

CONTENTS

ABOUT THE EDITORS	XIII
ABOUT THE AUTHORS	XV
INTRODUCTION	XXVII
CHAPTER 1 THE OWNER'S PERSPECTIVE	1
<i>Lynn Axelroth</i>	
I. Introduction	1
A. The Owner's Objectives	1
B. Contract Documentation and Form Contracts	2
II. The Relationship Between the Owner and the Architect	3
A. Introduction	3
B. Program	6
C. Scope of Services and Related Issues	6
D. Standard of Care	9
E. Ownership of Documents	9
F. Licensing	11
G. Insurance	11
H. Indemnification	11
I. Limitations of Liability	12
J. Dispute Resolution	12
K. Termination of the Architect's Agreement	13
L. Release of Lien	13
III. Relationship with the Contractor	14
A. Introduction	14
B. Types of Contracts	14
C. Contract Documents	17
D. Scope of the Work	19
E. Time	19
F. Progress Payments	21
G. Shop Drawings and Project Design	23

IV CONTENTS

H. Changes	24
I. Safety of Persons and the Work	24
J. Dispute Resolution	24
K. Insurance, Bonding, and Indemnification Provisions	25
L. Environmental Issues	26
M. Warranties and Correction of Defective Work	27
N. Termination	27
IV. Who Is the Owner?	28
A. Public Owners	28
B. Private Owners	30
V. Conclusion	31
CHAPTER 2 THE LENDER'S PERSPECTIVE	33
<i>Richard M. Shapiro</i>	
I. Introduction	33
II. The Lender	33
A. The Lender's Objectives	33
B. Types of Lenders	34
III. Construction Loan Structure	35
A. Loan Agreement	35
B. Promissory Note	39
C. Mortgage or Deed of Trust	39
D. Other Loan Documents	39
E. Guaranties	40
IV. Loan Underwriting Issues	41
V. Relationships with Other Project Participants	44
VI. Defaults and Workouts	45
VII. Conclusion	47
CHAPTER 3 THE DESIGN PROFESSIONAL	49
<i>L. Tyrone Holt</i>	
<i>Matthew J. Ninneman</i>	
<i>Carrie L. Okizaki</i>	
I. Introduction	49
II. Who Is the Design Professional and What Is His Role?	51
III. The Phases of the Design Process	55
A. Programming	55
B. Schematic Design	56
C. Design Development Phase	56
D. Construction Documents Phase	57
E. Bidding and Negotiation Phase	57
F. Contract Administration	57

IV. Defining the Traditional Duties of the Design Professional	58
A. The Common Law “Standard of Care” for Design Professionals	60
V. Defining the Rights of the Design Professional	63
A. Ensuring Payment for “Additional Services”	65
B. Ownership of the Design Documents	66
VI. Sources of the Design Professional’s Liability	68
A. Breach of Contract and Negligence	68
B. Breach of Warranty	71
C. Site Safety Claims	73
D. “Professional Stamp” Claims	74
VII. Managing the Design Professional’s Exposure to Liability	76
A. Indemnification	77
B. Limiting Liability for Failing to Construct in Accordance with the Plans and Specifications	80
C. Economic Loss Doctrine	80
VIII. Arbitration or Litigation	81
IX. Conclusion	82
CHAPTER 4 THE ROLE OF THE PRIME CONTRACTOR	83
<i>John T. Clappison</i>	
I. Introduction	83
II. Variations in Construction Projects: Public Versus Private	84
III. Project Delivery Systems: Different Ways to Do the Work and Different Roles for the Prime Contractor	85
A. The Traditional Design-Bid-Build Model	85
B. Alternative Project Delivery Systems	86
IV. The Bidding Process: Getting the Work	88
A. Overview	88
B. Bid Invitation	89
C. Bid Preparation	90
D. Bid Submission	93
V. Contract Formation: The Conditions Governing the Work	94
A. The Prime Contract	94
B. Subcontracts	96
VI. Contract Performance: Doing the Work	97
A. Staffing the Project	97
B. Scheduling the Work	98
C. Submittals and Shop Drawings	98
D. Requests for Information	99
E. Change Orders and Construction Change Directives	100

