UMASS 403496

SPRINGFIELD ARMORY NATIONAL HISTORIC SITE

Springfield, Massachusetts

BUILDING 19 HISTORIC STRUCTURE REPORT

Volume II.

Illustrations and Appendices

DRAFT

By

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I. HISTORIC ILLUSTRATIONS

LIST OF ILLUSTRATIONS AND CREDITS

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2. "City of Springfield," 1851. Surveyed and drawn by Marcus Smith and H. A. Jones, published by M. Dripps. Connecticut Valley Historical Society.

3. Site plan of the Springfield Armory, 1859. Drawn by E. S. Allin. SPAR NHS Collections. (Drawer 1, Folder 4.)

4. "Map of the City of Springfield from Actual Surveys," 1860. Published by Smith and McKinney, surveyed by Smith and Van Zandt. Connecticut Valley Historical Society.

5. "City Directory, Map of Springfield," 1861-62. Connecticut Valley Historical Society.

6. "City Directory, Map of Springfield, Mass.," 1862-63. Published by Samuel Bowles and Co. Connecticut Valley Historical Society.

7. "Topographical Plan of the Springfield Armory. Springfield, Mass.," April, 1864. SPAR NHS Collections. (Small Drawer 1, Folder 3.)

8. Bird's-eye view of Springfield, 1875. Engraving by Whitney and Adams. Connecticut Valley Historical Society.

9. Springfield Armory, Hill and Watershops from Secretary of War Report, 1875. SPAR NHS Collections. (Photo Drawer 7, Maps D7.)

10. "Topographical Plan of the U.S. Armory," 1877. Copy with additions, July, 1882. SPAR NHS Collections. (Drawer 1, Folder 1.)

11. "Main Grounds of U.S. Springfield Armory, April 15, 1897. SPAR NHS Collections. (Drawer 1, Folder 4.)

12. Detail. "Plan of Main Grounds, Springfield Armory, Springfield, Massachusetts," 1910. Connecticut Valley Historical Society.

13. "Buildings and Grounds, Hill Shops, Springfield Armory," March 11, 1918 with last revision February 1936. SPAR NHS Collections, no. S.A.E. 101. (Small Drawer 1, Folder 3.)

14. "Buildings, Grounds, Roads, Sidewalks, Fences, Springfield Armory, Hill Shops," May 2, 1904 with last revisions September 17, 1957. SPAR NHS Collections,no. 19-12-50. (Small Drawer 1, Folder 2.)

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16. "Springfield Armory, Hill Shop Area," June, 1965. SPAR NHS Collections, no. 10-02-101. (Small Drawer 1, Folder 2.)

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18. "Stables and Long Storehouse, Ventilator for Barn," July 24, 1861. SPAR NHS Collections, no. SA 1455. (Small Drawer 3, Folder 4A.)

19. "Addition to West End of Storehouse," August 20, 1862. SPAR NHS Collections, no. NHSD 128. (Drawer 7, Folder 2A.)

20. Proposed alteration to Long Storehouse raising middle bays one story, ca. 1866. SPAR NHS Collections, no. SA 1455. (Small Drawer 3, Folder 4A.)

21. Floor Plans, Long Storehouse, April 20, 1909. SPAR NHS Collections, no. SA 268. (Drawer 7, Folder 2.)

22. "Long Storage House Floor Plans," October 9, 1916. SPAR NHS Collections, no. SA 1675. (Drawer 7, Folder 2.)

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28. "Structural Steel Reinforcing Floor "B", of Building No. 19, Hill Shops," November 1, 1940. SPAR NHS Collections, no. SA 13243-1. Sheet 2 of 2. (Drawer 7, Folder 2.)

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HISTORIC IMAGES

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37. View of Armory from the west end of the Armory grounds, ca. 1860. SPAR NHS Collections, vertical file.

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49. South elevation of Building 19 looking west, December 1932. SPAR NHS Collections, neg. no. 758-C. (Photo Drawer 7, Folder B19 Ext.)

50. South elevation of the east (Stables) end of Building 19, December 1932. SPAR NHS Collections, neg. no. 755-C. (Photo Drawer 7, Folder B19A.)

51. Building 7 with the south elevation of Building 19 visible behind, December 1932. SPAR NHS Collections, neg. no. 752-SA. (Photo Drawer 1, Category 1.)

52. Building 8 with the south elevation of Building 19 visible behind, December 1932. SPAR NHS Collections, neg. no. 753-C. (Photo Drawer 1, Category 1.)

53. Building 10 with the south elevation of Building 19 visible behind, December 1932. SPAR NHS Collections, neg. no. 751-C. (Drawer 1, Category 1.)

54. "Building 19A - New slate roof showing progress of alterations - W.P.A. Project," October 5, 1937. SPAR NHS Collections, neg. no. SA-1630. (Photo Drawer 7, Folder 19A.)

55. "Bldg. 19A-Stable, Showing progress of alterations - W.P.A. Project," April 7, 1937. SPAR NHS Collections, neg. no. SA-1507.

56. "Bldg. 19 - Storehouse, Showing alterations to sallyport - W.P.A. Project," May 1, 1939. SPAR NHS Collections, neg. no. 2137-SA.

57. Shooting range for Building 28 under construction showing alterations to the east end of Building 19 as well as the development of the surrounding site, December 1941. SPAR NHS Collections, neg. no. 759-SA. (Photo Drawer 1, Category 1.)

58. Building 25 under construction, east end of Building 19 visible in upper left corner, ca. 1942. SPAR NHS Collections. (Photo Drawer 3.)

59. Building 32 completed. A portion of Building 19 is visible at the right, November 10, 1944. SPAR NHS Collections.

60. View of Building 19 from the Main Arsenal tower looking north, November 10, 1944. SPAR NHS Collections, neg. no. 4893-SA.

61. Aerial view of the Armory, March 22, 1949. SPAR NHS Collections, neg. no. 6834-SA.

62. Building 19, interior view from Long Storehouse looking east, ca. 1950. SPAR NHS Collections, neg. no. 8580-SA.

63. Building 19, interior, brick floor, April 1, 1952. SPAR NHS Collections, neg. no. 8583-SA.

64. Building 19, interior, worker stacking wood supplies, ca. 1952. SPAR NHS Collections.

65. Aerial view of the Springfield Armory, 1958. SPAR NHS Collections, neg. no. 19-058-916/ORD-58.

66. View with Building 7 in the foreground at the right and Building 19 visible in the background, ca. 1961. SPAR NHS Collections, neg. no. 19-058-224/ORD 61.

67. View from Main Arsenal looking northeast showing the Officers' Quarters facing the Parade Green and Building 19 in the background, ca. 1961. SPAR NHS Collections.

68. Aerial View of Armory Square, 1965. SPAR NHS Collections, neg. no. 19-058-6 8/AMC-65.

69. Building 19, south elevation, east end, 1966. SPAR NHS Collections, neg. no. 743/66.

70. Building 19, south elevation looking northwest, August 17, 1967. Included in the report by the Office of Archeology and Historic Preservation, Springfield Armory, Evaluation Under Provision of Historic Preservation Act 1966.

71. Aerial view of Armory Square showing addition of STCC buildings, 1983. SPAR NHS Collections, neg. no. 19/NHS 83.

SITE PLANS

Figure 1. "Armory Hill," 1830-31. Drawn by 2nd Lieutenant T. B. Linnard.

N° 2

ARMORY HILL

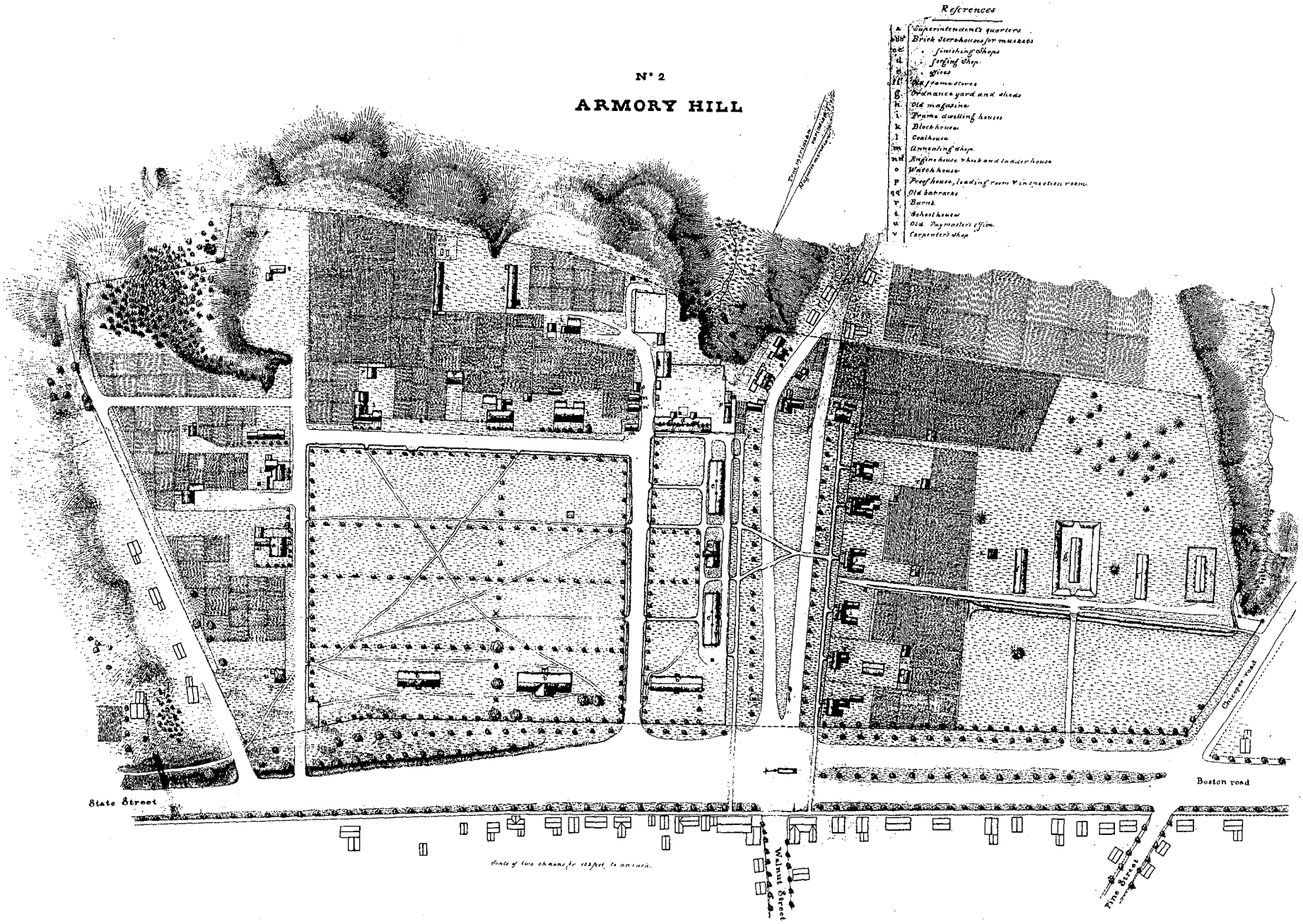


Figure 2. "City of Springfield," 1851. Surveyed and drawn by Marcus Smith and H. A. Jones, published by M. Dripps.

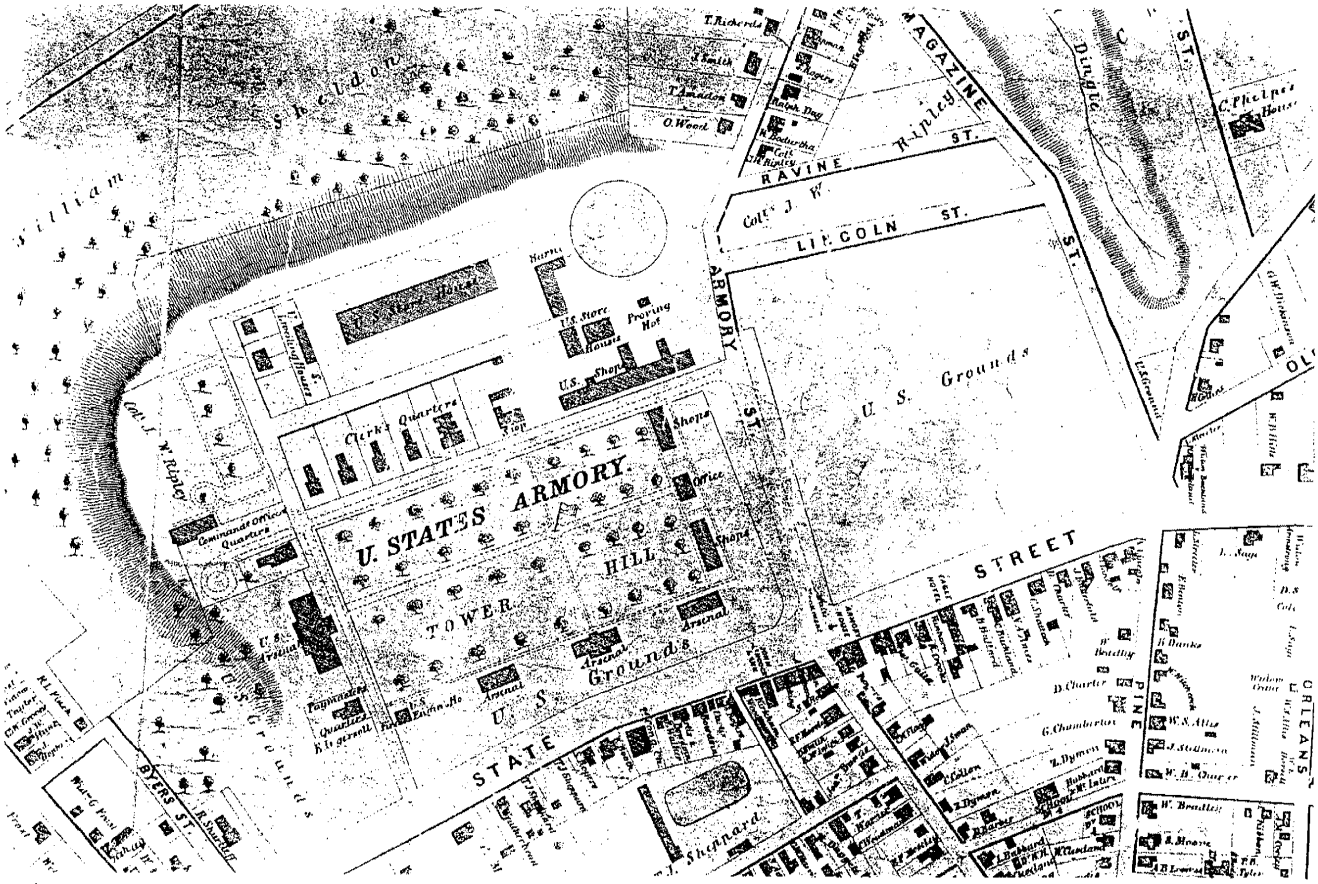

U. STATES ARMORY.
TOWER HILL
U. S. Grounds
ARMORY ST.
LINCOLN ST.
RAVINE
Ripley ST.
MAGAZINE
STATE STREET
PINE
ORLEANS
BYERS ST.
Clerk's Quarters
Commandant's Quarters
Shops
Office
Arsenal
Magazine
Drawing
Proving Mar
U.S. Store Houses
U.S. Shops
Engine House
Colo. J. W. Ripley
Col. J. W.
T. Richards
T. Smith
T. Madden
O. Wood
C. Phelps
Shepard

Figure 3. Site plan of Springfield Armory, 1859. Drawn by E. S. Allin.

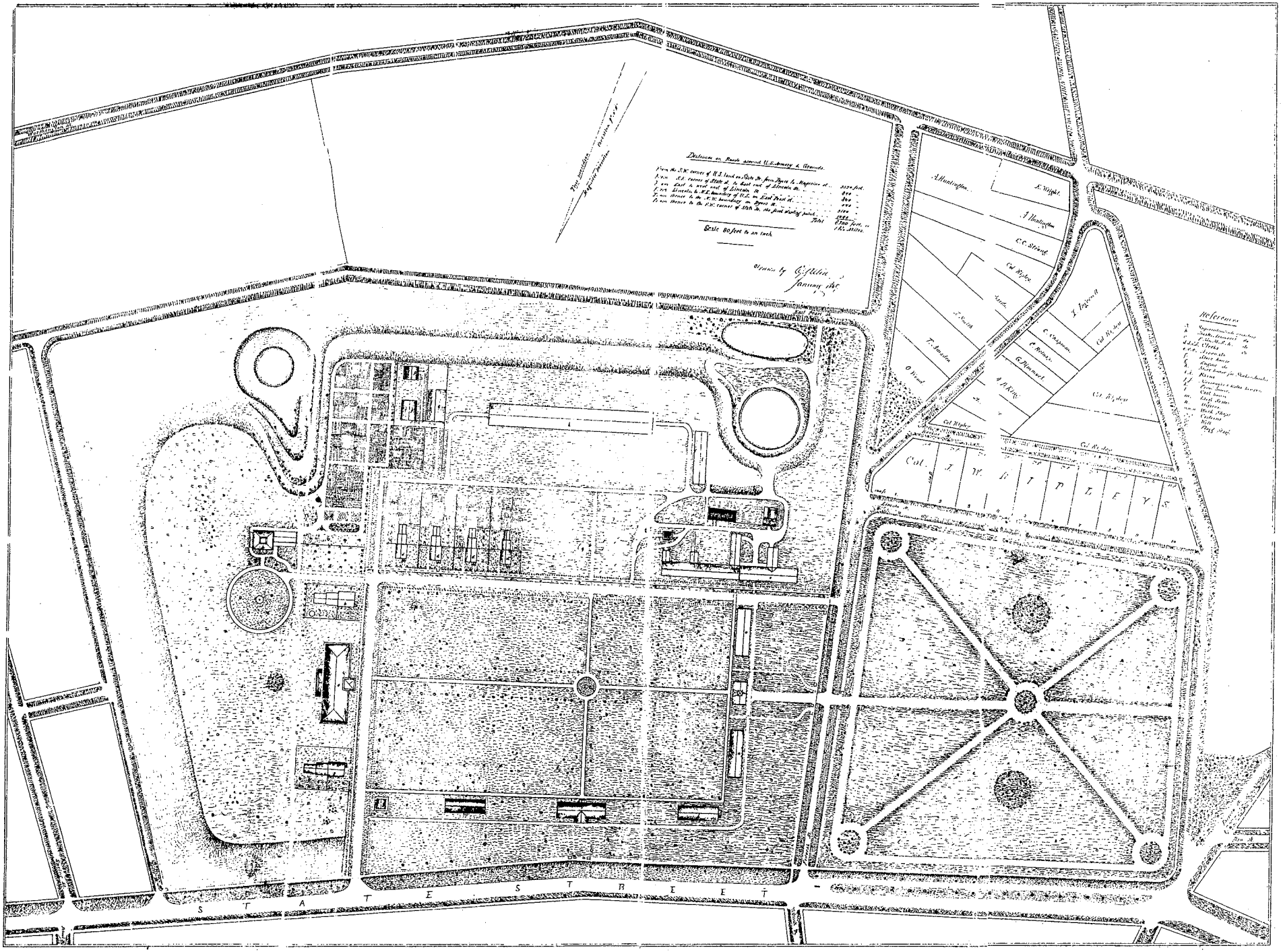

Distances on Roads assumed U.S. Armory & Arsenals.
Basis 80 feet to an inch.
Surveyed by C. Gillis
January 1850
Huntington
J. Huntington
C.C. Strong
Col. Ryker
Smith
T. Amerden
O. Wood
I. Ingersoll
C. Chapman
C. Wilson
G. Plummer
Col. Ryker
Col. M. Ave
Col. J. W. Fiske
Col. M. Ave
STATE STREET

Figure 4. "Map of the City of Springfield from Actual Surveys," 1860. Published by Smith and McKinney, surveyed by Smith and Van Zandt.

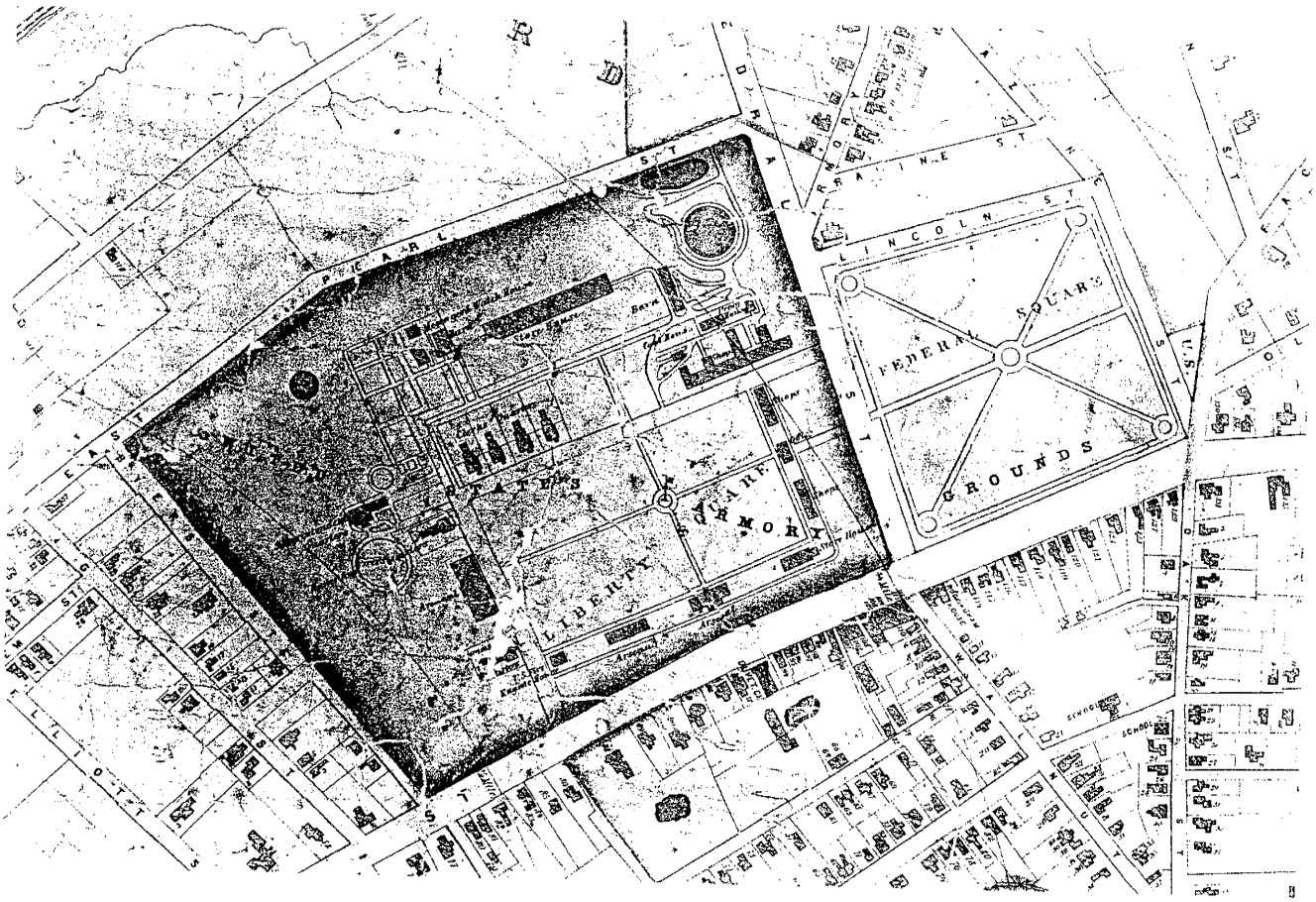

PEARL ST
LINCOLN ST
FEDERAL SQUARE
GROUNDS
LIBERTY
PARK
EAST
ST

Figure 5. "City Directory, Map of Springfield," 1861-62.

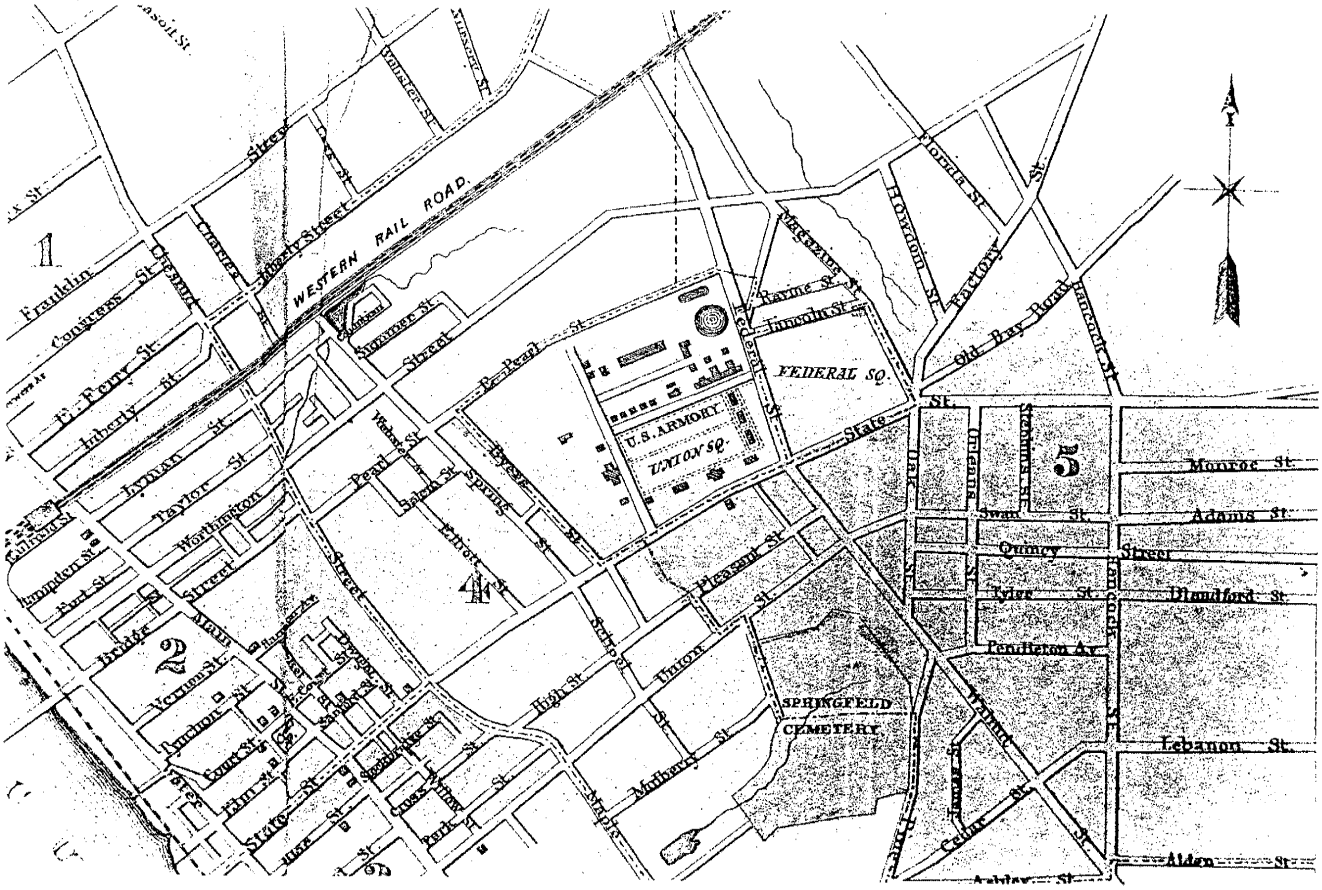

WESTERN RAIL ROAD.
U.S. ARMORY
UNION sq.
FEDERAL SQ.
SPRINGFELD CEMETERY
Monroe St.
Adams St.
Lebanon St.
Alden St.
Old Bay Road
Franklin St.
Congress St.
Liberty St.
Taylor St.
Pleasant St.
Union St.
Mulberry St.
Cedar St.
Ashley St.
Quincy Street
Bland ford St.
Penn Heron Av.
Summer St.
Lincoln St.
Florida St.
Factory St.
Orleans
Swan St.
Elliot St.
Spring St.
Pearl St.
Main Street
Bridge
Court St.
State St.
Water St.
Dwight St.
Lombard St.
Worthington Street
Gulrand St.
Hampden St.
Ford St.
Vernon St.
Dunbar St.
Park St.
Park
Cross Alley
Maple St.
Temple St.
Salem St.
Stacy St.
Mill St.
Myrtle St.
Hancock St.
Oak St.
Chauncy St.
Liberty Street
Maple St.
Pine St.
Magazine St.
Howard St.
Federal St.
Lincoln St.
Pearl St.
Water St.
Spring St.
Elliot St.
Union St.
Mulberry St.
Pleasant St.
Main Street
Bridge
Court St.
State St.
Vernon St.
Dunbar St.
Park St.

Figure 6. "City Directory, Map of Springfield, Mass.," 1862-63. Published by Samuel Bowles and Co.

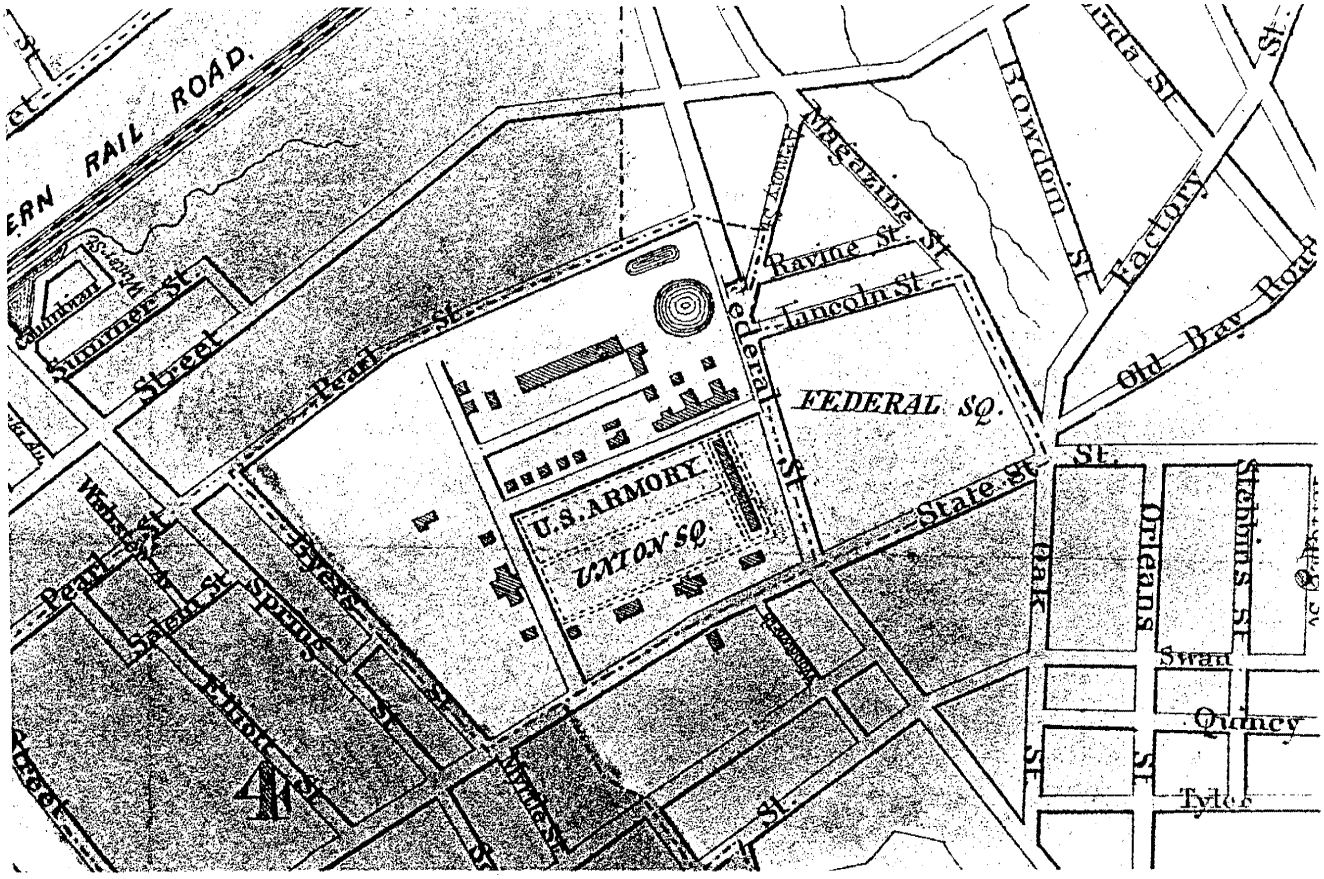

ERN RAIL ROAD.
Summer St.
Street
Pearl St.
Federal St.
Ravine St.
Lincoln St.
Magazine St.
Bowdoin St.
Factory
Old Bay Road
FEDERAL SQ.
U.S. ARMORY
UNION SQ.
State St.
Oak
Orleans
Stebbins St.
Swan
Quincy
Tyler
Pearl St.
Salem St.
Spring
Elliot St.
Myrtle St.
St.

Figure 7. "Topographical Plan of the Springfield Armory. Springfield, Mass.," April, 1864.

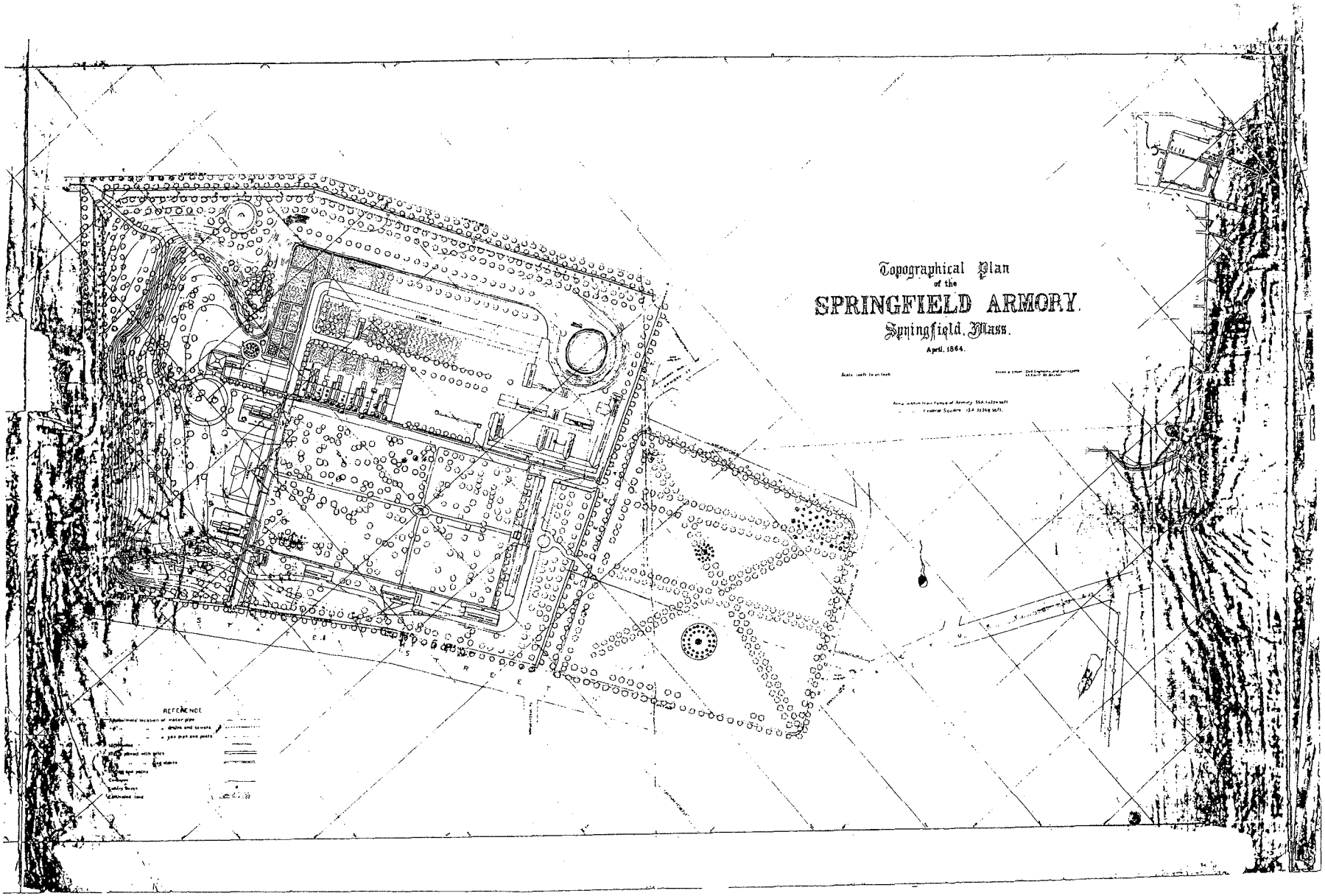

Topographical Plan
of the
SPRINGFIELD ARMORY.
Springfield, Mass.
April, 1864.
REFERENCE
S P R I N G F I E L D
S T R E E T

Figure 8. Bird's-eye view of Springfield, 1875. Engraving by Whitney and Adams.

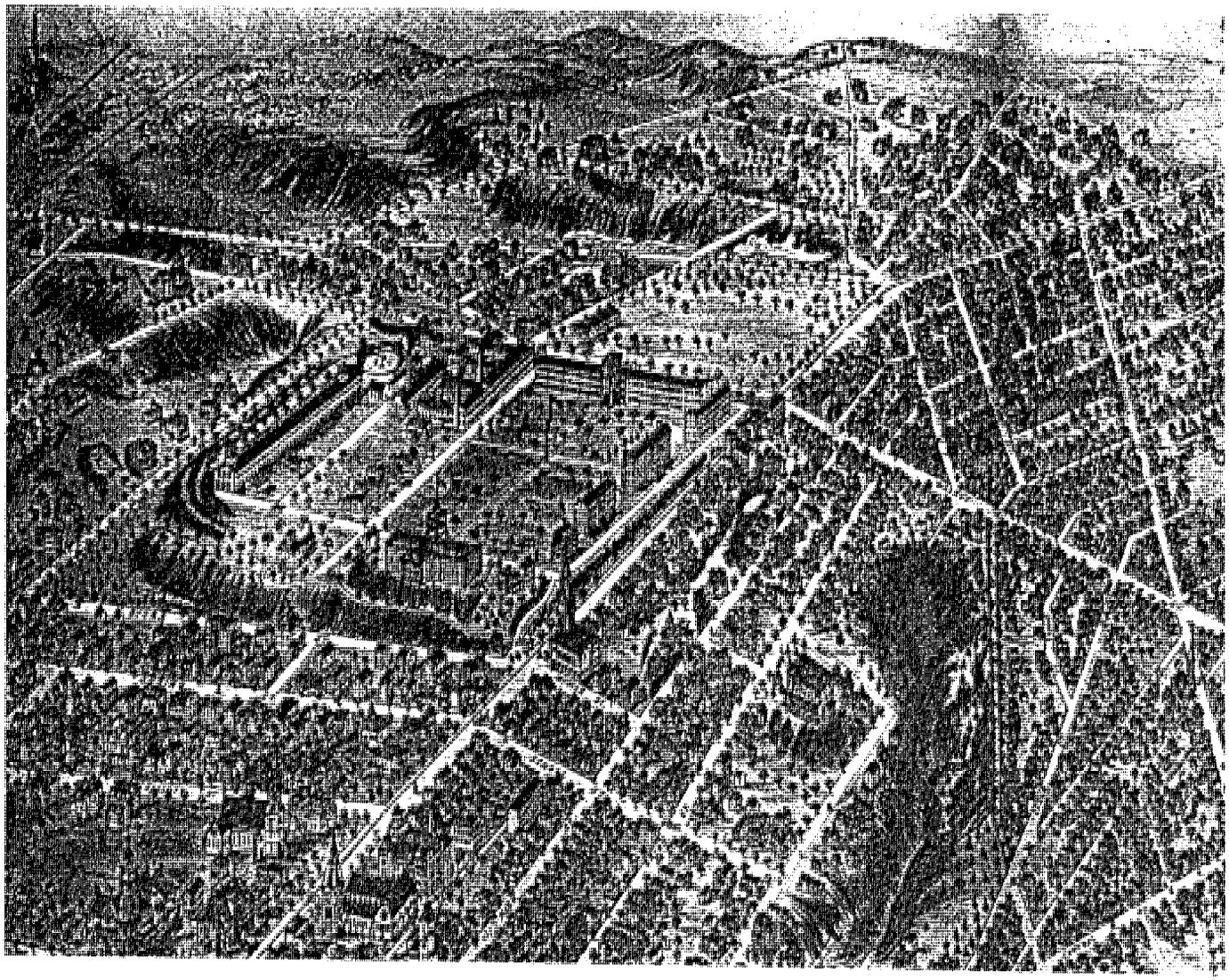


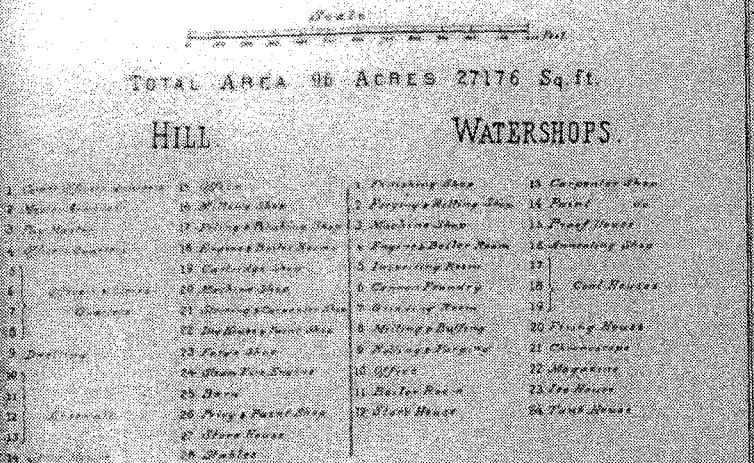
Figure 9. Springfield Armory, Hill and Watershops from Secretary of War Report, 1875.

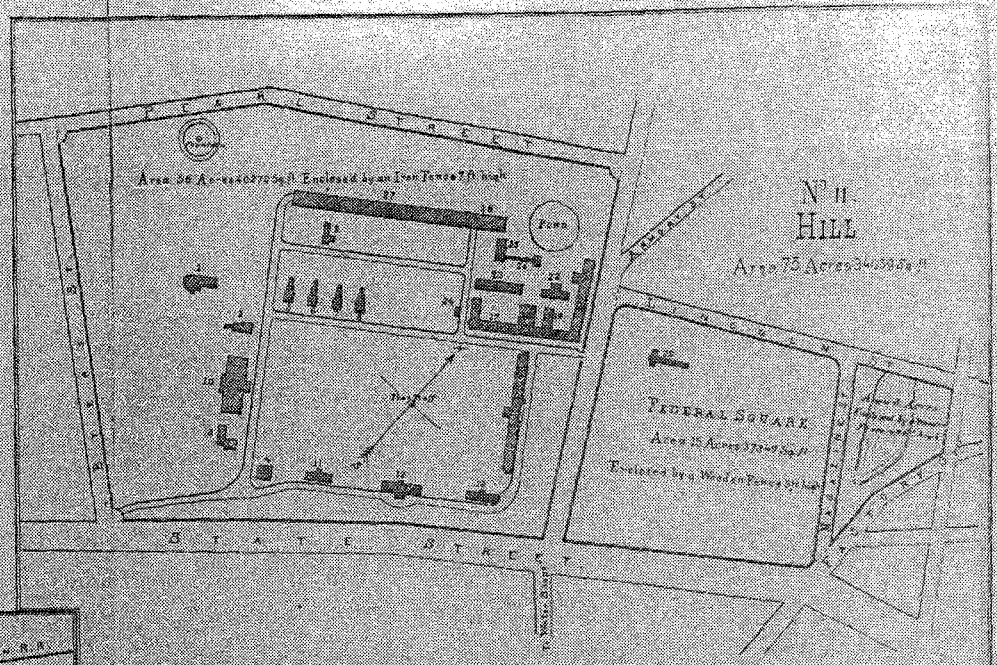
SPRINGFIELD ARMORY

TOTAL AREA 98 ACRES 27176 Sq. ft.

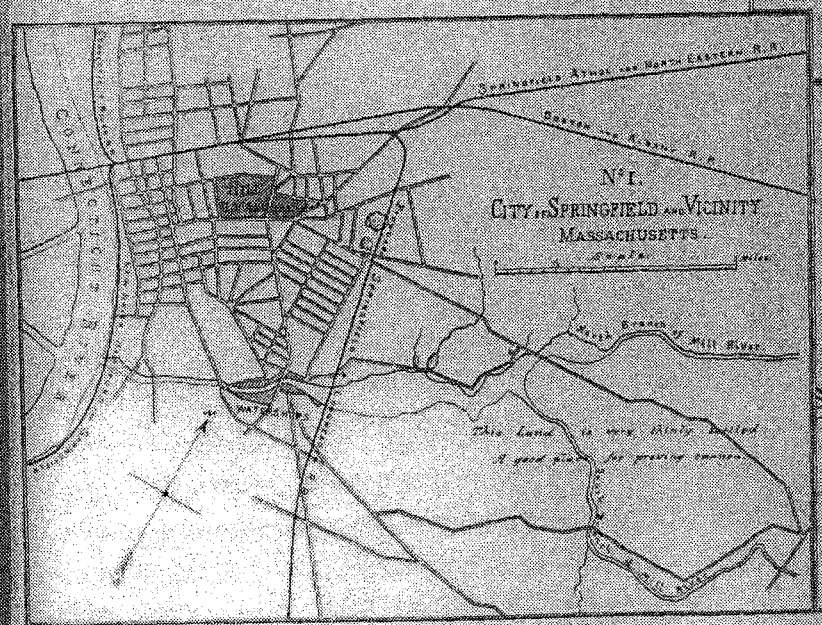
HILL.

WATERSHOPS.



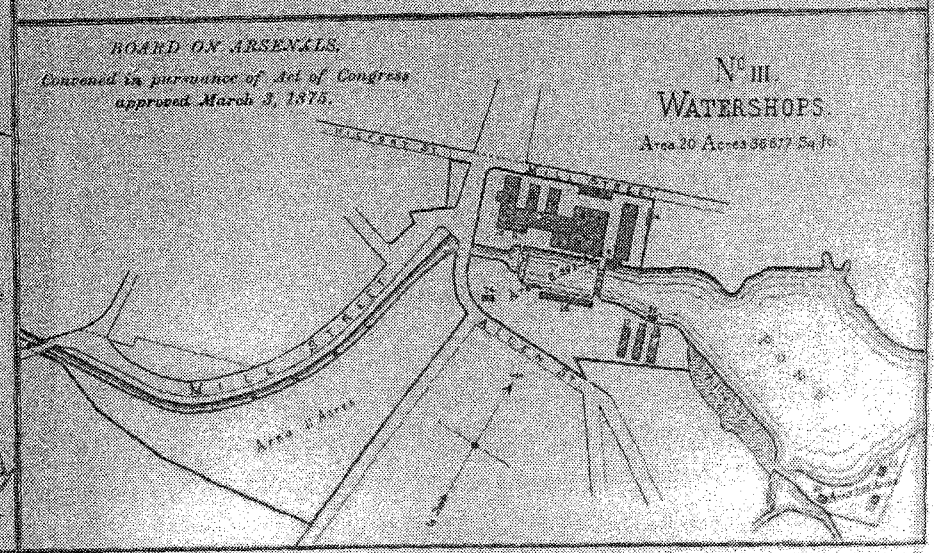


N° II.
HILL
Area 75 Acres 34 rods 8 ft



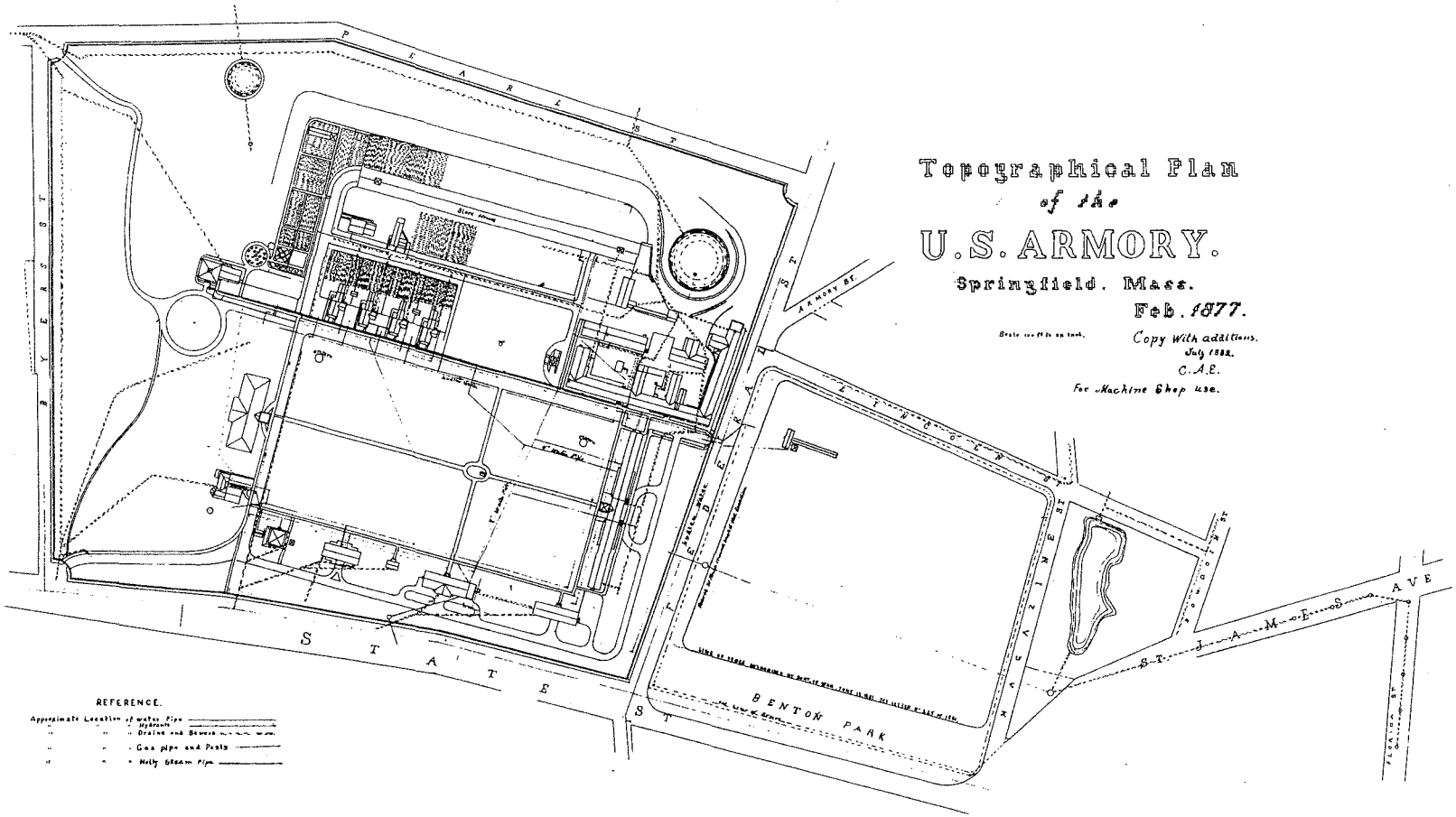
N° I.
CITY of SPRINGFIELD and VICINITY
MASSACHUSETTS.

BOARD ON ARSENALS.
Convened in pursuance of Act of Congress
approved March 3, 1875.



N° III.
WATERSHOPS.
Area 20 Acres 36677 Sq ft

Figure 10. "Topographical Plan of the U.S. Armory," 1877. Copy with additions, July, 1882.



Topographical Plan of the U.S. ARMORY.

Springfield. Mass.

Feb. 1877.

Copy With additions.
July 1882.
C.A.E.
For Machine Shop use.

SA84

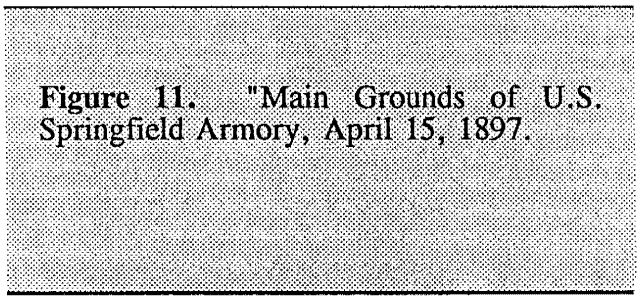
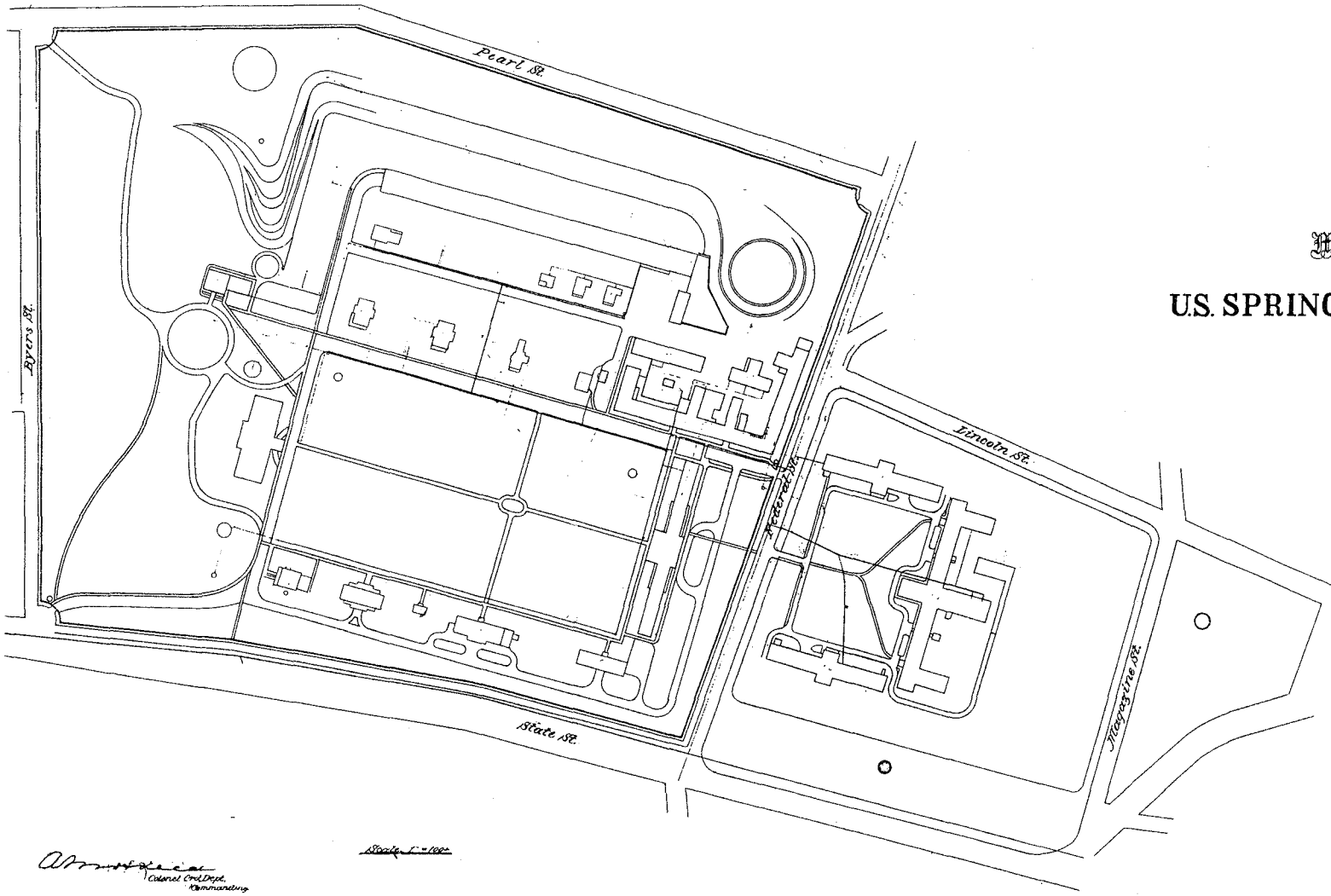


Figure 11. "Main Grounds of U.S. Springfield Armory, April 15, 1897.



Main Grounds of U.S. SPRINGFIELD ARMORY. Mass.

Scale 1" = 100'

Colonel Ord Dept. Commanding

No. 1257

WATER MAINS

Springfield Armory, April 15th 1877.

Figure 12. Detail. "Plan of Main Grounds, Springfield Armory, Springfield, Massachusetts," 1910.

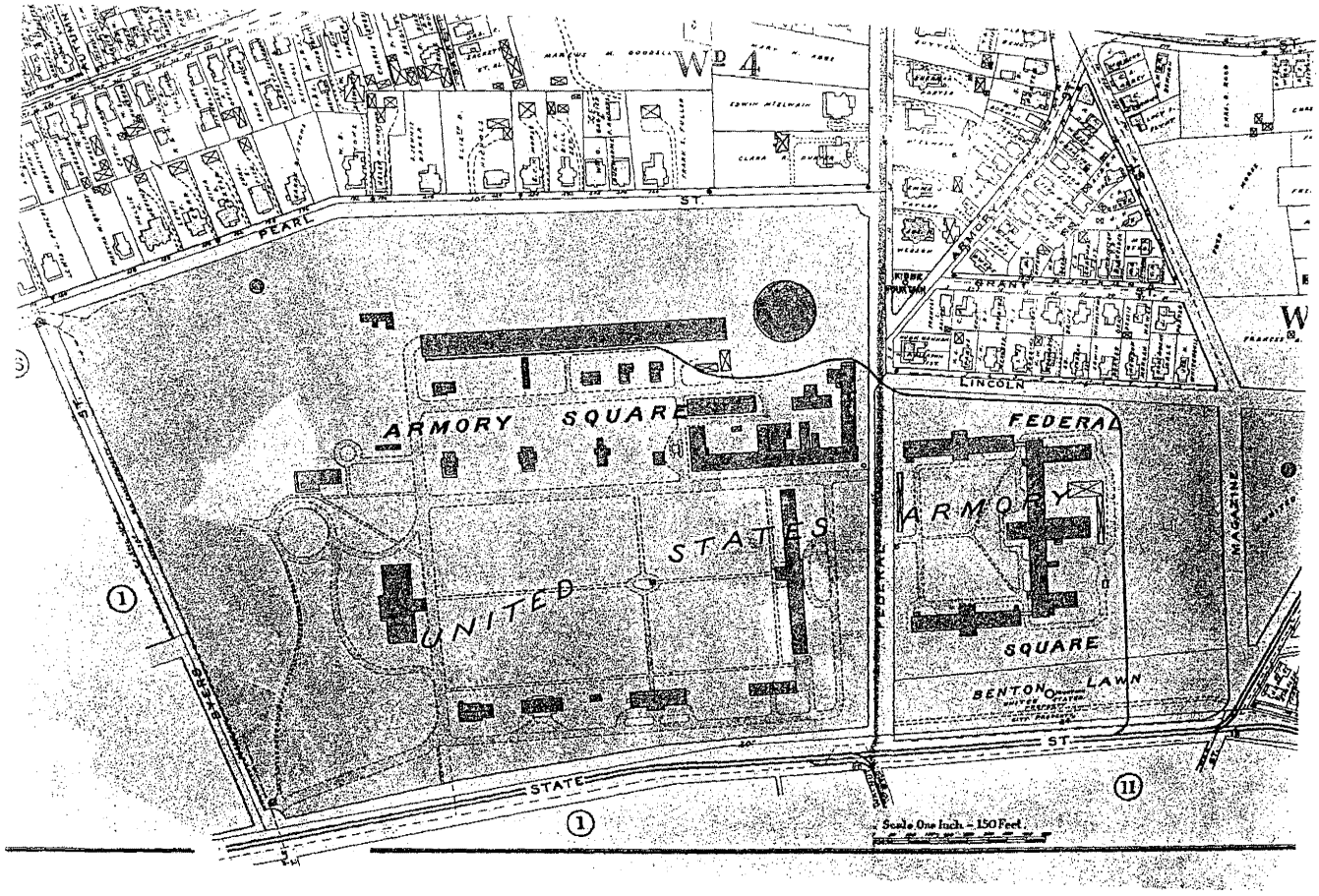
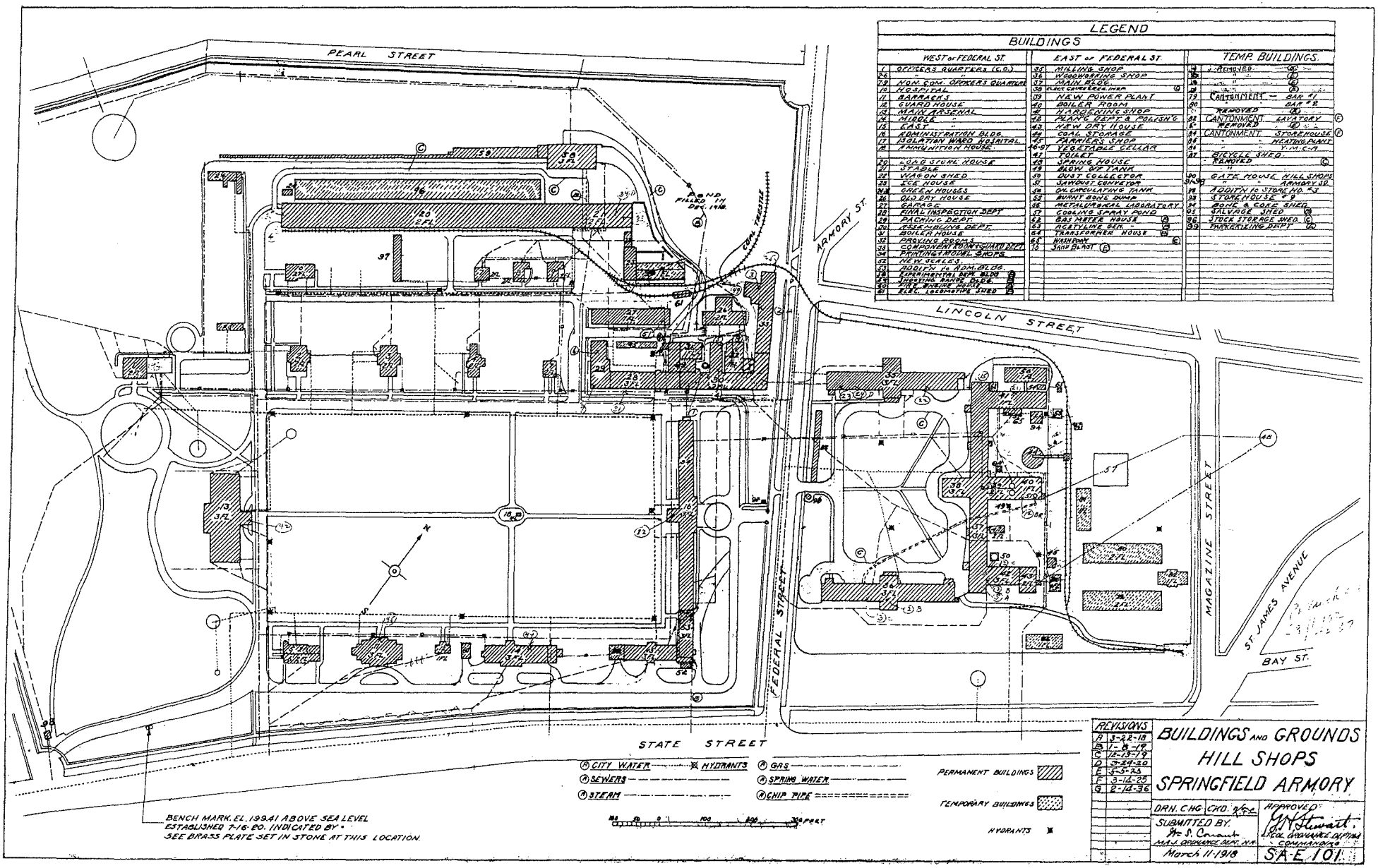

W^D 4
PEARL
ST.
ARMORY SQUARE
UNITED STATES
ARMORY
FEDERAL
SQUARE
BENTON
LAWN
LINCOLN
GRANT
STATE
ST.
Scale One Inch = 150 Feet

Figure 13. "Buildings and Grounds, Hill Shops, Springfield Armory," March 11, 1918 with last revision February 1936.



LEGEND

BUILDINGS

WEST of FEDERAL ST.		EAST of FEDERAL ST.		TEMP. BUILDINGS.	
1	OFFICERS QUARTERS (C.O.)	35	MILLING SHOP	72	REMOVED (C)
2-6	" " "	36	WOODWORKING SHOP	73	" " (C)
7-9	NON. COM. OFFICERS QUARTERS	37	MAIN BLDG.	74	" " (C)
10	HOSPITAL	38	ELECT. CONVERTER HOUSE (G)	75	" " (C)
11	BARRACKS	39	NEW POWER PLANT	79	CANTONMENT — BAR #1
12	GUARD HOUSE	40	BOILER ROOM	80	" BAR #2
13	MAIN ARSENAL	41	HARDENING SHOP		REMOVED (C)
14	MIDDLE "	42	PLANG DEPT & POLISH'G	82	CANTONMENT LAVATORY (F)
15	EAST "	43	NEW DRY HOUSE	83	" REMOVED (C)
16	ADMINISTRATION BLDG.	44	COAL STORAGE	84	CANTONMENT STOREHOUSE (F)
17	ISOLATION WARD HOSPITAL	45	FARRIERS SHOP	86	" HEATING PLANT
18	AMMUNITION HOUSE	46-47	VEGETABLE CELLAR	87	" Y.M.C.A.
		47	FOUNDRY		BICYCLE SHED
20	LONG STONE HOUSE	48	SPRING HOUSE		REMOVED (C)
21	STABLE	49	BLOW OFF TANK		"
22	WAGON SHED	50	DUST COLLECTOR	90	GATE HOUSE HILL SHOPS
23	ICE HOUSE	51	SUMMIT CONTACTOR	91-99	" ARMORY #2
24-3	GREEN HOUSES	54	OIL CIRCULATING TANK	98	ADDITN to STORE NO. #3
26	OLD DRY HOUSE	53	BURNT BONE DUMP	93	STOREHOUSE # 9
27	GARAGE	55	METALLURGICAL LABORATORY	94	ROOF & CONC. SHED
28	FINAL INSPECTION DEPT	57	COOLING SPRAY POND	95	SALVAGE SHED (C)
29	PACKING DEPT.	58	GAS METER HOUSE (B)	96	STOCK STORAGE SHED (C)
30	ASSEMBLING DEPT.	63	ACETYLINE GEN. (B)	99	PARKERIZING DEPT (C)
31	BOILER HOUSE	64	TRANSFORMER HOUSE (B)		
32	PROVING ROOMS	65	WASH ROOM (E)		
33	COMPONENT ROOM & GUARD DEPT	70	SAND BLAST (E)		
34	PRINTING & MODEL SHOPS				
42	NEW SCALES				
43	ADDITN to ADM. BLDG.				
78	EXPERIMENTAL RIFLE RANGE				
76	TARGETING RANGE BLDG.				
60	FIRE HOUSE & HOUSE				
61	ELEC. LOCOMOTIVE SHED (B)				

REVISIONS	
A	3-22-18
B	1-14-19
C	12-13-19
D	9-29-20
E	5-5-21
F	3-14-23
G	2-14-36

BUILDINGS AND GROUNDS
HILL SHOPS
SPRINGFIELD ARMORY

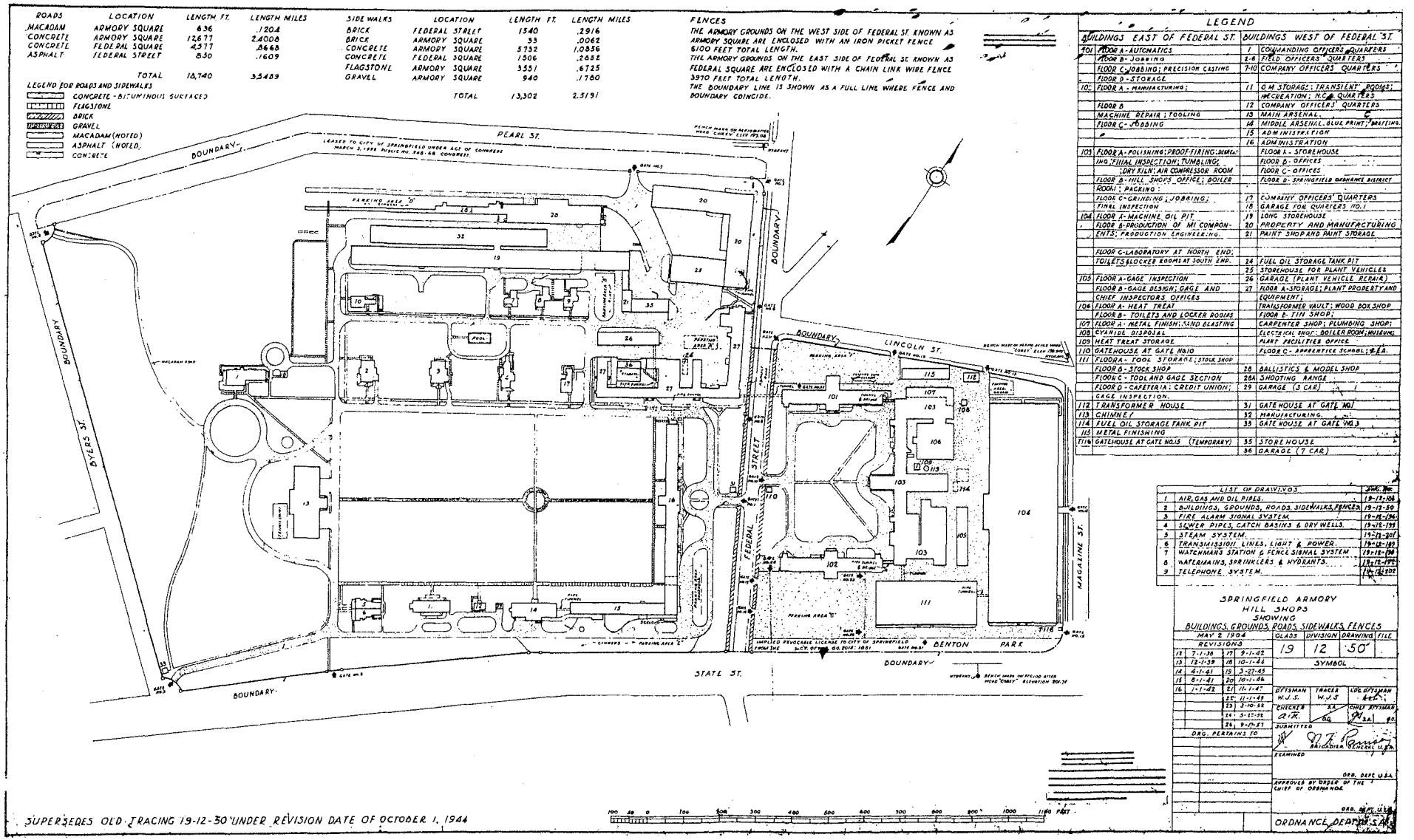
DRN. C.H.G. CHD. J.F.C.

SUBMITTED BY.
Mc S. Comanto
MAJ. ORDNANCE REP. N.A.
March 11-1918

APPROVED
G.N. Stewart
COL. ORDNANCE DEPT.
COMMANDING

SA-E 101

Figure 14. "Buildings, Grounds, Roads, Sidewalks, Fences, Springfield Armory, Hill Shops," May 2, 1904 with last revisions September 17, 1957.



ROADS	LOCATION	LENGTH FT.	LENGTH MILES
MACADAM	ARMORY SQUARE	636	.1204
CONCRETE	ARMORY SQUARE	12,677	2.4008
CONCRETE	FEDERAL SQUARE	4,577	.8668
ASPHALT	FEDERAL STREET	850	.1609
	TOTAL	18,740	3.5489

SIDE WALKS	LOCATION	LENGTH FT.	LENGTH MILES
BRICK	FEDERAL STREET	1340	.2916
BRICK	ARMORY SQUARE	33	.0062
CONCRETE	ARMORY SQUARE	5732	1.0856
CONCRETE	FEDERAL SQUARE	1306	.2652
FLAGSTONE	ARMORY SQUARE	3351	.6725
GRAVEL	ARMORY SQUARE	940	.1780
	TOTAL	13,302	2.5191

LEGEND FOR ROADS AND SIDEWALKS
- CONCRETE - BITUMINOUS SURFACED
- FLAGSTONE
- BRICK
- GRAVEL
- MACADAM (NOTED)
- ASPHALT (NOTED)
- CONCRETE

FENCES

THE ARMORY GROUNDS ON THE WEST SIDE OF FEDERAL ST. KNOWN AS ARMORY SQUARE ARE ENCLOSED WITH AN IRON PICKET FENCE 6100 FEET TOTAL LENGTH.
THE ARMORY GROUNDS ON THE EAST SIDE OF FEDERAL ST. KNOWN AS FEDERAL SQUARE ARE ENCLOSED WITH A CHAIN LINK WIRE FENCE 3970 FEET TOTAL LENGTH.
THE BOUNDARY LINE IS SHOWN AS A FULL LINE WHERE FENCE AND BOUNDARY COINCIDE.

LEGEND

BUILDINGS EAST OF FEDERAL ST.	BUILDINGS WEST OF FEDERAL ST.
101 FLOOR A - AUTOMATICS	1 COMMANDING OFFICERS' QUARTERS
FLOOR B - JOBBING	2-6 FIELD OFFICERS' QUARTERS
FLOOR C - JOBBING; PRECISION CASTING	7-10 COMPANY OFFICERS' QUARTERS
FLOOR D - STORAGE	
102 FLOOR A - MANUFACTURING;	11 O.M. STORAGE; TRANSIENT ROOMS; RECREATION; N.C.O. QUARTERS
FLOOR B	12 COMPANY OFFICERS' QUARTERS
MACHINE REPAIR; TOOLING	13 MAIN ARSENAL
FLOOR C - JOBBING	14 MIDDLE ARSENAL - BLUE PRINT; DRAFTING
	15 ADMINISTRATION
	16 ADMINISTRATION
103 FLOOR A - POLISHING; PROOF-FIRING; DEMIL- ING; FINAL INSPECTION; TUMBLING; DRY KILN; AIR COMPRESSOR ROOM	FLOOR A - STOREHOUSE
	FLOOR B - OFFICES
	FLOOR C - OFFICES
FLOOR B - HILL SHOPS OFFICE; BOILER ROOM; PACKING	FLOOR D - SPRINGFIELD ORDNANCE DISTRICT
FLOOR C - GRINDING; JOBBING; FINAL INSPECTION	17 COMPANY OFFICERS' QUARTERS
	18 GARAGE FOR QUARTERS NO. 1
104 FLOOR A - MACHINE, OIL PIT	19 LONG STOREHOUSE
FLOOR B - PRODUCTION OF MI COMPONENTS; PRODUCTION ENGINEERING	20 PROPERTY AND MANUFACTURING
	21 PAINT SHOP AND PAINT STORAGE
FLOOR C - LABORATORY AT NORTH END; TOILETS & LOCKER ROOMS AT SOUTH END	24 FUEL OIL STORAGE TANK PIT
	25 STOREHOUSE FOR PLANT VEHICLES
105 FLOOR A - GAGE INSPECTION	26 GARAGE (PLANT VEHICLE REPAIR)
FLOOR B - GAGE DESIGN; GAGE AND CHIEF INSPECTORS OFFICES	27 FLOOR A - STORAGE; PLANT PROPERTY AND EQUIPMENT;
106 FLOOR A - HEAT TREAT	TRANSFORMER VAULT; WOOD BOX SHOP
FLOOR B - TOILETS AND LOCKER ROOMS	FLOOR B - TIN SHOP;
107 FLOOR A - METAL FINISH; SAND BLASTING	CARPENTER SHOP; PLUMBING SHOP;
108 CYANIDE DISPOSAL	ELECTRICAL SHOP; BOILER ROOM (MUSEUM)
109 HEAT TREAT STORAGE	PLANT FACILITIES OFFICE
110 GATEHOUSE AT GATE NO.10	FLOOR C - APPRENTICE SCHOOL; U.S.A.
111 FLOOR A - TOOL STORAGE; STOCK SHOP	
FLOOR B - STOCK SHOP	28 BALLISTICS & MODEL SHOP
FLOOR C - TOOL AND GAGE SECTION	28A SHOOTING RANGE
FLOOR D - CAFETERIA; CREDIT UNION; GAGE INSPECTION	29 GARAGE (3 CAR)
112 TRANSFORMER HOUSE	31 GATEHOUSE AT GATE NO.1
113 CHIMNEY	32 MANUFACTURING
114 FUEL OIL STORAGE TANK PIT	33 GATE HOUSE AT GATE NO.3
115 METAL FINISHING	
T116 GATEHOUSE AT GATE NO.15 (TEMPORARY)	35 STOREHOUSE
	36 GARAGE (7 CAR)

LIST OF DRAWINGS	DWG. NO.
1 AIR, GAS AND OIL PIPES.	19-12-106
2 BUILDINGS, GROUNDS, ROADS, SIDEWALKS, FENCES.	19-12-30
3 FIRE ALARM SIGNAL SYSTEM.	19-12-196
4 SEWER PIPES, CATCH BASINS & DRY WELLS.	19-12-199
5 STEAM SYSTEM.	19-12-201
6 TRANSMISSION LINES, LIGHT & POWER.	19-12-189
7 WATCHMAN'S STATION & FENCE SIGNAL SYSTEM	19-12-198
8 WATER MAINS, SPRINKLERS & HYDRANTS.	19-12-192
9 TELEPHONE SYSTEM.	19-12-202

SPRINGFIELD ARMORY
HILL SHOPS
SHOWING
BUILDINGS, GROUNDS, ROADS, SIDEWALKS, FENCES

MAY 2 1904

CLASS	DIVISION	DRAWING	FILE
19	12	30	

SYMBOL

REVISIONS			
12	7-1-38	17	9-1-42
13	12-1-39	18	10-1-44
14	4-1-41	19	3-27-45
15	8-1-41	20	10-1-46
16	1-1-42	21	11-1-47
		22	11-1-48
		23	3-10-49
		24	5-27-49
		25	9-14-51

DFTSMAN	TRACER	LDG. DFTSMAN
W.J.S.	W.J.S	
CHECKED		CHIEF DFTSMAN
J.R.		

SUBMITTED
BRIGADIER GENERAL U.S.A.

DRG. PERTAINS TO

EXAMINED
ORD. DEPT. U.S.A.

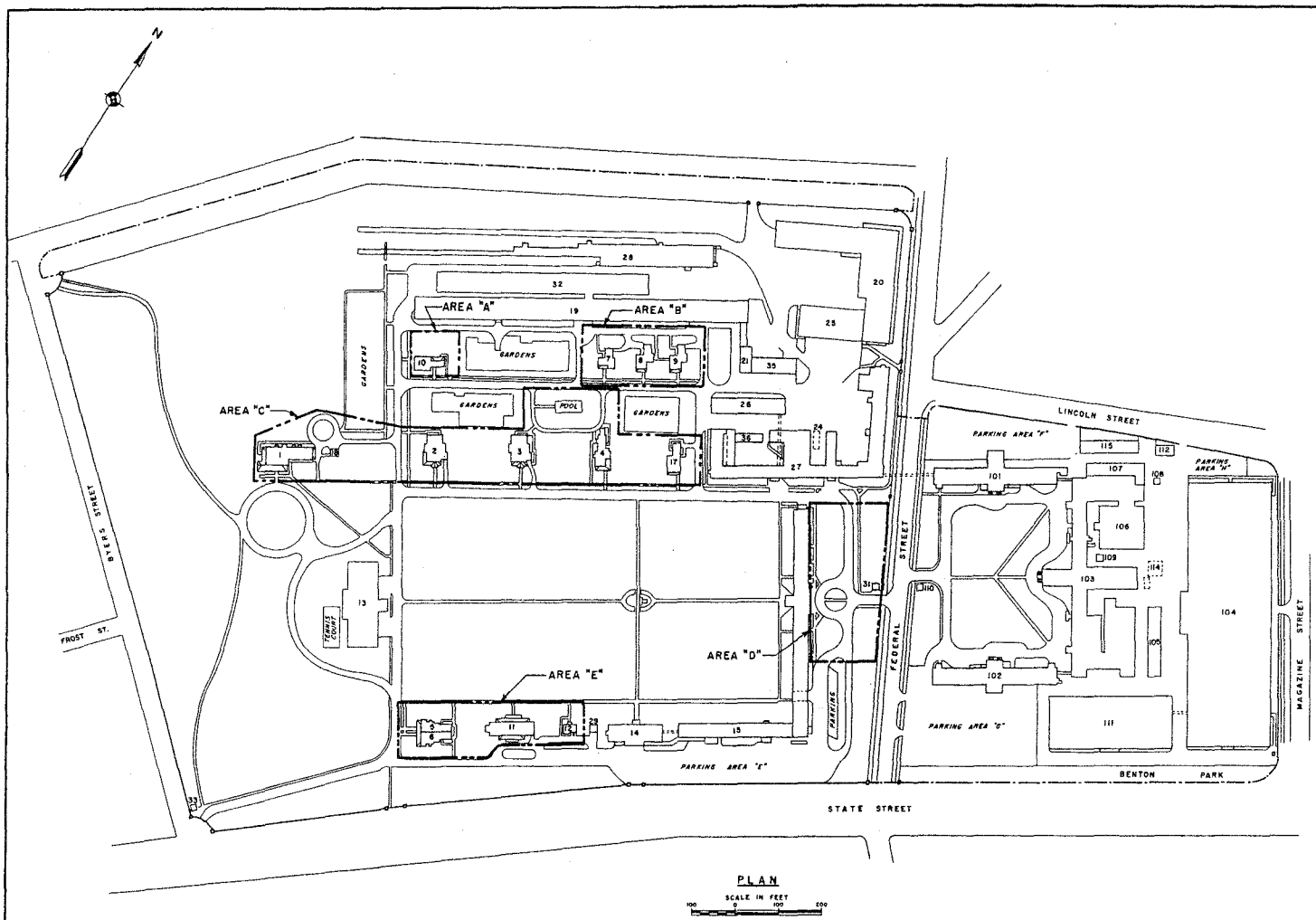
APPROVED BY ORDER OF THE CHIEF OF ORDNANCE
ORD. DEPT. U.S.A.

ORDNANCE DEPT. U.S.A.

SUPERSEDES OLD TRACING 19-12-30 UNDER REVISION DATE OF OCTOBER 1, 1944

100 50 0 100 200 300 400 500 600 700 800 900 1000 1160 FEET

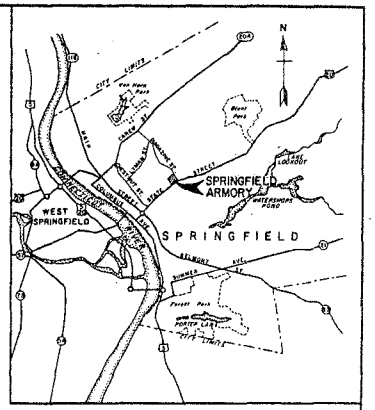
Figure 15. "Springfield Armory, Landscape Development Location Plan and Index," March, 1959.



PLAN

SCALE IN FEET

100 0 100 200



VICINITY MAP

SCALE IN MILES (approx.)

0 1 2

LEGEND

2 — Building Number Existing Structures

Area Outline for Detail Planting Plan

NOTE

For Detail Planting Plans of Areas A thru E, see Sheet No. 2.

INDEX OF DRAWINGS

DRAWING NO. 16-12-02

PLANTING

1 SITE PLAN

2 PLANTING DETAIL

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

PREPARED BY F.C.S.
DRAWN BY J.C.
CHECKED BY F.C.S.

CHIEF R.E.D. LABORATORIES

PROJECT ENGINEER

SUBMITTED

CHIEF MILITARY BRANCH

CHIEF ENGINEERING DIV.

APPROVED

COL., C.E. ASST. DIVISION ENGINEER

SPRINGFIELD ARMORY

SPRINGFIELD, MASS.

LANDSCAPE DEVELOPMENT

LOCATION PLAN AND INDEX

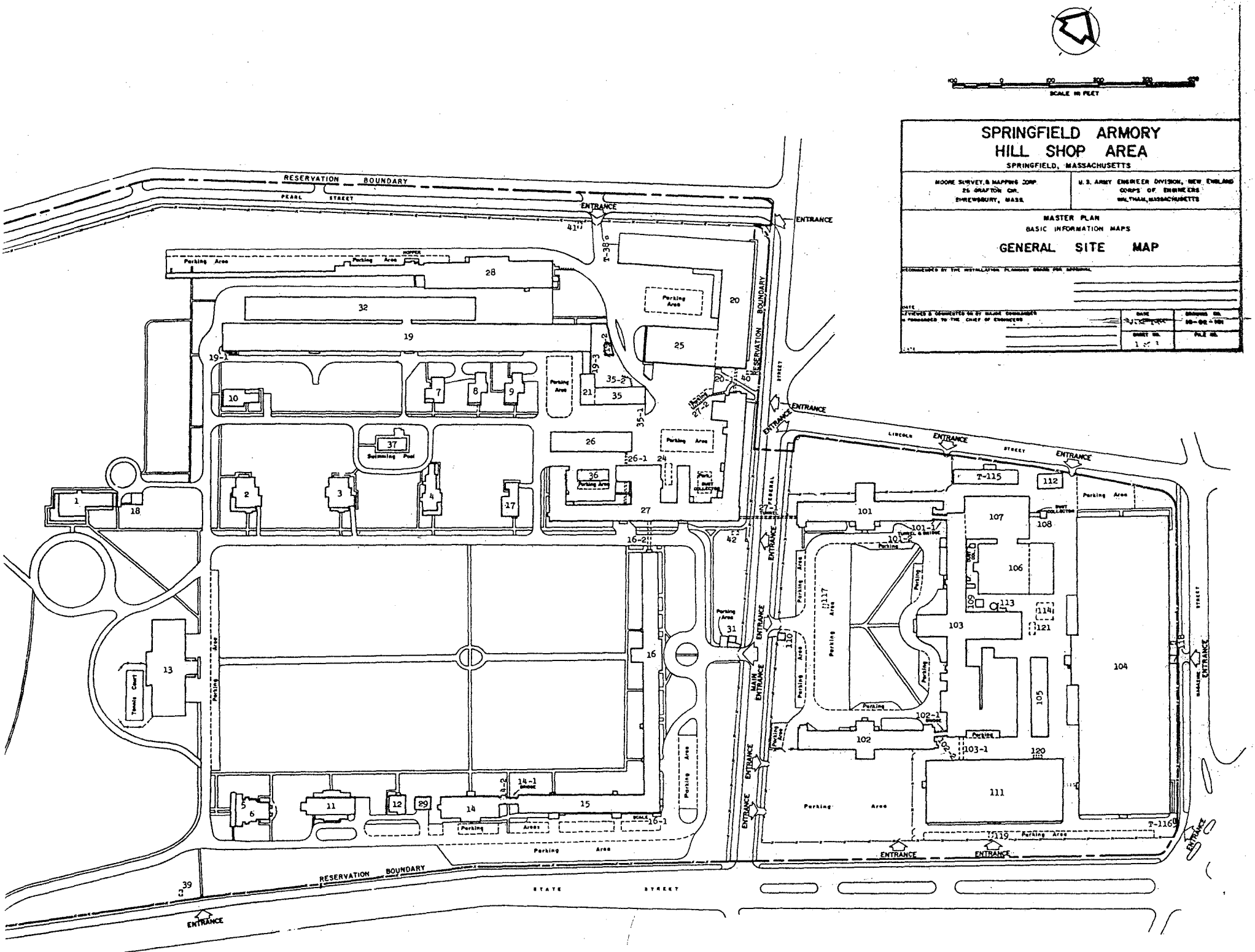
DATE MARCH 1959

SCALE AS SHOWN SPEC. NO.

DRAWING NUMBER
16-12-02

SHEET 1 of 2

Figure 16. "Springfield Armory, Hill Shop Area," June, 1965.


