

COLGATE & COMPANY JERSEY CITY PLANT: TURBINE HOUSE/ C-4      HAER No. NJ-71-S  
(Colgate-Palmolive Company Jersey City Plant: Turbine House/ C-4)  
35-39 Grand Street  
Jersey City  
Hudson County  
New Jersey

HAER  
NJ  
9-JERCI,  
185-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD  
Northeast Field Area  
Chesapeake/Allegheny System Support Office  
National Park Service  
U.S. Custom House  
200 Chestnut Street  
Philadelphia, PA 19106

HISTORIC AMERICAN ENGINEERING RECORD

HAER  
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9-JERCL  
188-

COLGATE & COMPANY JERSEY CITY PLANT: TURBINE HOUSE/C-4\*  
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Location: 35-39 Grand Street, Jersey City, Hudson County, New Jersey

Significance: In conjunction with the adjacent Boiler House/C-8, generating equipment in C-4 (commonly referred to as the Turbine House) provided most of the electrical power required at the Jersey City plant c1935-87. Although not an individually significant structure, C-2 was significant as a component of the Colgate plant.

Description: C-4 is a 53.6-by-74.1-foot reinforced concrete structure, with an approximately 9-foot-high basement, a high single story with about 19 feet interior clearance, and a flat roof. Concrete footings support pilasters and round interior columns which divide the structure in approximately equal four-by-two bays; additional basement piers support the five turbine units. The four-bay Grand Street facade, with a two-story appearance, is defined by plain pilasters extending to a plain entablature strip immediately above the second level of windows. The horizontal obscure glass block windows have exaggerated window sills and hopper panels set in metal frames; the second level includes a combination of hoppers and aluminum vents. A small stair and ramp platform at the second bay from the east leads into a truck bay. Similar windows on the north bay of the east facade define an interior office space. A superstructure on the roof carries overhead bridges and equipment. C-4 has a railroad siding along its north facade, and is shadowed by a conveyor bridge passing immediately overhead on Grand Street (HAER NO. NJ-71, C BLOCK TO SOUTHWEST [C-4 is at lower right center]).

The ground-floor interior includes five turbine units of between 250 and 2500 KW, steel I-beams on concrete column shoulders, traveling cranes riding on the beams, control boards along the west wall, and a mezzanine office structure in the north-easternmost bay. Finishes include a quarry tile floor, cement walls and an acoustical tile ceiling. The building connects to C-8 (HAER No. NJ-71-T) through openings in the ground floor and basement south walls. The basement includes other equipment needed for turbine operation: condensers and circulating pumps using river water pumped from E-3 (HAER No. NJ-71-JJ); and air pumps (FIRST FLOOR TO SOUTHWEST, No. 5 TURBINE AT RIGHT; Figure 2).

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\* Capitalized references are to photographs included with this documentation, or with the documentation for HAER NO. NJ-71 and associated structures.

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**History:** Colgate & Company purchased the C-4 site c1900, and built a stable for cart horses used for the firm. The older structure was demolished c1934-35, when Turner Construction Company built C-4 for Colgate-Palmolive-Peet, with Colgate's J.A Jacobs acting as project engineer. The company upgraded the electrical service in 1948 from 480 to 4160 AC volts, and added a fifth turbine unit; circuit breaker controls were gradually upgraded from the original carbon-type air breakers. Protective devices were also installed to prevent the power plant from feeding the New Jersey Public Service utility grid. C-4 was demolished in 1990.

**Sources:**

**Interviews**

Theodore Mrowzinski and Walter Merlin, Colgate-Palmolive Company engineers, October-November 1989.

**Plans**

All drawings listed below are currently (1991) held by the Colgate-Palmolive Company in the L-1 building at the Jersey City plant (HAER NO. NJ-71-SS). In addition to these citations, which document the structure, there are many plans, drawings, and specifications for changes to C-4 electrical and mechanical systems. For future access, researchers should contact the company's Office of Corporate Communications, 300 Park Avenue, New York, NY 10022.