F. Payment	101
G. Project Safety	102
H. Other Roles of the Contractor	102
VII. Conclusion	103
CHAPTER 5 THE ROLE OF THE SUBCONTRACTOR	105
<i>David A. Senter</i>	
I. Introduction	105
II. Role of the Subcontractor in the Project	105
A. The Traditional General Contractor/Subcontractor Relationship	106
B. Alternative Subcontractor Relationships	108
III. The Bidding Process from the Subcontractor's Perspective	109
A. In General	109
B. The General Contractor's Use of a Subcontractor's Bid	110
IV. Subcontract Agreements	113
A. Standard Form Agreements	113
B. Commonly Used and Litigated Subcontract Provisions	115
V. Contract Performance	126
A. Changes	126
B. Acceleration, Out-of-Sequence, and Delay Costs	127
C. Shop Drawings and Submittal Requirements	129
D. Site Inspection, Acceptance of Underlying Work, and Site Conditions	131
VI. Disputes and Remedies	132
A. Mechanic's Liens	132
B. Stop Notices and Liens on Funds	137
C. An Alternative Remedy: Payment Bonds	138
D. Payment Bonds on Nonpublic Projects	140
E. Pass-Through Claims against the Owner	140
VII. Conclusion	141
CHAPTER 6 A PRIMER IN CONTRACT SURETY LAW	143
<i>Marilyn Klinger</i>	
<i>Patricia H. Thompson</i>	
<i>Daniel G. Enriquez</i>	
<i>Robert H. Shaffer</i>	
<i>Joseph R. McFaul</i>	
I. Introduction to Suretyship: What Is the Difference between Suretyship and Insurance?	143
II. Surety Underwriting	144

III. Surety's Liability and Defenses under the Bid Bond	148
IV. Surety's Liability and Defenses under the Performance Bond	151
V. Surety's Liability and Defenses under the Payment Bond	153
VI. Release or Discharge Bonds	155
VII. Surety's Right of Subrogation	157
VIII. Surety's Right to Indemnification	159
IX. Conclusion	161
CHAPTER 7 CONSTRUCTION INSURANCE: AN INTRODUCTION	163
<i>Stephen D. Palley</i>	
I. Introduction	163
II. Understanding Construction Insurance	164
A. Seventeen Questions to Ask about Construction Insurance	164
III. Conclusion	185
Appendix	187
CHAPTER 8 DELIVERY SYSTEMS	189
<i>Robert A. Rubin</i>	
<i>Linda M. Thomas-Mobley</i>	
I. Introduction	189
II. The Anatomy of a Delivery System	190
A. The Cost-Risk Framework	190
B. The Relationship Framework	193
C. The Agreement Framework	201
D. The Party Framework	202
III. Assembling the PDS	203
IV. Conclusion	204
References	204
CHAPTER 9 PAYMENT PROVISIONS	207
<i>L. Wearen Hughes</i>	
<i>Brian M. Dobbs</i>	
I. Contract Price	207
A. Pricing Arrangements	207
B. Contractor's Request for Financial Assurance	209
II. Progress Payments	210
A. Schedule of Values	210
B. Application for Payment	211
C. Certification of Payment	212

VIII CONTENTS

D. Payment for Materials	213
E. Overpayment	213
III. Payment upon Completion	214
A. Substantial Completion	214
B. Final Completion	215
C. Waiver of Claims upon Payment or Acceptance	216
IV. Payment Applications as Information Sources	216
V. Miscellaneous Payment Issues	217
A. Prompt Payment Laws	217
B. Mechanic's Liens and Stop Notices	218
C. Lien Releases and Joint Checks	218
D. Pay-If-Paid and Pay-When-Paid Clauses	219
VI. Conclusion	220
VII. Further Reading	220

CHAPTER 10 CONSTRUCTION PROJECT SCHEDULING 221

Richard F. Smith

John Marshall Cook

I. Importance of Scheduling	221
A. Minimizing Time-Related Costs	221
B. Avoiding Inefficiencies	222
C. Completing Projects on Time	223
D. Using Scheduling as a Management Tool	224
II. Types of Scheduling	224
A. Bar Chart Scheduling	224
B. Critical Path Method Scheduling	225
III. Key Concepts in Scheduling	228
A. Float Concepts and Ownership of Float	228
B. How the Critical Path Changes	230
C. Concurrent Delay	231
D. Acceleration	231
E. Right to Finish Early	232
IV. Determining Responsibility for Delay Using CPM Schedules	233
A. Total Time Technique	234
B. Impacted As-Planned Technique	234
C. Fragnet Technique	235
D. Windows Technique	236
E. Collapsed As-Built Technique	237
F. Selecting an Appropriate Technique	238
V. Conclusion	242

VI. Resources	242
A. Articles	242
B. Regulations	242
C. Books	243
CHAPTER 11 CHANGES IN THE WORK	245
<i>Fred D. Wilshusen</i>	
<i>Christopher D. Montez</i>	
I. Introduction	245
II. Contract Law and Changes	246
III. Notice Requirements	248
IV. Initiating Change Orders	248
A. Force Account	248
B. Construction Change Directive	249
C. Contractor Claims	250
D. Architect-Initiated Claims	251
V. Documenting Change Orders	251
A. Requirement that Changes Be in Writing	251
B. Authority to Approve Changes	252
VI. Pricing and Payment Issues	253
A. Determining the Price	253
B. Pay-If-Paid Issues	254
C. Post-Performance Audit Rights	255
VII. Differing Site Conditions	256
VIII. Force Majeure	257
IX. Constructive Changes	258
X. Cardinal Changes	258
XI. Waiver and Release of Changes	259
XII. Conclusion	261
CHAPTER 12 TERMINATION	263
<i>Gregory L. Cashion</i>	
I. Introduction	263
II. Grounds for Termination by an Owner	264
A. Substandard, Defective, or Nonconforming Work	264
B. Failure to Pay Subcontractors or Suppliers	265
C. Failure to Pursue Work Diligently	265
D. Violation of Laws, Ordinances, or Regulations	266