SCALE IN FEET
SPRINGFIELD ARMORY
HILL SHOP AREA
SPRINGFIELD, MASSACHUSETTS
MOORE SURVEY & MAPPING CORP.
25 GRAFTON DR.
SHREWSBURY, MASS.
U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS
MASTER PLAN
BASIC INFORMATION MAPS
GENERAL SITE MAP
RESERVATION BOUNDARY
PEARL STREET
ENTRANCE
Parking Area
HOPPER
Swimming Pool
Tennis Court
RESERVATION BOUNDARY STREET
FEDERAL STREET
LINCOLN STREET
MAIN ENTRANCE
STATE STREET
RESERVATION BOUNDARY
ENTRANCE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
14-1
15
16
16-1
16-2
17
18
19
19-1
19-2
19-3
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20-1
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26
26-1
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27-1
27-2
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29
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32
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35-1
35-2
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37
39
41
42
101
101-1
101-2
102
102-1
103
103-1
104
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106
107
108
109
110
111
112
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121
T-115
T-116
T-119
T-38

CONSTRUCTION DRAWINGS

Figure 17. "Windows, Long Storehouse," ca. 1861.

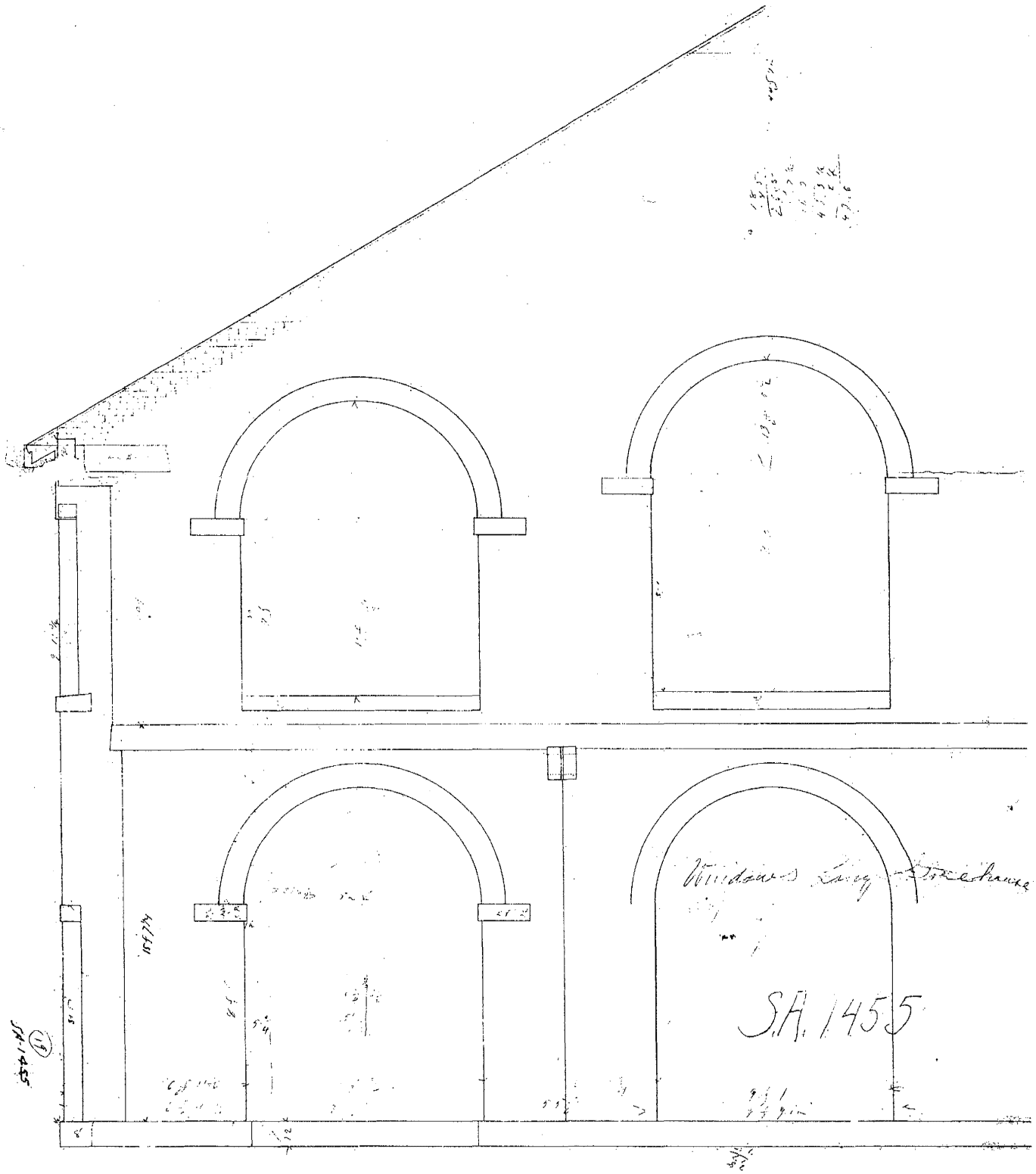
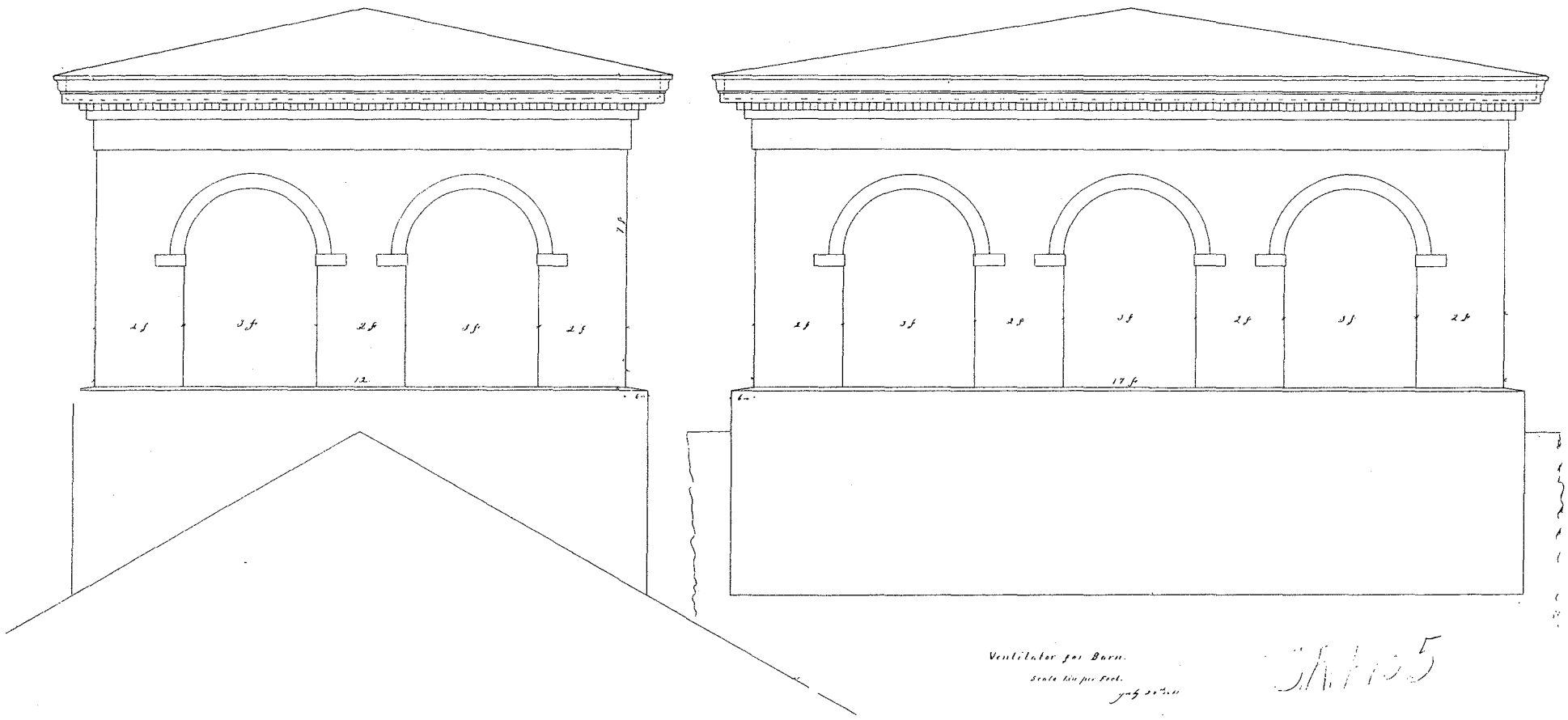

Windows Entrance
S.A. 1455

Figure 18. "Stables and Long Storehouse, Ventilator for Barn," July 24, 1861.

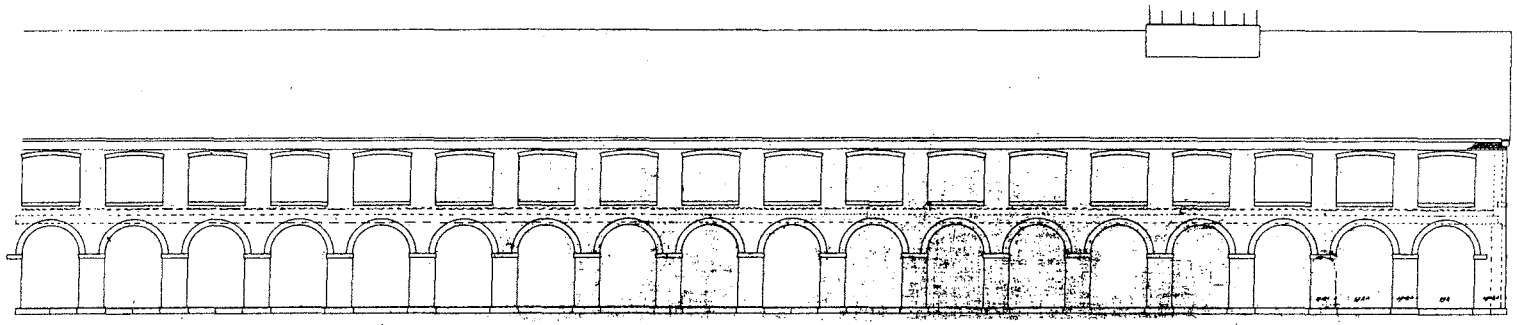


Ventilator for Barn.

Scale 1/8 per Foot.

No 5

Figure 19. "Addition to West End of Storehouse," August 20, 1862.



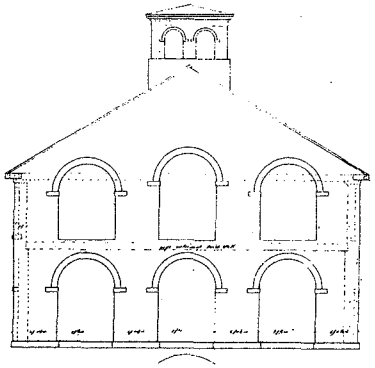
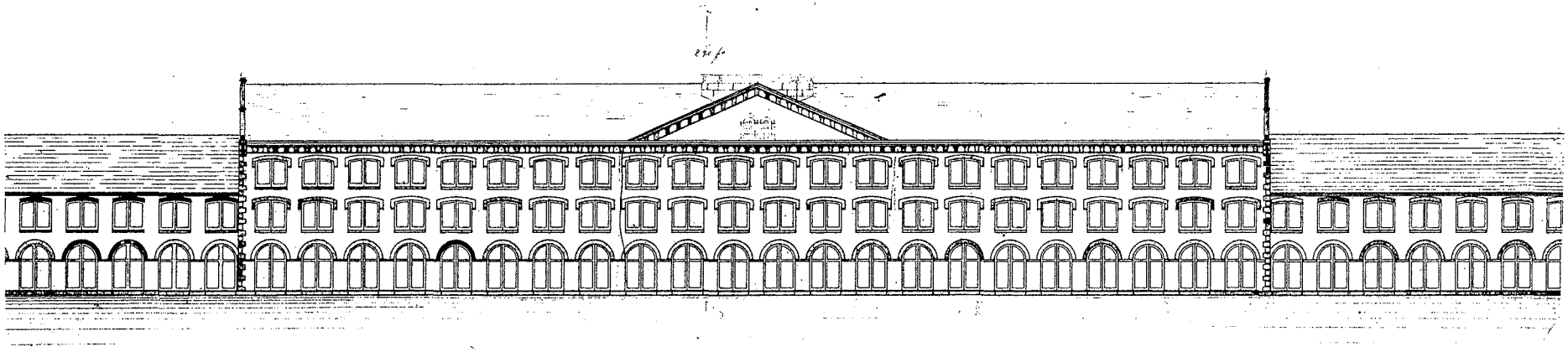
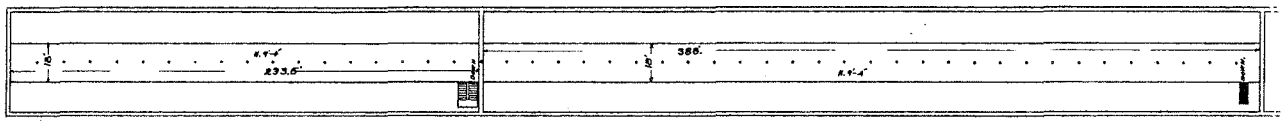


Figure 20. Proposed alteration to Long Storehouse raising middle bays one story, ca. 1866.

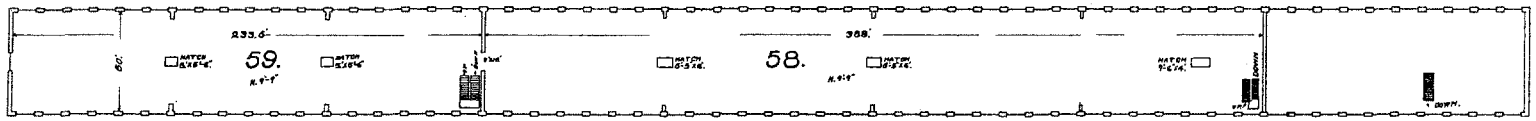


19 Stables S.A. 1455

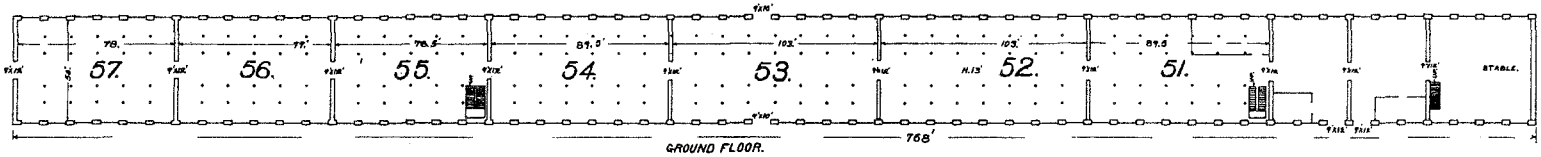
Figure 21. Floor Plans, Long Storehouse, April 20, 1909.



LOFT.



2ND FLOOR.

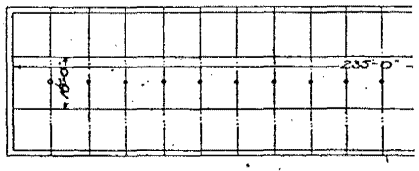


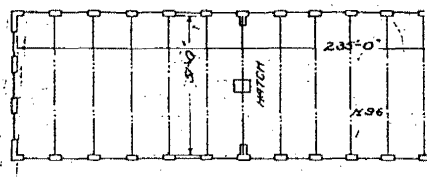
GROUND FLOOR.

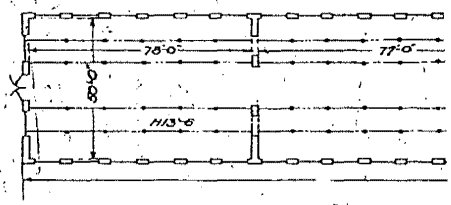
19

REVISIONS	LONG STORE HOUSE. FLOOR PLAN. SCALE 1 IN = 25 FT. STORAGE ROOMS, 51 TO 59.
	SPRINGFIELD ARMORY. APR 20, 1909.
	DELCAS CHECKED BY J.C. APPROVED [signature] COL ORD DEPT. COMMANDING.
	SUBMITTED [signature] MAJOR ORD. DEPT.
	OPERATION DRAWING S.A. 266

Figure 22. "Long Storage House Floor Plans," October 9, 1916.

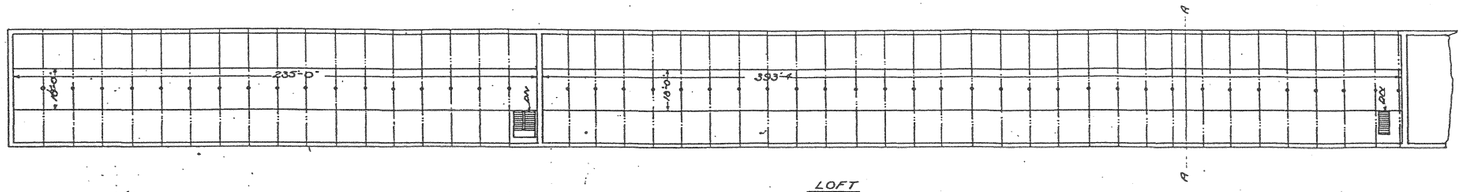


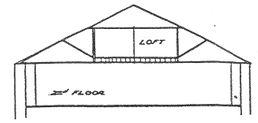




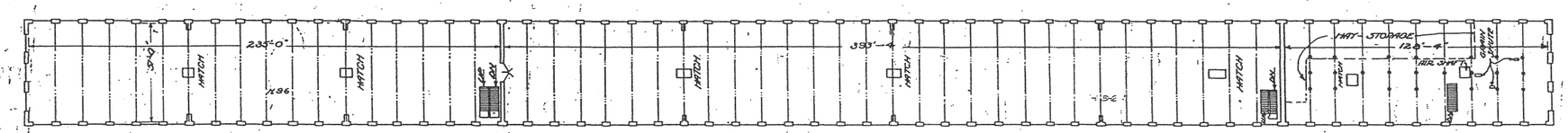
6"WATER MAIN

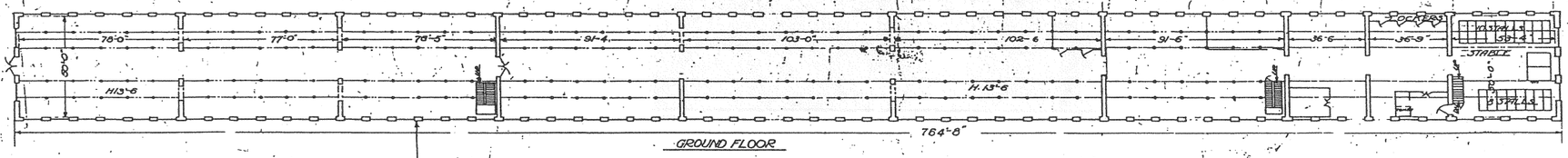
Figure 23. "2-Ton Freight Elevator, Section 62, Building No. 19-B-S1, Hill Shops," April 15, 1935.

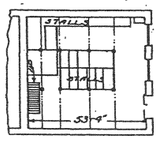


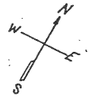


SECTION AT A—A









6" WATER MAIN

6" WATER MAIN

DR'G. PERTAINS TO		REVISIONS			
CLASS	DIV.				

LONG STORAGE HOUSE

FLOOR PLANS

SCALE 1 IN = 25 FT.

SPRINGFIELD ARMORY, U. S. A. OCT 9, 1916

SUBMITTED:	J.L.	H.F.D.	J.L.	T.F.F.

CAPTAIN ORDNANCE DEPARTMENT USA

EXAMINED:

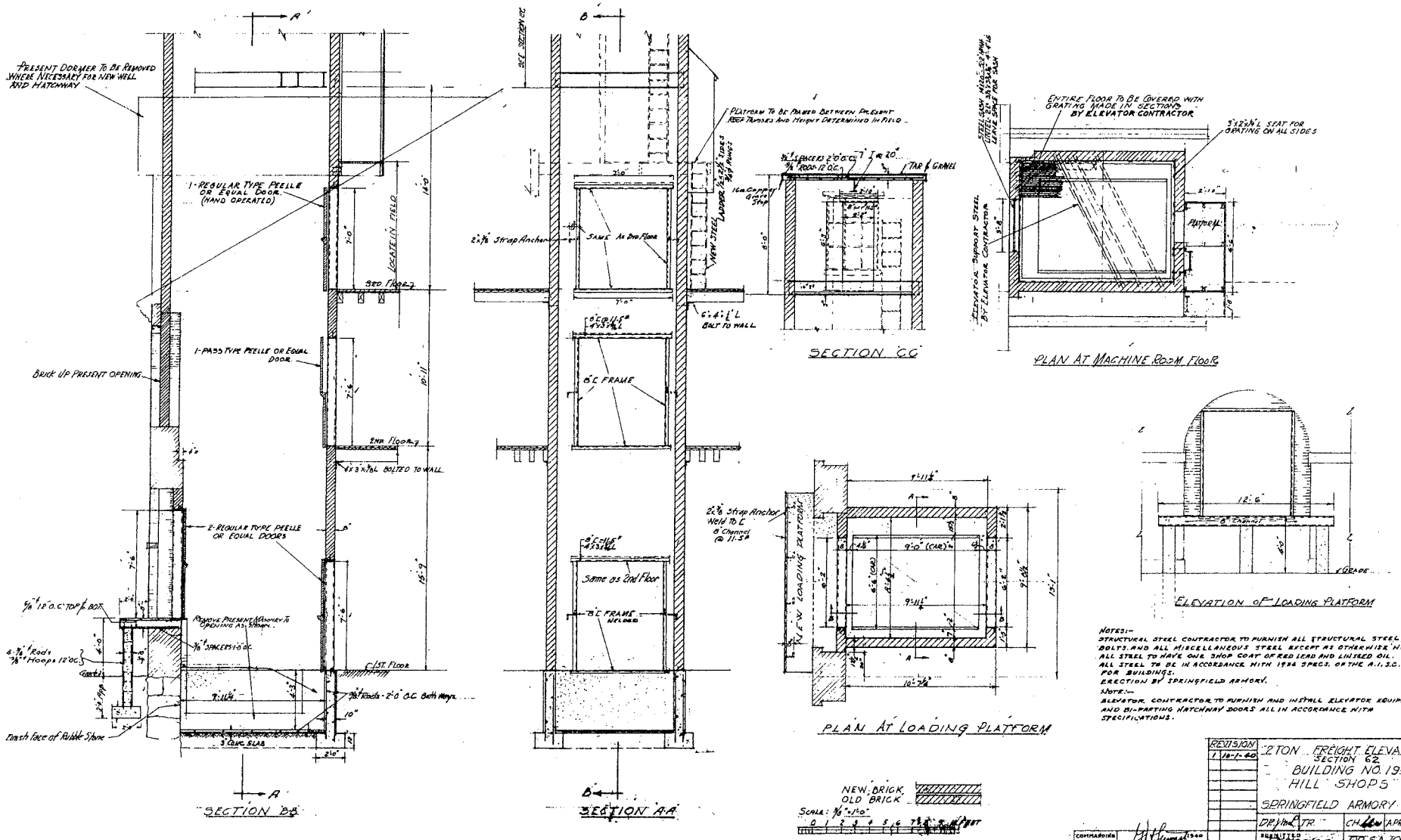
COL. ORDNANCE DEPARTMENT USA

APPROVED BY ORDER OF THE CHIEF OF ORDNANCE

MAJOR, ORDNANCE DEPARTMENT, U.S.A.

CLASS	DIVISION	DRAWING	FILE

Figure 23. "2-Ton Freight Elevator, Section 62, Building No. 19-B-S1, Hill Shops," April 15, 1935.



NOTES:-
STRUCTURAL STEEL CONTRACTOR TO FURNISH ALL STRUCTURAL STEEL, BOLTS, AND ALL MISCELLANEOUS STEEL EXCEPT AS OTHERWISE NOTED. ALL STEEL TO HAVE ONE SHOP COAT OF RED LEAD AND LINSEED OIL. ALL STEEL TO BE IN ACCORDANCE WITH 1936 SPECS. OF THE A.I.S.C. FOR BUILDINGS.
ERECTION BY SPRINGFIELD ARMORY.

NOTE:-
ELEVATOR CONTRACTOR TO FURNISH AND INSTALL ELEVATOR EQUIPMENT AND BI-PARTING HATCHWAY DOORS ALL IN ACCORDANCE WITH SPECIFICATIONS.

REVISION	
1	10-1-40

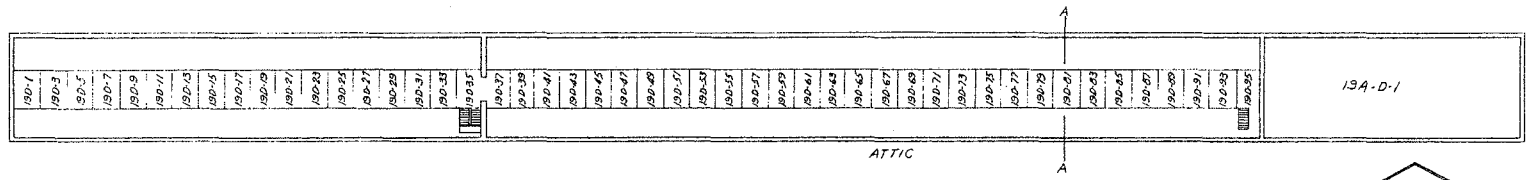
2 TON FREIGHT ELEVATOR
SECTION 62
BUILDING NO. 19-B-S1
HILL SHOPS
SPRINGFIELD ARMORY U.S.A.

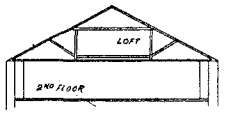
DR.		CH.	APR. 15, 1935
TR.			

DR. S.A. 100034

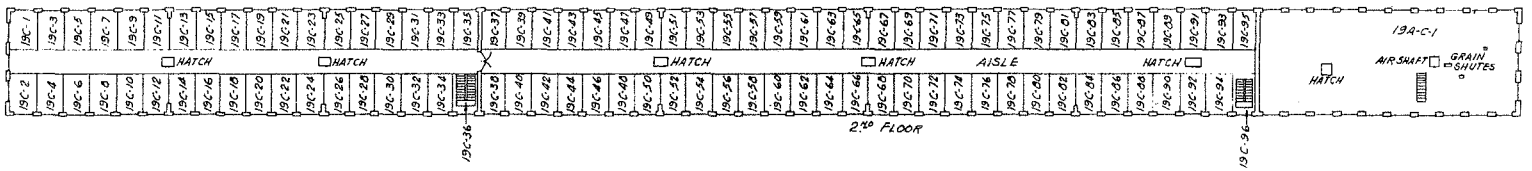
COMMANDING OFFICER — COL. ORD. DEPT. U.S.A.
Lt. Col. ORD. DEPT. U.S.A.

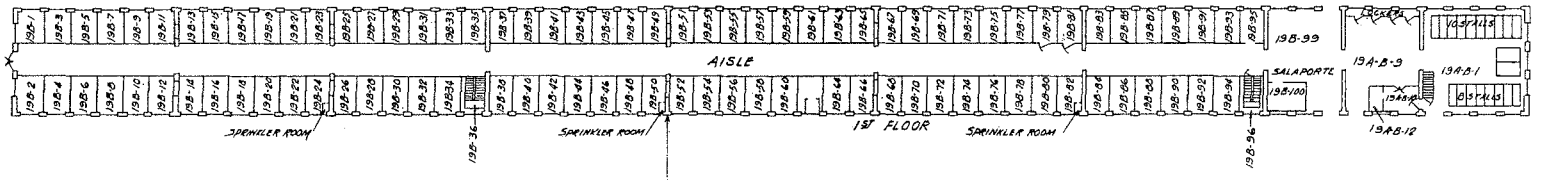
Figure 24. "Floor Plans, Buildings 19 and 19A," July 31, 1936.



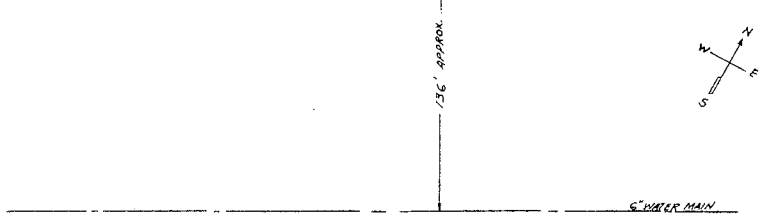


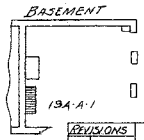
SECTION A-A

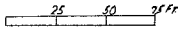












REVISIONS	

FLOOR PLANS

BUILDINGS 19B & 19A

SPRINGFIELD ARMORY. U.S.A.

DR. C.L.S.	T.R.	CHK.	JULY 31, 1936

OFFICER IN CHARGE LT. COL. ORD. DEPT. U.S.A.

SUBMITTED: LT. COL. ORD. DEPT. U.S.A.

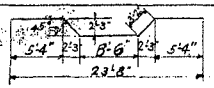
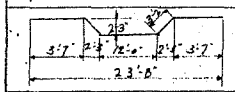
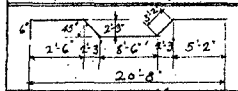
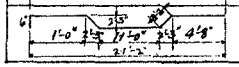
DRG.SA6085

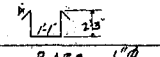
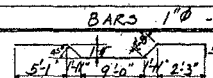
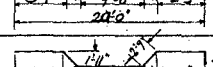
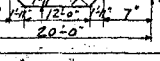
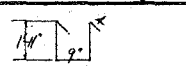
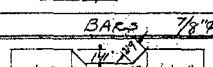
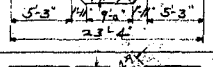
Figure 25. "Steel Schedule Alterations to Floor Stables Bldg. No. 19A Hill Shops," December 28, 1936.

SLAB STEEL

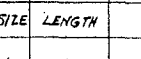
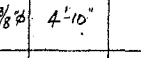
154 BARS	5/8"ϕ	- 28'-6" LONG.	
55 "	3/8"ϕ	- 26'-0" "	(SPACERS)
154 "	5/8"ϕ	- 4'-0" "	(BONDS) 3'-6" c.
109 "	3/8"ϕ	- 4'-0" "	(BONDS) 3'-6" c.
55 "	3/8"ϕ	- 26'-0" "	(SPCRS)
547 "	5/8"ϕ	- 6'-0" "	(TOP BM. & GDRS)

BEAM STEEL

BENDS	SIZE	LENGTH	BEAM NO.	NO. BARS IN EACH BM.	TOTAL NO. BARS.
	1"ϕ	25'-6"	"B" 2 REQ'D.	2	4
	1"ϕ	25'-6"	"B"	1	2
	3/8"ϕ	6'-3"	"B"	34	68
BARS 1"ϕ - 16'-8" LG.			"B"	4	8
	1"ϕ	23'-6"	"D" 4 REQ'D.	2	8
	1"ϕ	23'-6"	"D"	1	4

BENDS	SIZE	LENGTH	BEAM NO.	NO. BARS IN EACH BM.	TOTAL NO. BARS.
	3/8"ϕ	6'-3"	"D"	34	136
BARS 1"ϕ - 17'-6" LONG				4	16
	7/8"ϕ	22'-3"	"A" 10 REQ'D.	2	20
	7/8"ϕ	22'-3"	"A"	1	10
	3/8"ϕ	5'-7"	"A"	35	350
BARS 7/8"ϕ 17'-0" LG.			"A"	2	20
	3/8"ϕ	5'-3"	"E" 3 REQ'D.	35	105
BARS 7/8"ϕ 17'-0" LG.			"E"	4	12
	7/8"ϕ	25'-0"	"C" 5 REQ'D.	2	10
	7/8"ϕ	25'-0"	"C"	1	5
	3/8"ϕ	5'-7"	"C"	35	175
BARS 7/8"ϕ 16'-9" LG.			"C"	2	10

COLUMN STEEL

BENDS	SIZE	LENGTH		NO. BARS IN EACH COL.	TOTAL NO. BARS.
	3/8"ϕ	4'-10"		10	40
	3/8"ϕ	4'-2"		10	20
BARS 1 1/4" ϕ 10'-0" LG.				4	24

FOOTING STEEL

60 BARS	1/2"ϕ	- 4'-0" LONG	
24 "	1 1/4"ϕ	- 6'-0" "	(STAGS)

REVISIONS	
1	FEB 4, 1937

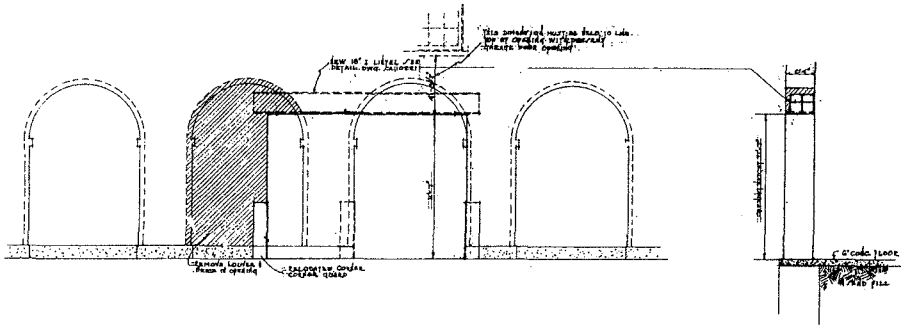
OFFICER IN CHARGE 1936 CON. QRD. DEPT. U.S.A.

STEEL SCHEDULE
ALTERATIONS TO FLOOR
STABLES BLDG NO. 19A
HILL SHOPS
SPRINGFIELD ARMORY U.S.A.

DR. E.J.D.	TR.	CK. J.B.T.	DEC 28, 1936

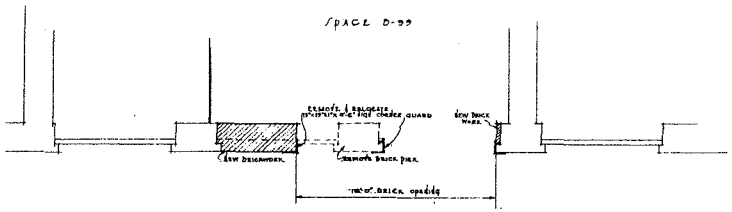
DRWG. SA-10004-B

Figure 26. "Alterations to Salaporte, Bldg. 19, Space B99, Hill Shops," April 26, 1938. Enlarging existing passageway to current configuration.

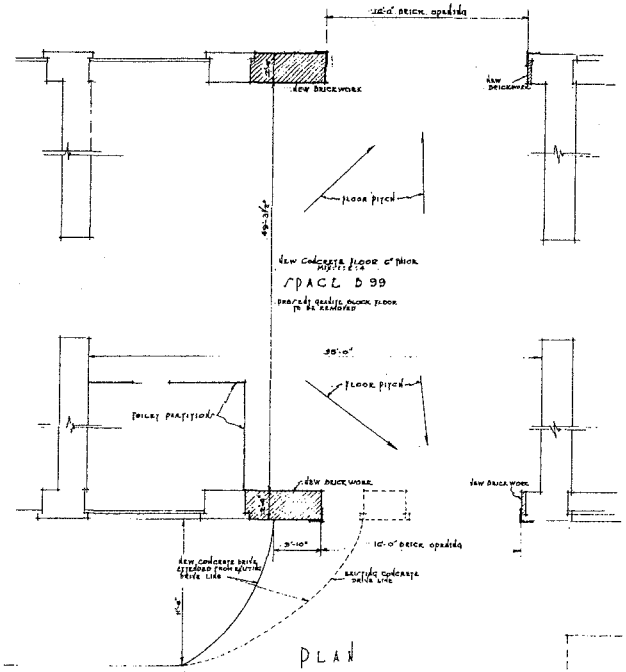


ELEVATION

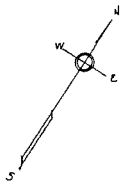
SECTION



PARTIAL PLAN
SOUTH SIDE, NORTH SIDE SIMILAR



PLAN



SCALE

0 1 2 3 4 8 15 16 20 FT.

REVISIONS	ALTERATIONS TO SALAPORTE BLDG 19 SPACE D99 KILL STOPS SPRINGFIELD ARMORY U.S.A.	
	DR. J.C. TR.	CH. H.S. APRIL 29, 1936
	SUBMITTED Asst. to the Depot Q.M.	DWG. SA 10220

COMMANDING OFFICER Approved 1936 U. COLORD DEPT Q.M.C.

Figure 27. "Structural Steel Reinforcing Floor "B", of Building No. 19, Hill Shops," November 1, 1940.

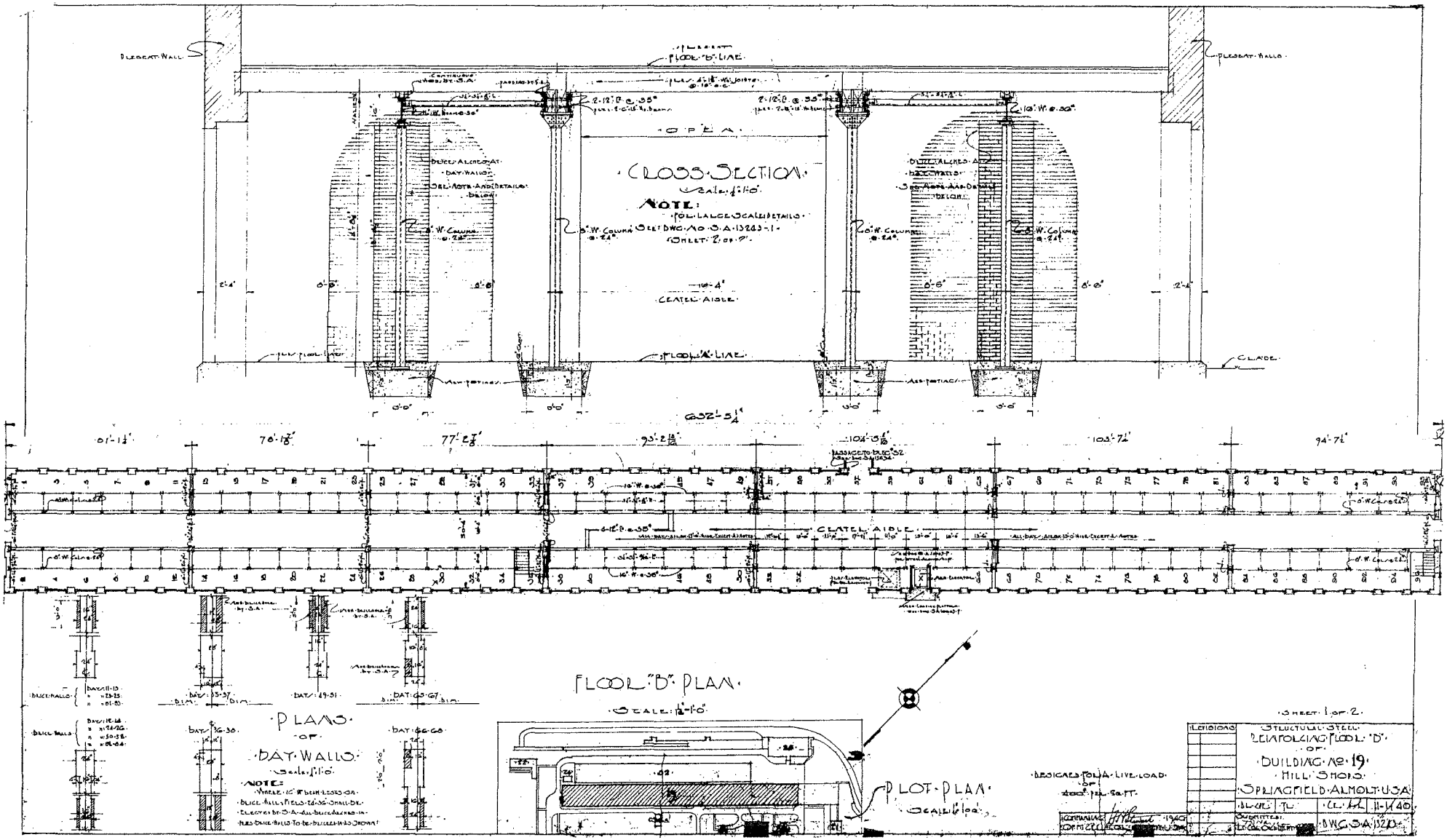
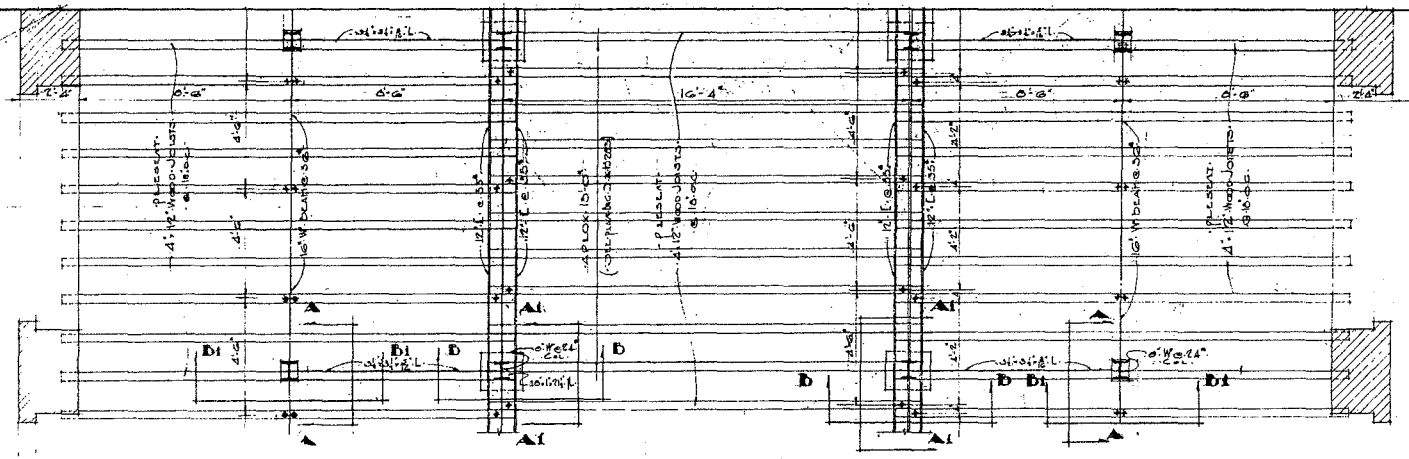
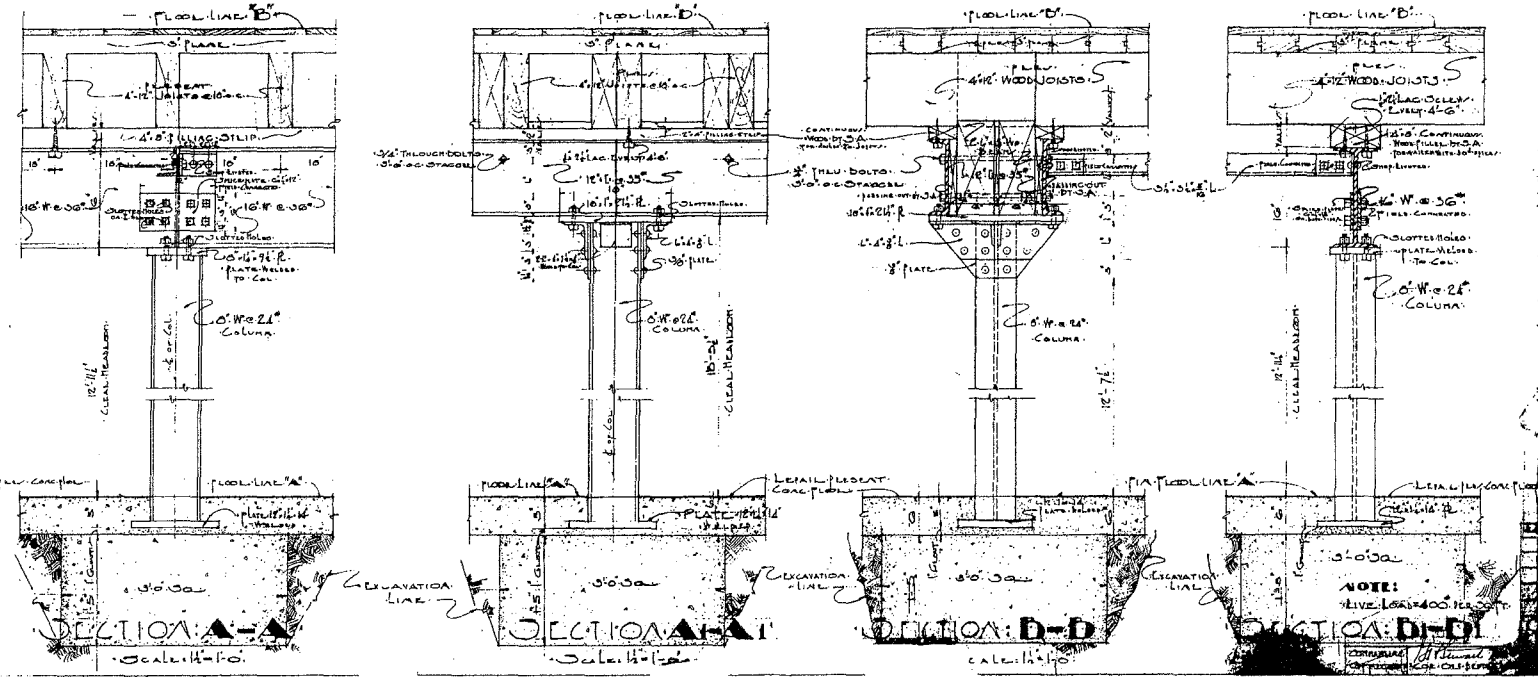

CROSS-SECTION
Scale 1/16"
NOTE:
FOR LARGE SCALE DETAILS
SEE DWG. NO. S.A. 13283-1
SHEET 2 OF 2
OPEN
CENTER AISLE
FLOOR "A" LINE
FLOOR "B" LINE
PLOT PLAN
Scale 1/64"
FLOOR "B" PLAN
Scale 1/2"=1'0"
PLANS OF DAT WALLS
Scale 1/16"
NOTES:
DESIGNED FOR A LIVE LOAD OF
200 LBS. PER SQ. FT.
STRUCTURAL STEEL
FOR
BUILDING No. 19
HILL STORE
SPRINGFIELD, ALMOLT, U.S.A.
SHEET 1 OF 2
DWG. S.A. 13283

Figure 28. "Structural Steel Reinforcing Floor "B", of Building No. 19, Hill Shops," November 1, 1940.



PLAN OF TYPICAL BAY

Scale 1/16



NOTES:

COATLACTOL ALL WELDED ALL DIMENSIONS ON THE JOB.

TOP FLANGES OF FLOOR TEES TO BE PUNCHED WITH 5/8" O HOLES @ EVEN 4'-0" AS INDICATED ON PLANS ABOVE.

COATLACTOL ALL PULASKI ALL BOLTS, LAG SCREWS AND WALL BEARING PLATES.

COATLACTOL ALL PULASKI ALL ANGLE WALL ANCHORS ON CHANNEL AND I BEAMS WHERE TEES TEST ON BRICK WALLS.

SHOP CONNECTIONS RIVETED 5/8" Ø

FIELD CONNECTIONS WITH BOLTS.

ALL STEEL TO HAVE ONE SHOP COAT OF RED LEAD AND LINSEED OIL.

CONNECTIONS SHALL DEVELOP FULL STRENGTH OF MEMBERS.

ALL ERECTION DETAILS TO BE AS NOTED.

ALL STEEL TO BE IN ACCORDANCE WITH 1934 SPECS OF THE A.I.S.C. FOR BUILDINGS.

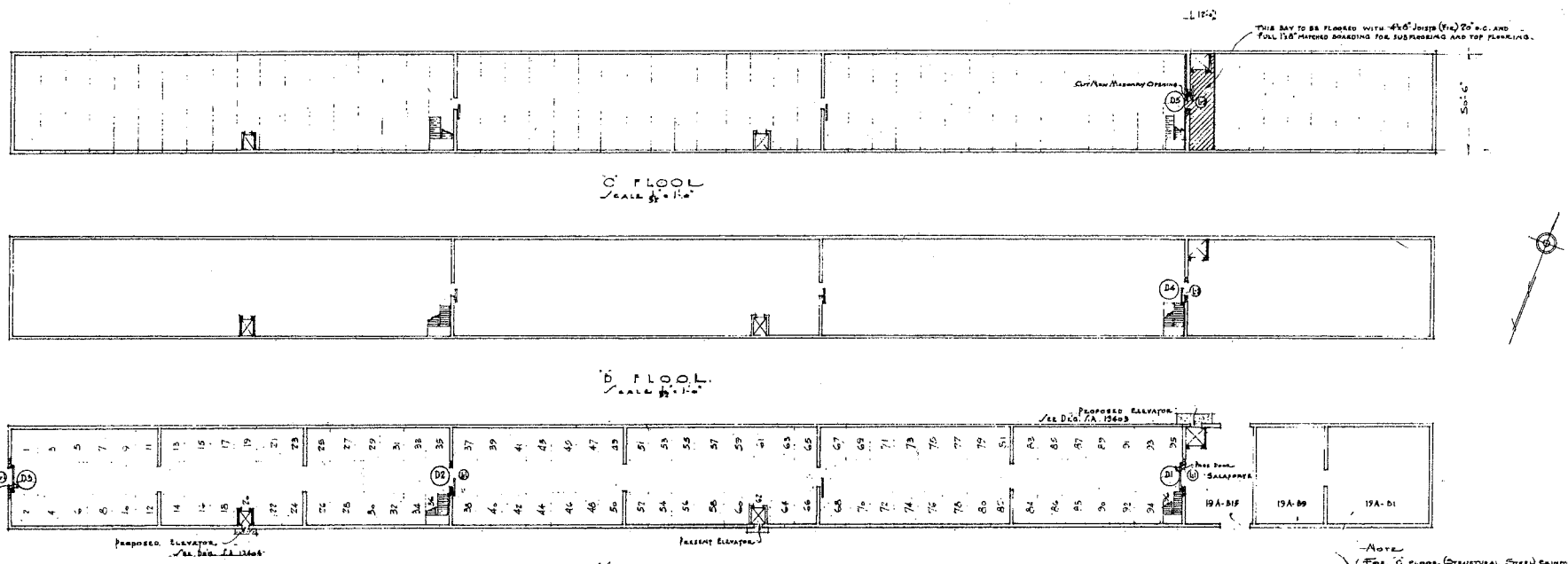
SHEET 2 OF 2

STRUCTURAL STEEL
REINFORCING FLOOR "D"
OF
BUILDING No. 19
MILL No. 1
SPRINGFIELD ARMORY

DRAWN | TRACED | CHECKED

SUBMITTED BY
LT. COL. OLIVER, U.S.A.

Figure 29. "Alteration to Doors, Building 19, Hill Shops," January 1, 1942. Illustrating installment of fire doors.



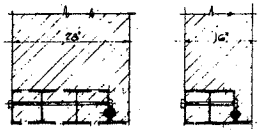
C FLOOR
Scale 1/8" = 1'-0"

D FLOOR.
Scale 1/8" = 1'-0"

A FLOOR.
Scale 1/8" = 1'-0"

NOTE
FOR 'C' FLOOR (STRUCTURAL STEEL) REINFORCING SEE DRG. SA. 13396.

DOOR MARK	FLOOR	LOCATION.	MASONRY OPENING WIDTH	MASONRY OPENING HEIGHT	DOOR TYPE.	WALL THICKNESS	LINTEL NUMBER	LINTEL LENGTH	REMARKS.
D1	A	EAST END NEAR SALAPORTE	11'-0"	11'-0"	ROLLING STEEL DOOR WITH WICKET DOOR.	28"	L1	13'-6"	AFTER MASONRY OPG.
D2	A	FIRE WALL AT BAY 38	10'-0"	11'-0"	3 PLY. LAB. TIN CLAD INCLINE SLIDE.	28"	L1	12'-6"	" " "
D3	A	WEST END OF BLDG.	11'-0"	11'-0"	ROLLING STEEL DOOR WITH WICKET DOOR	28"	L1	13'-6"	" " "
D4	B	EAST END OVER SALAPORTE.	8'-0"	8'-0"	3 PLY LAB. TIN CLAD INCLINE SLIDE.	16"	L2	9'-6"	" " "
D5	C	EAST END OVER SALAPORTE.	6'-0"	8'-0"	3 PLY LAB. TIN CLAD INCLINE SLIDE.	16"	L2	7'-6"	CUT NEW MASONRY OPG.



LINTEL L1
2-6"W 24
2-6"D 11.5
1-L 3"x3½"x⅝"

LINTEL L2
1-6"W 17
2-6"D 11.5
1-L 3"x3½"x⅝"

- LINTEL DETAILS -
See Schedule.

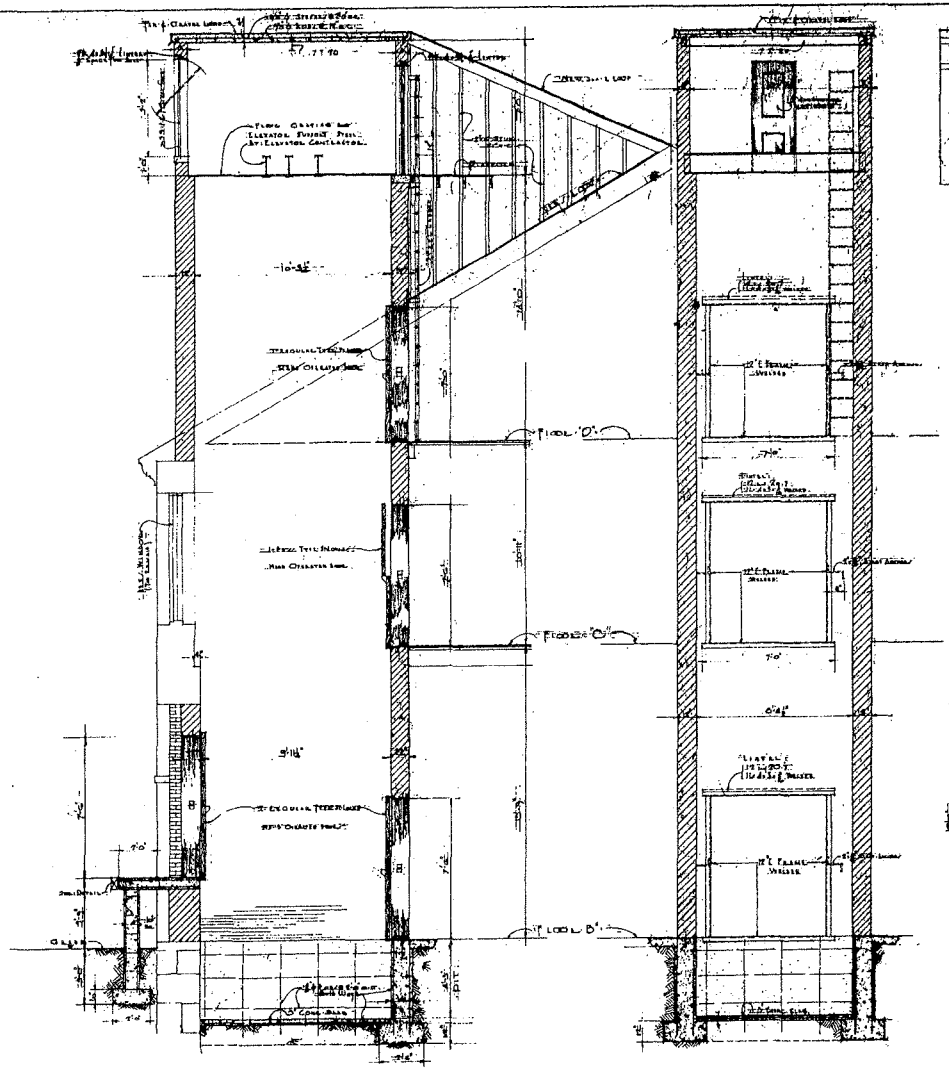
NOTES.
ROLLING STEEL DOORS SHALL BE 'COLMBLL' OR EQUAL WITH PASS DOOR.
TIN CLAD DOORS SHALL BE FURNISHED COMPLETE WITH HARDWARE AND WALL BOXES.
STRUCTURAL STEEL TO BE PAINTED ONE SHOP COAT OF RED LEAD & OIL.
ALL ERECTION TO BE DONE BY THE SPRINGFIELD ARMORY.

REVISIONS

ALTERATION TO DOORS
BUILDING No 19
- MILL, SHOPS -
SPRINGFIELD ARMORY U.S.A.

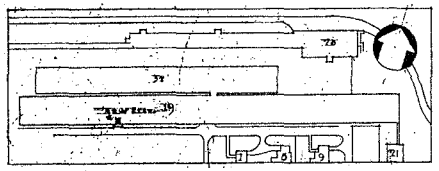
COMMANDING OFFICER	1941	DR. AGR	TR. AGR	CK.	JAN. 1. 1942
	COL. ORD. DEPT. U.S.A.	SUBMITTED:	DRG. SA. 13397.

Figure 30. "2-Ton Freight Elevator, Space 19B-25 Section 30, Building no. 19, Hill Shops," January 8, 1942.



SECTION: A–A
SCALE: 1/4"=1'-0"

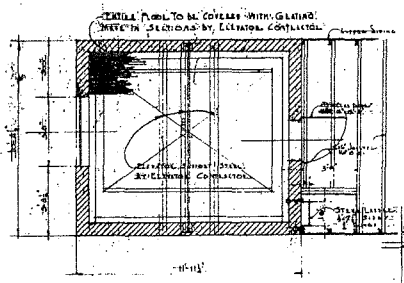
SECTION: B–B
SCALE: 1/4"=1'-0"



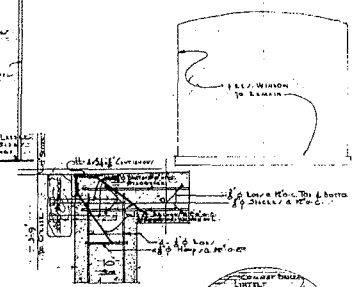
PLOT PLAN.
SCALE: 1/16"=1'-0"

NOTES:

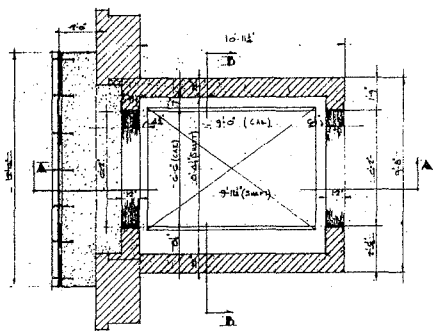
1. ELEVATOR CONTRACTOR TO FURNISH & INSTALL ELEVATOR EQUIPMENT AND BI-PARTING HATCHWAY DOORS ALL IN ACCORDANCE WITH SPECIFICATIONS. ELEVATOR MUST BE "BAY STATE" AND ELEVATOR DOORS MUST BE "ST. LOUIS".
2. STRUCTURAL STEEL CONTRACTOR TO FURNISH ALL STRUCTURAL STEEL, BOLTS AND ALL MISCELLANEOUS STEEL EXCEPT AS OTHERWISE NOTED.
3. ALL STEEL TO HAVE ONE SHOP COAT OF RED LEAD AND LINSEED OIL.
4. ALL STEEL TO BE IN ACCORDANCE WITH 1941 SPECS. OF THE A.I.S.C. AND BULLETINS.
5. ERECTION BY SPRINGFIELD ARMORY.



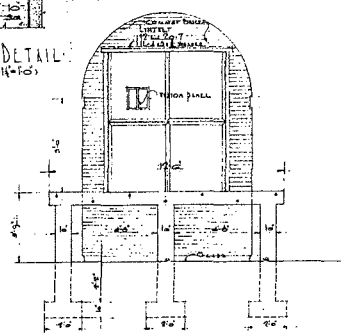
PLAN AT MACHINE ROOM FLOOR
SCALE: 1/4"=1'-0"



BUMPER DETAIL
SCALE: 1/4"=1'-0"



PLAN AT LOADING PLATFORM
SCALE: 1/4"=1'-0"

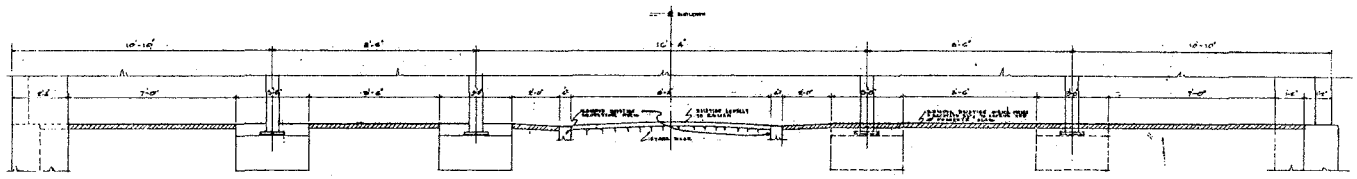


ELEVATION OF LOADING PLATFORM
SCALE: 1/4"=1'-0"

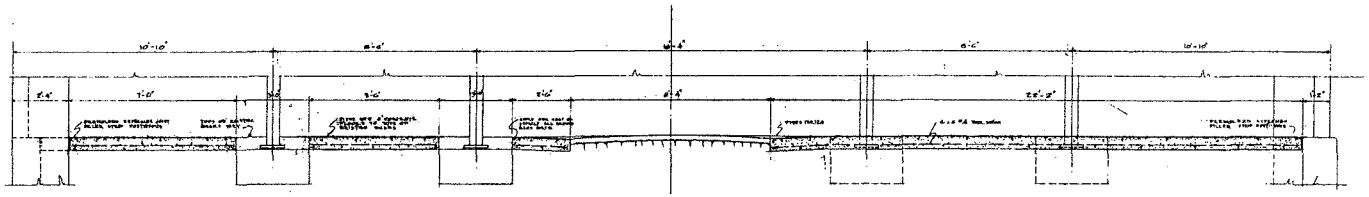
New Brick
Present Brick

CONCURRED:			
DEFECTED:	CHIEF OF ORD. DEPT. U.S.A.		
REVISIONS	2-TON FILLIGHT ELEVATOR		
	SHEET 1936-25 SHEET 30		
	BUILDING No 19		
	HILL SHOPS		
	SPRINGFIELD ARMORY U.S.A.		
	DR. C.	TR. B.	CH. A.A. 1-8-42
	SUBMITTED:		
	LT. COL. ORD. DEPT. U.S.A.		DWG. S.A. 13405

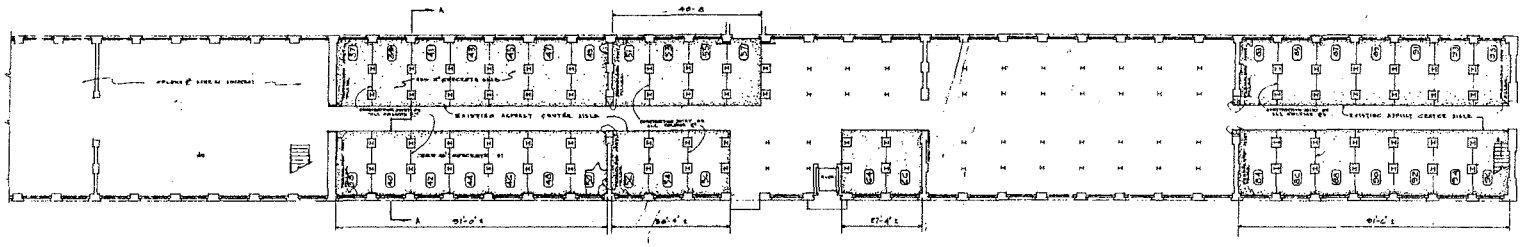
Figure 31. "New Floor Construction, Building 19," November 28, 1952.



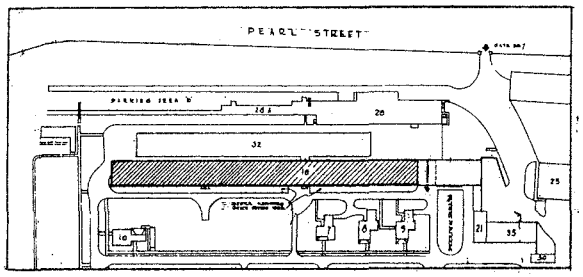
TYPICAL SECTION THRU EXISTING FLOOR SLAB



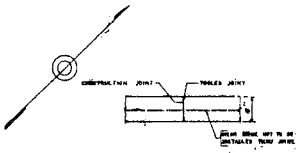
SECTION A-A



FLOOR PLAN



PLOT PLAN



TYPICAL CONSTRUCTION JOINT IN SLAB

RECORD DRAWINGS

CONTRACT NO. DA-19-016-ENG-2539

REVISION	DATE	DESCRIPTION	BY

ALDERMAN & MAC NEISH
ARCHITECTS – ENGINEERS
SPRINGFIELD, MASS.

CORPS OF ENGINEERS, U.S. ARMY
OFFICE OF THE DIVISION ENGINEER
NEW ENGLAND DIVISION
BOSTON, MASS.

LEGEND

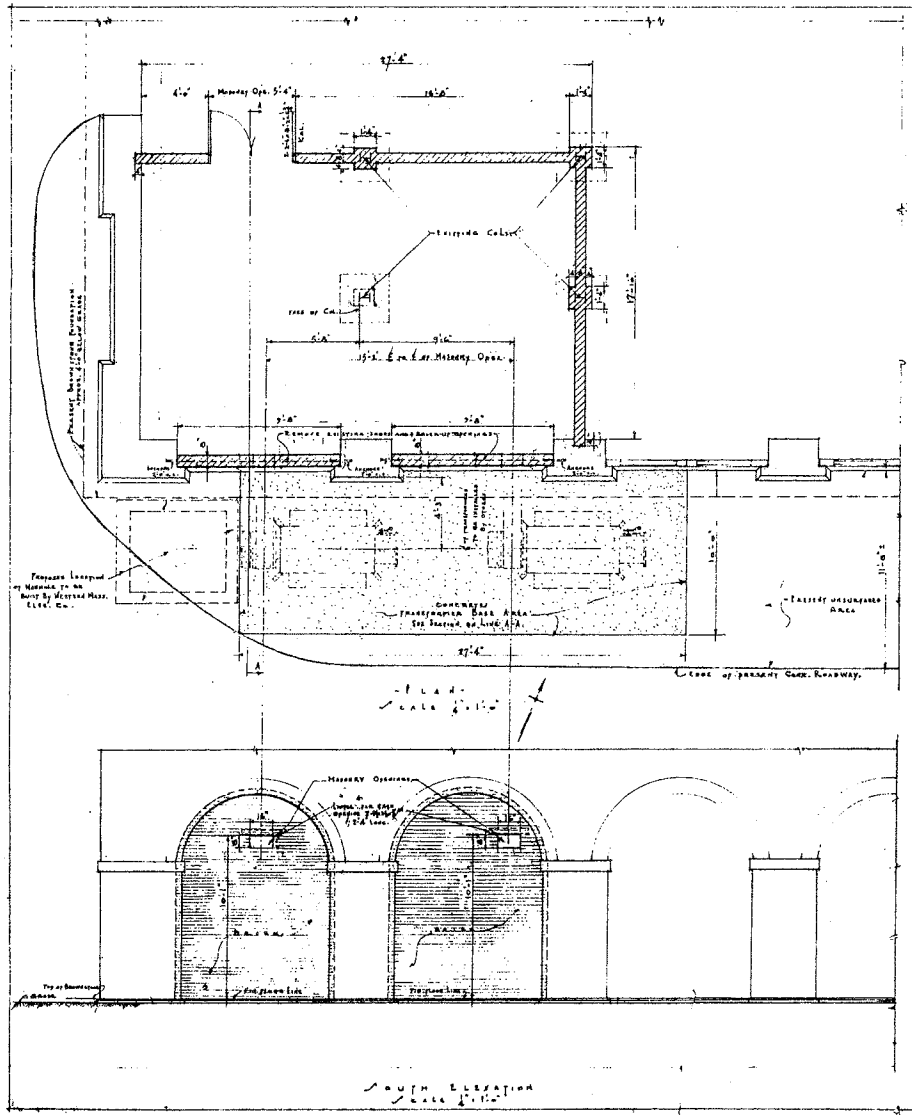
- EXISTING BRICK TO BE REMOVED
- NEW CONCRETE
- DESIGNATES BAY NUMBER

DRAWN BY V.C.
TRACED BY V.C.
CHECKED BY A.S.M.
SUBMITTED
APPROVED
APPROVED
DATE

NEW FLOOR CONSTRUCTION
BUILDING NO. 16
SPRINGFIELD ARMORY
SPRINGFIELD, MASS.

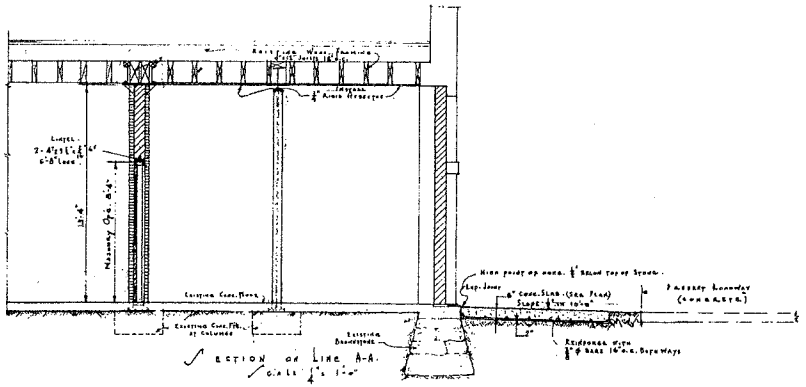
SCALE AS NOTED
DRAWING NUMBER
SHEET 1 OF 1
33-01-03

Figure 32. "Alterations to West End of Building No. 19 for Electric Sub-Station," January 4, 1954.

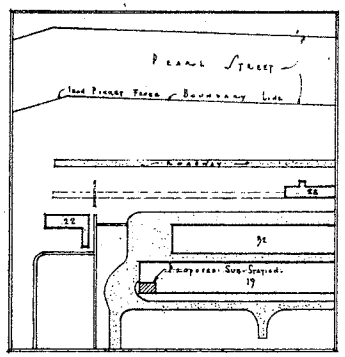


PLAN
Scale 1/4" = 1'-0"

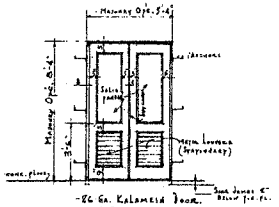
SOUTH ELEVATION
Scale 1/4" = 1'-0"



SECTION on LINE A-A.
Scale 1/4" = 1'-0"



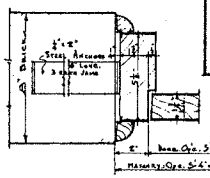
PLOT PLAN
Scale 1" = 100'-0"



-26 Ga. Kalamein Door.
1 Pair Required
Scale 1/4" = 1'-0"

HARDWARE SCHEDULE FOR KALAMEIN DOORS

3 Pr. 5" Half Surface Butt Hinges, Stanley BB 1165, Fin. D
1 Pr. Interest Russwin Sterling Deadlocks, Fin. 3 (Oxidized Bronze)
1-8" Chain Bolt, Stanley 535, Fin. D
1-8" Foot Bolt, Stanley 526, Fin. D with Strike # 1138
1-Door Closer, Russwin, CL 2510



SECTION B



SECTION C

KALAMEIN DETAILS
Scale 3" = 1'-0"

LEGEND

Existing Structure (Dark)
New Brickwork (Hatched)

Revisions	
1	9 Apr. 1954

ALTERATIONS TO WEST [illegible] BUILDING No. 19
FOR
ELECTRIC SUB-STATION
ARMORY
SPRINGFIELD ARSENAL
Dwg. By [illegible] 1954

Commanding Officer — Col. Ord. Dept. U.S.A. — 1954

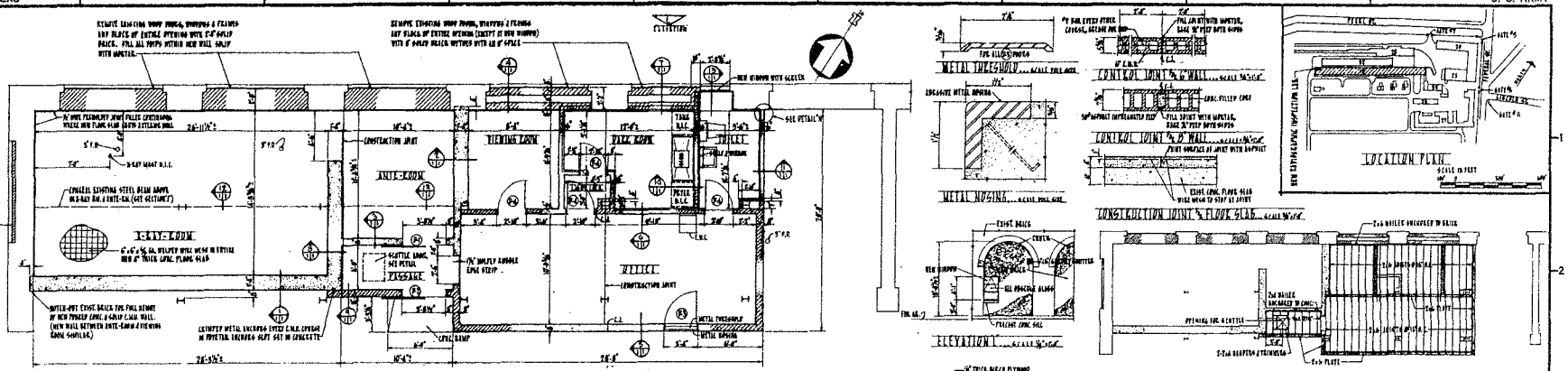
Submitted:
G. Freeman
Post Engineer.

[illegible] M. 585

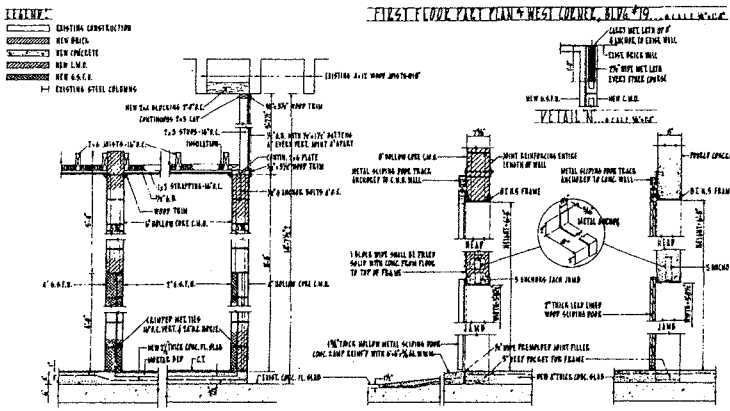
Figure 33. "Radiographic Inspection Lab - Bldg. 19, Plans, Elevations, Sections, and Details," June, 1960.

CORPS OF ENGINEERS

U. S. ARMY



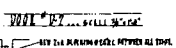
FIRST FLOOR PART PLAN & WEST ELEVATION, BLDG. #19



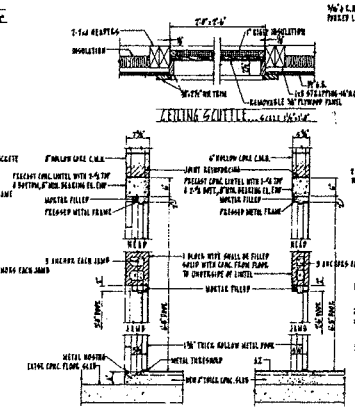
SECTION



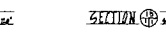
SECTION



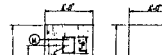
DETAIL "M"



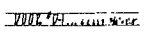
SECTION



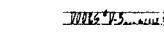
SECTION



DOOR "D1"



DOOR "D2"

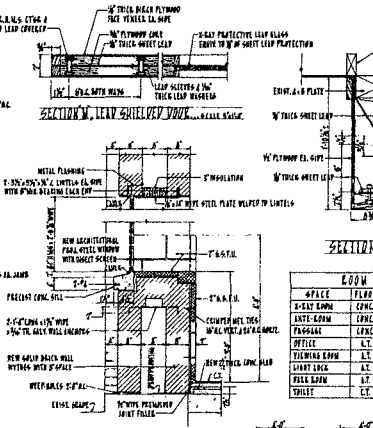


DOOR "D3"

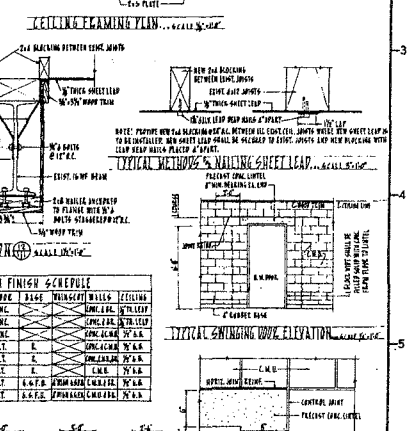


DOOR "D4"

SECTION



CEILING FRAMING PLAN



SECTION "M", LEAD SHIELDED DOOR

TYPICAL METHODS OF NAILING SHEET LEAD

TYPICAL SWINGING DOOR ELEVATION

TYPICAL CONTROL JOINT OPENING

ROOM FINISH SCHEDULE

SPACE	FLOOR	BASE	TRIM CAST	WALLS	CEILING
X-RAY ROOM	CONC.			CONC. & GL.	5/8" LEAD
ANTE-ROOM	CONC.			CONC. & GL.	5/8" LEAD
PASSAGE	CONC.			CONC. & GL.	5/8" LEAD
OFFICE	L.T.	R.		CONC. & GL.	5/8" LEAD
VIEWING ROOM	L.T.	R.		CONC. & GL.	5/8" LEAD
SHORT LOCK	L.T.	R.		C.M.U.	5/8" LEAD
FILM ROOM	L.T.	C.M.U.		C.M.U. & GL.	5/8" LEAD
TOILET	L.T.	C.M.U.		C.M.U. & GL.	5/8" LEAD

DOOR SCHEDULE

NOTE: CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS IN THE FIELD.

ABBREVIATIONS

L.T. ..... ASPHALT TILE
BR. ..... BRICK
C.J. ..... CONTROL JOINT
C.M.U. ..... CONCRETE MASONRY UNITS
CONC. ..... CONCRETE
G.R. ..... GYPSUM BOARD
G.S.F.R. ..... GALVIN STRUCTURAL FIXING UNITS
L. ..... RUBBER
N.I.C. ..... NOT IN CONTRACT
C.T. ..... CERAMIC TILE

GRAPHIC SCALES



INDEX TO DRAWINGS

DRAWING NO.	SHEET NO.	TITLE
35-51-01	1	ARCHITECTURAL.....PLAN, ELEVATIONS, SECTIONS & DETAILS
35-51-01	2	MECHANICAL.....PLUMBING, HEATING, VENTILATING & AIR-CONDITIONING - PLANS
35-51-01	3	ELECTRICAL.....PLANS
40-05-25	1	CONSTRUCTION SIGN

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

DES. BY A.A.M. | DR. BY A.A.M. | CK. BY J.S.

SUBMITTED: Chief, E&C Section

PROJECT ENGINEER: Chief, Design Branch

APPROVED: Chief, Military Engineering

SPRINGFIELD ARMORY
SPRINGFIELD, MASS.
RADIOGRAPHIC INSPECTION LAB - BLDG. #19
ARCHITECTURAL
PLANS, ELEVATIONS, SECTIONS & DETAILS

APPROVED: John Wm. Leighton, Chief, Engineering Division
DATE: JUNE 1960

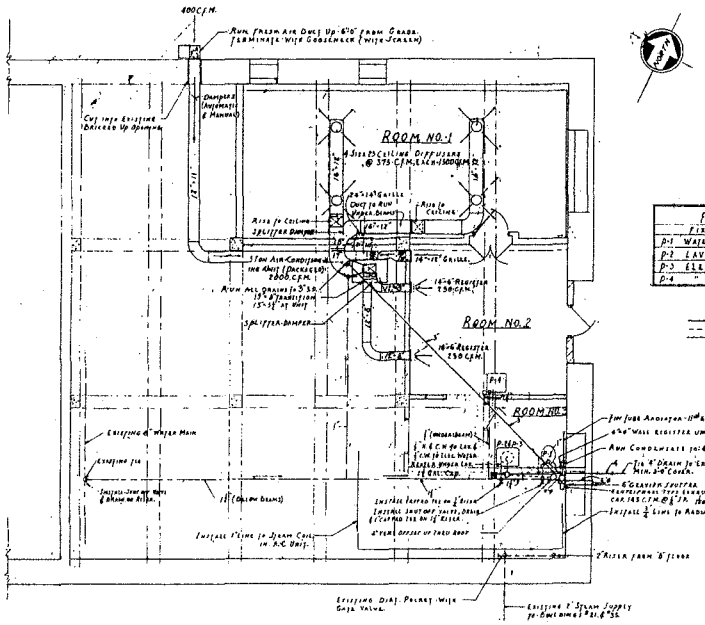
SCALE: AS SHOWN | SPEC. NO. ENG-19-016-60-92

DRAWING NUMBER
35-51-01

SHEET 1

6738

Figure 34. "Modification of Basement Area, Building 19, Springfield Armory," September 30, 1960. U.S. Army Corps of Engineers.



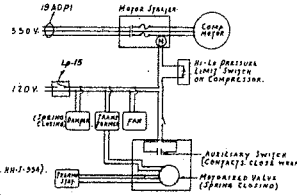
FIXTURE SCHEDULE			
Fixture	Trap Waste	H.W.	C.W.
P-1 Water Closet	4"	—	1"
P-2 Lavatory	1½"	½"	½"
P-3 Elec. W.H.	—	—	½"
P-4 " W.C.	1½"	—	½"

LEGEND
- Soil or Waste
- Vent
- Cold Water
- Cleanout

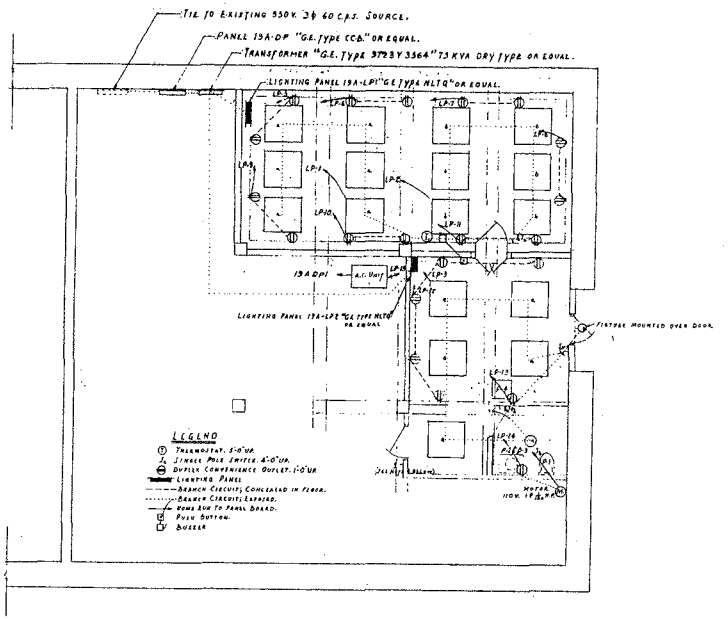
Plan — Plumbing & Air-Conditioning
Scale ½" = 1'-0"

Notes:
1. Install 150# Gate Valves at all Fixtures.
2. All Water Lines shall be Standard Brass and shall be Insulated with ½" thick pre-Shrunk Wool Felt. (Fed. Spec. HH-I-558)
3. All Supply & Return Ducts to Rooms #1 & #2 shall be Internally Insulated with 1" thickness of "Airacoustic Shield" (Johns Manville) or equal. Duct Sizes shown are to outside of Insulation.
4. Ductwork exposed within Room No. 1 shall be Externally Insulated with 1" thickness of Mineral Wool equal to "Sound Isolation Blanket" (Johns-Manville).
5. Steam lines shall be Standard Steel and shall be Insulated with Standard 85% Magnesia (Fed. Spec. HH-I-558).
6. Install "B" Hoffman Trap for Radiator & "800 Armstrong" Trap for A.C. Unit Steam Coil.
7. Diffusers to be equal to Anemostat type CM 1 - Size 25 with Splitter Dampers & Equalizing Deflectors.
8. Registers - - - - - - "Lima Series 101"
9. Grilles - - - - - - 15" with Manual Dampers.
10. Fabric Connections to be installed on all ducts at A.C. Unit.
11. Supply & Return Ducts to Room No. 1 shall be Wrapped with Insulation where the Ducts go through the Walls.
12. Air-Conditioning Unit to be Worthington "3CY60" or equal with ¾ H.P. Fan Motor.
13. Electric Water Cooler to be "General Electric Model RSA 12E3" or Equal.
14. Heater - as mfd. by National Steel Const. Co., Seattle (10 KW, 750 W., 1½ Gal. Cap.)
15. Lavatory to be "American Standard 22"x19" p#100-40, or equal (Acid-Resisting Enamel).
16. Water Closet to be "American Standard F 2030-11 with Satin Chrome Trip Lever, Seat & Wall Carrier, or equal.
17. Radiator to be "Vulcan" with "Style F" Cover, or equal.
18. Sight Drain shall be Trapped (Non-Siphoning).
19. A.C. Ducts (Supply & Return) to Room #1 shall have 1" Carbon Steel Rods @ 4'-0" o.c. Inserted thru Duct Opening & Grouted into Conc. Blks. 6" Min. Each Side of Opening.

Utilities to be Removed and/or Relocated
1. Remove Sprinkler Lines from proposed Rooms.
2. Relocate Steam Trap & Condensate Line from Room #1 to Area adjacent to Room #3.
3. Remove ¾" Gas Line from Room #1.

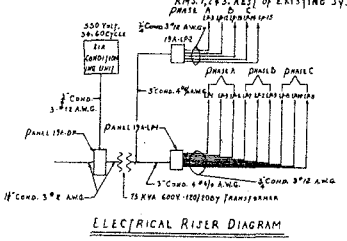


Wiring Diagram for A.C. Unit



Plan — Lighting & Power
Scale ½" = 1'-0"

Notes:
1. Fixtures for Rooms #1 & #2 shall be "Daylume" 6024-DB Cat. No. 4x4680" as mfd. by Day-Brite Lighting Co., or Equal.
2. Fixture for Room #3 shall be "Viroln V-625" as mfd. by Virden Lighting, or equal. Outdoor Fixture shall be "Prescolite WF-75" or equal as mfd. by Prescolite Mfg. Corp.
3. Following Controls to be Minneapolis-Honeywell, or Equal:
   - Damper Motor - M 405 D.
   - Thermostat - T 921 A 1 J K.
   - Auxiliary Switch - Q 51 D.
   - Modutrol Motor - M 905 F.
   - Linkage - Q 601 D.
   - Valve - 5011 A.
4. Toggle Switch for Existing Lighting Circuit to be Relocated to Position Shown. Remove Existing Lighting System within R.M.S. 1, 2 & 3. Abst of Existing System to remain.



Electrical Riser Diagram

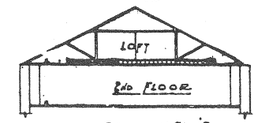
Lighting Panels 120/208 V., 3ϕ, 4 W., S/N Lugs in Mains		
Circuit No.	Branch Breaker Size - Amps	Serves
LP-1 — LP-2	20	Lighting
LP-3 — LP-11	20	Convenience Outlets
LP-12 — LP-14	20	Conv. Outlets, Exhaust Fan & Outdoor Light
LP-3	20	Lighting
LP-15	20	Air Conditioner

Distribution Panel 19ADP 600 V., 3ϕ, 3 Wire, 125 Amp Main Breaker		
Branch Circuit	Amp Trip	Destination
1	15	Air Conditioning Unit
2	100	Transformer

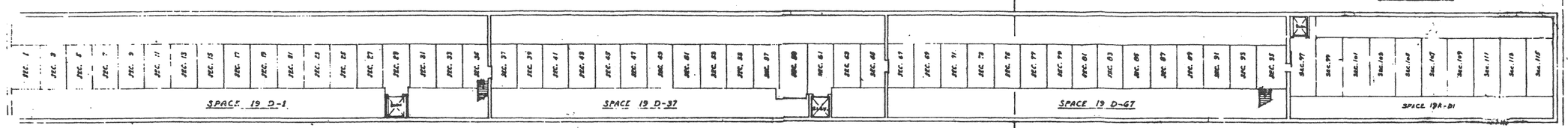
See Specifications

Modification of Basement Area, Building No. 13, Springfield Armory, Springfield, Mass.	
Drawn By: A.J. Dunne	Sept. 30, 1960
Submitted: Chief, Design Section, Civil Plant Facilities Office	Sketch PM. 614, Sheet 2 of 2

Figure 35. "Building No. 19, All Floors," February 1943, with last revisions in November 1961.

