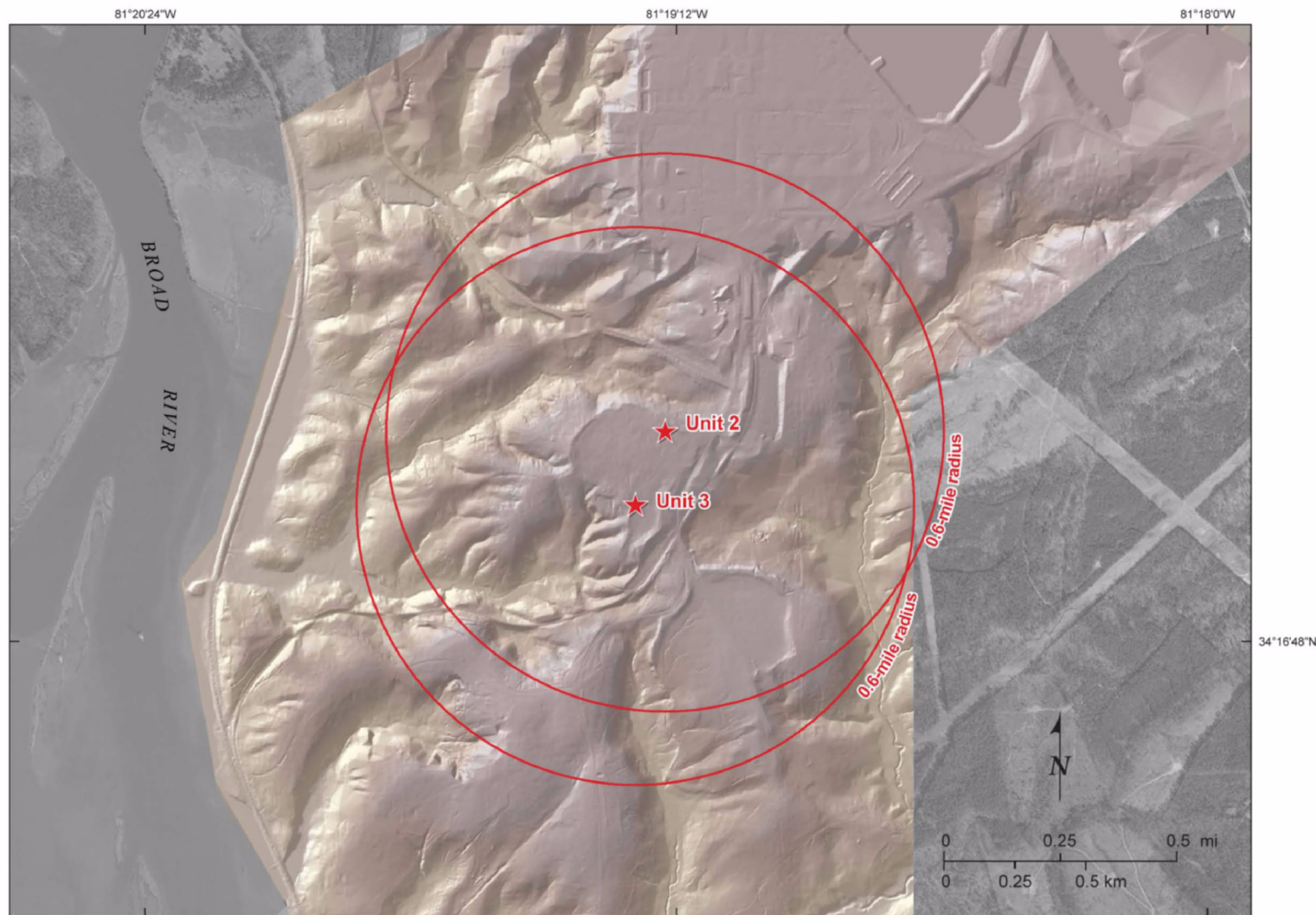


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Source: DEM (Digital Elevation Model) Hillshade generated from the contours of 2006 Glenn Associates Surveying, Inc. AutoCAD DWG Digital Data File.

