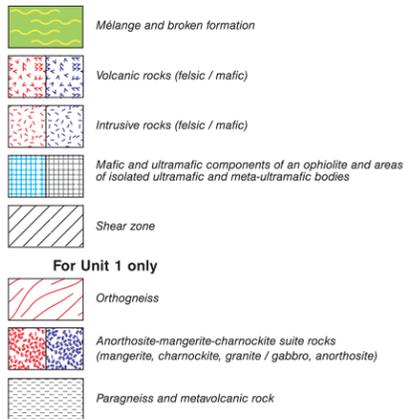


LEGEND

This legend is common to both the north and south sheets of this map. Not all lithotectonic units shown in the legend necessarily appear on this sheet. Examples of representative stratigraphic units given in red.

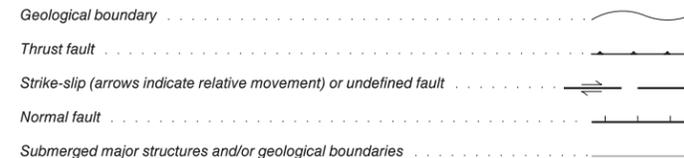
KEY



39 Plutonic rocks of unknown origin
Greensboro intrusive suite

Continental rift basins and magmatism related to formation of the Atlantic Basin

38a. Alluvial and lacustrine clastic sedimentary rocks and local basalt, granite, syenite, gabbro and minor felsic volcanic rocks; rift basins immediately preceding formation of the Atlantic Ocean.
Neward Supergroup, North Mountain Basalt, Wolfville Formation
38b. New-England-Quebec igneous suite; alkalic granite, syenite, and gabbro with minor felsic volcanic rocks.



Southern Appalachians

35 Lower Mississippian to Lower Permian mainly terrestrial clastic sedimentary rocks that form westward transgressive wedges includes minor cratonal facies near base.
35a. Mauch Chunk-Pottsville clastic wedge
Mauch Chuck Group
35b. Pennington-Lee clastic wedge
Lee Formation
35c. Ouachita clastic wedge
Pottsville Group

Alleghanian plutonism

37 Carboniferous to Permian plutonic rocks
Rolesville batholith, Narragansett Pier pluton, Sebago pluton

Acadian clastic wedge

33 Mainly Middle to Upper Devonian dominantly terrestrial clastic sedimentary rocks deposited on the west flank (Catskill clastic wedge) and on interior portions of the Appalachian Orogen; includes minor carbonate rocks.
Hamilton Group, Genesee Group, Sonyea Group
— on Laurentian Realm —

34 Middle Devonian to earliest Carboniferous plutonic rocks
Concord pluton, Deer Isle Granite, South Mountain batholith, Ackley batholith

Northern Appalachians
(except unit 32c)

Syn-acadian sedimentary and magmatic rocks

32a. Upper Silurian to Lower Devonian mainly marine with subordinate terrestrial clastic sedimentary rocks; commonly lying unconformably on pre-Upper Silurian rocks. Calcareous rocks are locally prominent in the west. Includes non-arc volcanic and associated bimodal magmatic rocks. Units extends into Middle Devonian in Gaspésie.
Salisbury Group, upper part of Chatham Group (above Salinic unconformity), Piscataquis magmatic suite
32b. Non-arc volcanic rocks and bimodal magmatic rocks of possibly unrelated tectonic settings. Exeter pluton, North Pole pluton, Rose Blanche pluton, North Bay batholith
32c. Upper Silurian to Lower Devonian plutonic rocks confined to Carolina.
Concord-Salisbury Plutonic Suite

Mid-paleozoic clastic wedge and time-equivalent rocks

23 Middle Ordovician to Lower Devonian, generally thin, shallow marine to terrestrial, clastic sedimentary wedge with subordinate carbonate rocks and chert. Includes unit 33 in southernmost Appalachians and carbonate rocks that are either the cratonward equivalent of unit 5 or lie unconformably on rocks deformed during the Taconic Orogeny.
Tuscarora Formation, Tonoloway Formation, Salina Group
— on Laurentian Realm —

Extensional basin and cover rocks

24 Upper Ordovician to Lower Mississippian clastic sedimentary rocks and diamictite lying unconformably on unit 4.
Talladega Group
— on southern Laurentian Realm —

Mid-paleozoic magmatism mainly in Axial realm

25 Middle Ordovician to Lower Silurian plutonic rocks and orthogneiss mainly confined to the Piedmont domain
Shelton Granite Gneiss, Cortlandt complex