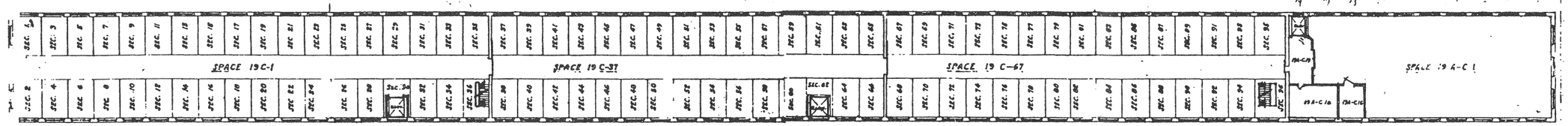


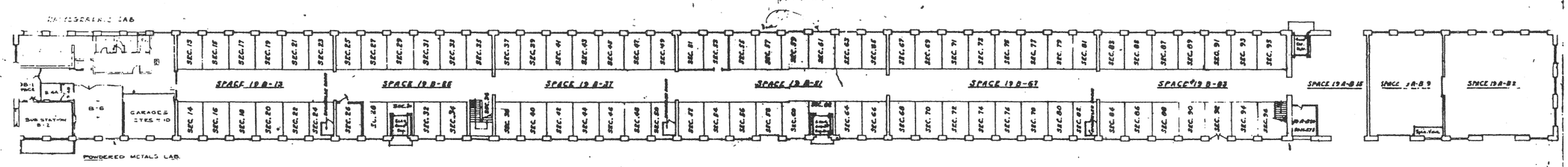
SECTION "A A"

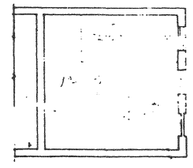


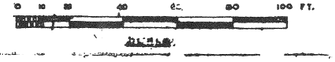
"A"

"A"









SUPERSEDES OLD TRACING SA6085

BUILDING Nº 19

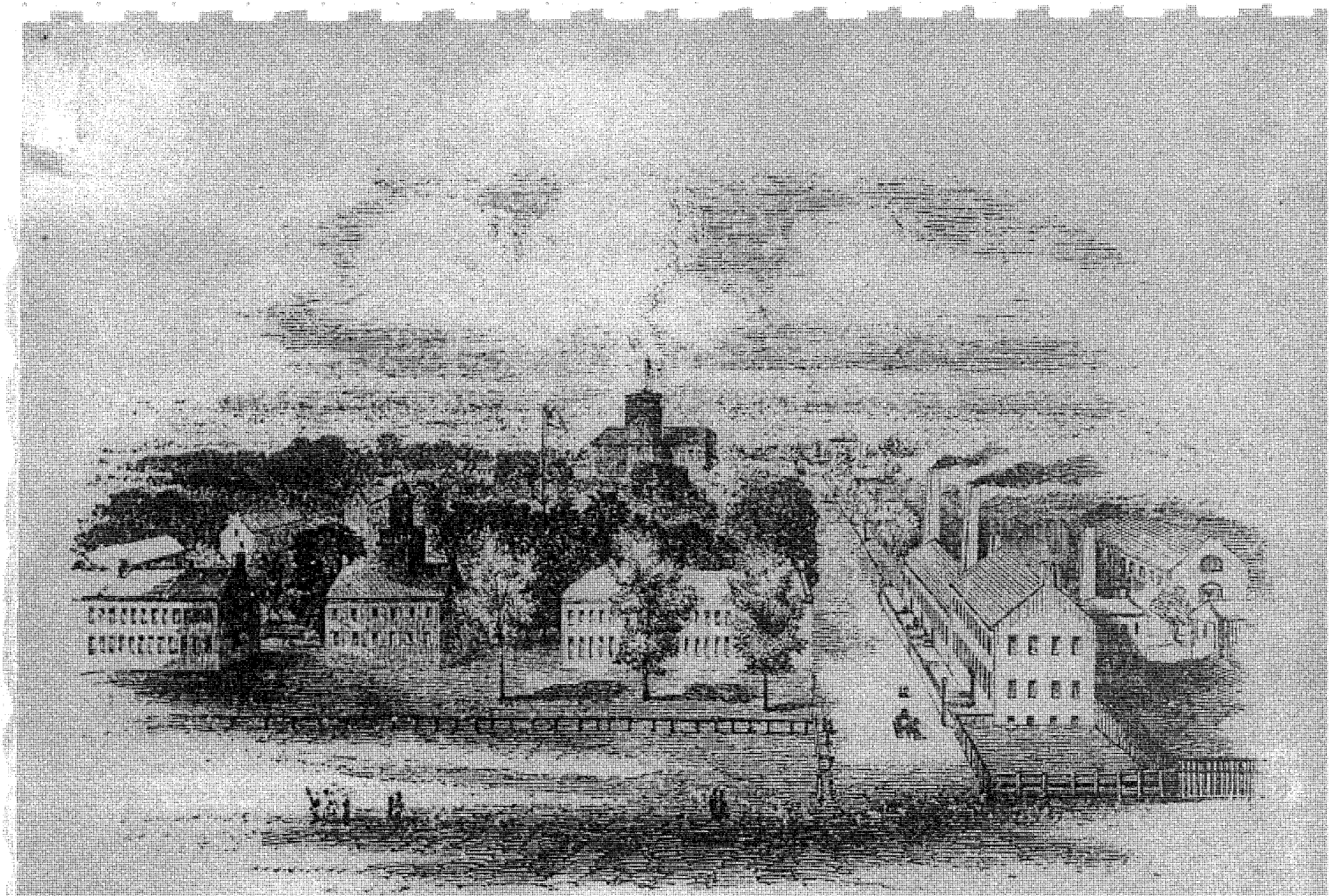
ALL FLOORS

DYESMAN	CHECKED	COMP. DYESMAN	CHIEF DYESMAN
M.J.S.			

S.A. 13305

HISTORIC IMAGES

Figure 36. General view. Long Store House appears to right; no Stables and West Addition, 1858.



GENERAL VIEW.

Figure 37. View of Springfield Armory from the west end of the Armory grounds, ca. 1860.

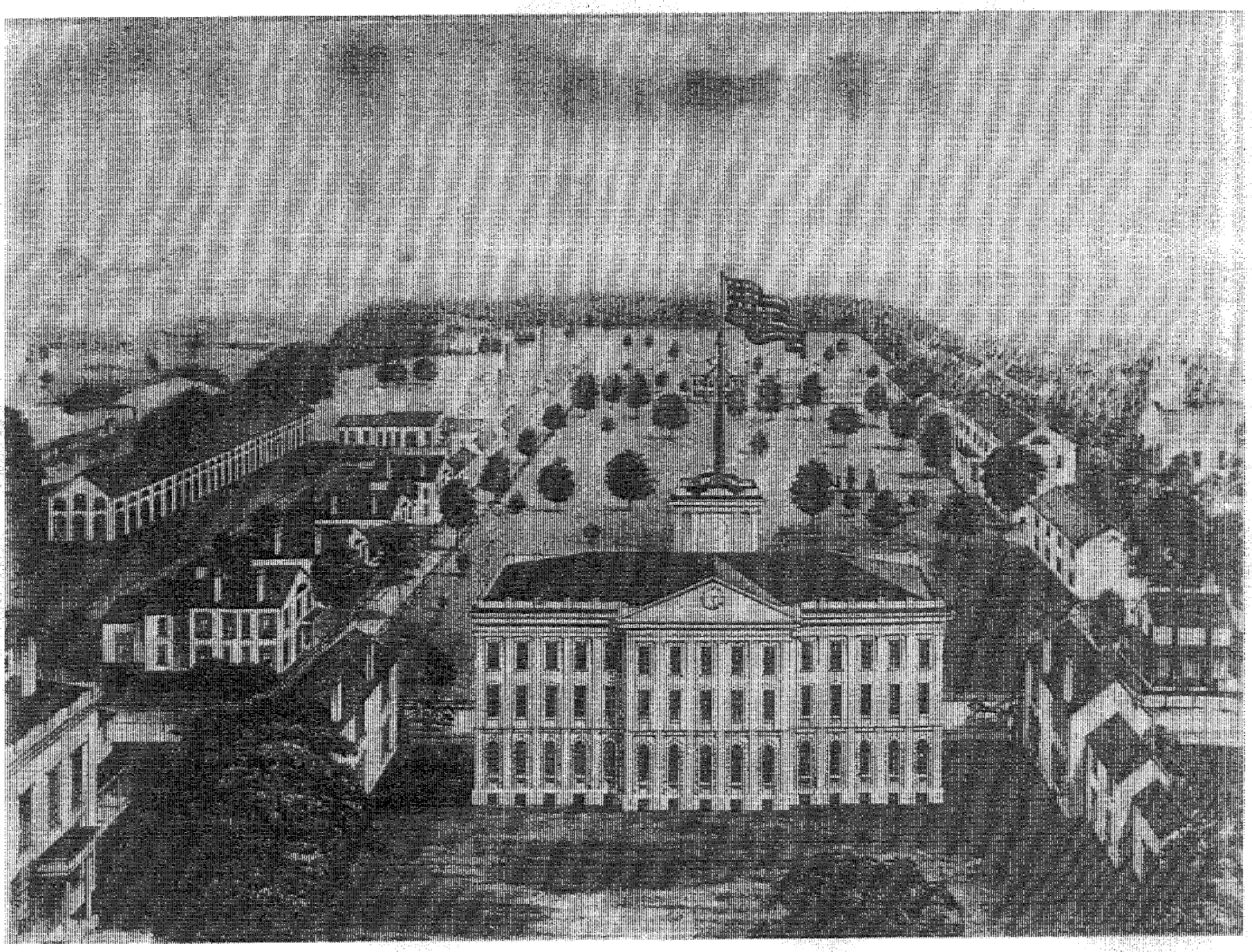
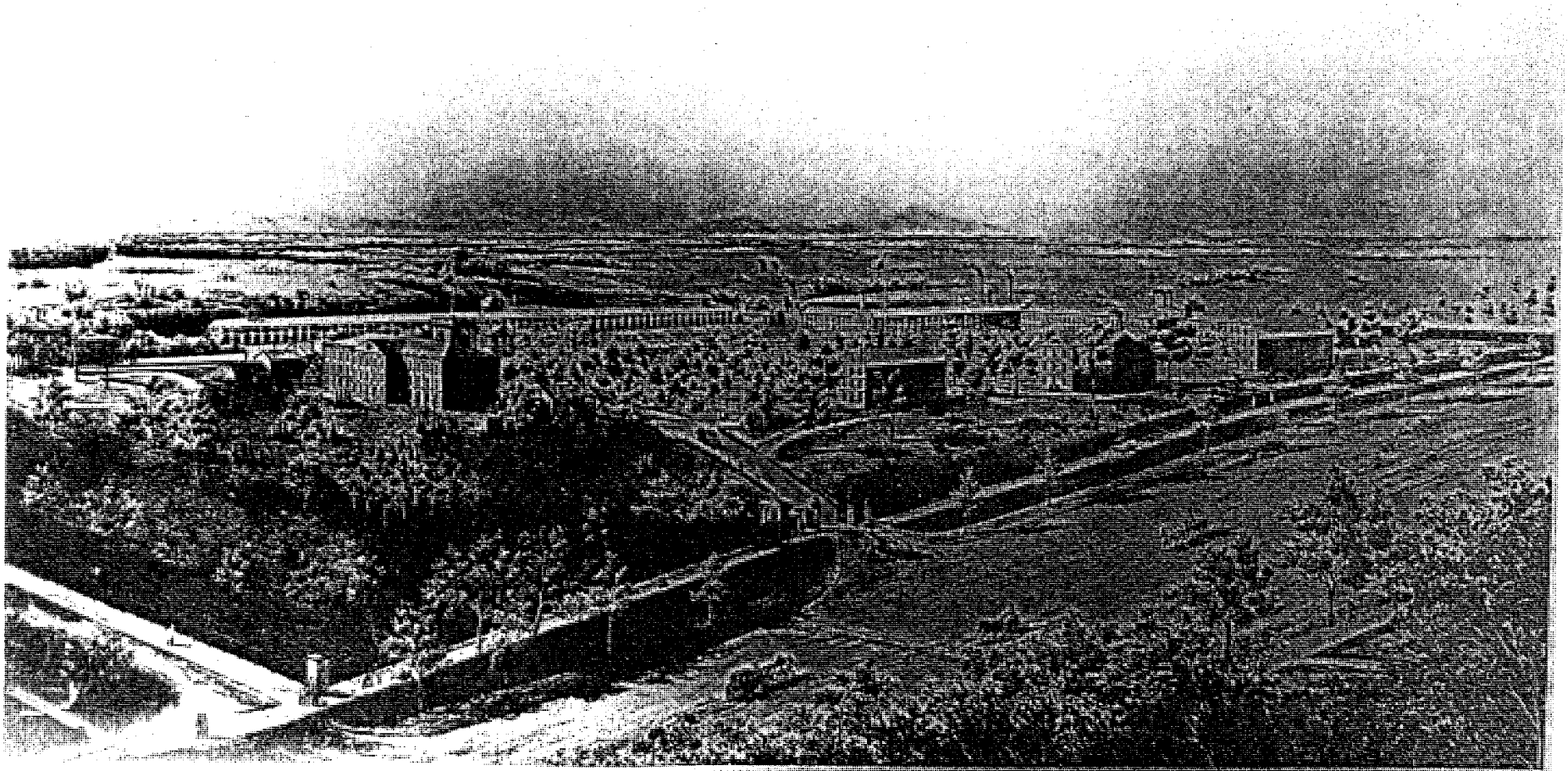


Figure 38. "The Hill Shops and Arsenal, United States Armory," 1864.



THE HILL SHOPS AND ARSENAL

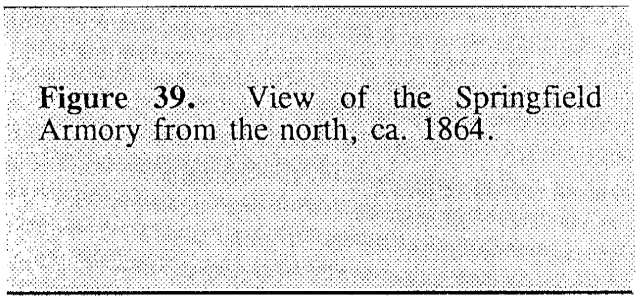


Figure 39. View of the Springfield Armory from the north, ca. 1864.

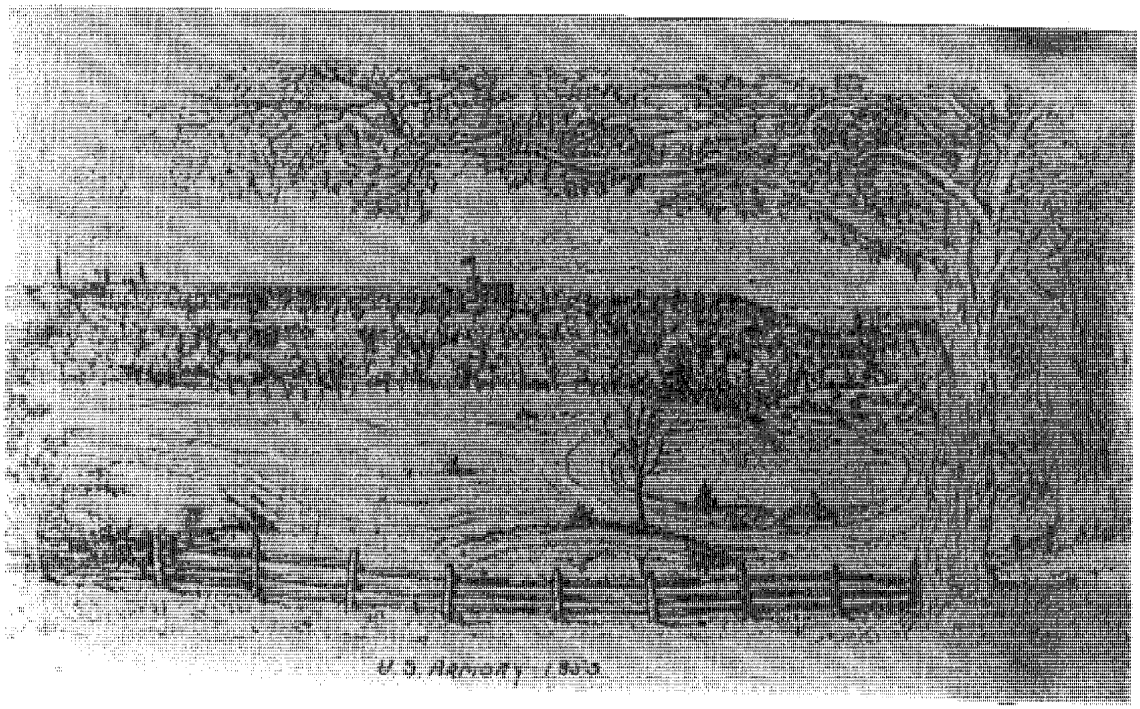
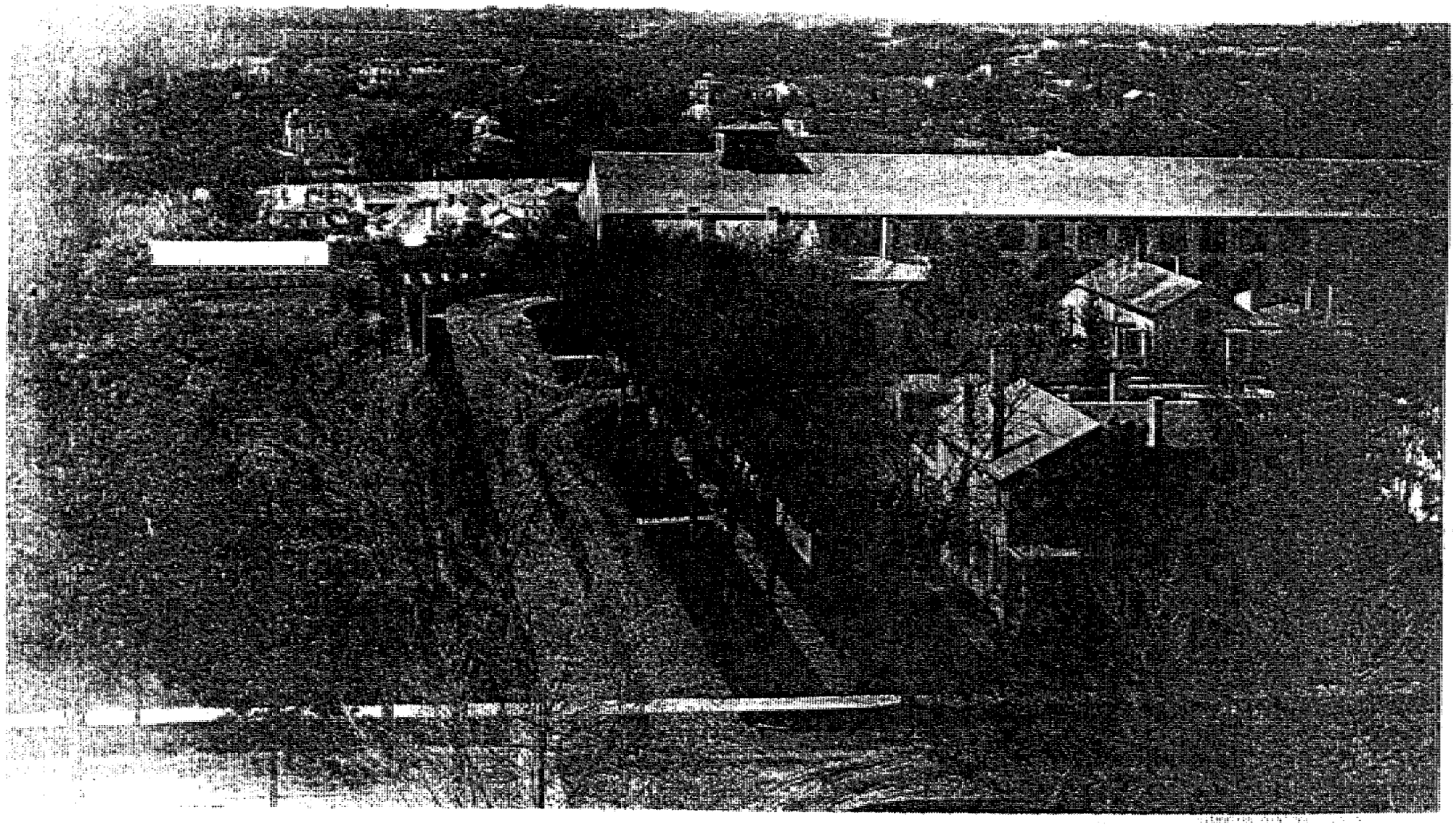


Figure 40. View from the Main Arsenal looking north towards Building 19, ca. 1870. Photograph by James Gill.



A Section Showing Mound Fo

Figure 41. East and north elevations of Building 19, ca. 1880-90.

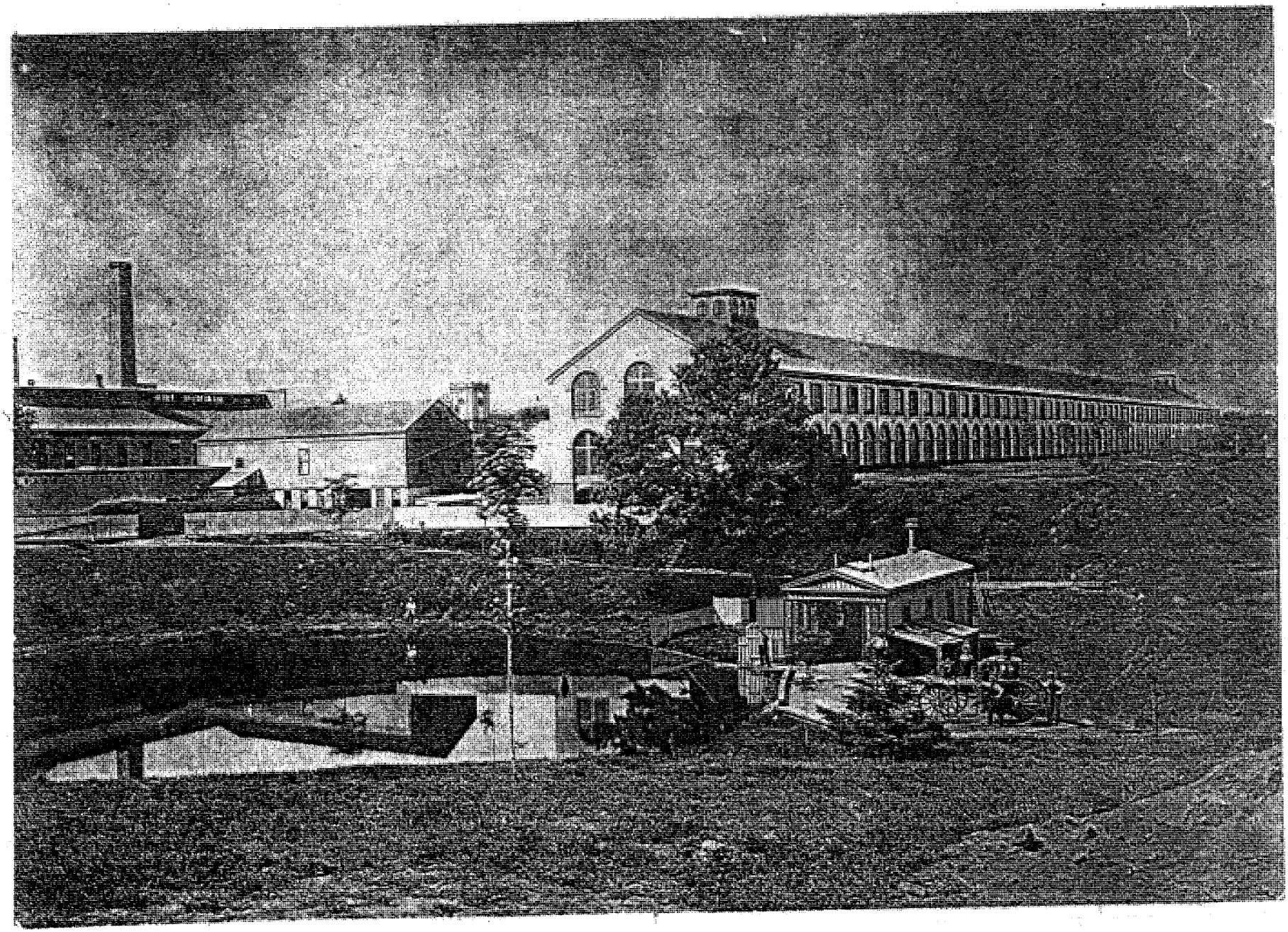


Figure 42. "Armory Square Looking Northwest, Showing Quarters 2, 3, and 4," ca. 1900.



ARMORY SQUARE LOOKING NORTHWEST, SHOWING QUARTERS 2, 3, AND 4. SPANISH AMERICAN WAR PERIOD. PHOTO ABOUT 1900.

Figure 43. Construction of "Long Stock Shed" with north elevation of Building 19 visible behind, ca. 1918.

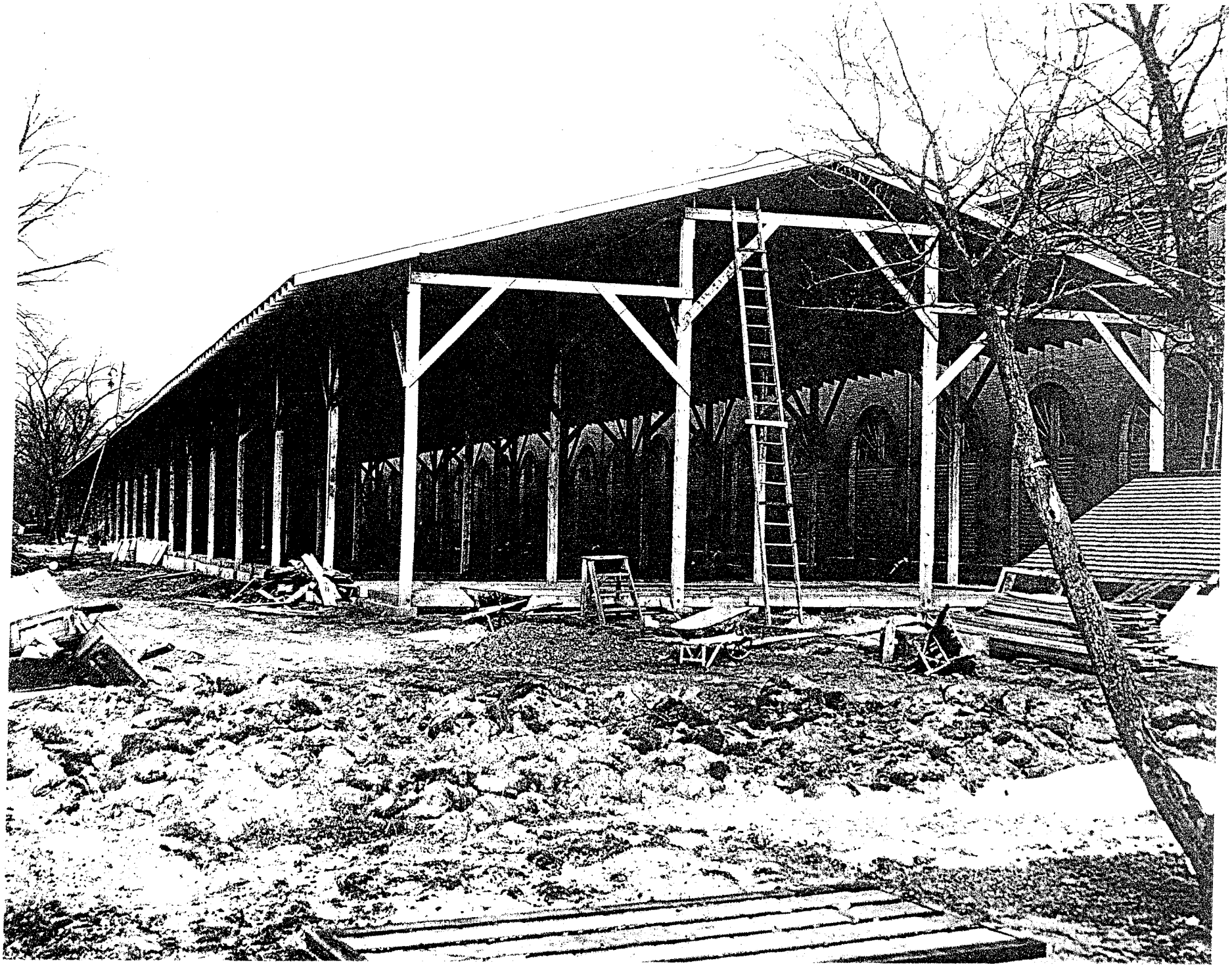


Figure 44. North elevation of Building 19 at left, "Long Stock Shed" at right, ca. 1922.



Figure 45. View of Building 19 from the ravine looking southwest, ca. 1920s.



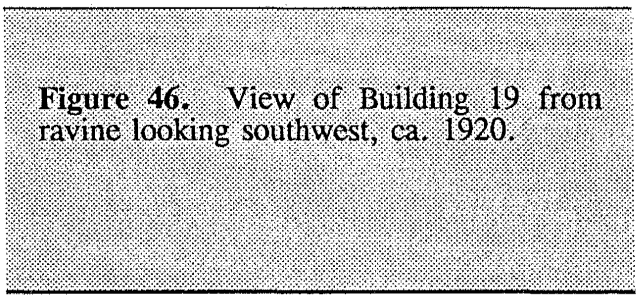


Figure 46. View of Building 19 from ravine looking southwest, ca. 1920.



Figure 47. Aerial view of Springfield Armory, March 6, 1930.

Figure 48. South elevation of Building 19 with root cellar and fruit trees in the foreground, December 12, 1932.

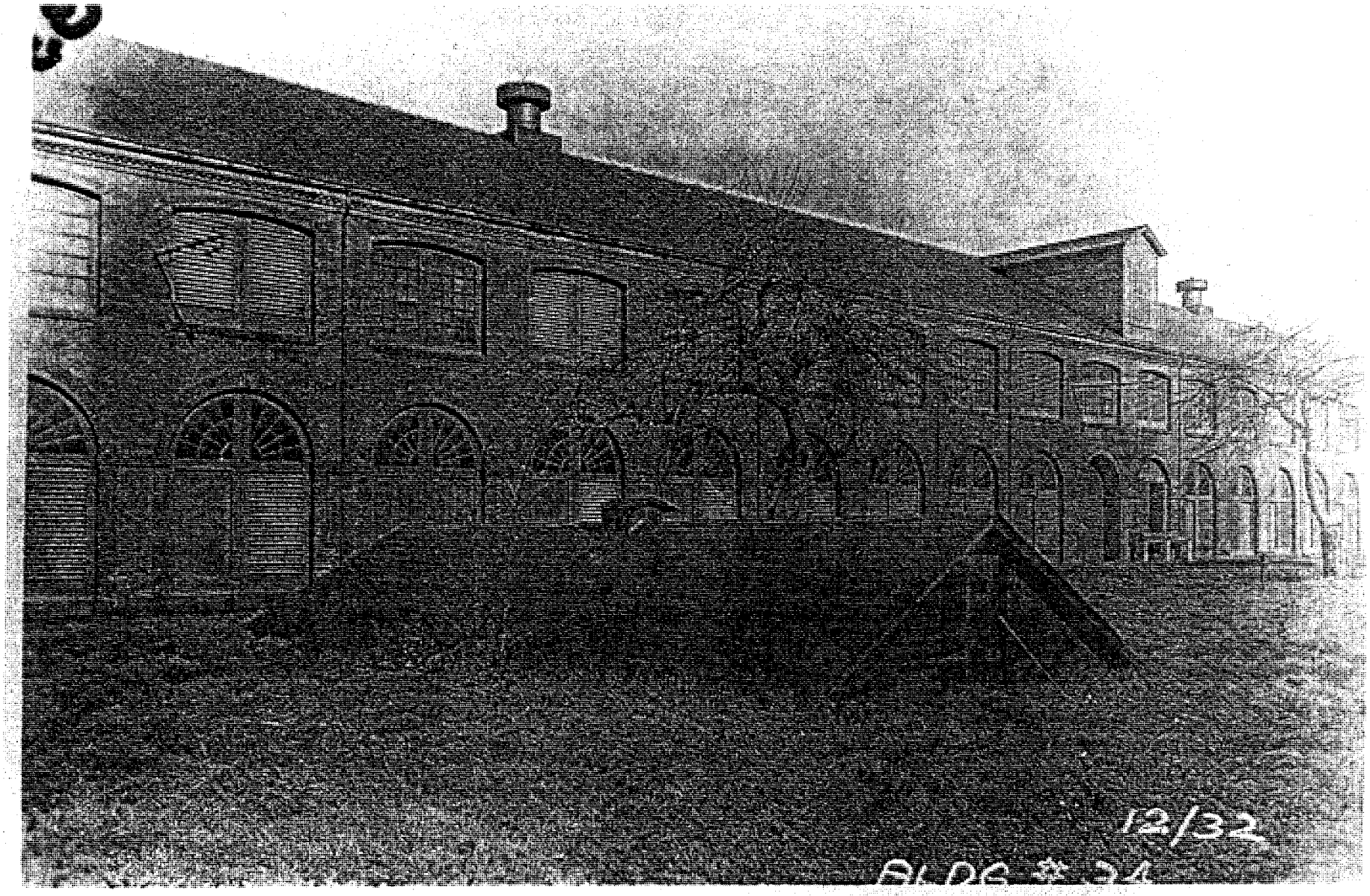

12/32
BLDG #24

Figure 49. South elevation of Building 19 looking west, December 1932.


BLDG.#19-12/32.
VEG.# 758-C

Figure 50. South elevation of the east (Stables) end of Building 19, December 1932.

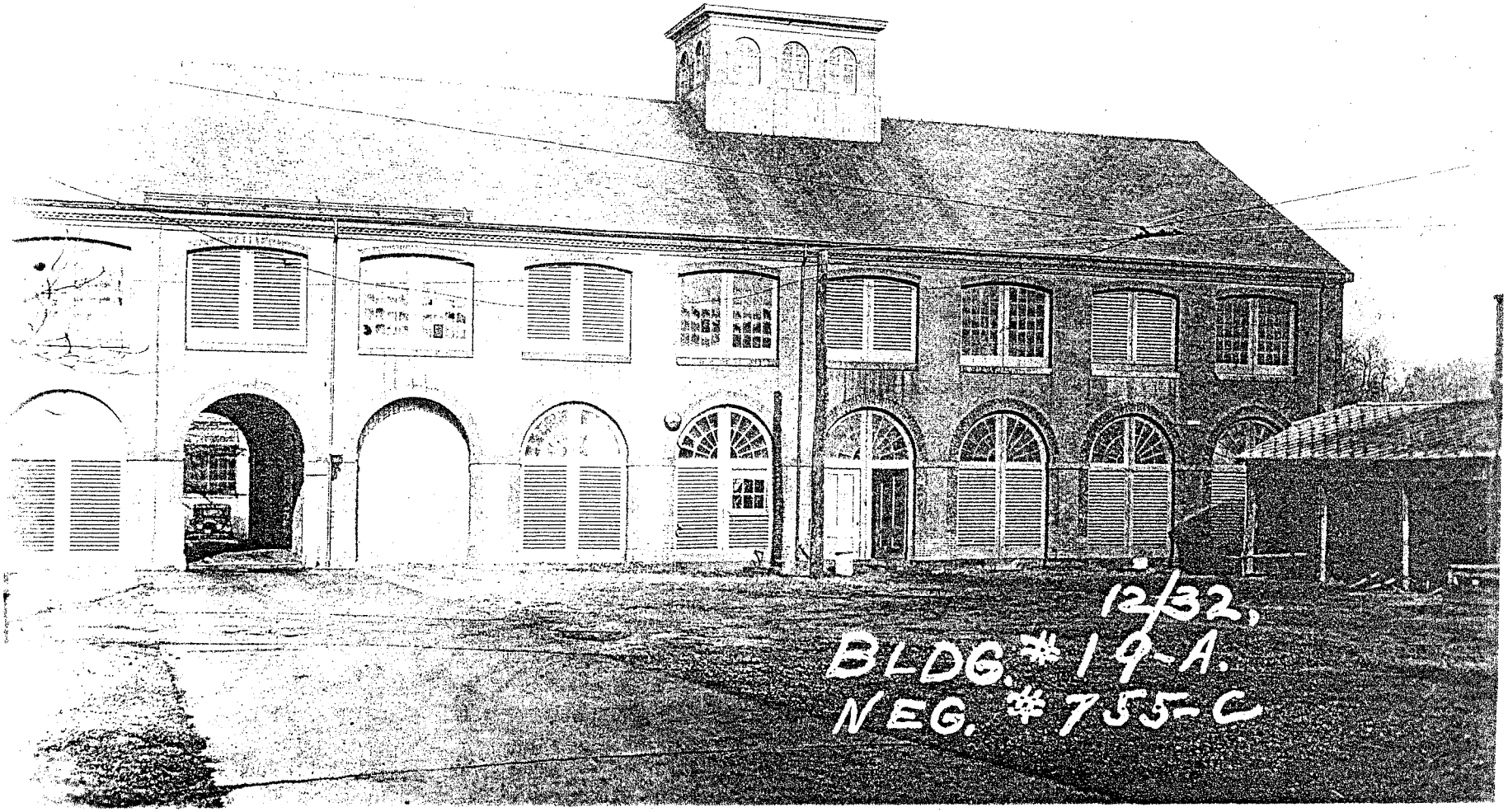
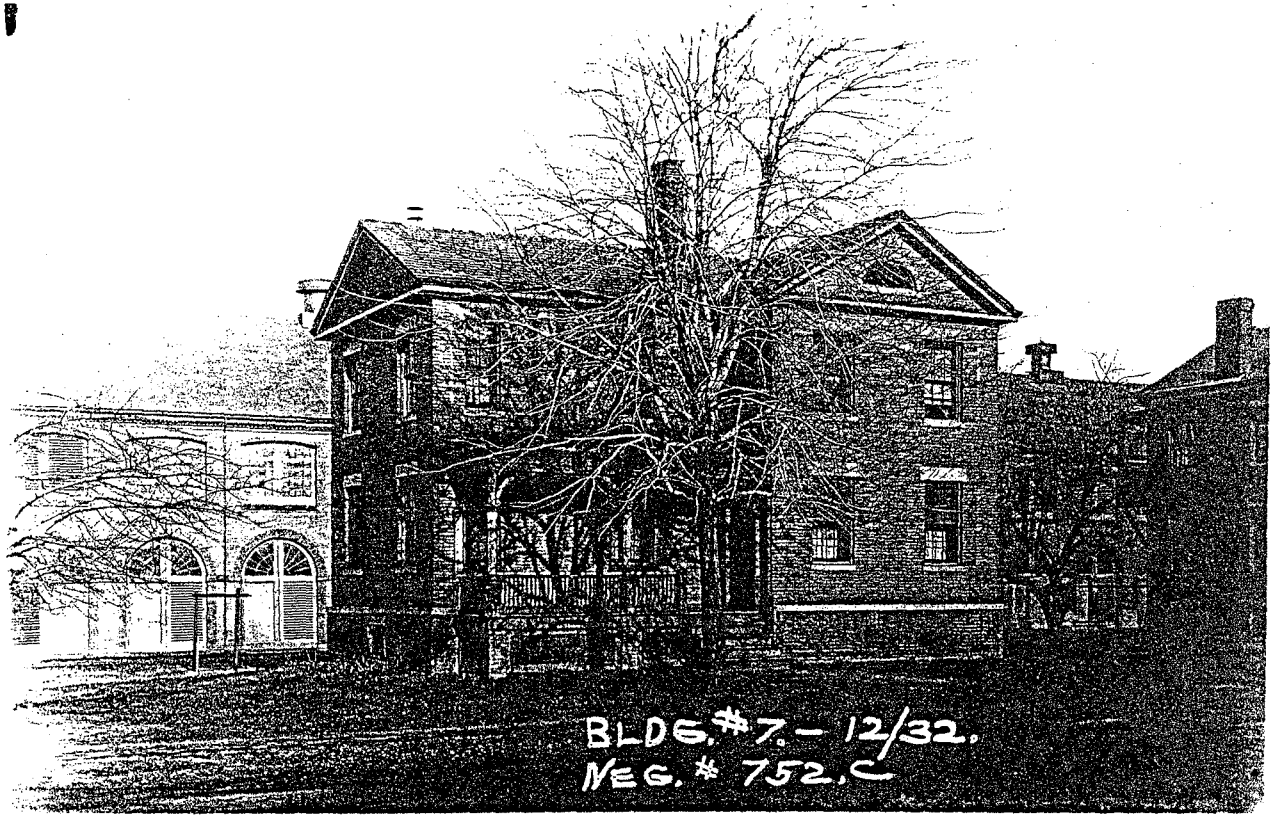

12/32,
BLDG. # 19-A.
NEG. # 755-C

Figure 51. Building 7 with the south elevation of Building 19 visible behind, December 1932.

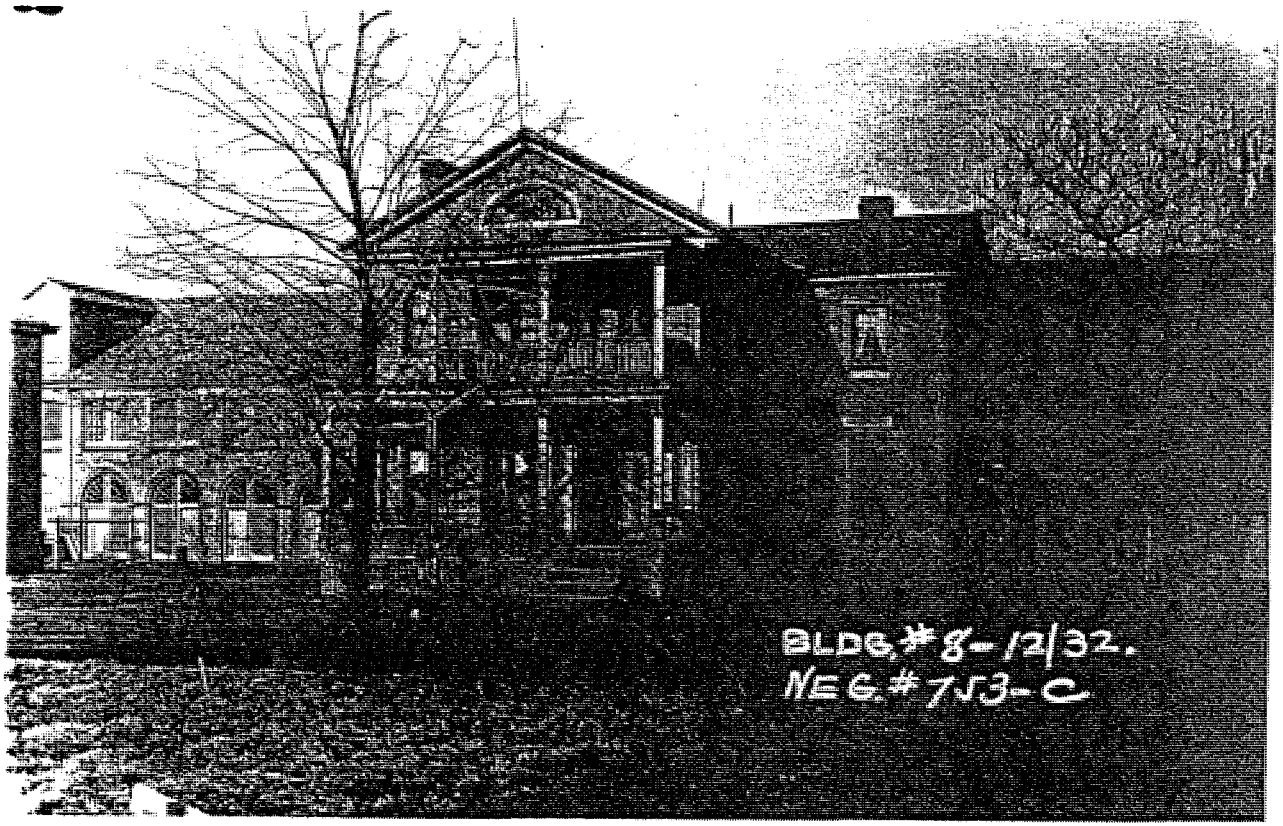


Drawer 1, Category 1: Bldgs. & Grounds
Quarters #7, #8, #9

752. SA

12/32

Figure 52. Building 8 with the south elevation of Building 19 visible behind, December 1932.



Drawers 1, Cards of Buildings & Grounds.
Folder Quadrangle # 7, # 8, # 9
753-C - on front of folder #1

-12/32

Figure 53. Building 10 with the south elevation of Building 19 visible behind, December 1932.



Drawer 1; Category 1
Bldg 10
751-5A

12/32

Figure 54. "Building 19A - New slate roof showing progress of alterations - W.P.A. Project," October 5, 1937.

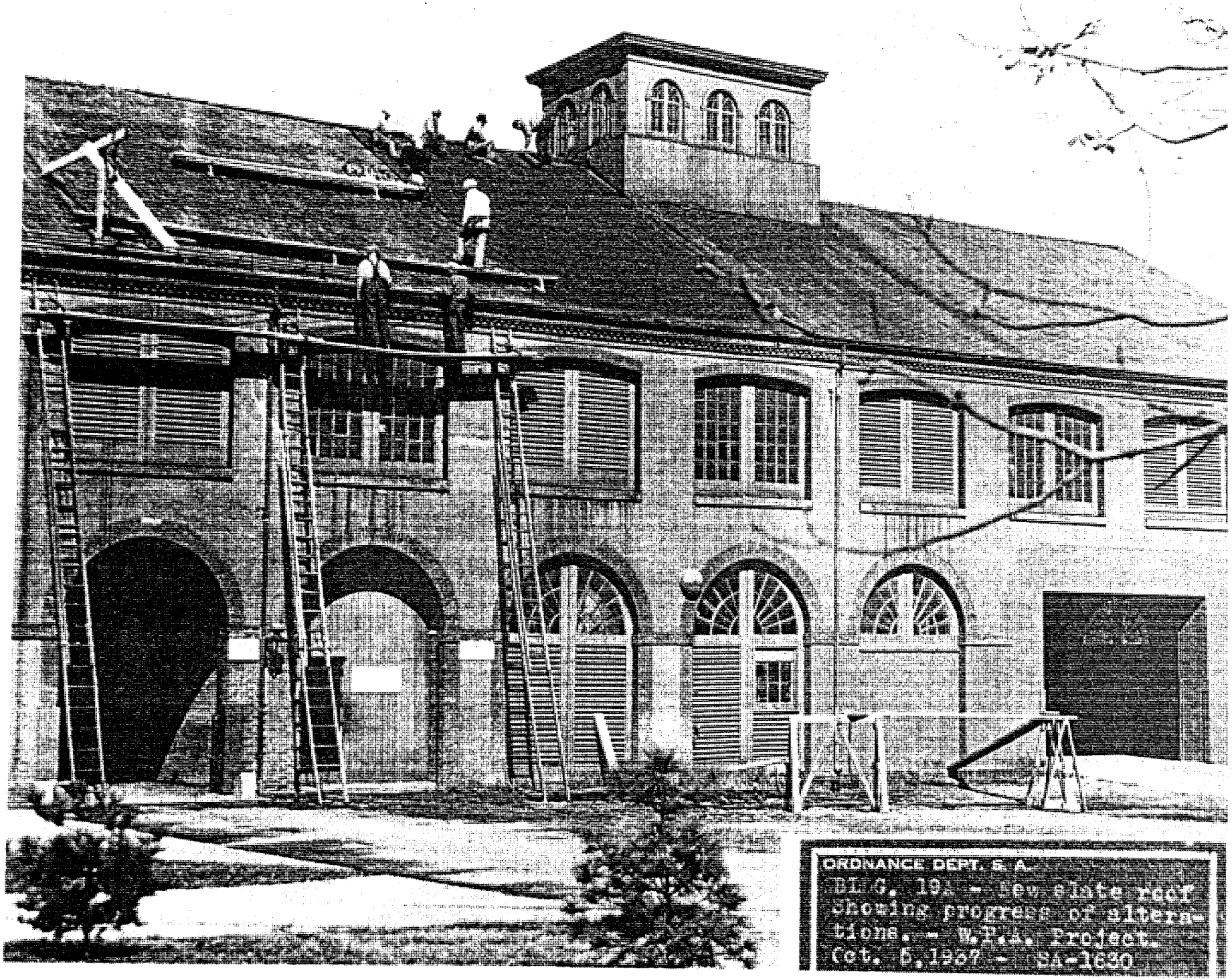
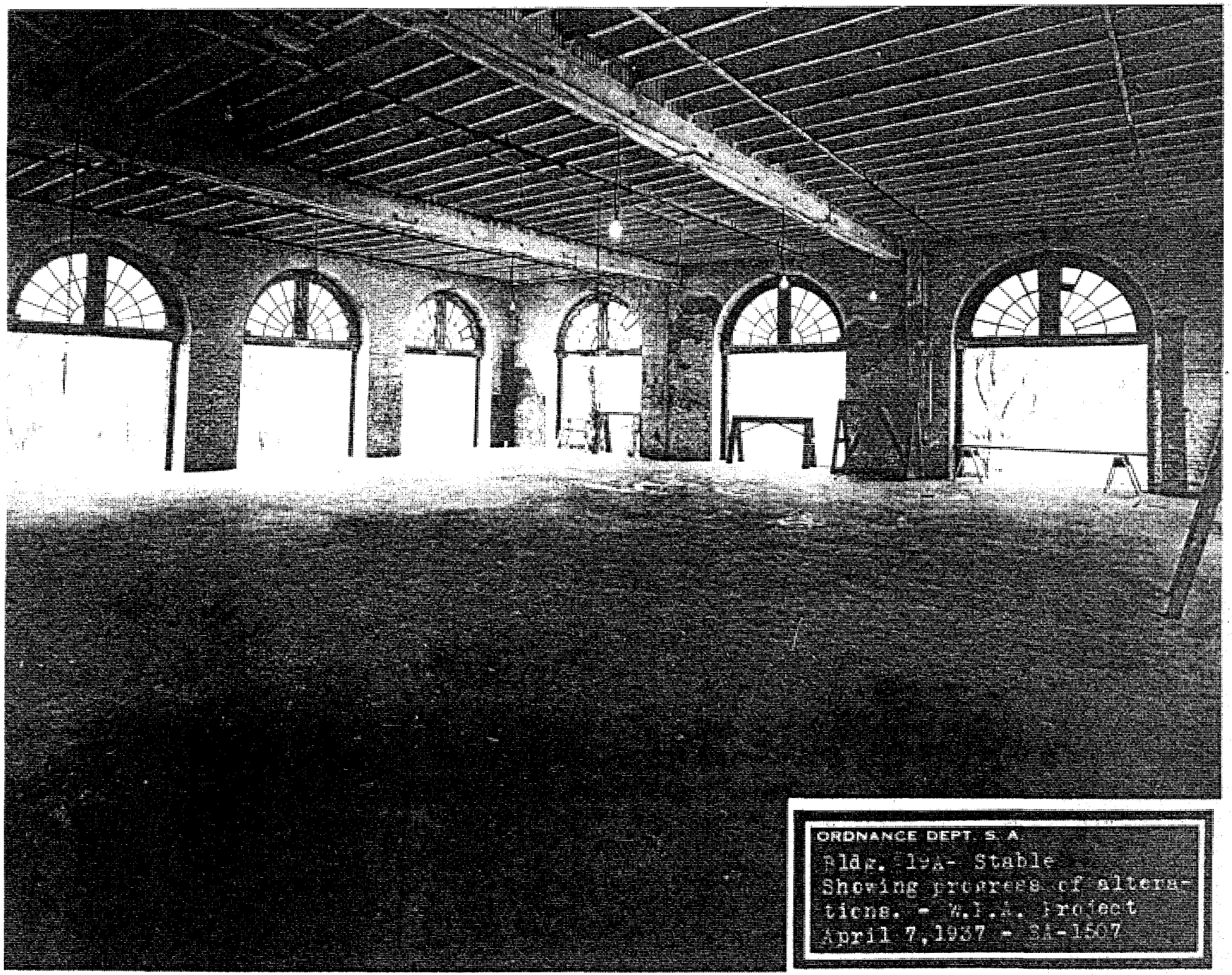
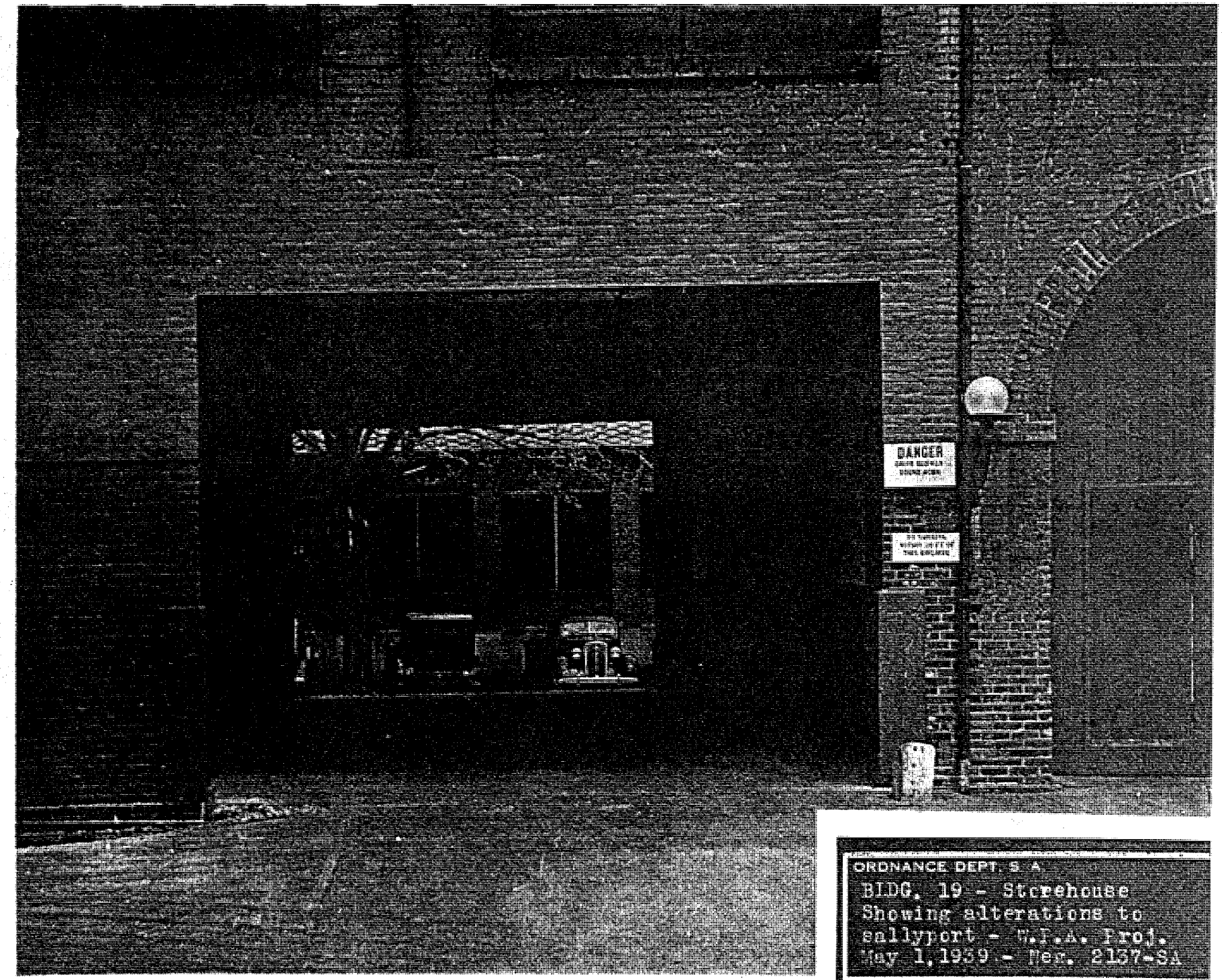

ORDNANCE DEPT. S. A.
Bldg. 19A - New slate roof
Showing progress of alterations. - W.P.A. Project.
Oct. 6, 1937 - SA-1630

Figure 55. "Bldg. 19A-Stable, Showing progress of alterations - W.P.A. Project," April 7, 1937.



ORDNANCE DEPT. S. A.
Bldg. 619A- Stable
Showing progress of alterations. - W.P.A. Project
April 7,1937 - SA-1507

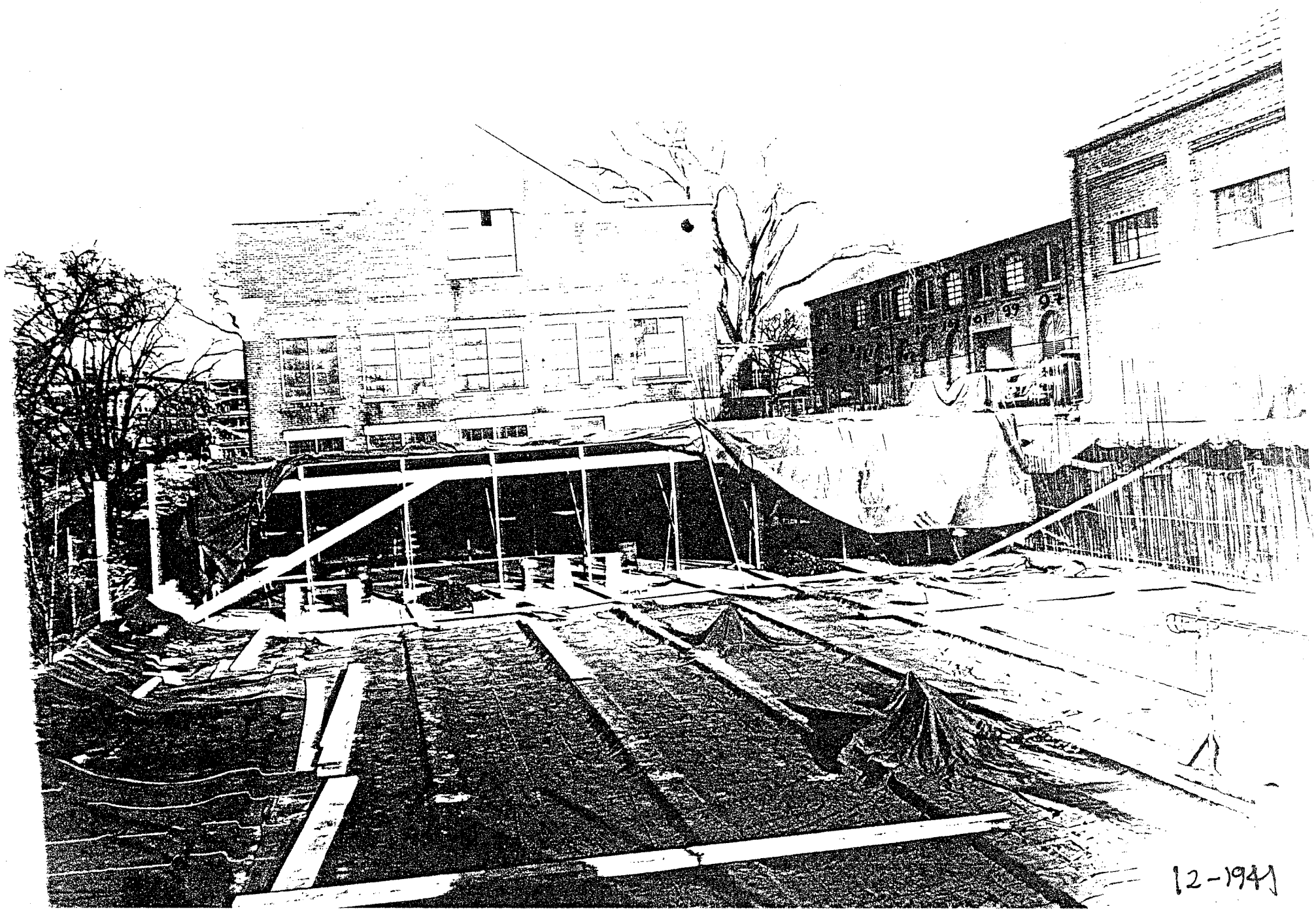
Figure 56. "Bldg. 19 - Storehouse, Showing alterations to sallyport - W.P.A. Project," May 1, 1939.



ORDNANCE DEPT. S A
BLDG. 19 - Storehouse
Showing alterations to
sallyport - W.P.A. Proj.
May 1,1939 - Rec. 2137-SA

Figure 57. Shooting range for Building 28 under construction showing alterations to the east end of Building 19 and the development of the surrounding site, December 1941.

Bldg. [illegible]
Neg. No. 59-58
Dec. 141



12-1941

Figure 58. Building 25 under construction, east end of Building 19 visible in upper left corner, ca. 1942.

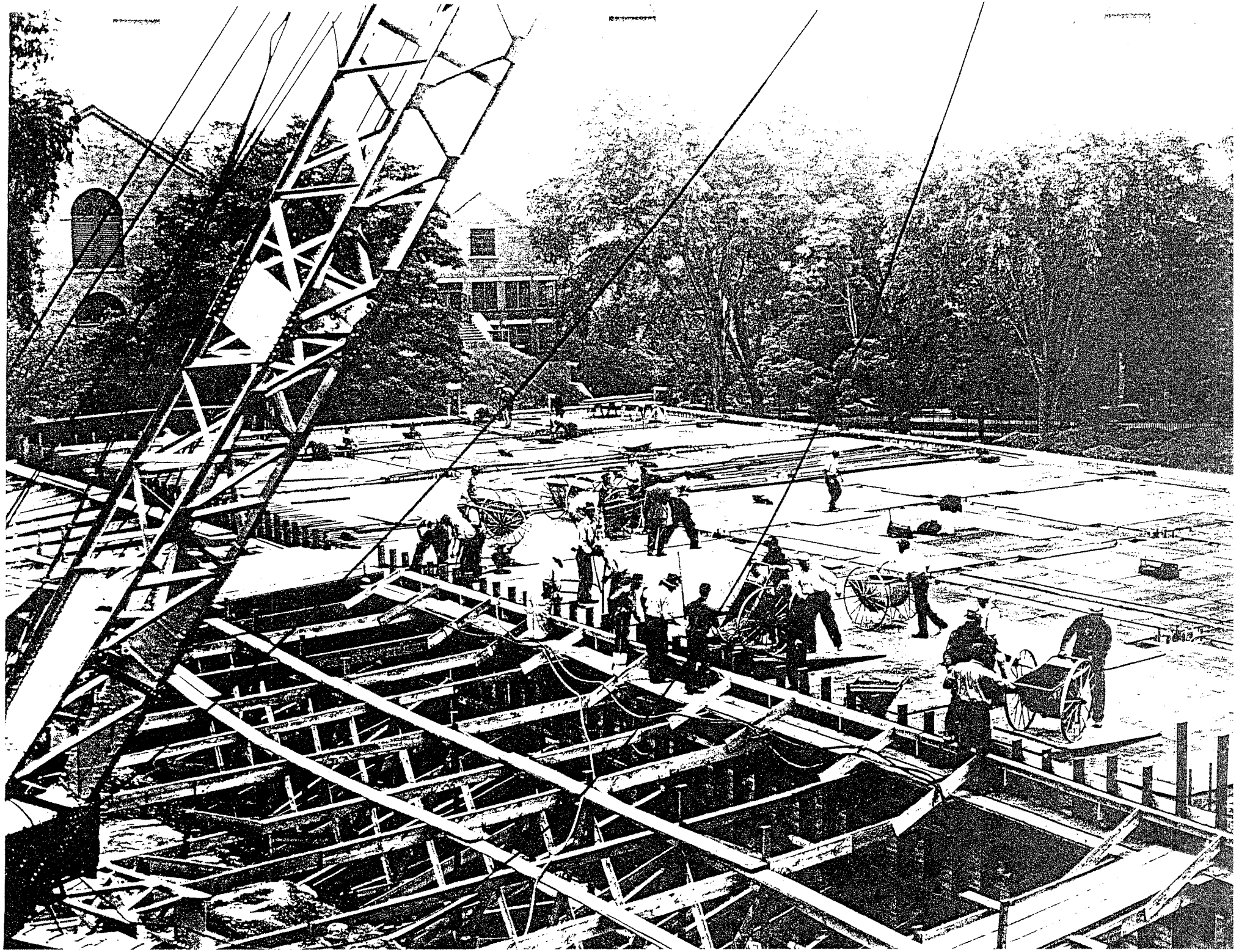
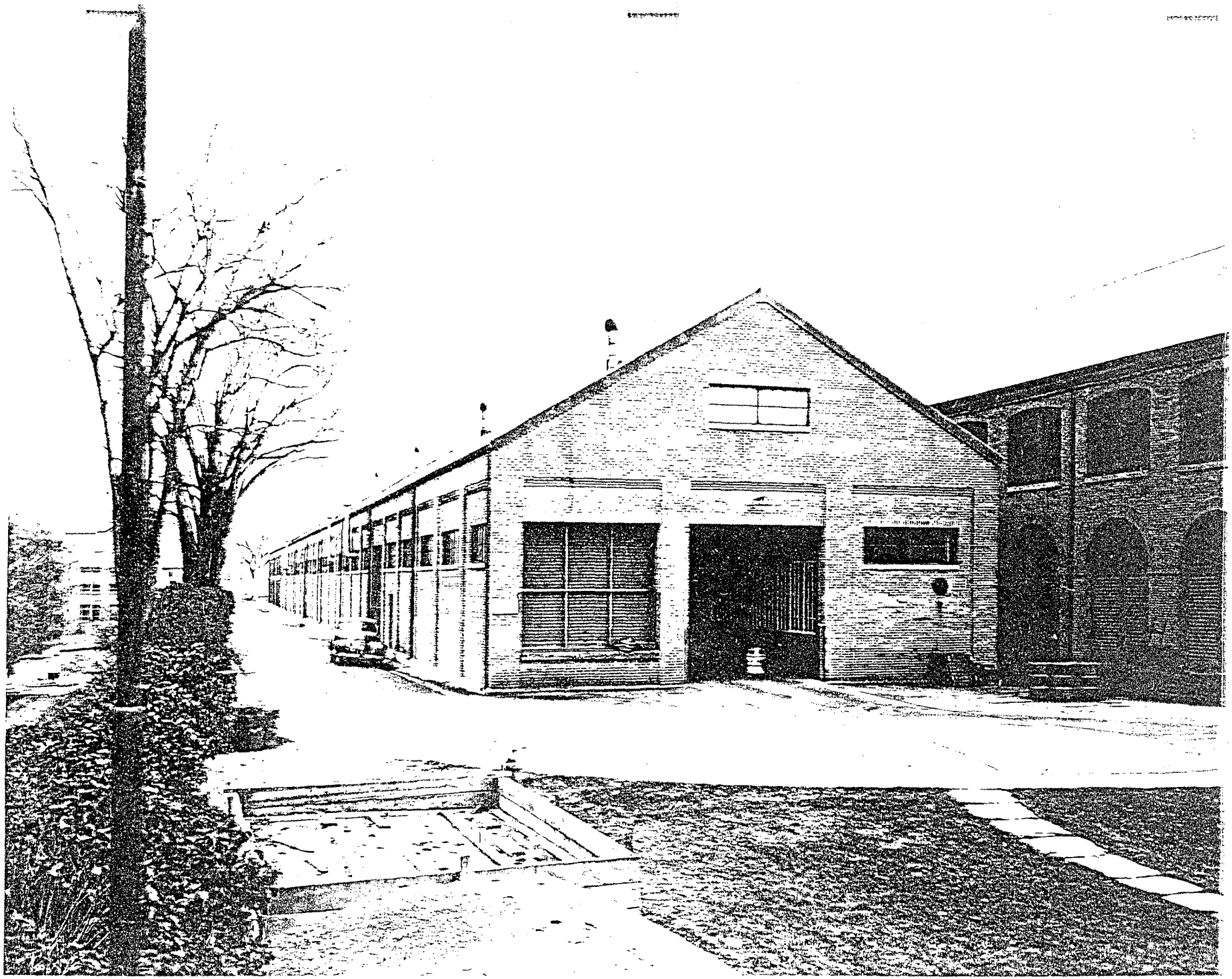


Figure 59. Building 32 completed. A portion of Building 19 is visible at the right, November 10, 1944.



NOV 10, 1944

SPARK PLUG DIVISION
BLDG #32

11-10-1944

Figure 60. View of Building 19 from the Main Arsenal tower looking north, November 10, 1944.

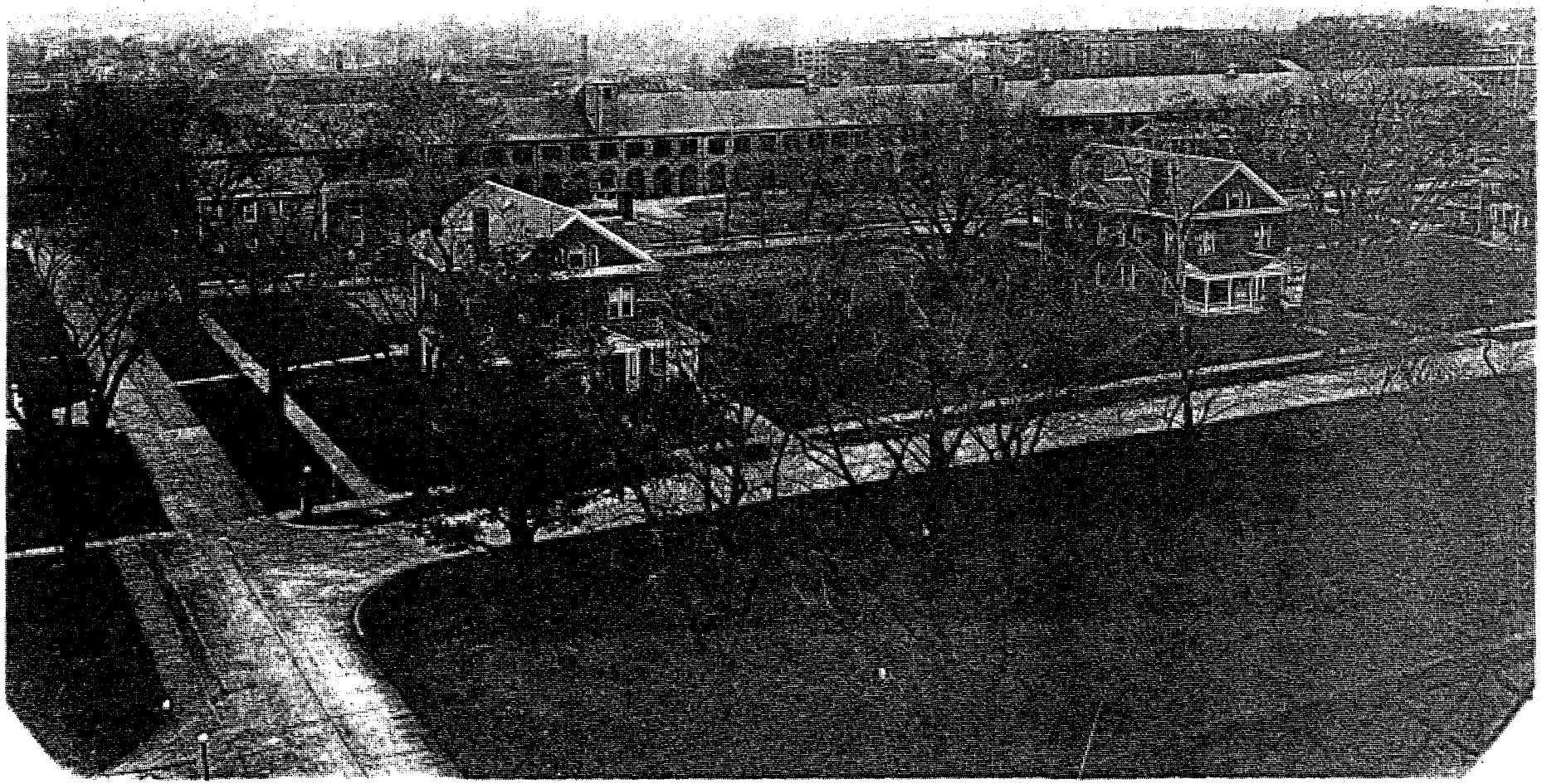


Figure 61. Aerial view of the Armory, March 22, 1949.



Figure 62. Building 19, interior view from Long Storehouse looking east, ca. 1950.

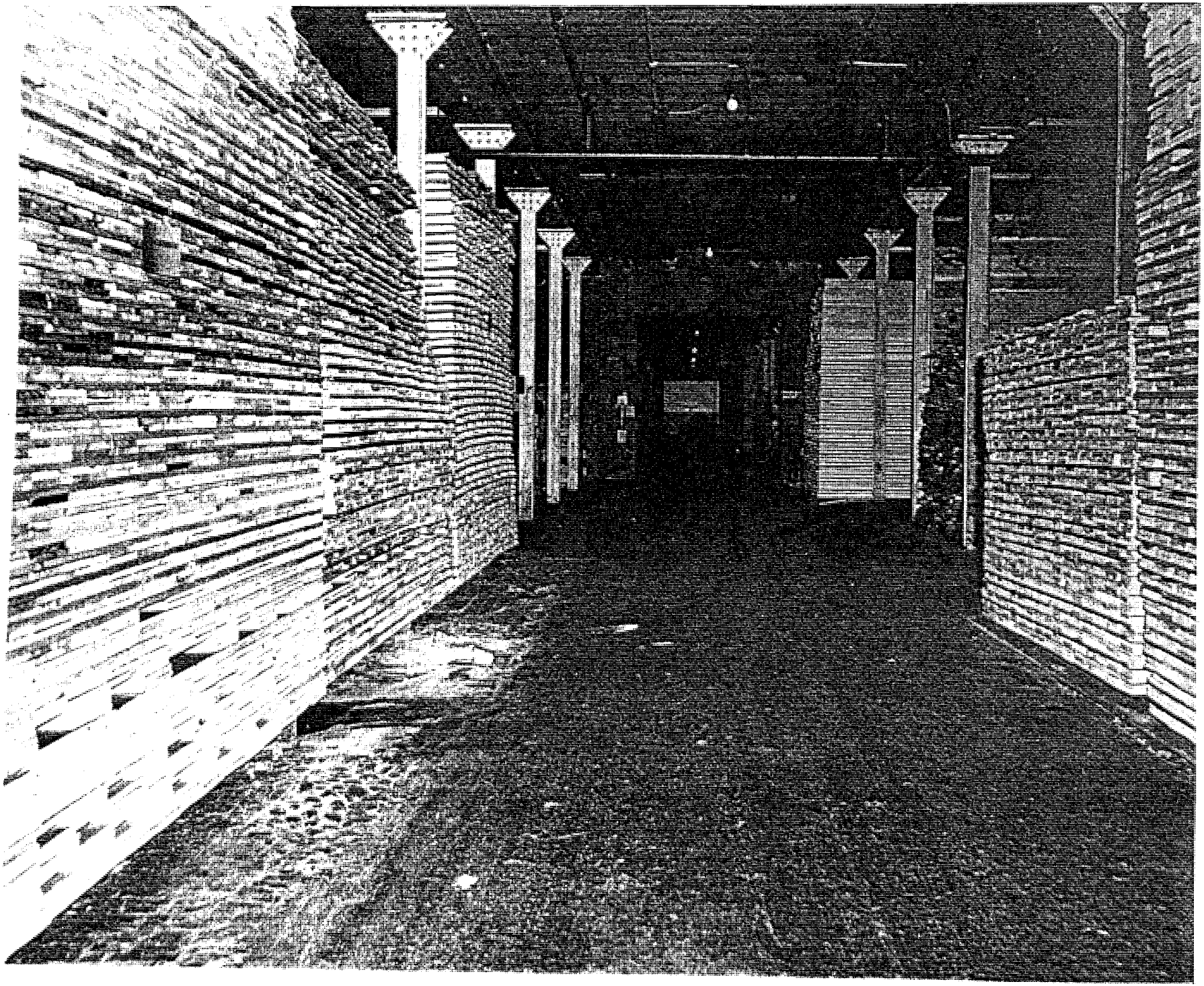


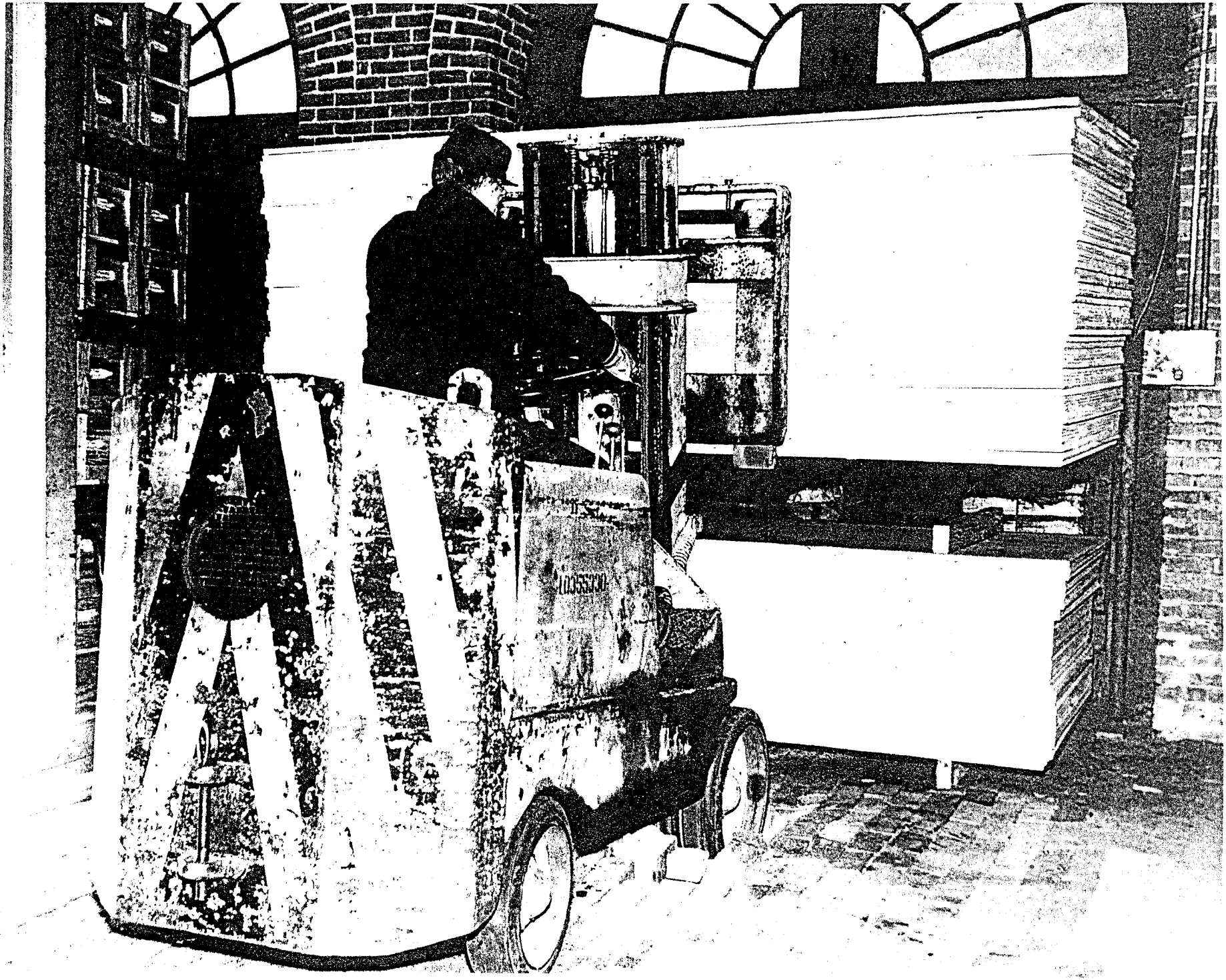
Figure 63. Building 19, interior, brick floor, April, 1952.



8583-SA SPRINGFIELD ARMORY - ORDNANCE DEPT. 1 April 1952

Brick Floor, Bldg. 19, Illustrates How Bricks Laid in Sand Break Down Under Modern Materials Handling Equipment, Causing Delays.

Figure 64. Building 19, interior, worker stacking wood supplies, ca. 1952.



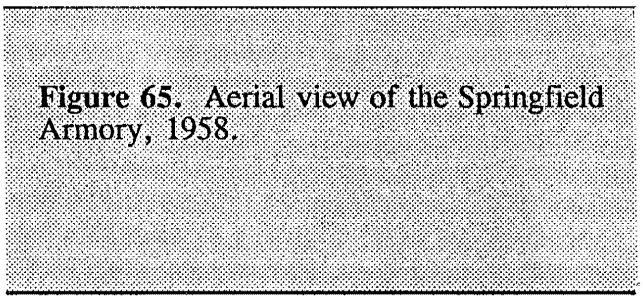


Figure 65. Aerial view of the Springfield Armory, 1958.

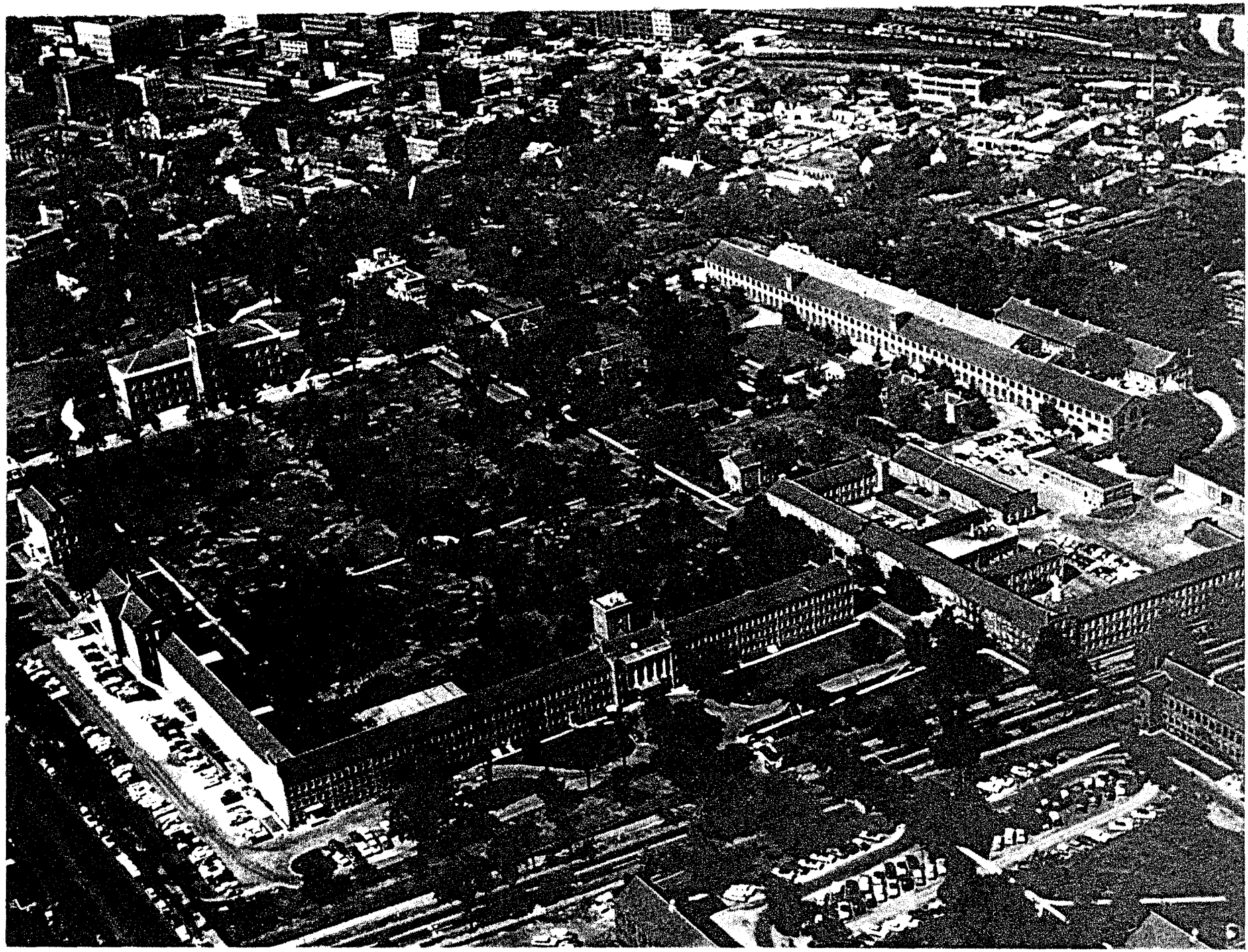


Figure 66. View with Building 7 in the foreground at the right and Building 19 visible in the background, ca. 1961.

