



EXPLANATION

An irregular blanketlike colluvial deposit of silt with subordinate pebbles and sand, ranging from a few inches to as much as 10 feet in thickness, is present over as much of the mapped area shown as Gsc, S, Cl, CS, and Cp.

Map symbols enclosed in parentheses indicate bedrock materials concealed by surficial materials or by water of the Ohio River.

- Silty and clayey sand**
- Chiefly grayish-brown clean to silty and clayey, micaceous, very fine to medium quartz sand. Thin lenses and layers of silt and clay in lower part. Unconsolidated, massive, and poorly bedded in part.
- Gravel**
- Gray to brown gravel; chiefly chert pebbles 0.5-1.5 inches across; matrix mainly silt. Loose, massive. Occurs mostly as elongate ridges.
- Silt and clay**
- Chiefly gray to yellowish-brown clayey silt and silty clay; iron oxide (?) concretions as much as 0.5 inch across locally abundant, noncalcareous. Widely scattered thin, poorly defined beds of silty and clayey very fine quartz sand. Silt, clay, and sand locally poorly, micaceous, and crudely bedded. Mostly unconsolidated, homogeneous, and massive.
- Sandy, clayey gravel**
- Brown to reddish-brown well-sorted gravel; chiefly chert pebbles 0.5-2 inches across; matrix composed chiefly of silty and very clayey well-sorted quartz and chert sand. Locally contains irregular lenses and layers of sand as much as 5 feet thick. Sporadic sandstone boulders as much as 15 feet across occur in vicinity of slopes developed on Porters Creek Clay. Massive to well-developed irregular bedding. Poorly consolidated, indurated by iron oxide in thin layers and at base where underlain by clay. Faulted in several places.
- Sand**
- Red to brown poorly graded fine to coarse quartz sand, generally clean. Crossbedded. Poorly consolidated, indurated locally near contacts with clay and sandy clay. Occurs as irregular lenses and layers as much as 30 feet thick. Jointed where indurated, faulted west of Lone Oak.
- Lean (low- to medium-plastic) clay**
- Light- to dark-gray silty fine to very silty clay; massive to thinly laminated. Poorly to moderately consolidated. Occurs as irregular lenses generally a few feet thick but locally as much as 30 feet thick. Tends to slump. Faulted west of Lone Oak.
- Clayey sand and sandy clay**
- Light-gray to pale-brown clayey sand and sandy clay, so-called "sandust sand" (Whitlatch, 1940, p. 233); chiefly very fine to fine quartz; clay occurs as pore filling and as grains; sparse mica. Massive to well-bedded, locally thinly laminated and crossbedded. Poorly consolidated. Sand slumps common. Faulted southwest of Concord School.
- Plastic clay**
- Gray to greenish-black clay, micaceous, locally glauconitic and sandy, conchoidal fracture; weathers into chips and blocks that persist in streams, jointed. Massive individual beds as much as 15 feet thick. Interbedded with thin beds of greenish-gray and pale-yellowish-brown highly glauconitic, clayey very fine to fine quartz sand. Moderately consolidated, slightly indurated in part.
- Interlayered sand, clay, and silt**
- Light-gray to yellowish-brown micaceous poorly graded very fine quartz sand; gray to black silty clay and clayey silt commonly with beds and laminae of light-colored micaceous very fine quartz sand. Generally horizontally bedded with alternating thin to thick beds of sand and clay. Poorly to moderately consolidated. Shown in section only.
- Artificial fill**
- Obtained chiefly from silt and clay (MC).

- Contact**
- Dashed where approximately located; short dashed where inferred; dotted where concealed.
- Fault**
- Dashed where inferred; dotted where concealed; queried where hypothetical. U, upthrown side; D, downthrown side.
- Contours drawn on bedrock surface**
- Dashed where approximately located. Shown only where extensively concealed by surficial materials. Based in part on drill-hole data (Finch, 1966). Contour interval 20 feet.
- Sporadic sandstone boulder or block**
- Minimum dimension more than 3 feet.
- Small slump block**
- x d
- Lean clay**
- Glauconitic sand
- Outcrops**
- x d
- Gravel**
- Sand
- Fig. 2
- Auger-hole sample location**
- PW, Paducah West quadrangle; M, Metropolis quadrangle. Numbers identify samples tested (see table 1 and figs. 1-4).
- Hand-dug sample location**
- Numbers identify samples tested (see table 1 and figs. 1-4).

ENGINEERING GEOLOGIC MAP AND SECTION OF THE PADUCAH WEST
AND PART OF THE METROPOLIS QUADRANGLES IN KENTUCKY