

TRIP B-5 (b)

The Building Stones of the Nelson A. Rockefeller Empire State Plaza

Leaders: R. H. Fickies and R. J. Dineen, N.Y. State Geological Survey

The construction of the Nelson A. Rockefeller Empire State Plaza, on 98 acres of land adjacent to the New York State Capitol Building represents the largest single-project use of a variety of industrial mineral products in the Northeastern U.S. in recent years. The project drew heavily on the Capital District's sand and gravel resources and provided a ready market for Portland Cement produced in the Hudson Valley. At least one Vermont marble quarry was depleted of reserves and closed down after supplying large quantities of stone to the project.

Facades of the Plaza present both rough and polished surfaces of several types of dimension stone selected from various parts of the United States, Europe, and South America for both exterior and interior facing on the walls of 10 of the 11 buildings in the complex. This walking tour will begin in the lobby of the Cultural Education Center (State Museum), whose walls are faced with polished creamy, white Alabama marble. From there the tour will proceed in a general clockwise direction around the Plaza (see Plaza map Fig. 1).

A listing of the various industrial minerals, their locations and uses in the Plaza is provided to aid the reader in taking a "self guided" tour of the Plaza.

TABLE 1

Building Stones and Other Industrial Minerals
Used in Construction of the Empire State Plaza

DIMENSION STONES

<u>Metamorphic Rock</u>	<u>Location</u>
Cherokee White Marble; Tate, Georgia - early Paleozoic	Exterior facing of Cultural Education Center
White Pearl Marble; West Rutland Vermont-Ordovician Sherburne Fm.	Exterior facing of Tower Building and the four Agency Buildings
Creamy White Marble; Sylacauga, Alabama - early Paleozoic	Interior facing of Cultural Education Center
Cherokee Melange Marble; Tate, Georgia - early Paleozoic	Exterior facing of Justice, Swan Street, and Legislative Buildings
Vert Tinos; Serpentinite, Isle of Tinos, Greece	Interior facing of portions of the Legislative Office Building lobby
Pavanazzo Marble; West Rutland Vermont, - Ordovician Shelburne Fm. (3" to 9" thick layer)	Interior Facing of portions of the Legislative Office Building lobby, all elevator lobbies in that building
Danby-Montclair Marble; Danby Vermont, -Ordovician Shelburne Fm.	Legislative Office Building, main entrance floor
Bluetone Marble; West Rutland, Vermont-Ordovician Shelburne Fm.	Walkways around reflecting pools on the outdoor plaza.

<u>Sedimentary rock</u>	<u>Location</u>
Travertine; Tivoli area, Italy	Interior facing of Grand Concourse, Elevator Lobbies in Tower and Agency Buildings
Indiana limestone	Paving stones on the Health Department Courtyard
Lenrock Stone; Greywacke Sandstone and Siltstone - Devonian Sonyea Group, Ithaca, New York	Exterior facing of the Main platform (The "great wall")

<u>Igneous rock</u>	<u>Location</u>
Lake Placid Blue "Granite"; Light Adirondack Anorthosite, Upper Jay, New York	Outside amphitheater adjacent to the Cultural Education Center, Legislative Building entrance steps, curbing and various fixtures on the plaza
Cold Springs Green "Granite"; Dark Adirondack Anorthosite, Upper Jay, New York	Ornamental stone fountain in the Legislative lobby. Water spouts on the Great Wall and elsewhere on the Plaza
Mount Airy "Granite"; North Carolina	Curbing - Swan Street & Madison Avenue
Uba Tuba "Granite"; Brown Monzonitic Stone from Brazil	The cornerstone - north end of outdoor plaza

CONCRETE

<p><u>Portland Cement</u></p> <p>Several producers in the Hudson and Mohawk Valleys (Helderberg Limestone)</p>	<p>Over 900,000 yd³ of concrete used in the Plaza. The Meeting Center is the only building with a concrete exterior facing.</p>
<p><u>Concrete Sands</u></p> <p>Cow Bay, Long Island, New York, and numerous local sources</p>	
<p><u>Concrete Gravels</u> (crushed stone)</p> <p>Hudson Valley dolomites</p>	
<p><u>Mortar Sand</u></p> <p>Corinth, New York</p>	