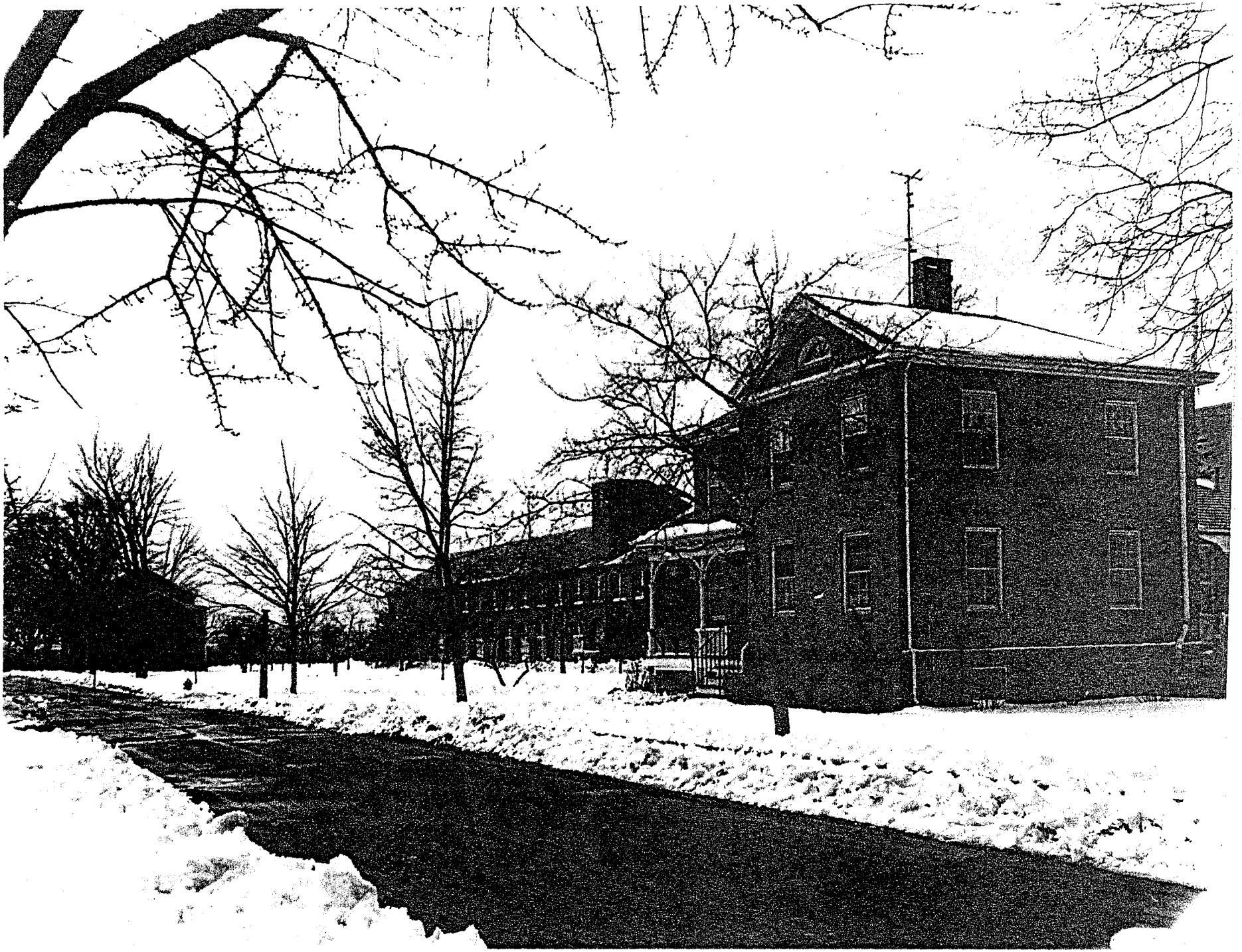
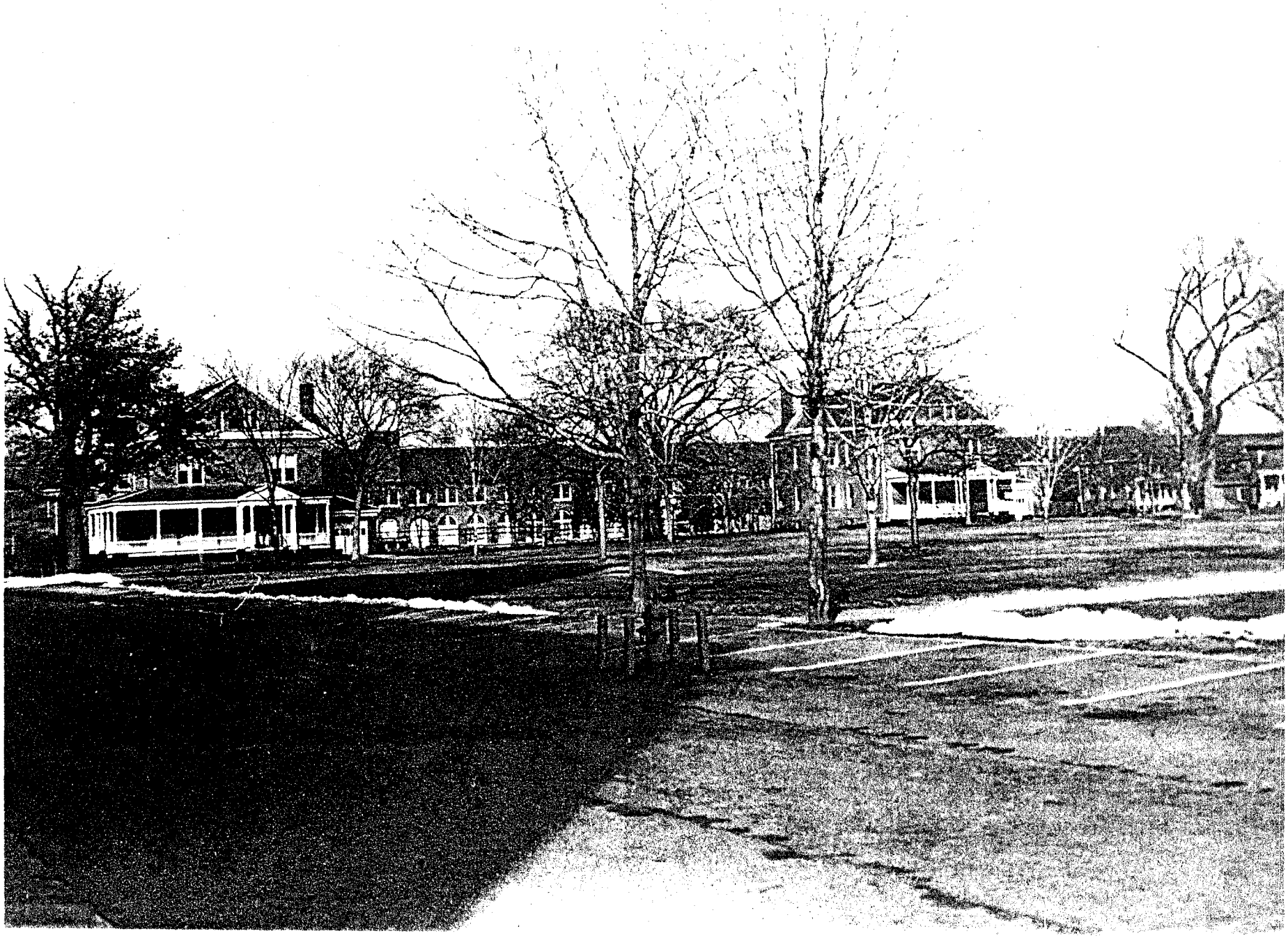


Figure 67. View from Main Arsenal looking northeast showing the Officers' Quarters facing the Parade Green and Building 19 in the background, ca. 1961.



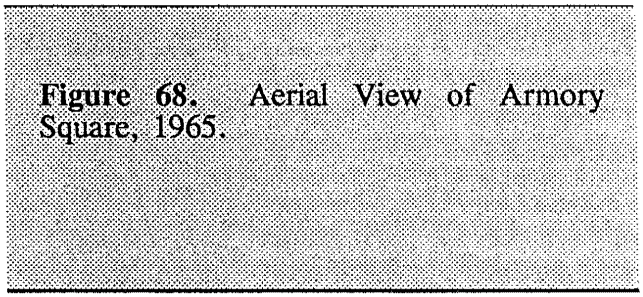


Figure 68. Aerial View of Armory Square, 1965.



Figure 69. Building 19, south elevation, east end, 1966.



Figure 70. Building 19, south elevation looking northwest, August 17, 1967.

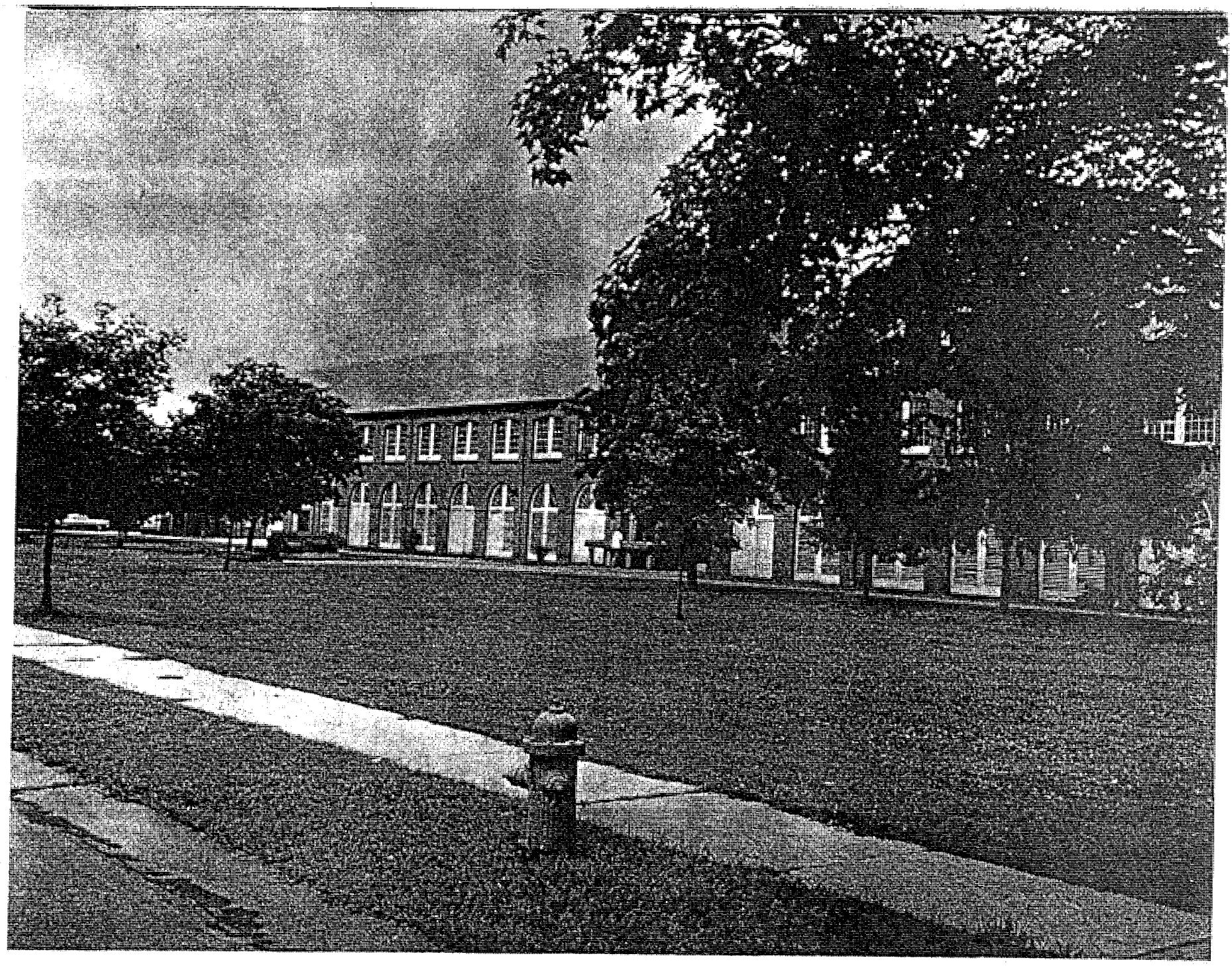
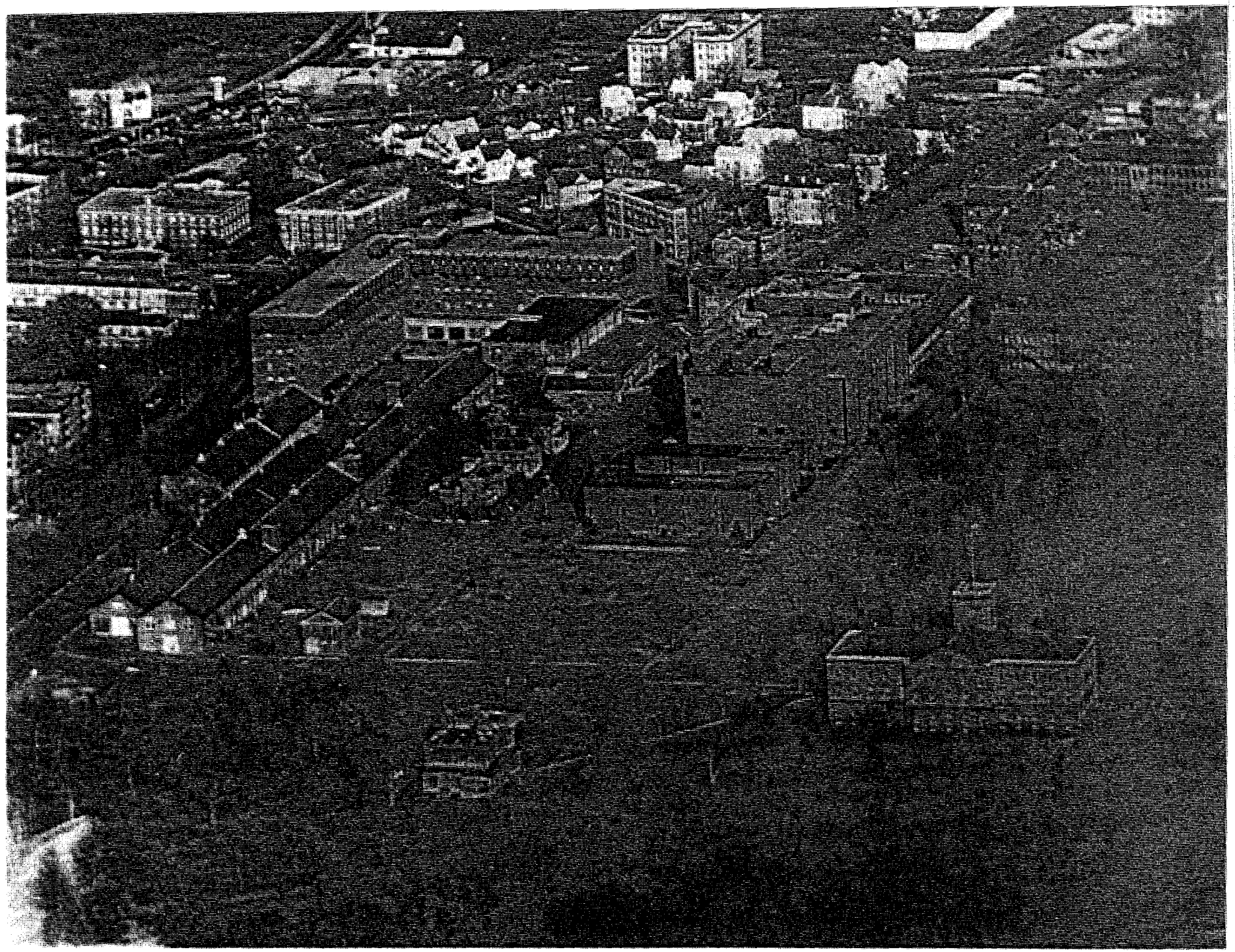


Figure 71. Aerial view of Armory Square showing addition of STCC buildings, 1983.



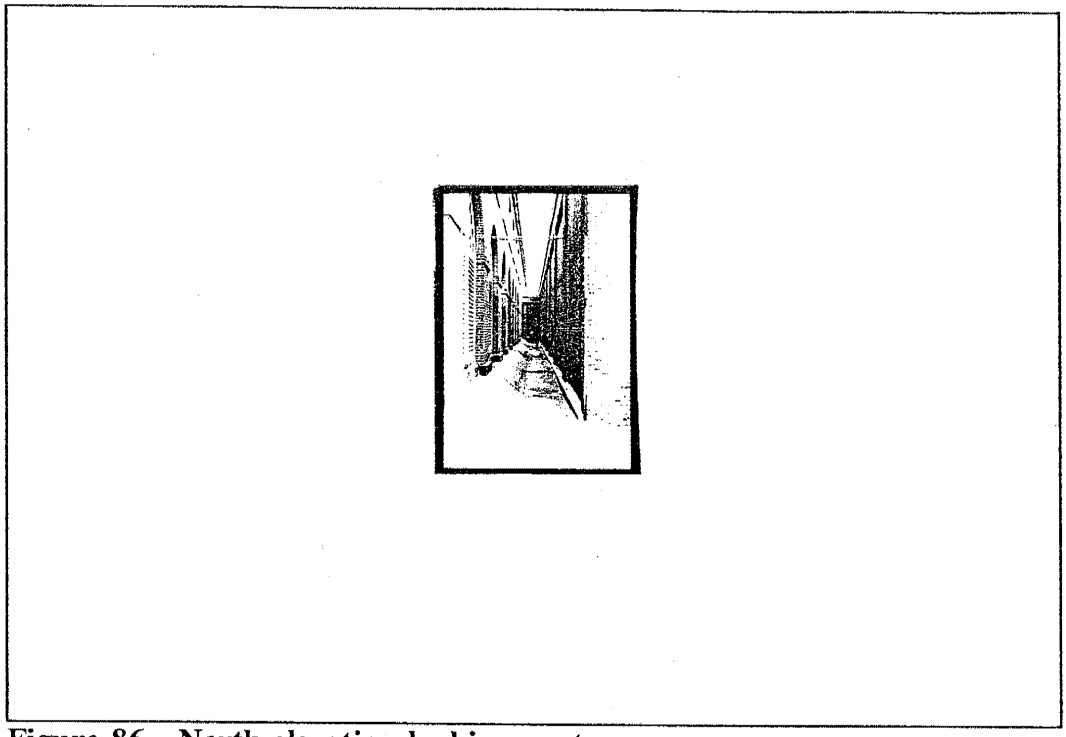


Figure 86. North elevation looking west.

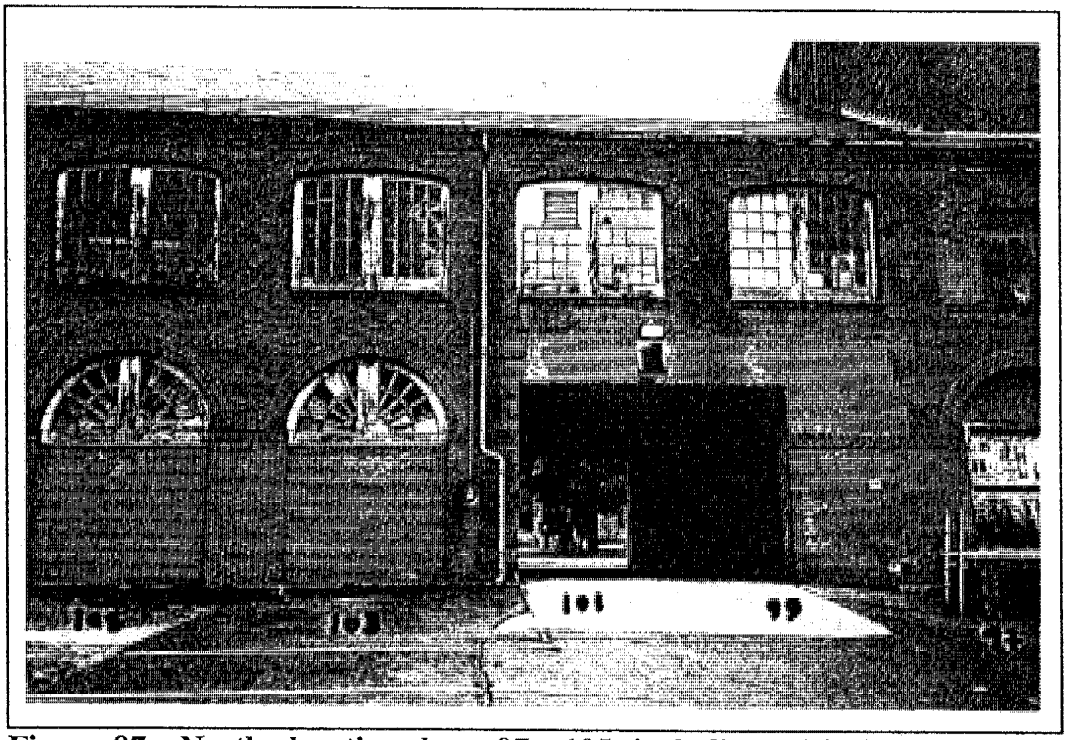


Figure 87. North elevation, bays 97 - 105, including vehicular passageway.

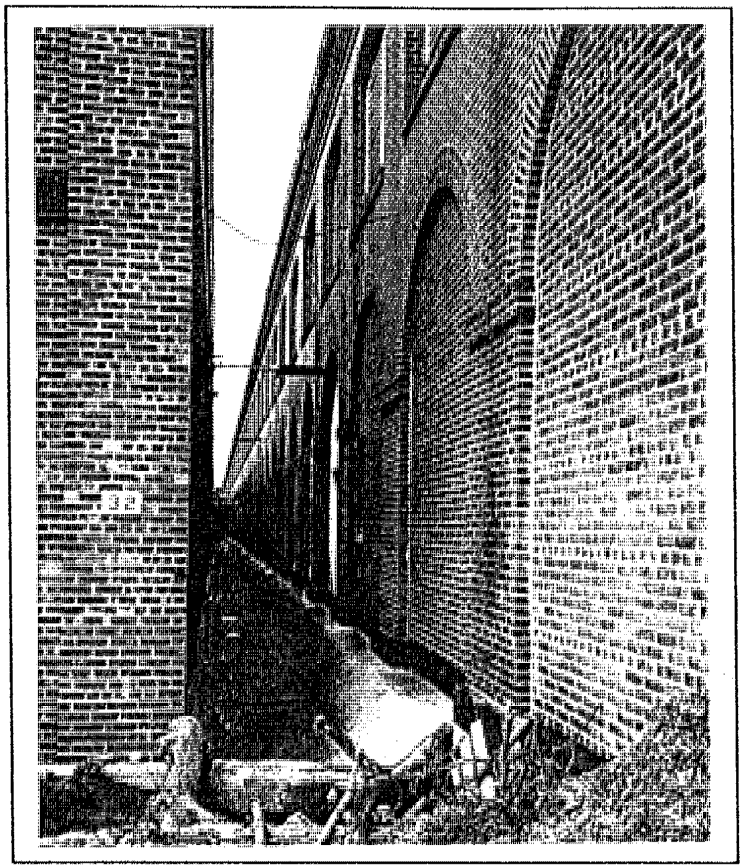


Figure 84. North elevation looking east.

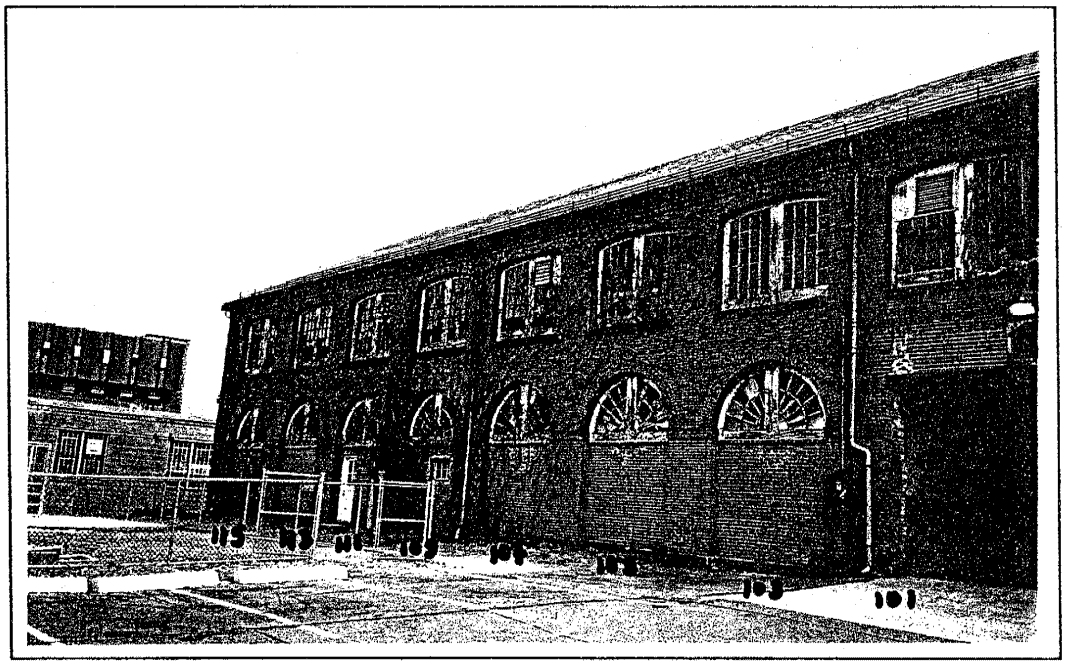


Figure 85. North elevation, east (Stables) end, bays 101 - 115.

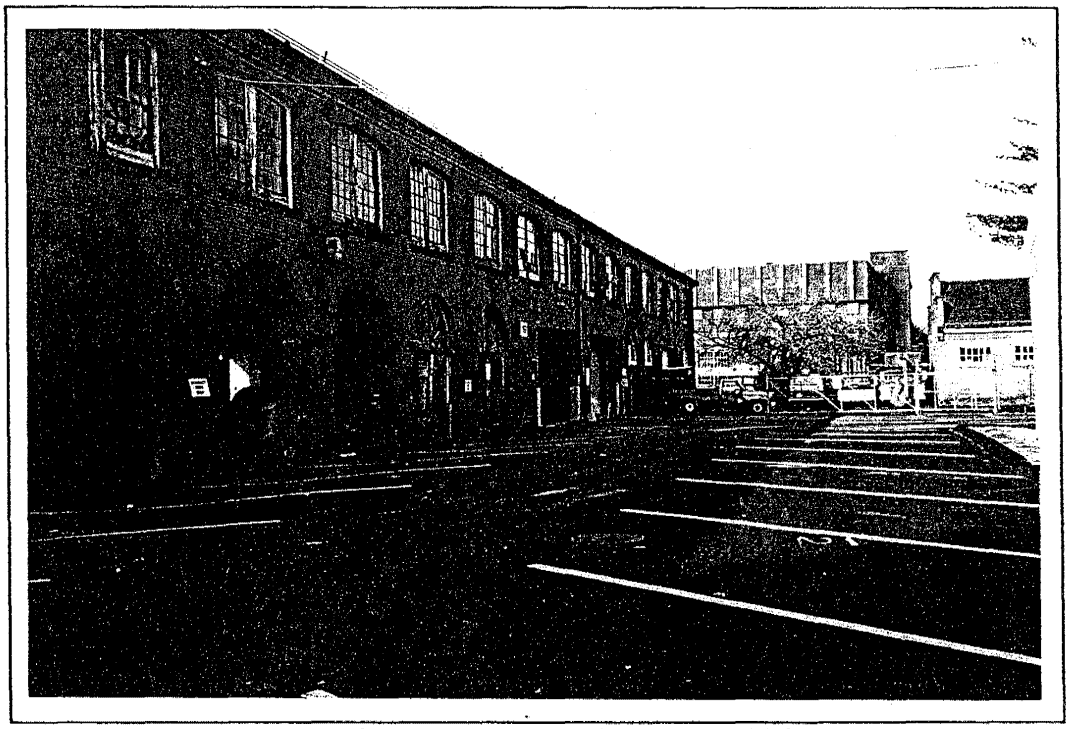


Figure 82. South elevation looking east, bays 90 - 116.

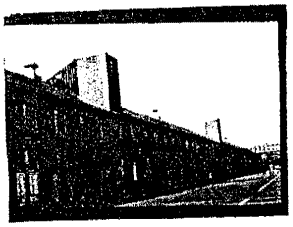


Figure 83. South elevation.

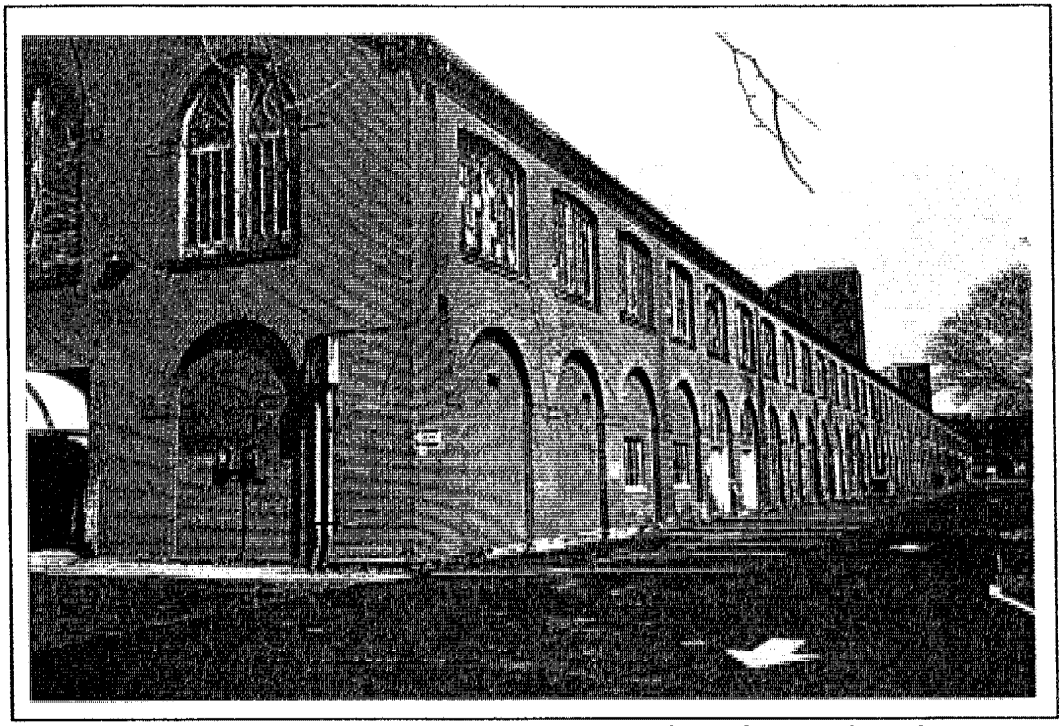


Figure 80. South elevation looking east. Portion of west elevation visible at left.

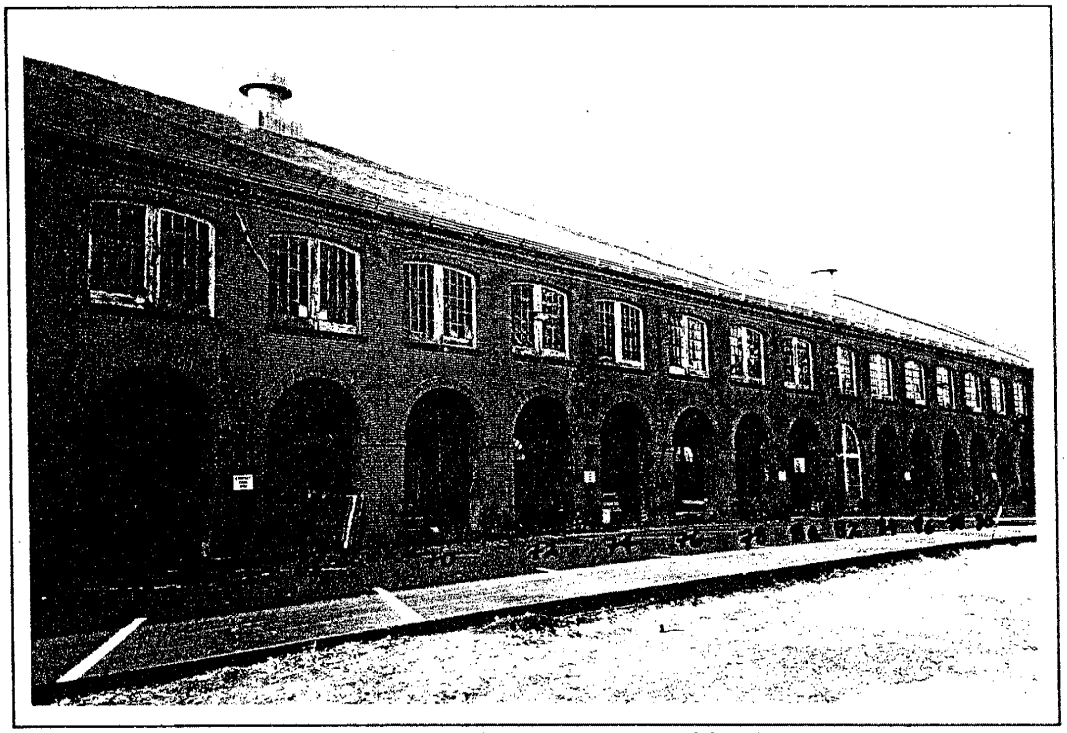


Figure 81. South elevation, looking east, bays 66 - 90.

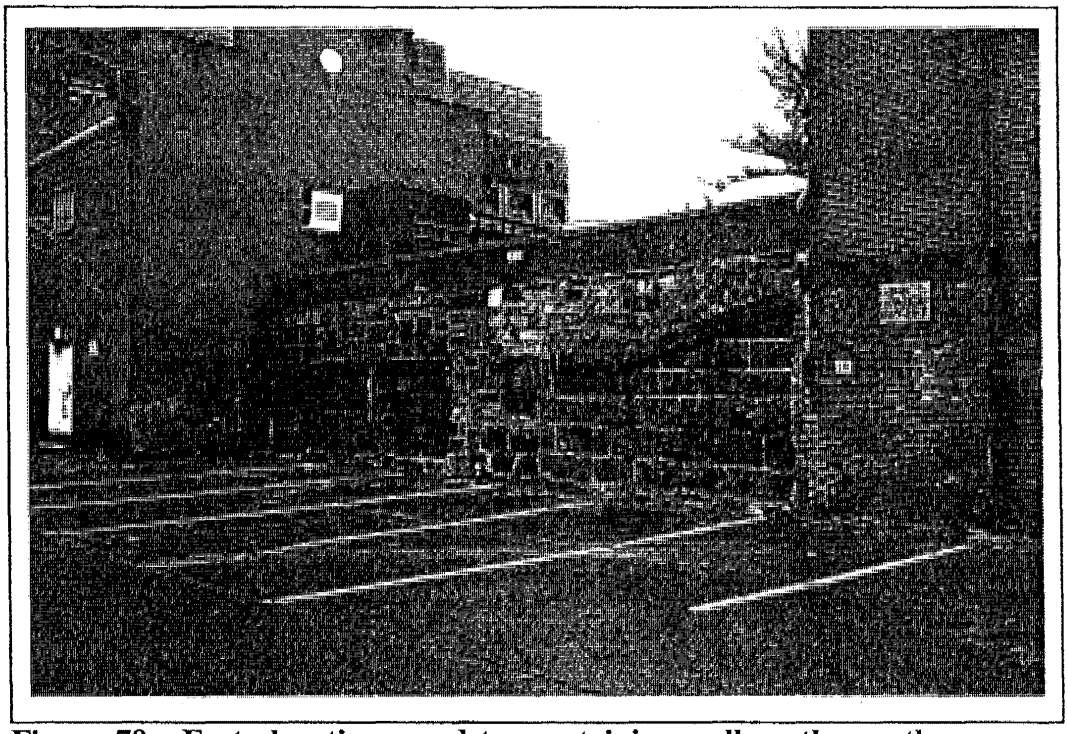


Figure 78. East elevation, sandstone retaining wall on the south.

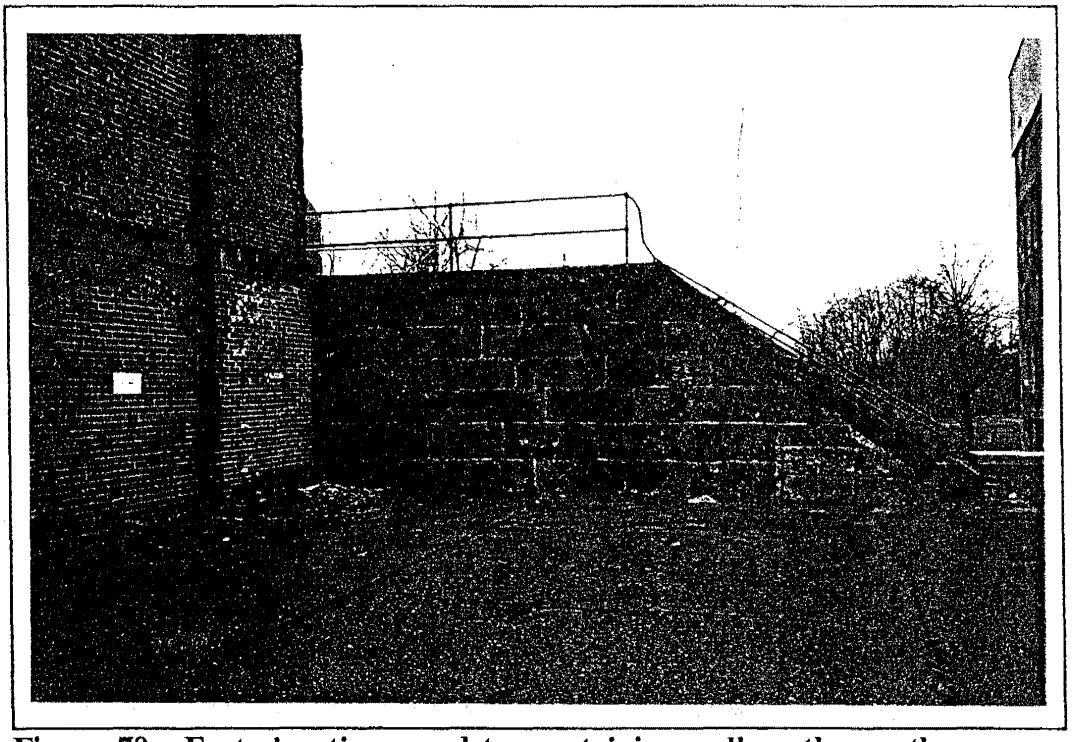


Figure 79. East elevation, sandstone retaining wall on the north.

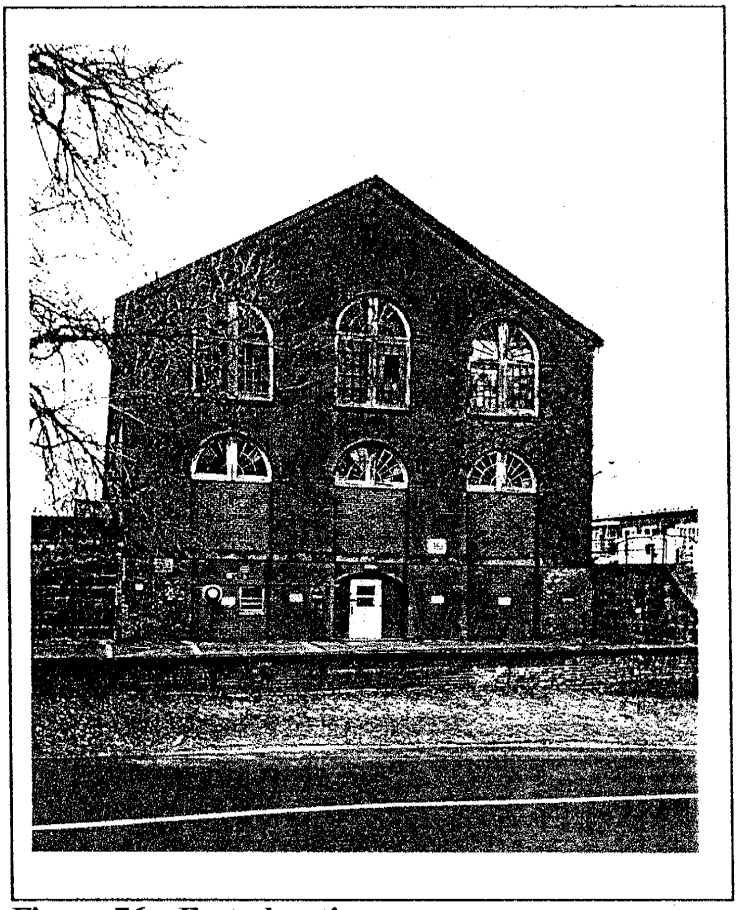


Figure 76. East elevation.

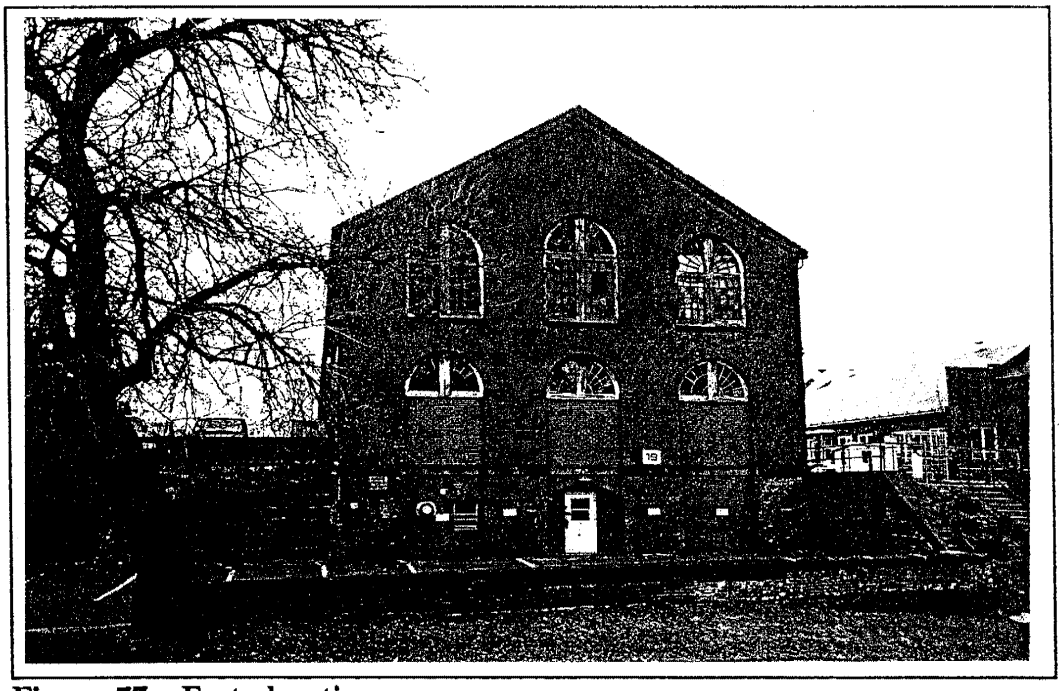


Figure 77. East elevation.

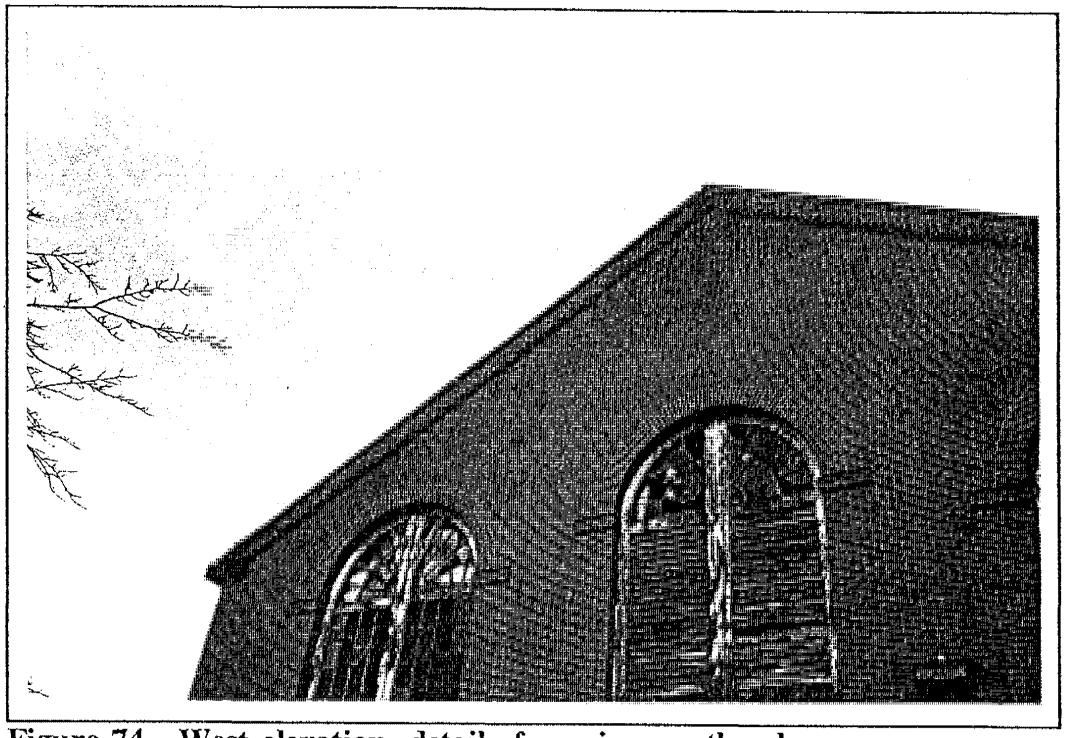


Figure 74. West elevation, detail of cornice, north rake.

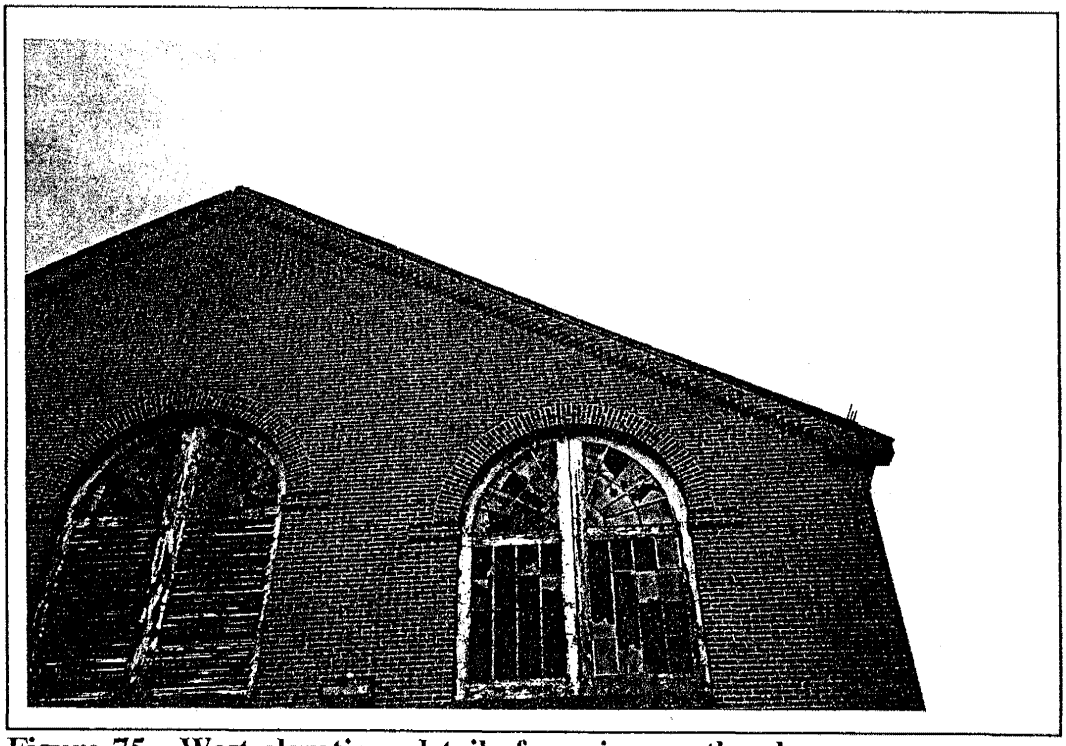


Figure 75. West elevation, detail of cornice, south rake.

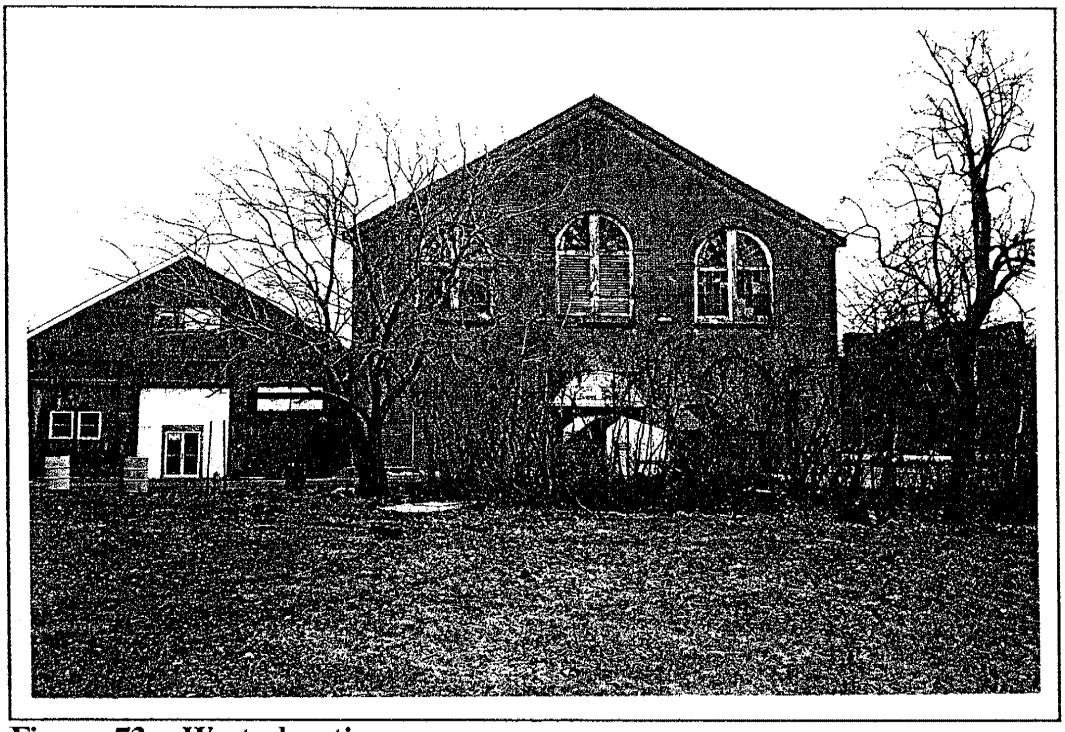


Figure 72. West elevation.

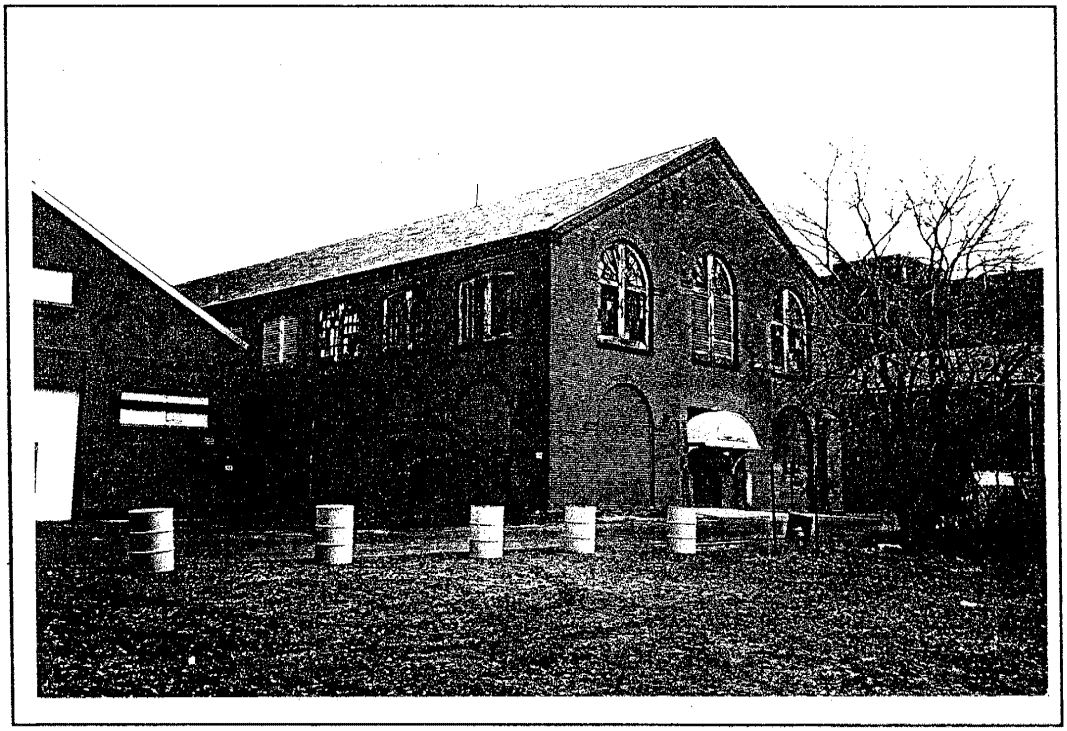


Figure 73. View of north and west elevations.

EXTERIOR WALLS

194. First story, West Addition looking east. Area used by Building Trades Training Center.

195. First story, West Addition, bays 6 and 8. Area used by the masons of the Building Trades Training Center.

196. Second story, Long Storehouse I, haphazard storage.

197. First story, PW4, east elevation, north bay. Note substantial masonry crack.

198. South elevation, bays 80, 82, and 84. Note missing arch treatments, broken windows, and brick deterioration along path of absent downspout.

199. South elevation, detail, bays 86, 8, and 90. Note missing mortar, broken brick, efflorescence, and rising damp.

200. North elevation. Note biological growth, rising damp, deteriorated wood, efflorescence, broken sandstone.

201. North elevation, bay 87. Broken sandstone, mortar loss, efflorescence, weathered wood.

202. North elevation, Stables, covered with detrimental vegetation.

203. South elevation, bay 56/58. Heavily damaged brick pier due to careless vehicular use of surrounding parking lot.

FLOORING

174. First story, Long Storehouse II, bay 84/86. Expansion joint in modern concrete flooring.

175. First story, West Addition. Concrete flooring with asphalt center aisle.

176. Second story, Long Storehouse II looking east. Note east/west, wide-board, tongue-and-groove flooring.

177. Long Storehouse II, loft flooring (including gaps along north and south sides) looking northwest.

178. Former hatch in bay 91/93 of Long Storehouse I

179. Loft, signage for load limits of loft flooring.

VERTICAL CIRCULATION

180. First story, stairway at bay 36 with plywood enclosure.

181. First story, stairway at bay 36, detail of newel post.

182. Stairway, bay 36, risers to second story from landing.

183. Second story, stairway, bay 36 as viewed from bay 34.

184. Second story, stairway, bay 36, head of stairs with risers to loft.

185. First story, stairway, bay 96.

186. Second story, stairwell area at bay 96.

187. Second story, head of stairs at bay 96 with risers to loft.

188. Exterior, elevator, bay 62 showing elevator shaft and loading platform.

189. First story, freight elevator, bay 30.

190. Loft, freight elevator, bay 62.

191. Interior of freight elevator, bay 97.

EXISTING CONDITIONS AND USE

192. First story, Long Storehouse II, bay 59, showing haphazard storage.

193. First story, Long Storehouse I, looking east towards PW5, showing haphazard storage.

154. West Addition, north wall showing plate, common rafters, bottom chord, truss rafter, and second-story brick pier.

155. Long Storehouse II, bay 55/57, north wall showing bottom chord, cushion, and brick pier.

156. West Addition, detail of common rafters notching into plate and lapping over brick cornice.

157. West Addition, north side wall. Detail of common rafters, plate, truss rafter, and bottom chord.

158. Second story, loft floor framing, Long Storehouse II looking east.

159. Second story, loft floor framing.

160. Second story, loft floor framing, West Addition showing bottom chord, posts, and joists.

161. Second story, loft floor framing, Long Storehouse II looking west and featuring center aisle posts, bottom chords, and loft floor joists.

162. West Addition, bay 2/4. Addition of suspension rod augmenting truss framing.

163. West Addition, bay 4/6. Riveted brace plate augmenting truss framing.

164. Loft, West Addition, north bay. Iron and wood braces added to a northern queen post.

165. Second story, Long Storehouse I, bay 94/96, repairs to bottom chord.

166. First story, structural steel center-aisle column, Long Storehouse II, bay 64/66.

167. First story, West Addition, detail of structural steel system, bay 14/16.

168. First story, Long Storehouse I looking east towards PW6.

169. First story, West Addition, bay 14/16, structural steel side column.

170. First story, Long Storehouse II, steel channel beams entering PW5 at center and south bays.

171. First story, West Addition, structural steel channel beam entering PW2.

172. First story, Stables, detail of structural steel above vehicular passageway.

173. First story, Stables, structural steel system at PW8.

131. PW3, loft, east elevation, north bay.

132. PW4, first story, east elevation, south bay.

133. PW4, first story, east elevation, north bay.

134. PW4, loft, center bay with fire door.

135. PW5, first story, west elevation, south bay.

136. PW5, first story, west elevation, center bay.

137. PW5, first story, east elevation, center bay.

138. PW5, second story, east elevation, north bay. Note brick infill of former passageway in corner.

139. PW6, first story, east elevation, south bay.

140. PW6, first story, east elevation, north bay.

141. PW6, first story, east elevation, center bay looking west.

142. PW6, first story, west elevation, south bay.

143. PW8, first story, west elevation, center bay.

FRAMING

144. Loft, West Addition looking west.

145. Loft, Long Storehouse II looking east from bay 39. Note A-frame supports for center tie-rods.

146. Loft, West Addition, north queen post, bay 23.

147. Loft, West Addition, north queen post, bay 23.

148. Loft, Long Storehouse II, queen post and strut, bay 37.

149. Loft, Long Storehouse II, queen post and strut, bay 39.

150. Loft, Long Storehouse II, north queen post, bay 39. Detail of iron stirrup.

151. Detail of iron stirrup around bottom chord at bay 39.

152. West Addition, washer and nut fastening center tie-rod (not visible) to underside of bottom chord.

153. Long Storehouse II, washer and nut fastening center tie-rod (not visible) to underside of bottom chord.

110. Loft, Long Storehouse II looking east.

111. Loft, West Addition looking west.

112. Sprinkler system valve room, bay 24, West Addition.

113. High voltage room in Bay 81 against PW6, Long Storehouse I.

114. First story, Stables, bay 97. Two-ton freight elevator.

115. First story, Stables, bay 98, early bathroom facilities.

116. First story, Long Storehouse II, example of signage for bay numbering/designation system.

117. Loft, West Addition. Example of typical signage found throughout Building 19. Loft, bay 36.

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118. First story, Long Storehouse II, bays 69 - 75, north elevation showing configuration of interior wall.

119. Second story, West Addition looking west, interior walls.

120. Second story, West Addition, bay 23. Note treatment of interior wall.

121. Second story, West Addition, corner of the south and west- end interior walls.

122. Second story, West Addition, south wall, bay 24. Note brick pier on right and truncated partition wall on left.

123. Loft, West Addition, west end interior wall.

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125. PW2, first story, West Addition, east elevation, south bay.

126. PW3, west elevation, south bay from stair landing. Note original finishes.

127. PW3, west elevation showing joining of PW3 and south wall.

128. PW3, second story, east elevation, south bay.

129. PW3, second story, east elevation, center and north bays.

130. PW3, loft, east elevation, south bay.

91. Bay 82, south elevation showing hierarchy of wall openings.

92. Rectangular wall opening, south elevation, bay 104/106, equipped with roll-up metal door.

93. Rectangular wall openings, south elevation, bays 100/102, 104/106, and 114.

94. Second-story segmental arch, interior, West Addition, bay 24. Modern raised frame.

95. Second-story segmental arch, interior, West Addition, bay 4. Flush frame with batten shutters.

96. First-story semi-circular arch, interior, Long Storehouse II, bay 53. Note louvered blinds and batten shutters.

97. Semi-circular arches, bays 69, 71, 73, north elevation. Note brick lip for holding wooden frame.

ROOF COVERING AND FEATURES

98. South elevation looking east, note elevator shafts and copper ventilators.

99. Bays 87, 89, and 91 of the north elevation. Note the snow guard, ventilator, downspout, and roof slates.

100. Bay 30, elevator shaft.

101. Second-story window, south elevation. Note corbelled cornice.

102. Interior framing for conical copper ventilator straddling the roof at bay 25/27.

103. Interior framing for conical copper ventilator straddling the roof at bay 25/27.

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104. First story, West Addition looking east and showing center aisle plan with exposed structural steel system.

105. First story, West Addition looking west towards PW3.

106. First story, Long Storehouse II looking east.

107. First story, plan from vehicular passageway (bay 99/102) looking west into Long Storehouse I.

108. Second story, West Addition looking east.

109. Second story, Long Storehouse I looking west towards PW3.

LIST OF ILLUSTRATIONS AND CREDITS

All of the following photographs are National Park Service (NPS) photographs taken by architectural conservators Carole L. Perrault and Judith A. Quinn during the course of the project. Negatives are currently stored in the collections of the BCB/CRC, Boston, Massachusetts.

EXTERIOR WALLS

72. West elevation.

73. View of north and West elevations.

74. West elevation, detail of cornice, north rake.

75. West elevation, detail of cornice, south rake.

76. East elevation.

77. East elevation.

78. East elevation, sandstone retaining wall on the south.

79. East elevation, sandstone retaining wall on the north.

80. South elevation looking east. Portion of the west elevation visible at the left.

81. South elevation looking east, bays 90 - 116.

82. South elevation, looking east.

83. South elevation.

84. North elevation looking east. Note concrete drain and proximity of Building 32.

85. North elevation, east (Stables) end, bays 101 - 115.

86. North elevation looking west.

87. North elevation, bays 97 - 105, including vehicular passageway.

EXTERIOR WALL OPENINGS

88. Semi-circular arched opening with louvered blinds and fanlight, south elevation.

89. Segmentally-arched opening, second story, south elevation.

90. East elevation, north bay. Segmental arch at basement level surmounted by first-story semi-circular arch.

EXISTING CONDITIONS ILLUSTRATIONS

EXTERIOR WALL OPENINGS

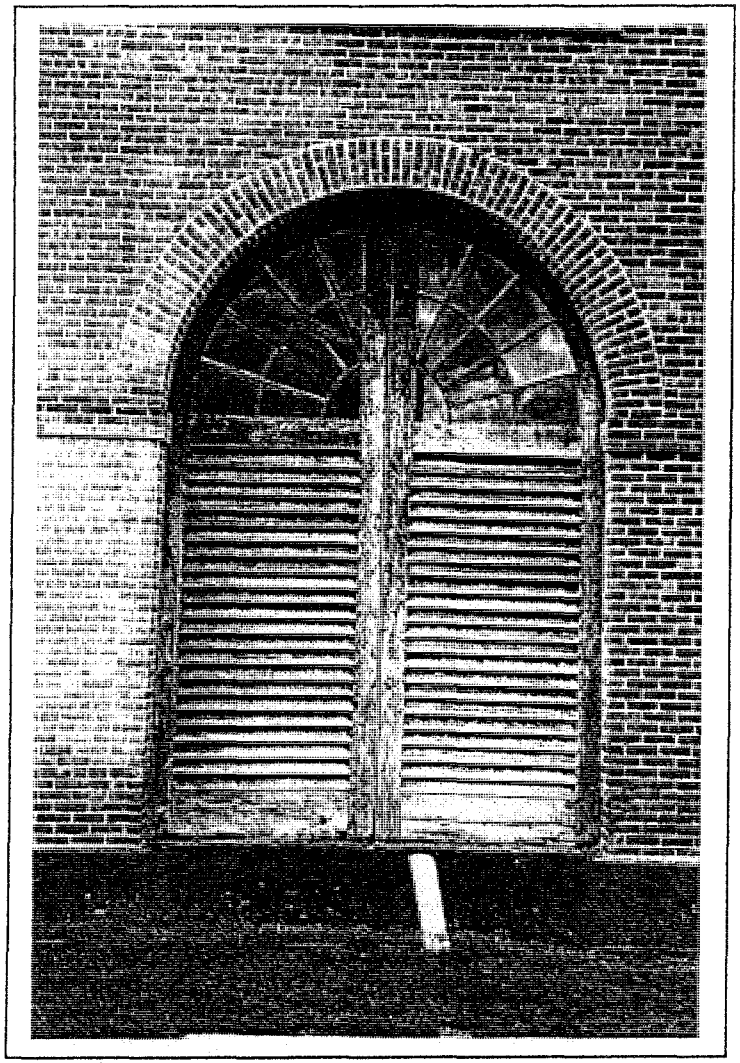


Figure 88. Semi-circular arched opening with louvered blinds and fanlight, south elevation.

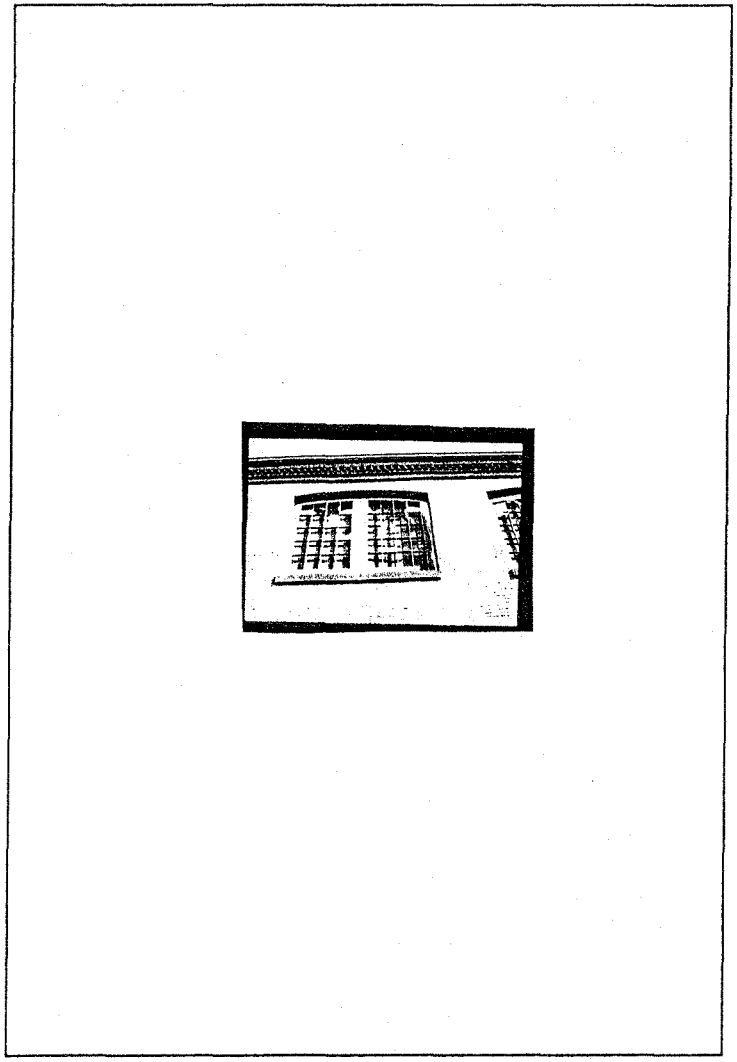


Figure 89. Segmentally-arched opening, second story, south elevation.

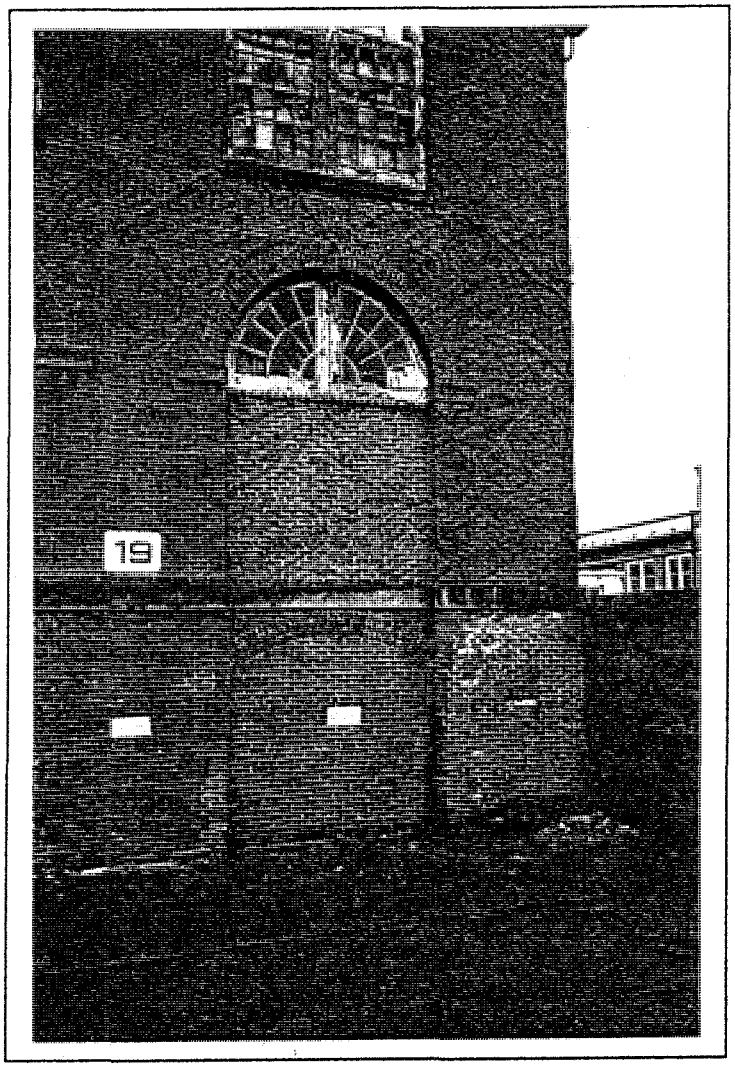


Figure 90. East elevation, segmental arch at basement level surmounted by first-story semi-circular arch.

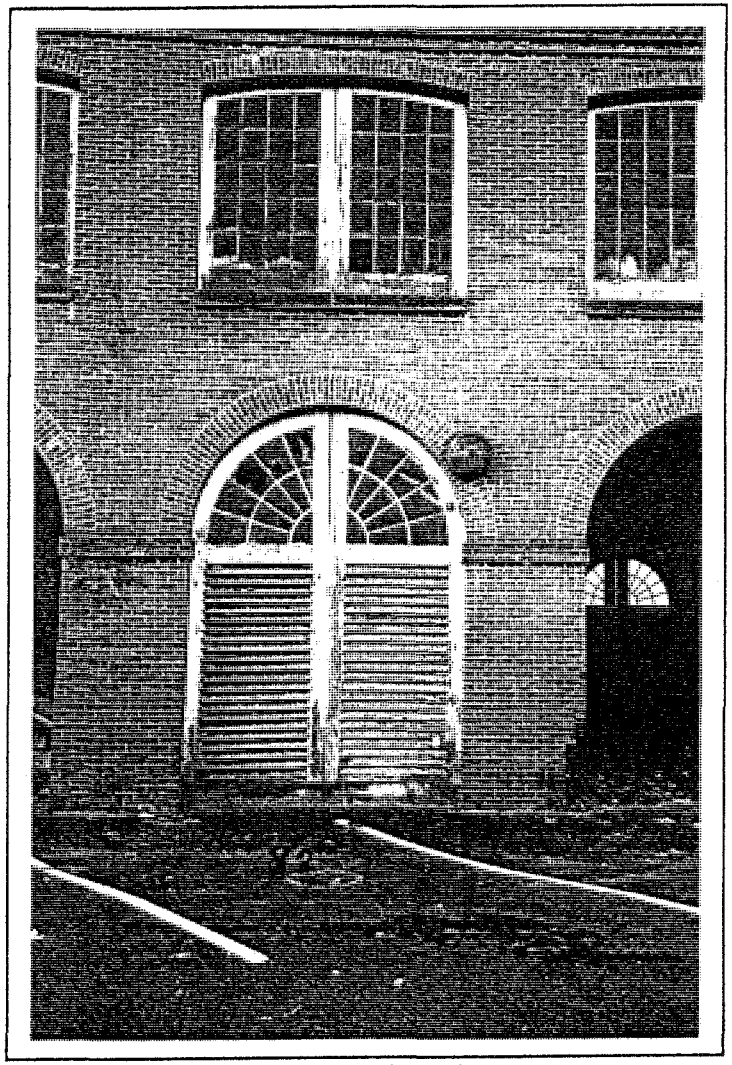


Figure 91. Bay 82, south elevation.



Figure 92. Rectangular wall opening, south elevation, bay 104/106, equipped with roll-up metal door.

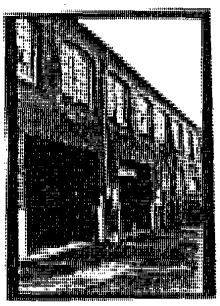


Figure 93. Rectangular wall openings, south elevation. Bays 100/102, 104/106, and 114.

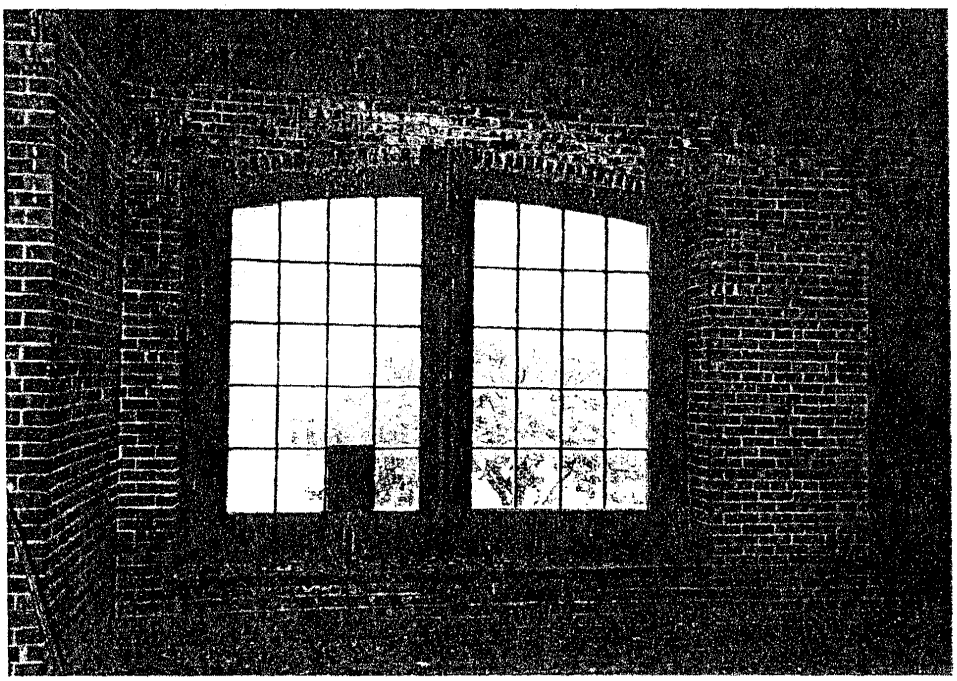


Figure 94. Segmental arch, interior, West Addition, bay 24. Modern raised frame.

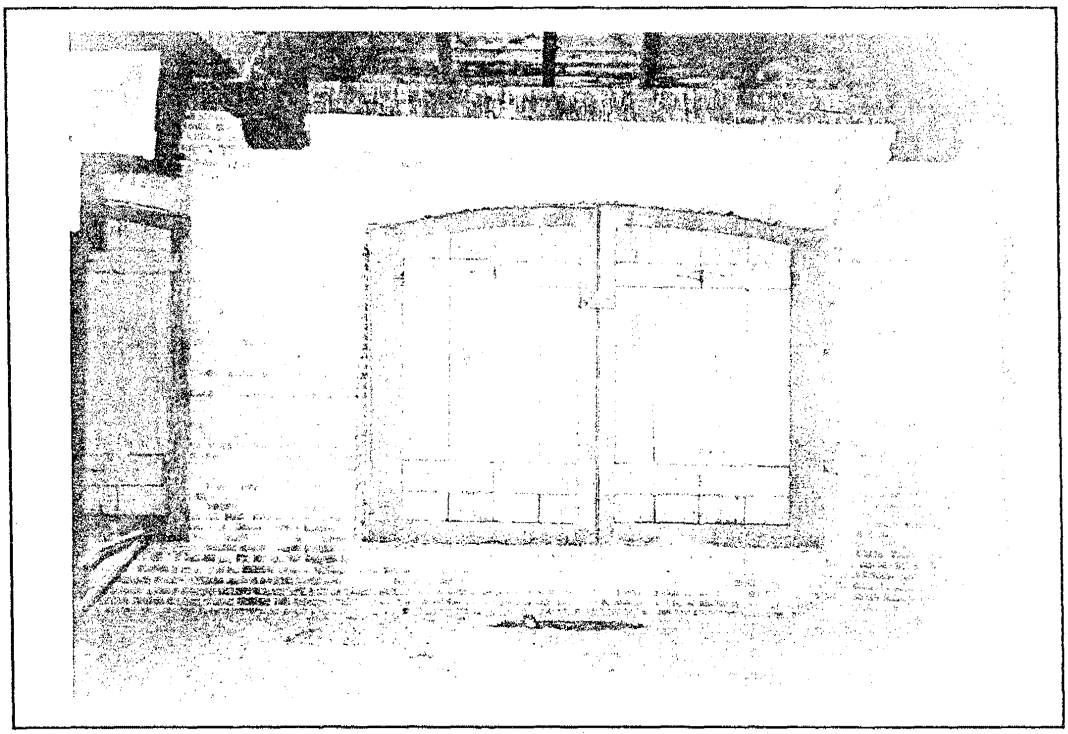


Figure 95. Segmental arch, interior. Flush window frame with wide-board batten shutters.

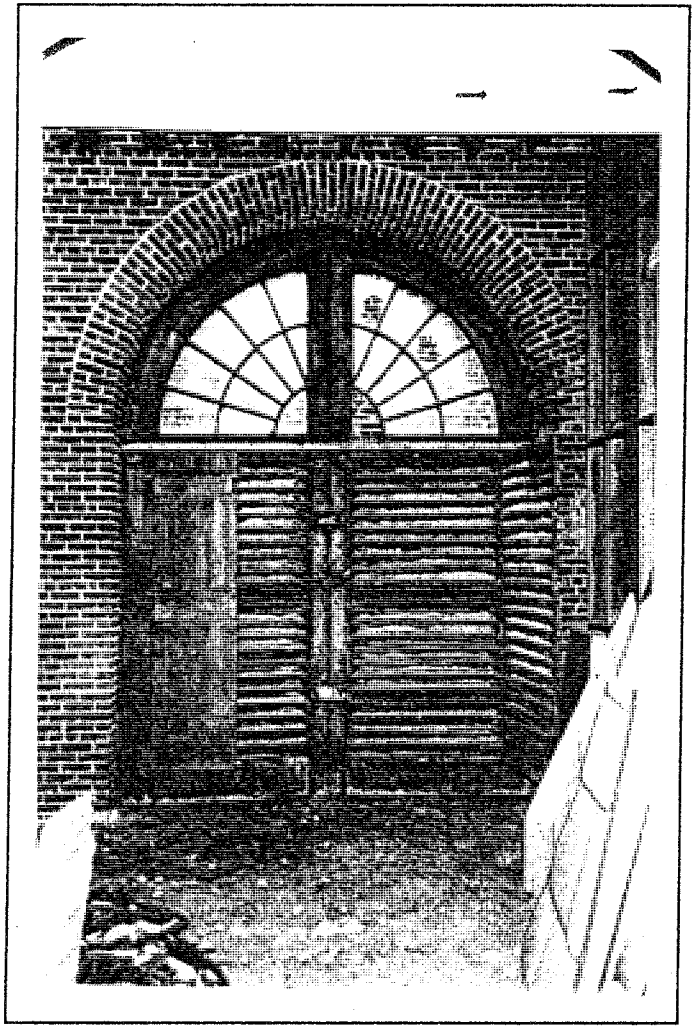


Figure 96. Semi-circular arch, interior, bay 53, north elevation.

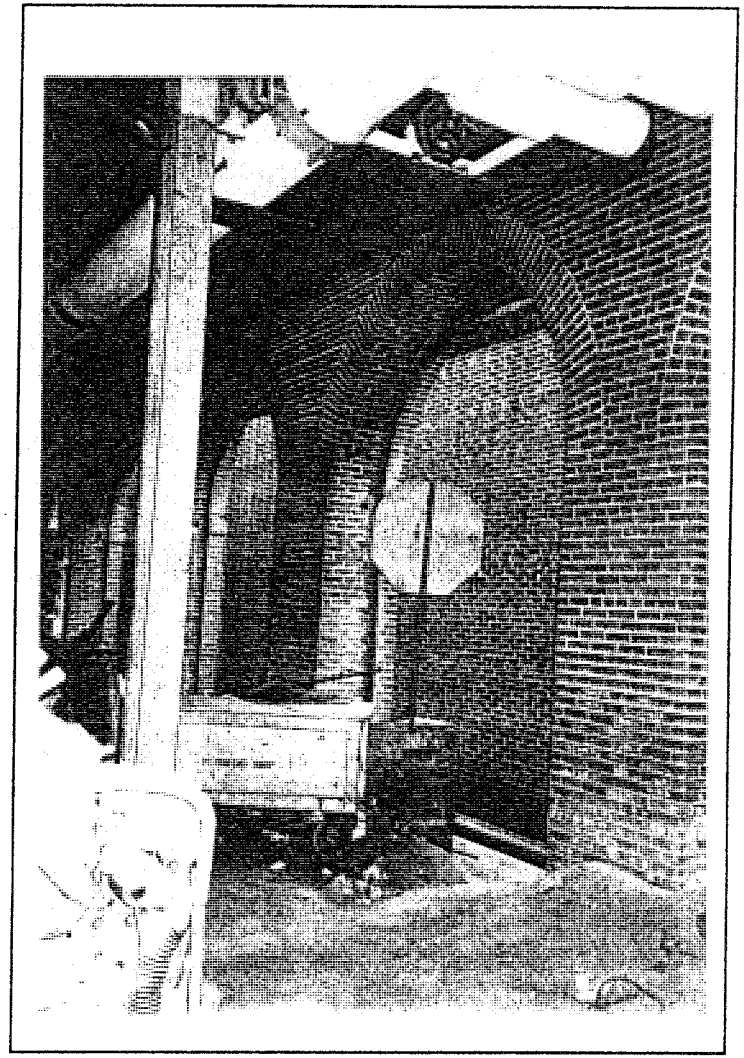


Figure 97. Semi-circular arches, bays 69, 71, 73, north elevation. Note brick lip for wooden frame.

ROOF COVERING AND FEATURES

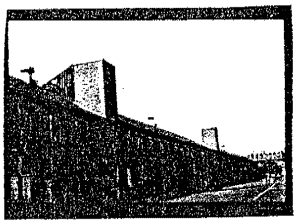


Figure 98. South elevation looking east, note elevator shafts and ventilators.

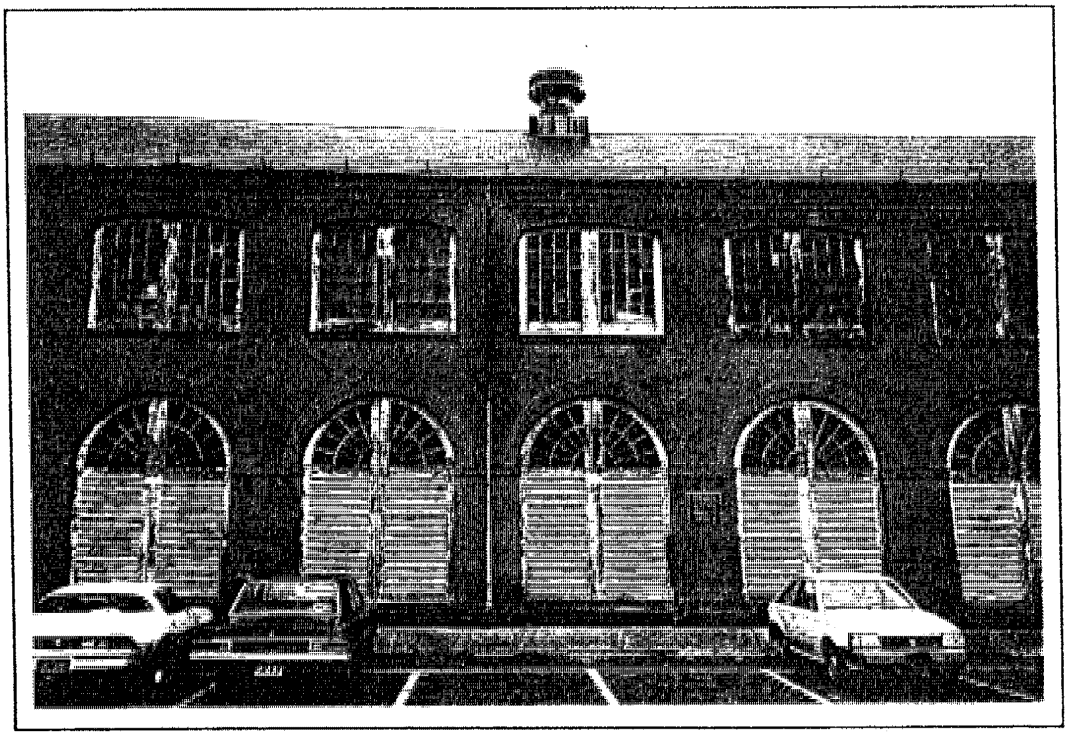


Figure 99. Bays 87, 89, and 91 of the north elevation. Note snow guards, ventilator, downspout, and roof slates.

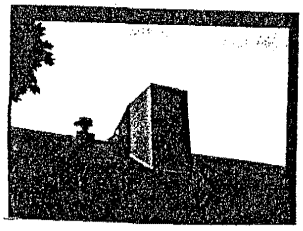


Figure 100. Elevator shaft at bay 30.

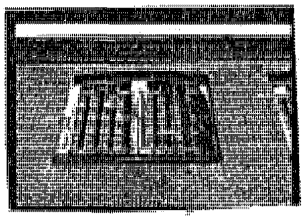


Figure 101. Second-story window, south elevation, note corbelled cornice.

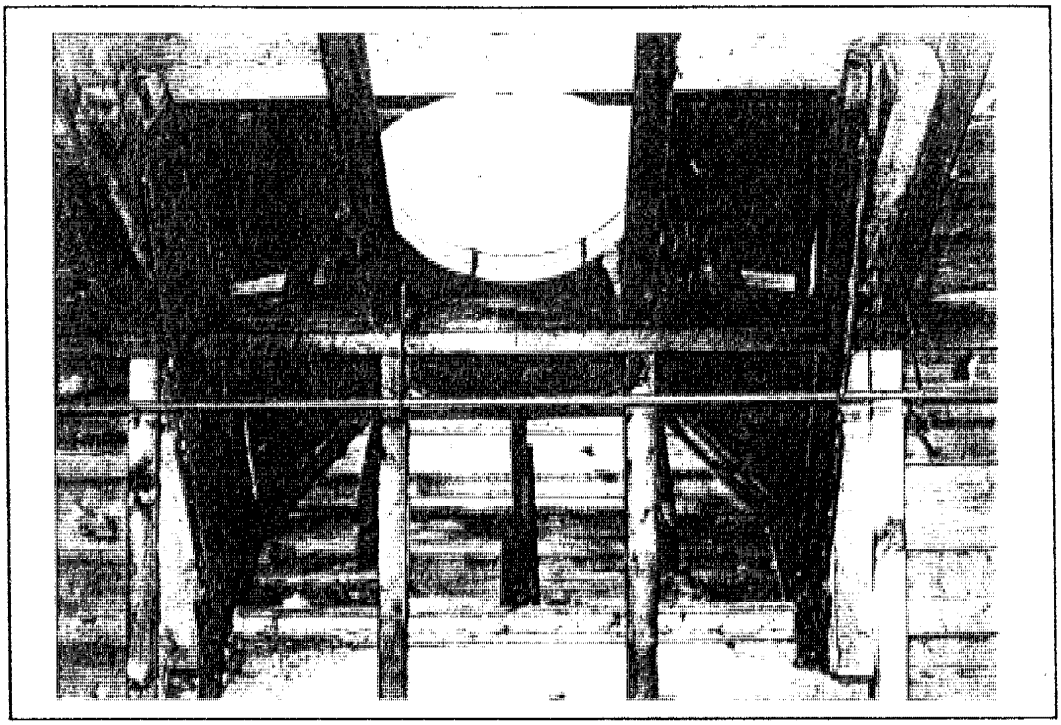


Figure 102. Interior framing for conical copper ventilator straddling the roof at bays 25/27.

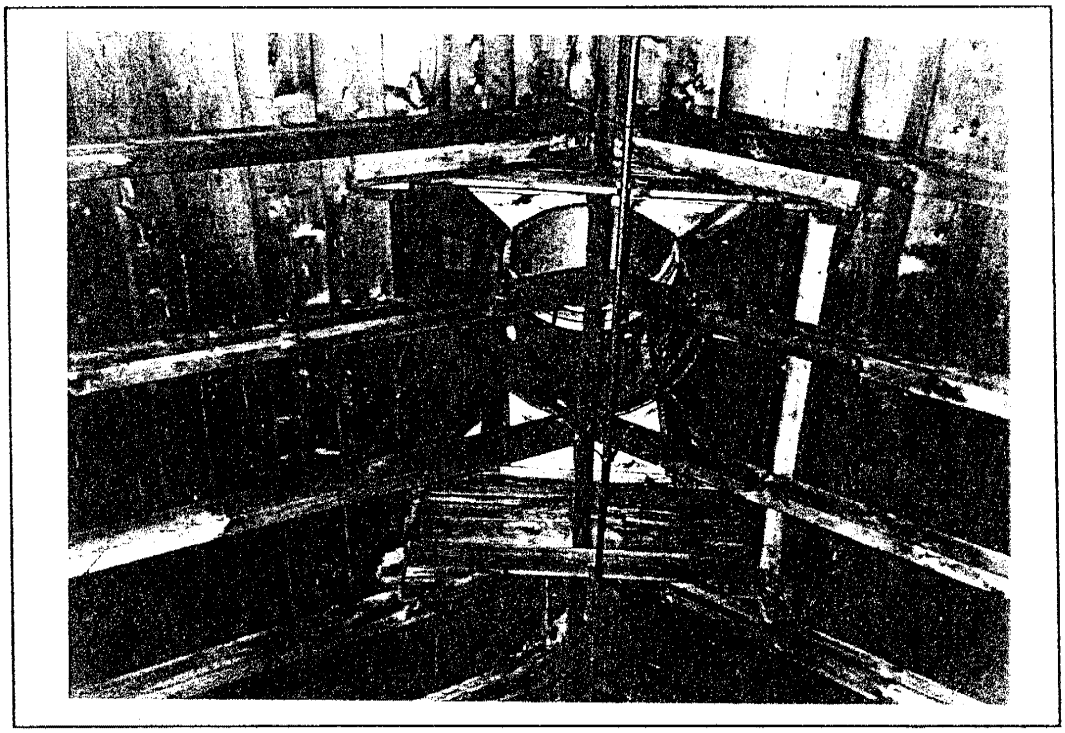


Figure 103. Interior framing for conical copper ventilator straddling the roof bays 25-27.