Figure 2.5.1-223. Site Shaded Relief Map

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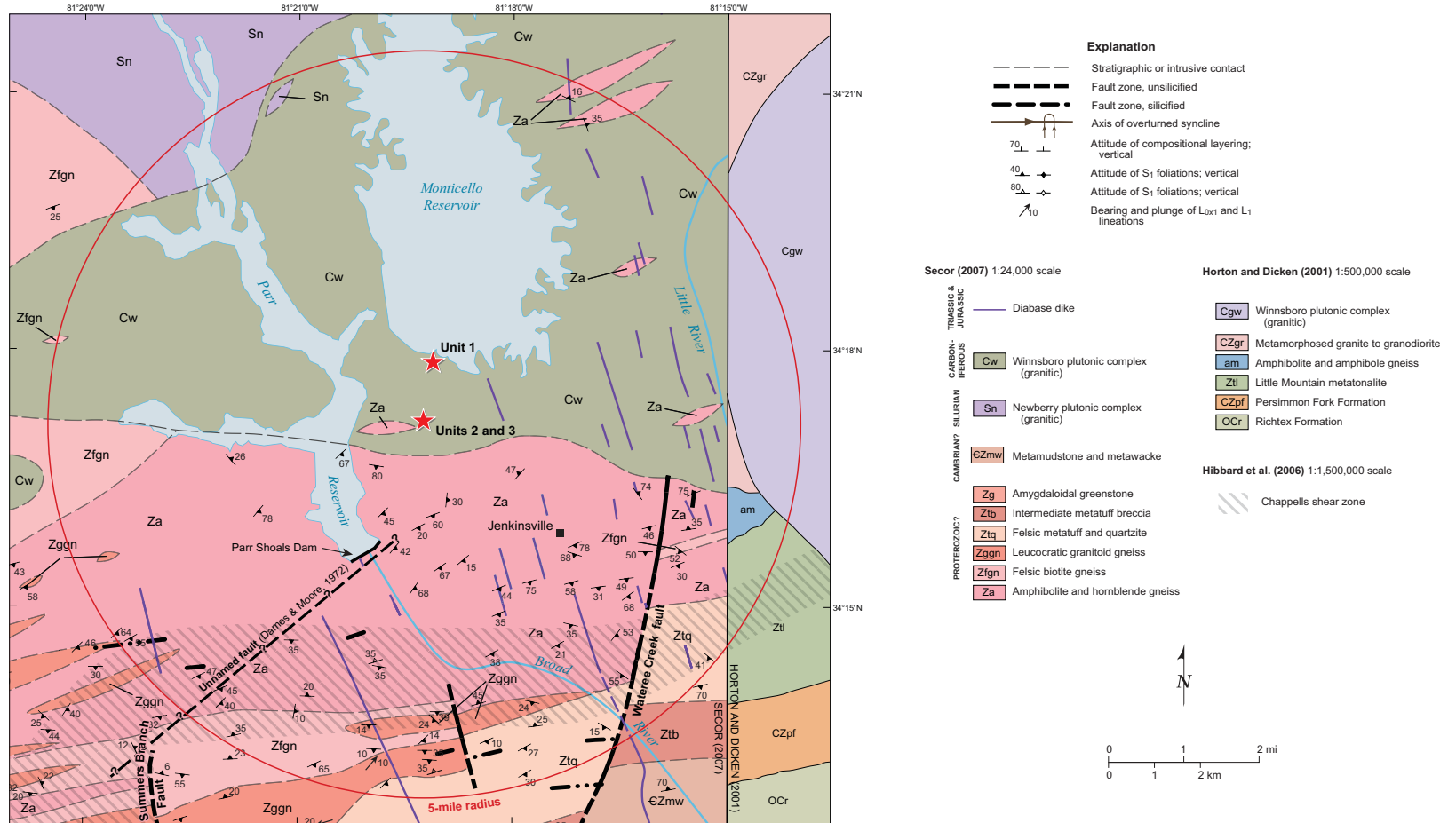