E. Other Substantial Breaches of Contract	266
F. Termination for Convenience	266
III. Role of Certification by the Initial Decision Maker	267
IV. Notification of Default	268
A. Notice to the Contractor	268
B. Notice to the Surety	268
C. Documenting the Default	269
V. The Owner's Remedies upon Termination for Default	270
A. Taking Possession of the Site, Unused Materials, Equipment, Machinery, and Tools	270
B. Taking an Assignment of Subcontracts or Finding New Subcontractors	270
C. Completing the Project	271
VI. Impact of a Default Termination on the Contractor	271
A. Delays in Completion of the Project	271
B. Increase in the Project Price	272
C. Litigation Risks	272
VII. Damages for Wrongful Termination	272
VIII. Grounds for Termination by a Contractor	273
IX. Practical Considerations	275
X. Conclusion	275
CHAPTER 13 GOVERNMENT CONSTRUCTION CONTRACTING	277
<i>James F. Nagle</i>	
I. General Principles	277
II. Contract Formation	280
III. Governing Law	283
A. Statutes	285
B. Regulations	285
IV. Individuals	290
V. Forums	291
VI. Agencies	293
VII. Subcontracting	293
VIII. Freedom of Information Act	295
IX. Final Words of Caution	295
X. Conclusion	298
CHAPTER 14 CONSTRUCTION DEFECTS	299
<i>Roland Nikles</i>	
I. Introduction	299
II. Some General Types of Construction Defects	300
A. Site and Foundation Defects	300
B. Building Envelope Defects	301

C. Structural Deficiencies	301
D. Mechanical and Electrical System Defects	301
E. Defects in Building Life Safety Systems	301
III. Theories of Liability for Construction Defects	302
A. Theories of Liability that Require Privity of Contract	302
B. Theories of Liability Not Dependent on Privity	305
IV. Common Defenses to Claims for Construction Defects	309
A. Time-Related Defenses	309
B. Category-Based Defenses	311
V. Special Problems Relating to Homeowner Associations	316
A. Rights of Associations	316
B. Liabilities of Associations	317
VI. Insurance for Construction Defects	318
A. Overview: Identifying Policies and Providing Notice	318
B. Types of Policies to Look For	319
C. General Liability Policies	319
D. Builders Risk and Professional Liability Policies	320
E. Property Policies	321
VII. Conclusion	321
CHAPTER 15 CONSTRUCTION DAMAGES	323
<i>Andrew D. Ness</i>	
I. Introduction and General Principles	323
A. Basic Principles of Contract Damages	323
B. Damages for Breach versus Price Adjustment under the Contract	326
C. The Duty to Mitigate Damages	327
II. Damages for Added and Deleted Work	327
III. Damages for Construction Delays	328
A. Contractor's Actual Delay Damages	329
B. Liquidated Delay Damages	334
C. Owner's Actual Delay Damages	334
D. No-Damages-for-Delay Clauses	336
IV. Damages for Inefficiency and Acceleration	337
A. Identifying Labor Disruption and Inefficiency	337
B. Methods for Measuring Inefficiency Damages	337
C. The Total Cost and Modified Total Cost Methods	339
D. Acceleration Costs	340
V. Damages for Defective Construction	340
A. Cost to Repair	340
B. Diminution in Value	341

VI. Damages for Defective Design	341
A. Cost to Correct Erroneous Design Documents	342
B. Cost to Correct Design Errors and Omissions and the Concept of Betterment	342
VII. Damages for Third-Party Claims	343
A. Property Damage and Physical Injury	343
B. The Economic Loss Rule	343
VIII. Other Construction Damages	344
A. Punitive Damages	344
B. Other Types of Liquidated Damages	345
C. Profit	345
D. Interest	346
E. Attorney's Fees and Litigation Costs	346
IX. Conclusion	347
CHAPTER 16 ALTERNATIVE DISPUTE RESOLUTION IN THE 21ST CENTURY	349
<i>Alan E. Harris</i>	
I. Introduction	349
II. On-Site ADR Techniques	350
A. Partnering	350
B. Traditional and Step Negotiations	352
III. Dispute Review Boards	353
IV. Supervised Negotiations	354
A. Mediation	354
B. Mini-Trials	357
V. Med-Arb, A Hybrid Technique	358
VI. Arbitration	359
A. General Principles	359
B. Contractual Arbitration	360
C. Contractual Limitations on the Scope of Arbitration Awards	363
VII. The Role of the Courts in the ADR Process	364
Index	365
Table of Cases	381