<table>
<thead>
<tr>
<th>Glossary</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AAR</td>
<td>after action review</td>
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<tr>
<td>AFJ PAM</td>
<td>Air Force joint pamphlet</td>
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<td>AFJ MAN</td>
<td>Air Force joint manual</td>
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<tr>
<td>aggregate</td>
<td>a clustered mass of individual soil particles varied in shape, ranging in size from a microscopic granule to a small crumb, and considered the basic structural unit of soil</td>
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<td>AR</td>
<td>Army regulation</td>
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<tr>
<td>atomize</td>
<td>to reduce to a fine spray</td>
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<td>Atterberg limits</td>
<td>water contents at certain critical stages in soil behavior; they can be used to describe the plasticity of a soil and if the soil is cohesive or cohesionless</td>
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<tr>
<td>attn</td>
<td>attention</td>
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<tr>
<td>ballast</td>
<td>a heavy substance (such as wet sand) used to increase the weight of rollers</td>
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<tr>
<td>base course or base</td>
<td>important element in a road structure; it functions as the primary load-bearing component of the road, ultimately providing the pavement (or surface) strength; therefore, it is made of higher quality material than subbase material</td>
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<tr>
<td>BCY</td>
<td>bank cubic yard(s)</td>
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<tr>
<td>binder</td>
<td>a material that produces cohesion in loosely assembled substances; for example, tar, cement, and cohesive soil material passing a Number 40 sieve</td>
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<tr>
<td>borrow pit</td>
<td>an area where material is excavated for use as fill at another location</td>
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<tr>
<td>CCY</td>
<td>compacted cubic yard(s)</td>
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<tr>
<td>cfm</td>
<td>cubic feet per minute</td>
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<td>chock</td>
<td>motionless or for blocking the movement of a wheel</td>
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<tr>
<td>clay</td>
<td>a cohesive soil, which exhibits plasticity within a range of water contents and whose particles are less than 0.005 millimeters in size</td>
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<td>coefficient</td>
<td>any of the factors of a product considered in relation to a specific factor; especially a constant factor of a term as distinguished from a variable</td>
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<tr>
<td>cohesion</td>
<td>the act or state of sticking together tightly</td>
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<td>cycle time</td>
<td>cycle time is the time required for a machine to complete one cycle of operation</td>
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<tr>
<td>DA</td>
<td>Department of the Army</td>
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</table>
desired dry density usually expressed as an acceptable density range but stated as a single value when used to determine soil stabilizing requirements

DEUCE deployable universal combat earthmover

dredging method of moving material from below a body of water

efficiency factor a percentage factor (60-minute working hour = 100 percent) used to adjust production estimates for normal production delays

EM engineer manual

EVW empty vehicle weight

F Fahrenheit

finishing the final grading of an embankment or other earthwork or the smoothing of a wearing surface after it is placed

FM field manual

FMTV family of medium tactical vehicles

fpm foot, feet per minute

FSN federal stock number

ft foot, feet

gantry a triangular frame on top of a crane superstructure, which carries sheaves for the boom support lines; also, a platform (usually supported by towers) made to carry a traveling crane on parallel tracks

gap graded see soil gradation

GPM gallons(s) per minute

gradation see soil gradation

granular consisting of particles having a bulky shape

gravel see soil

GVW gross vehicle weight

heaped material piled above the sides of a restricting container (such as an excavator bucket, a scraper bowl, or a dump-truck carrying box)

HM hazardous material

hopper Usually, a funnel-shaped receptacle for holding and loading material (grain, sand, crushed rock, or coal); also, any of various other receptacles for the temporary storage of material

HQ headquarters

HW hazardous waste

in situ soil in its natural (undisturbed) state

in-place mixing mixing done at the construction site

inst institute

kph kilometers(s) per hour

lb pound(s)

