

RARITAN ARSENAL, MACHINE SHOP S-3
(Raritan Arsenal, Building 15C)
2890 Woodbridge Avenue
Bonhamton Vicinity
Middlesex County
New Jersey

HABS No. NJ-1061-G

HABS
NJ
12-BONTO, V,
1G-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, PA 19106

HISTORIC AMERICAN BUILDINGS SURVEY

RARITAN ARSENAL, MACHINE SHOP S-3

(Raritan Arsenal, Building 15C)

HABS No. NJ-1061-G

HABS
NJ
12-BONHAMTON
1G

Location: 2890 Woodbridge Avenue, Bonhamton vicinity, Middlesex County, New Jersey

USGS Perth Amboy, New Jersey Quadrangle
Universal Transverse Mercator Coordinates: 18.554280.4484840

Significance: Machine Shop S-3 is significant as a contributing structure in the World War II expansion of the shops complex. This expansion arose due to increased wartime production of artillery and motorized arms.

Description: Building 15C is an interior building and has no elevations exposed to the elements. It is surrounded on four sides by Building 15A (HABS No. NJ-1061-E), Building 19 (HABS No. NJ-1061-J), Building 15D (HABS No. NJ-1061-H) and Building 14 (HABS No. NJ-1061-D). The structure contains a north and south elevation that were originally exterior walls before the construction of Buildings 15A and 15D; the east and west elevations are formed by Buildings 14 and 19. When Building 15C was constructed, it served as a connector between Buildings 14 and 19.

The walls are constructed of common bond brick with cast concrete sills and lintels. The south wall is filled with five-light by seven-light metal-frame industrial windows above wainscot-height brick walls separated by brick piers. The windows in the north wall have been removed and the wainscot infilled with metal panels and wood sills. The brick piers remain. The floor is poured concrete slab. The three-bay structure is supported by riveted steel posts that rest on poured concrete bases. A gable-peak skylight is centered above six bays. The skylight is constructed of corrugated reinforced glass supported by a riveted steel frame. The frame rests on brick supports on the flat roof.

A "Shaw-Box" traveling crane with a ten-ton capacity and a sixty-foot span is located at the center bay, attached to the posts at clerestory level. Signage indicates that it was manufactured by Manning, Maxwell and Moore of Muskegon, Michigan. The crane ran on tracks attached to the interior of the posts and was powered by 200 volts. An office located at the mezzanine of the northwest corner of the building is constructed of metal and is supported by I-beams riveted to the posts. Electrical outlets are attached to every post. Metal incandescent light fixtures with globe-shaped bulbs are located throughout the building.

History: Machine Shop S-3 was constructed in 1940-1941 as part of the World War II involvement (Dames & Moore 1993:7-4). The activities undertaken in this shop were the overhauling and modification of light and heavy artillery as well as the

modification of small arms and automatic arms (Dames & Moore 1993:7-8). A 1943 interior photograph of the building shows the west wall (that of Building 14 (HABS No. NJ-1061-D)) still containing its original windows (Raritan Arsenal History, Vol. 106: n.p.). These windows have been removed and infilled with hollow tile. Construction of an addition (Building 15A) to Machine Shop S-3 was begun in the summer of 1944. As part of this project, the crane, which had been made available from surplus lists, was installed (Raritan Arsenal History, Vol. VIII: 462). An account lists machinery installed in 1951: three welding machines, two "Do-All" machines, two milling machines, one screw machine, and one threading machine. In 1952, one jig shear, two milling machines, and one rapid threading machine were also installed (Dames & Moore 1993:Appendix E). The ten-ton capacity crane indicates heavy machinery use.

The building is owned by the United States Environmental Protection Agency (U.S.E.P.A.) and is vacant. The U.S.E.P.A. has decided to demolish the building because it cannot presently be reused and renovation is not cost-effective.

Sources:

Dames & Moore. Archival Search Report Former Raritan Arsenal, Edison, New Jersey, Volumes 1 and 2, Appendix E. Prepared for the Army Corps of Engineers, Kansas City District, Kansas City, Missouri, July 1993.

Oversize manuscript map "Raritan Arsenal Building Numbers, January 2, 1943." R.G. 156, Entry 646, Box 225, National Archives, College Park, Md.

Raritan Arsenal History, Vol. VIII 1 July 1944 thru September 1944. R.G. 156, Entry 646, Box 230, National Archives, College Park, Md.

