

Bash Bish Falls Rodgers Bedrock Compilation Sheet 2 (paper)

Map

NOTICE !

Bedrock quadrangle 1:24,000 scale compilation sheets for the Bedrock Geological Map of Connecticut, John Rodgers, 1985, Connecticut Geological and Natural History Survey, Department of Environmental Protection, Hartford, Connecticut, in Cooperation with the U.S. Geological Survey, 1:125,000 scale, 2 sheets. [minimum 116 paper quad compilations with mylar overlays constituting the master file set for geologic lines and units compiled to the State map, some quads have multiple sheets depicting iterations of mapping]. Compilations drafted by Nancy Davis, Craig Dietsch, and Nat Gibbons under the direction of John Rodgers.

Geologic unit designation table translates earlier map unit nomenclature to the units ultimately used in the State publication.

This map set contains unpublished maps, cross-sections, and related information archived by the State Geological and Natural History Survey of Connecticut as part of the Survey Library Collection.

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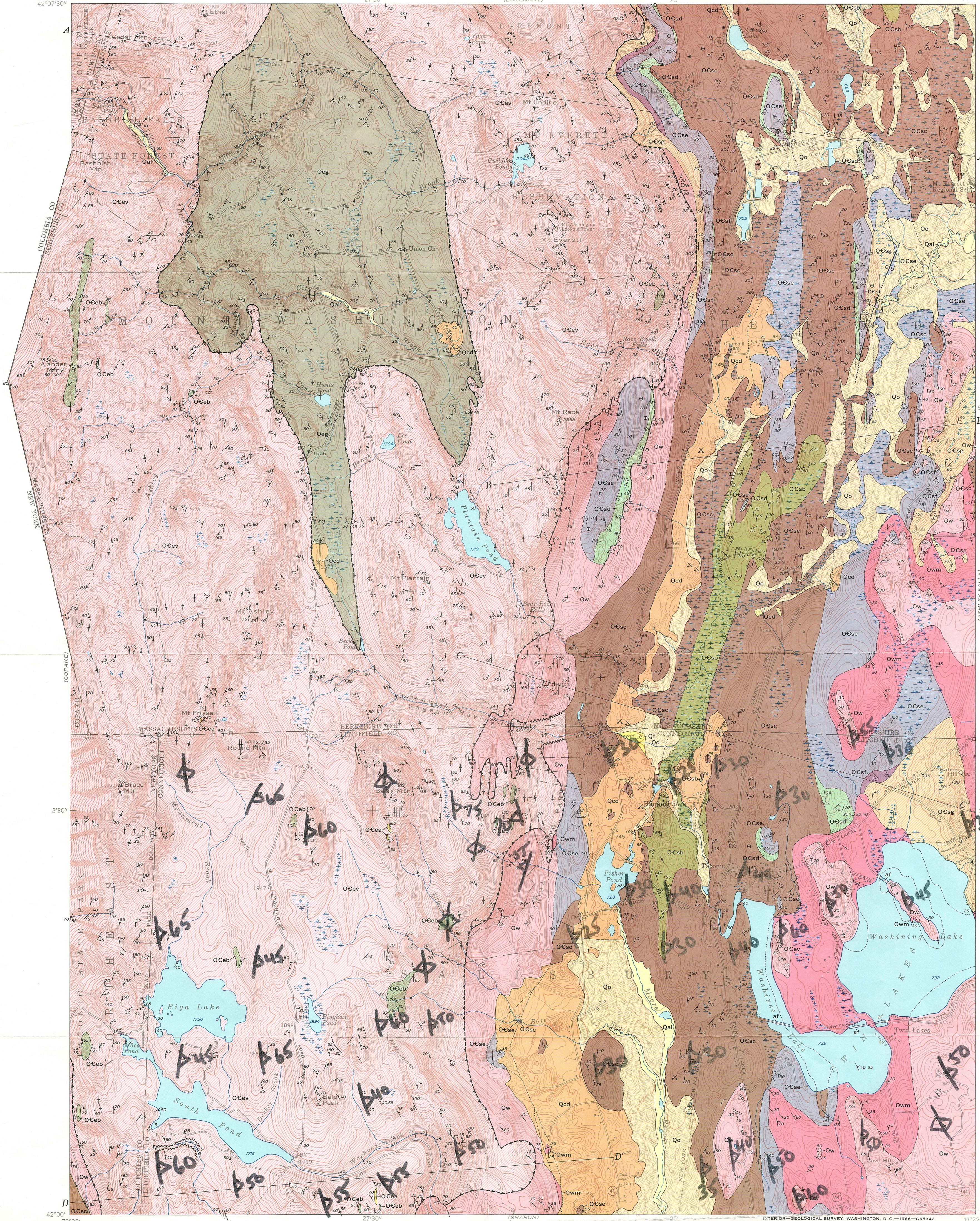
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J.H. Stratton 5 July 1977