Figure 2.5.1-224. Site Area Geologic Map

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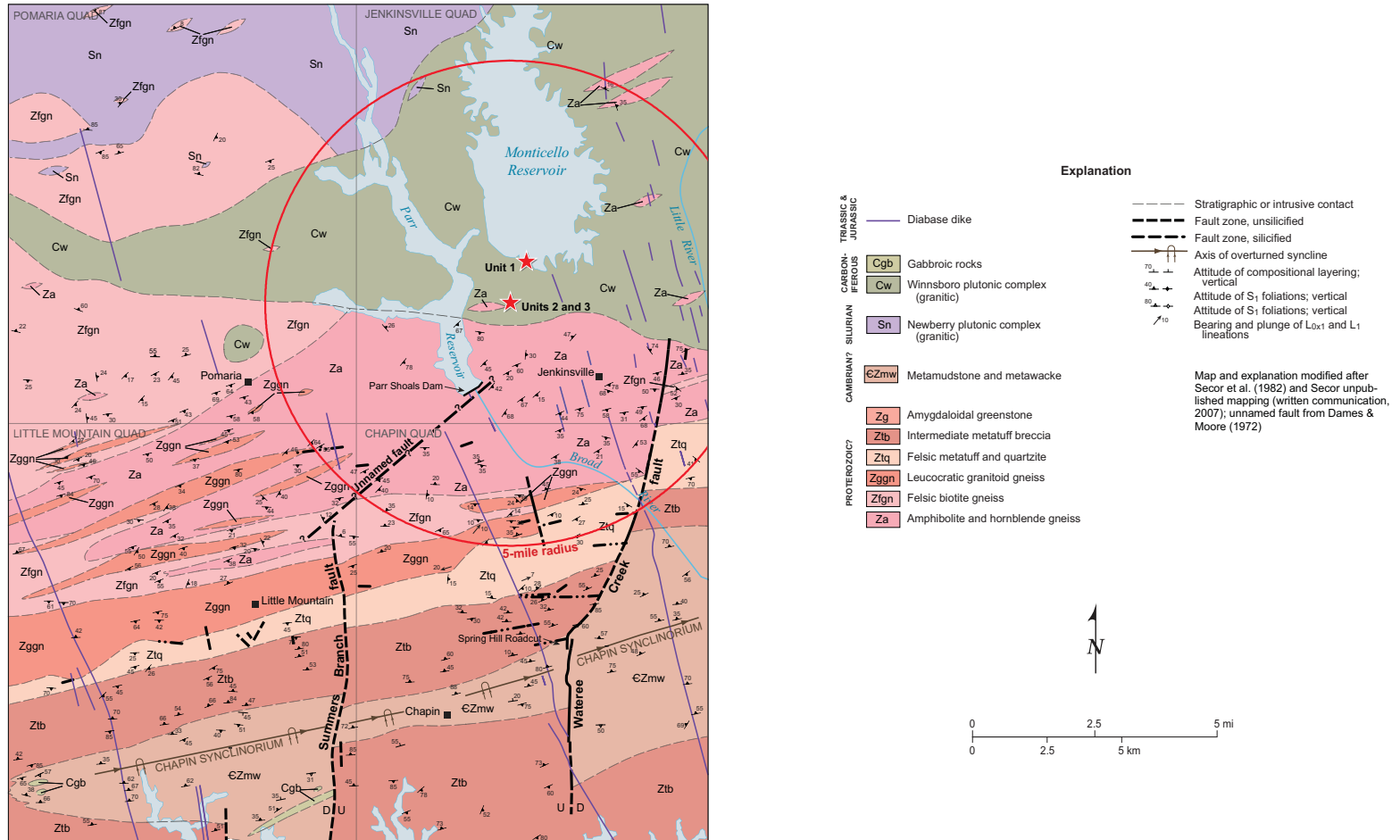
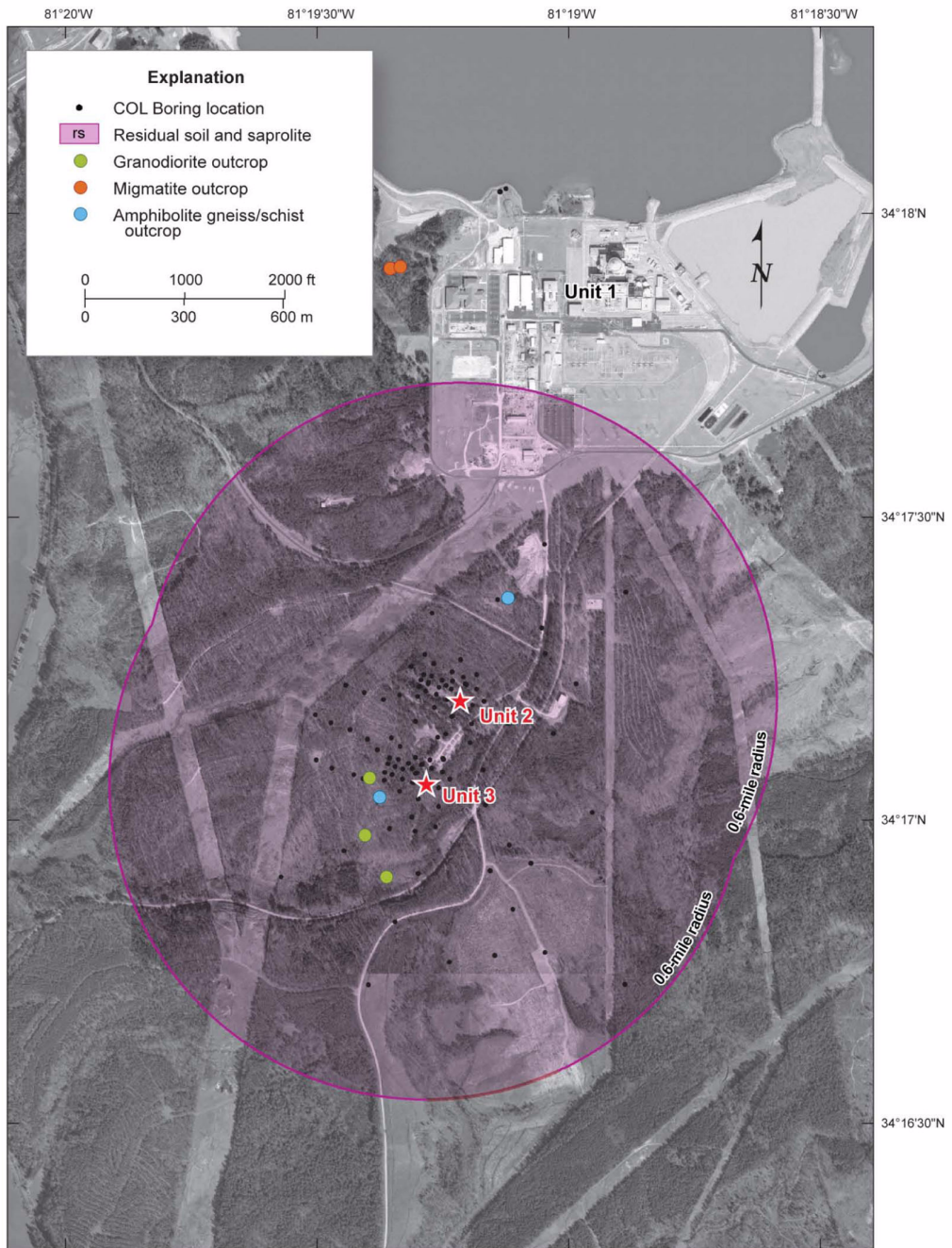


