

Soil Mechanics Vol.1 - Pile Buck 2012-09-28

This excellent handbook combines four technical manuals covering Site Investigations, Laboratory Testing of Soils and basic Soils Engineering applicable to the Planning, Design and Construction of Pile Foundations and other major Civil Structures. Our manual reviews the various methods of conducting site investigations and laboratory and field testing, preliminary to project design. Covering the basics of soils identification procedures and goes on to settlement behavior, seepage, slope stability and other important subjects. Detailing some more difficult technical subjects including seismic activity and vibrations to some of the modern solutions for soils stabilization such as vibro-flotation and cement or chemical grouting methods.

Handbook of Geotechnical Investigation and Design Tables - Burt G. Look 2017-06-29

This practical handbook of properties for soils and rock contains in a concise tabular format the key issues relevant to geotechnical investigations, assessments and designs in common practice. There are brief notes on the application of the tables. These data tables are compiled for experienced geotechnical professionals who require a reference do

Innovative Solutions in Structural and Geotechnical Engineering - 1999

Craig's Soil Mechanics - Jonathan Knappett 2019-10-11

Craig's Soil Mechanics continues to evolve and remain the definitive text for civil engineering students

worldwide. It covers fundamental soil mechanics and its application in applied geotechnical engineering from A to Z and at the right depth for an undergraduate civil engineer, with sufficient extension material for supporting MSc level courses, and with practical examples and digital tools to make it a useful reference work for practising engineers. This new edition now includes: Restructured chapters on foundations and earthworks, the latter including new material on working platforms and collapse of underground cavities (sinkhole formation). New mobilised-stress-based deformation methods that can straightforwardly be used with both linear and non-linear soil stiffness models and field measurements of shear wave velocity, for serviceability limit state design. Extended sets of correlations for making sensible first estimates of soil parameters, adding deformation-based parameters for broader coverage than the Eighth Edition. Extended section on robust statistical selection of characteristic soil parameters. Greater use of consolidation theory throughout in determining whether actions, processes and laboratory/in-situ tests are drained or undrained. Extended chapter on in-situ testing, adding the Flat Dilatometer Test (DMT), and interpretation of consolidation parameters from CPTU and DMT testing. An updated section on pile load testing. Additional worked examples and end-of-chapter problems covering new material, with fully worked solutions for lecturers. The electronic resources on the book's companion website are developed further, with the addition of two new spreadsheet numerical analysis tools and improvement of existing tools from the Eighth Edition. Using these, readers can take real soil test data, interpret its mechanical properties and apply these to a range of common geotechnical design problems at ultimate and serviceability limiting states.

Principles of Foundation Engineering - Braja M. Das 2018-10-03

Master the core concepts and applications of foundation analysis and design with Das/Sivakugan's best-selling PRINCIPLES OF FOUNDATION ENGINEERING, 9th Edition. Written specifically for those studying undergraduate civil engineering, this invaluable resource by renowned authors in the field of geotechnical engineering provides an ideal balance of today's most current research and practical field applications. A wealth of worked-out examples and figures clearly illustrate the work of today's civil engineer, while timely information and insights help readers develop the critical skills needed to properly apply theories and analysis while evaluating soils and foundation design. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

The Manual of Bridge Engineering - M. J. Ryall 2000

- Bridge type, behaviour and appearance David Bennett, David Bennett Associates · History of bridge development · Bridge form · Behaviour - Loads and load distribution Mike Ryall, University of Surrey · Brief history of loading specifications · Current code specification · Load distribution concepts · Influence lines - Analysis Professor R Narayanan, Consulting Engineer · Simple beam analysis · Distribution co-efficients · Grillage method · Finite elements · Box girder analysis: steel and concrete · Dynamics - Design of reinforced concrete bridges Dr Paul Jackson, Gifford and Partners · Right slab · Skew slab · Beam and slab · Box - Design of prestressed concrete bridges Nigel Hewson, Hyder Consulting · Pretensioned beams · Beam and slab · Pseudo slab · Post tensioned concrete beams · Box girders - Design of steel bridges Gerry Parke and John Harding, University of Surrey · Plate girders · Box girders · Orthotropic plates · Trusses - Design of composite bridges David Collings, Robert Benaim and Associates · Steel beam and concrete · Steel box and concrete · Timber and concrete - Design of arch bridges Professor Clive Melbourne, University of Salford · Analysis · Masonry · Concrete · Steel · Timber - Seismic analysis of design Professor Elnashai, Imperial College of Science, Technology and Medicine · Modes of failure in previous earthquakes · Conceptual design issues · Brief review of seismic design codes - Cable stayed bridges - Daniel Farquhar, Mott MacDonald · Analysis · Design · Construction - Suspension bridges Vardaman Jones and John Howells, High Point Rendel · Analysis · Design · Construction - Moving bridges Charles Birnstiel, Consulting engineer · History · Types · Special problems - Substructures Peter Lindsell, Peter Lindsell and Associates · Abutments · Piers - Other structural elements Robert Broome et al, WS Atkins · Parapets · Bearings · Expansion joints - Protection Mike Mulheren, University of Surrey · Drainage · Waterproofing · Protective coating/systems for concrete · Painting system for steel · Weathering steel · Scour protection · Impact protection - Management systems and strategies Perrie Vassie, Transport Research Laboratory · Inspection · Assessment · Testing · Rate of deterioration · Optimal maintenance programme · Prioritisation · Whole life costing · Risk analysis -

Inspection, monitoring, and assessment Charles Abdunur, Laboratoire Central Des Ponts et Chaussées · Main causes of deterioration · Investigation methods · Structural evaluation tests · Stages of structural assessment · Preparing for recalculation - Repair and Strengthening John Darby, Consulting Engineer · Repair of concrete structures · Metal structures · Masonry structures · Replacement of structures
Applied Mechanics Reviews - 1986

Advances in Urban Geotechnical Engineering - S. Sonny Kim 2021-07-13

This volume discusses a compilation of studies regarding transportation geotechnics, geomechanics, rock mechanics, and geosynthetics reinforced soils from the 6th GeoChina International Conference held in NanChang, China, July 19-21, 2021.

