

EXPLANATION FOR GEOLOGIC MAP AND CROSS SECTIONS

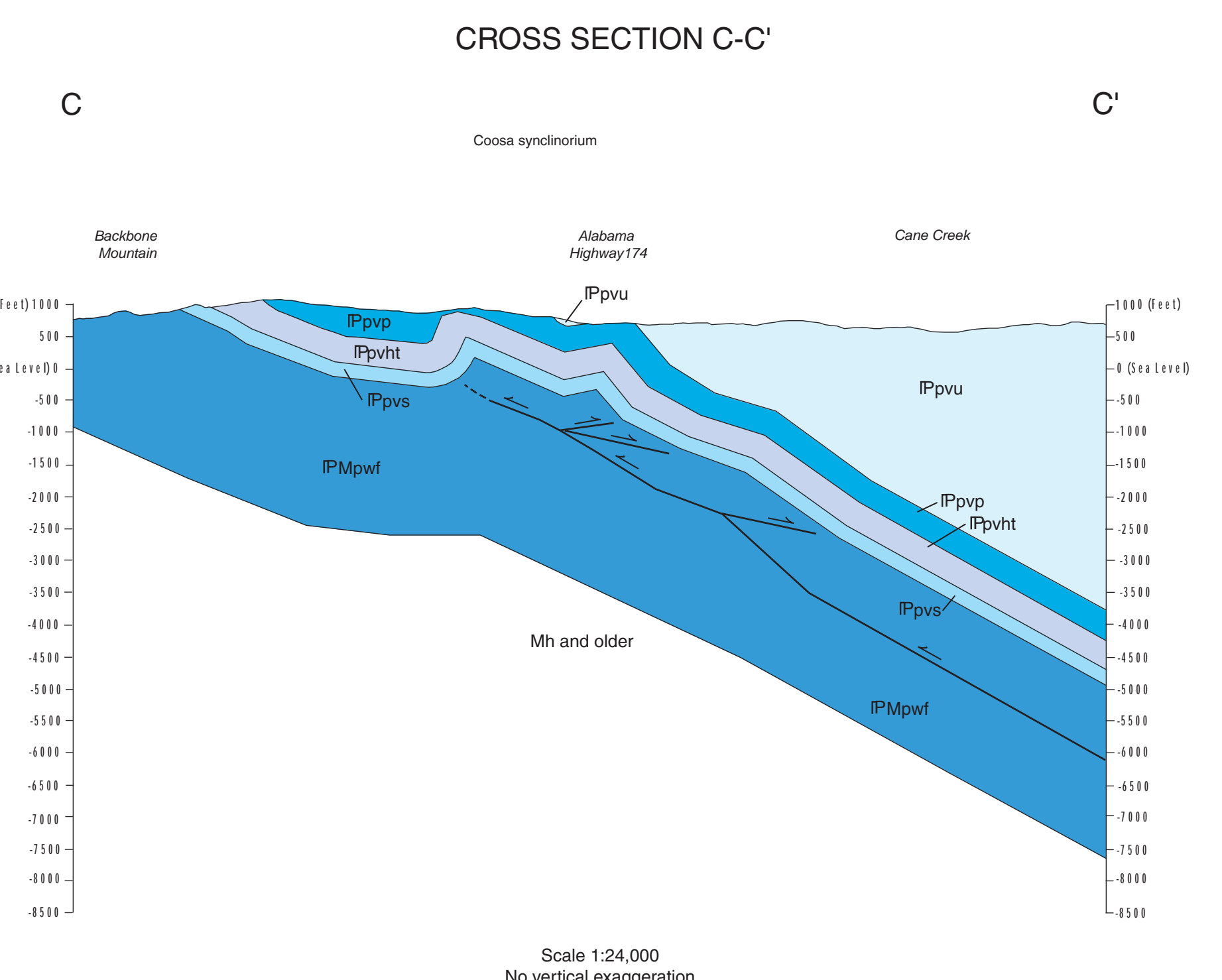