FLOOR PLAN

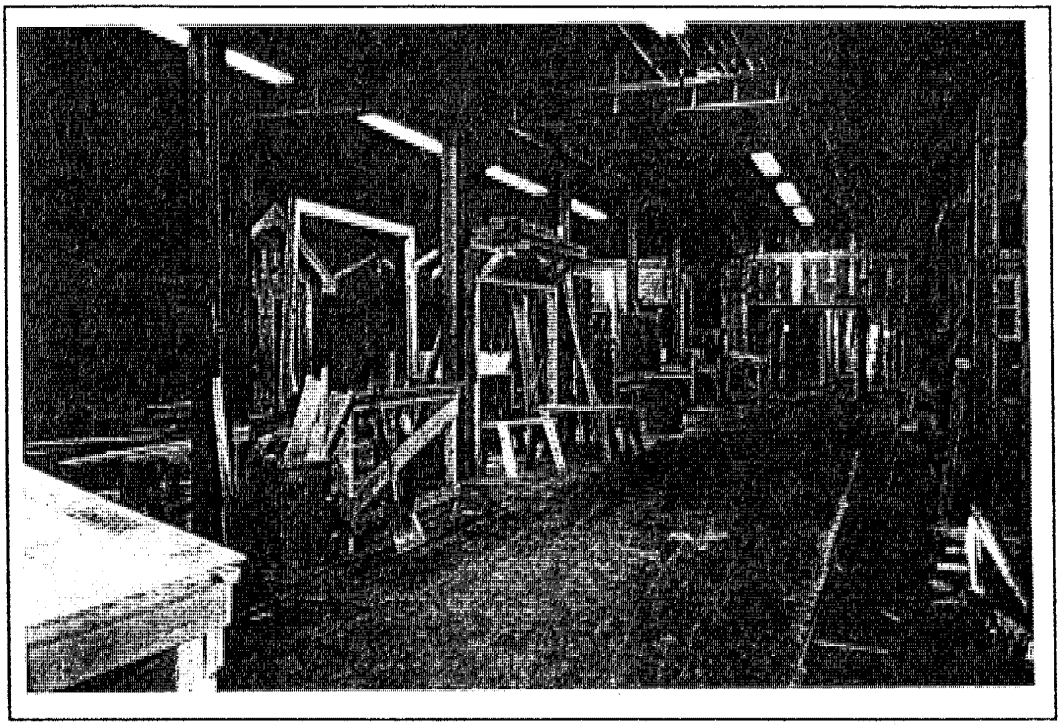


Figure 104. First story, West Addition looking east and showing center aisle plan with exposed structural system. (Space occupied by Building Trades Training School.)

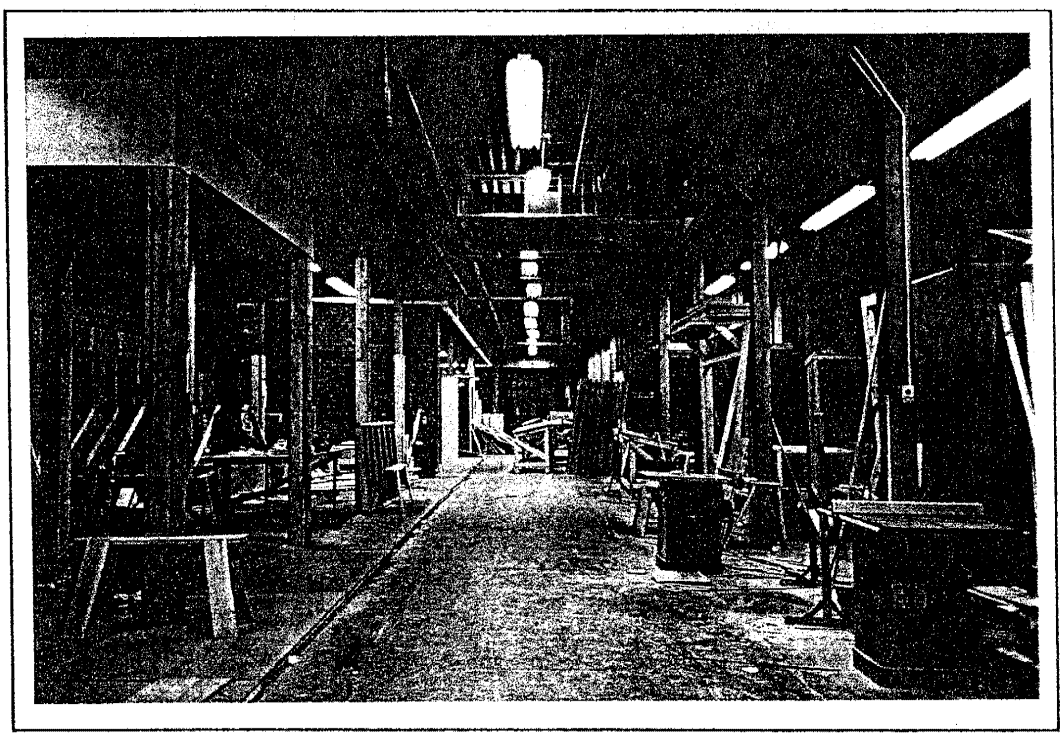


Figure 105. First story, West Addition looking west towards PW3.

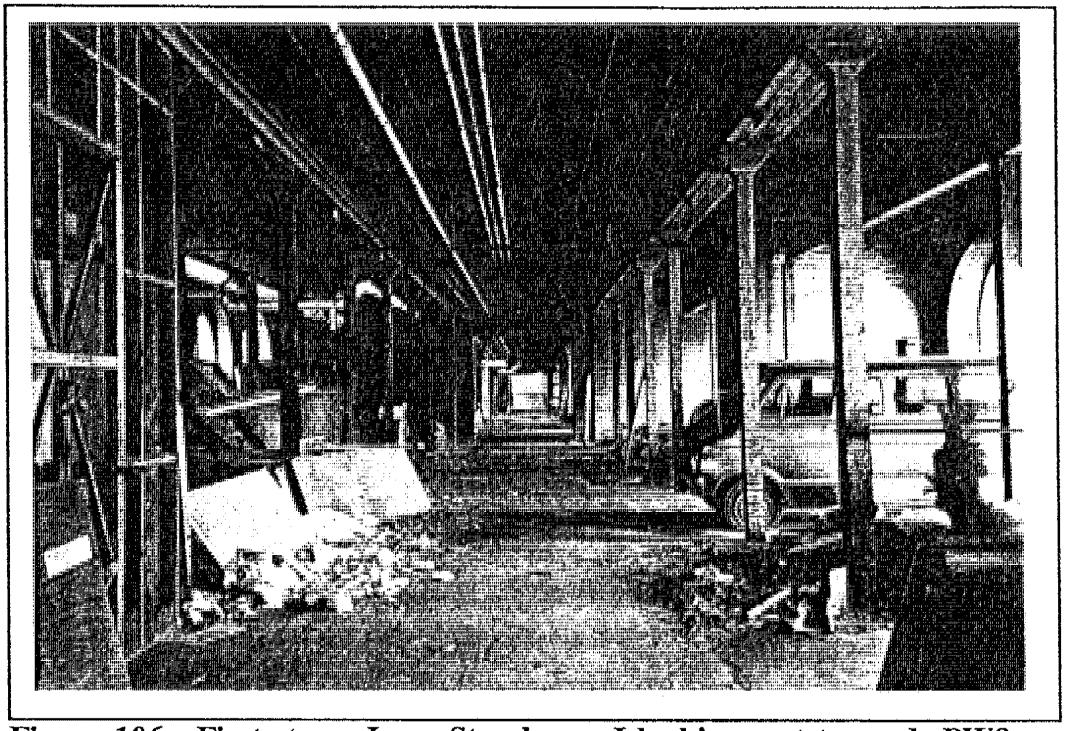


Figure 106. First story, Long Storehouse I looking east towards PW8.

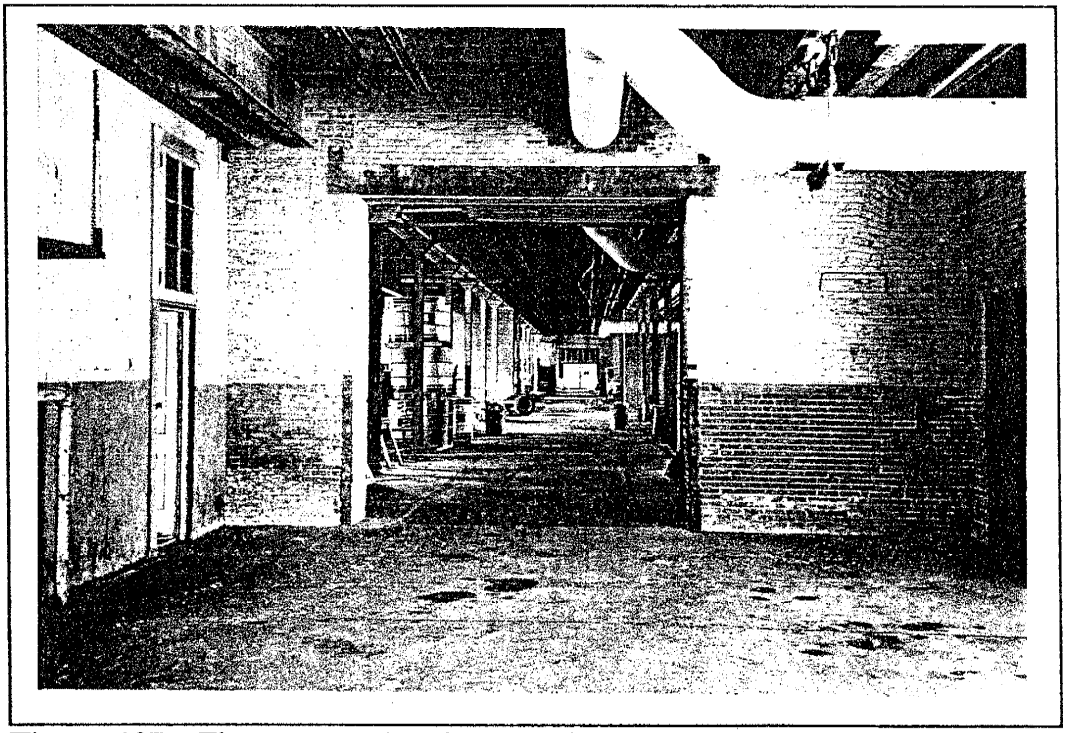


Figure 107. First story, plan from vehicular passageway looking west through Long Storehouse I and II.

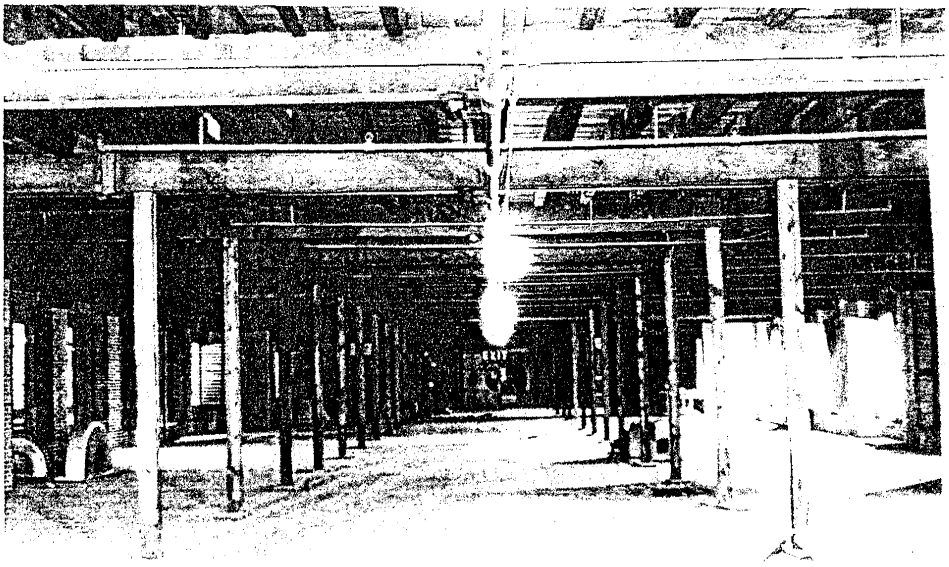


Figure 108. Second story, West Addition looking east.

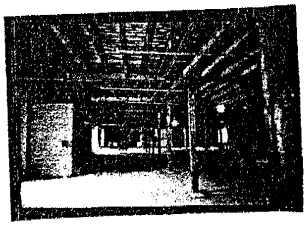


Figure 109. Second story, Long Storehouse I looking west towards PW3. Note truncated partition wall and center aisle posts.

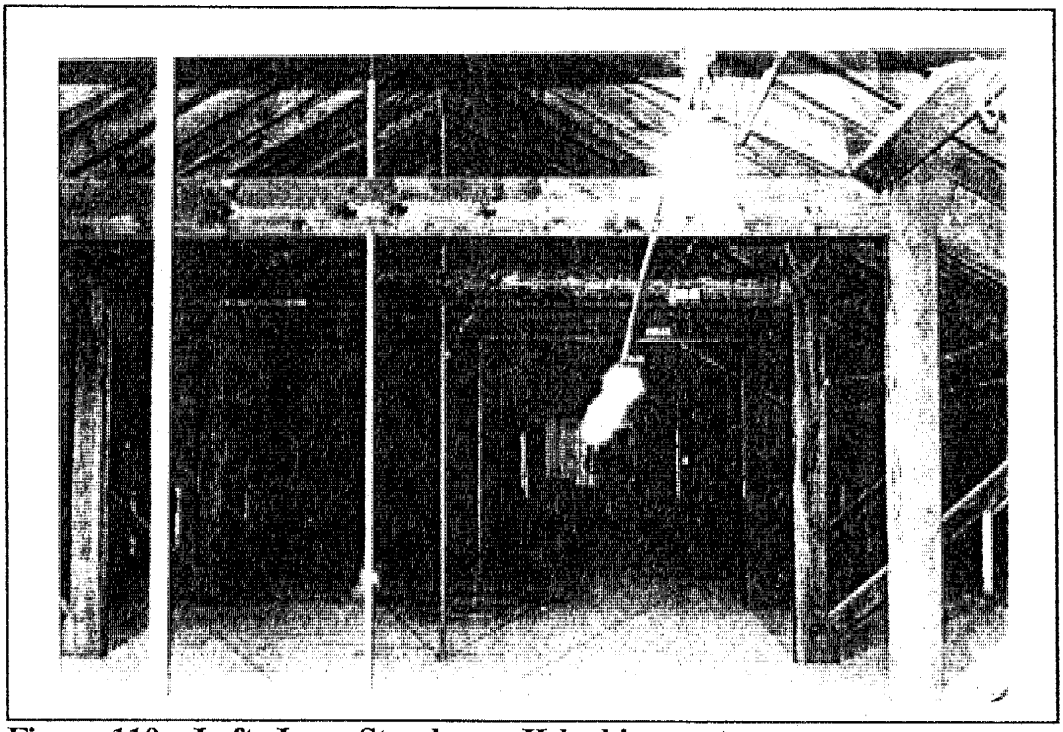


Figure 110. Loft, Long Storehouse II looking east.

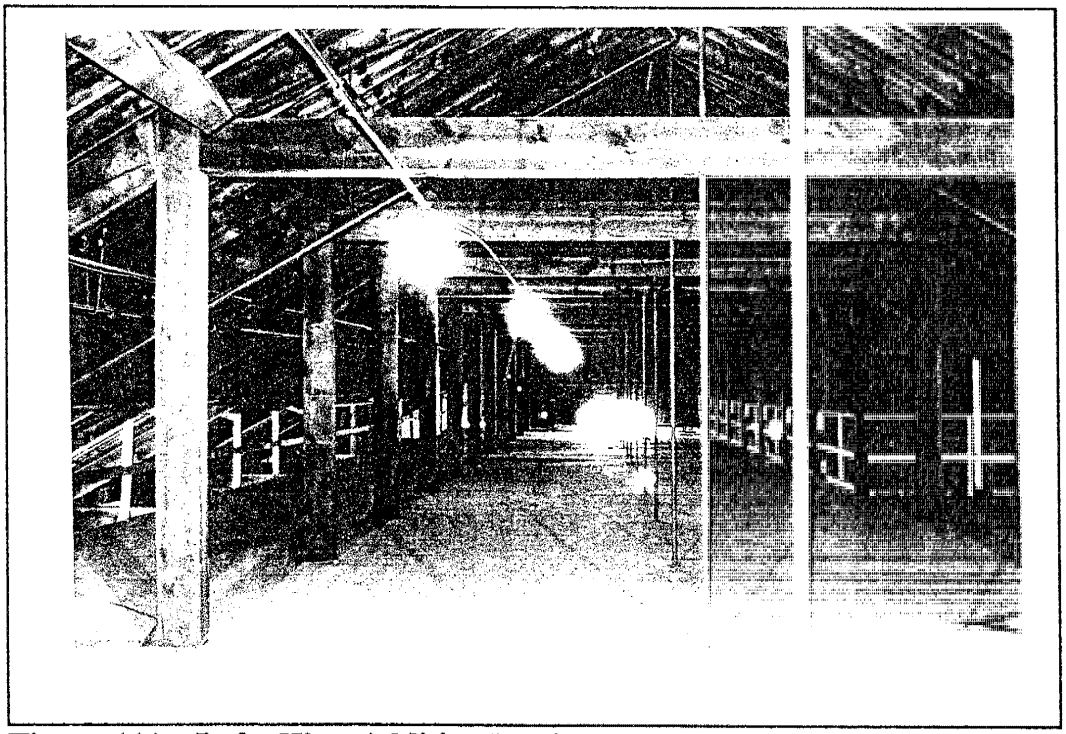


Figure 111. Loft, West Addition looking west.

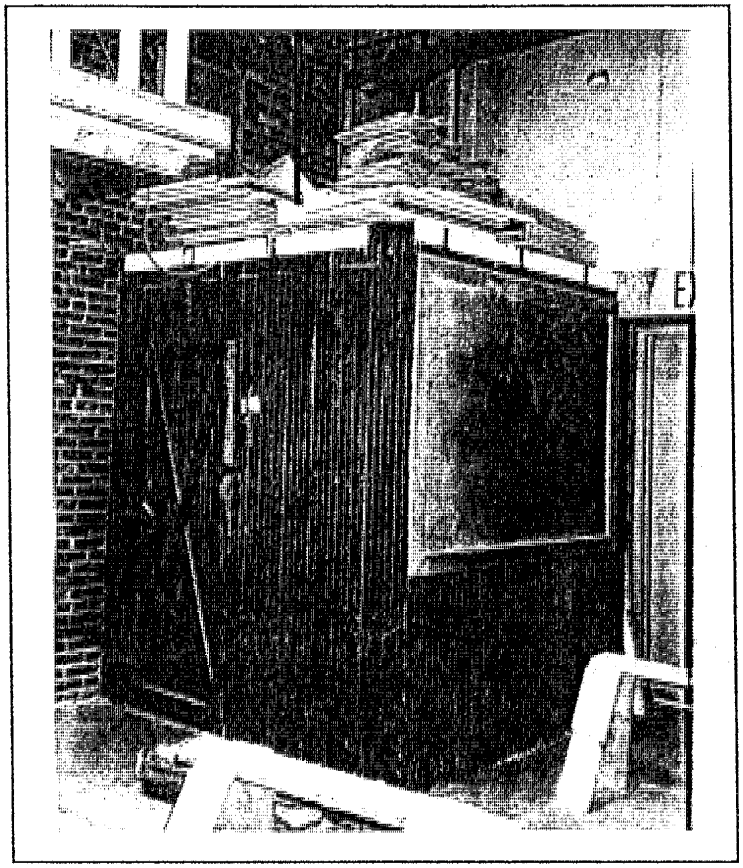


Figure 112. Sprinkler system valve room, bay 24, West Addition.

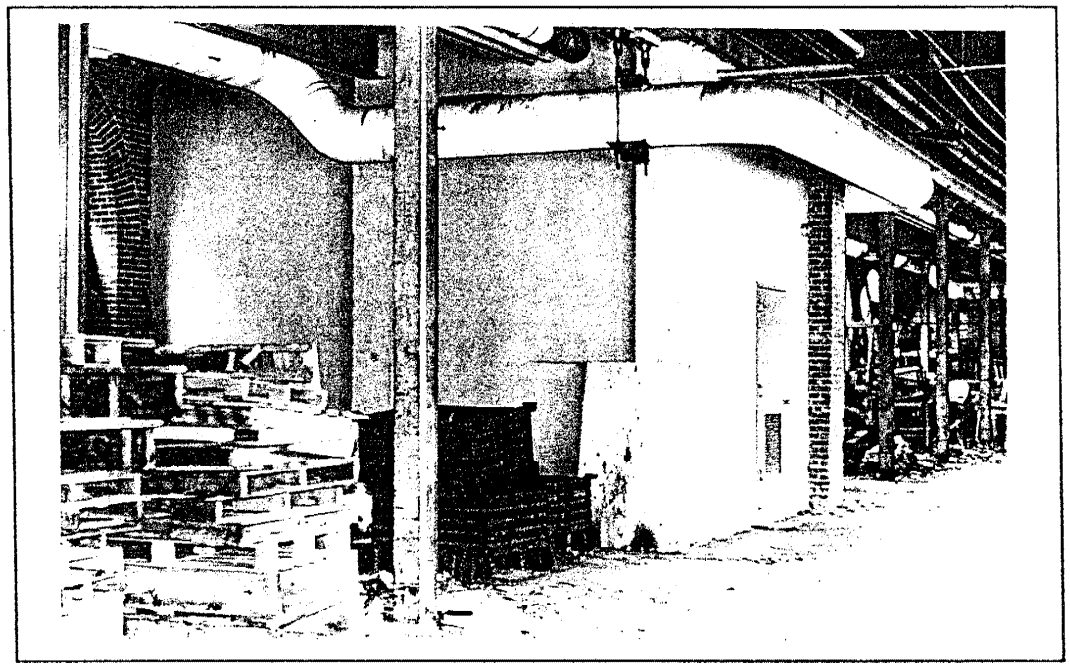


Figure 113. High voltage room in bay 81, Long Storehouse II.

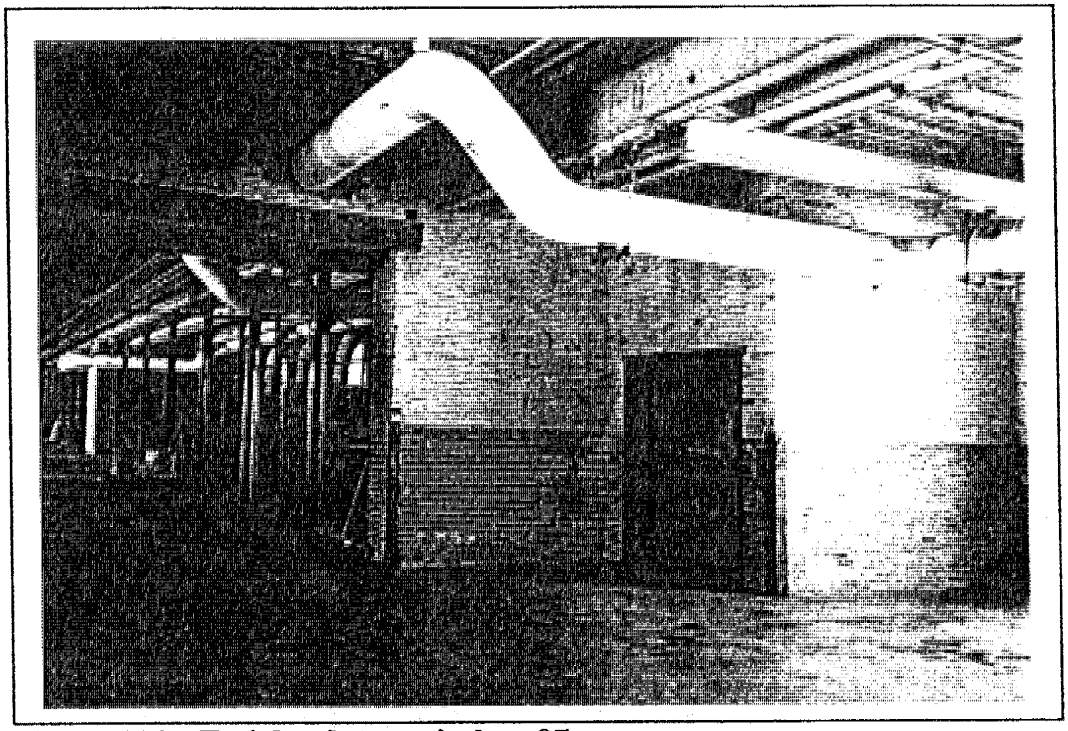


Figure 114. Freight elevator in bay 97.

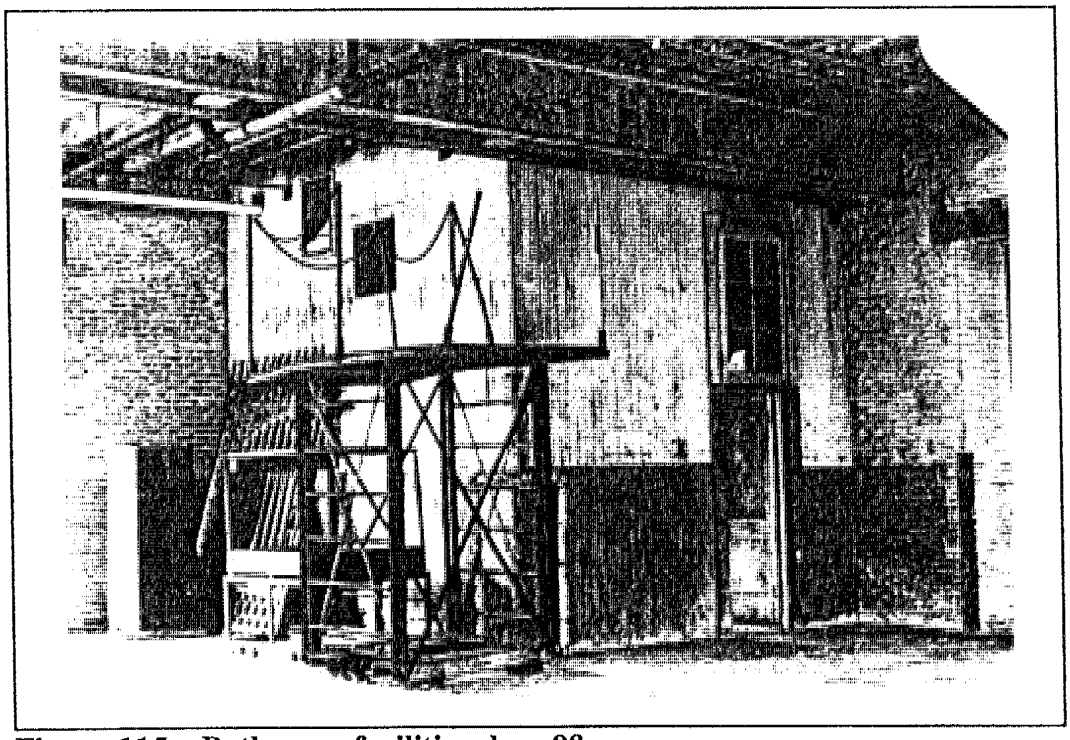


Figure 115. Bathroom facilities, bay 98.

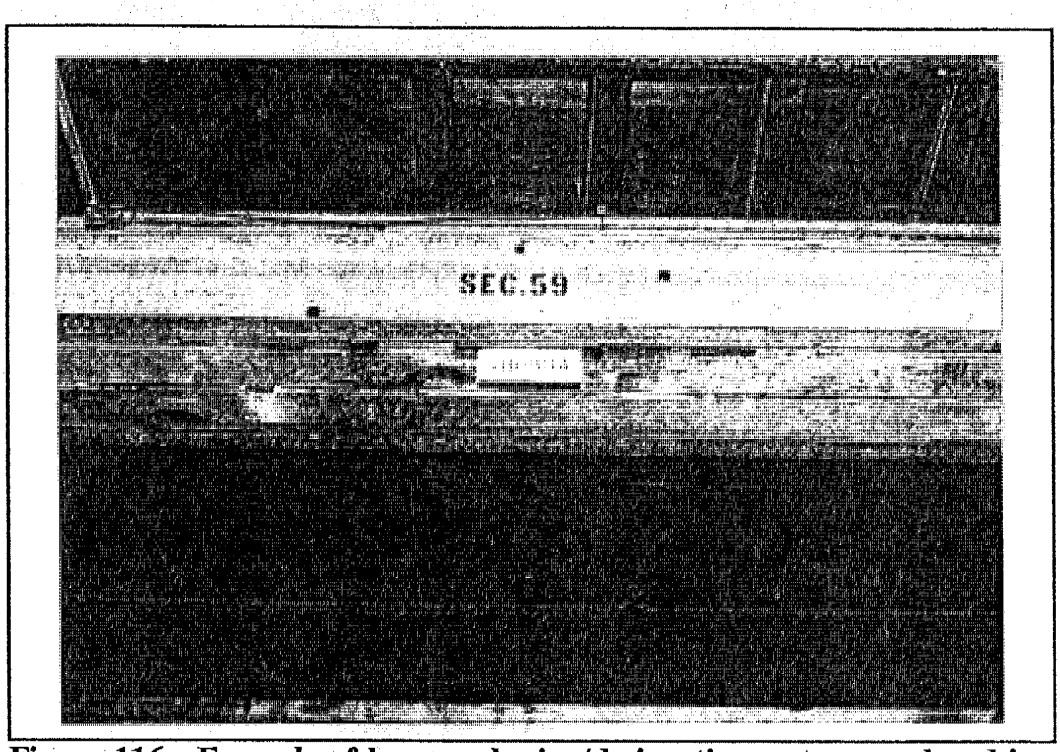


Figure 116. Example of bay numbering/designation system employed in Building 19.

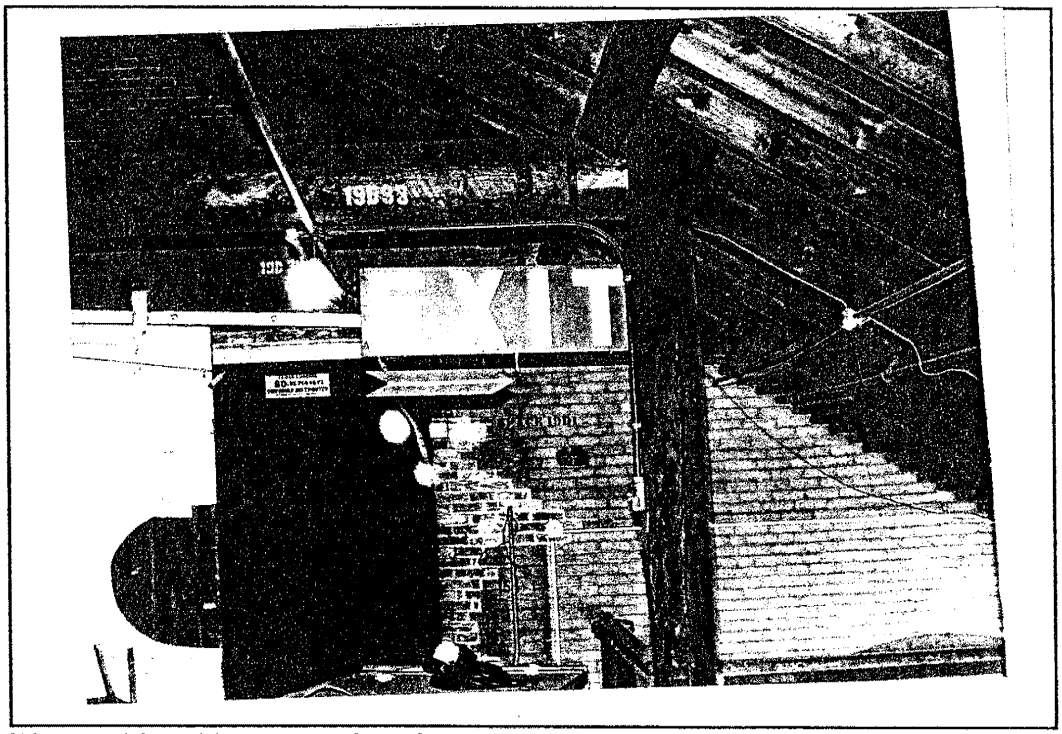


Figure 117. Example of typical signage found throughout Building 19. Loft, bay 36.

INTERIOR WALLS

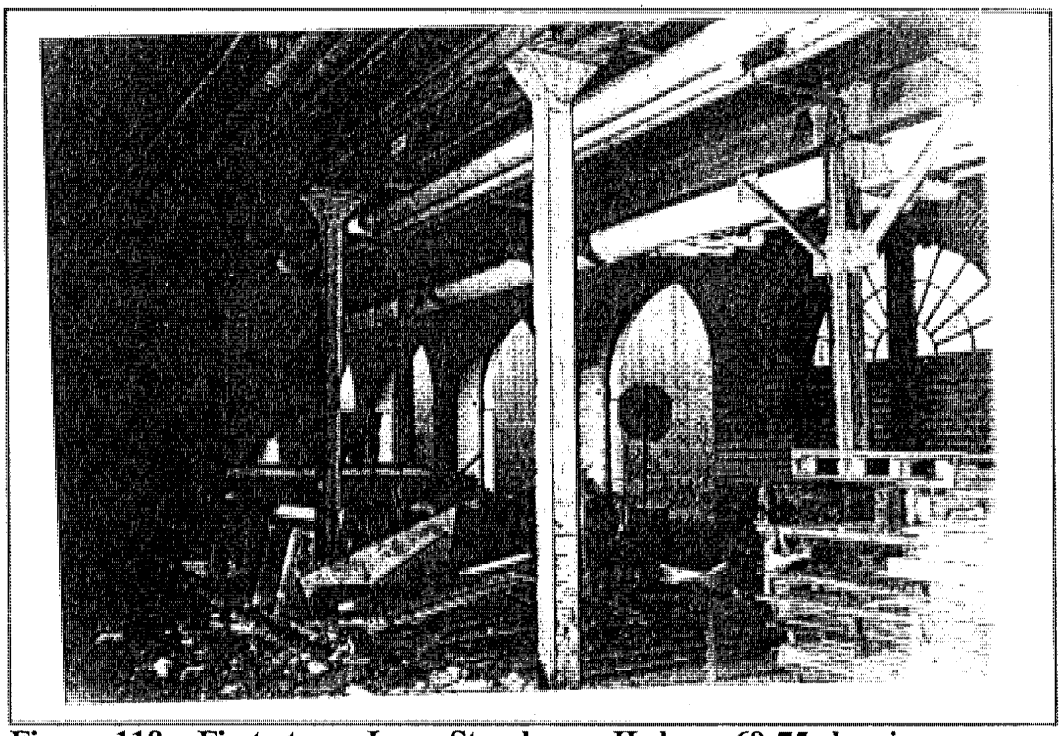


Figure 118. First story, Long Storehouse II, bays 69-75 showing configuration of interior walls.

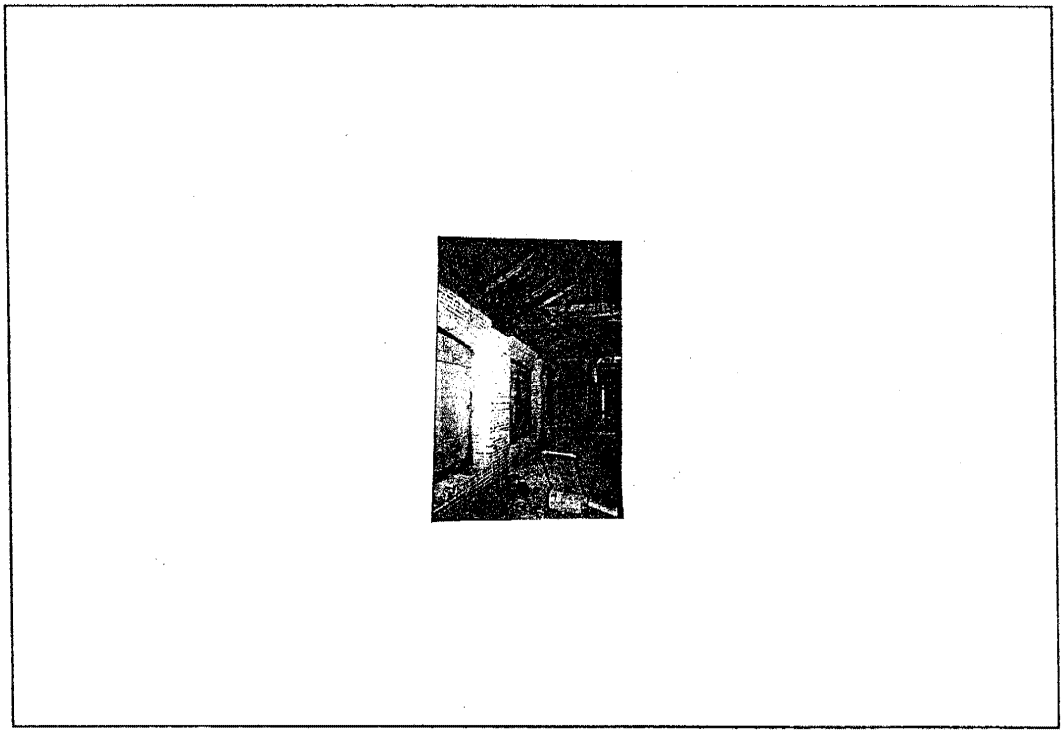


Figure 119. Second story, West Addition looking west, interior walls.

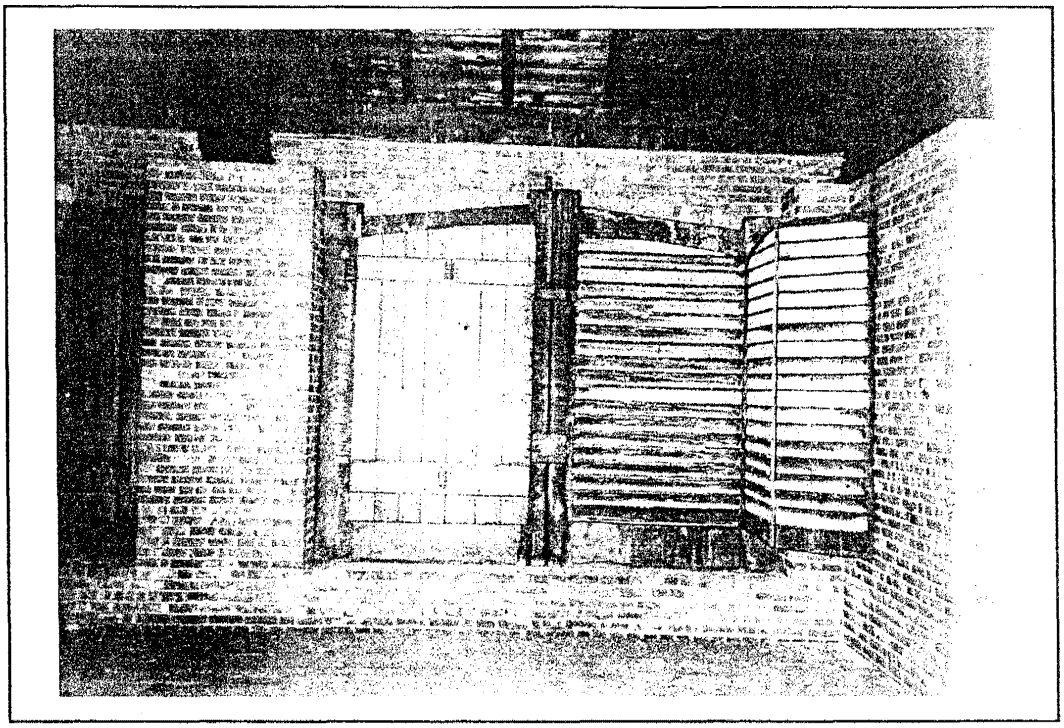


Figure 120. Second story, bay 23, note treatment of interior wall.

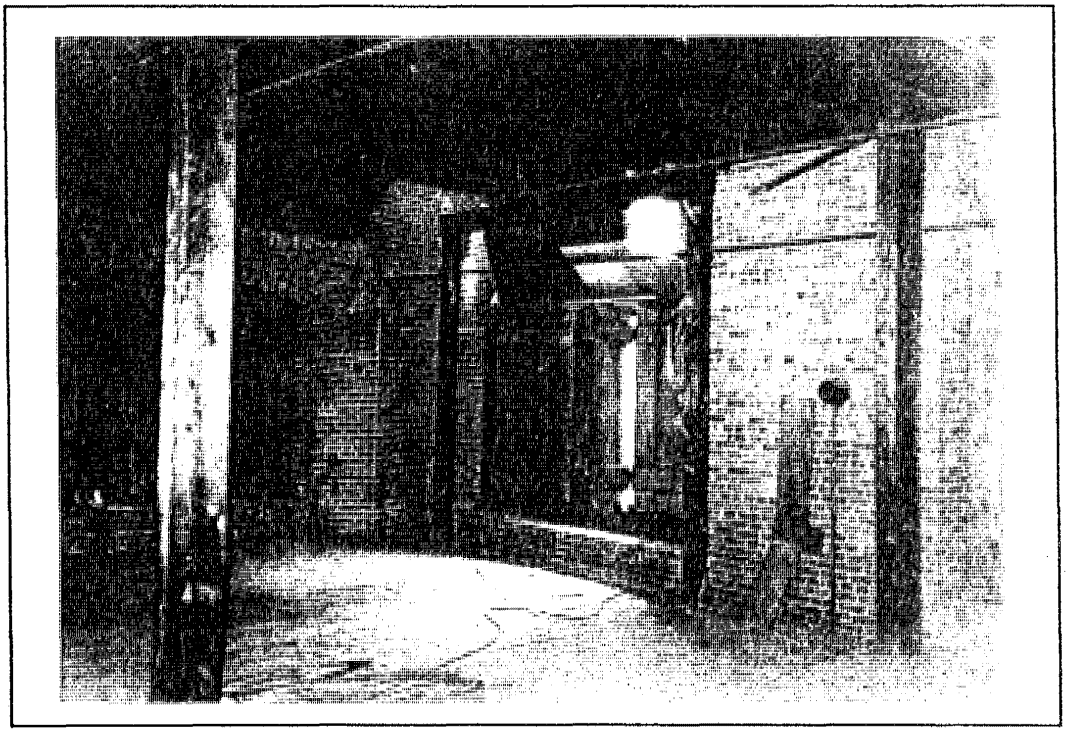


Figure 121. Second story, West Addition, corner of the south and west-end walls, note treatment of interior walls.

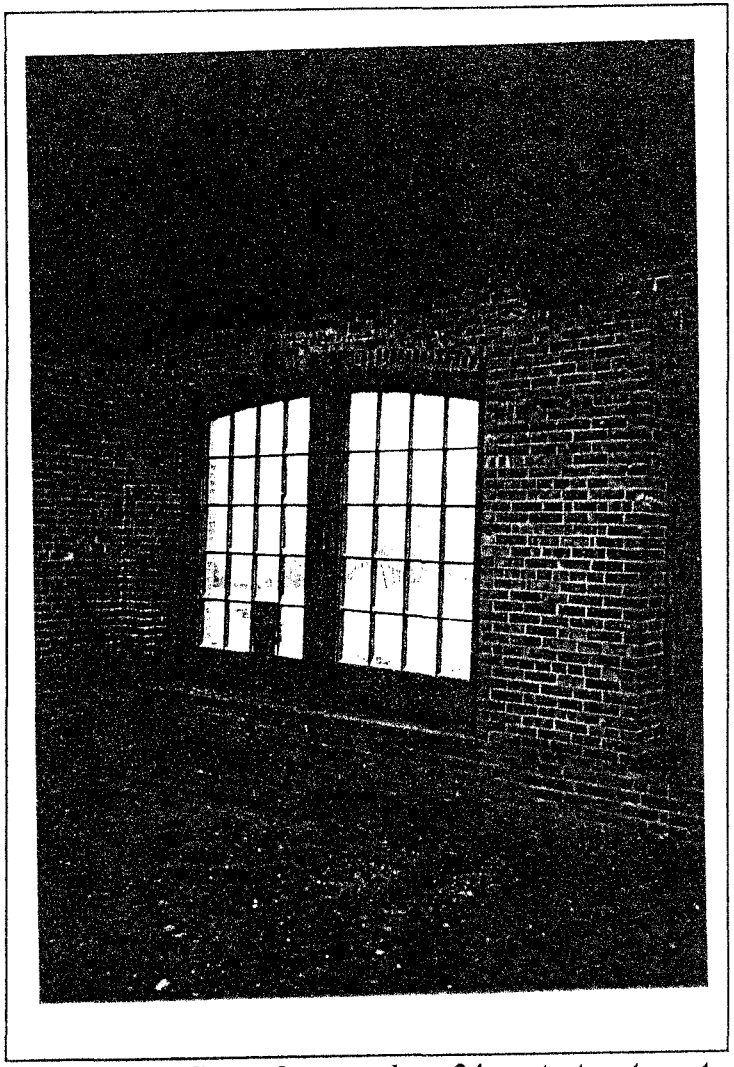


Figure 122. Second story, bay 24, note treatment of interior walls.

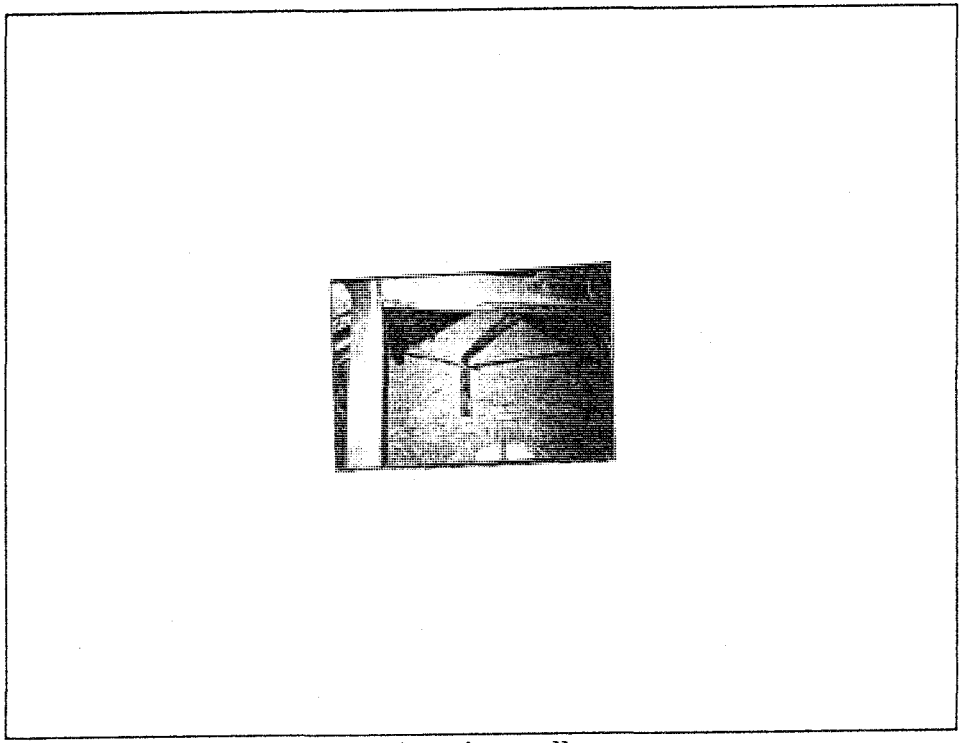


Figure 123. Loft, west-end interior wall.

PARTITION WALLS

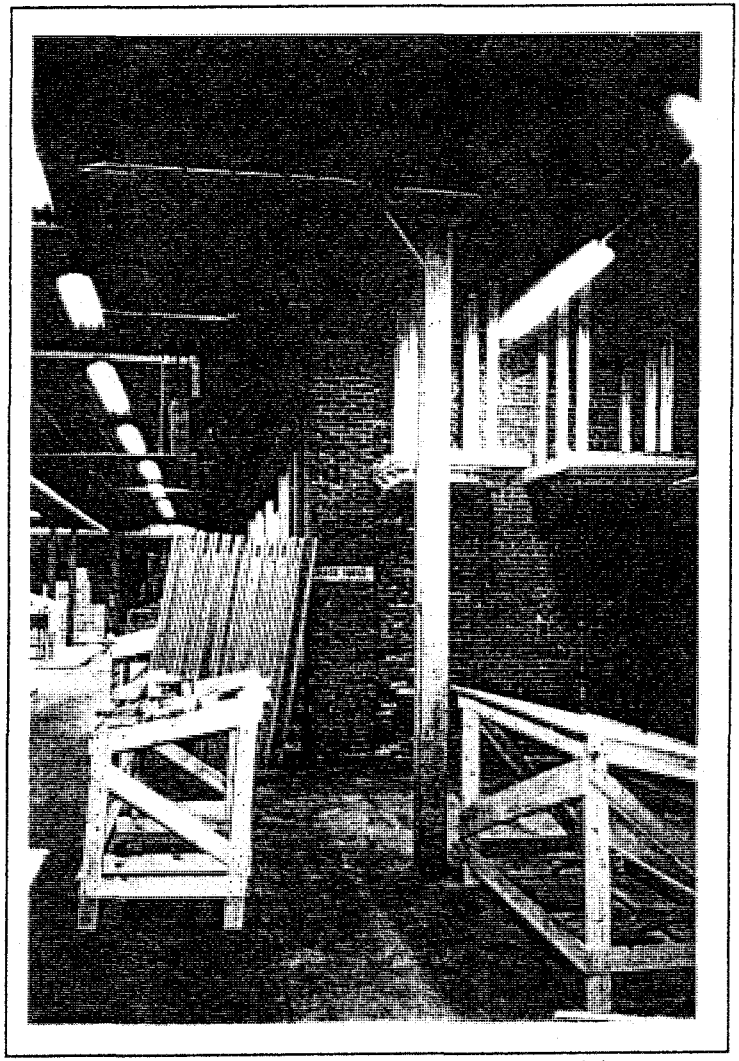


Figure 124. PW2, first story, West Addition, west elevation, south bay.

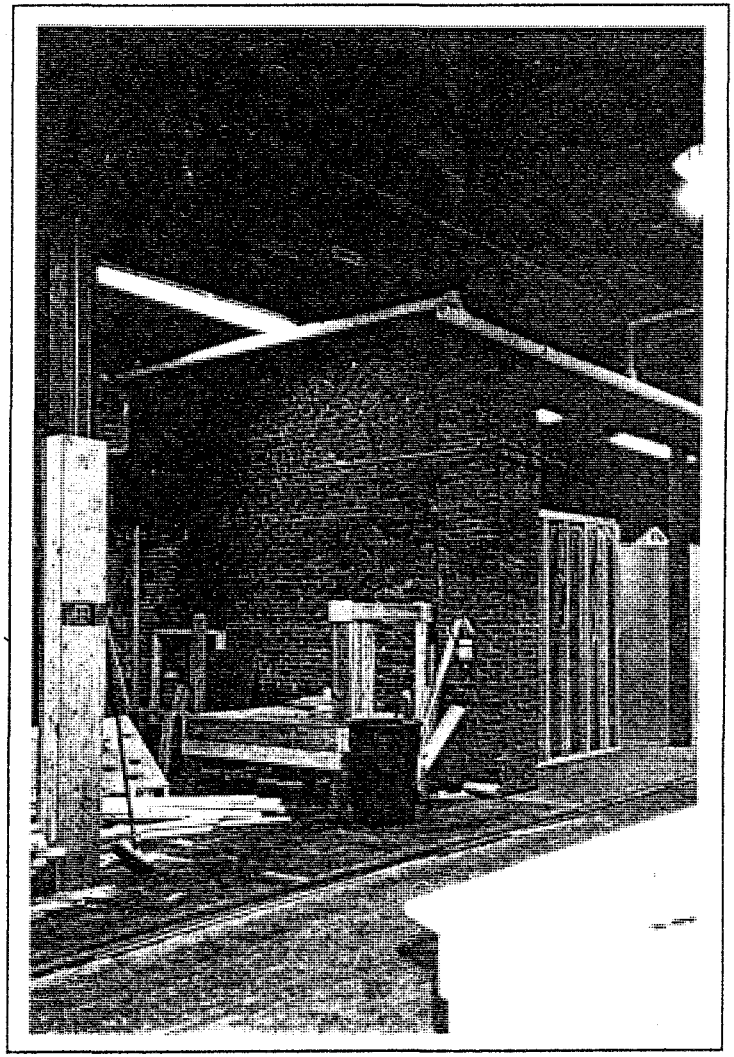


Figure 125. PW2, first story, West Addition, west elevation, north bay.

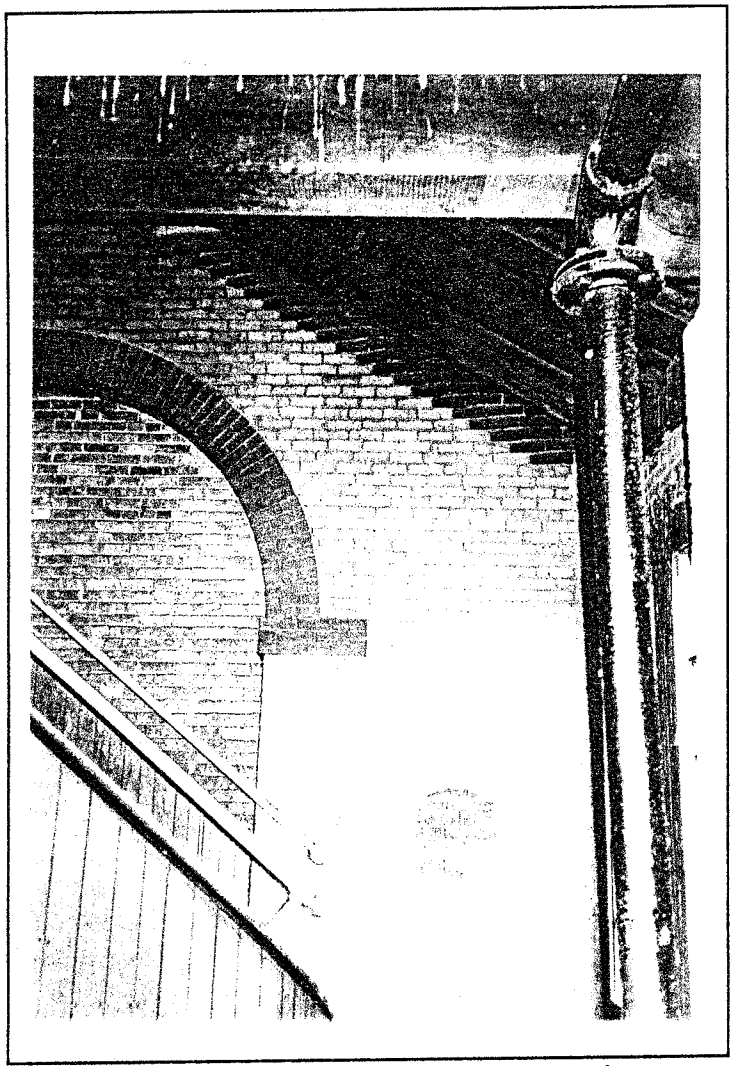


Figure 126. PW3, south arch, west elevation as seen on stairs in bay 36. Note original finishes.

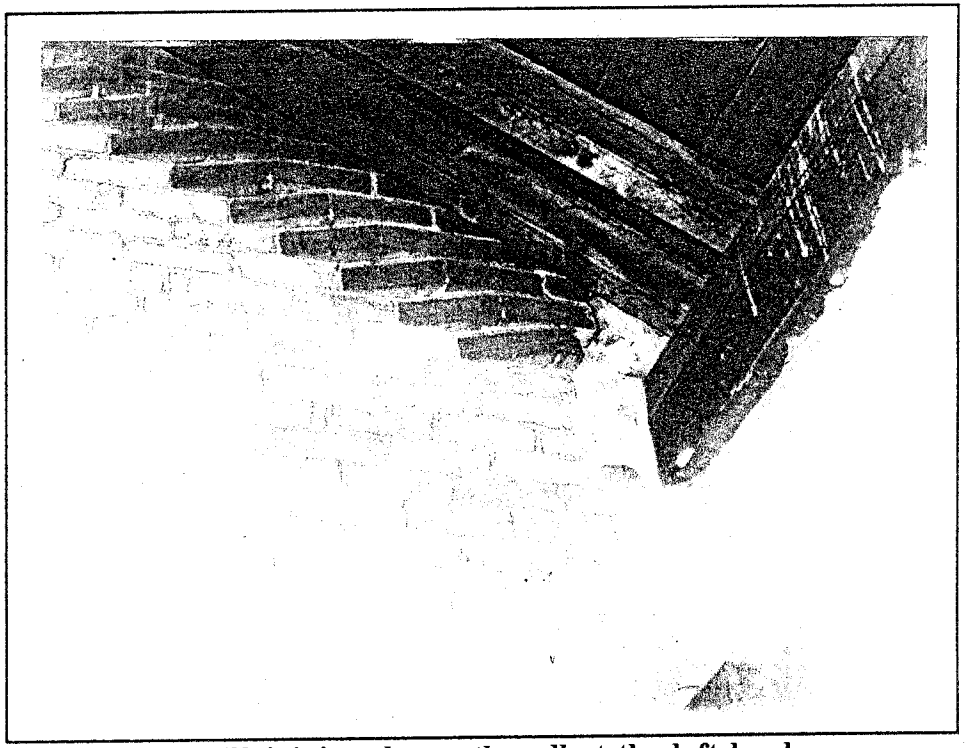


Figure 127. PW3 joining the south wall at the loft level.

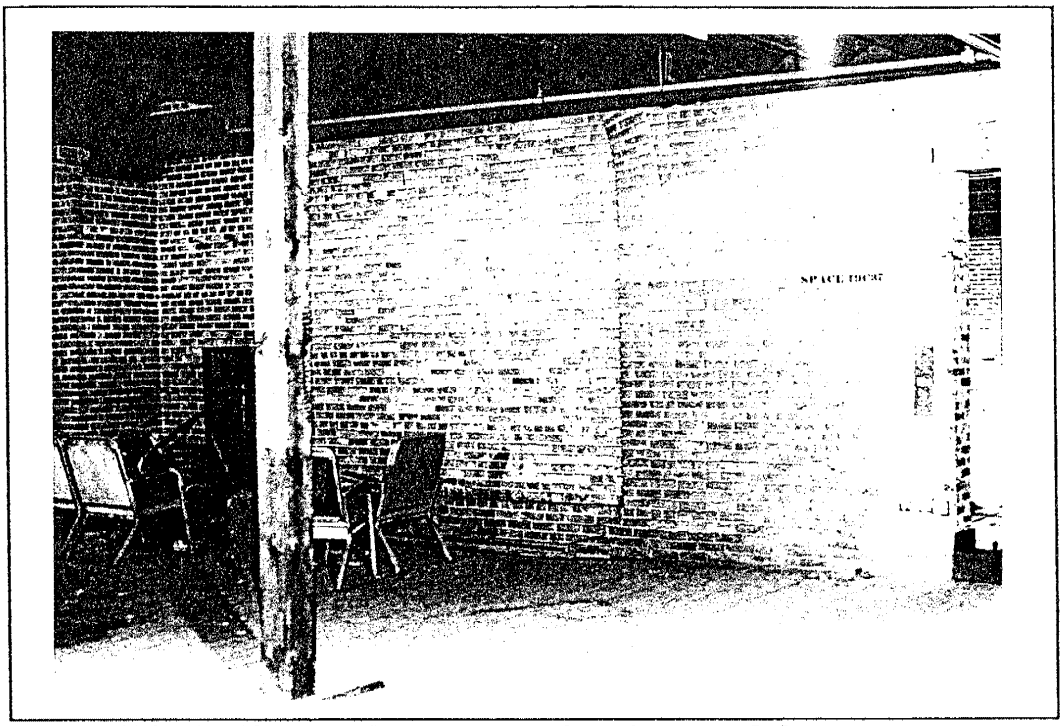


Figure 128. PW3, second story, east elevation, south bay.

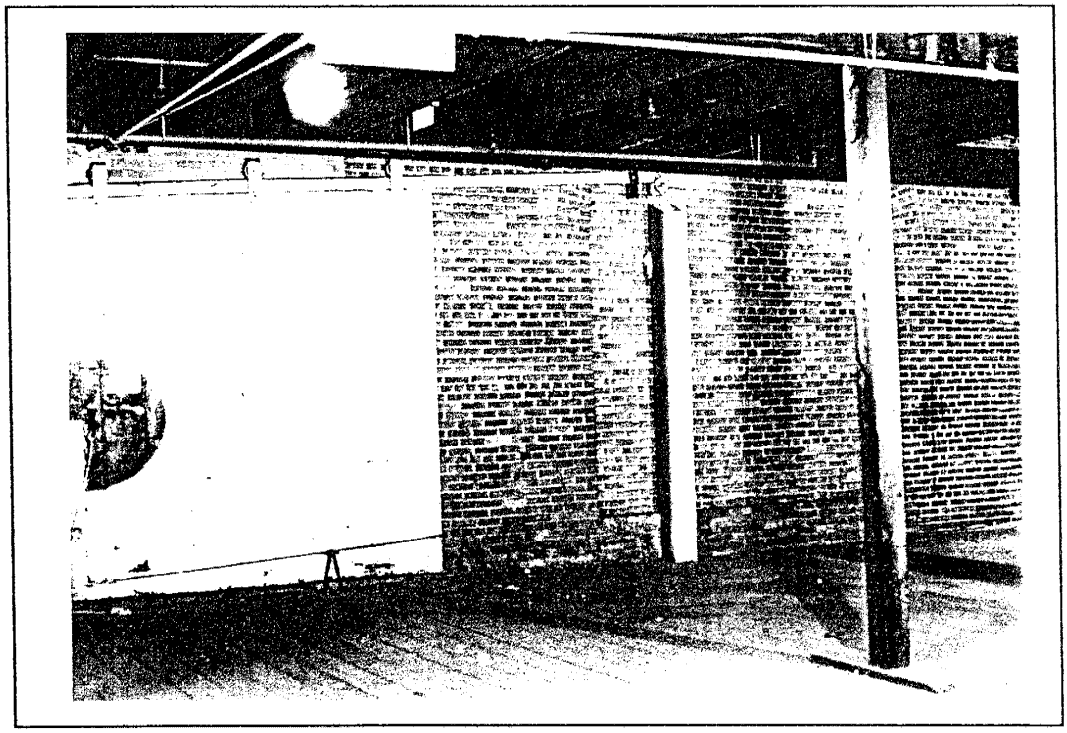


Figure 129. PW3, second story, east elevation, north bay.

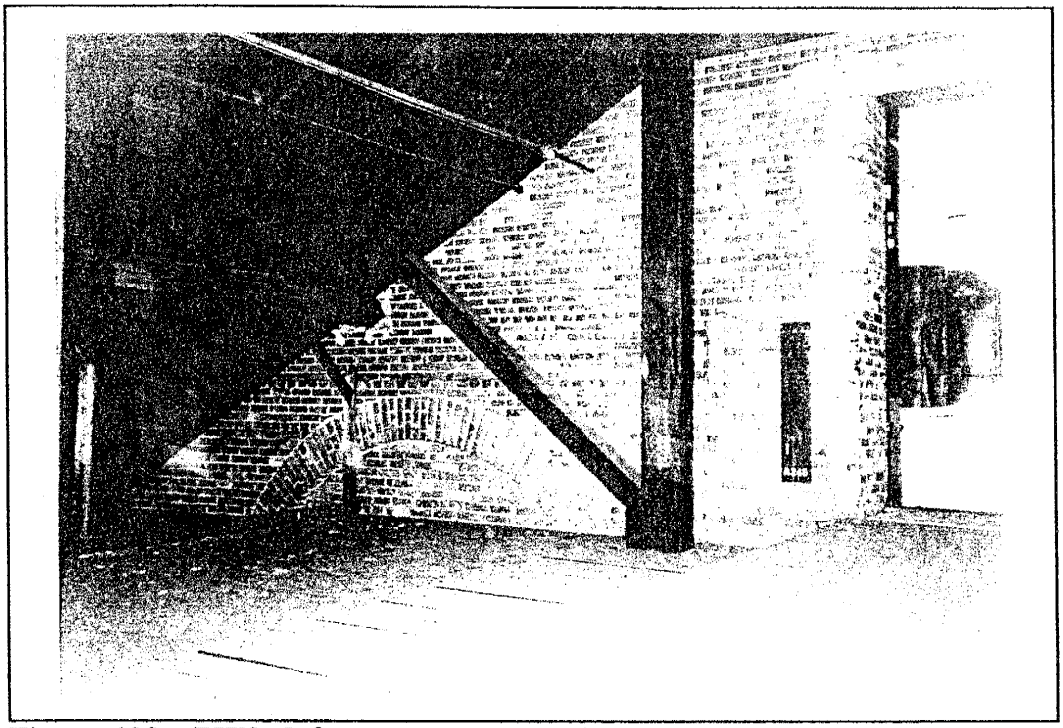


Figure 130. PW3, loft story, east elevation, south bay.

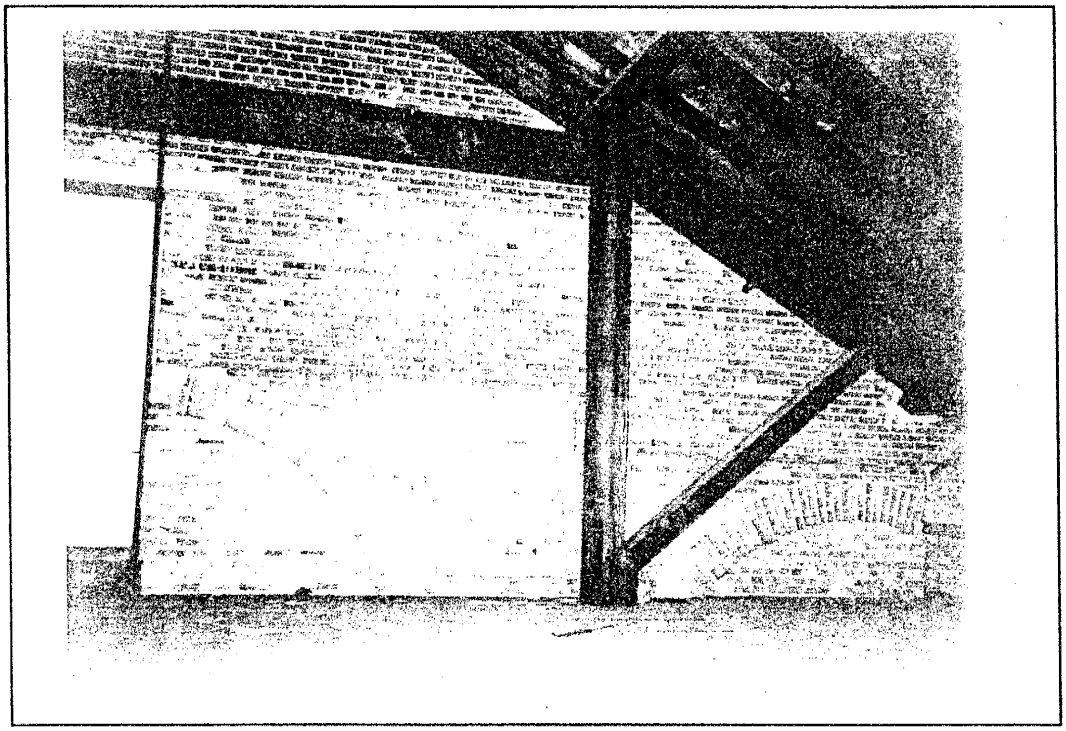


Figure 131. PW3, loft story, east elevation, north bay.

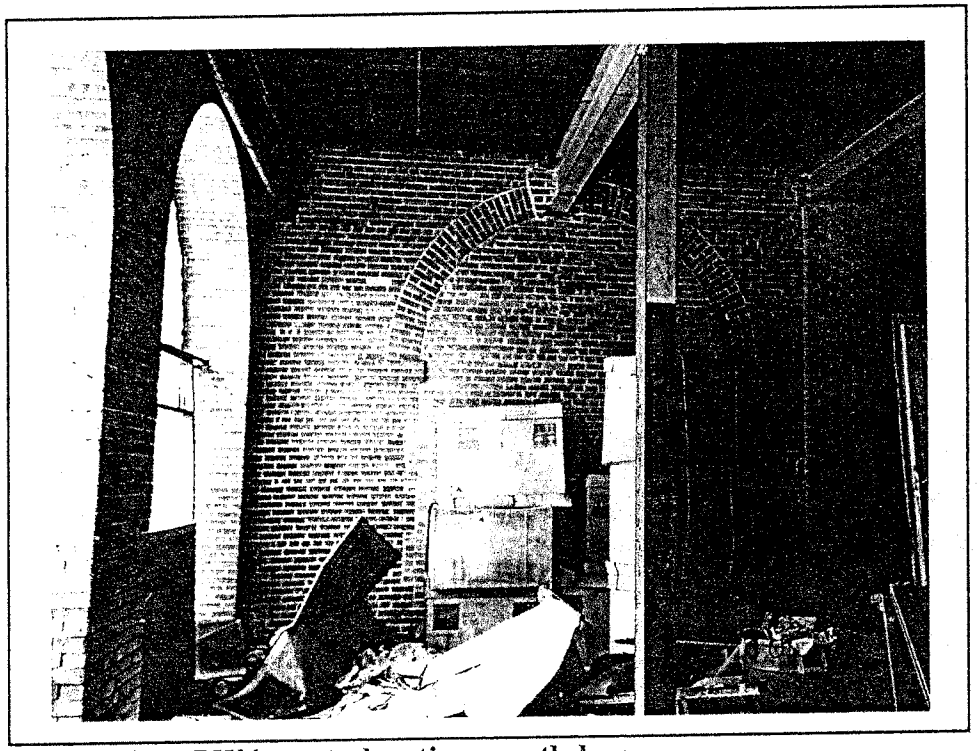


Figure 132. PW4, east elevation, south bay.

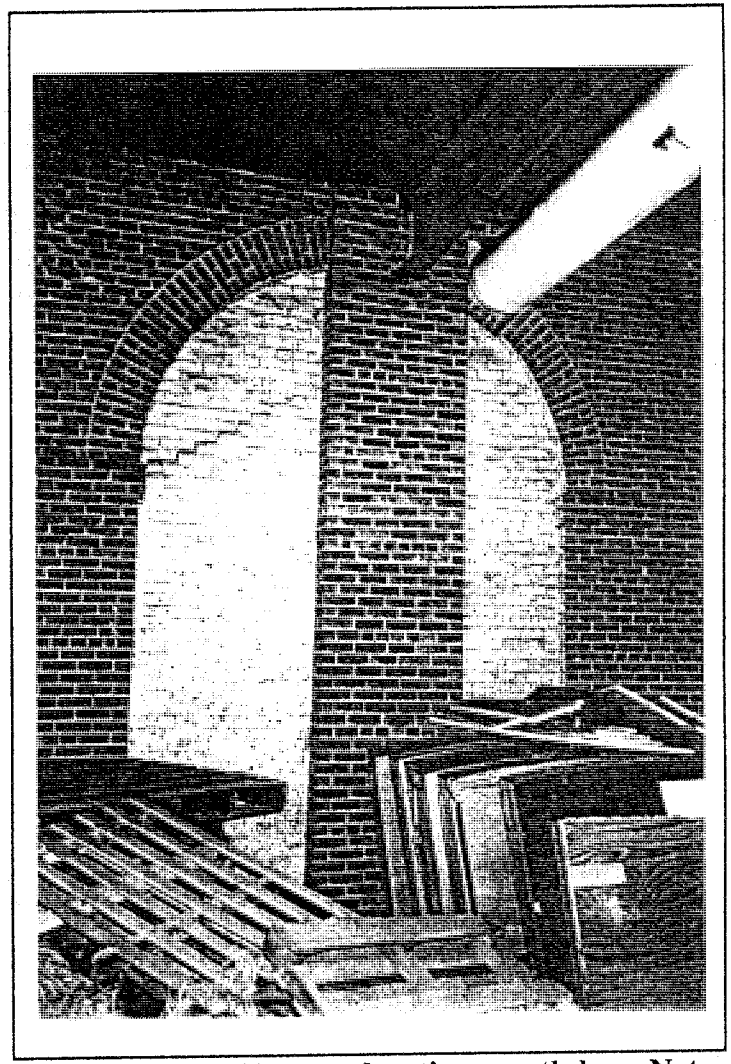


Figure 133. PW4, east elevation, north bay. Note brick pier.

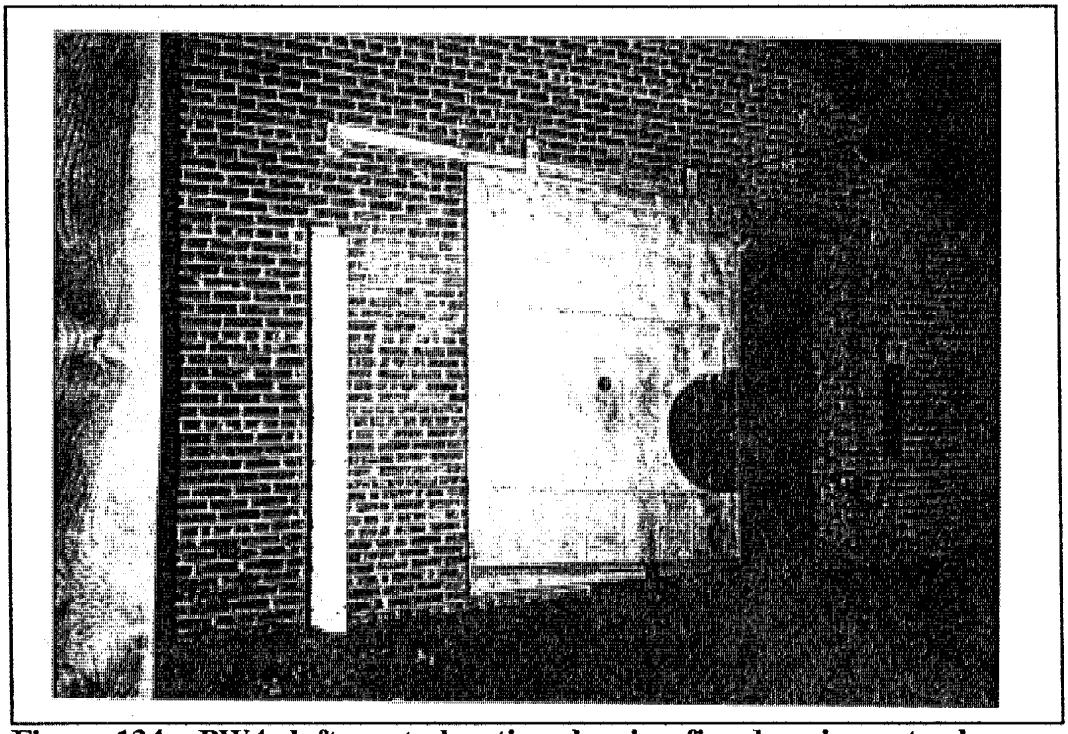


Figure 134. PW4, loft, east elevation showing fire door in center bay.

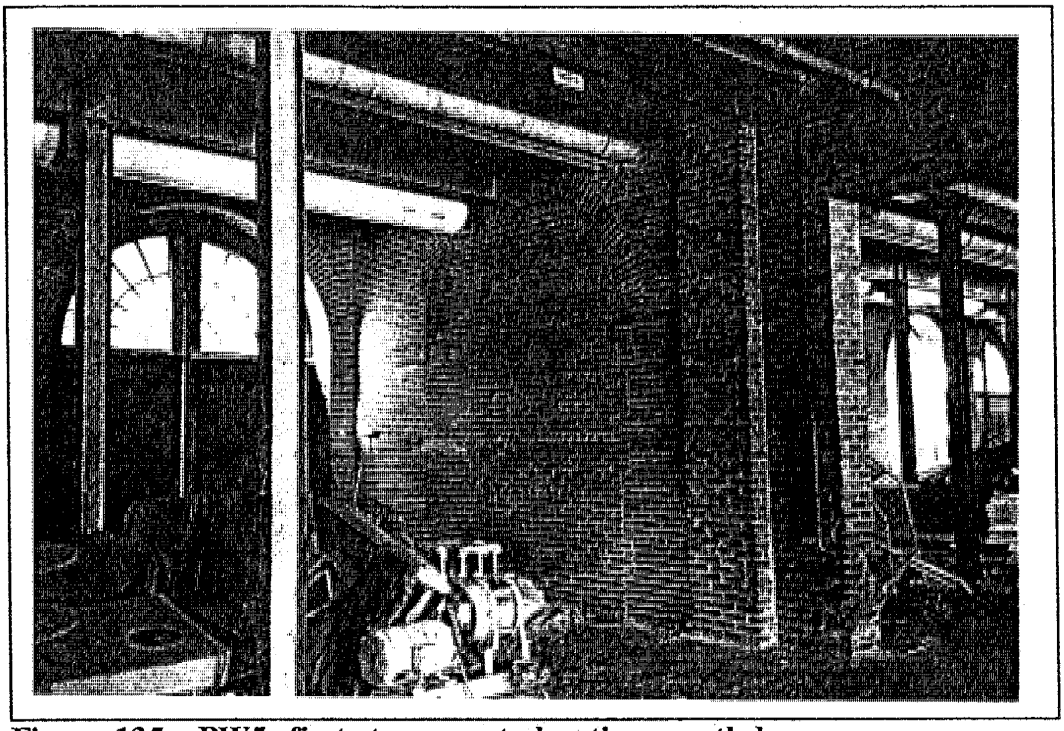


Figure 135. PW5, first story, west elevation, north bay.

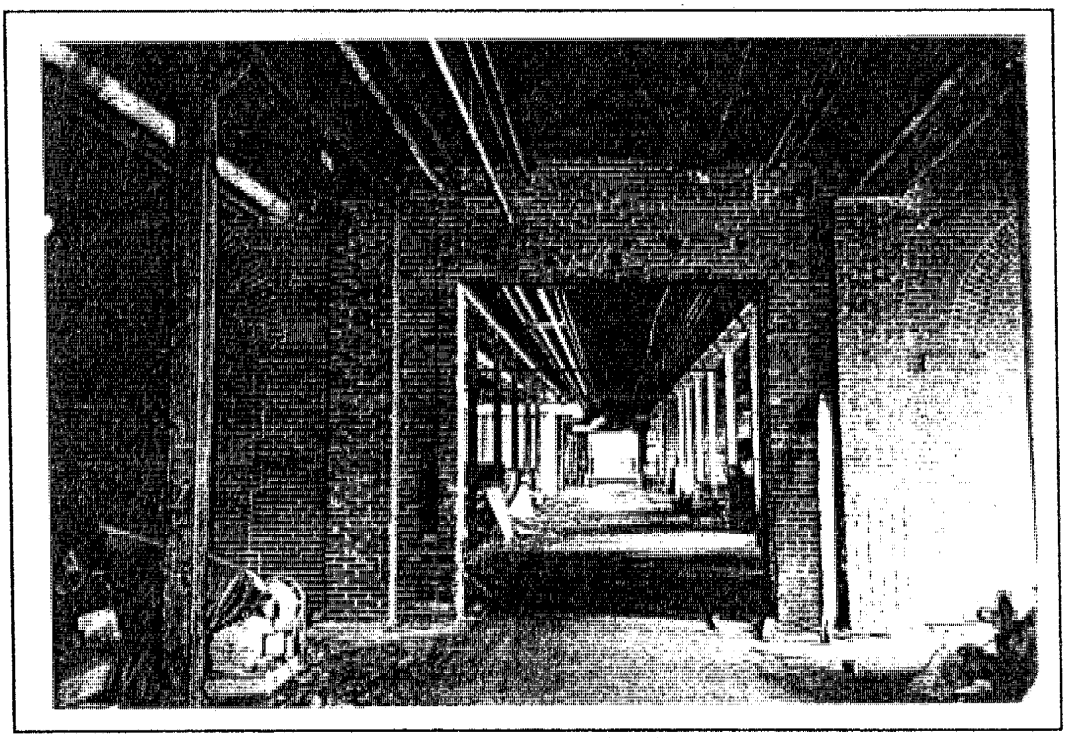


Figure 136. PW5, first story, west elevation, center bay.

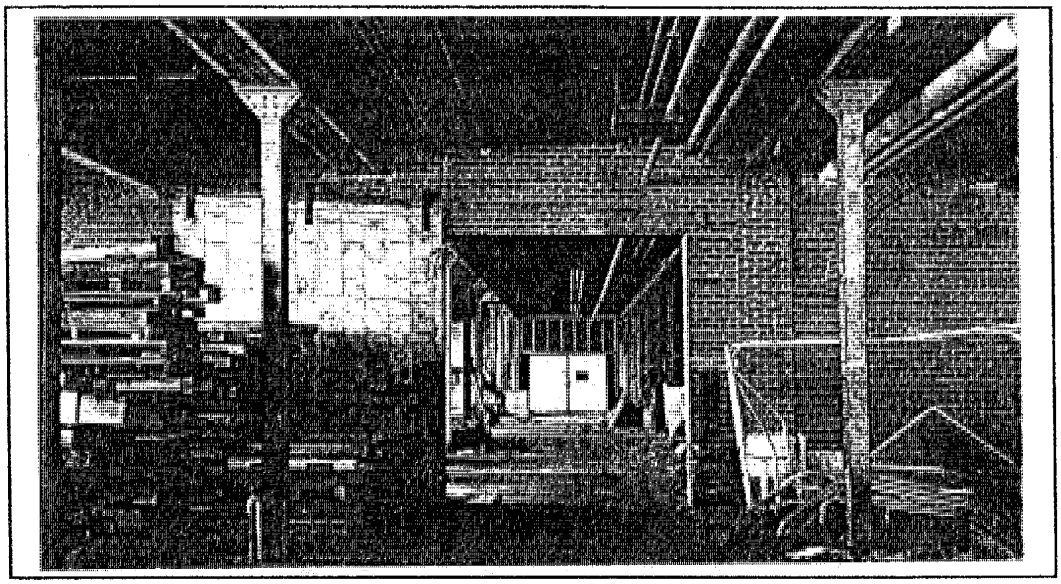


Figure 137. PW5, first story, east elevation, center bay.

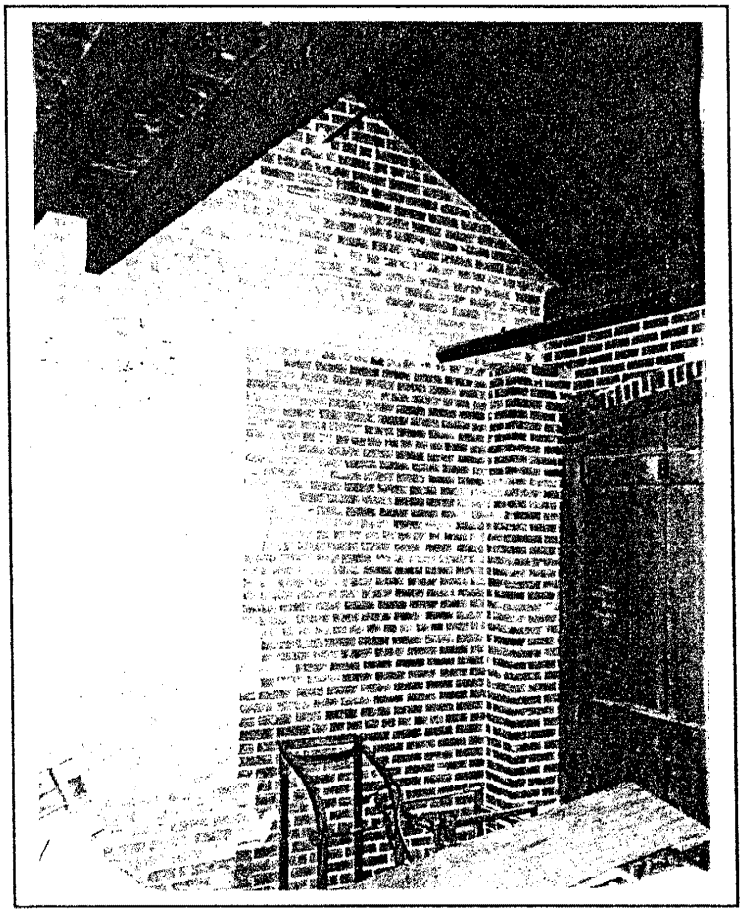


Figure 138. PW5, second story, east elevation, north bay. Note brick infill of former door.

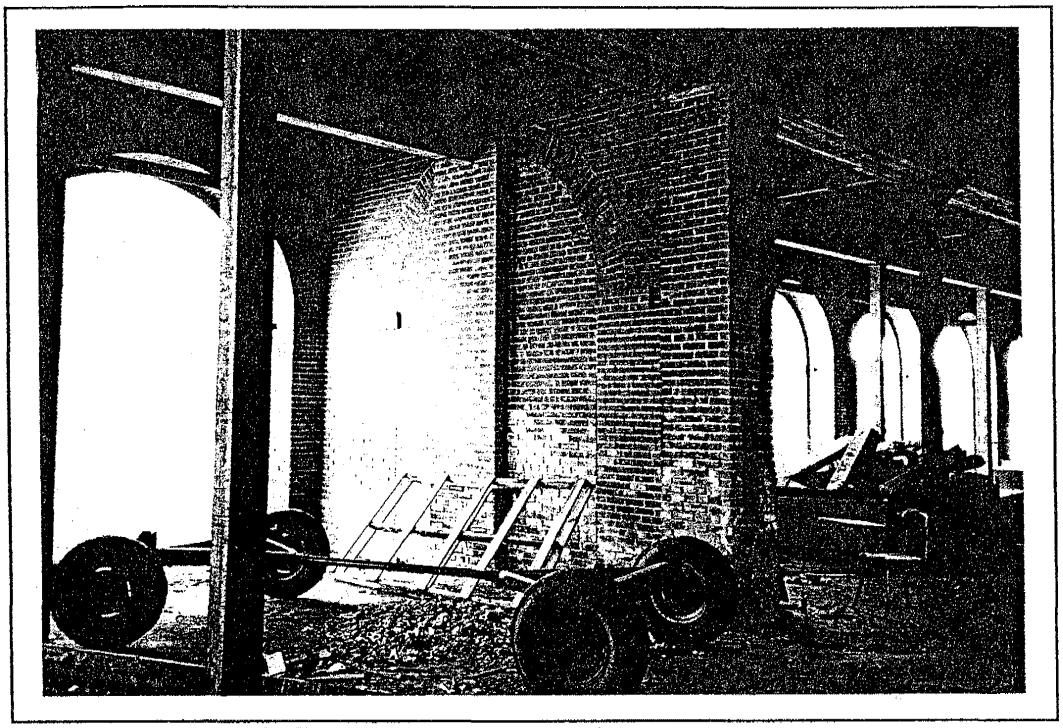


Figure 139. PW6, first story, east elevation, south bay.