Figure 2.5.1-225. Geologic Map of the Jenkinsville, Pomaria, Little Mountain and Chapin 7.5-Minute Quadrangles

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**Figure 2.5.1-226. Map of Surficial Geology, Plant Layout and Borehole Locations for the Site Area**

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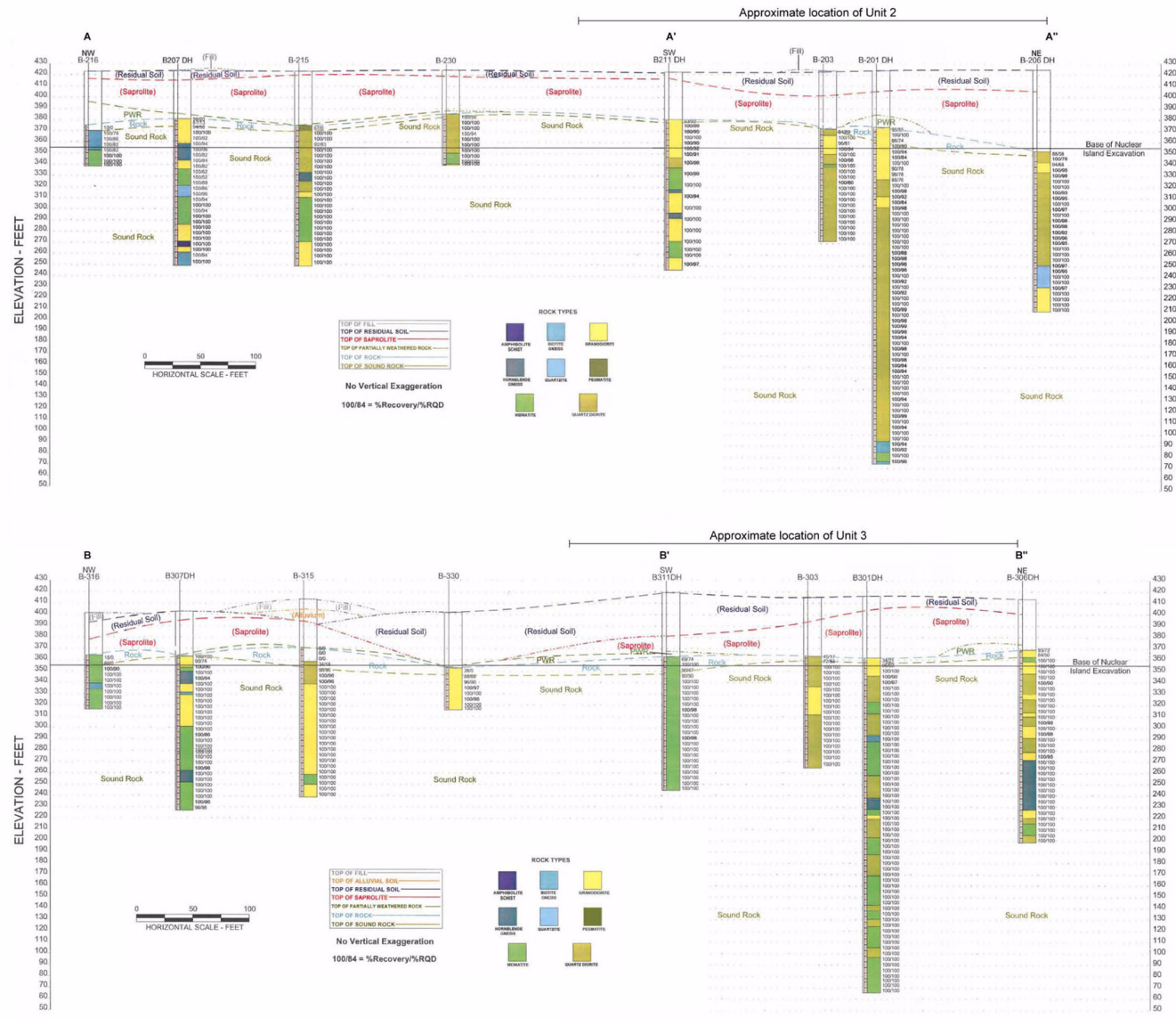


