
LIST OF TABLES

	Page
Table 1-1. <i>The Mohs hardness scale</i>	1-2
Table 1-2. <i>Classification of igneous rocks</i>	1-11
Table 1-3. <i>Classification of sedimentary rocks</i>	1-14
Table 1-4. <i>Classification of metamorphic rocks</i>	1-16
Table 1-5. <i>Identification of geologic materials</i>	1-19
Table 1-6. <i>Field-estimating rock hardness</i>	1-22
Table 1-7. <i>Field-estimating rock density</i>	1-23
Table 1-8. <i>Engineering properties of rocks</i>	1-24
Table 1-9. <i>Aggregate suitability based on physical properties</i>	1-24
Table 1-10. <i>Use of aggregates for military construction missions</i>	1-25
Table 2-1. <i>Geologic time scale</i>	2-15
Table 2-2. <i>Reports for geographic/terrain intelligence</i>	2-33
Table 2-3. <i>Sources of remote imagery</i>	2-35
Table 3-1. <i>Stream evolution process</i>	3-6
Table 3-2. <i>Fluvial surficial features</i>	3-21
Table 3-3. <i>Glacial surficial features</i>	3-32
Table 3-4. <i>Aggregate types by feature</i>	3-38
Table 5-1. <i>Unified soil classification (including identification and description)</i>	5-7
Table 5-2. <i>Auxiliary laboratory identification procedure</i>	5-9
Table 5-3. <i>Characteristics pertinent to roads and airfields</i>	5-11
Table 5-4. <i>Characteristics pertinent to embankment and foundation construction</i>	5-15
Table 5-5. <i>Comparison of the USCS, Revised Public Roads System, and FAA System</i>	5-29
Table 5-6. <i>Revised Public Roads System of soil classification</i>	5-30
Table 5-7. <i>Agricultural Soil Classification System</i>	5-34
Table 5-8. <i>Classification of four inorganic soil types</i>	5-35
Table 5-9. <i>Comparison of soils under three classification systems</i>	5-36
Table 7a. <i>Hydrogeologic indicators for groundwater exploration</i>	7-3
Table 7-1. <i>Frost-susceptible soil groups</i>	7-11

	Page
Table 8-1. <i>Compaction test comparisons</i>	8-4
Table 8-2. <i>Minimum compaction requirements</i>	8-8
Table 8-3. <i>Soil classification and compaction requirements (average)</i>	8-13
Table 9-1. <i>Numerical example of proportioning</i>	9-6
Table 9-2. <i>Stabilization methods most suitable for specific applications</i>	9-11
Table 9-3. <i>Guide for selecting a stabilizing additive</i>	9-13
Table 9-4. <i>Minimum unconfined compressive strengths for cement, lime, and combined lime-cement-fly ash stabilized soils</i>	9-14
Table 9-5. <i>Durability requirements</i>	9-14
Table 9-6. <i>Gradation requirements</i>	9-15
Table 9-7. <i>Estimated cement requirements for various soil types</i>	9-15
Table 9-8. <i>Average cement requirements for granular and sandy soils</i>	9-16
Table 9-9. <i>Average cement requirements for silty and clayey soils</i>	9-16
Table 9-10. <i>Average cement requirements of miscellaneous materials</i>	9-18
Table 9-11. <i>Recommended gradations for bituminous-stabilized subgrade materials</i>	9-23
Table 9-12. <i>Recommended gradations for bituminous-stabilized base and subbase materials</i>	9-23
Table 9-13. <i>Bituminous materials for use with soils of different gradations</i>	9-24
Table 9-14. <i>Emulsified asphalt requirements</i>	9-24
Table 9-15. <i>Thickness design procedures by airfield category</i>	9-28
Table 9-16. <i>Design determinations</i>	9-29
Table 9-17. <i>Estimated time required for test procedures</i>	9-29
Table 9-18. <i>Road classifications</i>	9-30
Table 9-19. <i>Recommended minimum thickness of pavement and base course for roads in the theater-of-operations</i>	9-35
Table 9-20. <i>Reduced thickness criteria for permanent and nonexpedient road and airfield design</i>	9-35
Table 9-21. <i>Airfield categories</i>	9-37
Table 9-22. <i>Thickness reduction factors for Navy design</i>	9-45
Table 9-23. <i>Equivalency factors for Air Force bases and Army airfields</i>	9-45
Table 9-24. <i>Recommended minimum thickness of pavements and bases for airfields</i>	9-46

	Page
Table 9-25. <i>Stabilization functions pertinent to theater-of-operations airfields</i>	9-49
Table 9-26. <i>Basic airfield expedient surfacing requirements</i>	9-50
Table 9-27. <i>Design requirements for strength improvement.</i>	9-52
Table 9-28. <i>Recommended aggregate gradation for dust control on airfields and heliports</i>	9-62
Table 9-29. <i>Dust palliative numbers for dust control in nontraffic areas</i>	9-65
Table 9-30. <i>Dust palliative numbers for dust control in occasional-traffic areas.</i>	9-66
Table 9-31. <i>Dust palliative numbers for dust control in traffic areas</i>	9-67
Table 9-32. <i>Dust palliative electives.</i>	9-68
Table 9-33. <i>Roads and cantonment area treatments.</i>	9-72
Table 9-34. <i>Helipad/helicopter maintenance area treatments.</i>	9-74
Table 11-1. <i>Vehicle input parameters</i>	11-4
Table 11-2. <i>Boussinesq theory coefficients.</i>	11-5
Table 11-3. <i>Compacted strength properties of common structural materials</i>	11-6
Table 11-4. <i>Criteria and properties for geotextile evaluation</i>	11-9
Table 11-5. <i>Geotextile survivability for cover material and construction equipment</i>	11-10
Table 11-6. <i>Minimum properties for geotextile survivability</i>	11-10
Table 11-7. <i>Recommended minimum overlap requirements.</i>	11-12
Table 12-1. <i>Gradation requirements for laterite and laterite gravels.</i>	12-3
Table 12-2. <i>Criteria for laterite base course materials</i>	12-4
Table 12-3. <i>Criteria for laterite subbase materials</i>	12-4
Table 12-4. <i>Measured depth of thaw below various surfaces in the subarctic after 5 years. (Fairbanks, Alaska, mean annual temperature 26 degrees Fahrenheit)</i>	12-8
Table A-1. <i>Recommended maximum permissible values of gradation and Atterberg limit requirements in subbases and select materials.</i>	A-5
Table A-2. <i>Desirable gradation for crushed rock, gravel, or slag and uncrushed sand and gravel aggregates for base courses.</i>	A-5
Table B-1. <i>Percentage of hard and brown coal reserves in major coal-producing countries.</i>	B-1