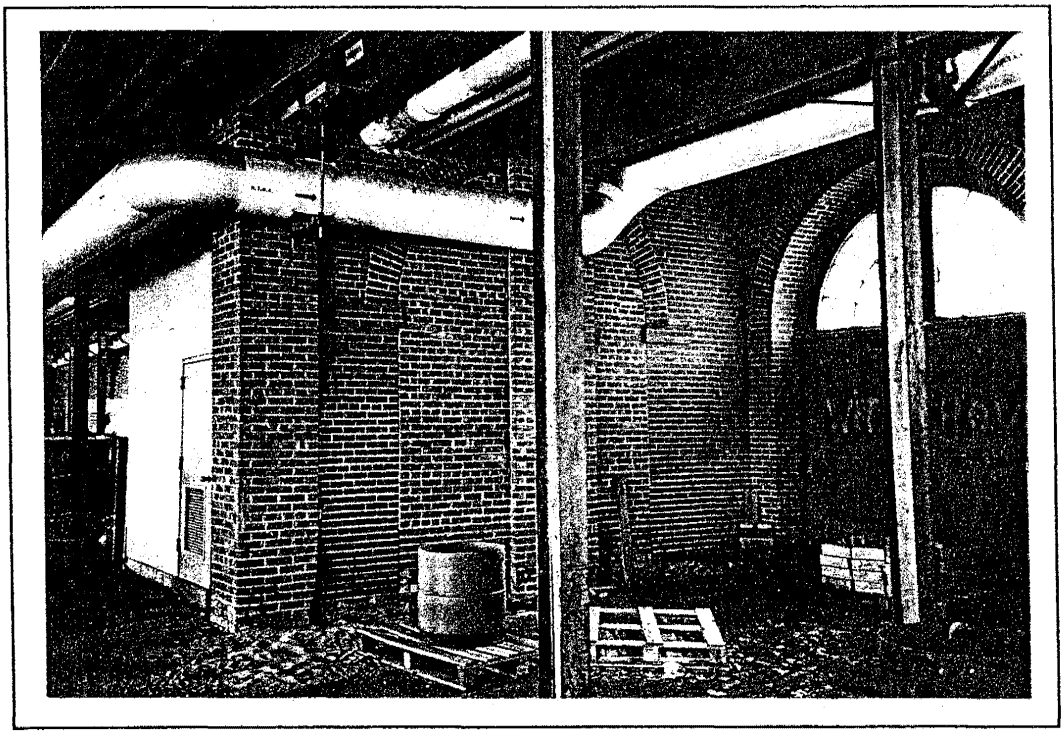


Figure 140. PW6, first story, east elevation, north bay.

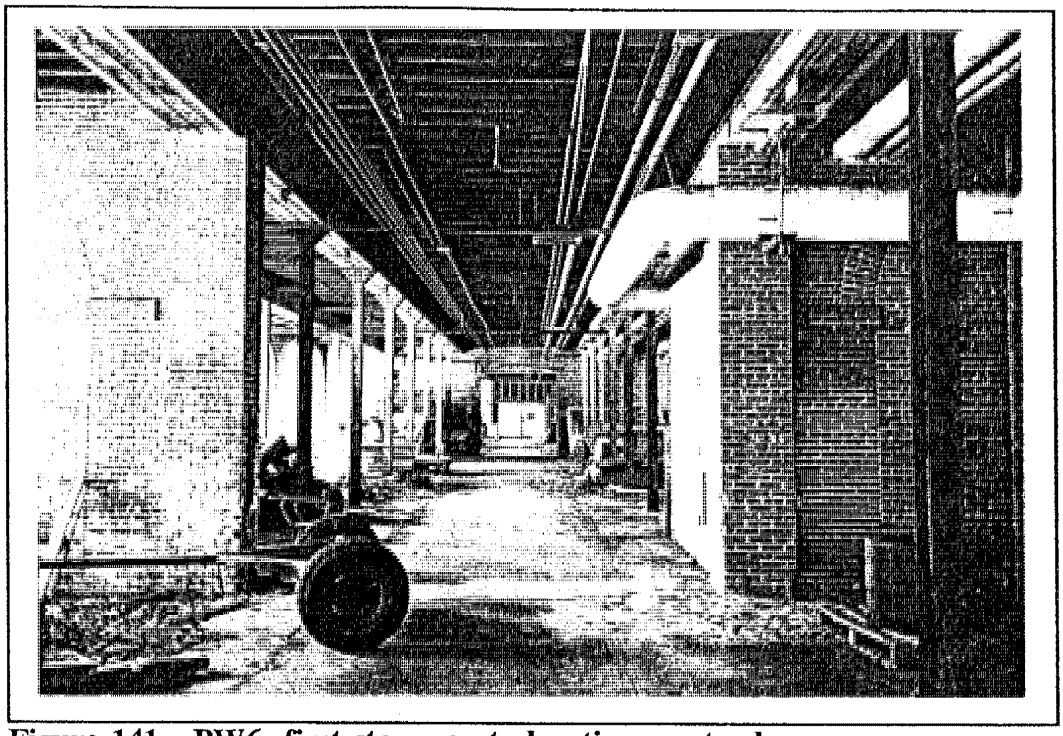


Figure 141. PW6, first story, east elevation, center bay.

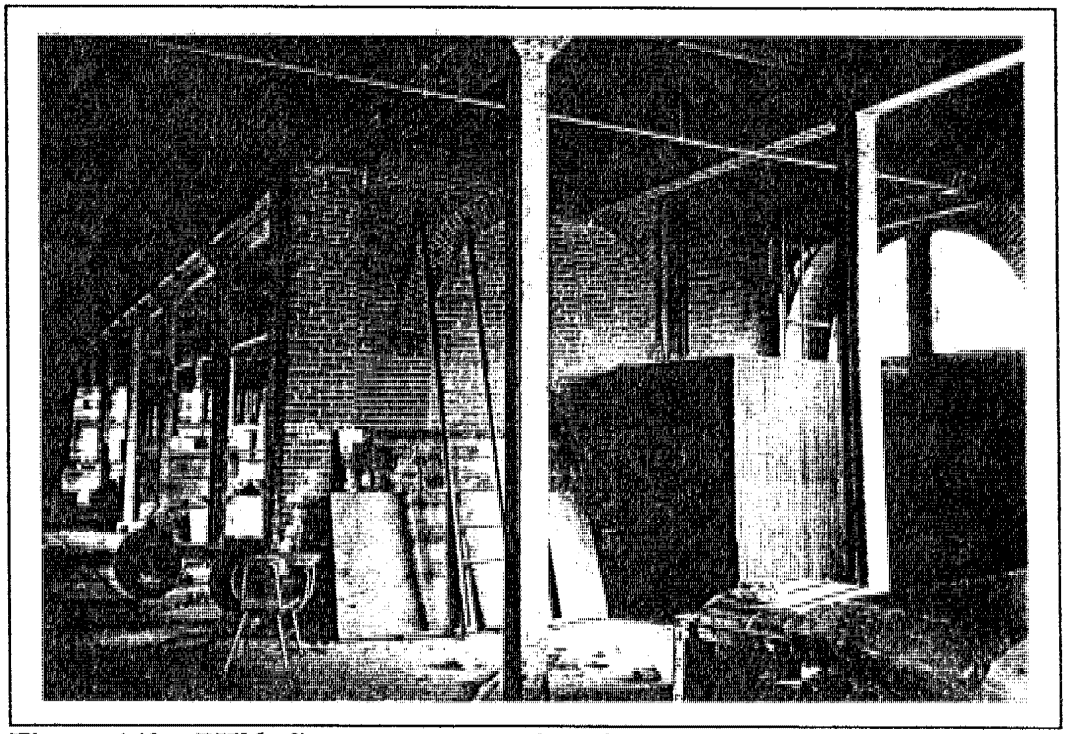


Figure 142. PW6, first story, west elevation, south bay.

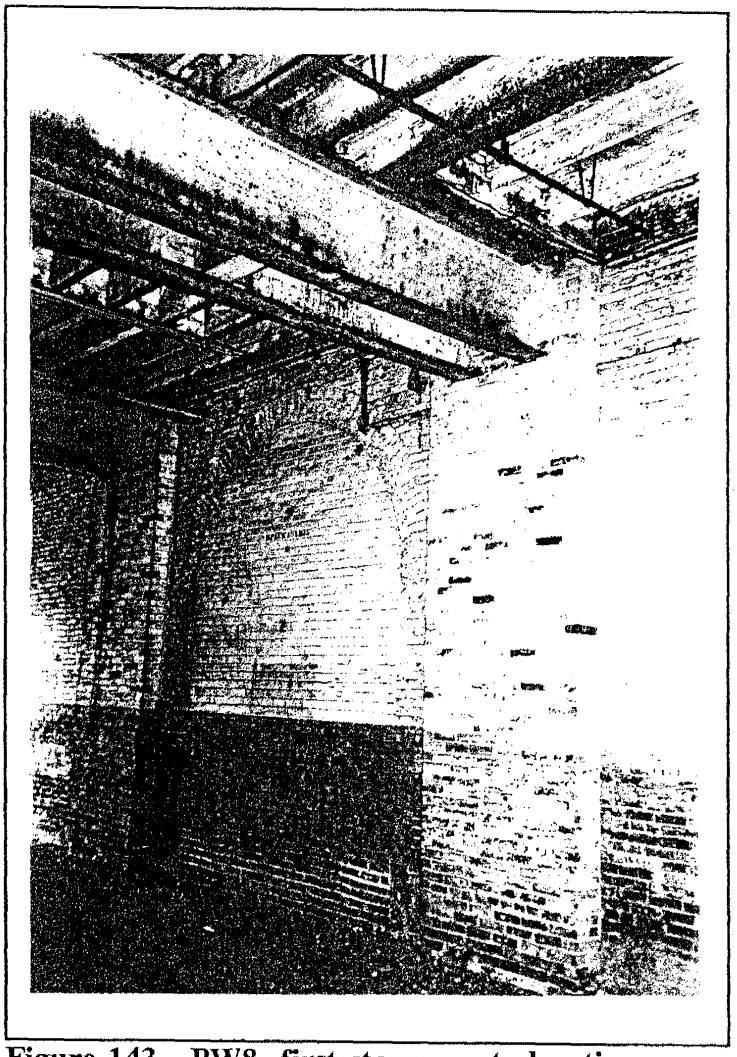


Figure 143. PW8, first story, west elevation, center bay.

FRAMING

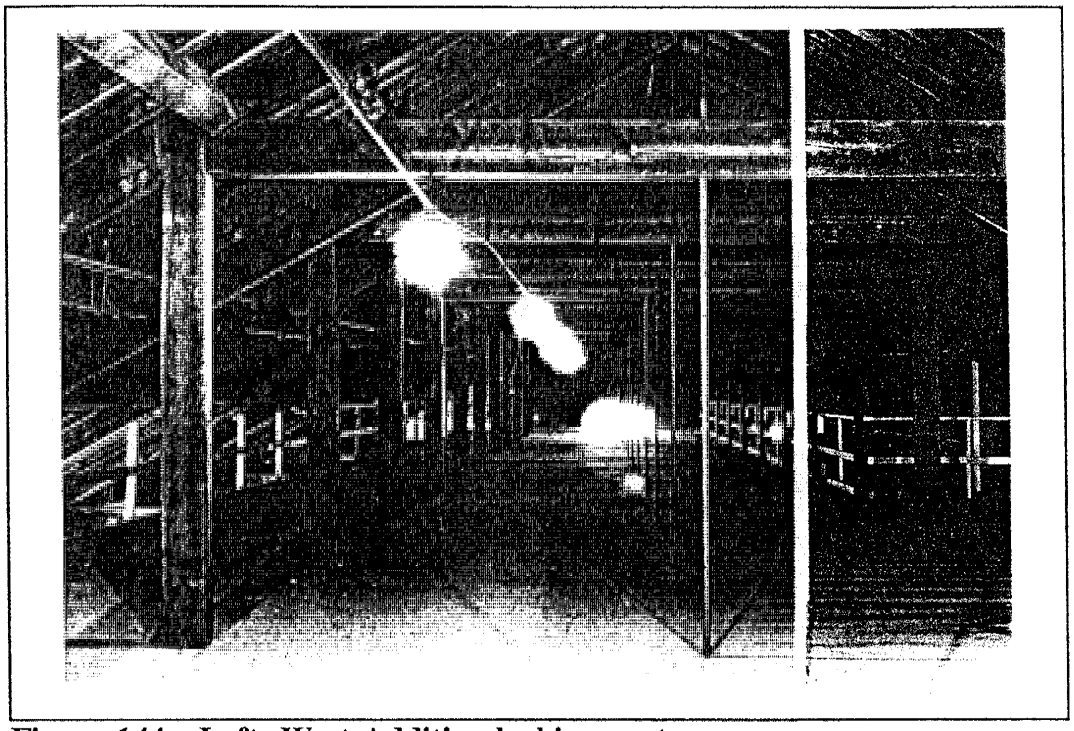


Figure 144. Loft, West Addition looking west.

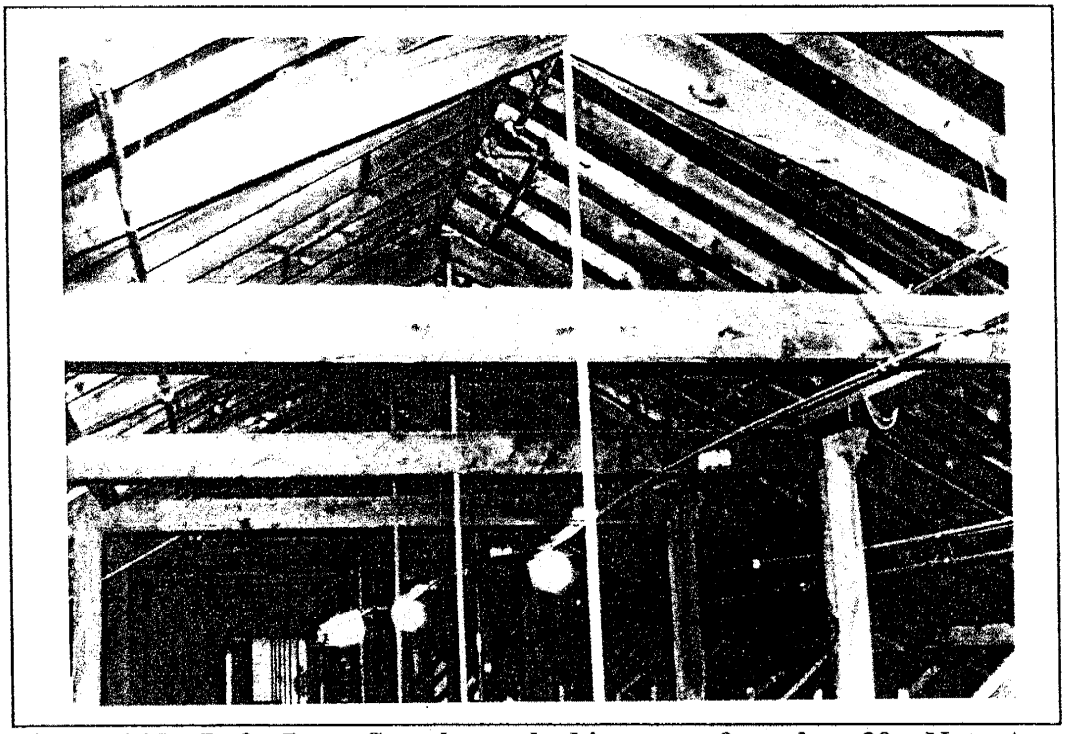


Figure 145. Loft, Long Storehouse looking east, from bay 39. Note A-frame support for center tie-rod.

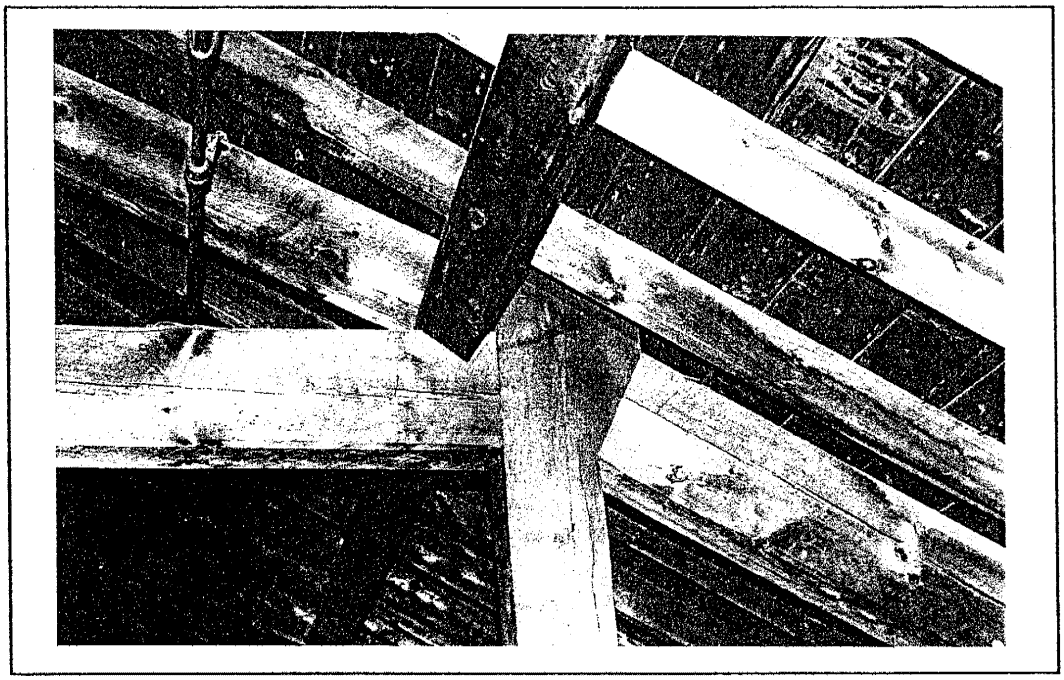


Figure 146. Loft, West Addition, queen post, bay 23.

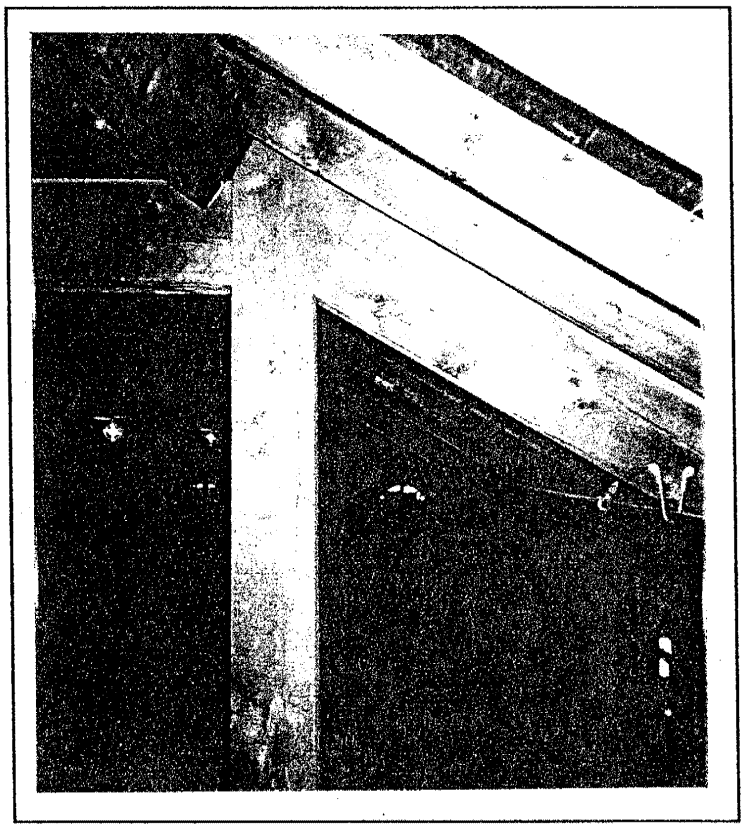


Figure 147. Loft, West Addition, queen post, bay 23.

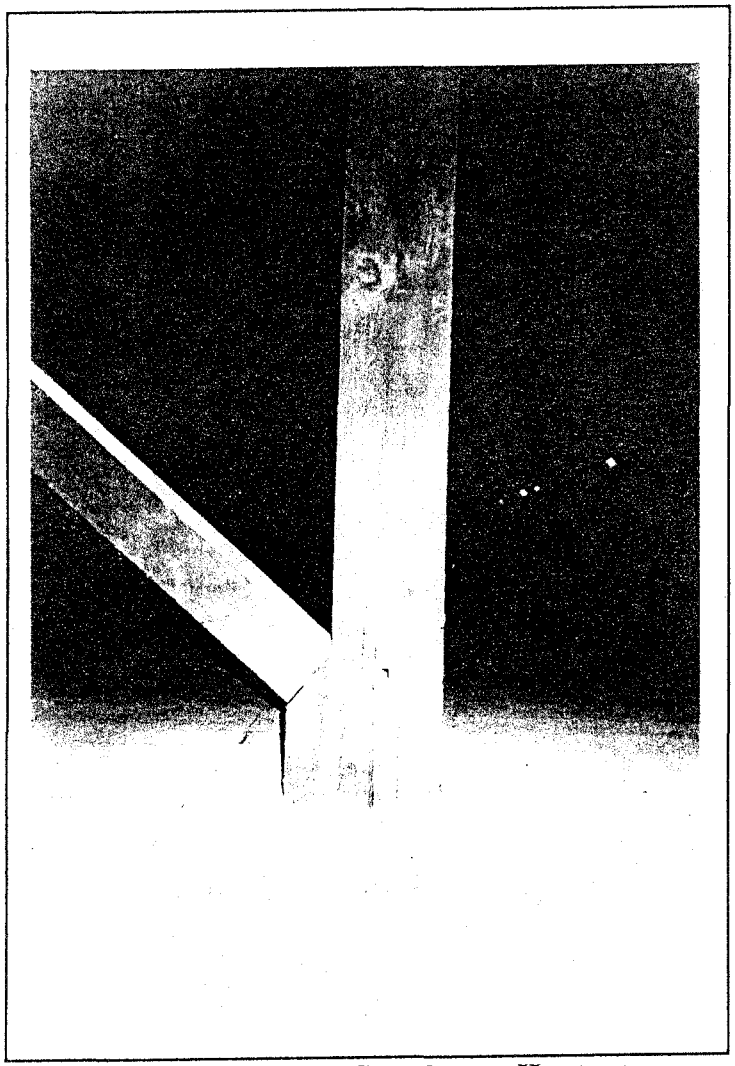


Figure 148. Loft, Long Storehouse II, strut joining queen post, bay 37. Note iron stirrup.

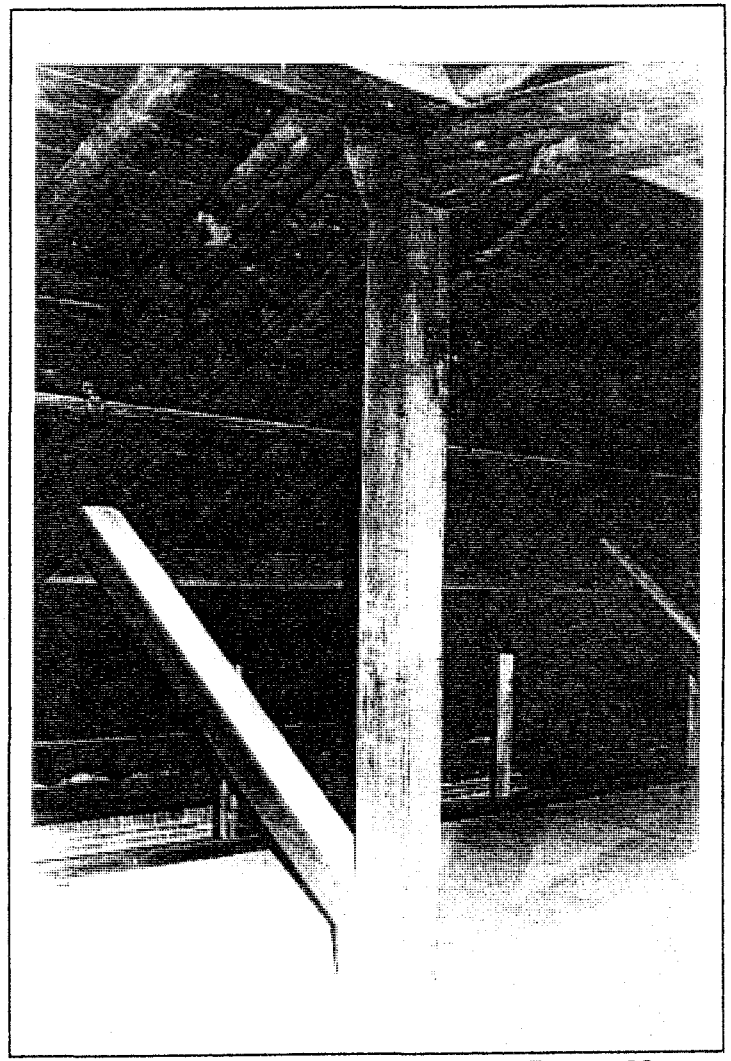


Figure 149. Loft, Long Storehouse II, bay 39. Queen post and strut.

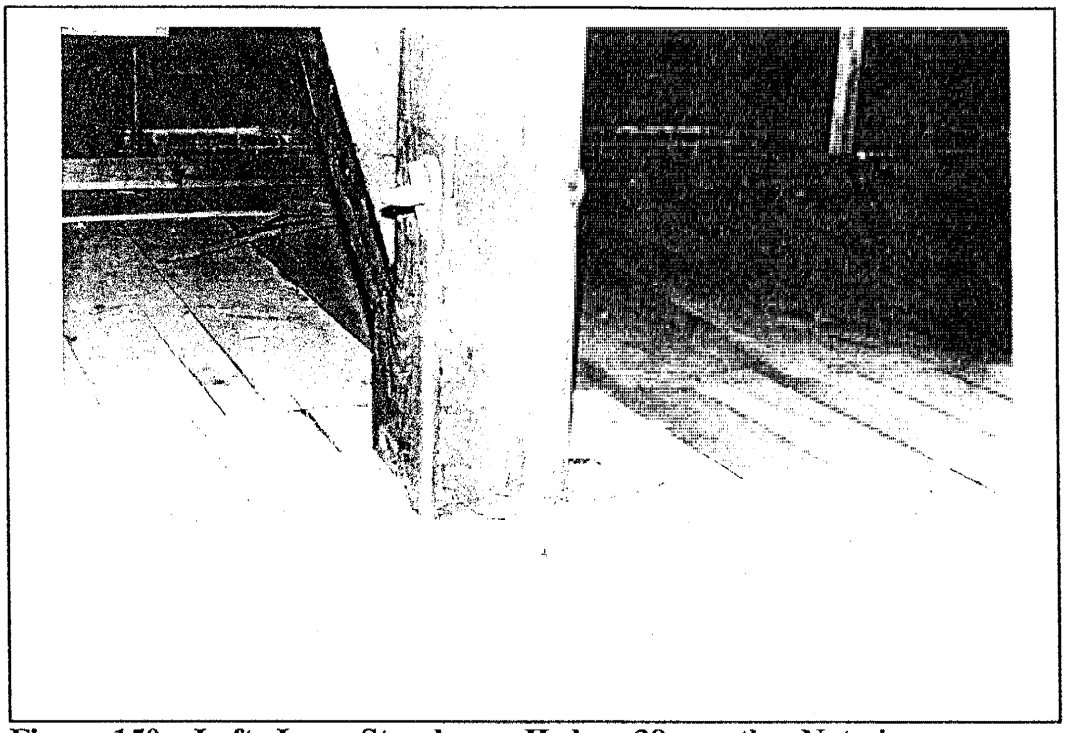


Figure 150. Loft, Long Storehouse II, bay 39, north. Note iron stirrups.

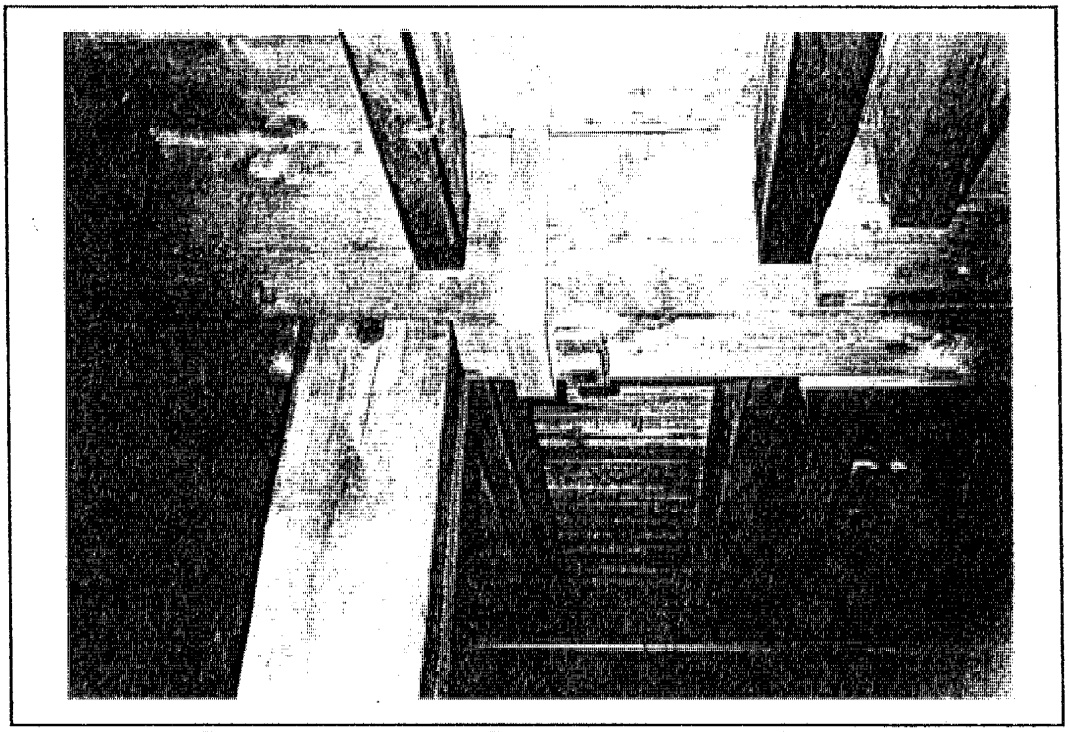


Figure 151. Second story, Long Storehouse II, bay 39, iron stirrup supporting bottom chord.

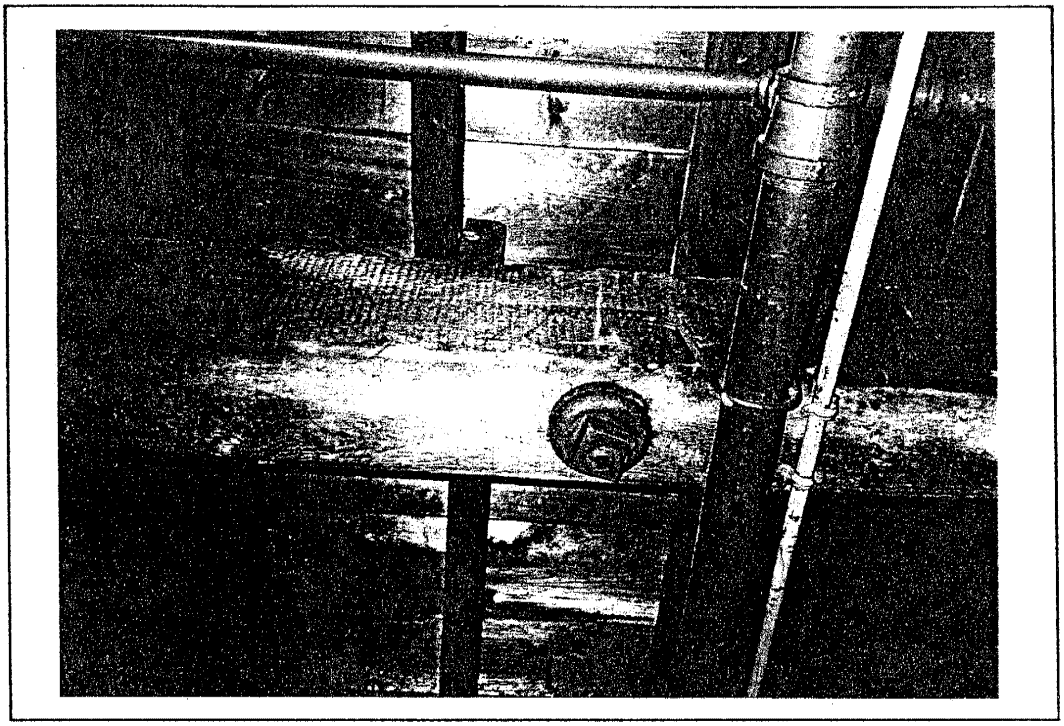


Figure 152. Second story, West Addition. Iron nut and washer fastening loft floor framing center tie-rod to underside of bottom chord.

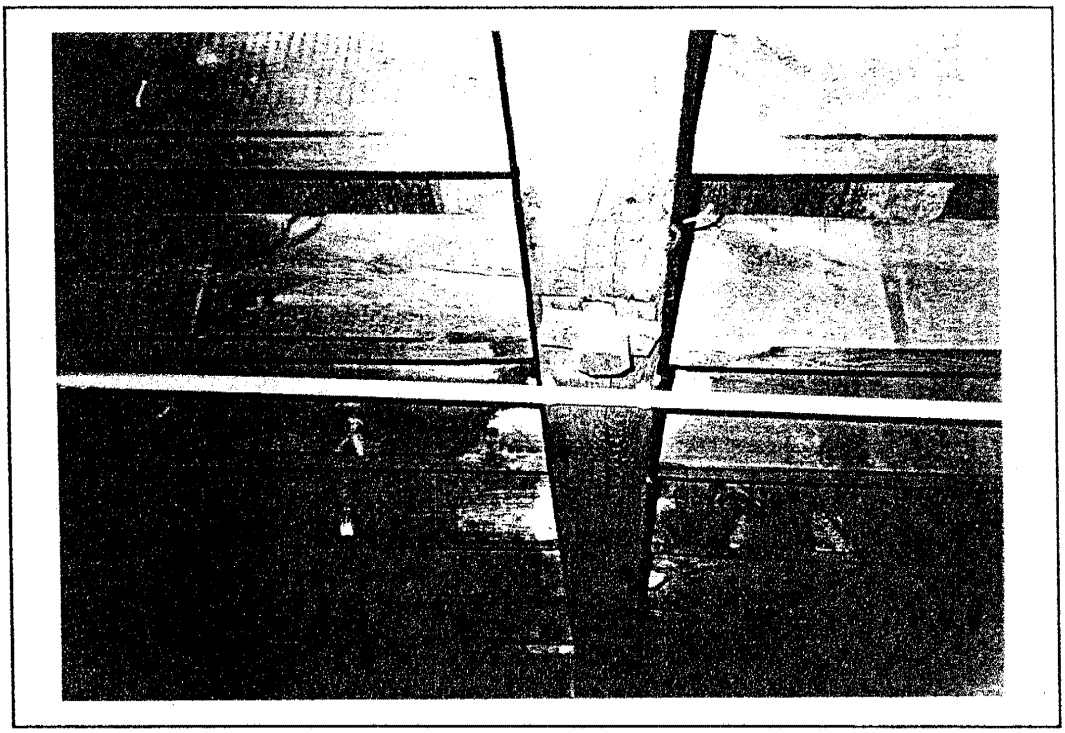


Figure 153. Second story, Long Storehouse II. Iron nut and washer fastening loft framing's center tie-rod to underside of bottom chord.

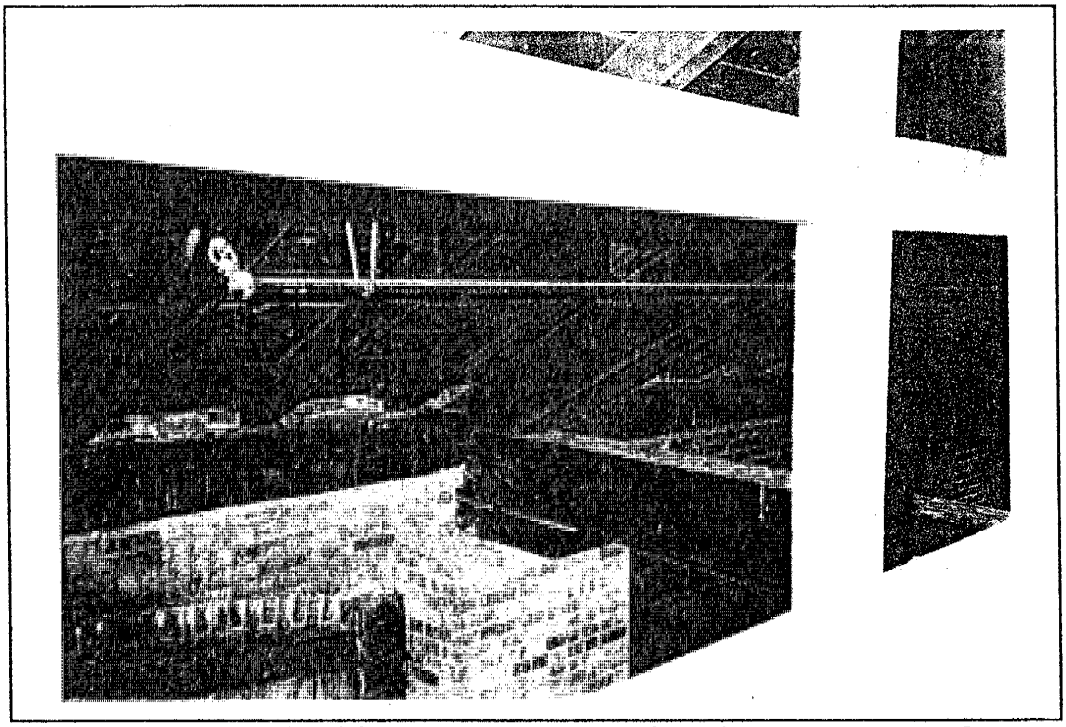


Figure 154. West Addition, north wall showing plate, common rafters, bottom chord, truss rafter and second-story brick pier.

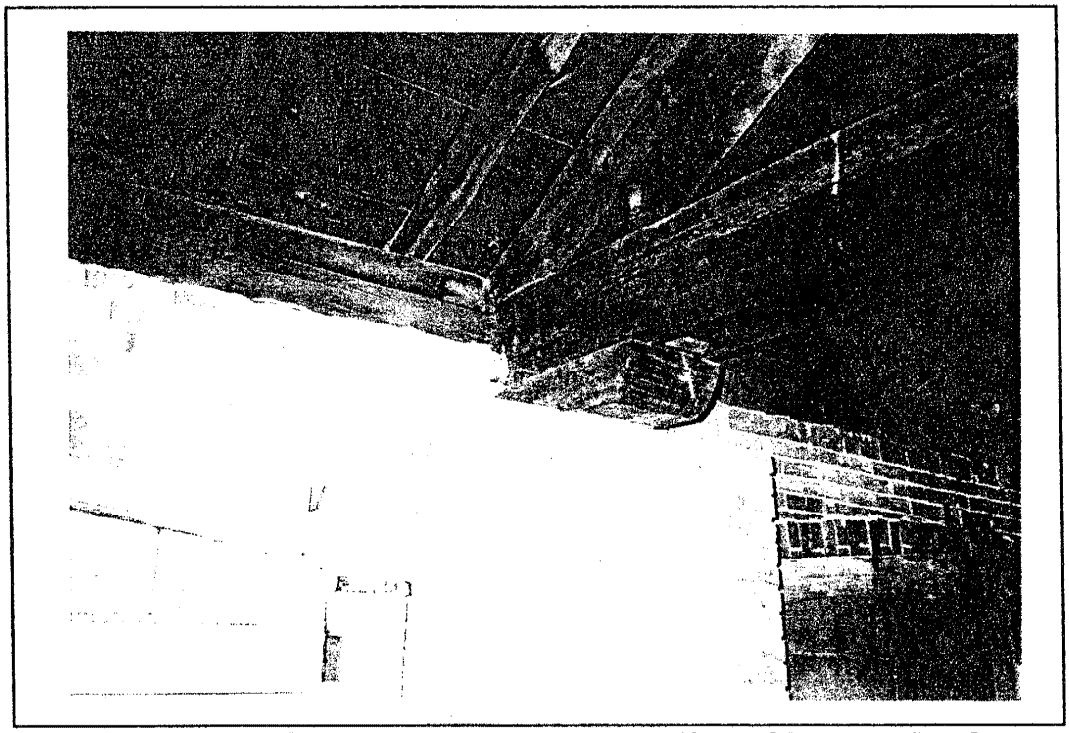


Figure 155. Long Storehouse II, bay 55/57. View of bottom chord, cushion, and brick pier.

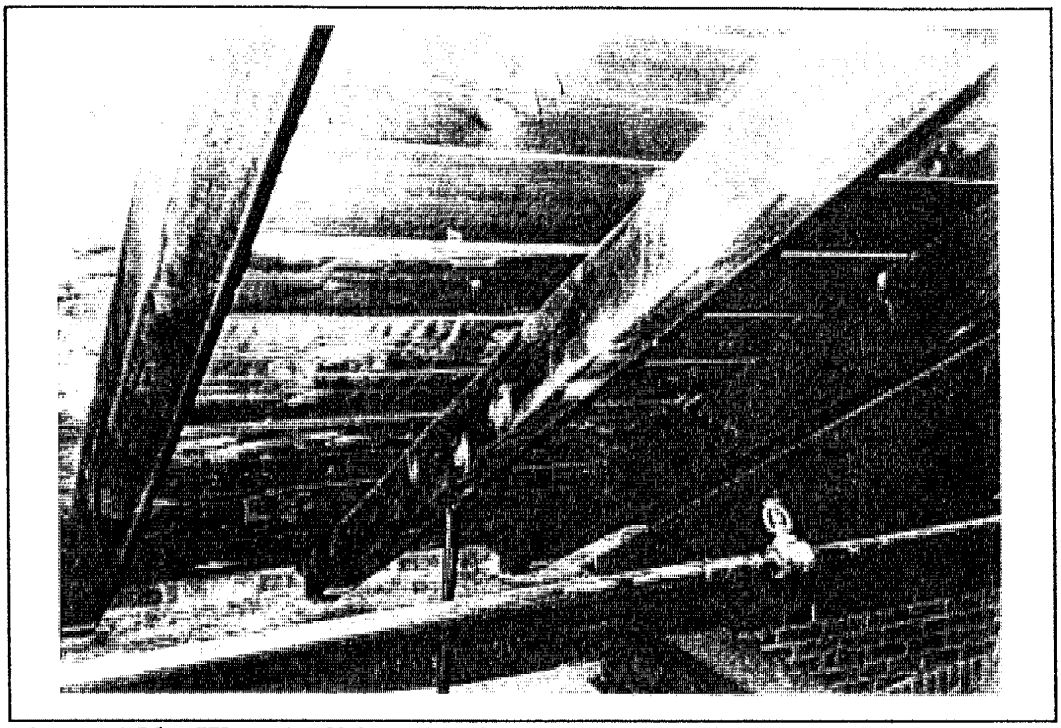


Figure 156. West Addition, detail of common rafters notching into plate and lapping over brick cornice.

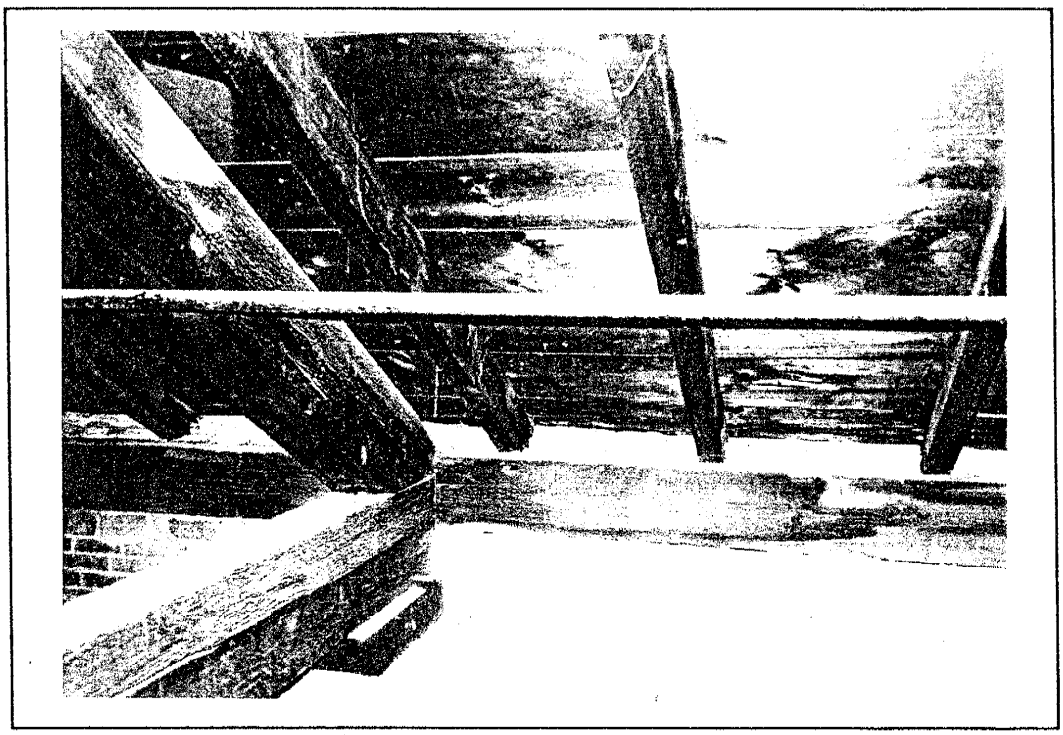


Figure 157. West Addition, north side wall. Detail of common rafters, plate, truss rafter and bottom chord.

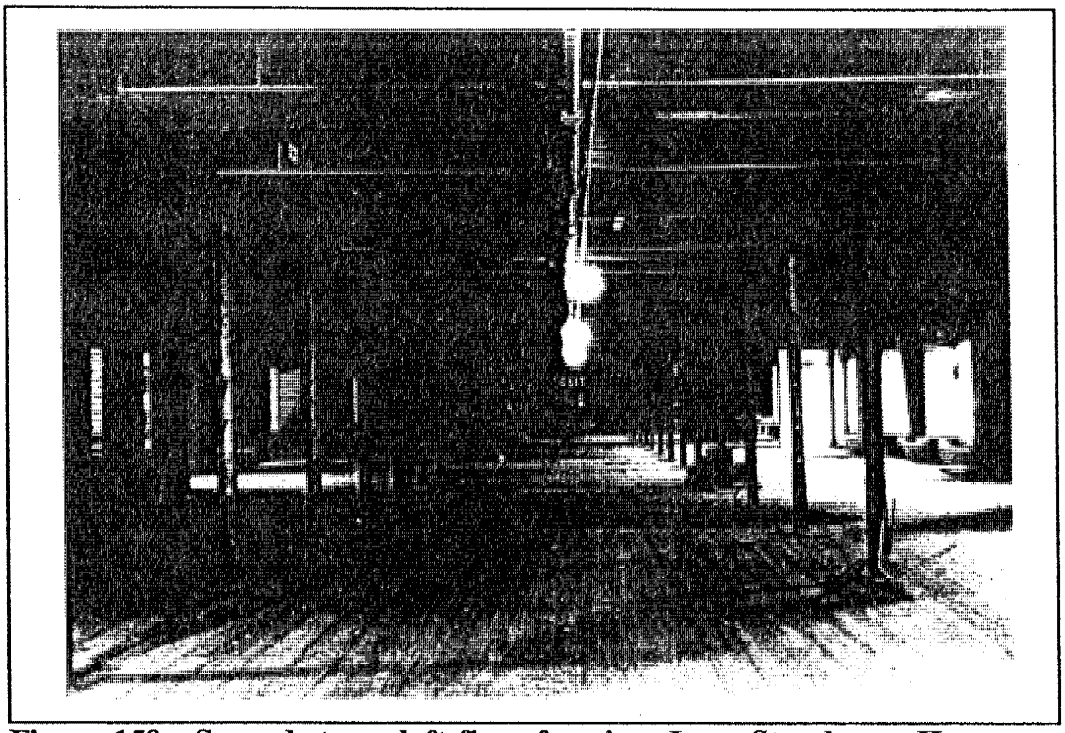


Figure 158. Second story, loft floor framing, Long Storehouse II looking east.

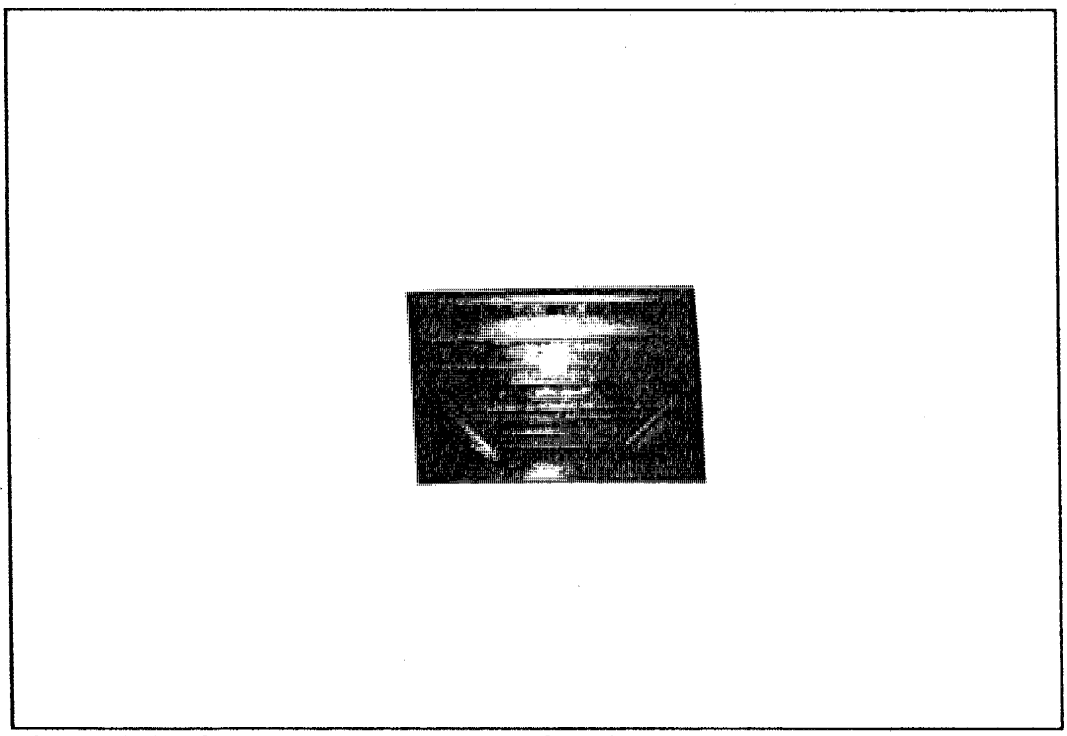


Figure 159. Second story, loft floor framing.

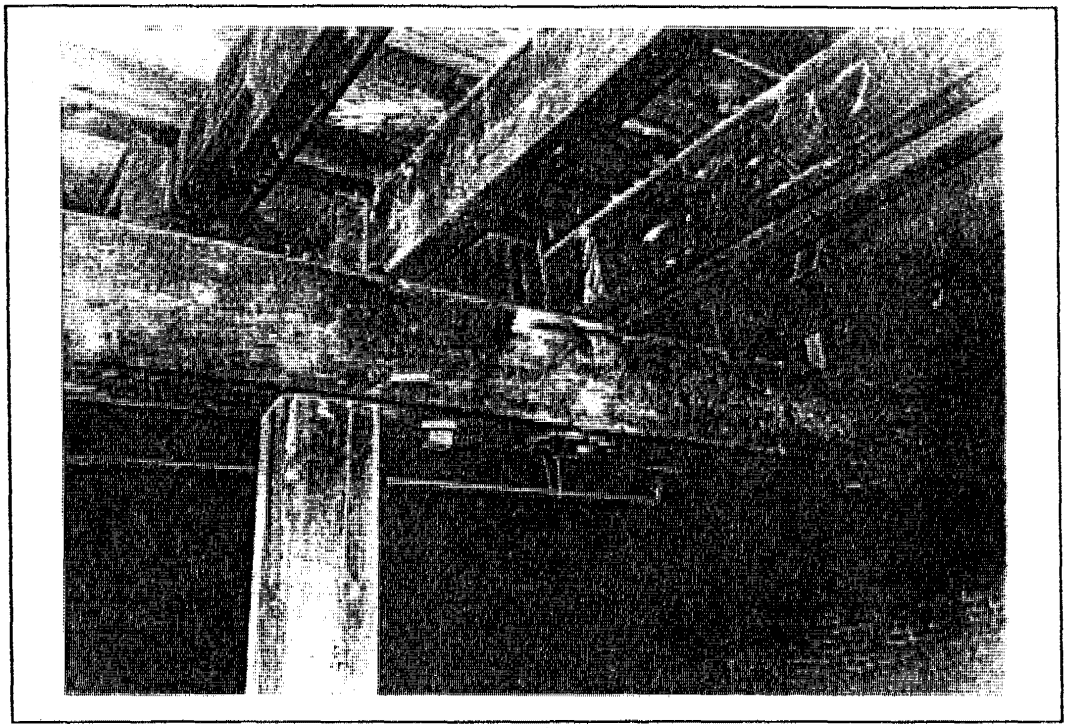


Figure 160. Second story, loft floor framing, West Addition showing joists, bottom chord, and post.

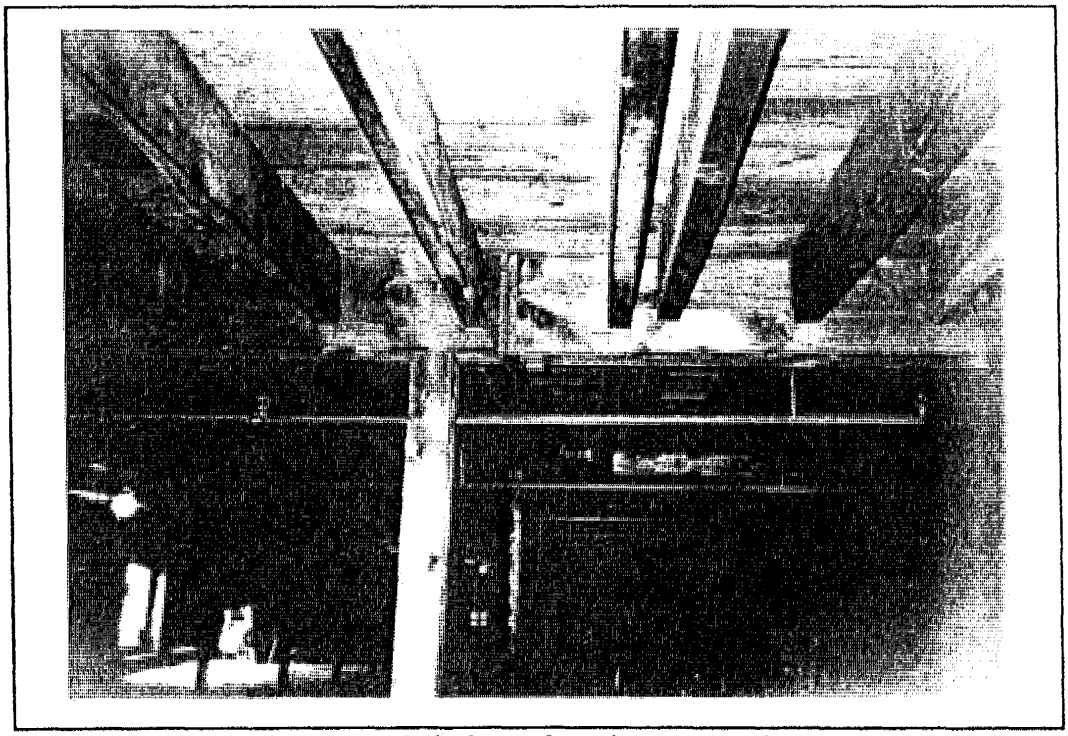


Figure 161. Second story, loft floor framing, Long Storehouse II.

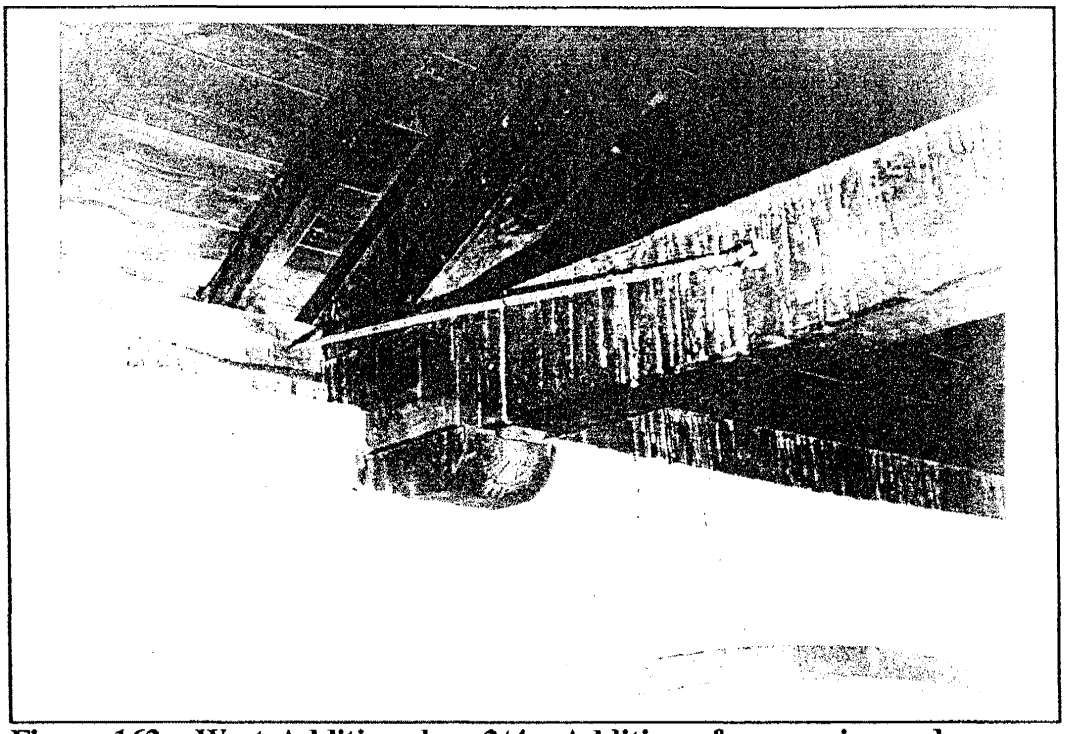


Figure 162. West Addition, bay 2/4. Addition of suspension rod augmenting truss framing.

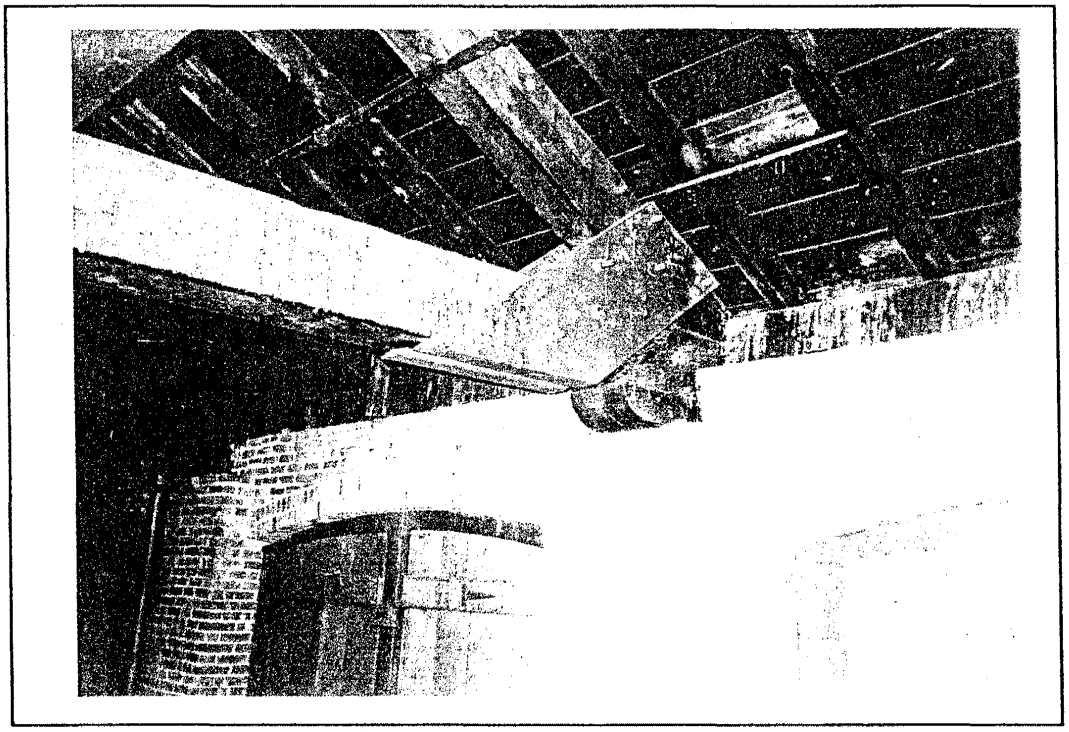


Figure 163. West Addition, bay 4/6. Riveted brace plate augmenting truss framing.

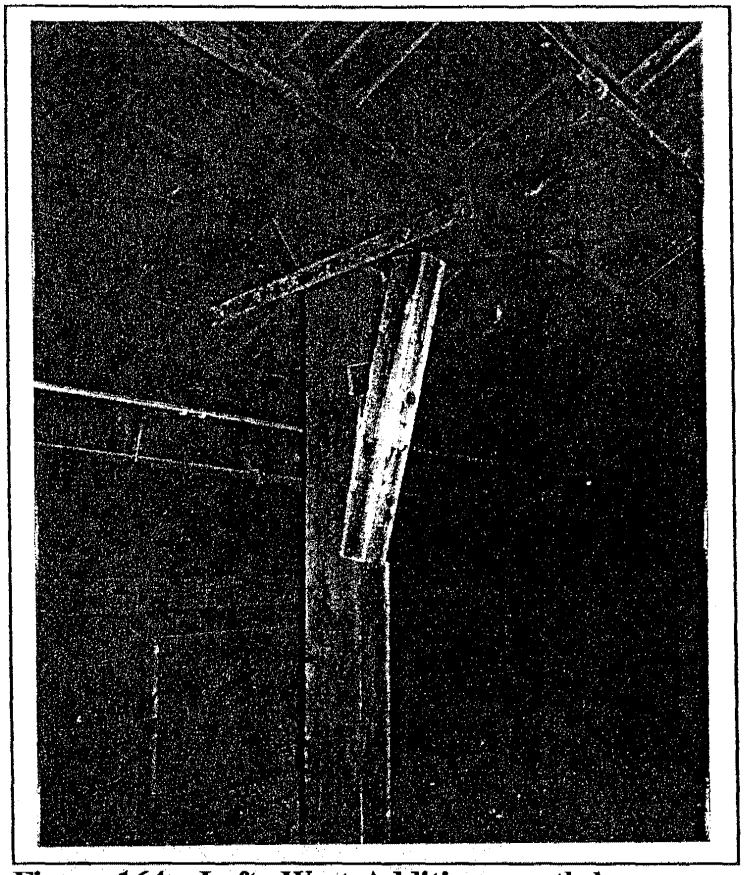


Figure 164. Loft, West Addition, north bay. Iron and wood braces augmenting truss framing.

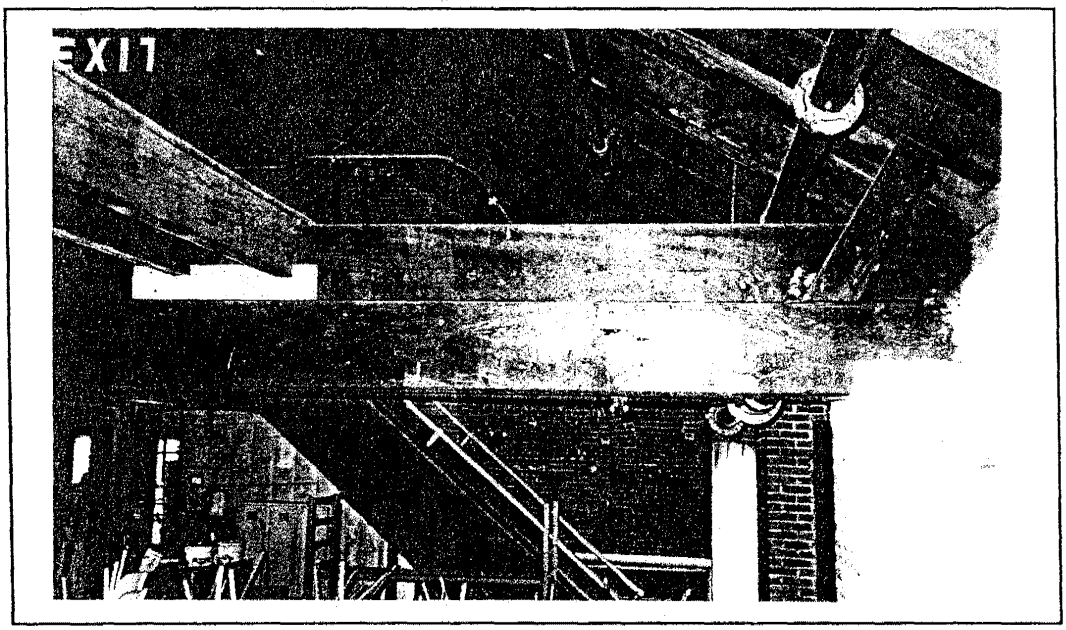


Figure 165. Second story, Long Storehouse I, repairs and additions to the bottom chord at bay 94/96.

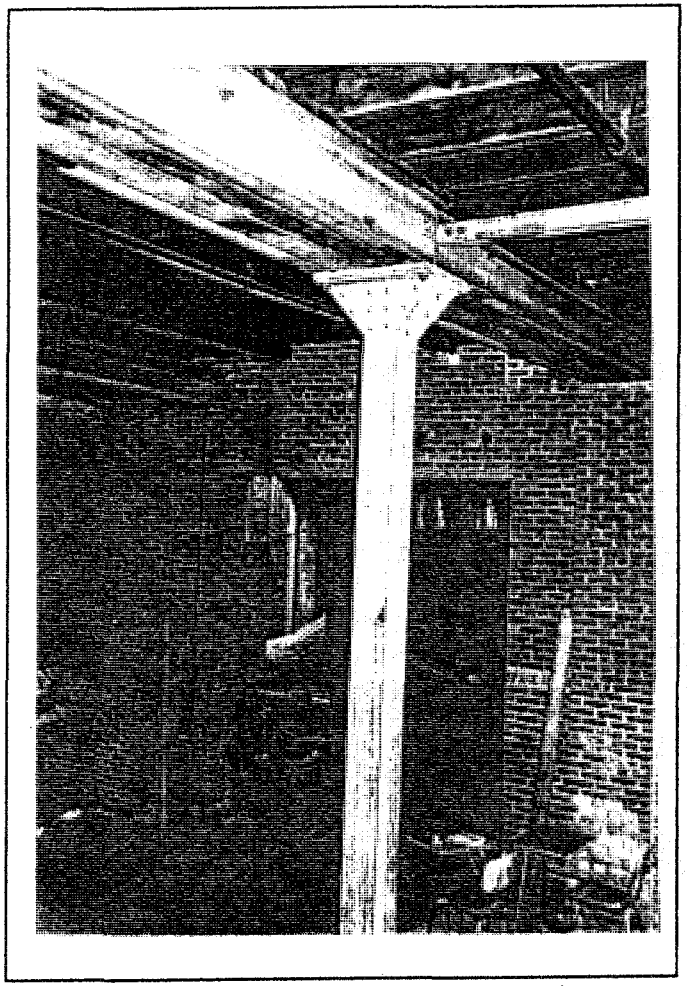


Figure 166. First story, structural steel system, Long Storehouse II, bay 64/66.

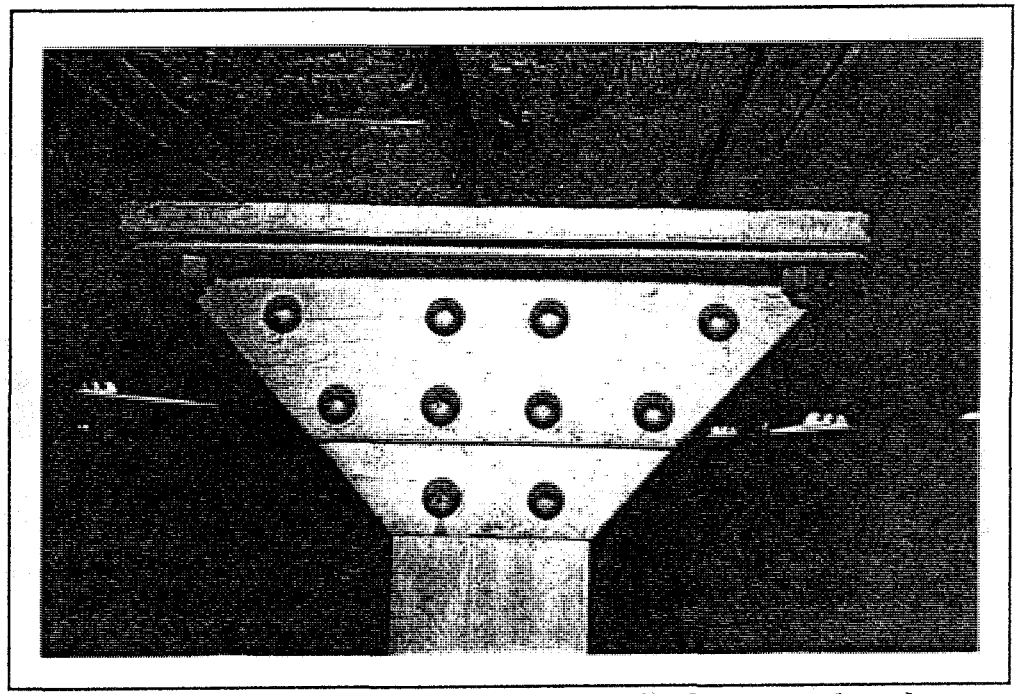


Figure 167. First story, West Addition, detail of structural steel system, bay 14/16.

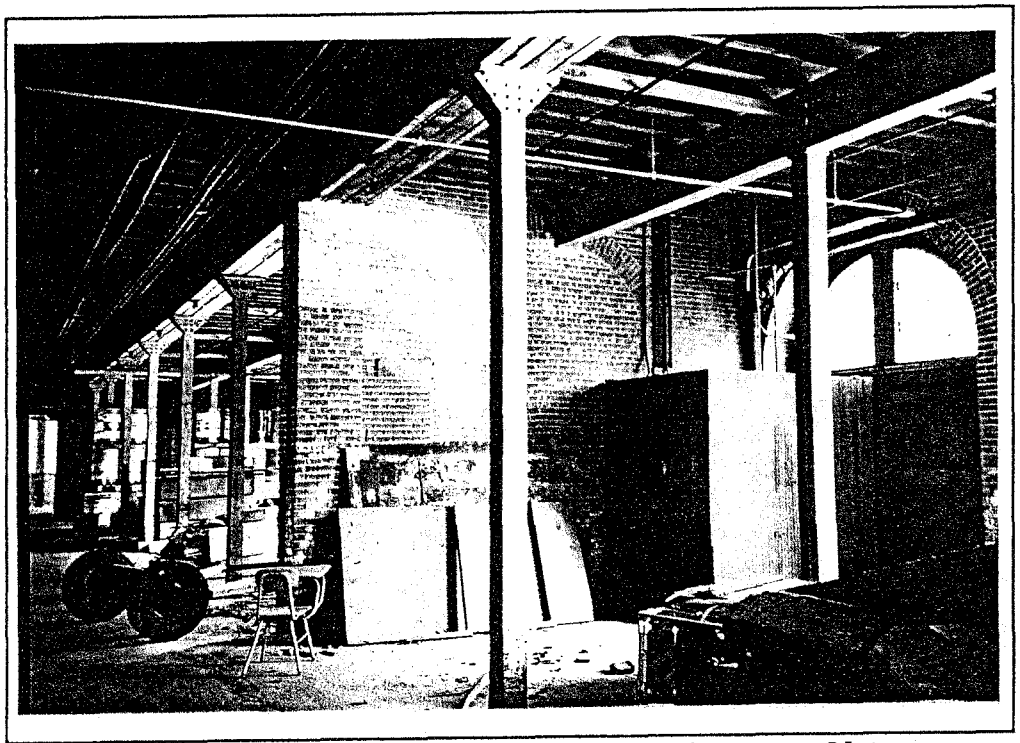


Figure 168. First story, Long Storehouse I looking east. Note structural steel system.



Figure 169. First story, West Addition, detail of structural steel system, bay 14/16.

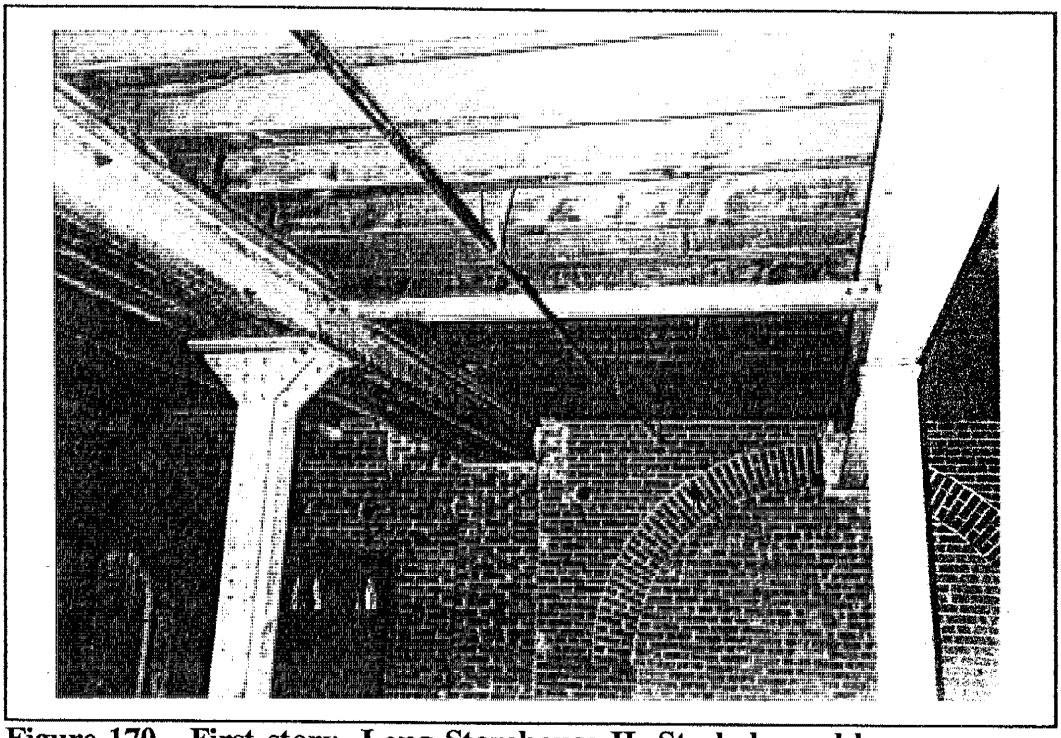


Figure 170. First story, Long Storehouse II. Steel channel beams entering PW5 at center and south bays.

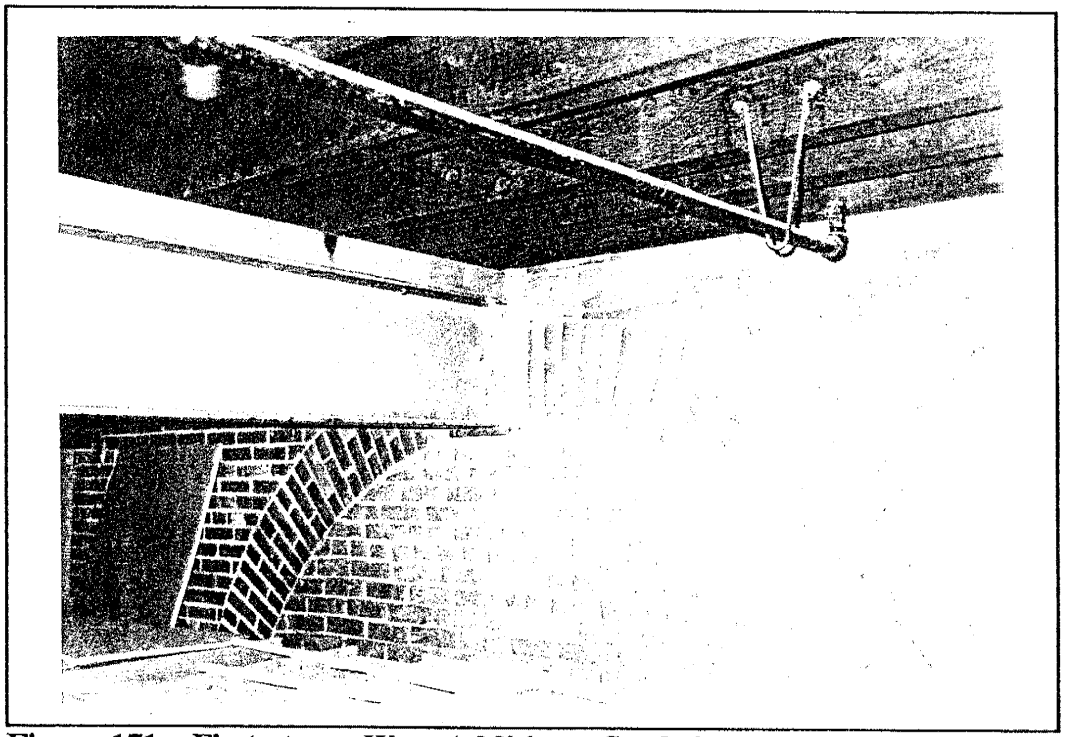


Figure 171. First story, West Addition. Steel channel beam piercing PW2.

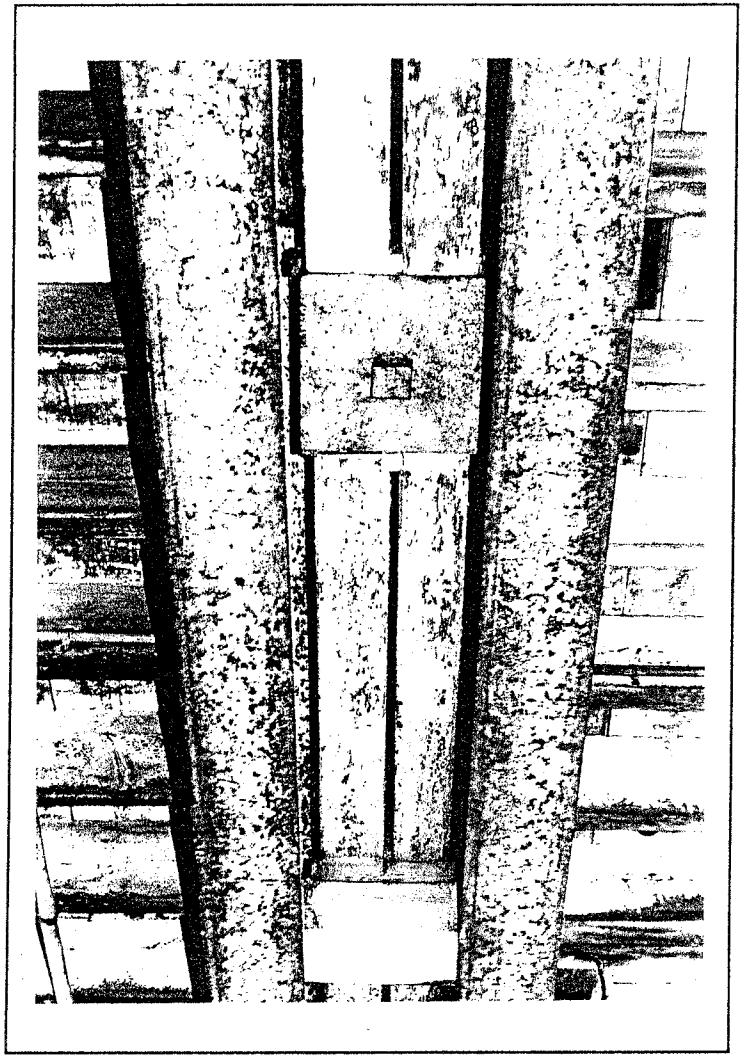


Figure 172. First story, Stables, vehicular passageway. Detail of structural steel framing.

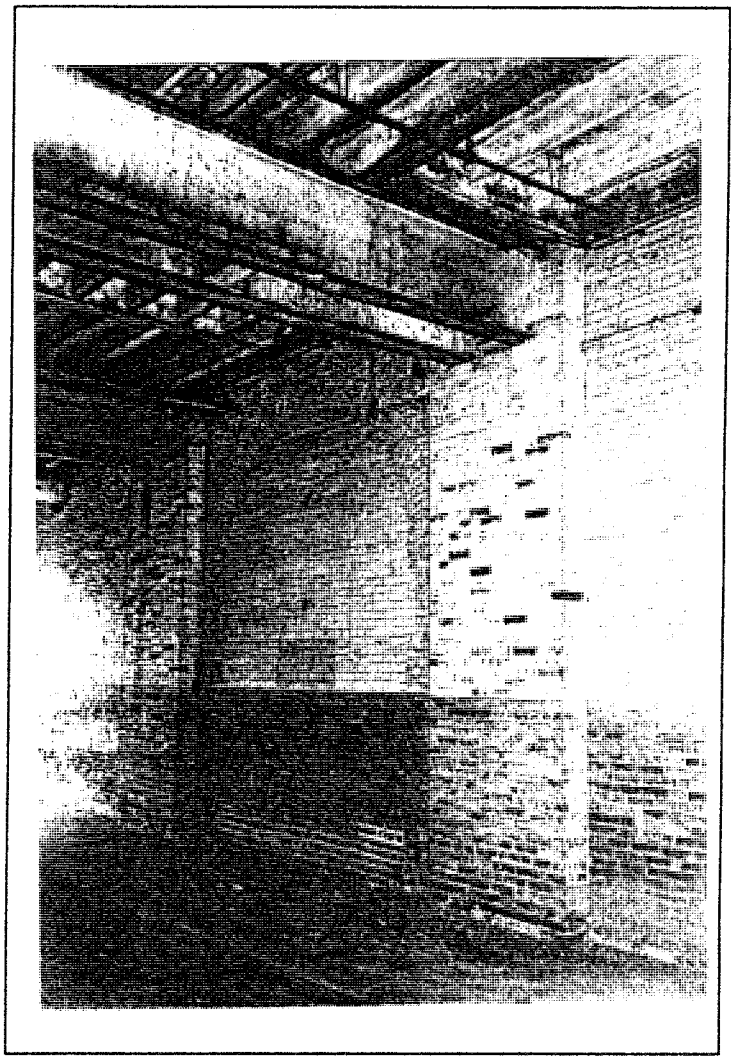


Figure 173. First story, Stables, vehicular passageway. Structural steel framing and PW8.

FLOORING

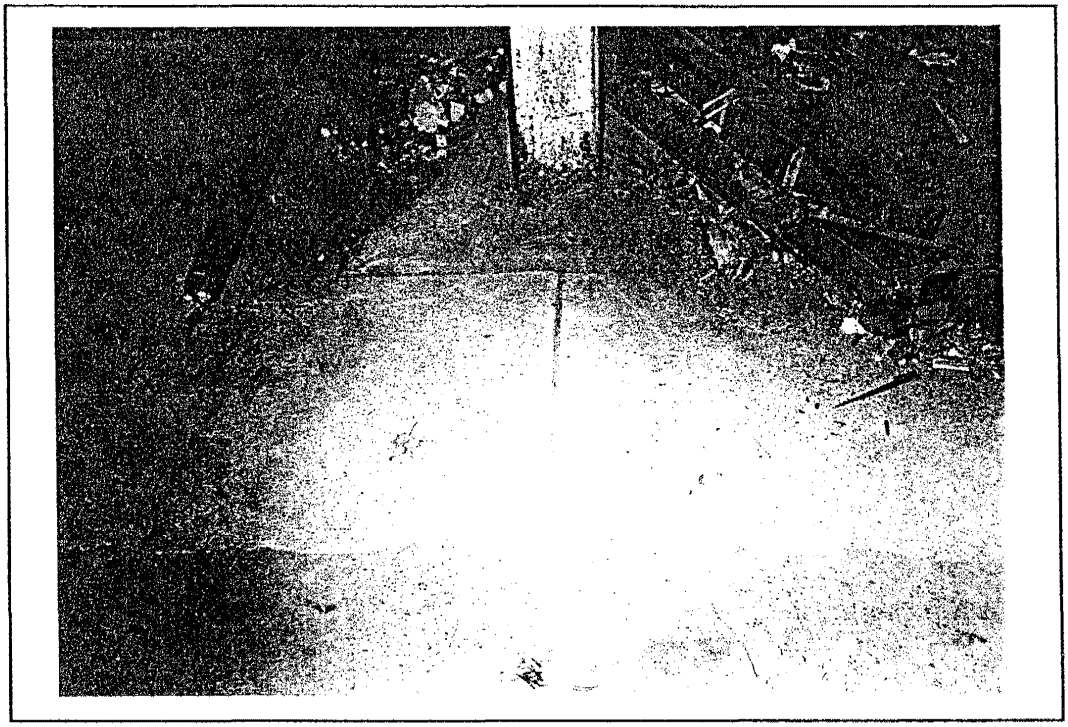


Figure 174. First story, Long Storehouse II, bay 84/86. Expansion joint in modern concrete flooring.

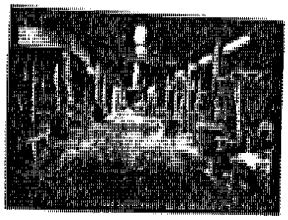


Figure 175. First story, West Addition. Concrete flooring with asphalt center aisle.

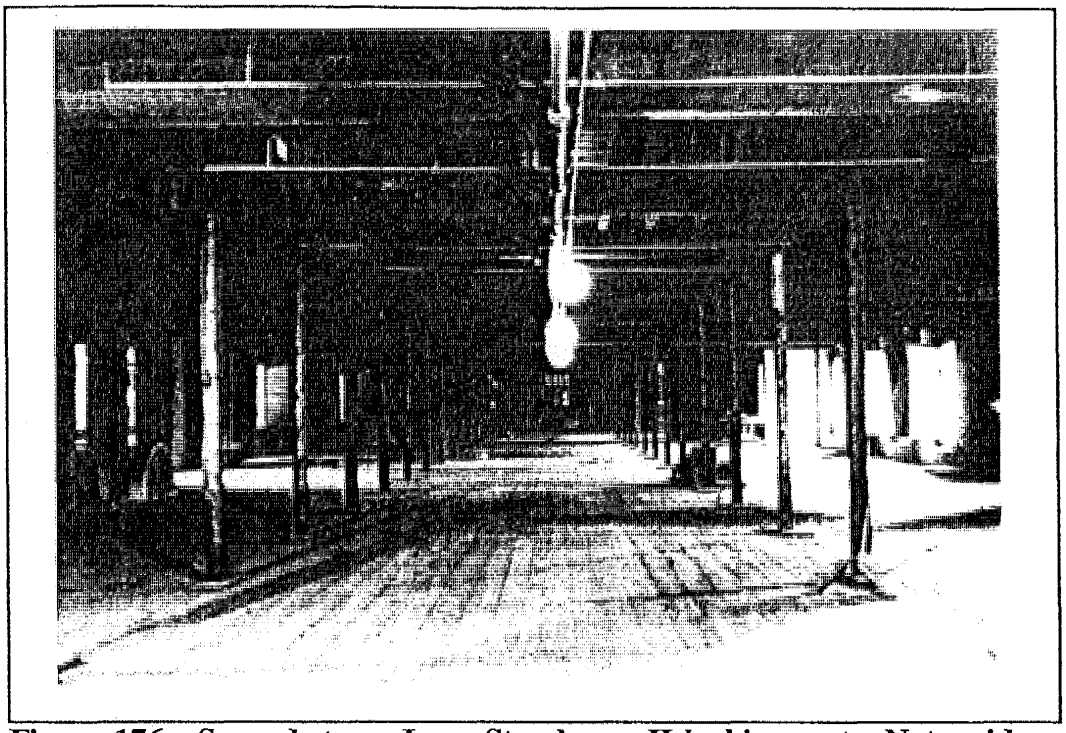


Figure 176. Second story, Long Storehouse II looking east. Note wide, east/west floor boards.