Figure 2.5.1-227. Geologic Cross Sections A-A' and B-B'

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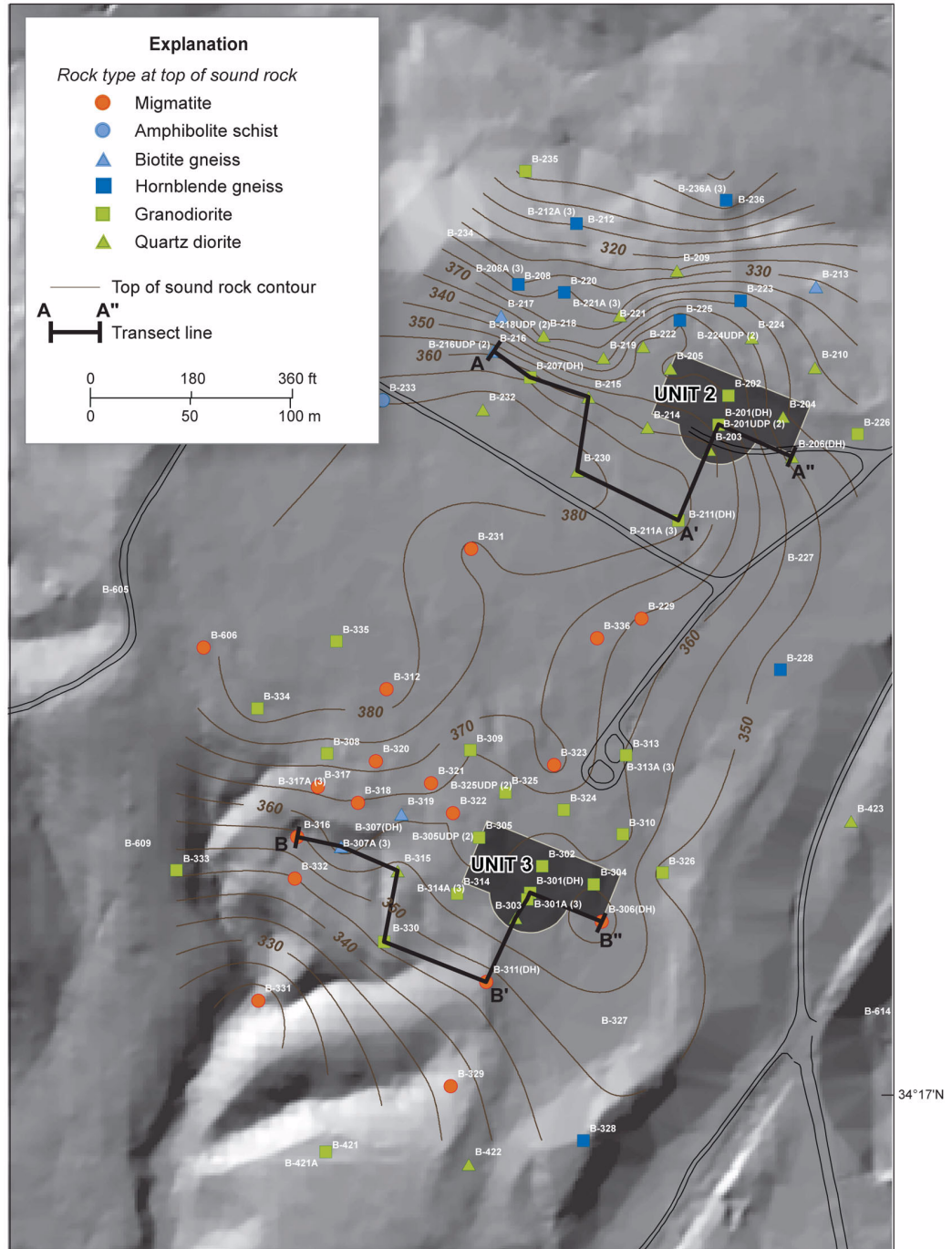


