1. Record Nr. UNINA9910792034803321

Autore	Clancy John, Dip. Arch.
Titolo	Site surveying and levelling / / John Clancy
Pubbl/distr/stampa	Abingdon, Oxon : , : Routledge, , 2011
ISBN	1-135-13816-8 0-08-092848-X 1-299-28760-3 1-135-13817-6
Edizione	[Second edition.]
Descrizione fisica	1 online resource (332 p.)
Disciplina	526.9
Soggetti	Surveying Leveling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	First published by Butterworth-Heinemann in 1991.
Nota di contenuto	Cover; Site Surveying and Levelling; Copyright; Contents; Preface to 2nd Edition; Preface to 1st Edition; Acknowledgements; Introduction - what is surveying?; Types of surveyor; The origins of land survey; Land surveying as it affects the construction industry; 1 Basic Principles; 1.1 Purposes of surveying; 1.2 Branches of surveying; 1.3 Branches of technique; 1.4 Basic survey methods; 1.5 Conducting a survey; 1.5.8 Ordnance Survey; 1.6 Accuracy and precision; 1.7 Errors; 1.8 Control; 1.9 Summary; Exercises on Chapter 1; 2 Linear measurement - principles and equipment; 2.1 Basic terminology 2.2 Equipment and instruments2.3 Equipment used for linear measurement; 2.4 Use of equipment for linear measurement; 2.5 Instruments for 90° setting-out and slope measurement; 2.6 Use of instruments for measuring angles; 2.7 Equipment for noting information in the field; Exercises on Chapter 2; 3 Linear measurement - fieldwork practice; 3.1 Errors in chaining; 3.2 Measuring offsets; 3.3 Division of the offset area; 3.4 Fixing buildings and artefacts; 3.5 Setting out a right angle by chain and/or tape; 3.6 To drop a perpendicular to a line from a point outside the line 3.7 Setting out a 45° angle3.8 Setting out 60° and 30° angles; 3.9 Obstructions in chaining; 3.10 Chaining free, vision obstructed; 3.11

Chaining obstructed, vision free; 3.12 Chaining and vision both obstructed; 3.13 Other aspects of dealing with obstructions; 3.14 Chain angles; 3.15 Plotting the survey; 3.16 Construction of scales; 3.17 Calculation of areas; 3.18 Summary; Exercises on Chapter 3; 4 Levelling - principles and equipment; 4.1 Reasons for levelling operations; 4.2 Principles of ordinary levelling; 4.3 Methods of obtaining a horizontal line or plane; 4.4 Principles of the level
4.5 Types of level4.6 Instrument adjustments; 4.7 Levelling staves; 4.8 General; Exercises on Chapter 4; 5 Practical levelling and contouring; 5.1 Definitions; 5.2 Ordinary levelling; 5.3 Tacheometry; 5.4 Fieldwork procedure; 5.5 Temporary adjustments; 5.6 Types of level book; 5.7 'One-set up' levelling; 5.8 Series levelling; 5.9 Recriprocal levelling; 5.10 Flying levels; 5.11 Trial levels; 5.12 Principles of area levelling and contouring; 5.13 Direct levelling for contours; 5.14 Indirect levelling for contours; 5.15 Section levelling; 5.16 Inverse levelling; 5.17 Errors and adjustments
5.18 Permissible error in levelling5.19 Adjustment of the level book; 5.20 The permanent adjustments of the level; Exercises on Chapter 5; 6 Angular measurement; 6.1 Uses of the theodolite; 6.2 Development of the theodolite; 6.3 Setting up the theodolite; 6.4 Moving to another station; 6.5 End of the work; 6.6 Reading systems; 6.7 Face of the theodolite and compensated measurement; 6.8 Measurement of horizontal angles; 6.9 Measuring horizontal angles by prismatic compass; 6.10 Bearings; 6.11 Traverse surveys; 6.12 Extending straight lines by theodolite; 6.13 Lining-in by theodolite
6.14 Computation of true horizontal length

Sommario/riassunto

This popular and useful text has been completely revised and up-dated so that it forms and indipensible handbook for any student of surveying.An additional chapter on modern developments is included and the text has also been extended to cover ordnance survey; calculation of areas; computation of true horizontal length; measurement of vertical angles; Code of Measuring Practice; curve ranging and calculations of volumes for earthworks.