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# Preface

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## SCOPE

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Construction in the theater of operations is normally limited to roads, airfields, and structures necessary for military operations. This manual emphasizes the soils engineering aspects of road and airfield construction. The references give detailed information on other soils engineering topics that are discussed in general terms. This manual provides a discussion of the formation and characteristics of soil and the system used by the United States (US) Army to classify soils. It also gives an overview of classification systems used by other agencies. It describes the compaction of soils and quality control, settlement and shearing resistance of soils, the movement of water through soils, frost action, and the bearing capacity of soils that serve as foundations, slopes, embankments, dikes, dams, and earth-retaining structures. This manual also describes the geologic factors that affect the properties and occurrences of natural mineral/soil construction materials used to build dams, tunnels, roads, airfields, and bridges. Theater-of-operations construction methods are emphasized throughout the manual.

## PURPOSE

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This manual supplies engineer officers and noncommissioned officers with doctrinal tenets and technical facts concerning the use and management of soils during military construction. It also provides guidance in evaluating soil conditions, predicting soil behavior under varying conditions, and solving soil problems related to military operations. Military commanders should incorporate geologic information with other pertinent data when planning military operations, to include standing operating procedures.

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The proponent of this publication is the US Army Engineer School. Submit changes for improving this publication on DA Form 2028 and forward it to: Commandant, US Army Engineer School, ATTN: ATSE-TD-D, Fort Leonard Wood, MO 65473-6650.

Unless otherwise stated, masculine nouns and pronouns do not refer exclusively to men.