LCY loose cubic yard(s)
lift  the depth of material that may be placed or compacted at one time
load time  the time it takes the loading equipment to actually load the haul unit, plus any time lost by the loading equipment while waiting for the haul unit to be spotted
loam  a general agricultural term, applied most frequently to sandy, silty topsoils that contain a trace of clay
M-Kg  meters to kilograms
MPH  mile(s) per hour
MSDS  material safety data sheet
NA  not applicable
NATO  North Atlantic Treaty Organization
NAVFAC  naval facility
NSN  national stock number
No.  number
OMC  optimum moisture content
OPLAN  operation plan
OPORD  operation order
optimum moisture content  the moisture content at which the soil's highest density can be obtained for a given amount of compactive input energy; soils compacted at moisture contents below optimum do not compact as completely as those at optimum moisture; those above optimum approach a plastic stage and begin to act like liquids, distributing an applied force equally in all directions and not moving particles into the voids
outriggers  stabilizers used on cranes and backhoes to prevent tipping while loading or digging
pcf  pounds per cubic foot
PCSA  Power Crane and Shovel Association
PI  plasticity index
pintle  a pivot pin (usually upright) on which another part turns
plasticity  the ability of a soil to deform without cracking or breaking; see also optimum moisture content
POL  petroleum, oils, and lubricants
psi  pound(s) per square inch
push loading  loading a scraper with dozer (push tractor) assistance
push tractor or pusher assistance  a dozer pushing a scraper during earthmoving operations
rimpull  the usable force developed between the driving tires and the travel surface
ripping  digging or tearing hard material using shanks (teeth) mounted on a dozer, grader, or other machine; the number of shanks mounted on the back of a dozer can usually be changed to engage one, two, or three shanks
ROPS: rollover protective system

rpm: revolution(s) per minute

RPR: rimpull required

SCIP: scarify and compact in place

SEE: small emplacement excavator

shore: (1) to give support to; brace; (2) a prop for preventing sinking or sagging; (3) a prop placed against or beneath equipment to restrict movement

shoulder: that part of the top surface of an approach embankment, causeway, or cut immediately adjoining the roadway that accommodates stopped vehicles in emergencies and laterally supports base and surface courses

side casting: to push or throw to the side, using with the blade or bucket

soil: soil is classified by particle size and type; gravel has large, coarse, blocky-shaped particles, while clay has small, fine, platy-shaped particles; sand and silt have particle sizes between these two extremes; (for earthmoving, soil is placed in three categories: rock, soil, and rock soil)

soil gradation: soil is either well-graded or poorly graded; well-graded soil is capable of being tightly compacted; it contains a variety of particle sizes; during compaction, smaller particles are worked between and around larger particles to reduce the percentage of voids, making the soil denser and stronger; poorly graded soil is difficult or impossible to compact; it contains a high percentage of similar-size particles (called uniformly gapped) or a poor relationship of the percentage of sizes (called gap-graded); such soil has a relatively high percentage of voids after compaction; therefore, it lacks density and strength

SOP: standing operating procedure

sq: square

STP: soldier training publication

struck: a full load of material that is level with the top of its container, (such as a scraper bowl or a dump-truck body)

tandem: a group of two or more arranged one behind the other or used or acting in conjunction

TB: technical bulletin

TC: training circular

tine: a slender, pointed projecting part or; a prong

TM: technical manual

torque: a force that produces or tends to produce rotation or torsion (such as an auto engine delivers to the drive shaft)

TRADOC: United States Army Training and Doctrine Command

US: United States

USAES: United States Army Engineer School
<table>
<thead>
<tr>
<th>Term</th>
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<tr>
<td><strong>USCS</strong></td>
<td>Unified Soil Classification System</td>
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<tr>
<td><strong>vpm</strong></td>
<td>vibrations per minute</td>
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<tr>
<td><strong>windrows</strong></td>
<td>a long, low ridge of material scraped to the side, using a blade, when moving earth</td>
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<tr>
<td><strong>yd</strong></td>
<td>yard(s)</td>
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