Figure 2.5.1-228. Contour Map of Sound Rock Surface at Units 2 and 3

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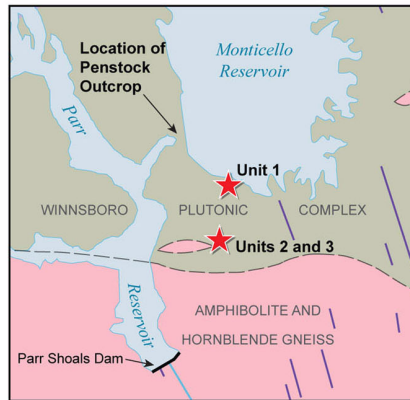
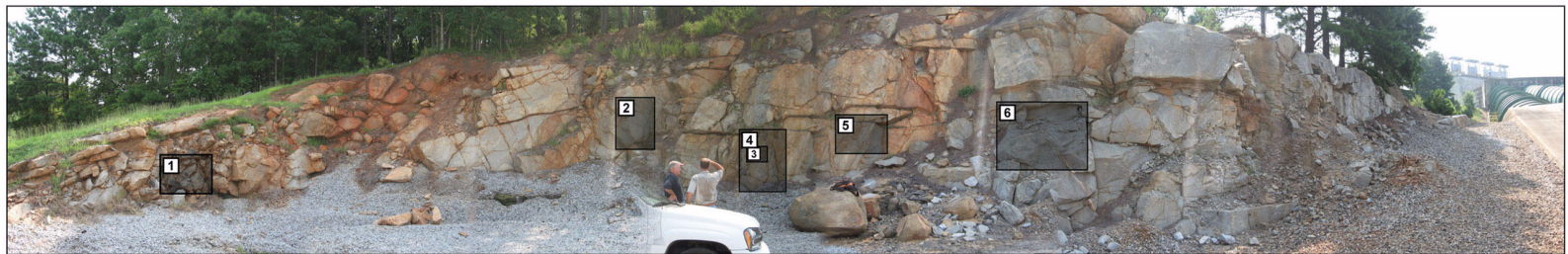
Brecciated mafic inclusions in granodiorite matrix



Flow structures



Cross-cutting relationships



Brecciated mafic inclusions in granodiorite matrix



Flow structures



Flow structures

Figure 2.5.1-229. Photographs of Fairfield Pumped Storage Facility Penstock Outcrop