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH
THE COMMONWEALTH OF MASSACHUSETTS, DEPARTMENT OF PUBLIC WORKS AND
U. S. DEPARTMENT OF COMMERCE, BUREAU OF PUBLIC ROADS AND
THE STATE OF CONNECTICUT, GEOLOGICAL AND NATURAL HISTORY SURVEY

GEOLOGIC QUADRANGLE MAP
BASHBISH FALLS QUADRANGLE, MASS.-CONN.-N. Y.
GG-507



EXPLANATION

A thin layer of windblown sand and silt, generally mixed with underlying glacial debris, is present but not shown over parts of the upland areas, and is poorly developed over the glacial drift deposits.

Swamp deposits of Pleistocene to Recent age are shown only by the standard map symbol for swamps printed on the underlying bedrock color. These deposits consist of undecomposed to partly decomposed organic matter generally mixed with sand and silt; locally they contain peat.

Pleistocene till covers most areas not underlain by swamps or other surficial deposits. This material consists of nonsorted to poorly sorted mixture of boulders, gravel, sand, silt, and clay deposited directly from an ice sheet advancing generally from the northwest over the uplands.

Recent

- Qf Alluvial fan deposits
- Qal Silt, sand, and gravel, generally moderately to poorly sorted

Pleistocene to Recent

- Qa Alluvium
- Qo Silt, sand, and gravel, well to moderately sorted, occurs as low terraces subject to floods and reworking at least every several years
- Qc Outwash
- Qcd Gravel, sand, and silt deposited by melt-water streams

Water-laid ice-contact deposits

Kettled, collapsed, or eroded glacial till deposits, and deposits in temporary ponds; gravel, sand, silt, and minor amounts of clay; include kames, kame terraces, and proglacial kettled deposits

Bedrock of the Allochthon (?)

- Ocev
- Ocab
- Ocas

Everett Formation

Mainly quartzose argillite in shades of green and gray green. Generally weathers dull gray, but rusty weathering, due to pyrite, locally exists. Bedding, rarely visible, shows an interstratification of thin layers, or by color differences. Rock is typically a fine-grained phyllite in the NW corner of the quadrangle, an albite (frequently weathered 1 mm white spots)-aluminous-chlorite-chlorite-muscovite-limonite schist near Mount Everett, and a coarse calcic albite-ilmenite-aluminous-staurolite-chlorite-muscovite-quartz schist near Lions Head. Substratum rock types include: (1) feldspathic quartzite up to a few feet thick, commonly laminated on mm scale and rarely cross-laminated, weathering dull white; (2) lenses of feldspathic micaceous matrix (OCca) as much as 30 feet thick and 500 feet long; (3) seams of quartz-calcite rock each a few inches thick, ranging into thin layers, and (4) a "black and white" rock, consisting of alternations of centimeter layers of gray and dark black-gray schists, the darker layers resulting from high titanium content. Isolated patches of dark gray schist (OCcb), lithically resembling the Wallomasee or the Egremont but apparently interbedded with the green schist of the Everett, are mapped with this formation.

