

CIVIL Engineer's

ILLUSTRATED SOURCEBOOK

- DESIGN & LAYOUT OF CONSTRUCTION PLANS
- BIDDING PROCESS & ORGANIZATION
- CONSTRUCTION PHASE MONITORING

ROBERT O. PARMLEY, P.E.

CONTENTS

Preface	ix
Introduction	xi

PLANNING

Section 1	TECHNICAL REPORTS	1-1
Section 2	PROJECT SCHEDULING	2-1
Section 3	FIELD RECONNAISSANCE, SURVEYING & MAPPING	3-1
Section 4	PUBLIC MEETINGS	4-1
Section 5	REGULATORY APPROVALS	5-1
Section 6	COST ESTIMATING	6-1

DESIGN

Section 7	TITLE SHEET ORGANIZATION	7-1
Section 8	BUILDINGS	8-1
Section 9	WATER SUPPLY & DISTRIBUTION	9-1
Section 10	FIRE PROTECTION	10-1
Section 11	WASTEWATER COLLECTION & TREATMENT	11-1
Section 12	STORM SEWER SYSTEMS	12-1
Section 13	DAMS & RESERVOIRS	13-1

Section 14	STREETS, ROADS & HIGHWAYS	14-1
Section 15	BRIDGES	15-1
Section 16	AIRPORTS	16-1
Section 17	ATHLETIC FACILITIES	17-1
Section 18	TRAILER COURTS & CAMPGROUNDS	18-1
Section 19	RETROFITTING & REHABILITATION	19-1
Section 20	SPECIALIZED PROJECTS	20-1
Section 21	STANDARD DETAILS	21-1
Section 22	SPECIFICATIONS	22-1

BIDDING PROCESS

Section 23	BIDDING DOCUMENTS	23-1
Section 24	ADVERTISING & BID OPENING	24-1
Section 25	CONSTRUCTION CONTRACTS	25-1

CONSTRUCTION

Section 26	PRE-CONSTRUCTION CONFERENCE	26-1
Section 27	SHOP DRAWINGS	27-1
Section 28	SAFETY	28-1
Section 29	INSPECTION & TESTING	29-1
Section 30	CONSTRUCTION STAKING	30-1
Section 31	CLOSE-OUT	31-1

SUPPLEMENTAL

Section 32	TECHNICAL REFERENCE	32-1
Index		I-1