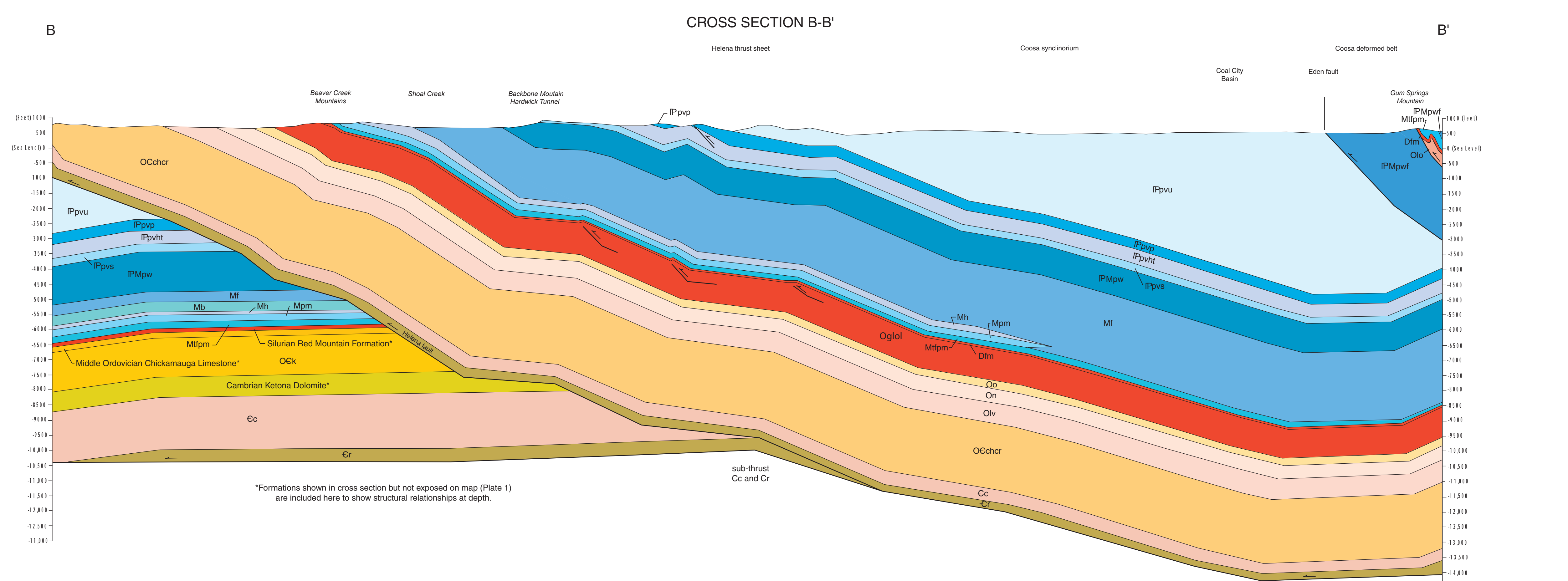
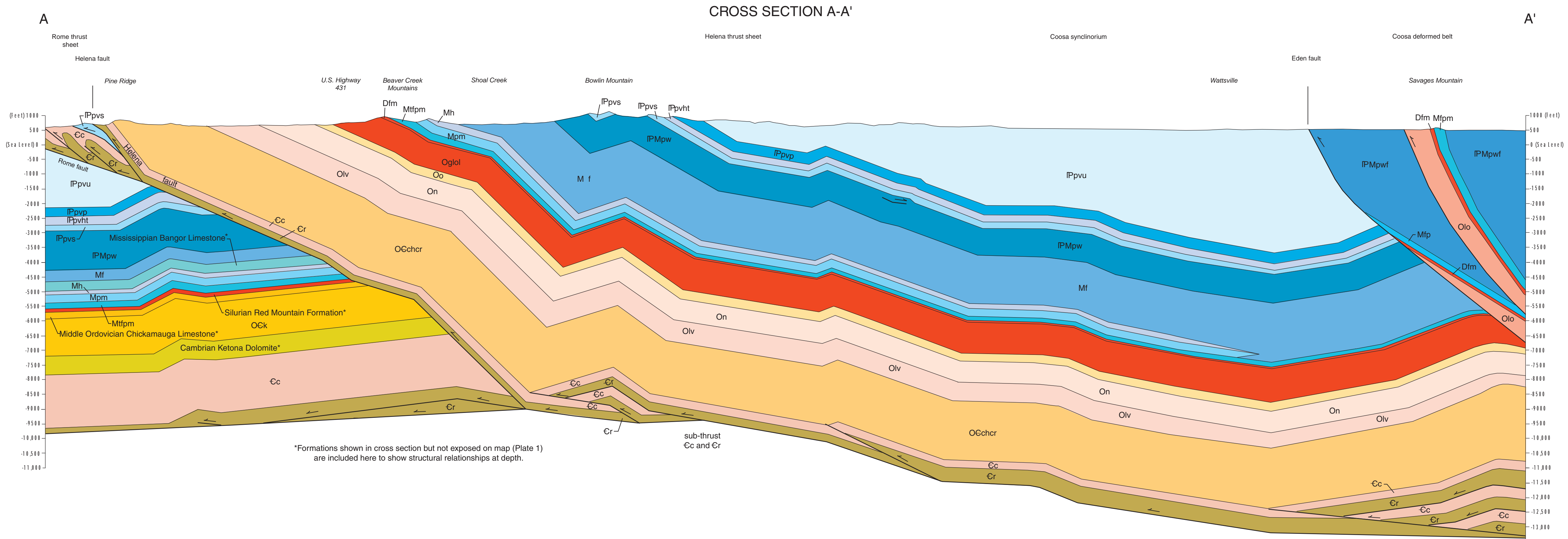
SYMBOLS FOR GEOLOGIC MAP