Bedrock of the Autochthon

- Oeg

Egremont Phyllite

Carbonaceous, black to silvery gray, fine-grained quartzose silty slate and phyllite. Locally contains thin-bedded white sandy limestone, rusty weathering layers, or impure limestone lenses several feet thick. May be same as Wallomasee Formation, which it closely resembles.

- Ow
- Owm

Wallomasee Formation

Ow, jet black, dark gray, and silvery gray schist or phyllite, locally calcareous, micaceous, or quartzose. Basal beds in quartzose. Basal beds in quartzose schist or aluminous greenish gray quartzose schist resembling parts of the Everett Formation. Bedding, rarely visible, is defined by quartzite beds a few inches thick, by white sandy limestone, or by rusty weathering layers. The bulk of the rock is carbonaceous muscovite-chlorite phyllite to the north, and staurolite-ilmenite-biotite-quartz schist or biotite-sillite-quartz schist to the south.

Ocm, predominantly a massive gray schistose marble, mottled by dark irregular phyllitic masses. Orange-brown where weathered. Also included are (1) lenses of gray to white calcite marble a few feet thick, weathering into blue gray and (2) silty, thin-bedded gray marble aggregating tens of feet thick which on weathered surfaces displays tuckered bedding as layers of darker color. Beds (1) and (2) occur near the base of the formation and were part of the Stockbridge Limestone as used by Dale (1927). A cliff-forming unit, as much as 200 feet thick, the rock rarely shows bedding, and grades laterally into Ow.

- OCsg
- OCsf
- OCsc
- OCsd
- OCsb
- OCsa

Stockbridge Formation

OCsg, massive, white to gray mottled marble, weathering into smooth, platy surfaces; interbeds of uniform, compact, homogeneous, pale yellow-gray dolomite a few feet thick showing bounding structure and weathering cream colored and with craggy surfaces.

OCsf, a discontinuous, heterogeneous unit, whose thickness varies rapidly along strike. Lithic types include (1) calcareous sandstone showing prominent cross-stratification on block scale; (2) silty, gray, fine-grained limestone; (3) massive calcareous quartzite; and (4) massive gray dolomite.

OCsc, massive gray, white, or gray mottled white calcite marble weathering into smooth, platy surfaces. Locally rock is mottled by irregular, gray, rough-weathering dolomite masses about 1 cm across. Rare beds of cream-weathering massive dolomite. The unit on the whole resembles OCsg and stratigraphic association is essential to its proper assignment.

OCsd, heterogeneous, discontinuous unit of widely ranging thickness, consisting of several rock types: (1) silty, impure limestone; (2) massive, cream-gray fine-grained dolomite; (3) calcareous siltstone; and (4) calcareous sandstone showing prominent cross-stratification on block scale on weathered surfaces. This as a whole resembles OCsf, and assignment of isolated outcrops to either unit may be uncertain.

OCsb, massive to sheared, iron gray to white dolomite; weathers pale gray; forms outcrops of rounded blocks. Individual beds are as much as 30 feet thick. Brownish-orange weathering dolomite with phyllitic partings locally present near the base of the unit, grading into OCsb below. Stratification on mm scale, defined by flowing rounded quartz sand grains, manifested on weathered surfaces and is especially common near the top of the unit; cross-stratification rarely seen. Upper dolomite beds may be lens-shaped and upon slight weathering turn into a soggy, sandy, flexible rock that readily soaks up water.

OCsa, pale gray, silty, and white dolomite, massive, compact, and uniform; weathers pale cream to gray. Individual beds a few inches to several feet thick, interbedded with gray silty to green micaceous phyllite a few inches thick, or calcareous siltstone 10 feet thick or more. Beds of calcareous and feldspathic sandstone which weather dull green gray, as well as sparse dolomite quartzite and rusty-weathering siltstone, are diagnostic of the unit.

