

TABLE OF CONTENTS

CHAPTER 1 GENERAL INFORMATION

- 1.1 Introduction
- 1.2 Projects Defined
- 1.3 Project Inception
- 1.4 Engineering Reports
- 1.5 Preparation of Construction Plans
- 1.6 Preparation of Construction Specifications
- 1.7 Construction Requirements
- 1.8 As Built Requirements

CHAPTER 2 WATER MAIN DESIGN

- 2.1 General
- 2.2 Design Criteria
- 2.3 Appurtenances
- 2.4 Water House Connections

CHAPTER 3 WATER PUMPING STATIONS, WELL HOUSES AND WATER TOWER DESIGN

- 3.1 Introduction
- 3.2 Regulations
- 3.3 Permits and Approvals
- 3.4 Design Phases
- 3.5 Hydraulic Computations
- 3.6 Design Criteria for Water Pumping Stations
- 3.7 Production Wells
- 3.8 Potable Water Storage Facilities

CHAPTER 4 SEWER MAIN DESIGN

- 4.1 Introduction
- 4.2 Design Criteria
- 4.3 Gravity Sewer Main Design
- 4.4 Pipeline Materials
- 4.5 Gravity Sewer Appurtenances
- 4.6 Sewer House Connections (SHCs)
- 4.7 Force Main Design
- 4.8 Low Pressure Sewer Systems
- 4.9 Vacuum System Design
- 4.10 Hydrogen Sulfide Analysis

CHAPTER 5 WASTEWATER PUMPING STATION DESIGN

- 5.1 Introduction
- 5.2 Regulations
- 5.3 Permits and Approvals
- 5.4 Design Phases
- 5.5 Types of Wastewater Pumping Stations and Selection
- 5.6 Hydraulic Computations
- 5.7 Large Wastewater Pumping Stations
- 5.8 Small Wastewater Pumping Stations
- 5.9 Package Stations

APPENDIX

- Table of Equivalent Dwelling Units
- Review Checklist
- Public Works Agreement
- Construction Permit
- As-Built Requirements
- Design Manual Update Policy
- Standard Cost Tables for Engineer Estimates
- Solar Battery Backup for Pump Stations
- List of Approved Materials & Manufacturers