Turner Construction Company  
1934 Core Borings

Turner Construction Company/J.A. Jacobs, Engineer  
1934 [12 drawings]:

1	Basement Plan	7	Cross Section
2	First Floor Plan	C-1	Turbine House Foundation Plan
3	Roof Plan	C-1A	Turbine House Foundation Plan
4	Grand Street Elevation	C-2	First Floor Plan
5	East Elevation	C-3	Third Floor Plan
6	West Elevation	C-4	Column Schedule

**Bibliography**

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1962-79 Colgate-Palmolive Company. "Jersey City Plant." Serial No.  
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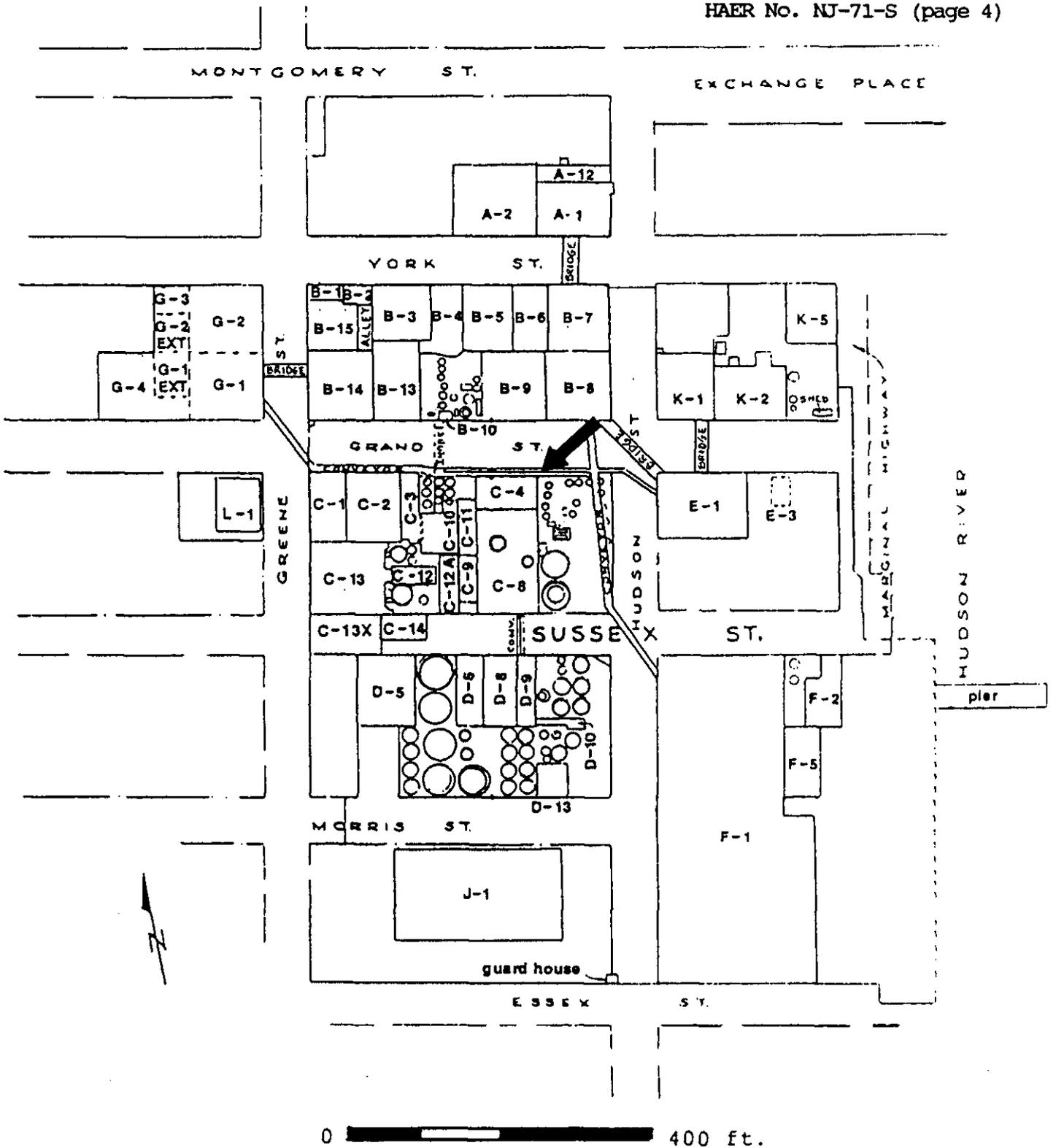