Geotechnical Engineering Circular No. 6 - Robert E. Kimmerling 2002-09-02

This document is the sixth in a series of Geotechnical Engineering Circulars (GEC) developed by the Federal Highway Administration (FHWA). This Circular focuses on the design, procurement and construction of shallow foundations for highway structures. The intended users are practicing geotechnical, foundation and structural engineers involved with the design and construction of transportation facilities.

Introductory Geotechnical Engineering - Hsai-Yang Fang 2006-08-21

Integrating and blending traditional theory with particle-energy-field theory, this book provides a framework for the analysis of soil behaviour under varied environmental conditions. This book explains the why and how of geotechnical engineering in an environmental context. Using both SI and Imperial units, the authors cover: rock mechanics soil mechanics and hydrogeology soil properties and classifications and issues relating to contaminated land. Students of civil, geotechnical and environmental engineering and practitioners unfamiliar with the particle-energy-field concept, will find that this book's novel approach helps to clarify the complex theory behind geotechnics.

Structural Foundation Designers' Manual - W. G. Curtin 2008-04-15

This manual for civil and structural engineers aims to simplify as much as possible a complex subject which is often treated too theoretically, by explaining in a practical way how to provide uncomplicated, buildable and economical foundations. It explains simply, clearly and with numerous worked examples how economic foundation design is achieved. It deals with both straightforward and difficult sites, following the process through site investigation, foundation selection and, finally, design. The book: includes chapters on many aspects of foundation engineering that most other books avoid including filled and contaminated sites mining and other man-made conditions features a step-by-step procedure for the design of lightweight and flexible rafts, to fill the gap in guidance in this much neglected, yet extremely economical foundation solution concentrates on foundations for building structures rather than the larger civil engineering foundations includes many innovative and economic solutions developed and used by the authors' practice but not often covered in other publications provides an extensive series of appendices as a valuable reference source. For the Second Edition the chapter on contaminated and derelict sites has been updated to take account of the latest guidelines on the subject, including BS 10175. Elsewhere, throughout the book, references have been updated to take account of the latest technical publications and relevant British Standards.

Characteristics of Geologic Materials and Formations - Roy E. Hunt 2006-10-25

Properly understanding and characterizing geologic materials and formations is vital for making critical engineering decisions. Identifying and classifying rock masses and soil formations allows reasonable estimation of their characteristic properties. Comprising chapters from the second edition of the revered *Geotechnical Engineering Investigation*

Analysis and Design of Geotechnical Structures - Manuel Matos Fernandes 2020-08-27

Analysis and design of geotechnical structures combines, in a single endeavor, a textbook to assist students in understanding the behavior of the main geotechnical works and a guide for practising geotechnical engineers, designers, and consultants. The subjects are treated in line with limit state design, which underpins the Eurocodes and most North America design codes. Instructors and students will value innovative approaches to numerous issues refined by the experience of the author in teaching generations of enthusiastic students. Professionals will gain from its comprehensive treatment of the topics covered in each chapter, supplemented by a plethora of informative material used by consultants and designers. For the benefit of both academics and professionals, conceptual exercises and practical geotechnical design problems are proposed at the end of most chapters. A final annex includes detailed resolutions of the exercises and problems.

Tall Building Foundation Design - Harry G. Poulos 2017-07-20

This book provides a comprehensive guide to the design of foundations for tall buildings. After a general review of the characteristics of tall buildings, various foundation options are discussed followed by the general principles of foundation design as applied to tall buildings. Considerable attention is paid to the methods of assessment of the geotechnical design parameters, as this is a critical component of the design process. A detailed treatment is then given to foundation design for various conditions, including ultimate stability, serviceability, ground movements, dynamic loadings and seismic loadings. Basement wall design is also addressed. The last part of the book deals with pile load testing and foundation performance measurement, and finally, the description of a number of case histories. A feature of the book is the emphasis it places on the various stages of foundation design: preliminary, detailed and final, and the presentation of a number of relevant methods of design associated with each stage.

Problem Solving in Soil Mechanics - A. Aysen 2021-07-13

Written for university students taking first-degree courses in civil engineering, environmental and agricultural engineering, *Problem Solving in Soil Mechanics* stimulates problem-solving learning as well as facilitating self-teaching. Generally assuming prior knowledge of subject, necessary basic information is included to make it accessible to readers new to the topic. Filled with worked examples, new and advanced topics and with a flexible structure that means it can be adapted for use in second, third and fourth year undergraduate courses in soil mechanics, this book is also a valuable resource for the practising professional engineer as well as undergraduate and postgraduate students. Primarily designed as a supplement to *Soil Mechanics: Basic Concepts and Engineering Applications*, this book can be used by students as an independent problem-solving text, since there are no specific references to any equations or figures in the main book.

Drilled Shaft Design and Construction Guidelines Manual: Reese, L. C., and Allen, J. D., Structural analysis and design for lateral loading - Lymon C. Reese 1977