

# SURFICIAL GEOLOGY OF THE QUARRYVILLE 7.5' QUADRANGLE, PA

**Open-File Report 96-05**  
QUARRYVILLE QUADRANGLE  
PENNSYLVANIA—LANCASTER CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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**THIS REPORT HAS NOT BEEN REVIEWED  
FOR CONFORMITY WITH THE PUBLICATION STANDARDS  
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**EXPLANATION**

**AF = Artificial Fill**  
Compacted to semi-compacted material used for fill. Composed of locally derived bedrock or surficial material.

**A = Alluvium**  
Material underlies narrow to broad, flat-surfaced floodplains of perennial streams. Comprises stratified sand, silt, and clay in upper part; same plus gravel in lower part. Generally less than 10 feet thick.

**C = Colluvium**  
Colluvium is unsorted and unstratified to crudely stratified debris derived from underlying bedrock. Comprises fragments set in finer-grained matrix. Platy fragments in schist bedrock areas (RC); more sand in quartzite bedrock areas (RC<sub>q</sub>); more equant fragments in gneiss bedrock areas (RC<sub>g</sub>). Mapped where greater than 6 feet thick.

**AC = Alluvium and colluvium undivided**  
Alluvium and colluvium are mapped together where the valley in which they occur is too narrow to map the units separately at 1:24,000 scale.

**RC = Schist bedrock and colluvium undivided**  
Surfaces with low to steep slopes underlain by unweathered or weathered schist bedrock and thin (<6 feet), discontinuous deposits of colluvium.

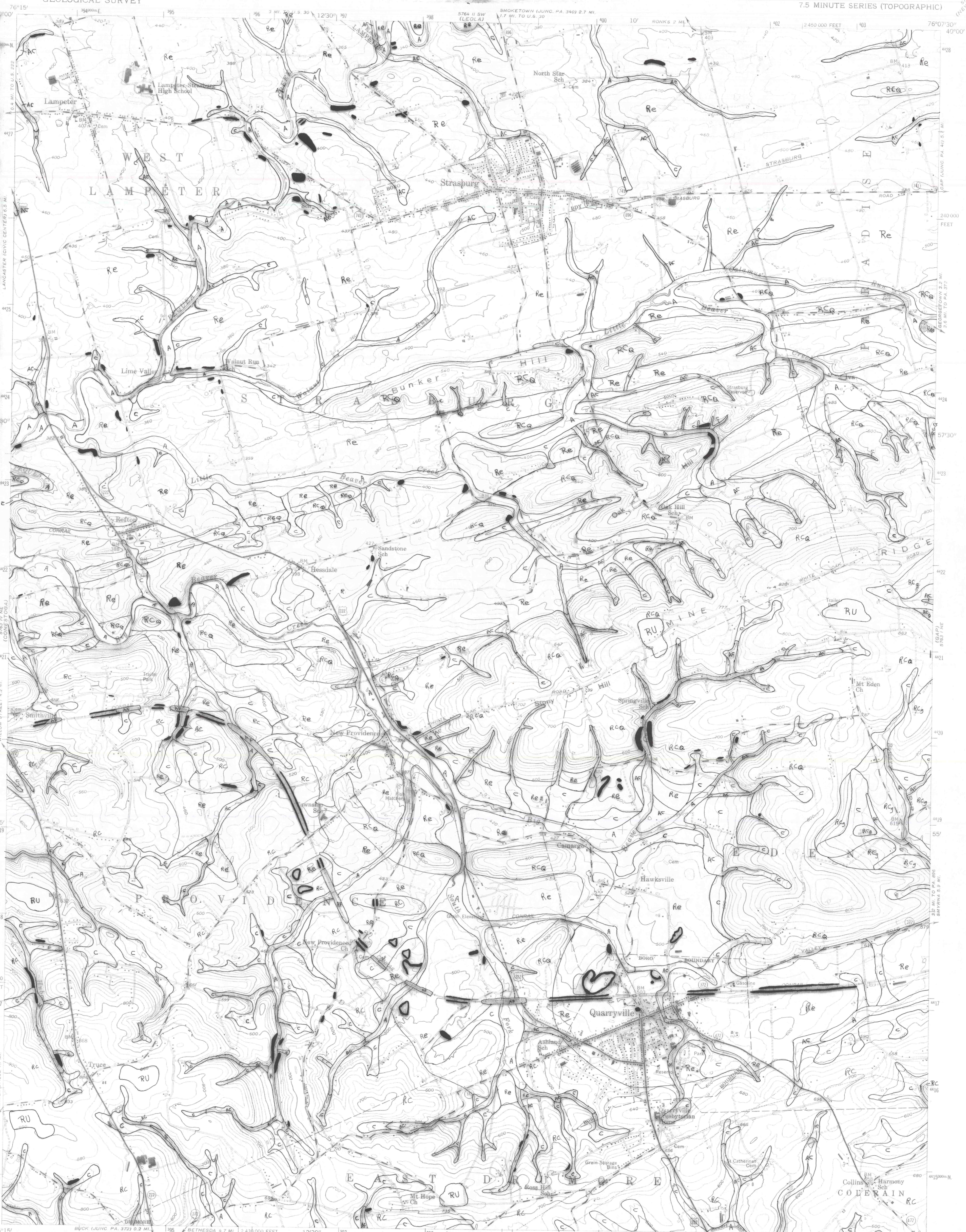
**RC<sub>q</sub> = Quartzite bedrock and colluvium undivided**  
Surfaces with low to steep slopes underlain by unweathered or weathered quartzite bedrock and thin (<6 feet), discontinuous deposits of colluvium.

**RC<sub>g</sub> = Gneiss bedrock and colluvium undivided**  
Surfaces with low to steep slopes underlain by unweathered or weathered gneiss bedrock and thin (<6 feet), discontinuous deposits of colluvium.

**Re = Carbonate residuum**  
Surface underlain by silt, clay, and some rock fragments produced by dissolution of carbonate bedrock. Thickness variable. Small outcrops of bedrock common.

**RU = Rock upland**  
Nearly flat upland surface underlain usually by weathered schist bedrock, sometimes by unweathered schist bedrock. Little or no colluvium is present.

**● = Outcrop**  
Areas with continuous or discontinuous bedrock outcrop.



Mapped, edited, and published by the Geological Survey  
Control by USGS, USCGS, USCE, and USSCS  
Topography from aerial photographs by photogrammetric methods. Aerial photographs taken 1952. Field check 1955.  
Polyconic projection, 1927 North American datum  
10,000-foot grid based on Pennsylvania coordinate system, south zone  
1000-meter Universal Transverse Mercator grid ticks, zone 18, shown in blue  
Revisions shown in purple compiled in cooperation with State of Pennsylvania agencies from aerial photographs taken 1969 and 1976. This information not field checked

SCALE 1:24,000

ROAD CLASSIFICATION

Heavy-duty	Light-duty
Medium-duty	Unimproved dirt
U. S. Route	State Route

QUARRYVILLE, PA.  
N 3952.5—W 7607.5/7.5  
1955  
PHOTOREVISED 1969 AND 1976  
AMS 5763 1 NW—SERIES V831

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

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