Figure 1. LOCATION OF TURBINE HOUSE/C-4 AT COLGATE JERSEY CITY PLANT

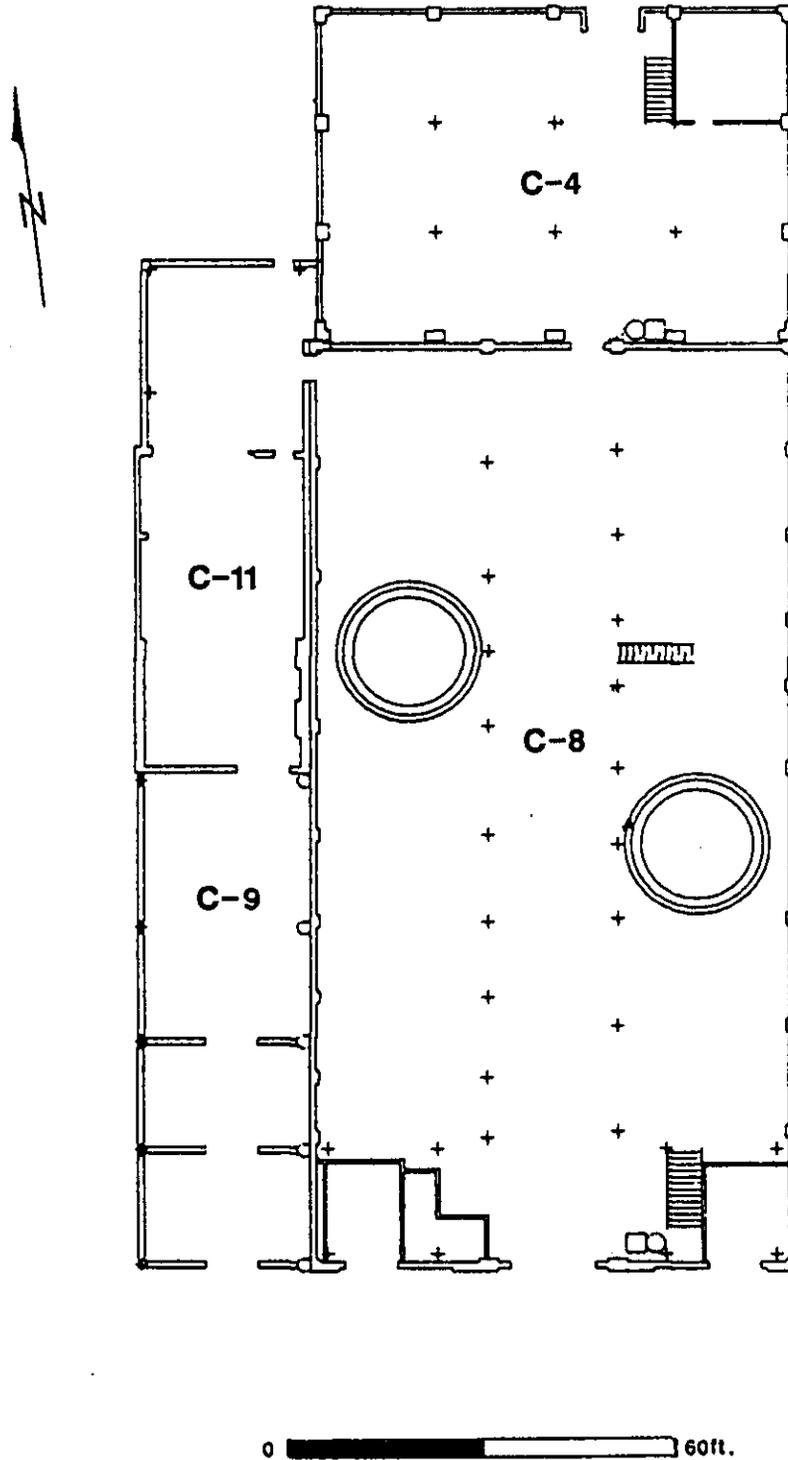


Figure 2. FIRST FLOOR PLANS OF C-4, C-8, C-9, AND C-11