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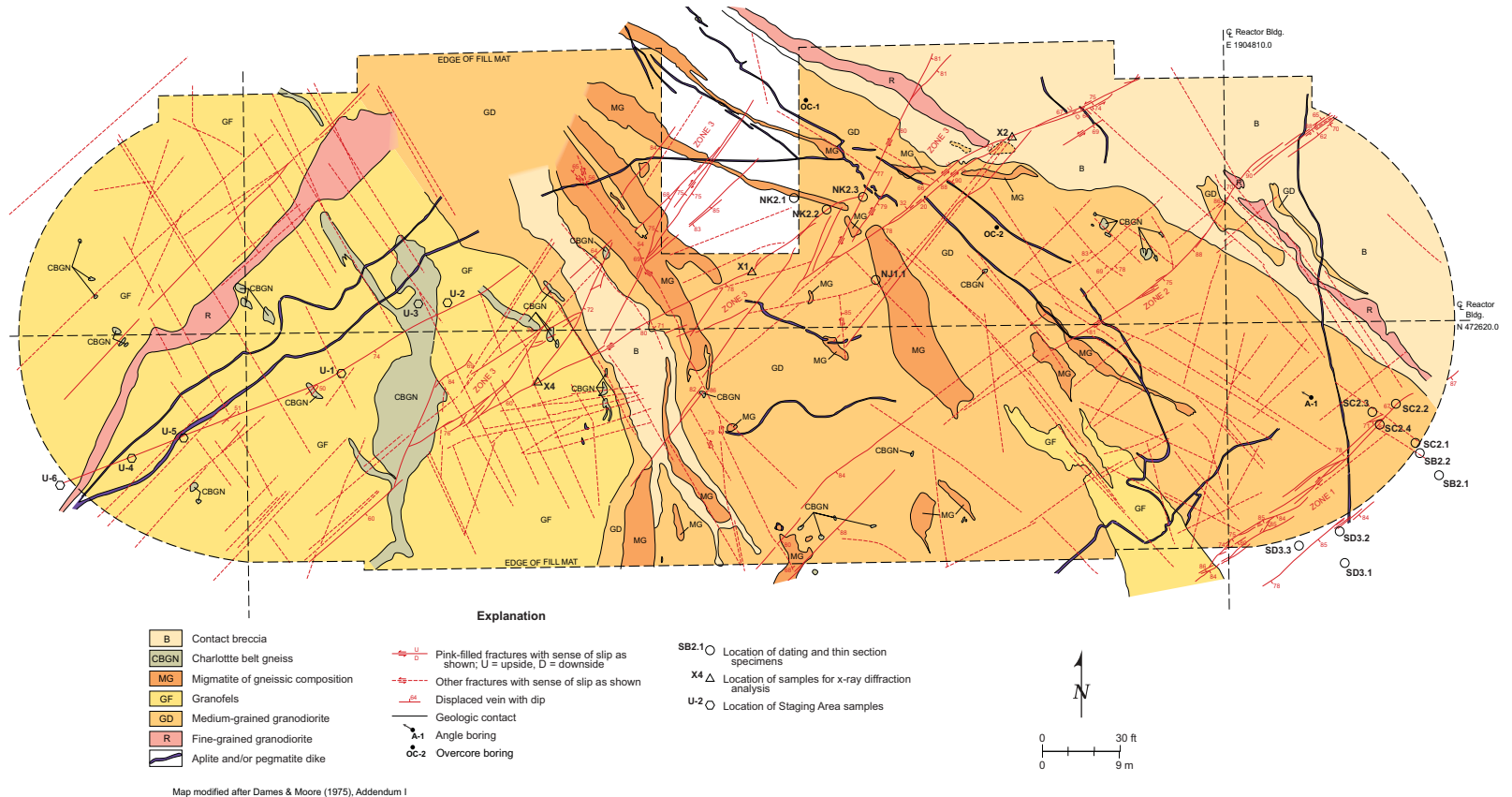