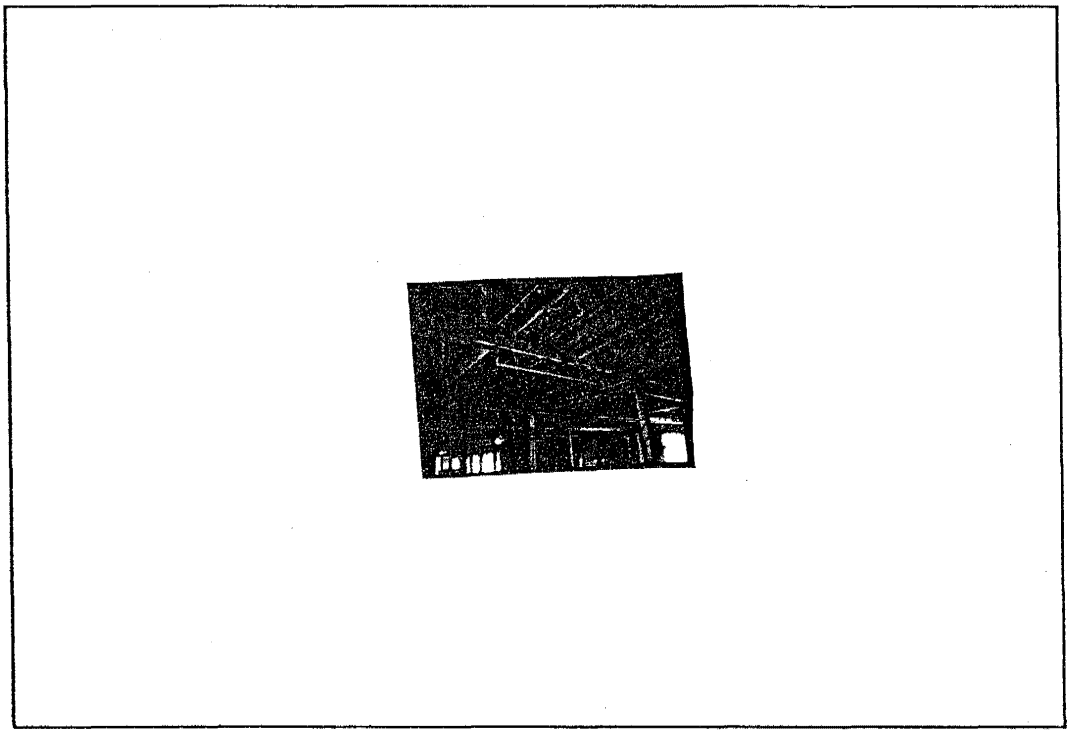


Figure 177. Loft flooring, Long Storehouse II looking northwest.

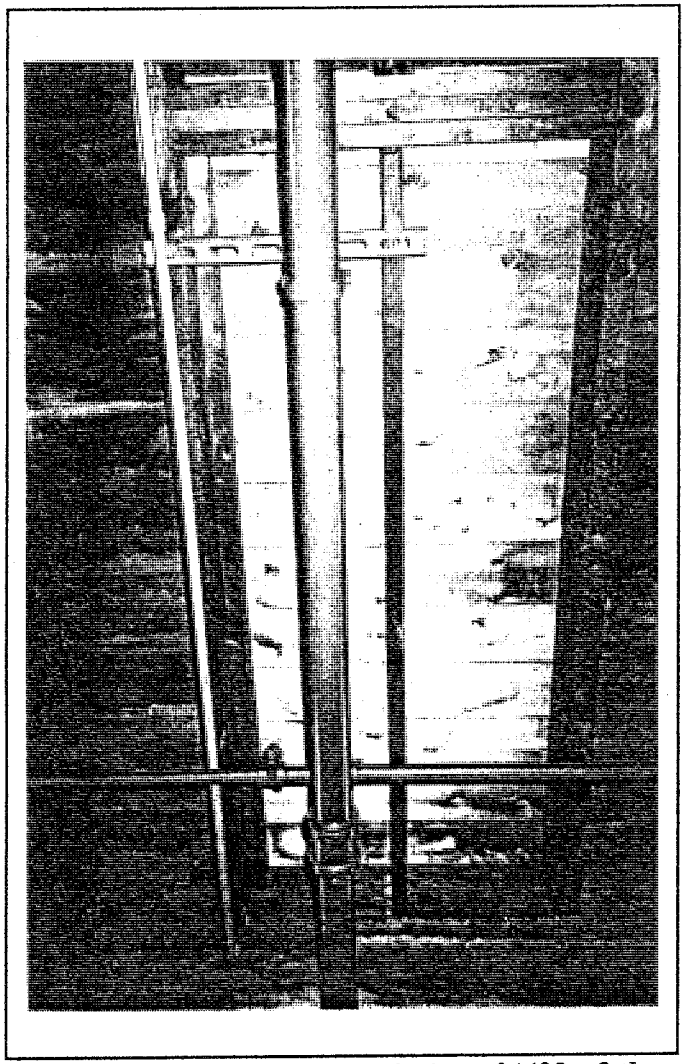


Figure 178. Former hatch in bay 91/93 of the Long Storehouse I, currently boarded up.

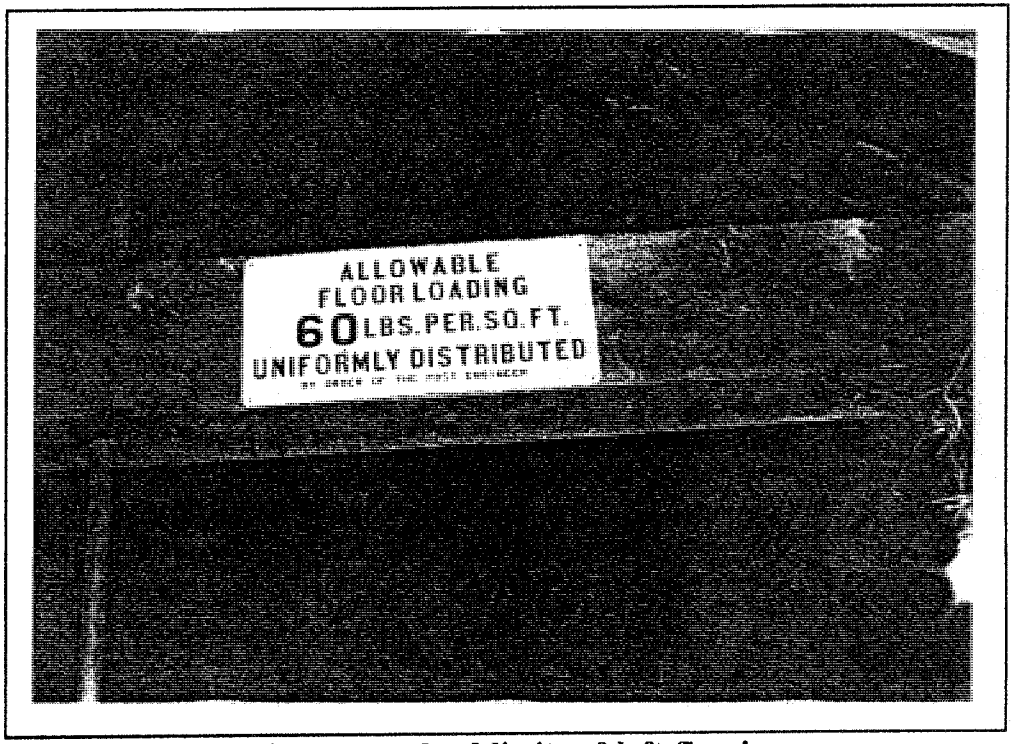


Figure 179. Loft signage for load limits of loft flooring.

VERTICAL CIRCULATION



Figure 180. Stairway, bay 36. First story with plywood enclosure.



Figure 181. Stairway, bay 36, newel post.

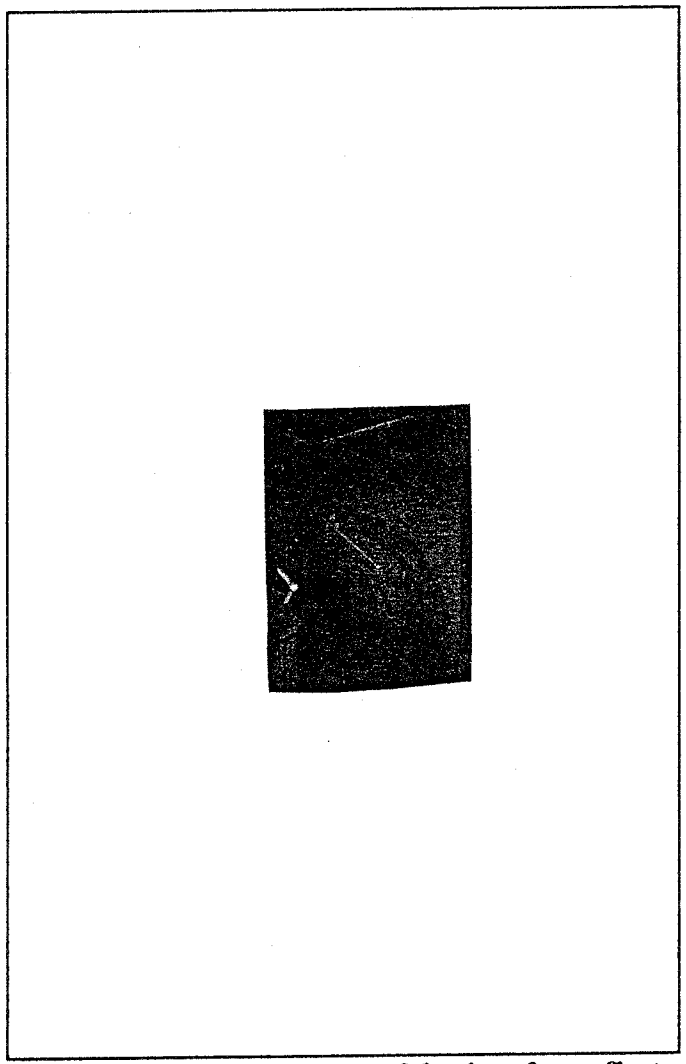


Figure 182. Stairway, bay 36, view from first story landing.

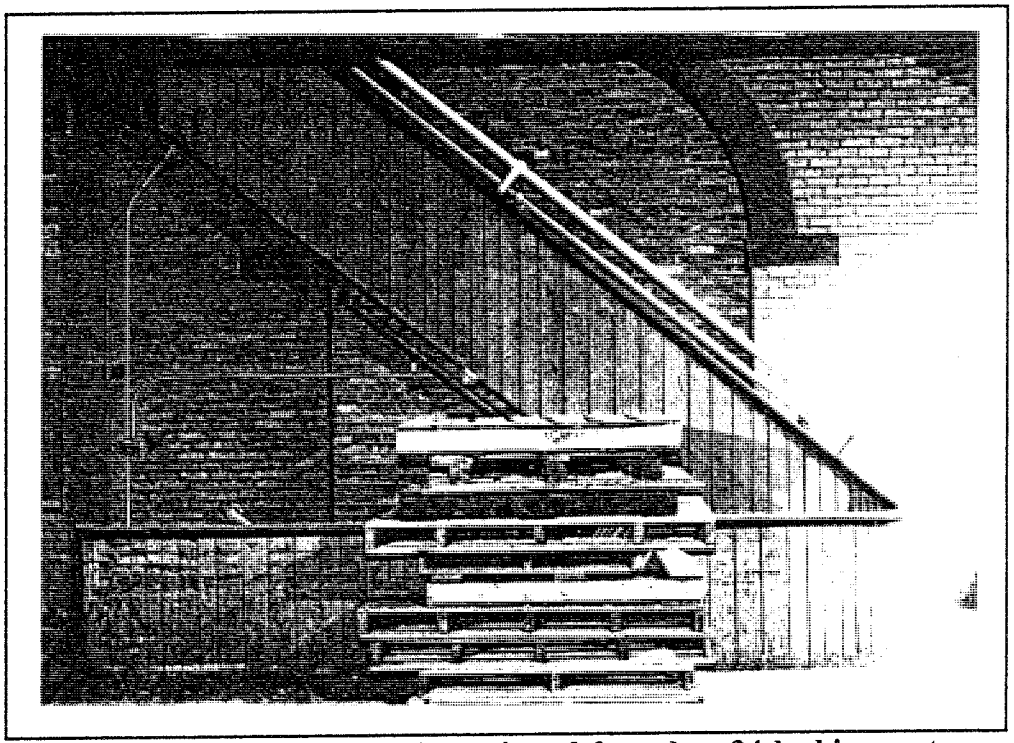


Figure 183. Stairway, bay 36, as viewed from bay 34 looking east, second story.

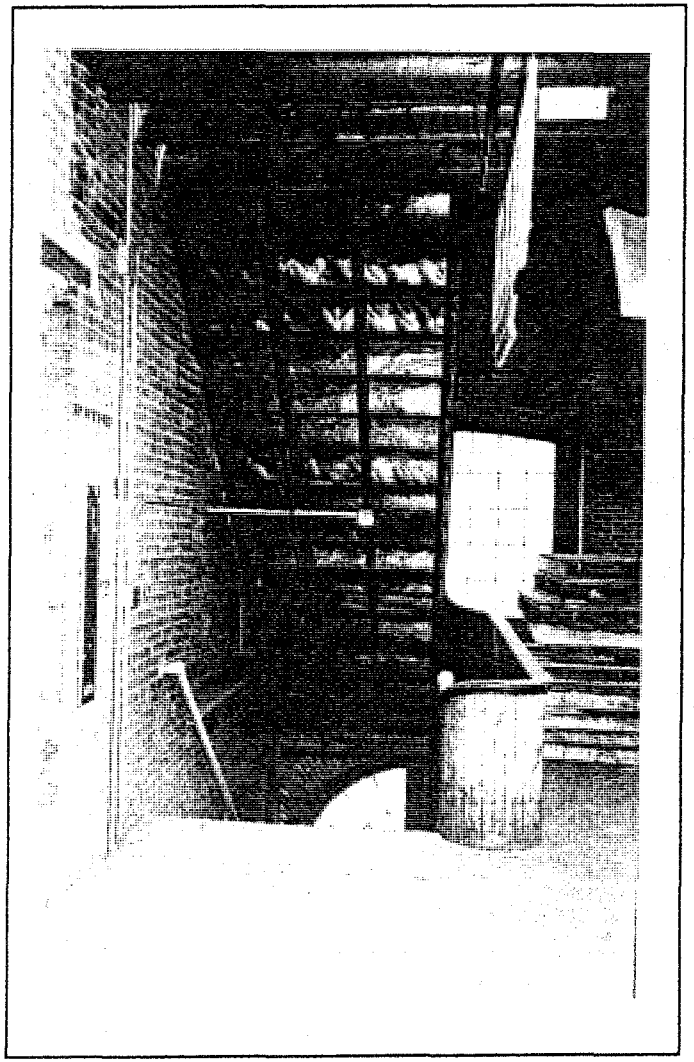


Figure 184. Stairway, bay 36 from second story looking at risers to Loft.

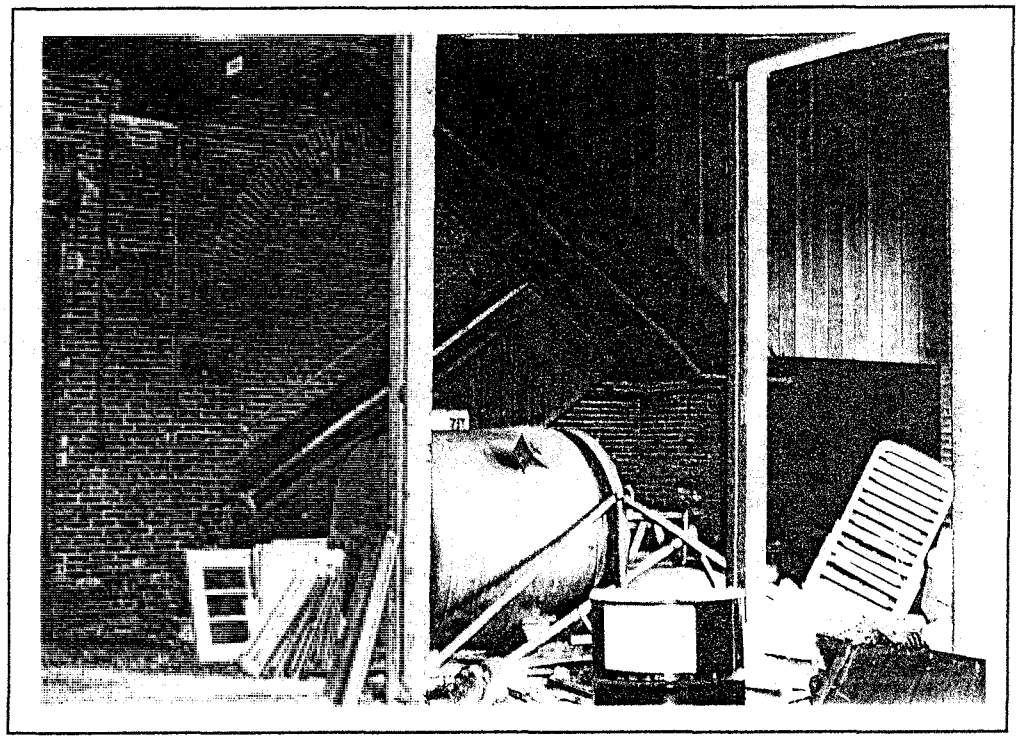


Figure 185. Stairway, bay 96, first story.

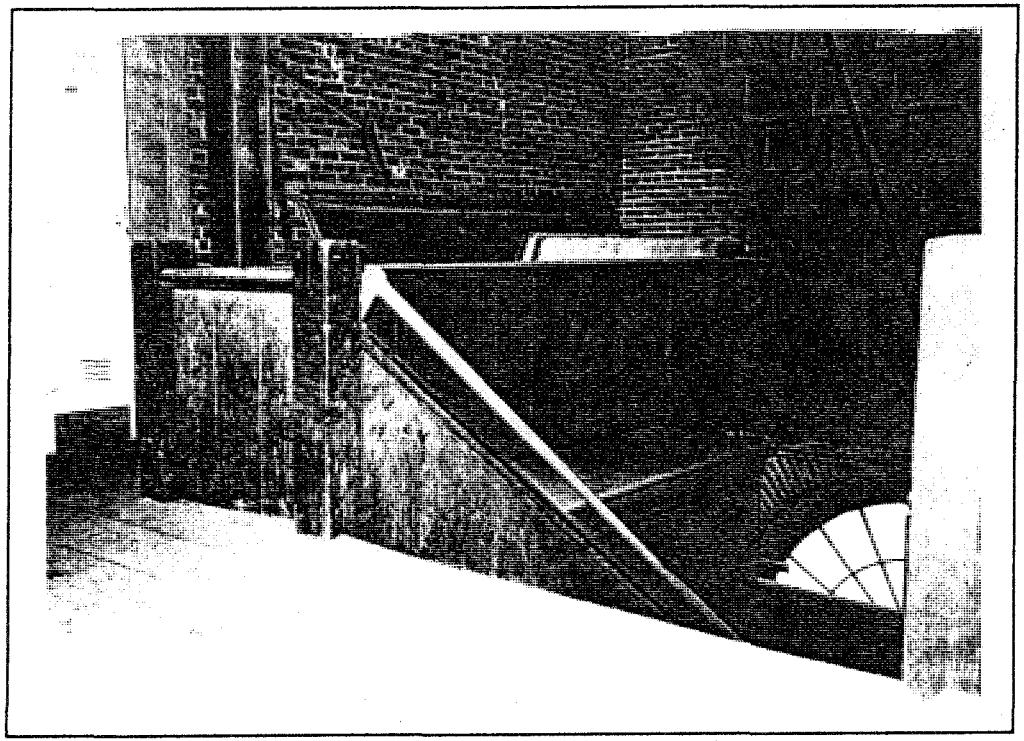


Figure 186. Stairway, bay 96, second story at stairwell.

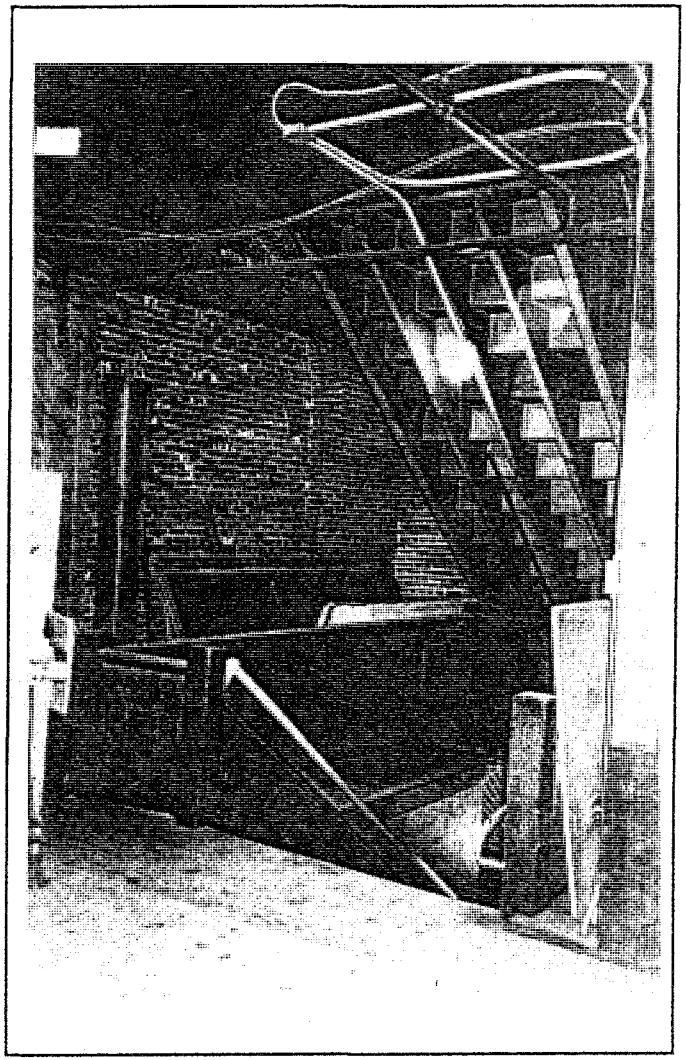


Figure 187. Stairway, bay 96, second story showing risers to loft.

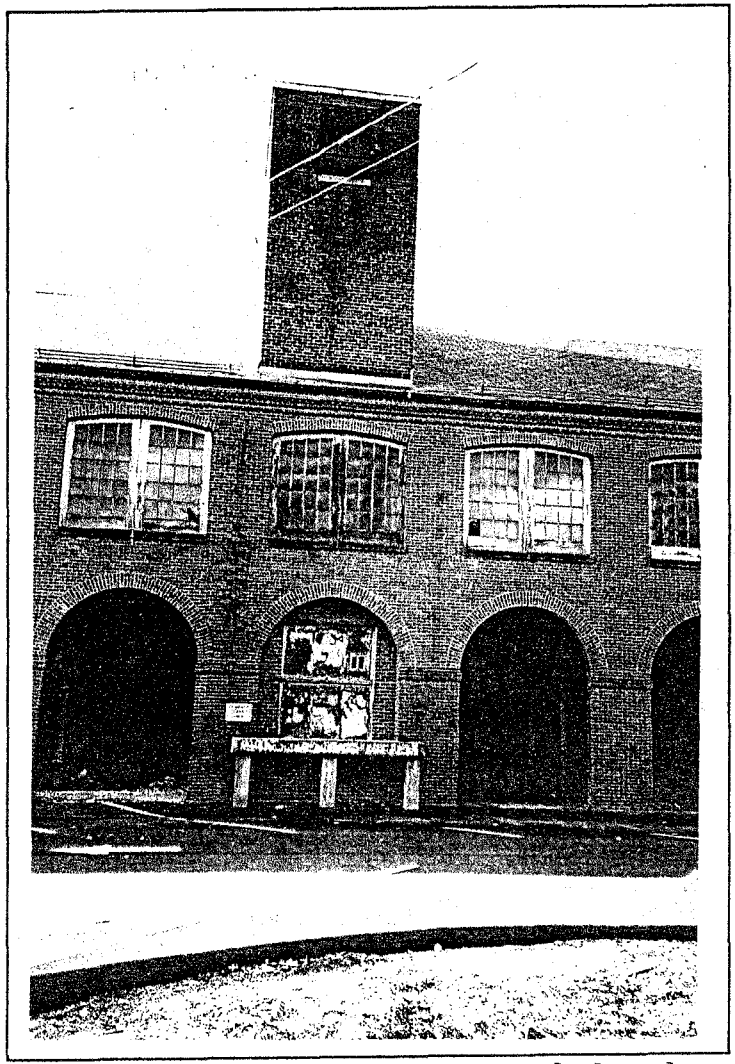


Figure 188. Bay 62, elevator loading dock and shaft.

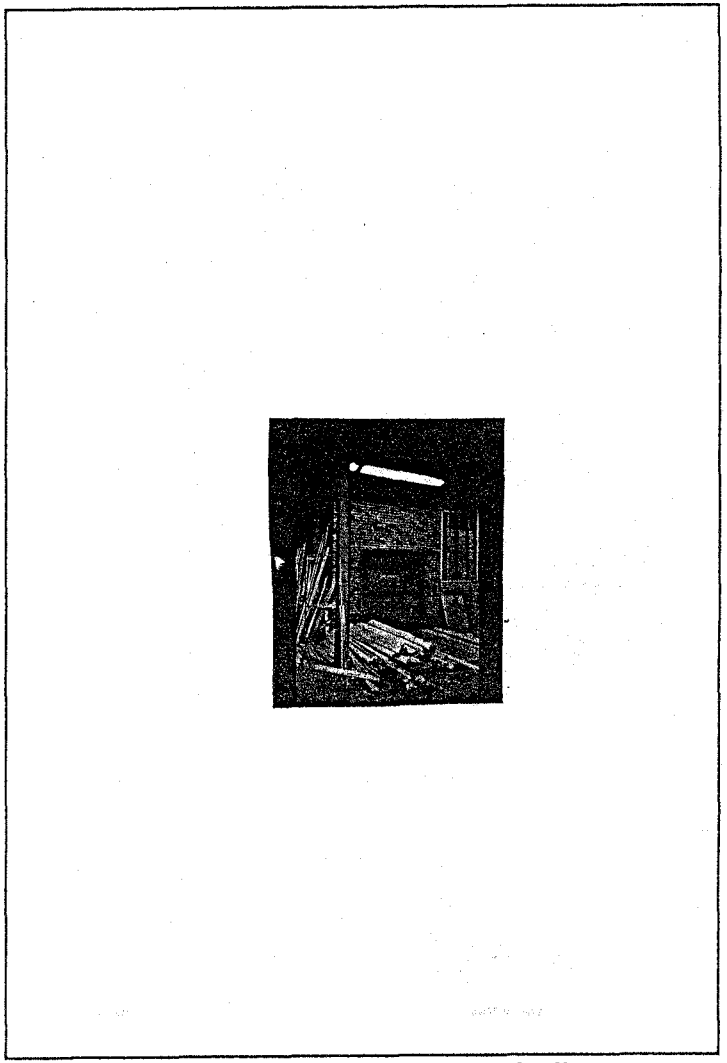


FIgure 189. Freight elevator, bay 30, first story.

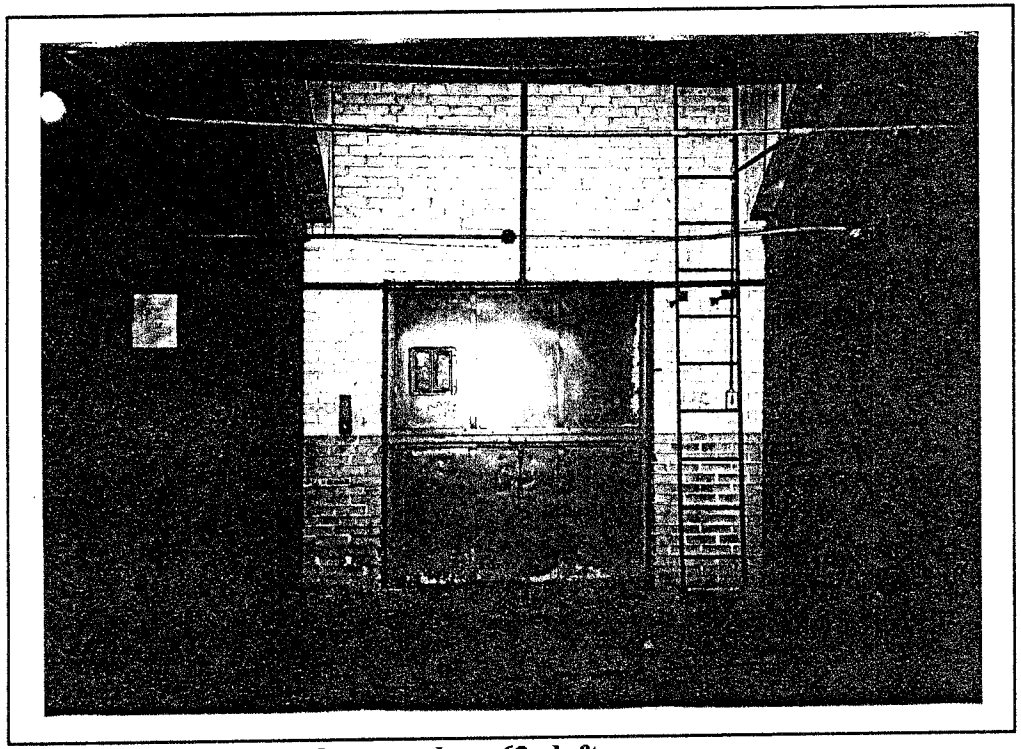


Figure 190. Freight elevator, bay 62, loft.

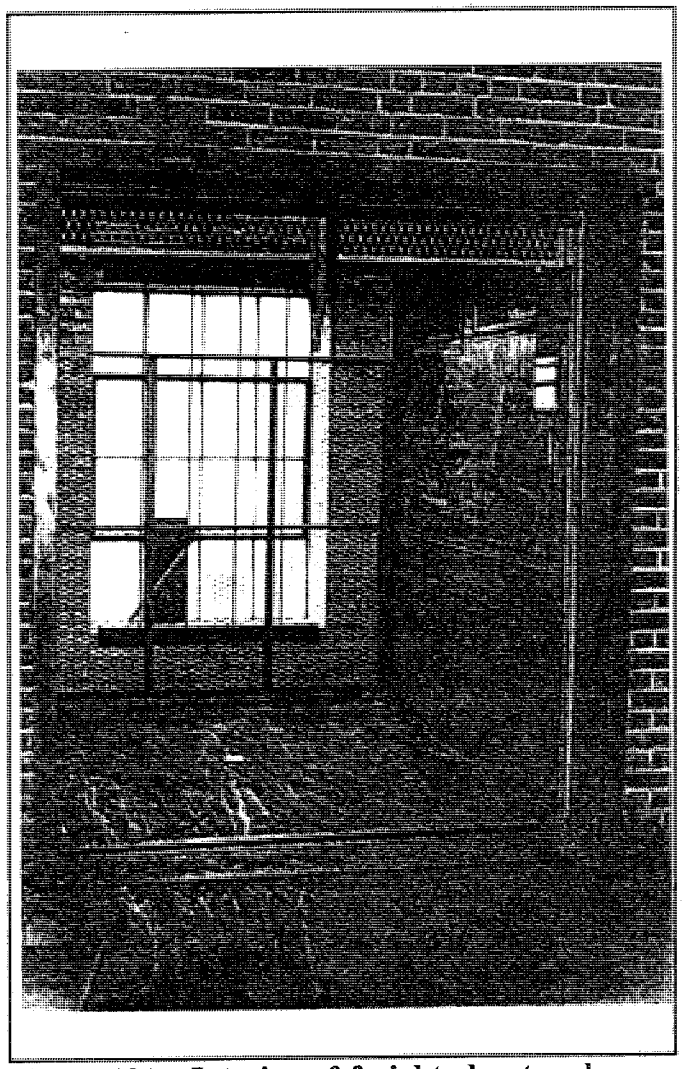


Figure 191. Interior of freight elevator, bay 97.

EXISTING CONDITIONS AND USE

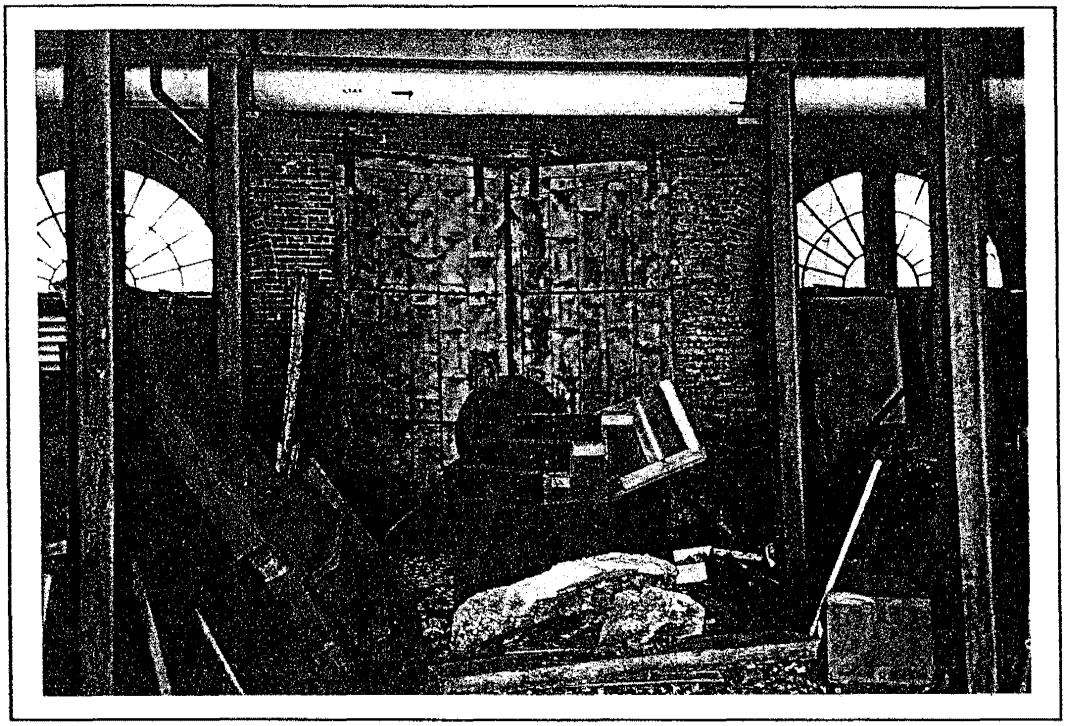


Figure 192. First story, Long Storehouse II, bay 59, haphazard storage.

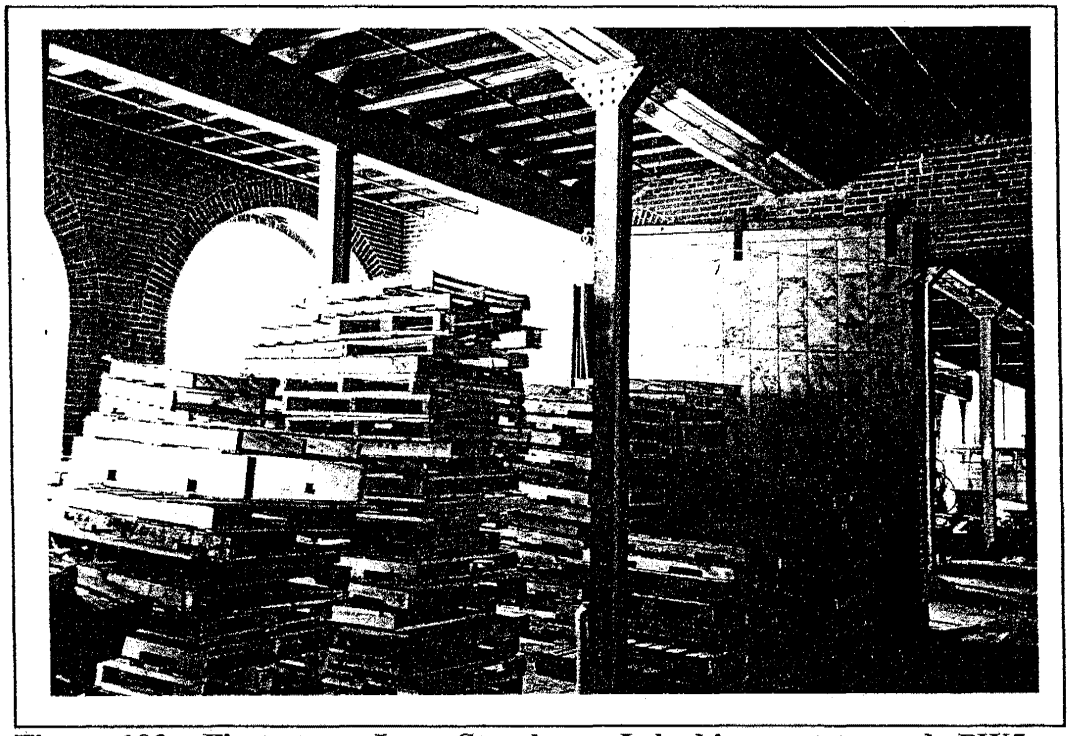


Figure 193. First story, Long Storehouse I, looking east towards PW5 showing haphazard storage.

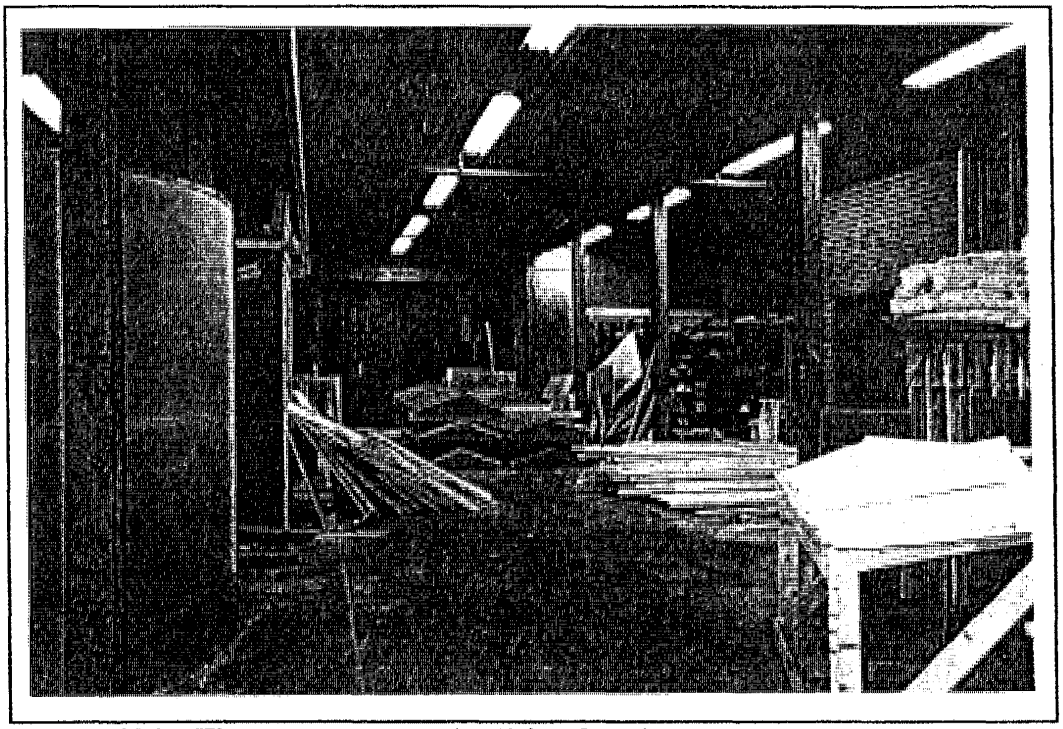


Figure 194. First story, West Addition looking east. Area used by Building Trades Training Center.

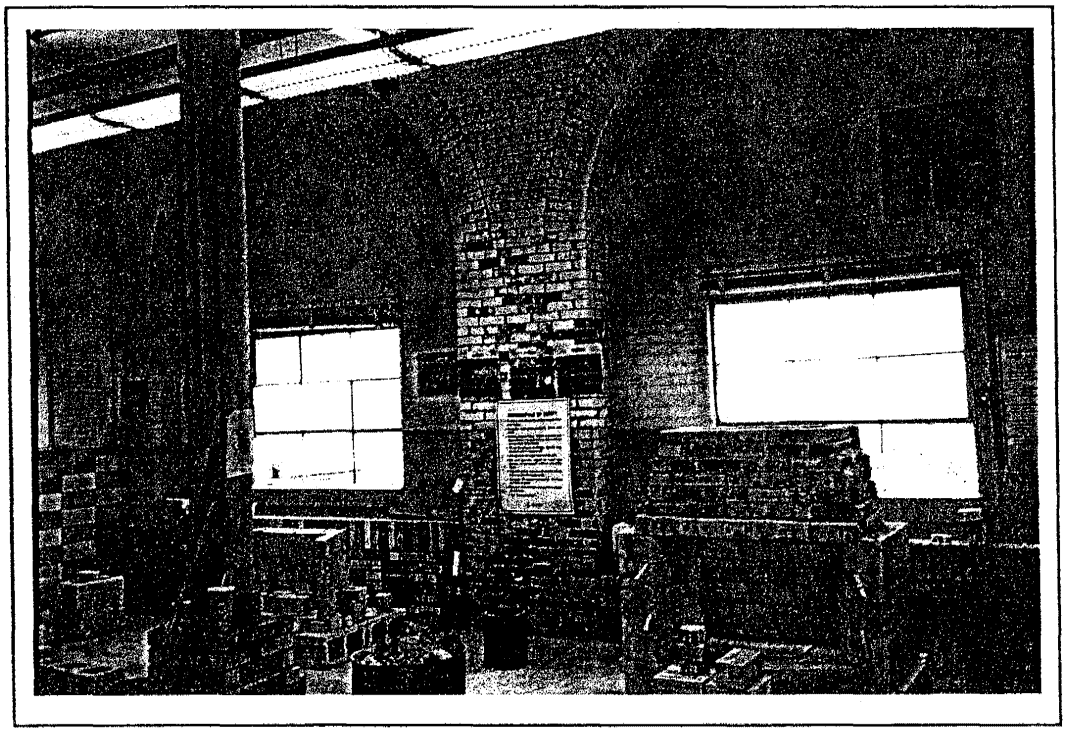


Figure 195. First story, West Addition, bays 6 and 8 currently used by Building Trades Training Center.

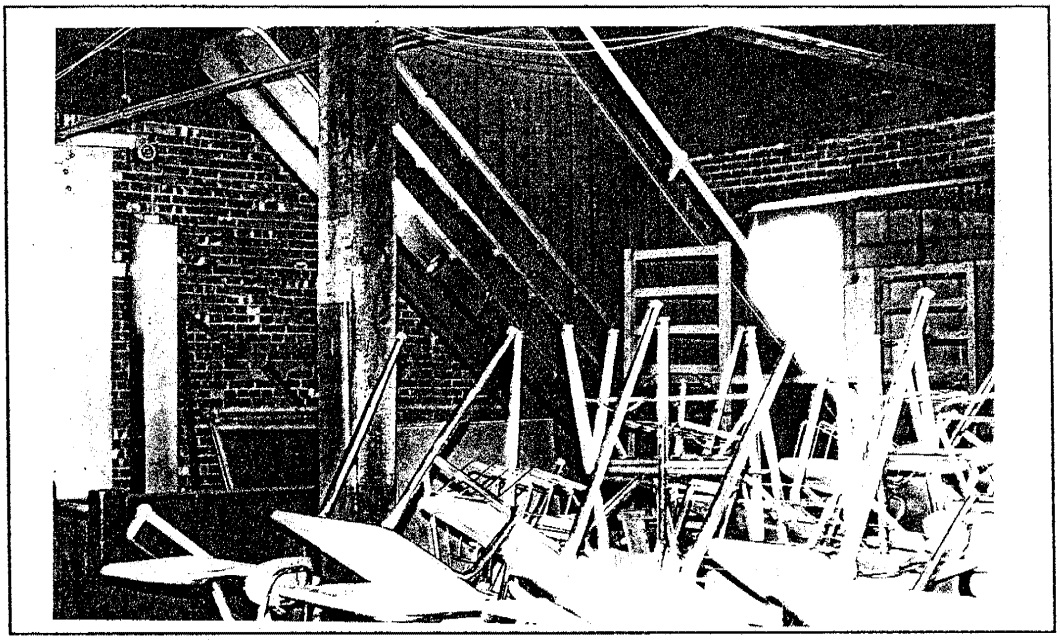


Figure 196. Second story, Long Storehouse I, haphazard storage.

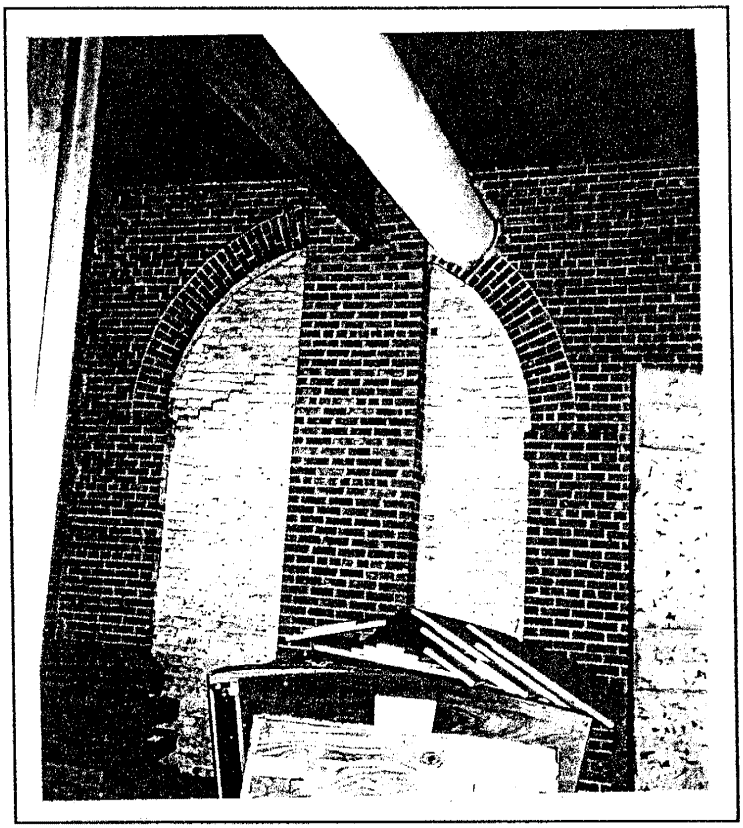


Figure 197. First story, PW4, north bay. Note substantial masonry crack.

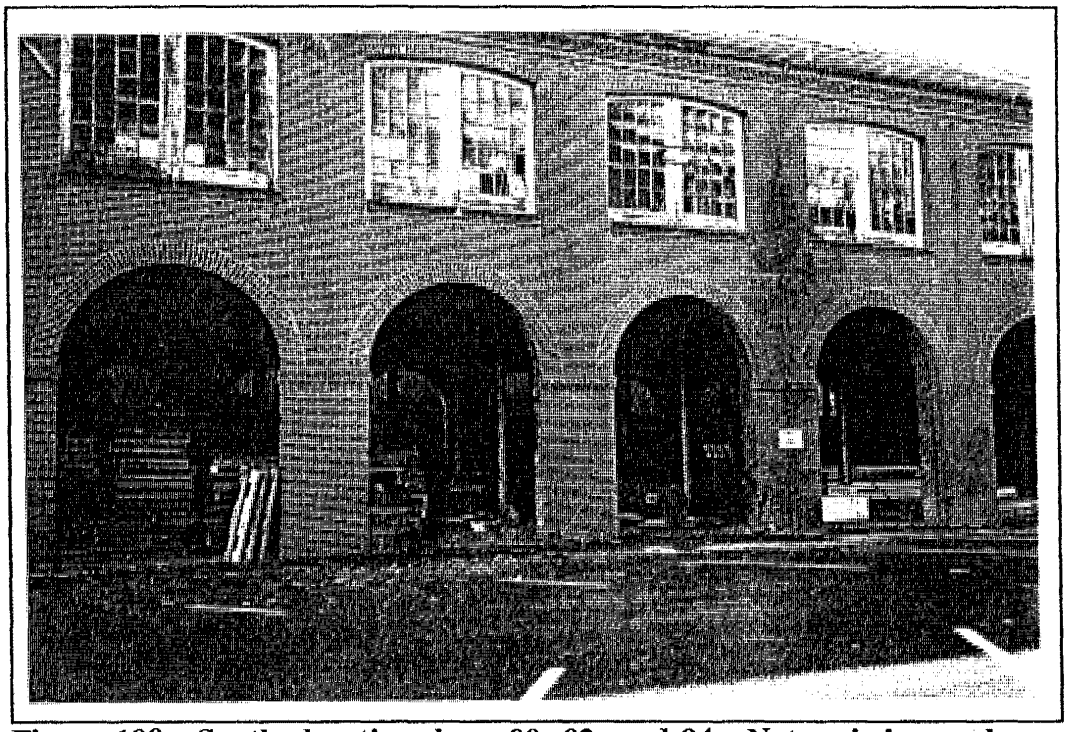


Figure 198. South elevation, bays 80, 82, and 84. Note missing arch treatments, broken windows, and brick deterioration along path of absent downspout.

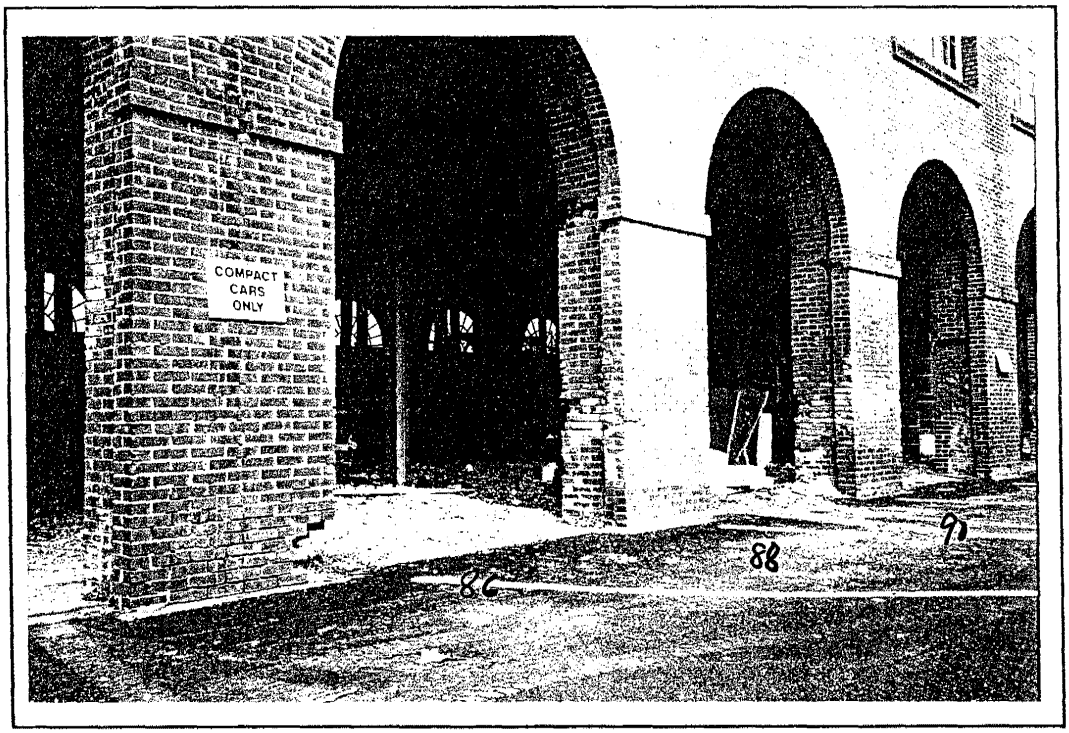


Figure 199. South elevation, detail, brick trauma at bays 86, 88 and 90.

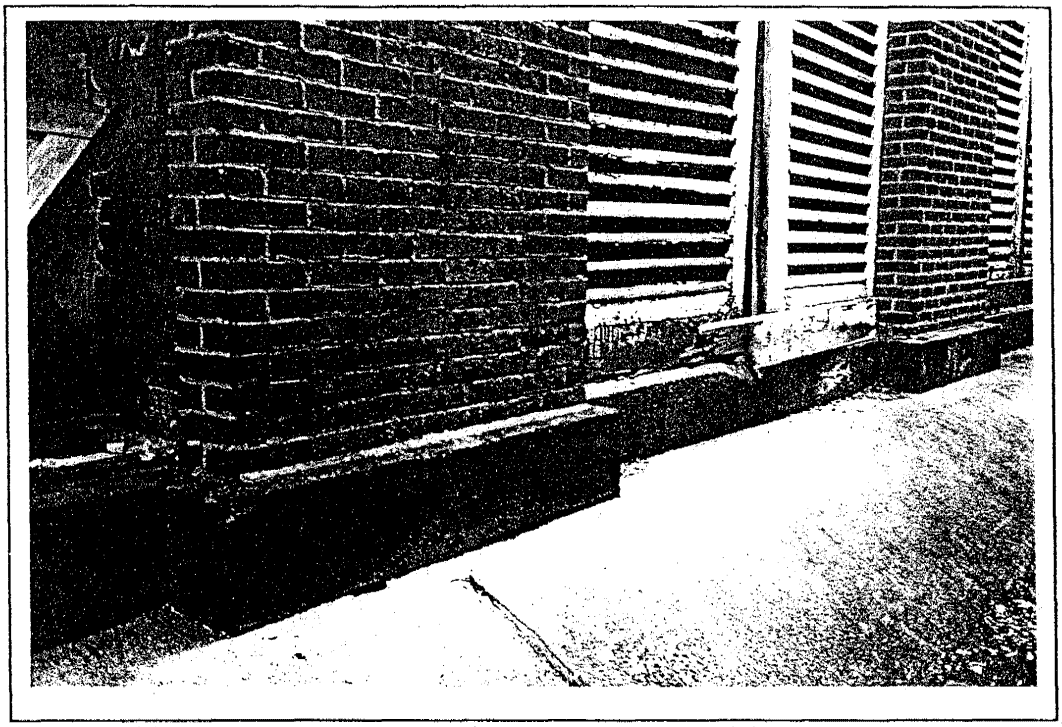


Figure 200. North elevation. Biological growth, rising damp, mortar loss, and wood deterioration.

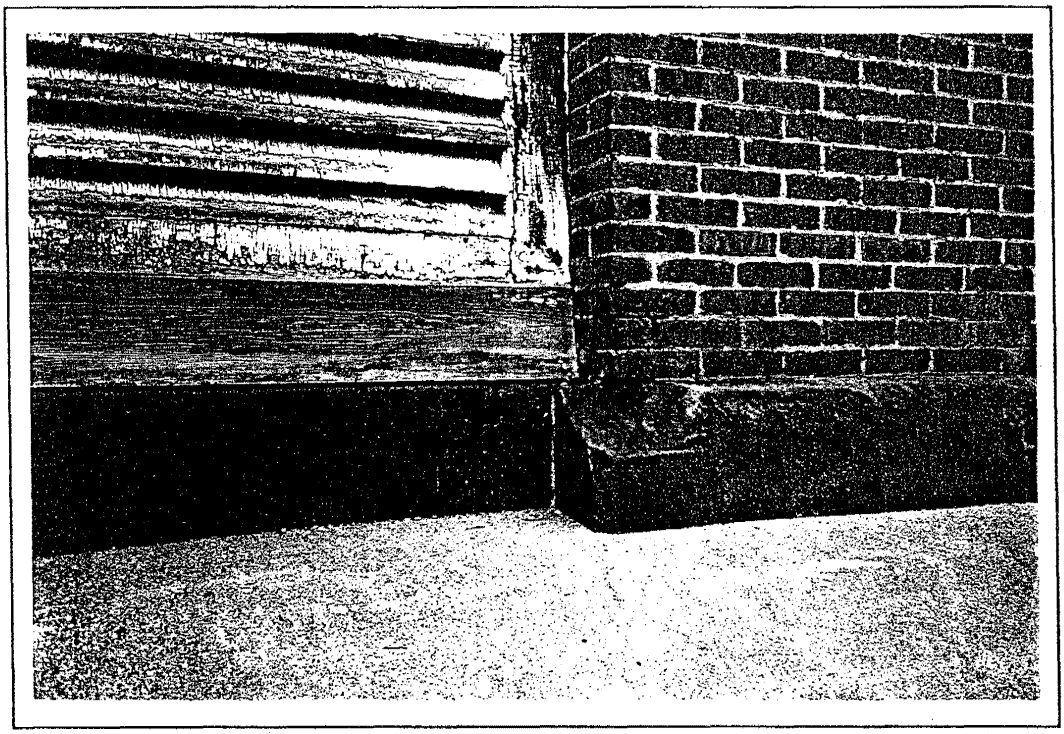


Figure 201. North elevation with broken sandstone, weathered wood, efflorescence on brick., etc.

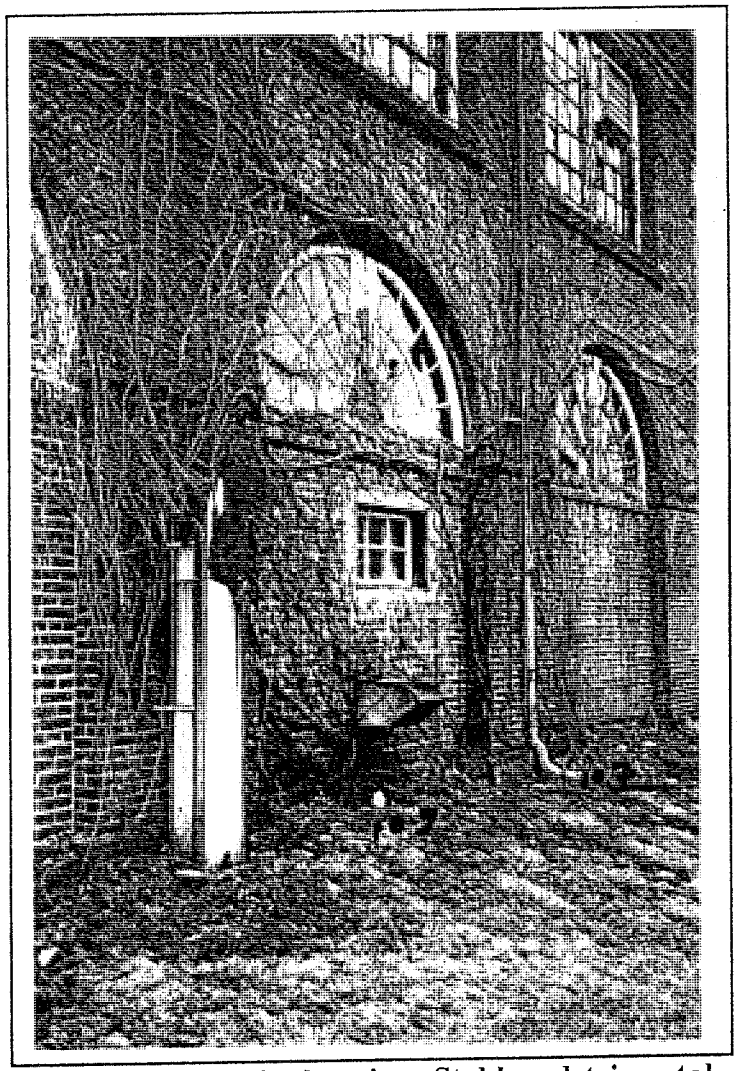


Figure 202. North elevation, Stables, detrimental vegetation.

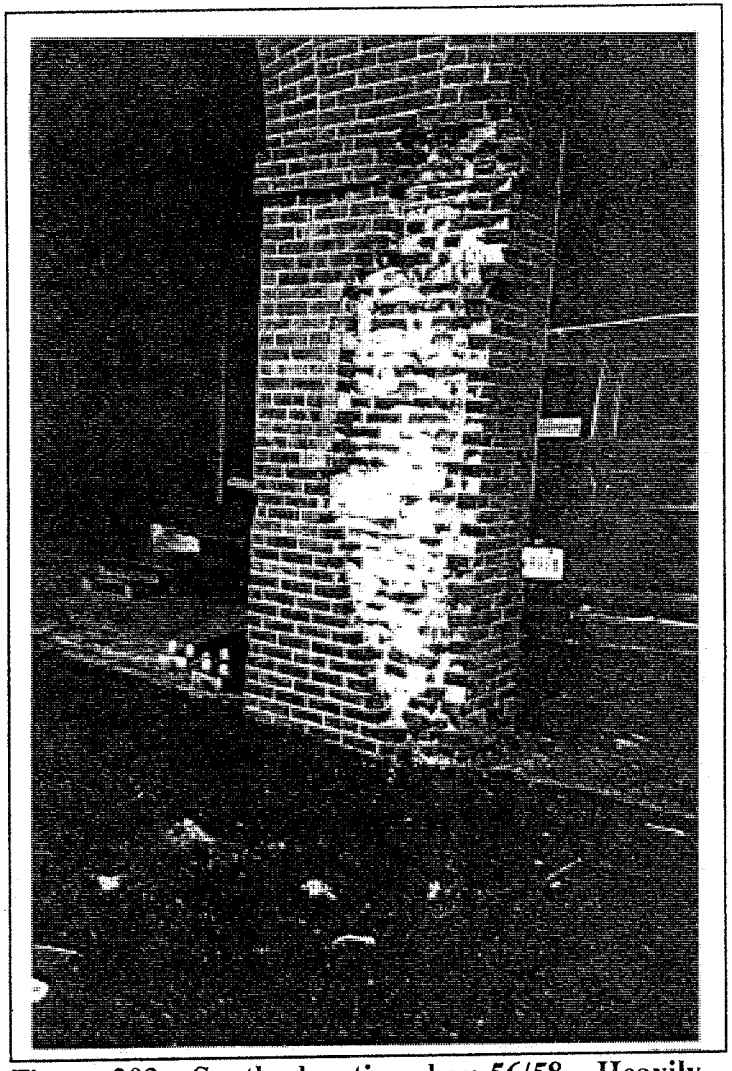


Figure 203. South elevation, bay 56/58. Heavily damaged brick pier due to careless vehicular use of surrounding parking lot.

III. APPENDICES

APPENDIX A.

Treatments of Exterior Wall Openings by Elevation and Bay Location

INTRODUCTION

General Comments: Appendix E, "Treatments of Exterior Wall Openings by Elevation and Bay Location," has been organized according to the shape of the openings and specific treatment types, as follows:

Type I. Semi-Circular Arches

A. Louvered Blinds; Fanlight
B. Solid Panels; Fanlight
C. Glazed Sash; Fanlight
D. Open Archway; No Infill
E. Recessed Brick Infill; Stretcher Bond
F. Recessed Brick Infill; (6) Stretcher to (1) Header Course
G. Recessed Brick Infill; (6) Stretcher to (1) Header/Stretcher Course
H. Recessed Brick Infill; (7) Stretcher to (1) Header Course
I. Recessed Brick Infill; (7) Stretcher to (1) Header/ Stretcher; Fanlight
J. Recessed Brick Infill; (7) Stretcher to (1) Header Course; Freight-Elevator Door
K. Wood Garage Door; Fanlight
L. Wood Matchboard Sliding-Door
M. Plywood Infill; Door and Vent
N. Stucco Infill; Double Door and Vent
O. Fire Door

Type II. Segmental Arches

A. Flush Brick Infill; (7) Stretcher to (1) Header/Stretcher
B. Recessed Brick Infill; Door
C. Glazed; Wood, Flush Frame
D. Glazed; Wood, Raised Frame; Mortised/Tenoned/Pegged (M/T/P)
E. Glazed; Wood, Modern Frame; Nailed
F. Glazed; Metal Sash
G. Louvered Blinds

Type III. Rectangular Openings

A. Wood and Brick Infill; Glazed Door
B. No Infill
C. Metal Corrugated Door
D. Vertical Wood-Plank Wall and Door

In the inventory that follows, the word or number flush with the left margin represents the bay. For each bay on the east elevation, the basement treatment is listed first followed by the first story and then the second story. For each bay on the west elevation, north elevation, and the south elevation, the first-story treatment is listed first followed by the second-story treatment.

* * *

West Elevation

South Brick Infill; Recessed; **Type I-H.**
Glazed Sash; Fanlight; Batten Shutters; **Type I-C.**

Center Rectangular Opening; Wood and Brick Infill; Glazed Door; **Type III-A.**
Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**

North Brick Infill; Recessed; **Type I-E.**
Glazed Sash; Fanlight; Batten Shutters; **Type I-C.**

* * *

East Elevation

South Brick Infill; Flush; **Type II-A.**
Brick Infill; Recessed; Fanlight; **Type I-I.**
Glazed Sash; Fanlight; Batten Shutters; **Type I-C.**

Center Brick Infill; Recessed; Door; **Type II-B.**
Brick Infill; Recessed; Fanlight; **Type I-I.**
Glazed Sash; Fanlight; Batten Shutters; **Type I-C.**

North Brick Infill; Flush; **Type II-A.**
Brick Infill; Recessed; Fanlight; **Type I-I.**
Glazed Sash; Fanlight; **Type I-C.**

* * *

South Elevation

West Addition

2 Brick Infill; Recessed; Vent; **Type I-G.**
Glazed; Wood, Flush Frame; M/T/P; Batten Shutters; **Type II-C.**

4 Brick Infill; Recessed; Vent; **Type I-G.**
Glazed; Wood, Flush Frame; Nailed; Batten Shutters; **Type II-C.**

6 Brick Infill; Recessed; Fixed Window; Vent; **Type I-G.**
Glazed; Wood, Flush Frame; M/T/P; Batten Shutters; **Type II-C.**

8 Brick Infill; Recessed; Fixed Window; **Type I-G.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

10 Wood Garage Door; Fanlight; **Type I-K.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

12 Wood Garage Door; Fanlight; **Type I-K.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

14 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

16 Panelled Doors; Fanlight; **Type I-B.** (interior inaccessible)
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

18 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

20 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

22 Panelled Doors; Fanlight; **Type I-B.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

24 Louvered Blind; Metal Door; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

26 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

28 Panelled Doors; Fanlight; **Type I-B.** (interior inaccessible)
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-D.**

30 Brick Infill; Freight-Elevator Door; **Type I-J.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; **Type II-D.**

32 Wood Matchboard, Sliding-Door; **Type I-L.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

34 Panelled Doors; Fanlight; Plywood Infill on Interior; **Type I-B.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

36 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

Long Storehouse II

38 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

40 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

42 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters (west removed);
Type II-E.

44 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

46 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

48 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.** (int. inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

50 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

52 Open Archway; Plywood and Metal Partition; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

54 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

56 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

58 Open Archway; No Infill; **Type I-D.** (possible former fire door location)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

60 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

62 Brick Infill; Freight-Elevator Door; **Type I-J.**
Glazed; Wood, Raised Frame; M/T/P; **Type II-D.**

64 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

66 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

Long Storehouse I

68 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

70 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

72 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

74 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

76 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

78 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

80 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

82 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

84 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

86 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

88 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

90 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

92 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

94 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

96 Panelled Doors; Fanlight; **Type I-B.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

Stables

98 Louvered Blinds; Fanlight; **Type I-A.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

100 Semi-Circular Arches Infilled and Replaced with Rectangular Opening; **Type III-B.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

102 Semi-Circular Arches Infilled and Replaced with Rectangular Opening; **Type III-B.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

104 Semi-Circular Arches Infilled and Replaced with Rectangular Opening; **Type III-C.**
Glazed; Wood, Raised Frame; M/T/P; **Type II-D.**

106 Semi-Circular Arches Infilled and Replaced with Rectangular Opening; **Type III-C.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

108 Brick Infill; Fanlight; **Type I-I.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

110 Brick Infill (reused brick); Door; Fanlight; **Type I-I.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

112 Semi-Circular Arches Infilled and Replaced with Rectangular Opening; Vertical Plank Wood Wall and Door Inset; **Type III-D.**
Glazed; Wood, Raised Frame; M/T/P; **Type II-D.**

114 Semi-Circular Arches Infilled and Replaced with Rectangular Opening; Vertical Plank Wood Wall and Door Inset; **Type III-D.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

116 Brick Infill (reused brick); Fanlight; **Type I-I.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

* * *

North Elevation

West Addition

Bays

1 Brick Infill; Recessed; **Type I-F.** (interior inaccessible)
Glazed; Wood, Flush Frame; M/T/P; Batten Shutters; **Type II-C.**

3 Brick Infill; Recessed; **Type I-F.** (interior inaccessible)
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

5 Brick Infill; Recessed; **Type I-F.** (interior inaccessible)
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

7 Brick Infill; Recessed; **Type I-F.**
Louvered Blinds; Batten Shutters; **Type II-G.**

9 Brick Infill; Recessed; Window; Vent; **Type I-F.**
Louvered Blinds; Batten Shutters; **Type II-G.**

11 Plywood Infill; Wood Door and Frame; Vent; **Type I-M.**
Louvered Blinds; Batten Shutters; **Type II-G.**

13 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

15 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Louvered Blinds; Batten Shutters; **Type II-G.**

17 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

19 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Louvered Blinds; Batten Shutters; **Type II-G.**

21 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

23 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Louvered Blinds; Batten Shutters; **Type II-G.**

25 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

27 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Louvered Blinds; Batten Shutters; **Type II-G.**

29 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

31 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Louvered Blinds; Batten Shutters; **Type II-G.**

33 Louvered Blinds; Fanlight; **Type I-A.** (interior inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

35 Panelled Doors; Fanlight; **Type I-B.** (interior inaccessible)
Louvered Blinds; Batten Shutters; **Type II-G.**

Long Storehouse II

37 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

39 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

41 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Louvered Blinds; Batten Shutters; **Type II-G.**

43 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

45 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Louvered Blinds; Batten Shutters; **Type II-G.**

47 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

49 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.** (int. inaccessible)
Louvered Blinds; Batten Shutters; **Type II-G.**

51 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

53 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

55 Louvered Blinds; Fanlight; Batten Shutters (west removed); **Type I-A.**
Louvered Blinds; Batten Shutters; **Type II-G.**

57 Louvered Blinds; Fanlight; Batten Shutters (west removed); **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

59 Fire Door; **Type I-O.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

61 Louvered Blinds; Fanlight; Batten Shutters (east removed); **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

63 Louvered Blinds; Fanlight; **Type I-A.**
Louvered Blinds; Batten Shutters; **Type II-G.**

65 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

Long Storehouse I

67 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

69 Open Archway; No Infill; **Type I-D.**
Louvered Blinds; Batten Shutters; **Type II-G.**

71 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

73 Open Archway; No Infill; **Type I-D.**
Glazed; Wood, Raised Frame; M/T/P; **Type II-D.**

75 Louvered Blinds; Fanlight; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

77 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Louvered Blinds; Batten Shutters; **Type II-G.**

79 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

81 Stucco Infill with Double Metal Doors; **Type I-N.** (int. inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

83 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood; Modern Raised Frame; Nailed; **Type II-E.**

85 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

87 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

89 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters (west removed); **Type II-D.**

91 Louvered Blinds; Fanlight; Batten Shutters (west removed); **Type I-A.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

93 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.** (int. inaccessible)
Glazed; Wood, Raised Frame; M/T/P; **Type II-D.**

95 Louvered Blinds; Fanlight; Batten Shutters; **Type I-A.** (int. inaccessible)
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

Stables

97 Freight-Elevator Door; Brick Infill; **Type I-J.**
Glazed; Metal Sash; **Type II-F.**

99 Semi-Circular Arches removed for Bays 99/101 and replaced with Rectangular Opening; **Type III-B.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

101 Semi-Circular Arches removed for Bays 99/101 and replaced with Rectangular Opening; **Type III-B.**
Glazed; Wood, Modern Raised Frame; Nailed; **Type II-E.**

103 Brick Infill; Fanlight; **Type I-I.**
Glazed; Wood, Raised Frame; M/T/P; **Type II-D.**

105 Brick Infill; Fanlight; **Type I-I.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

107 Brick Infill; Fanlight; **Type I-I.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

109 Brick Infill (reused brick); Window; Fanlight; **Type I-I.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

111 Brick Infill (reused brick); Door; Fanlight; **Type I-I.**
Glazed; Wood, Raised Frame; M/T/P; **Type II-D.**

113 Brick Infill (reused brick); Fanlight; **Type I-I.**
Glazed; Wood, Modern Raised Frame; Nailed; Batten Shutters; **Type II-E.**

115 Brick Infill (reused brick); Fanlight; **Type I-I.**
Glazed; Wood, Raised Frame; M/T/P; Batten Shutters; **Type II-D.**

APPENDIX B.

Inventory of Exterior Wall Openings by Treatment Type

INTRODUCTION

I. Semi-Circular Arches

A. Louvered Blinds; Fanlight
- West Elevation, Second Story
  - center bay
- South Elevation, First Story
  - bays 14, 18, 20, 24 (with metal door), 26, 36, 38, 40, 42, 44, 46, 48, 50, 82, 98
- North Elevation, First Story
  - bays 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 61, 63, 65, 75, 77, 79, 83, 85, 87, 89, 91, 93, 95

B. Solid Panels; Fanlight
- South Elevation, First Story
  - bays 16, 22, 28, 34 (plywood interior), 96
- North Elevation, First Story
  - bay 35

C. Glazed Sash; Fanlight
- West Elevation, Second Story
  - south, north bays
- East Elevation, Second Story
  - south, center, north bays

D. Open Archway; No Infill
- South Elevation, First Story
  - bays 52 (with plywood; metal partition - horses stall), 54, 56, 58, 60, 64, 66, 68, 70, 72, 74, 76, 78, 80, 84, 86, 88, 90, 92, 94
- North Elevation, First Story
  - bays 67, 69, 71, 73

E. Recessed Brick Infill; Stretcher Bond
- West Elevation, First Story
  - north bay

F. Recessed Brick Infill; (6) Stretcher to (1) Header Course
- North Elevation, First Story
  - bays 1, 3, 5, 7, 9 (with window, vent)

G. Recessed Brick Infill; (5) Stretcher to (1) Header/Stretcher Course
- South Elevation, First Story
  - bays 2 (with vent), 4 (with vent), 6 (with window and vent), 8 (with window)

H. Recessed Brick Infill; (7) Stretcher to (1) Header Course
West Elevation, First Story
- south bay

I. Recessed Brick Infill; (7) Stretcher to (1) Header/Stretcher; Fanlight
East Elevation, First Story
- south, center, north bays
South Elevation
- bays 108 (new brick, 110 (with door; reused brick), 116 (reused brick)
North Elevation
- bays 103 (new brick), 105 (new brick), 107 (new brick), 109 (reused brick; with window), 111 (reused brick, with door), 113 (reused brick), 115 (reused brick)

J. Recessed Brick Infill; (7) Stretcher to (1) Header Course; Freight Elevator Door
South Elevation
- bays 30, 62
North Elevation
- bay 97

K. Wood Garage Door; Fanlight
South Elevation
- bays 10, 12

L. Wood Matchboard Siding-Door
South Elevation
- bay 32

M. Plywood Infill; Door and Vent
North Elevation
- bay 11

N. Stucco Infill; Double Door and Vent
North Elevation
- bay 81

O. Fire Door (not accessible from exterior)
North Elevation
- bay 59

II. Segmental Arches

A. Flush Brick Infill; (7) Stretcher to (1) Header/Stretcher
East Elevation, Basement
- south and north bays

B. Recessed Brick Infill; Door
East Elevation, Basement
- center bay

C. Glazed; Wood, Flush Frame
South Elevation, Second Story
- bay 2 (m/t/p), 4 (nailed), 6 (m/t/p)
North Elevation, Second Story
- bay 1 (m/t/p)

D. Glazed; Wood, Raised Frame; Mortised, Tenoned, and Pegged
South Elevation, Second Story
- bays 10, 14, 18, 22, 26, 30, 34, 38, 40, 44, 48, 52, 54, 58, 62, 66, 68, 72, 76, 80, 82, 86, 90, 94, 96, 104, 108, 112, 116
North Elevation, Second Story
- bays 13, 17, 21, 25, 29, 33, 37, 39, 43, 47, 51, 53, 57, 59, 61, 65, 67, 71, 73, 75, 79, 81, 85, 89, 93, 95, 99, 103, 111, 115

E. Glazed; Wood, Modern Raised Frame; Nailed
South Elevation, Second Story
- bays 4, 8, 12, 16, 20, 24, 28, 32, 36, 42, 46, 50, 56, 60, 64, 70, 74, 78, 84, 88, 92, 98, 100, 102, 106, 110, 114
North Elevation, Second Story
- bays 3, 5, 83, 87, 91, 101, 105, 107, 109, 113

F. Glazed; Metal Sash
North Elevation
- bay 97

G. Louvered Blinds
North Elevation, Second Story
- bays 7, 9, 11, 15, 19, 23, 27, 31, 35, 41, 45, 49, 55, 63, 69, 77

III. Rectangular Openings

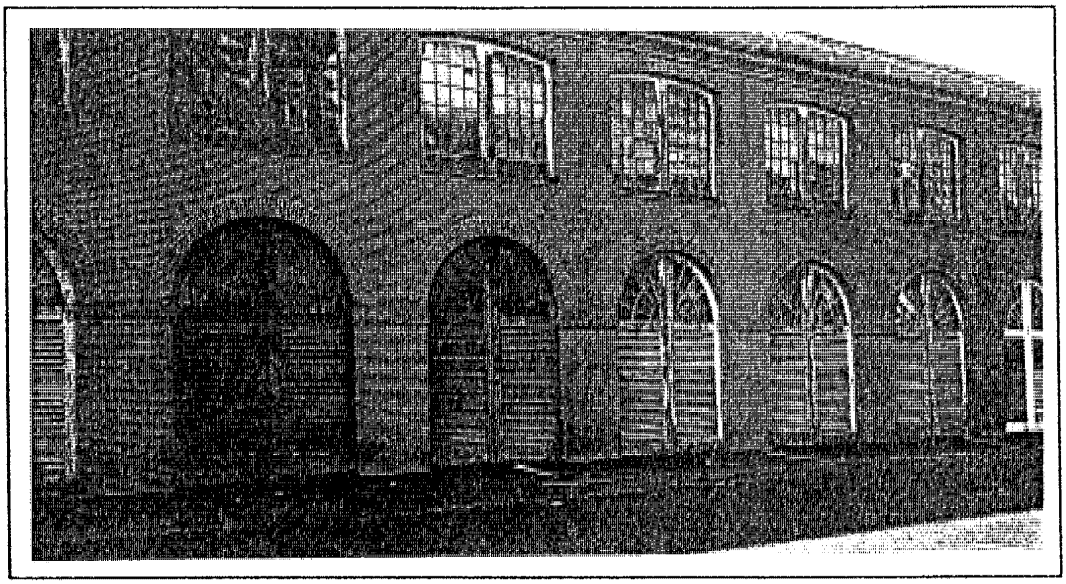
A. Wood and Brick Infill; Glazed Door
West Elevation, First Story
- center bay

B. No Infill
South Elevation, First Story
- bays 100/102
North Elevation, First Story
- bays 99/101

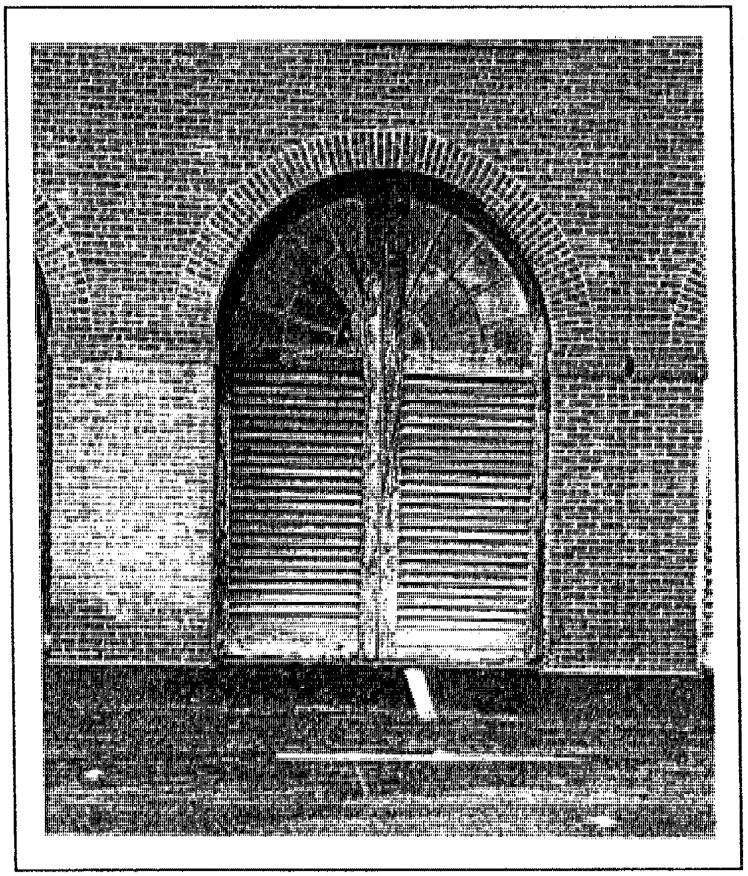
C. Metal Corrugated Door
South Elevation, First Story
- bays 104/106

D. Vertical Wood-Plank Wall and Door
South Elevation, First Story
- bays 112/114

I. Semi-Circular Arches



Treatment Type I-A. South elevation, first story, bays 40 - 50. Louvered blinds with fanlights.



Treatment Type I-A. South elevation, first story, bay 40. Louvered blinds with fanlight.

I-A. Louvered Blinds; Fanlight

Location:

West Elevation, Loft Story
- center bay

South Elevation, First Story
- bays 14, 18, 20, 24 (with metal door), 26, 36, 38, 40, 42, 44, 46, 48, 50, 82, 98

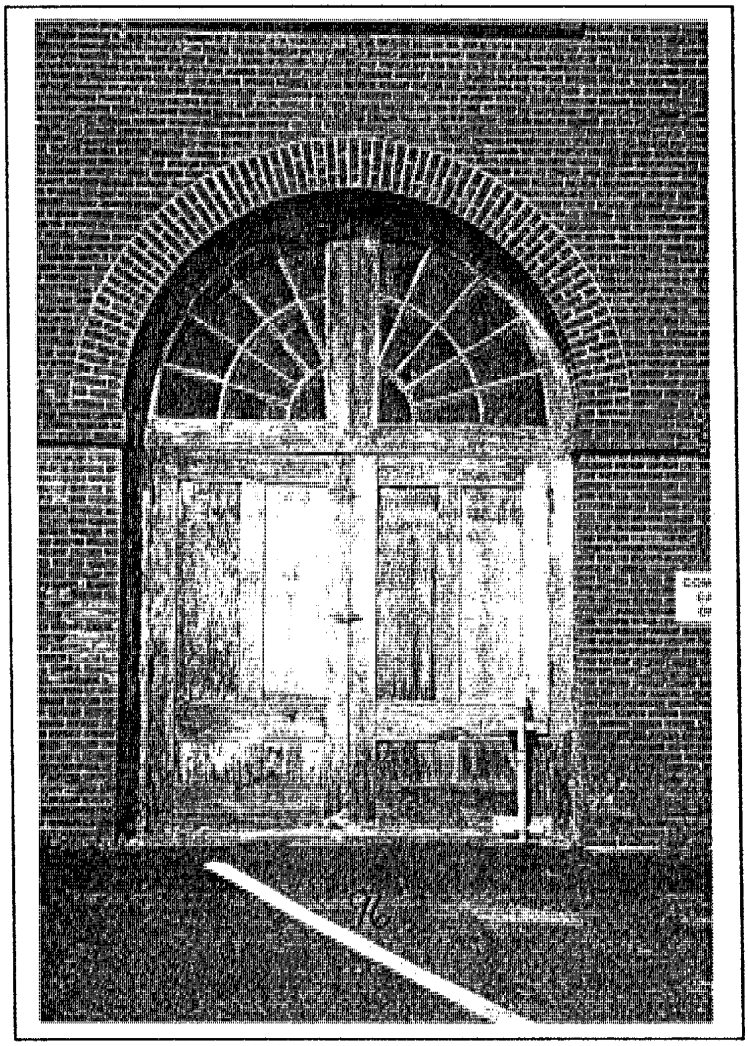
North Elevation, First Story
- bays 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 61, 63, 65, 75, 77, 79, 83, 85, 87, 89, 91, 93, 95

General:

Louvered blinds are found in fifty-one openings, as noted above. The blinds are set in the typical semi-circularly arched wood frame and feature a typical fanlight and brace system. Folding batten-shutters remain in some openings. The typical louvered-blind treatment is described in detail in Appendix C, "Louvered Blind, Solid Panel, and Sash Treatments."

Variations:

Only one variation is apparent in the louvered blinds. It is at bay 24 where a metal Kalamein door has replaced the west side of the louvered blinds. The door sits in a metal frame and wood jamb.



Treatment Type I-B. South elevation, first story, bay 96. Solid panels and fanlight.

I-B. Solid Panels; Fanlight

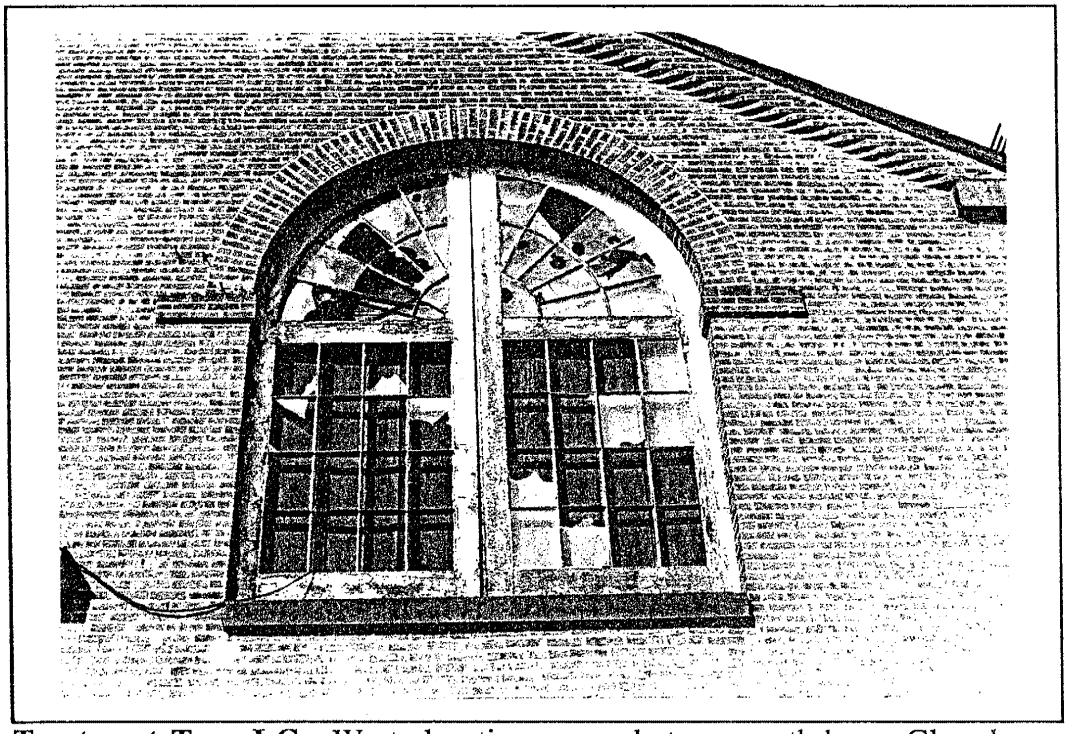
Location:

South Elevation, First Story
- bays 16, 22, 28, 34, 96

North Elevation, First Story
- bay 35

General:

Solid panels refer to those openings in which the semi-circular arch frame is filled with solid wood panels. This treatment makes the opening appear as though it is filled with double four-panelled doors. It seems, however, that many of the openings treated in this manner were non-operable, and thus, not true doors. This treatment type is found in six openings, as noted above. The solid panels are set in the typical semi-circular arch wood frame and feature a typical fanlight and brace system. Folding batten-shutters remain in some openings. A detailed description of the solid panel treatment is described in detail in Appendix C, "Louvered Blind, Solid Panel, and Sash Treatments."