Marine basin

26 Upper Ordovician slate, schist, quartzite, and conglomerate with minor metavolcanic rocks.
Arvonia Formation
— on Axial Realm —

LAURENTIAN REALM
(entire orogen)

6 Taconic foreland basin
Westward-transgressive clastic wedges mainly derived from an eastern source and associated carbonate rocks. Locally includes mélangé.
6a. Lower to Middle Ordovician Sevier clastic wedge
6b. Middle to Upper Ordovician Taconic clastic wedge; gradational with unit 23
6c. Lower to Upper Ordovician Tourelle-Humber wedge; extends into Lower Silurian on Anticosti Island
Tourelle Formation, Goose Tickle Group

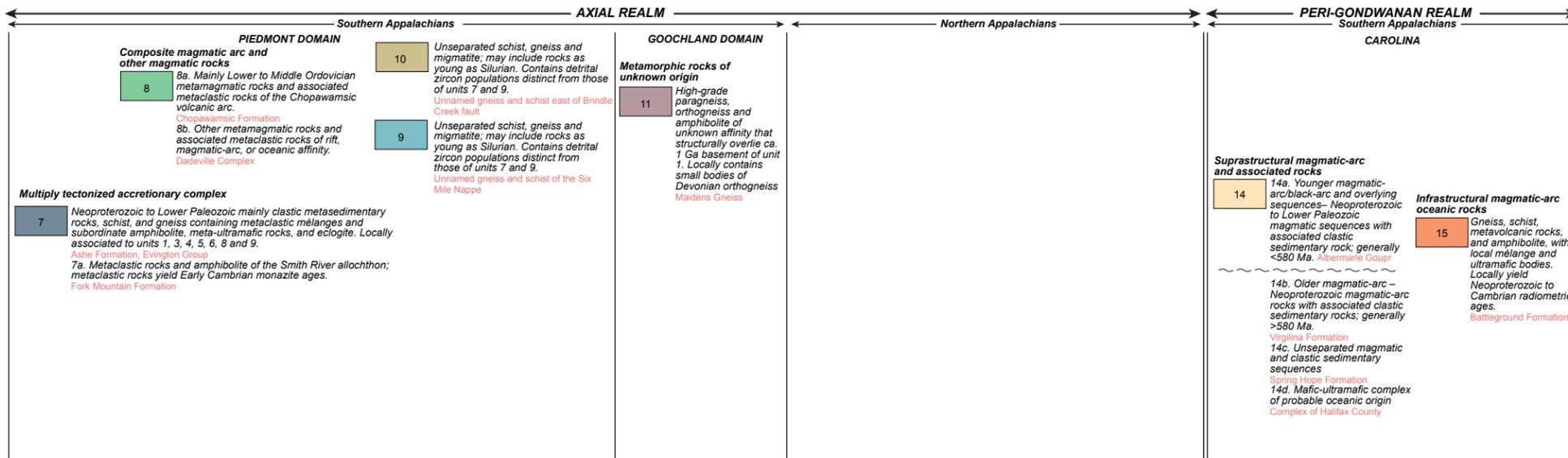
4 Lower Paleozoic basal transgressive clastic sequence and overlying dominantly carbonate platform sequence containing local clastic rocks
Chilhowee Group, Knox Group, Beekmantown Group, Phillipsburg Group, Port au Port Group, Potsdam Sandstone

5 Continental slope-and-rise facies; locally may contain oceanic volcanic rocks and rift-facies rocks
Conestoga Limestone, Ottawaquchoe Fm, Trois-Pistoles Group, Northern Head Group, West Castleton Formation

3 Iapetus rift facies
Neoproterozoic to Cambrian mainly clastic sedimentary rocks filling rift basins and associated magmatism related to Iapetus rifting. Locally contains fragments of oceanic crust
Coxe Supergroup, Gatoulin Formation, Pinnacle Formation, Tibbit Hill Formation, Bateau Formation, Lynchburg Formation
2 Encratonic magmatic rocks (ca. 750-680 Ma.) and associated sedimentary rocks; southern Appalachians
Grandfather Mountain Formation, Crossnore Complex

Grenville basement of Laurentian including ca. 1 Ga inliers within the hinterland

1 Gneiss, schist, and plutonic rocks affected by the Grenville Orogeny and associated post-orogenic granitoid bodies
Mount Holly Complex, Disappointment Hill Complex
1a. Basement components > 1.5 Ga.



WLS COL 2.5-1

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 & 2

Explanation of
Lithotectonic Map of the Site Region

FIGURE 2.5.1-202b Rev 2