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CONSTRUCTION ACCOUNTING:

Financial, Managerial, Auditing, and Tax

Fourth Edition

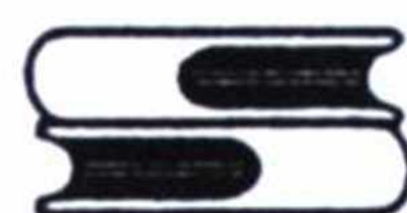
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to Robert and Helen

TABLE OF CONTENTS

Preface xi

Part 1: INTRODUCTION 1

- 1: HOW ACCOUNTING IS USEFUL TO THE CONSTRUCTION FIRM 3**
Introduction 3, Inadequate Construction Accounting 4, Unique Characteristics of Construction Accounting 4, Evolution of Accounting in the Construction Firm 6, Disciplines of Construction Accounting 7

Part 2: FINANCIAL ACCOUNTING 13

- 2: RECOGNIZING ACCOUNTING TRANSACTIONS 15**
Introduction 15, Factors Affecting Financial Transaction Treatment 15, The Basic Accounting Relationship 16, Debits and Credits 18, Typical Construction Financial Transactions 20, Chart of Accounts 40
- 3: ACCOUNTING ENTRIES FOR REVENUE RECOGNITION 42**
Introduction 42, Cash and Accrual Methods 43, Long-Term Contracts 47
- 4: THE BOOKKEEPING PROCESS 57**
Introduction 57, The Accounting Cycle 58, Journals 58, Ledgers 65, Bookkeeping for Construction Labor Costs 68, Bookkeeping for Materials and Purchasing 78, Miscellaneous Ledgers and Accounting Forms 85
- 5: ACCOUNTING ENTRIES FOR ADJUSTMENTS, REVERSALS, AND CHANGES 89**
Introduction 89, Adjusting Journal Entries 89, Closing the Books 92, Reversing Entries 92, Accounting Entries and Switching Accounting Methods 94, Accounting Changes 97

viii Table of Contents

6:	CONSTRUCTION FIRM FINANCIAL STATEMENTS	101
	Introduction 101, Types of Financial Statements 101	
7:	FINANCIAL ANALYSIS OF THE CONSTRUCTION FIRM	118
	Introduction 118, Construction Firm Financial Structure Characteristics 119, Statement Analysis Difficulties 121, Financial Ratio Analysis 123, Industrywide Financial Ratios 127, Trend Analysis 131, Dependence on Surety and Lending Institutions 134, Concerns of Sureties and Lending Institutions 138	
8:	PORTRAYING THE FIRM IN A FAVORABLE LIGHT	140
	Introduction 140, Selecting a Year End for Improving Financial Statements 140, Real Estate on the Construction Firm's Financial Statements 142, Equipment's Effect on the Balance Sheet 144, Liability Term and Balance Sheet Presentation 146, Recognition of Owner's Investment 148, Officer's Receivable and Financial Statements 149, Revenue-Recognition Variation 149, Owner Salary and Financial Statements 151, Income Statement Treatment of Miscellaneous Income 153	
	<i>Part 3: MANAGERIAL ACCOUNTING</i>	155
9:	MANUAL JOB-COST SYSTEMS	157
	Introduction 157, Job-Cost Accounting 157, Standard Costs 163, Write-It-Once Systems 170, General Ledger Systems 174	
10:	MANUAL PROJECT-MANAGEMENT INFORMATION SYSTEMS	176
	Introduction 176, The Integrated Project-Management System 176, Manual Project-Management Information Systems 187	
11:	SELECTION OF COMPUTER SOFTWARE AND APPLICATIONS	207
	Why the Construction Firm is Dependent on Computer Implementation 207, General Ledger Computerized Accounting 208, Project Management Software 210, Future Applications of Computers for Construction Firms 213, Using the Computer as a Graphics Tool 214, Levels of Computer Language 215, Example General Ledger Computer Program 218, Integrated Project Management Using the Microcomputer 225	
12:	CASH FLOW AND BUDGETING	230
	Introduction 230, The Cash Cycle 231, Project Planning 232, Bar Chart Model 233, Project Planning and Cash-Flow Analysis 239, Managing Cash 243, Cash Budget For the Firm 246, Cash Flow and Changing Conditions 251	
13:	BREAK-EVEN ANALYSIS AND OVERHEAD ALLOCATION	255
	Introduction 255, Cost-Accounting Terminology 256, Methods for Increasing Profits 259, Break-Even Analysis and Contribution 263, Overhead Allocation 265, Absorption Versus Direct Costing 270	
	<i>Part 4: AUDITING</i>	267
14:	FINANCIAL AUDITING	275
	Introduction 275, Auditing and the Independent Public Accountant 276, Unique Construction Auditing Problems 279, Auditing Balance Sheet and Income Statement Accounts 282, Auditing Work in Progress 291, Audited Financial Statements 295	