- QUATERNARY**
 - Qal** Alluvium. Unconsolidated silt, sand, and gravel containing clasts of local bedrock. Mapped only along larger streams.
- PENNSYLVANIAN**
 - Pottsville Formation undifferentiated** (IPpvu) Dark-gray silty shale containing intervals of light- to medium-gray lithic sandstone and interbeds of coal and underclay.
 - Pine Sandstone Member** (IPpvp) Very light-gray quartzose sandstone commonly containing scattered quartz pebbles and quartz pebble conglomerate; wavy-bedded sandstone and mudstone common in upper part.
 - Hardwick Tunnel member** (IPpvht) Predominantly dark-gray to black shale with occasional interbeds of thin sandstone and rare bioclastic limestone.
 - Shades Sandstone Member** (IPpvs) Very light-gray quartzose sandstone commonly containing scattered quartz pebbles and quartz pebble conglomerate; includes thin intervals of dark-gray shale.
- MISSISSIPPIAN AND PENNSYLVANIAN**
 - Parkwood Formation** (IPmpw) Medium- to dark-gray shale containing intervals of light- to medium-gray sandstone and rare coal.
 - Parkwood Formation and Floyd Shale undifferentiated** (IPmpwf) Dark-gray shale containing interbedded greenish-gray sandstone and rare dark-gray argillaceous limestone.
 - Floyd Shale** (Mf) Dark-gray to black shale locally containing minor laminae and thin interbeds of light-gray sandstone; lower part includes grayish-orange fossiliferous chert (tongue of Bangor Limestone).
 - Hartselle Sandstone** (Mh) Very light-gray crossbedded and rippled quartzose sandstone locally containing thin interbeds and partings of dark-gray shale.
 - Pride Mountain Formation** (Mpm) Dark-gray shale commonly containing nodules, stringers, and beds of siderite.
 - Tuscumbia Limestone, Fort Payne Chert, and Maury Formation undifferentiated** (Mtpm) Light- to medium-gray coarse bioclastic limestone containing abundant echinoderm columnals (Tuscumbia); chert, light-gray to brown weathering orange-brown, thin- to medium-bedded, nodular, contains brachiopods and echinoderm columnals (Fort Payne); mudstone, maroon, medium- to thick-laminated (Maury).
 - Fort Payne Chert and Maury Formation undifferentiated** (Mtpm) Thin-bedded, medium-dark-gray limestone and dark-bluish gray chert weathering to grayish-orange chert (Fort Payne). Pale-olive and grayish-red-purple mudstone locally containing discoid phosphatic concretions (Maury).

