CHAPTER 1

INTRODUCTION

The design and construction of sewers and culverts are among the most important areas of public works engineering and, like all engineering projects, they involve various stages of development. The information presented in this manual does not cover all phases of the project, and the engineer may need to consult additional references for the data required to complete preliminary surveys.

This manual is a compilation of data on concrete pipe, and it was planned to provide all design information needed by the engineer when he begins to consider the type and shape of pipe to be used. All equations used in developing the figures and tables are shown along with limited supporting theory. A condensed bibliography of literature references is included to assist the engineer who wishes to further study the development of these equations.

Chapters have been arranged so the descriptive information can be easily followed into the tables and figures containing data which enable the engineer to select the required type and size concrete pipe without the lengthy computations previously required. All of these design aids are presently published in engineering textbooks or represent the computer analysis of involved equations. Supplemental data and information are included to assist in completing this important phase of the project, and illustrative example problems are presented in Chapters 2 through 4. A review of these examples will indicate the relative ease with which this manual can be used.