Figure 2.5.1-230. Structure Map of Unit 1 Excavation



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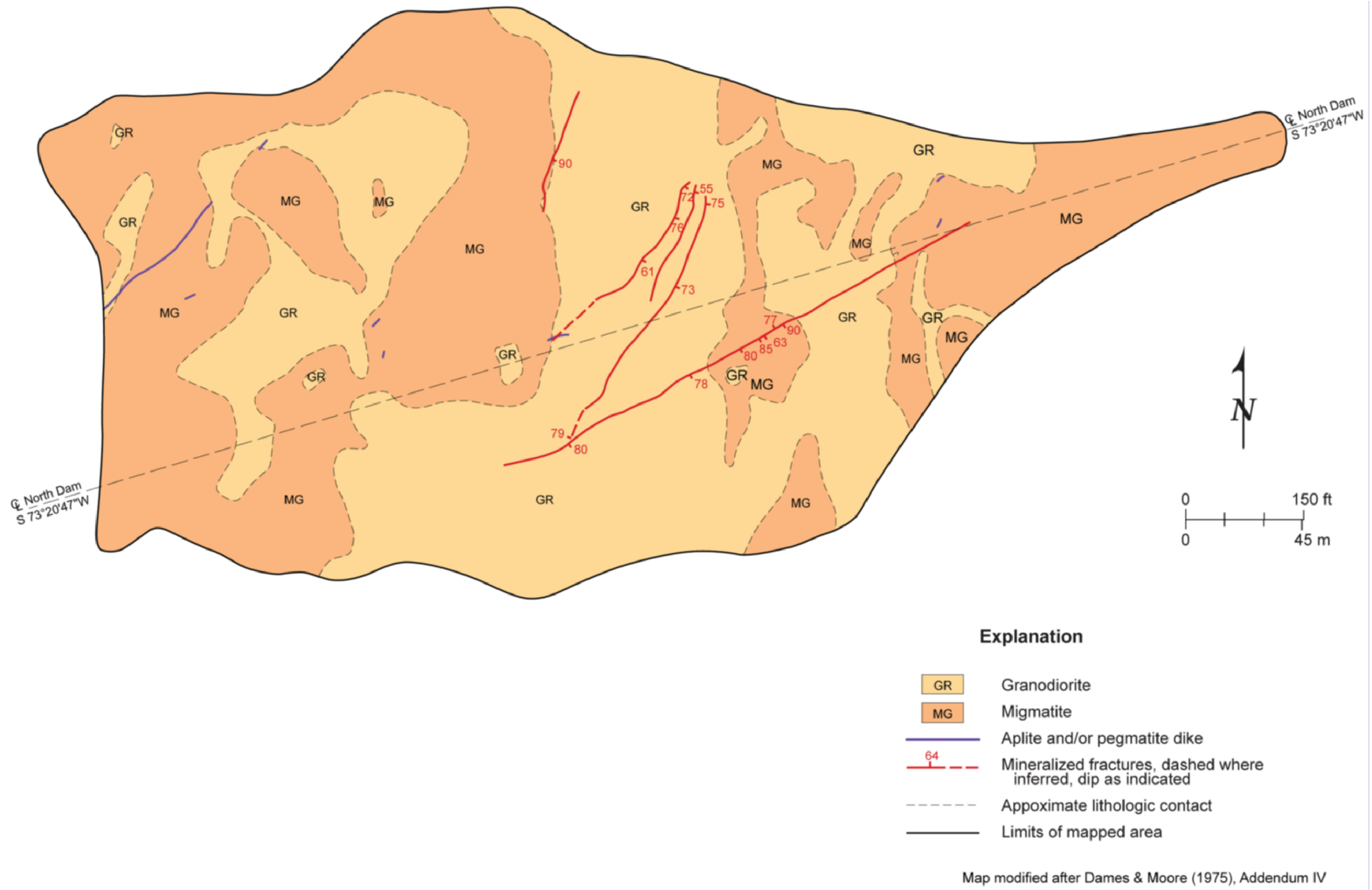


Figure 2.5.1-231. Structure Map of the Unit 1 Service Water Pond North Dam Site

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COL Application  
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Physiographic Province	Lithotectonic Element <small>(Hibbard et al. 2006; 2007)</small>		Lithotectonic Element <small>(Hatcher et al. 2007)</small>	
Appalachian Plateau and Valley and Ridge	Laurentian Realm	lapetus drift facies – passive margin sequence overlain by Taconic foreland basin	Laurential Platform and Rifted Margin	Platform rocks and clastic wedges
		<i>Great Smoky and associated faults</i>		<i>Great Smoky and associated faults</i>
		lapetus Rift facies		Rifted Margin rocks
Blue Ridge	~~~~ Hollins Line – Pleasant Grove fault system ~~~~		~~~~ Hayesville – Soque River fault ~~~~~	
	Iapetan Realm	Multiply tectonized accretionary complex	Terranes accreted during Taconian Events	
~~~~ Chattahoochee - Holland Mountain - Burnsville fault ~~~~~				
Brevard Zone		Alleghanian events	Tugaloo terrane and Smith River allochthon	
Six Mile nappe			Brindle Creek fault	
Brindle Creek Fault	Cat Square terrane			
Unnamed gneiss and schist	~ Central Piedmont Shear Zone ~~~~~		~ Central Piedmont Shear Zone ~~~~~	
Piedmont	Peri-Gondwanan Realm	Suprastructural magmatic-arc and associated rocks	Kings Mountain terrane	
		Infrastructural magmatic-arc oceanic rocks (includes Kings Mtn.)	Central Piedmont Suture	
	Continental rift basins and magmatism related to formation of the Atlantic Ocean		Carolina Superterrane	Carolina terrane
			Charlotte terrane	
Triassic - Jurassic basins				
//////////////////////////////////// Pre - Cretaceous Unconformity - Fall Line //////////////////////////////////////				
Coastal Plain	Coastal Plain		Coastal Plain and subsurface terranes	

**Figure 2.5.1-232. Correlations Between Physiographic Provinces and Recent Lithotectonic Classifications**