15:	MANAGEMENT AUDITING 300
	Introduction 300, Objectives of Management Auditing 300, Internal Control Audit for Accounting/Finance 303, Internal Controls for Project Estimate and Control 307, Operational Auditing 309, Compliance Auditing 311
	<i>Part 5: TAX PLANNING 313</i>
16:	INITIAL TAX-PLANNING DECISIONS 315
	Introduction 315, Legal Organizational Structure 316, Tax Planning and Legal Structure 323, Unreasonable Surplus or Excess Earnings 324, Estate-Planning Considerations 325
17:	TAX PLANNING AND REVENUE RECOGNITION 327
	Introduction 327, Cash and Accrual Methods 328, Long-Term Contract Methods, 329, Tax Differences of Revenue-Recognition Methods 333, Practical Considerations of Revenue-Recognition Methods 336, Changing Revenue-Recognition Methods 340, Taxable Income and Financial Reporting Differences 342
18:	DEPRECIATION AND RELATED TAX BENEFITS 345
	Introduction 345, Importance of Depreciation 346, Depreciation Methods 348, Use of Depreciation Methods 351, Acceptable Methods 352, Restrictions on Accelerated Methods 354, Investment Credit 354, Capital Gains 356, Tax Consequences of Fixed Assets 357
	<i>Part 6: VALUE ADDED SERVICES 361</i>
19:	IMPLEMENTING PROGRAMS FOR INCREASING JOB SITE PRODUCTIVITY 363
	Construction Productivity Defined 363, Opportunity to Increase Construction Productivity 365, Ten Step Program to Increase Productivity 366
20:	QUANTIFICATION OF CHANGE ORDERS AND CLAIMS 383
	Base Bid Work 383, Change Order Work 383, Construction Claim 386, Financial Treatment of Claims 387, Quantification of Claim Amount 388, Resolution of Claims 397, Record Keeping to Prevent Claim 398
21:	VALUATION OF THE CONSTRUCTION FIRM 399
	Reasons for Determining the Valuation of the Construction Firm 399
22:	USING NEW TECHNOLOGY TO IMPROVE PRODUCTIVITY 405
	The Importance of Information to the Construction Firm 405, Implementing New Technology for Labor Reporting 407, Controlling Materials, Tools, and Supplies 408, New Technology and Equipment Productivity 410, Daily Reports, Jobsite Record Keeping, and Project Billings 411, Websites for Information Transfer 412
	Index 415

PREFACE

After years of observing and working with numerous construction firms, we have concluded that the use of sound accounting practices is the single most important characteristic of the profitable firm. Successful construction contracting is, in great part, the ability to forecast correctly and control costs efficiently. Fundamental to both tasks is the regular use of good accounting methods.

This book assumes no prior knowledge of accounting, so we have attempted to present accounting and its related practices in an easily understood manner.

For those readers with prior accounting training, the unique characteristics of construction accounting should be of interest. Understandably, the unique characteristics of both the construction process and the businesses themselves result in accounting practices and procedures that differ from those used in other industries. Included in these characteristics are long-term contracts, decentralized accounting, significant dependence of the construction firm on external parties, and poor internal controls. In fact, no business needs accounting more, but practices it less, than the typical construction firm.

This book is meant to interest any construction firm intent on structuring its accounting practices. The objectives are to assist in increasing a firm's profitability while decreasing its risk. Both objectives take into account the relatively low profit margin and high risk typical in construction.