OTHER INDUSTRIAL MINERALS

<p><u>Red Natural Gravel</u></p> <p>Vermont river gravels composed of Cambrian Monkton Quartzite</p>	<p>Walkways on the Plaza</p>
<p><u>Buff Natural Gravel</u></p> <p>Cape May, New Jersey</p>	<p>Labyrinth area</p>
<p><u>Red Paving Bricks</u></p> <p>Ohio</p>	<p>Walkways on the Plaza</p>
<p><u>Buff Brick</u></p> <p>Ohio</p>	<p>Various Parapet Walls</p>

EMPIRE STATE PLAZA AND VICINITY ALBANY, NEW YORK

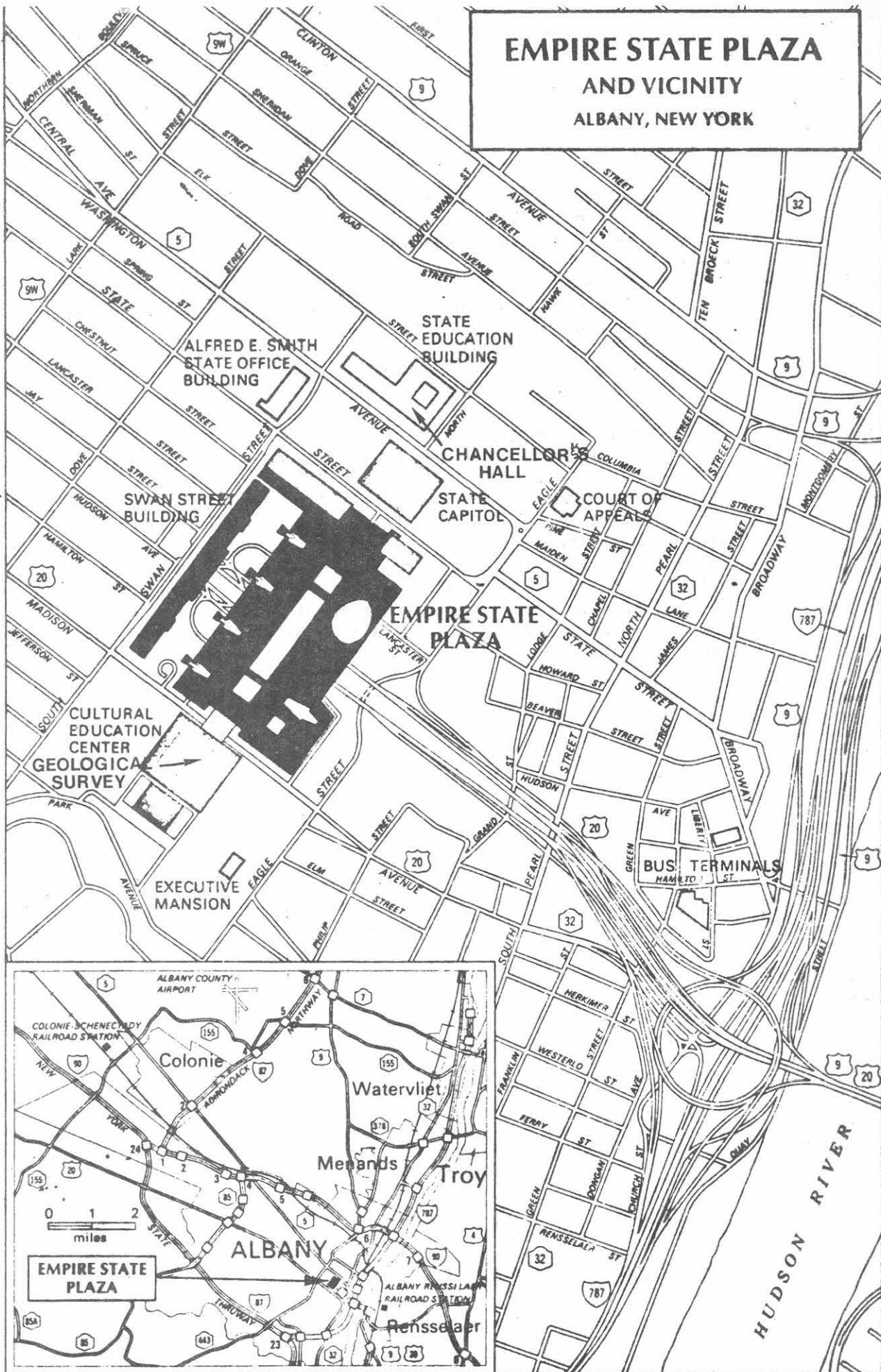


FIGURE 1
NELSON A. ROCKEFELLER - EMPIRE STATE PLAZA
OUTDOOR PLAZA LEVEL