- DEVONIAN**
 - Frog Mountain Sandstone** (Dfm) Light- to dark-gray feldspathic to lithic sandstone and light- to dark-gray dolomudstone and minor interbedded dark-gray to black siltstone (Helena thrust sheet), light-colored sandstone and dark-greenish-gray and dark-brownish-gray silty and sandy mudstone, and rare bioclastic limestone (Coosa deformed belt).
 - Greensport Formation, Little Oak Limestone, and Lenoir Limestone undifferentiated** (Oglol) Maroon and grayish-green shale and interbedded siltstone and minor light-gray to greenish-gray sandstone (Greensport); dark-gray partly fossiliferous stylonodular limestone locally containing chert nodules (Little Oak and Lenoir); medium- to dark-gray fenestral limestone at base (Moshalm Member of Lenoir).
 - Little Oak Limestone** (Olo) Dark-gray stylonodular limestone locally containing abundant fossil fragments.
- ORDOVICIAN**
 - Odeville Limestone** (Oo) Dark-gray mottled dolomitic limestone overlain by dark-gray fossiliferous stylonodular limestone.
 - Newala Limestone** (On) Medium-bluish-gray chert-free micritic limestone containing interbeds of light- to light-bluish-gray dolomite and medium- to dark-gray mottled dolomitic limestone.
 - Longview Limestone** (Olv) Interbedded light- to medium-gray micritic and partly sandy limestone and light-gray dolomite; commonly contains thin interbeds and nodules of chert.
 - Chepultepec Dolomite and Copper Ridge Dolomite undifferentiated** (OCchcr) Light- to dark-gray dolomite containing intervals of interbedded light- to medium-bluish-gray limestone; produces abundant dense and cavernous chert (Chepultepec); light- to medium-gray dolomite producing abundant predominantly dense chert containing common algal laminations (Copper Ridge).
- LOWER TO UPPER CAMBRIAN**
 - Knox Group undifferentiated** (Ock) Light- to dark-colored chert residuum commonly preserving features of carbonate rocks.
 - Conasauga Formation** (Cc) Pale-olive shale and mudstone (Helena thrust sheet); thinly interbedded dark-gray limestone and shale (Rome thrust sheet).
 - Rome Formation** (Cr) Grayish-red-purple and grayish-olive mudstone, shale, and siltstone containing interbedded sandstone, dolomite, and limestone.

- Contact, located very approximately, showing location of control point
- |--- Thrust fault, located very approximately, sawtooth on upper plate
- Contact or fault, concealed beneath mapped units
- |--- Strike and dip of beds
- ⊕ Horizontal beds
- ⊖ Vertical beds
- ↗ Overturned beds
- ↗ Anticline, showing trace and direction of plunge
- ↘ Syncline, showing trace and direction of plunge

- SYMBOLS FOR CROSS SECTIONS A-A' and B-B'
- Stratigraphic contact
 - |--- Fault, showing relative movement, dashed where inferred



CROSS SECTIONS A-A', B-B', C-C', AND EXPLANATION FOR THE GEOLOGIC MAP OF THE WATTSVILLE 7.5-MINUTE QUADRANGLE AND CROSS SECTIONS, ST. CLAIR COUNTY, ALABAMA

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