Lending institutions, surety companies, accountants, and other external parties dealing with the construction firm also need a thorough grasp of construction accounting. This understanding is necessary if they are to assist the construction contractor and if they are to evaluate the construction contractor properly. The book attempts to help external parties with both tasks.

An important part of a construction student's training in a college program should include business topics with an emphasis on accounting. Too often, however, such training addresses either the design or the construction supervision phases of the whole process. Design and supervision mainly affect quality-one of construction's three important variables. Accounting in great part addresses the other two variables-time and cost.

Construction accounting is not static. The introduction of automated data processing equipment that utilizes the computer is having a significant impact on

construction accounting practices. Management auditing that aims at improving the overall efficiency and profitability of the construction firm is another example of recent change in accounting practice.

Construction Accounting covers the four most widely recognized divisions of accounting: financial, managerial, auditing, and tax. An introductory chapter precedes these four divisions. This introductory chapter cites some of the special difficulties of construction accounting and identifies accounting areas applicable to construction.

Financial accounting and related material are presented in chapters 2 through 8. Of these, 2 through 5 can be considered as a package of basic accounting principles. Some would maintain that chapter 4, on bookkeeping, should come first. I believe, however, that bookkeeping and all its related forms and procedures are better understood if one first has an understanding of the basic accounting relationship and typical accounting transactions. The accounting relationship and accounting transactions are examined in chapters 2 and 3.

Chapters 6 through 8 address the financial statements of the construction firm. These should be of special interest to any external party who has to interpret these financial statements. Chapter 8 illustrates how the use of alternative accounting methods and principles can result in widely varying financial statement results.

Managerial accounting is discussed in chapters 9 through 13. Here the emphasis is on using accounting for future decision making. This contrasts with the widely held view that accounting is merely a means of reporting on past events.

Management information systems and computers are discussed in chapters 9 through 11. The treatment of these topics reflects their increasing impact on the construction firm, project management, and construction accounting. Chapter 11 has been updated from Edition II to reflect the new computer technology and computer software currently available to the construction firm and industry. The chapter should enable the reader to appraise computer software applications relevant to the construction firm and construction project.

The construction firm's dependence on external parties often results in the need for a financial audit. Chapter 14 discusses the unique difficulties of performing a financial audit of the construction firm. In addition to helping external parties perform an audit, chapter 14 assists the construction firm prepare for an audit.

The concept and procedures of management auditing, to include operational auditing, are presented in chapter 15. Unlike the financial audit that focuses only on financial data, the emphasis of management auditing is on improving the efficiency of the operations that in turn dictate financial results. More and more construction firms are recognizing the value of management auditing.

Chapters 16 through 18 address that far reaching aspect of accounting referred to as tax planning. The emphasis of these three chapters is on ways to lessen the negative impact of tax by tax avoidance and deferral. Discussion is limited to the tax areas commonly confronted by the construction firm.

Part 6, Value Added Services, includes three new chapters. These three new chapters recognize the new and changing services provided by accountants to the

construction clients. One of the best ways to increase construction firm profitability and reduce risk is to increase job site productivity. Many of the procedures to increase job site productivity are accounting oriented. Chapter 19 provides accounting related topics relevant to increasing job site productivity.

Given the difficult and uncertain nature of the construction process, many construction firms encounter the need to prepare a construction claim to the project owner or designer. A key component of these claims is the quantification of financial damages. In chapter 20, accounting related topics are presented to enable the construction firm to prevent, prepare, and present construction changes and claims.

Finally, given the need to sell the construction firm or to restructure the firm, an valuation of the firm has to be quantified. In chapter 21, alternative methods of valuing the construction firm are presented.

The addition of chapters 19–22 recognize the changing business environment of the construction firm and the services provided by the accounting profession. These chapters provide the reader with the tools and procedures to aid the construction firm in a competitive environment.

We would like to thank the staff of Stipes Publishing for their preparation of typesetting and their review of the material. We would also like to thank Sandy, Jim's wife, and Doug's mother for her review of the material and her assistance in typing. Finally we would like to thank the many construction firms that we have serviced. These firms indirectly inspired us to write this textbook.

Peoria, Illinois

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CONSTRUCTION ACCOUNTING

Part 1

INTRODUCTION

CHAPTER

1 How Accounting Is Useful to the Construction Firm