OCsa, first exposed in area but shown at depth in section B-B' and known from area to the east. Massive, uniform, smooth-weathering, gray, white, and mottled dolomite.

Other Symbols:

- Strike and dip of beds
- Strike of vertical beds
- Horizontal beds
- Strike and dip of foliation
- Strike of vertical foliation
- Horizontal foliation
- Strike and dip of foliation and parallel bedding
- Strike and dip of bedding and nonparallel foliation
- Two foliations with parallel strike, but different dips
- Coexisting non-parallel planar features
- Strike and dip of axial plane of fold, showing bearing and amount of plunge of axis
- Vertical axial plane of fold, showing bearing and amount of plunge of axis
- Bearing and plunge of lineation
- Melt-water channel
- Glacial grooves and striations
- Pit in sand, gravel, or till
- Abandoned bedrock quarry
- Artificial fill

QUATERNARY

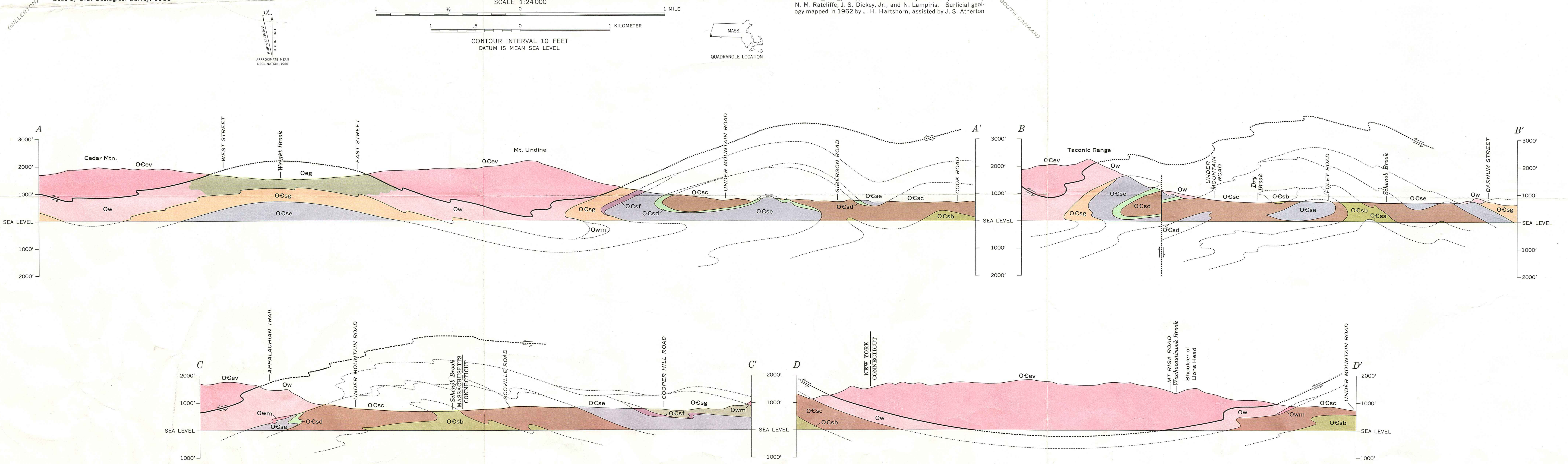
CAMBRIAN OR ORDOVICIAN

ORDOVICIAN

CAMBRIAN AND ORDOVICIAN

Scale: 1:24,000. Contour interval 10 feet. Datum is mean sea level.

Geographic Coordinates: 42° 07' 30" N, 73° 30' W.



GEOLOGIC MAP OF THE BASHBISH FALLS QUADRANGLE, MASSACHUSETTS, CONNECTICUT, AND NEW YORK
By
E-an Zen and J. H. Hartshorn
1966

For sale by U.S. Geological Survey, price \$1.00