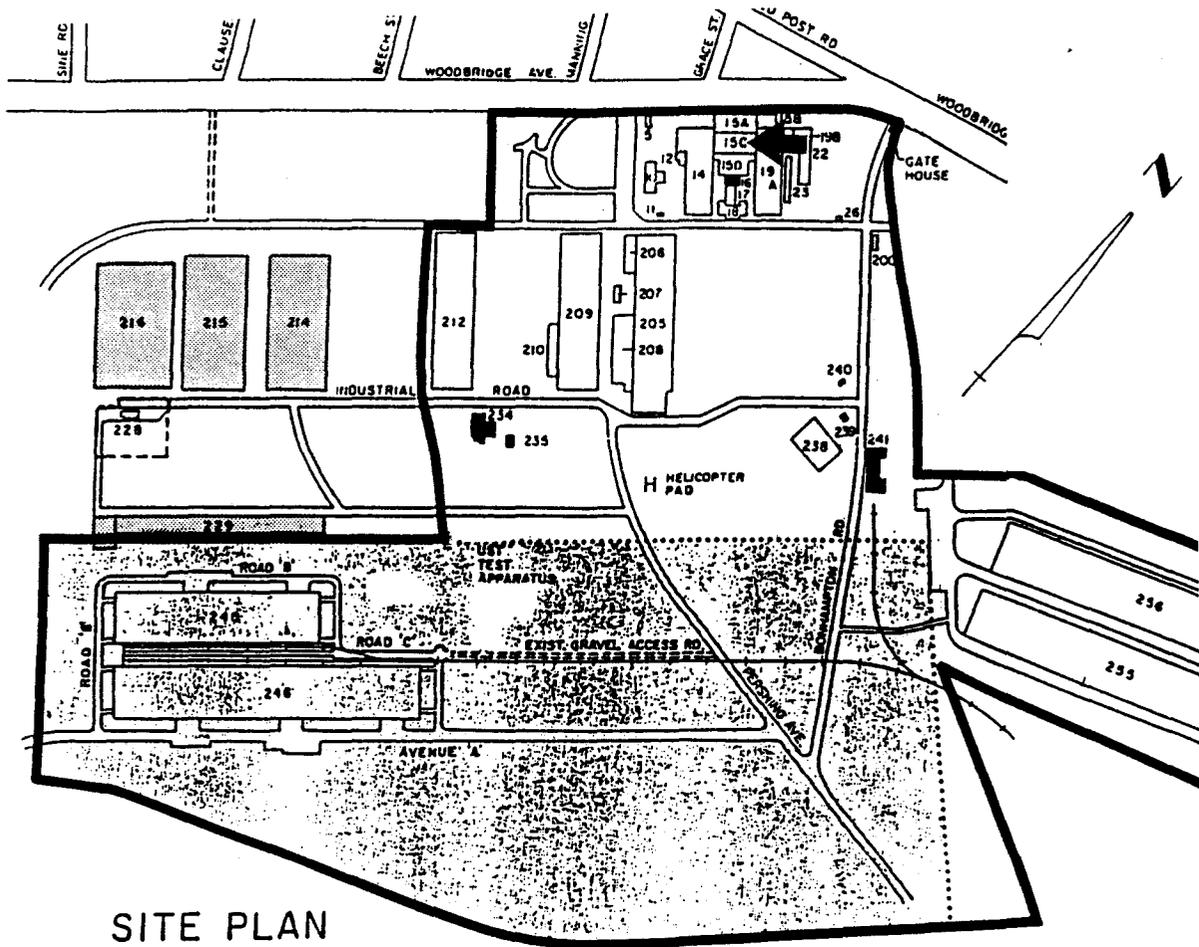
Raritan Arsenal History (Photographs), Vol. 106. R.G. 156, Entry 646, Box A234, National Archives, College Park, Md.

Historian:

Stacy E. Spies, Richard Grubb & Associates, October, 1996

PROPERTY PLOT PLAN

Map of the U.S.E.P.A.-owned property which includes part of the former Raritan Arsenal. Arrow points to subject building. Map is altered from Figure 2 of the Stage 1 Cultural Resources Survey, United States Environmental Protection Agency Edison Facility, Edison Township, Middlesex County, New Jersey, 1990.



SITE PLAN
600 0 600
SCALE IN FEET
US ENVIRONMENTAL PROTECTION AGENCY

KEY:

-  - EPA BOUNDARY
-  - BUILDINGS OWNED BY MIDDLESEX COUNTY COLLEGE
-  - BUILDINGS RECENTLY DEMOLISHED

SKETCH FLOORPLAN