Treatment Type I-C. West elevation, second story, south bay. Glazed sash.

I-C. Glazed Sash; Fanlight

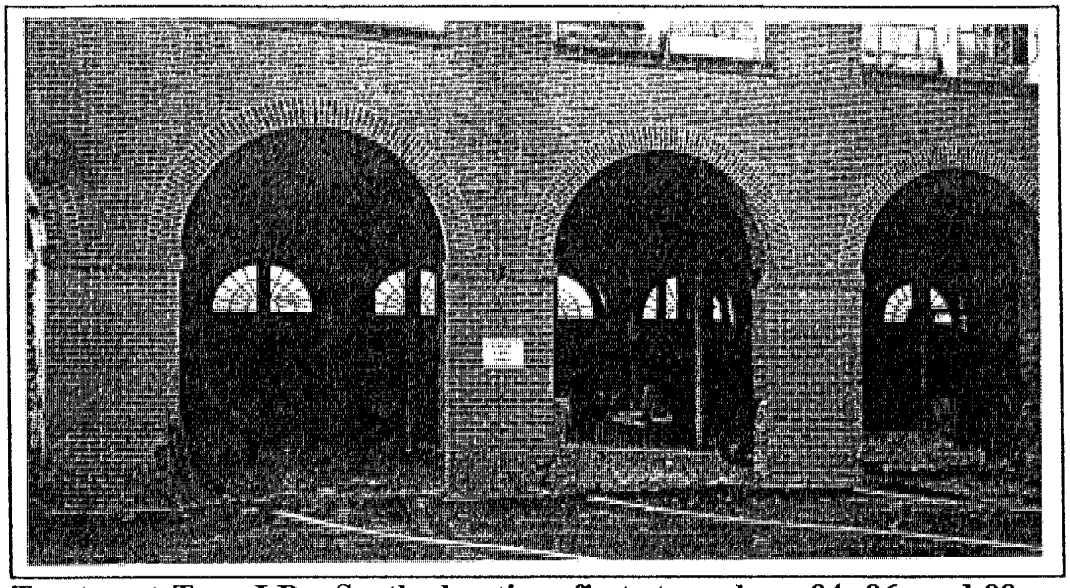
Location:

West Elevation, Second Story
- south, north bays

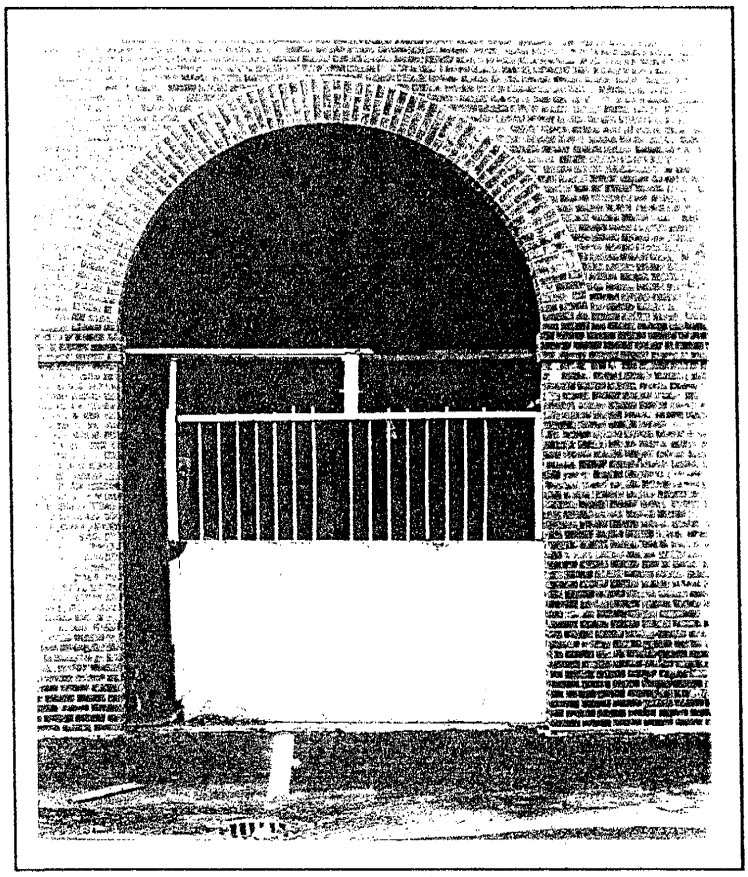
East Elevation, Second Story
- south, center, north bays

General:

Fixed-sash windows of this type are found on only the second story, west and east elevations in five bays. The sash is set in the typical semi-circular arch wood frame and exhibits the typical fanlight and brace system. See Appendix C, "Louvered Blind, Solid Panel, and Sash Treatments," for a detailed description of the sash.



Treatment Type I-D. South elevation, first story, bays 84, 86, and 88.



Treatment I-D. South elevation, first story, bay 52. (Plywood and metal partition from former horse stall.)

I-D. Open Archway; No Infill

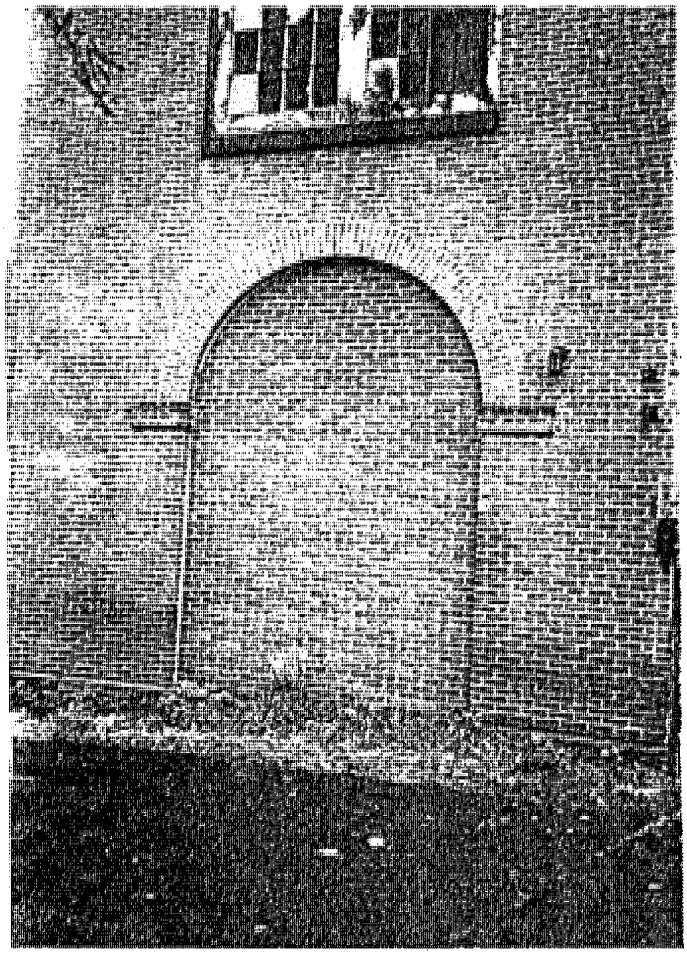
Location:

South Elevation, First Story
- bays 52 (with plywood; metal partition - horses stall), 54, 56, 58, 60, 64, 66, 68, 70, 72, 74, 76, 78, 80, 84, 86, 88, 90, 92, 94

North Elevation, First Story
- bays 67, 69, 71, 73

General:

All of these openings (twenty-four in total) are currently devoid of any infill.



Treatment Type I-E. **West elevation, first story, north bay. Recessed brick infill; stretcher bond.**

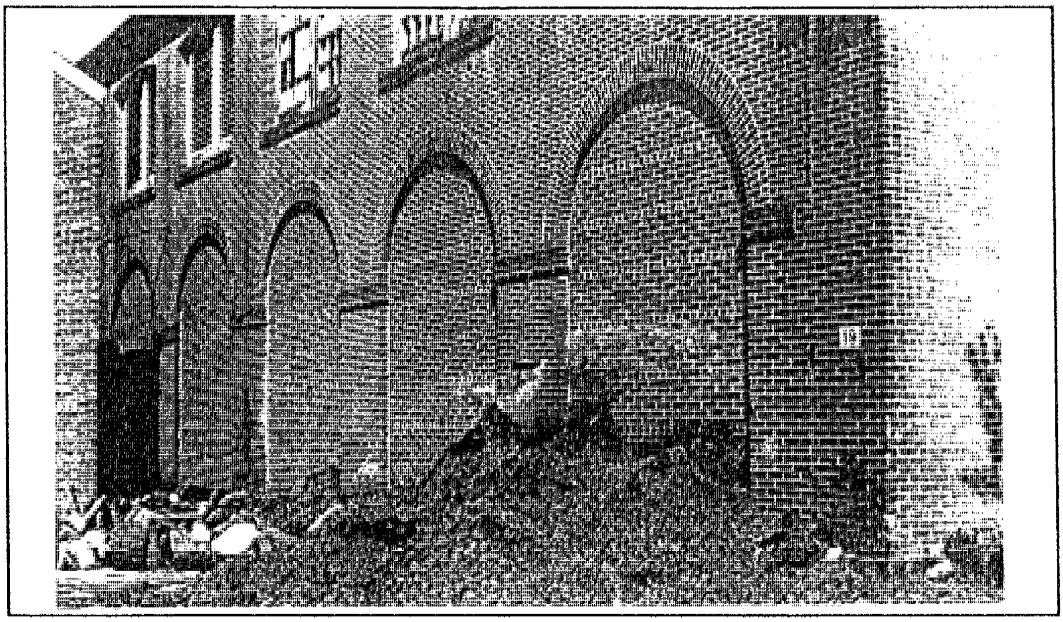
I-E. Recessed Brick Infill; Stretcher Bond

Location: West Elevation, First Story
- north bay

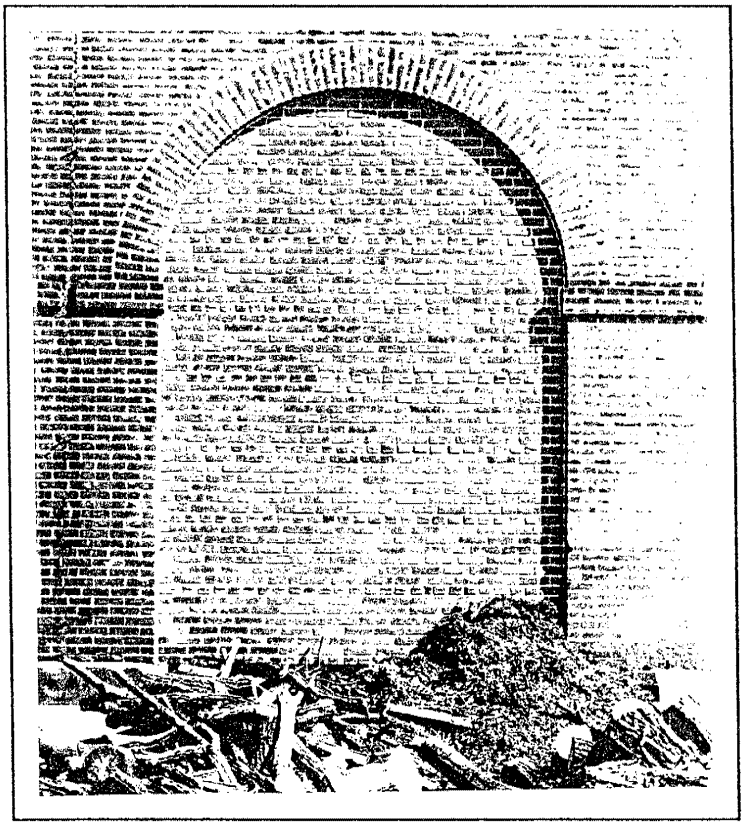
Brick Bond: Infill
stretcher (orange colored brick)

Brick Dimensions: Infill
length - 8"
height - 2-1/4"
depth - 3-3/8" to 3-1/2"

Design: The brick infill is recessed for 4" from the wall surface. It overlaps the sandstone water-table at the wall base by approximately 1". The infill is caulked at the seam of the arch with caulking compound. Only one opening is treated in this manner.



Treatment Type I-F. North elevation, first story, bays 1, 3, 5, 7, and 9. Recessed brick infill; (6) stretcher to (1) header course.



Treatment Type I-F. North elevation, first story, bay 1. Recessed brick infill.

I-F. Recessed Brick Infill; (6) Stretcher to (1) Header Course

Location: North Elevation, First Story
- bays 1, 3, 5, 7, 9 (with window, vent)

Brick Coursing: Infill
(6) stretcher to (1) header course

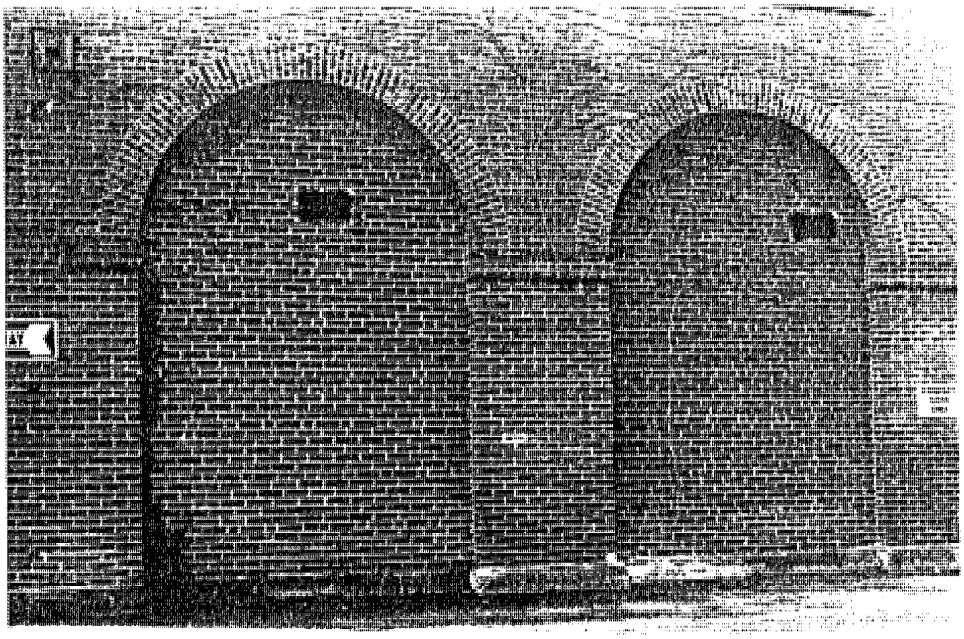
Brick Dimensions: Infill
length - 7-3/4" to 8"
height - 2-1/8" to 2-1/4"
depth - 3-1/4"

Design: Five, first-story semi-circular arches are of this type. The entire archway is filled with brick. The brick is recessed from the wall plane by 4". It sits on a sandstone water-table. The water table is exposed for approximately 10-1/2" from the ground level. The seam between the arch and infill is caulked with a caulking compound. At bay 7, two 5/8" diameter drain pipes penetrate the lower brick course, and at bay 9, three drain pipes are extant. The lower courses of the other bays are not visible.

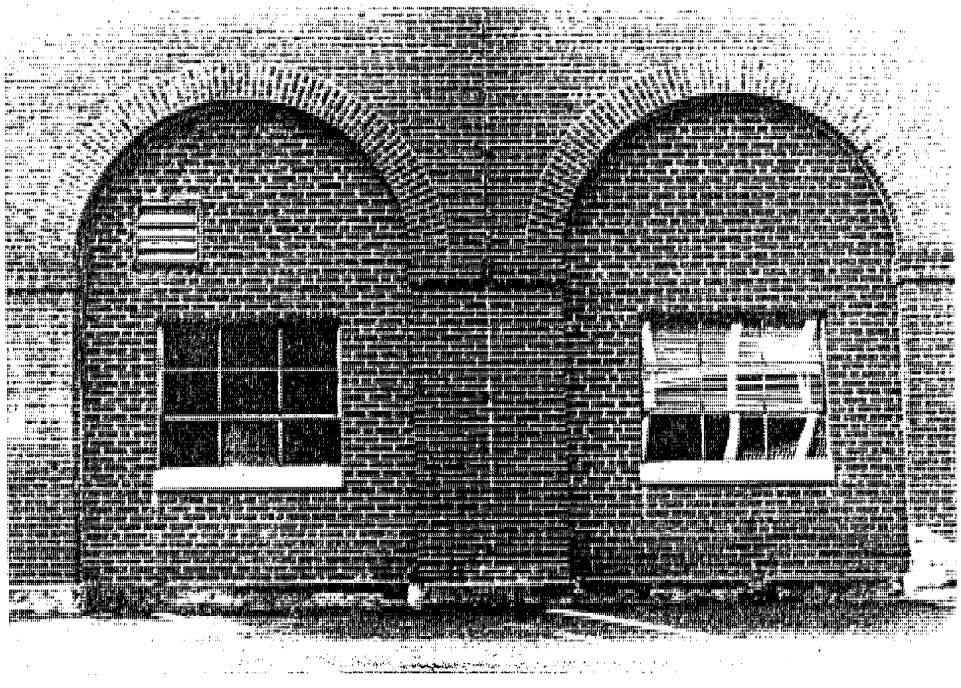
Bay 9: This bay varies from the others in that it is finished with a vent and window.

Vent: The upper west corner of the arch infill features a 3-louvered metal vent, square in shape.

Window: The window is located against the east jamb of the arch, two courses below the impost. It is 4'1-1/2" high x 2'9" wide and is filled with twenty-four panes of structural glass. The window sill is constructed of concrete and the lintel features copper flashing.



Treatment Type I-G. South elevation, first story, bays 2 and 4. Recessed brick infill with vents; (5) stretchers to (1) header/stretcher course.



Treatment Type I-G. South elevation, first story, bays 6 and 8. Recessed brick infill with windows.

I-G. Recessed Brick Infill; (5) Stretcher to (1) Header/Stretcher Course

Location: South Elevation
- bays 2 (with vent), 4 (with vent), 6 (with window and vent), 8 (with window)

Brick Coursing: Infill
(5) stretcher to (1) header/stretcher course; bricks in bays 2-4 are browner in color while those in bays 6-8 are more orange in color

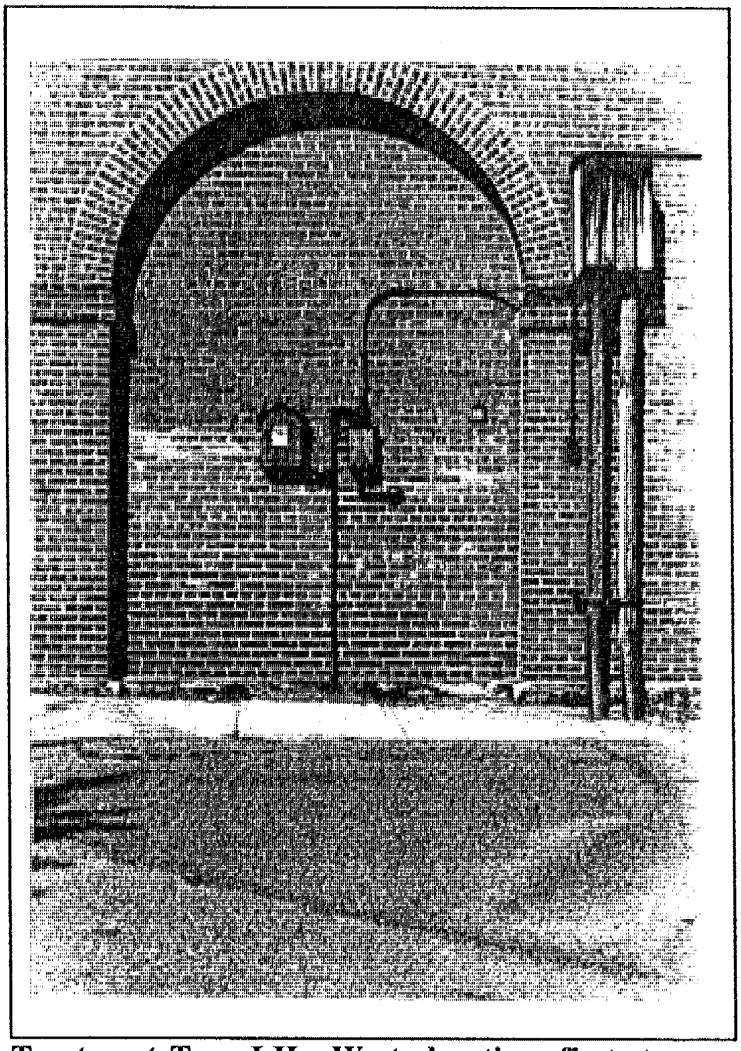
Brick Dimensions: Infill
length - 7-3/4" to 8"
height - 2-1/8"
depth - 3-3/8" to 3-1/2"

Design: The archway is filled with brick. The infill is recessed for 8-1/4" from the wall plane. It sits on a sandstone water-table. The water table is exposed for approximately 8" from the ground level. The seam of the infill and arch is caulked with mortar in bays 2 and 4, while that of bays 6 and 8 is caulked with a caulking compound.

Vents: Rectangular Vents in Bays 2 and 4: These vents are 3-1/2 courses high x 2 brick lengths long and are screened with wire mesh. The vent at bay 2 is located twelve courses below arch, slightly off-center towards the east. The vent at bay 4 is at the same course level, however, it is closer to the west jamb of the archway.

Exhaust Vent in Bays 6: Located above the upper, west corner of the window, it is eight courses of brick high by 2-1/2" brick lengths wide. It is composed of a metal frame and four metal louvers.

Windows: A window is approximately centered below the imposts in bays 6 and 8. The windows are 4'1" high x 5' wide and exhibit fixed sash of nine lights each. The sash and lintel are of metal while the sill is of concrete. The concrete sill is 5" high and features a sloped upper edge.



Treatment Type I-H. West elevation, first story, south bay. Recessed brick infill; (7) stretcher to (1) header course.

III-A. Wood and Brick Infill; Glazed Door

Location: West Elevation, First Story
- center bay

General:

Semi-Circular Arch: Evidence for the semi-circular arch is gone. A rectangular opening has been introduced in its place. The infill consists of flush brick keyed into the wall brick.

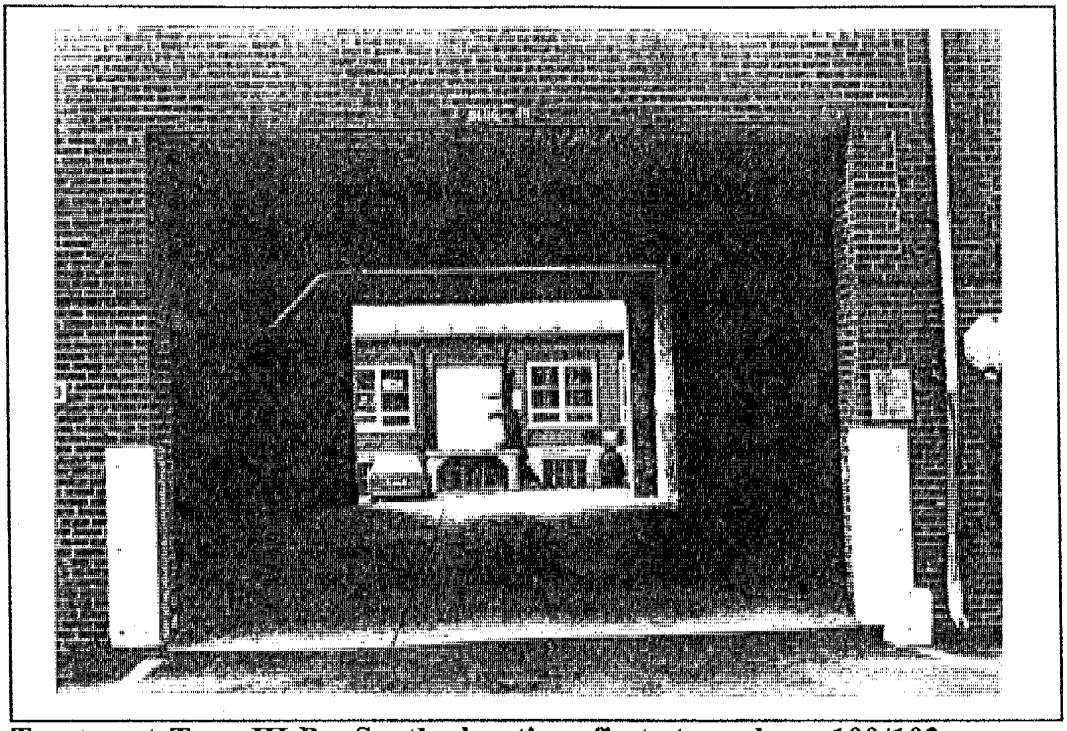
Rectangular Opening: The opening is currently 11'3" high x 11' wide. The lintel consists of two metal plates and brick, from west to east: metal; exposed brick; metal; exposed brick.

Doors: Double doors are situated in the center of the opening. They are recessed for 1'8". The doors are Kalamein, glazed with plate glass, one panel each side and a transom of glass overhead. An aluminum threshold is set on a concrete sill.

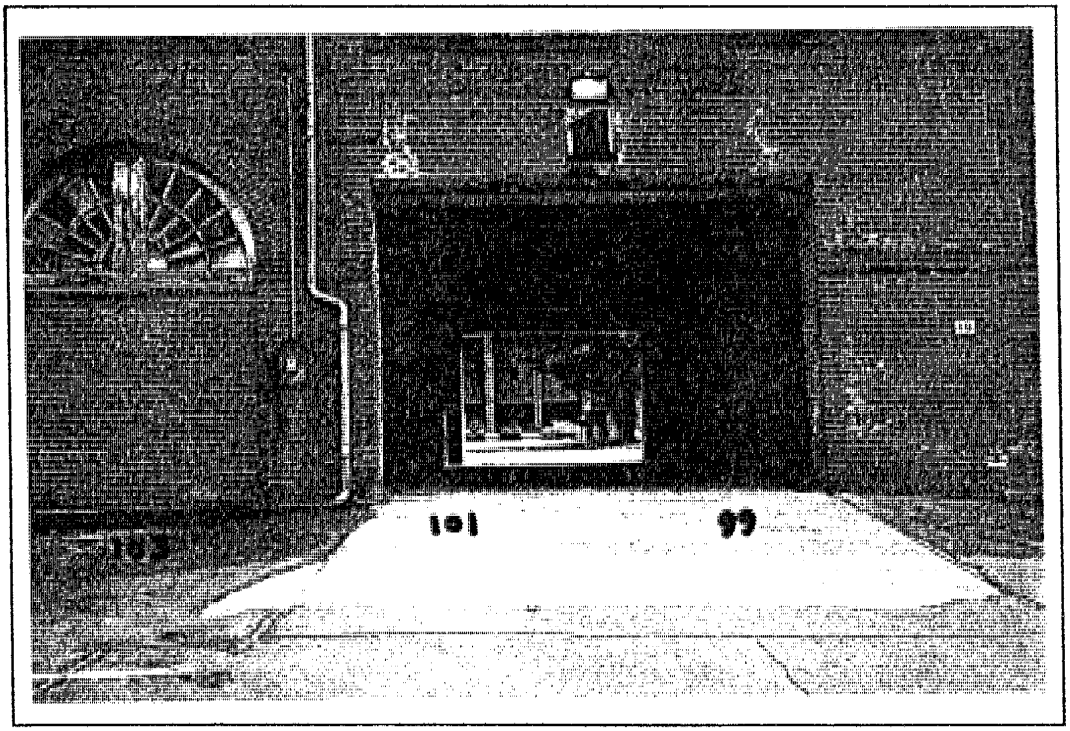
Wall: A brick wainscot of modern, brown brick is extant on either side of the double doors. The infill consists of (7) stretcher courses to (1) header/stretcher course. Modern wood clapboards are secured above the wainscot and are composed in a wood frame. Bumper guards consisting of metal angle plates are fastened at either side of the opening. They are 13" x 13" wide and 4'6" high.

Canopy: A wood semi-circular canopy is installed over the doors in the opening. The canopy is set on brackets.

Lighting: Two wall-fixtures are placed at either side of the double doors on the clapboards.



Treatment Type III-B. South elevation, first story, bays 100/102, vehicular passageway.



Treatment Type III-B. North elevation, first story, bays 99/101, vehicular passageway.

III-B. No Infill

Location:

South Elevation, First Story
- bays 100-102

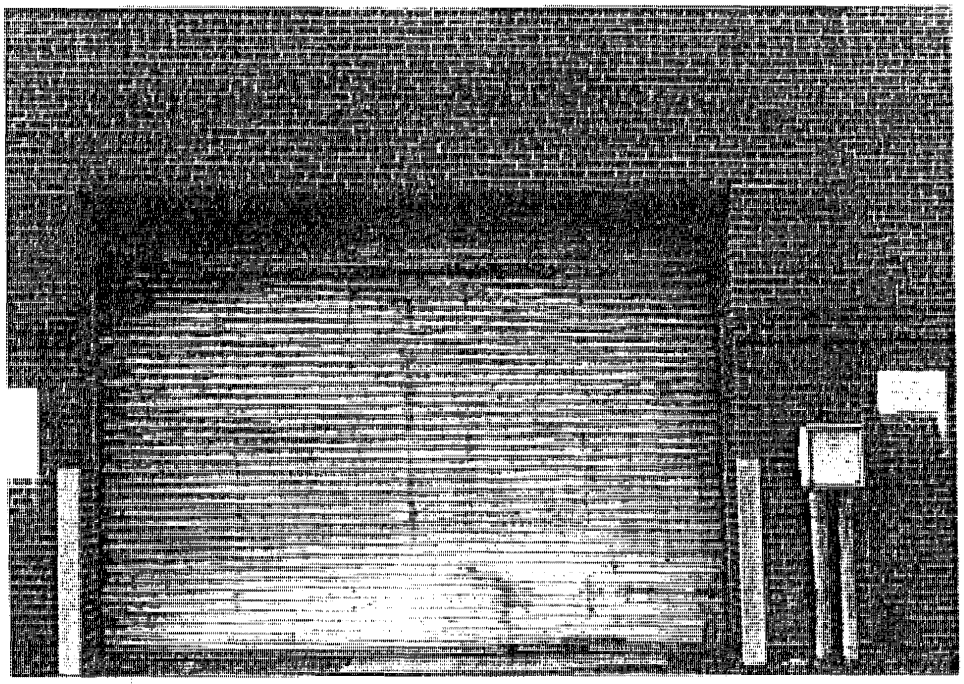
North Elevation, First Story
- bays 99-101

General:

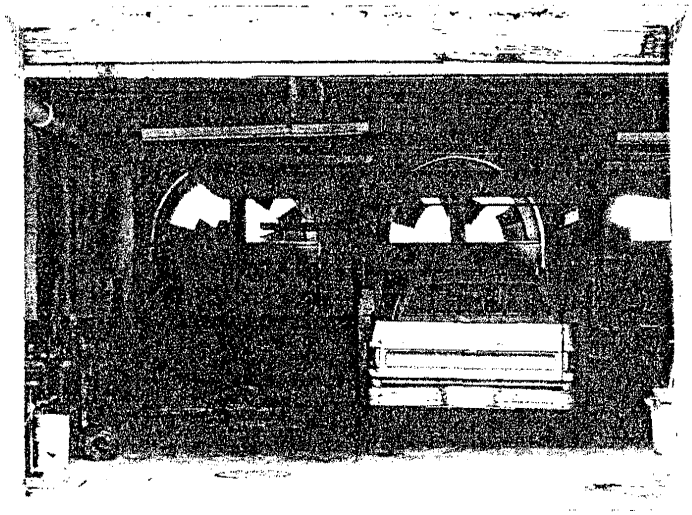
The two original semi-circular arches for bays 100-102 and 99-101 were altered to accommodate one rectangular opening. The evidence for the arches is still visible on the interior.

Bays 100-102: At bay 100 the semi-circular arch is filled partially with flush brick. The opening begins at the middle of bay 100 and stretches to the east side of bay 102. It is 11'7" high x 16' wide. The west jamb appears to have all new brick with no patching or keying is evident. The east jamb features three keys and its seams are in a deteriorated state. The lintel is metal and extends beyond the jambs of the opening. The interior dimension is 2'4-3/4" high. The interior side is bolted to brick with six square-bolts and the underneath side with rivets of fifteen rows of three. Metal angle-plates serve as bumper guards at each corner of the opening. They are 13" wide at the exterior and jambs and 4'5" high.

Bays 99-101: At bay 99 the semi-circular arch is filled partially with flush brick (6'6" to rectangular opening). The arch is without imposts. The evidence of the semi-circular arch is completely gone at bay 101. The opening begins on the west side of bay 101 and extends to the mid-point of bay 99. It is 11'6" high x 15'5" wide. The west jamb is 2'4" thick, consisting of all new brick. The east jamb is 2'4" thick and is composed of the old facing brick on the exterior and new brick on the interior. The lintel is of metal and extends beyond the jambs of the opening. It is composed of interior and exterior metal angle-beams. The interior is bolted to brick with six square-bolts and underneath side with rivets fifteen rows of three. Bumper guards are not extant at this opening.



Treatment Type III-C. South elevation, first story, bays 104/106. Metal corrugated door.



Treatment Type III-C. Bays 104/106 with metal corrugated door open revealing interior garage.

III-C. Metal Corrugated Door

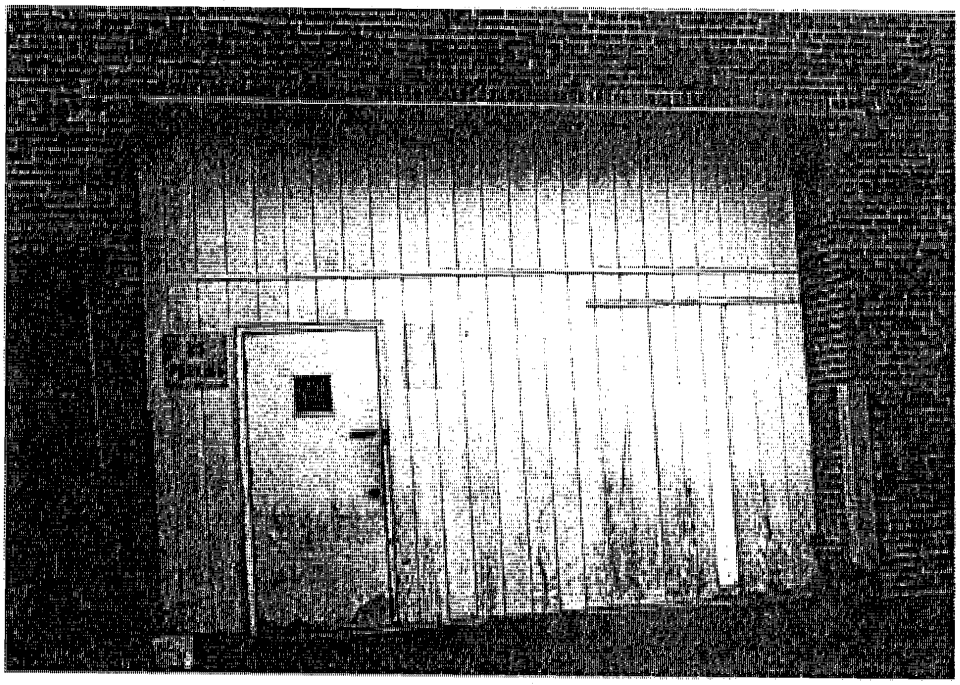
Location: South Elevation, First Story
- bays 104-106

General:

Semi-Circular Archway Treatment: The two semi-circular arches at bays 104 and 106 have been removed and one rectangular opening introduced.

Rectangular Opening: The opening is 11'9" high x 16' wide and is centered on bays 104 and 106. The lintel consists of a metal plate extending the width of the opening and secured with rivets fifteen rows of three. Bumper guards are fixed at the east and west corners of the opening. They are 5' high x 6" wide (exterior) x 4" wide (interior).

Door: A metal, corrugated, door is recessed 2'5" from the wall plane. The door rolls upward on pulley tracks mounted on the east and west sides of the opening, floor to lintel in height. The door is operable and installed on the interior wall. A hood encases the rolled door at the lintel. A pulley chain is located on the west side with a motor to its west. The pulley motor is welded to a metal plate in the floor. The threshold consists of concrete with asphalt aggregate.



Treatment Type III-D. South elevation, first story, bays 112/114. Vertical wood-plank wall and door.

III-D. Vertical Wood-Plank Wall and Door

Location: South Elevation, First Story
- bays 112-114

General:

Semi-Circular Archway Treatment: New brickwork was introduced disquising any evidence of the semi-circular arches on the exterior. A fragment of bay 114's semi-circular arch is visible on the interior east side of the arch and jamb.

Rectangular Opening: The opening is 11'3" high x 16' wide. The rectangular opening is centered on the bays. The brick infill consists of American bond of (7) stretcher courses to (1) header course, with variations. The interior is covered with interior wall finishes. The exterior includes a vertical plank wall and plank door inset at the west end. The wall features vertical boards, 7-1/2" wide, tongue and grooved, with two battens. The upper batten stretches across the opening at two-thirds the way up from the ground level. The lower only extends 5'6" across the opening from the east end is 8" below the upper. At the center of the wall is a plank which extends vertically to the ground. A 1" square weatherstrip is nailed to the lintel. Nailed on the wall, west of the door is a "No Parking" sign. Bumper guards are fastened at the east and west sides of the opening. Consisting of angle bars 5' high x 6" wide at the exterior and jambs.

Door: The wood plank door is recessed 2'1/2" from the wall plane. It is 6'8" high x 2'11" wide. It features wood trim. The threshold is concrete and aluminum.

APPENDIX C.

Description of Typical Louvered Blind, Solid Panel, and Sash Treatments.

INTRODUCTION

General Comments: The original treatment for semi-circular arches included either louvered blinds, solid panels, or sash. The original treatment for segmental arches consisted of either louvered blinds or sash. All arches received folding batten-shutters.

I. Semi-Circular Arches

A. Frame
B. Fanlight
C. Brace System: Toeboard, Lintel, Jamb Boards, Intrados Board
D. Solid Panels
E. Louvered Blinds
F. Sash
G. Folding Batten-Shutters
   Inventory of Batten Shutters for Semi-Circular Arches
H. Threshold
I. Finishes

II. Segmental Arches

A. Frame
   Inventory of Frame Types for Segmental Arches
B. Sash
C. Louvered Blinds
   Inventory of Glazed and Louvered-Blind Treatments for Segmental Arches
D. Folding Batten-Shutters
   Inventory of Batten Shutters for Segmental Arches
E. Finishes

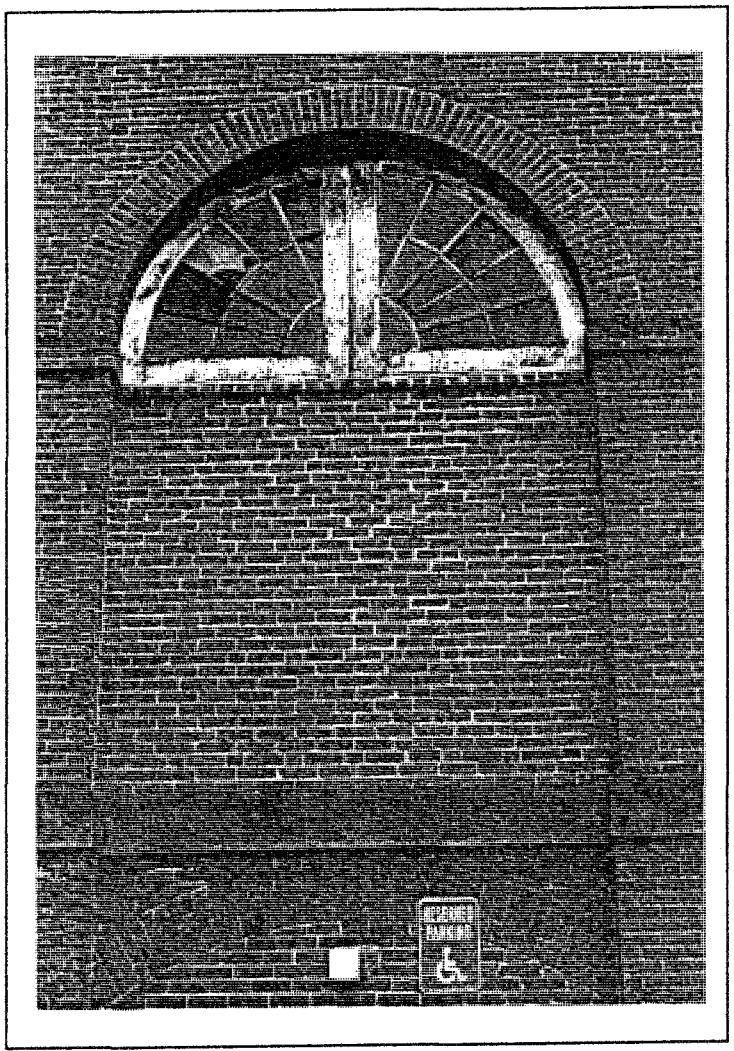
I-H. Recessed Brick Infill; (7) Stretcher to (1) Header Course

Location: West Elevation, First Story
- south bay

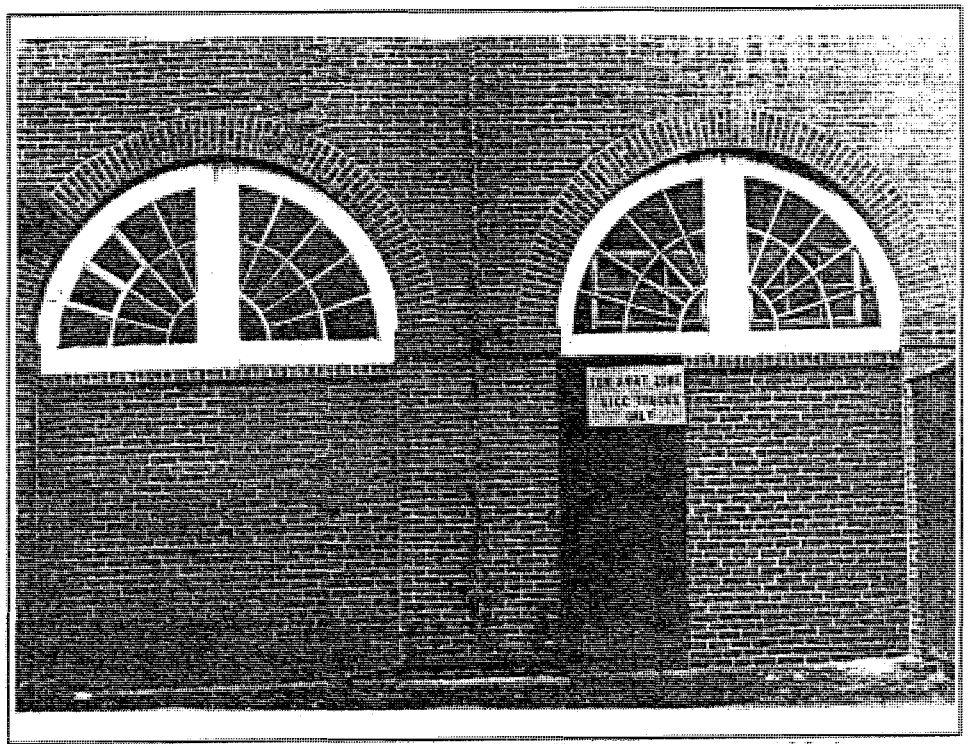
Brick Coursing: Infill
(7) stretcher to (1) header course

Brick Dimensions: Infill
length - 7-1/2" to 8"
width - 2-1/8"
depth - 3-1/2"

Design: The brick infill is recessed 8" from the wall plane. The seam of arch and infill is caulked with caulking compound. The infill sits on a sandstone water-table. Mounted in the center of the arch are two fire Gamewell boxes - a red box stamped with "#66, Fire Alarm Station, "The Gamewell Co., Newton, MA"; and a blue box stamped with "Gamewell - The Gamewell Co., Newton, MA."



Treatment Type I-I. East elevation, second story, south bay. Recessed brick infill; (7) stretcher to (1) header/stretcher course; fanlight.



Treatment Type I-I. South elevation, first story, bay 108 (new brick), bay 110 (reused brick).

I-I. Recessed Brick Infill; (7) Stretcher to (1) Header/Stretcher; Fanlight

Location: All of this archway type are located in the Stables.

East Elevation, Second Story
- south, center, north bays

South Elevation
- bays 108 (new brick), 110 (with door; reused brick), 116 (reused brick)

North Elevation
- bays 103 (new brick), 105 (new brick), 107 (new brick), 109 (reused brick, with window), 111 (reused brick, with door), 113 (reused brick), 115 (reused brick)

Brick Coursing:

Infill
(7) stretcher to (1) header course

Brick Dimensions:

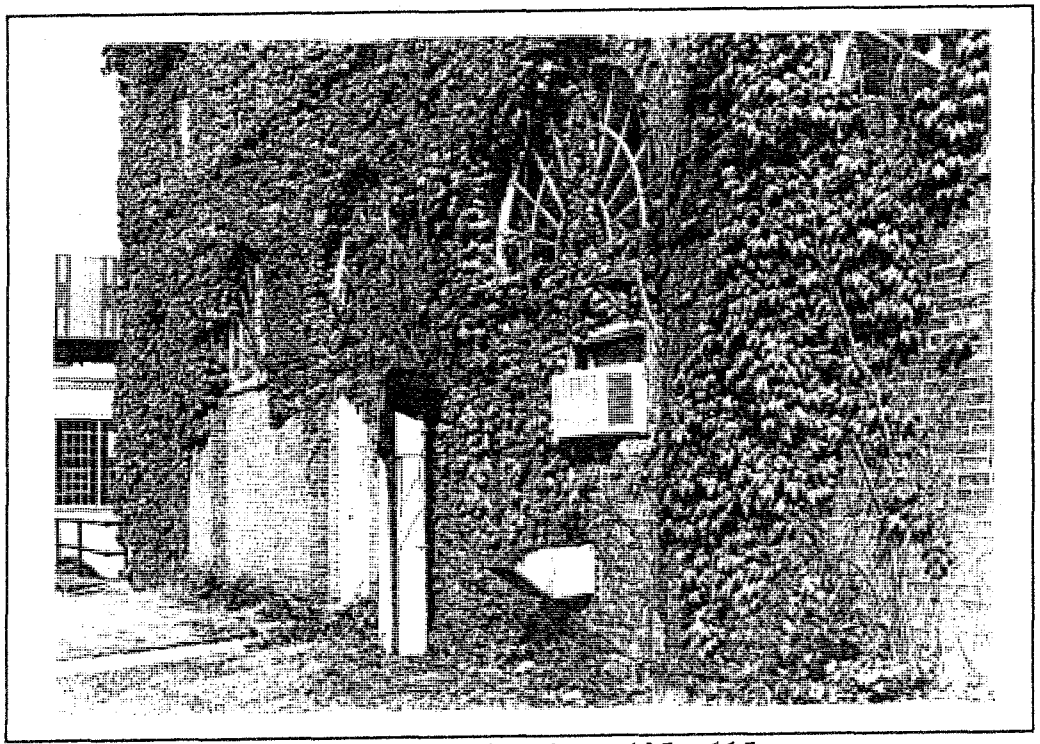
New Brick Infill
length - 7-1/2" to 8-1/2"
height - 2" to 2-1/4"
depth - 3-1/4" to 3-3/8"

Reused Brick Infill
length - 7-1/2" to 7-3/4"
height - 2-1/4"
depth - 3-1/2"

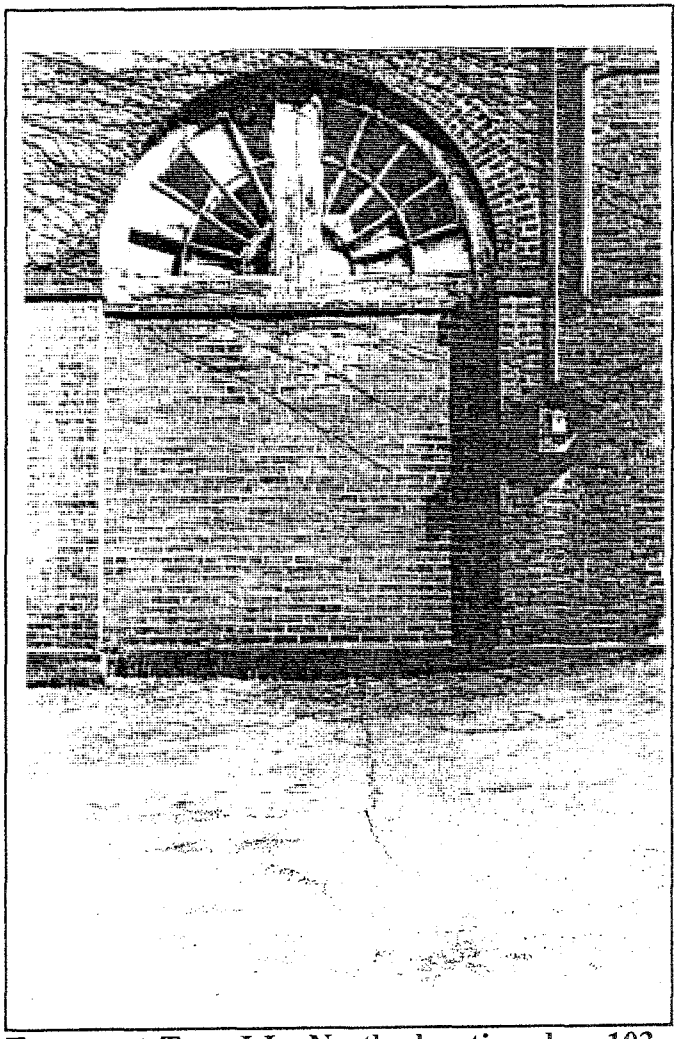
General: The lower frame and solid panels or louvered blinds (including shutters, etc.) have been removed, while the fanlight remains intact. The void (from impost to water table) has been filled with brick. The infill is recessed for 8", except for the upper course which is recessed for 7". The uppermost course of the infill is raised from the lower wall plane by 1". The fanlight's lower rail butts the infill. There are variations to this treatment at bays 109, 110, and 111, described below. Through the infill of bay 108, three pipes travel. The arch and infill seams are caulked with mortar throughout.

Bay 109: This bay features a window opening and an exhaust-vent pipe

Window: Located several courses below the shelf course of the fanlight, a window is recessed. The opening is 2'7-1/2" high x 3'7-1/2" wide. A 3-1/4" wide wood frame set in concrete holds a fixed 6-light window during the winter. In the summer, the window is removed and an air conditioner is set in plywood in the opening.



Treatment Type I-I. North elevation, bays 105 - 115.



Treatment Type I-I. North elevation, bay 103.

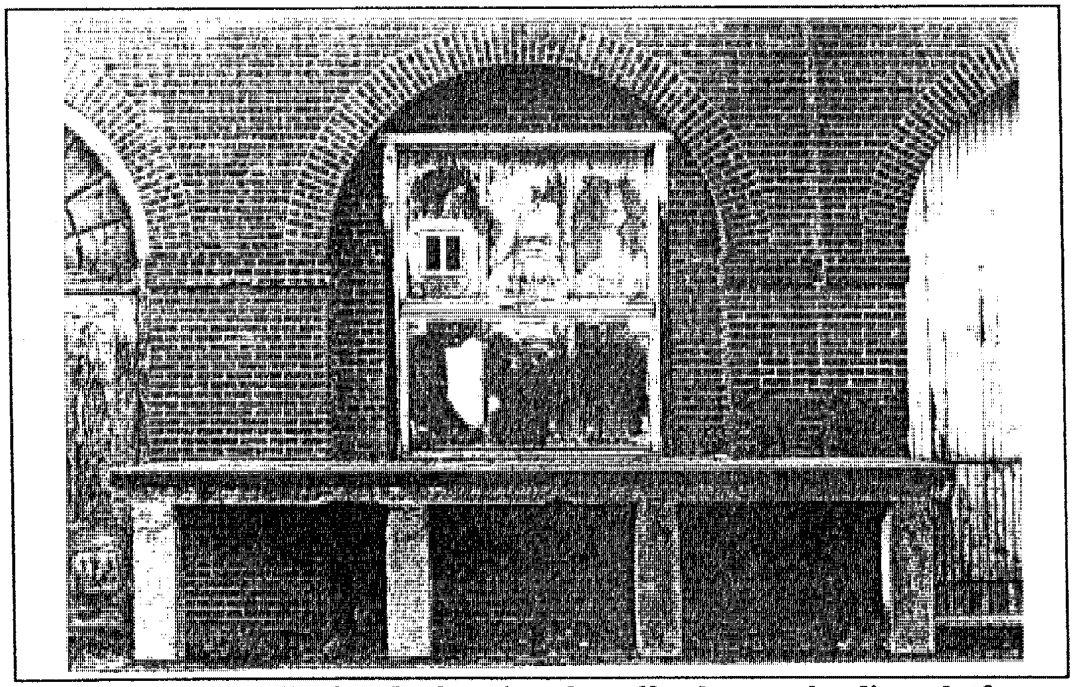
Exhaust-Vent Pipe: The pipe is located at the center of the arch, at ground level.

Bay 110: A door has been introduced into this bay at the west side of the infill. The wood door consists of five vertical boards nailed with wire nails. The header lintel does not stretch completely across the opening. A sign has been attached at the upper east corner of the door--"Tow Away Zone * STCC Trucks Only."

Bay 111: A wood door occupies the east half of the infill. The door, including frame, is 6'7" high x 2'8" wide. The frame is 1-3/4" wide x 4" deep on the exterior and 1-1/4" wide on the interior. The door features three panels in the lower half of the door, raised on the interior, recessed on the exterior; four lights above of frosted glass; a metal threshold; and three 5-knuckle ball butt-hinges (modern hardware). The door sits on the sandstone water-table.



Treatment Type I-J. South elevation, bay 30, elevator loading platform.



Treatment Type I-J. South elevation, bay 62, elevator loading platform.

I-J. Recessed Brick Infill; (7) Stretcher to (1) Header Course; Freight-Elevator Door

Location:

South Elevation
- bays 30, 62

North Elevation
- bay 97

Brick Coursing:

Infill

Bay 30: (7) stretcher to (1) header course

Bays 62, 97: (7) stretcher to (1) header/stretcher course

Brick Dimensions:

Infill

length - 7-1/2" to 8"
height - 2-1/4" to 2-3/8"
depth - 3-3/4"

General:

Each archway is filled with brick and a freight-elevator door. In addition, on the exterior a concrete loading platform stretches across the bay. Each elevator opening features a similar metal door frame and threshold.

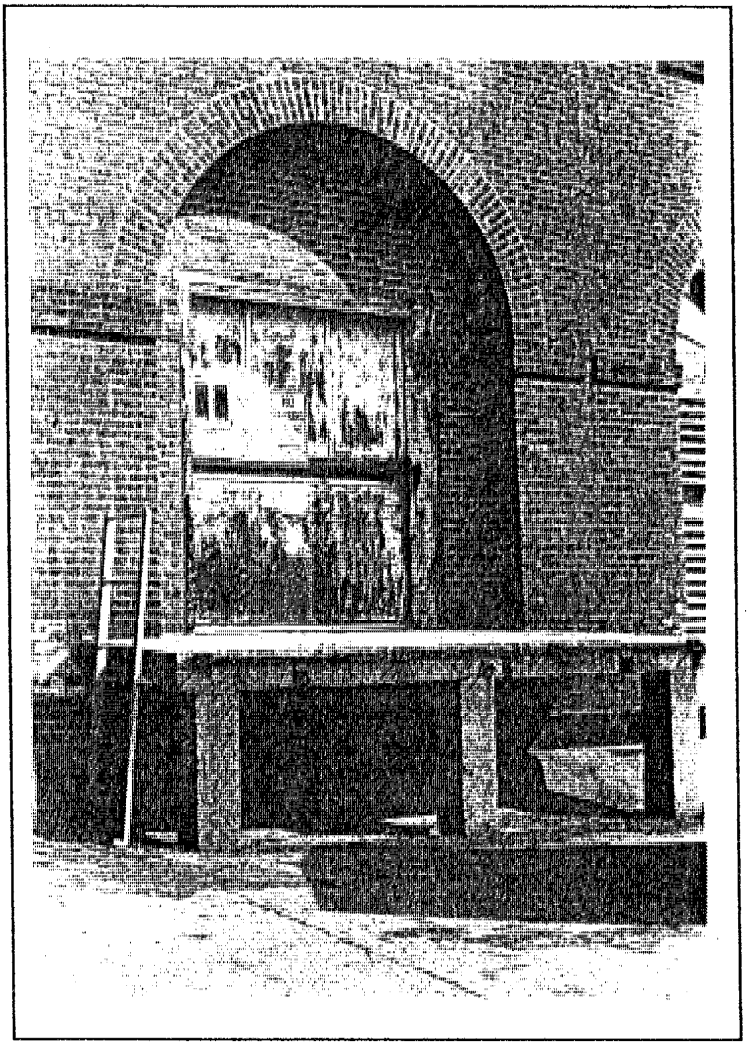
Bay 30: The elevator door opening is 7'5" high x 6'2" wide. The brick infill is recessed 15" from the wall plane and the elevator door is recessed 12" from the infill plane.

Bay 62: The elevator door opening is 7'6" high x 6'2" wide. The brick infill is recessed 16" from the wall plane and the elevator door is recessed 12" from the infill plane.

Bay 97: The elevator door opening is 7'6" high x 6'2" wide. The brick infill is recessed for 16" from the wall plane and the elevator door is recessed 12" from the infill plane. A "No Parking Loading Zone" sign mounted on the door. The infill is pointed in a different manner from that in the other elevator bays.

Elevator Doors:

Similar elevator doors are found at each of the respective bays. The doors were manufactured by the St. Louis Fire Door Co., as stamped on each door. The doors feature six panels (3 over 3). All are solid with the exception of one vision panel with two lights. The position for this vision panel varies somewhat between doors. At bay 30, it is located in the upper west panel. At bays 62 and 97, it is located in the upper east panel. The hardware varies between the doors.



Treatment Type I-J. North elevation, bay 97, elevator loading platform.

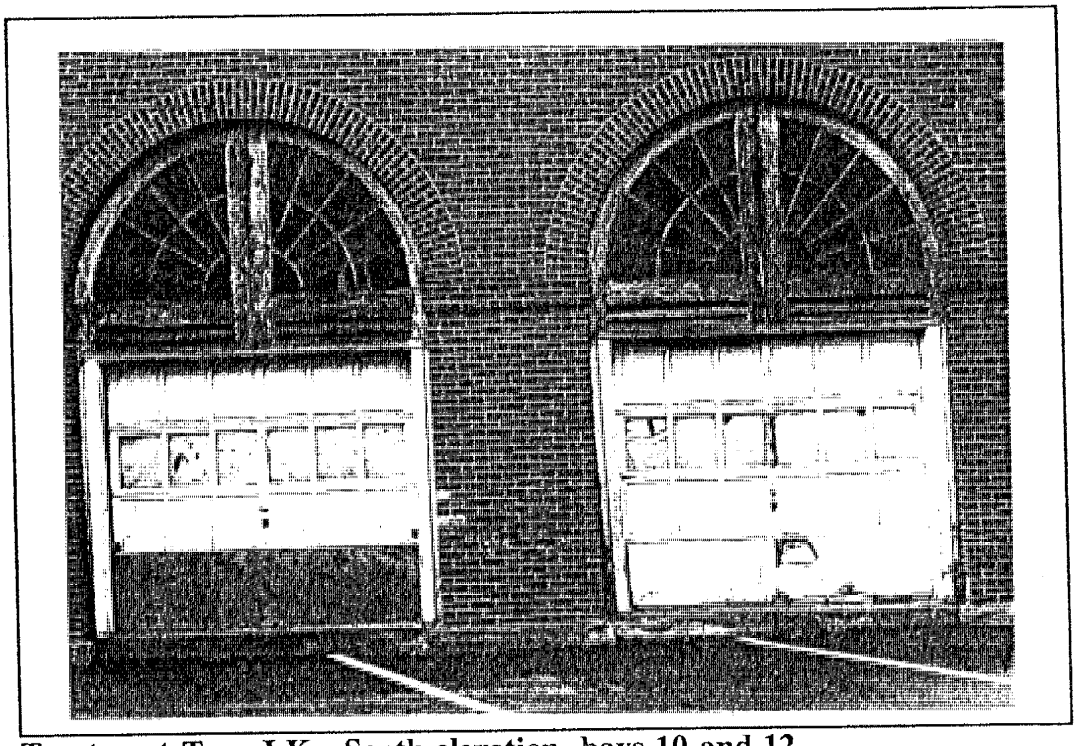
Concrete Loading Platforms:

The design of the concrete loading platforms varies slightly from elevator-to-elevator. They are all supported by piers in the front of the platform and tied into the wall at the rear of the platform.

Bay 30: This platform is 3'10" high x 3'6" wide (to wall plane) x 17" long. It features four concrete piers (10" square). The platform has 3" metal angle iron bar at its upper edge (bumper guard).

Bay 62: This platform is 4' high x 2' wide (to wall plane) x 11'11" long. It features three concrete piers (10" square). A 10" high iron channel-plate is secured on the outside edge of the platform.

Bay 97: This platform is 3'7" high x 4'1/2" wide (to wall plane) x 12'6" long and is constructed of concrete with asphalt aggregate. The platform consists of three concrete piers (10" square). A metal angle bar, 3" high, is fastened on the outside edge of the platform. A six rung ladder is secured to the east side of the platform.



Treatment Type I-K. **South elevation, bays 10 and 12.**

I-K. Wood Garage Door; Fanlight

Location: South Elevation
bays 10, 12

General: The archway consists of a wood garage door, surmounted by a fanlight. The garage door is set in a wood frame. The fanlight design is typical. The door appears to have been manufactured by the Daniele Door Co., Wilbraham, Massachusetts.

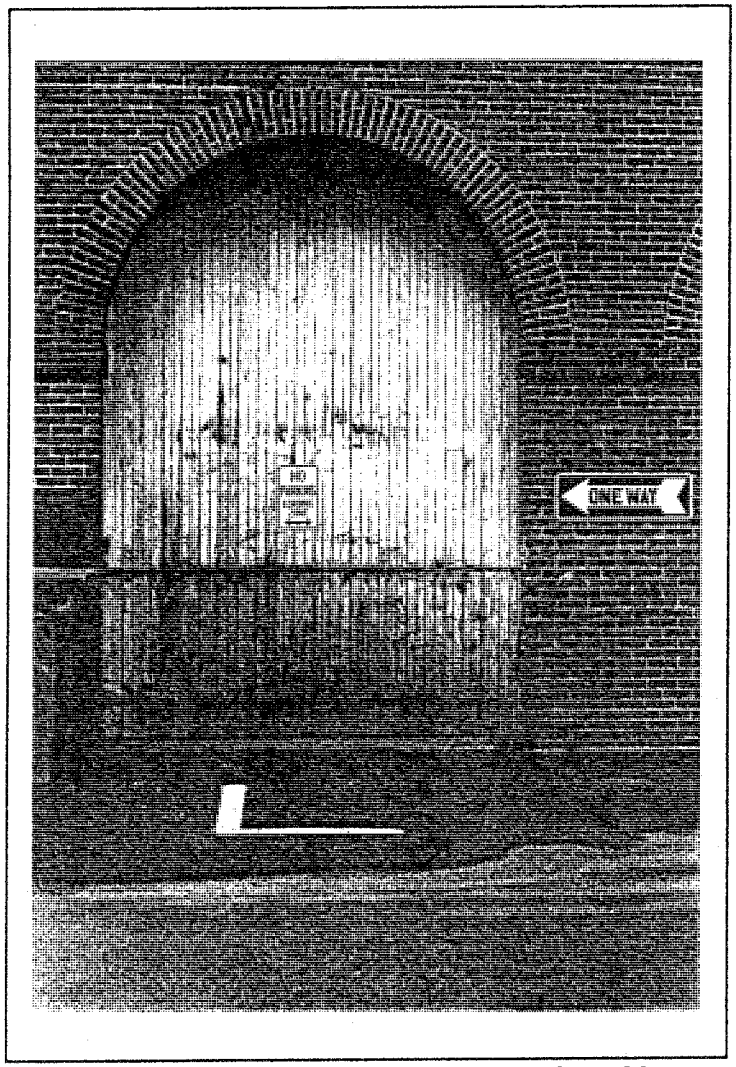
Door Frame: The door is surrounded by a wood, box frame. The frame is 6-1/2" wide at the sides; 1/2" wide at the lintel.

Garage Door: The wood garage door is 7'1/2" high x 8' wide. The door is recessed 8" from the frame. The door sits on the sandstone water-table (approximately 7" from the ground level) and abuts the second upper rows of louvers (formerly the archway featured louvered blinds).

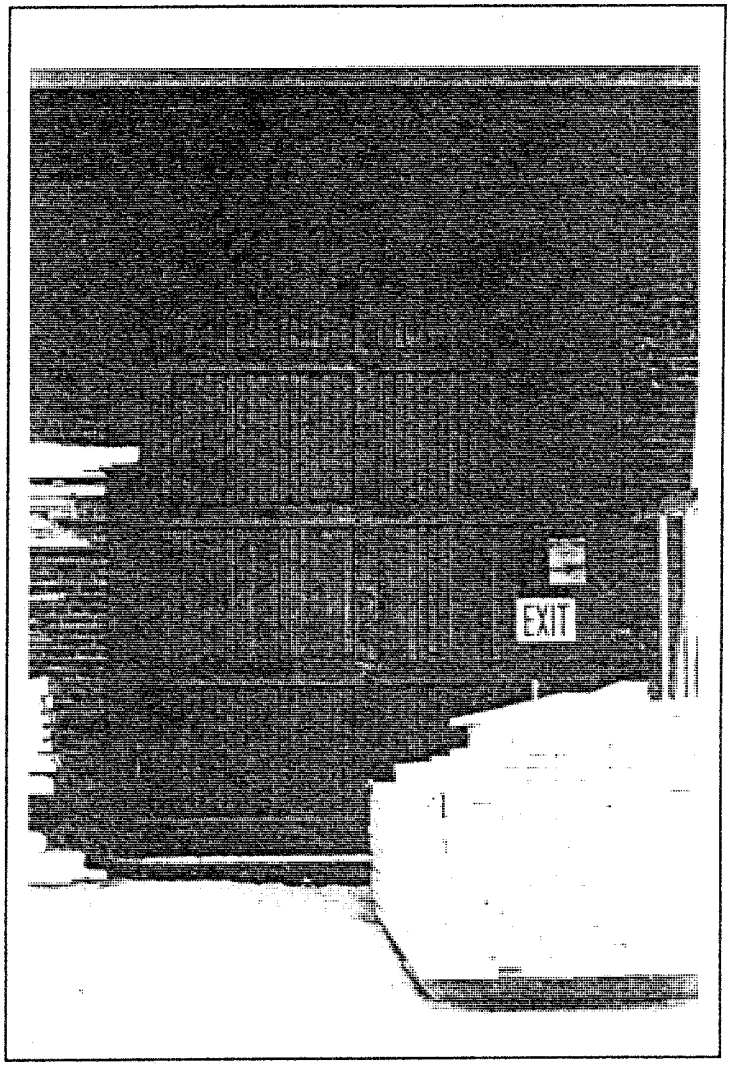
The design is identical for both doors; it consists of the following: four horizontal rows; each row consist of six panels, defined by battens; the second upper row is glazed; the other panels are solid wood; the bottom row of panels of bay 10's door is covered with 1/2" plywood (2' high x 7'10" long), unpainted; the lower row of panels on bay 12's door is covered by a sheet of 3/4" plywood on the left and a sheet of particle board on the right.

Hardware: Both garage doors feature a Winfield knob/latch and a Russwin lock. Bay 12 features a grasp handle, while it is missing at bay 10.

Finishes: The garage doors, frame, and fanlight are painted white.



Treatment Type I-L. South elevation, bay 32, matchboard sliding-door, exterior.



Treatment Type I-L. South elevation, bay 32. Matchboard sliding-door, interior.

I-L. Wood Matchboard Sliding-Door

Location: South Elevation
bay 32

General: The archway is filled with a sliding, wood matchboard door. The archway is open. The door is hung on the interior wall (recessed 2'4" from the exterior wall plane). The door sits on a concrete sill and sandstone water-table. A "No Parking Loading Zone" sign is mounted in the center of the door.

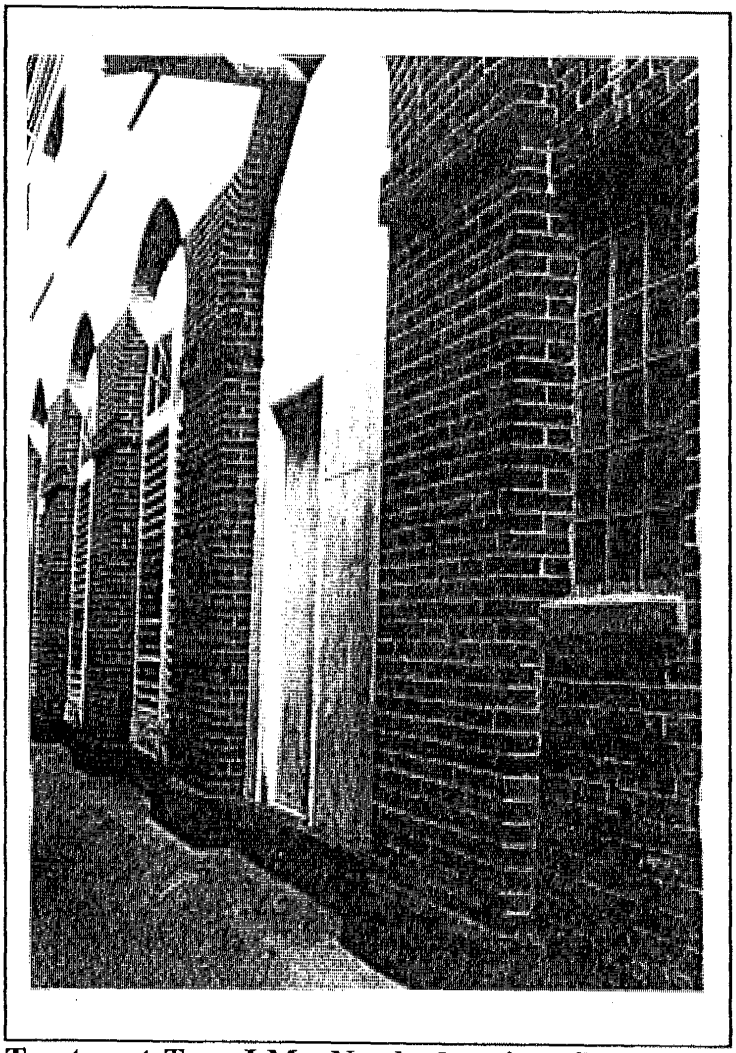
Matchboard Construction: The door is 13'7" high x 10'4" wide x 2-1/2" thick.

Matchboard panels: The matchboards are vertically laid in panels of two. The two panels are 5" wide and the door is constructed of wire nails.

Battens: Two metal battens are extant. The first is 9" from the ground level, while the upper is 3'7-1/2" from the ground level. The battens are 1" wide, secured to the panels with screws.

Hardware: A sliding door-pull and a hasp plate is extant on the west side.

Finishes: The door is painted dark brown.



Treatment Type I-M. North elevation, first story, bay 11. Plywood infill, door and vent.

I-M. Plywood Infill; Door and Vent

Location: North Elevation
bay 11 (wood door and frame; vent)

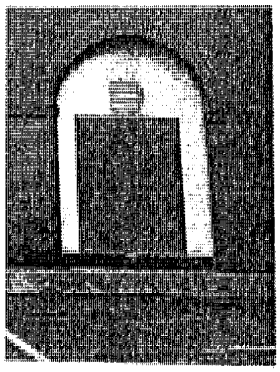
Design: Plywood fills the archway. It is secured with wire nails. The infill is recessed 8" from the wall plane. The seam of the arch and infill is caulked with caulking compound.

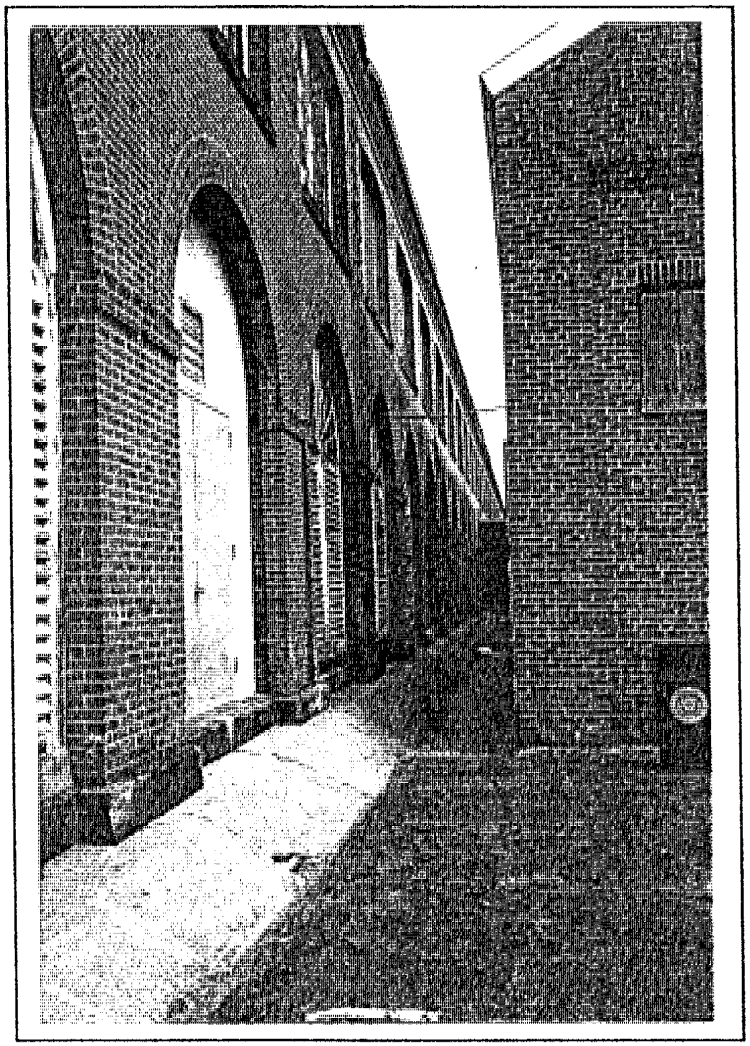
Door: The wood door is located on the east side of the archway. The door opening is 6'6-1/2" high x 2'11-1/2" wide. It features a wood door frame and an aluminum threshold.

Vent: A square vent is extant at the upper east corner of the archway. The metal vent consists of two louvers.

Iron Pipe: An iron pipe is situated at the west side of the upper arch. It crosses between Building 19 and 32.

Finishes: The plywood infill, door and frame are painted white.





Treatment Type I-N. North elevation, first story, bay 81. Stucco infill, double door and vent.

I-N. Stucco Infill; Double Door and Vent

Location: North Elevation
bay 81

General: This opening is filled with a stucco-like material. The infill is recessed 13" from the wall plane.

Double Doors: The doors are approximately centered in the archway. The doors are collectively 6" wide, rising to the height of the arches impost. A metal door frame, 2" wide, surrounds the door on three sides. An aluminum threshold, secured to the sandstone water-table, serves the doors.

Vent: A metal vent is centered over the double doors. The vent consists of five louvers.

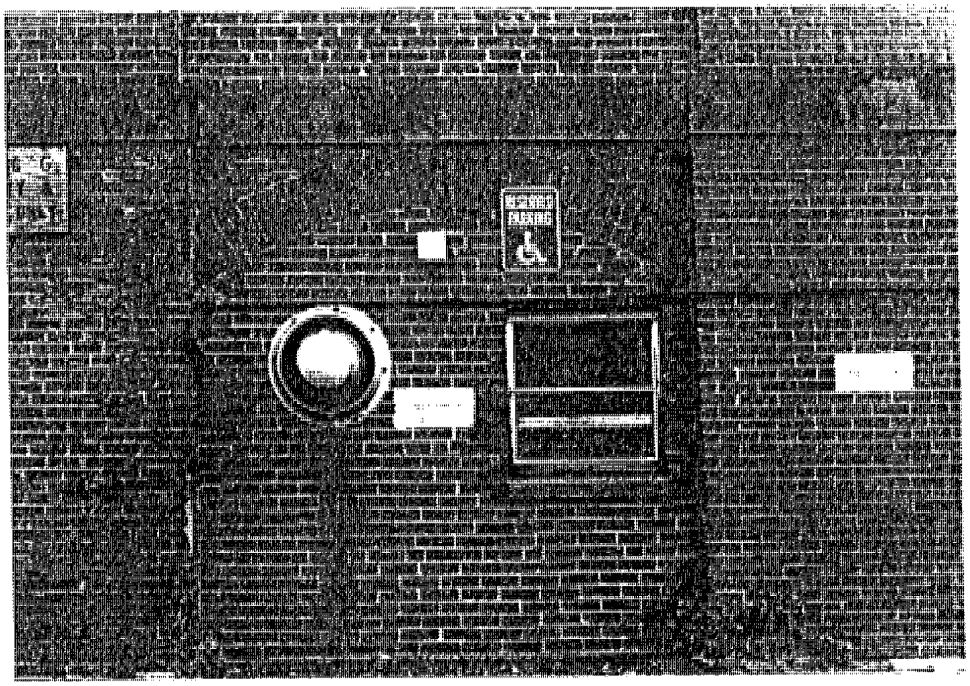
Finishes: The wall is finished in white paint, while the door is painted blue-grey.

I-O. Fire Door (Illustrated in Appendix E, "Fire-door Inventory")

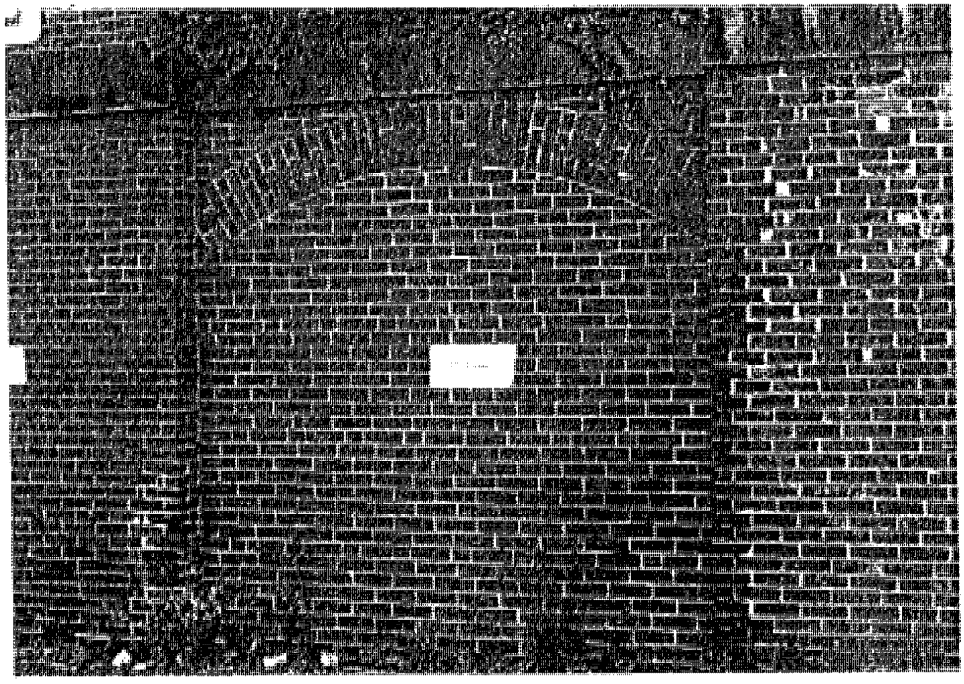
Location: North Elevation
bay 59

General: The fire door is not visible from the outside. It is located within the passageway between Building 19 and Building 32. The side of the fire door extant within the passageway was not accessible during this survey. The details of construction for the fire door are included in the "Fire Door Inventory", see Appendix E.

II. Segmental Arches



Treatment Type II-A. East elevation, basement, south bay (with window, vent).



Treatment Type II-A. East elevation, basement, north bay.

II-A. Flush Brick Infill; (7) Stretcher to (1) Header/Stretcher

Location: East Elevation, Basement
- south (with window, vent) and north bays

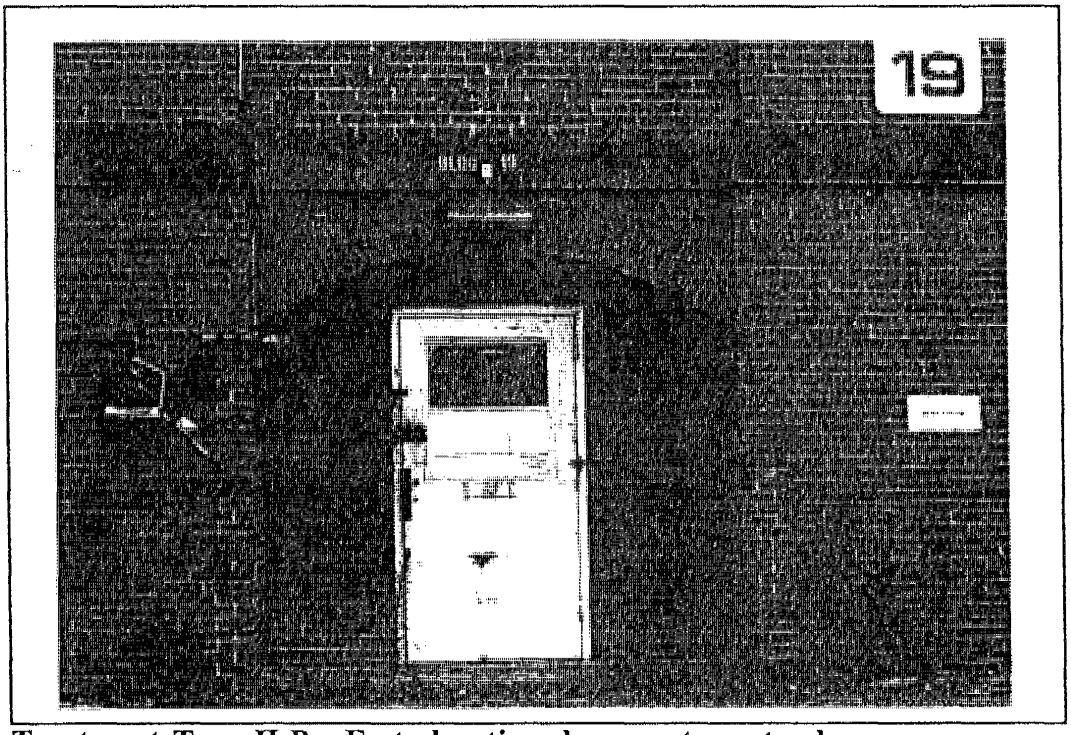
Brick Coursing: Infill
(7) stretcher to (1) header/stretcher course

Brick Dimensions: Infill - modern brick
length - random between 6-3/4" to 8"
height - 2-1/4"
depth - 3-3/8" to 3-1/2"

General: The segmental arch is rounder than those on the south and north elevations. The entire archway is filled with brick. The brick infill is flush with the face of the arch, although both are recessed from the wall plane (8"). The north bay is solid infill, while the south bay features a window and vent. Miscellaneous signage is extant on the infill. A utility pipe projects from the bottom south corner of the north bay infill. A pipe projects south of the vent in the south bay.

Window: A window is located in the south bay infill on its north side, serving the lavatory. It featues a sliding, safety-glass sash window and concrete sill.

Vent: A large, round, aluminum exhaust vent is located in the south bay infill on its south side.



Treatment Type II-B. East elevation, basement, center bay.

II-B. Recessed Brick Infill; Door

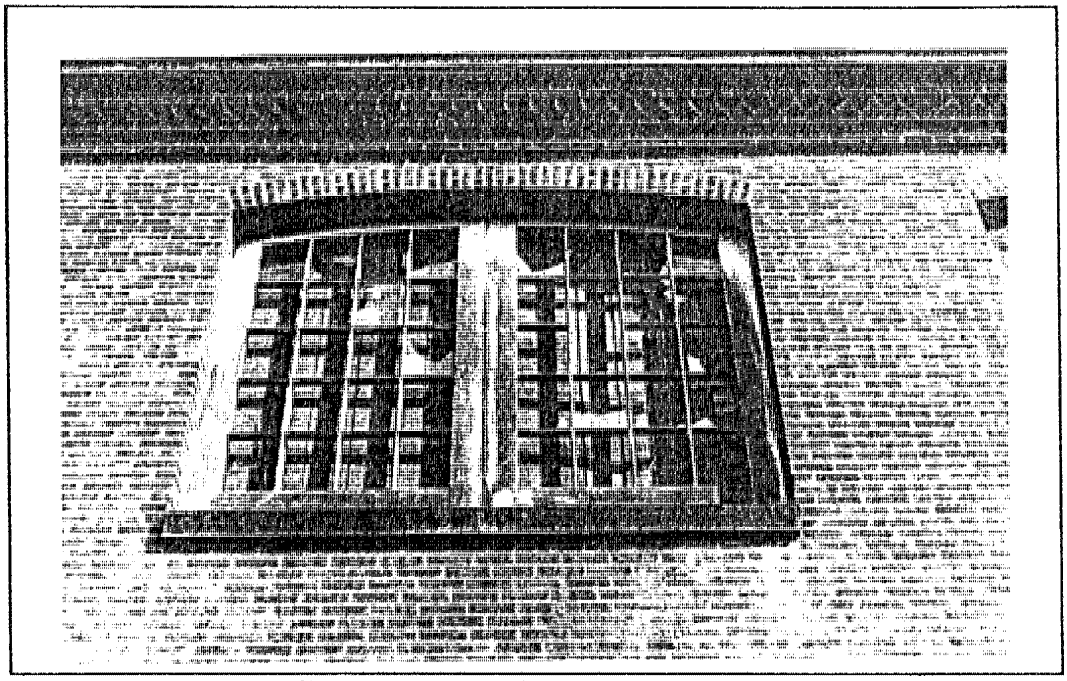
Location: East Elevation, Basement
- center bay

Brick Coursing: (6) stretcher to (1) header/stretcher course

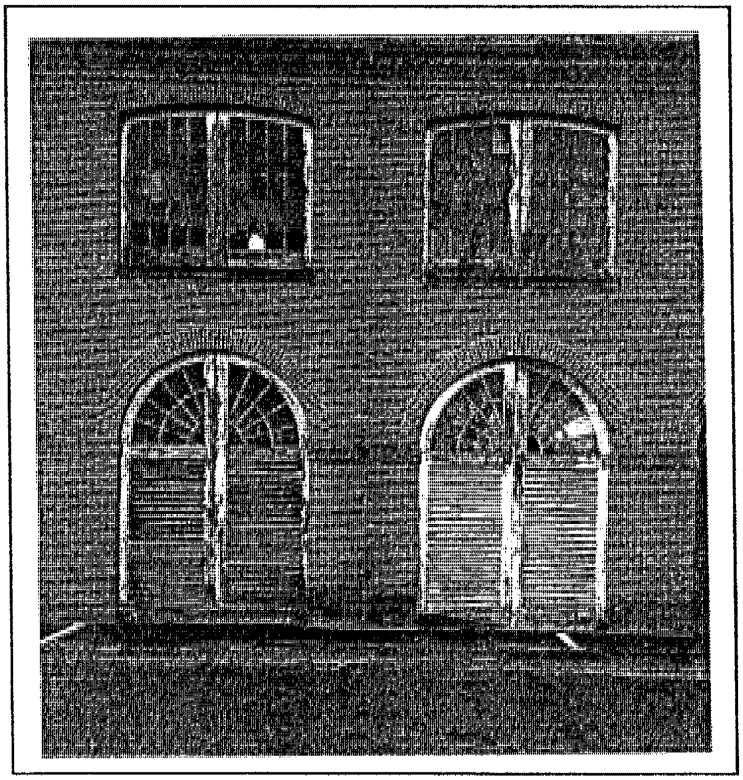
Brick Dimensions: Infill (modern, smooth faced, orange brick with dark grey mortar)
length - 8"
height - 2-1/4"
depth - 3-1/2"

General: The archway is filled with brick. A door has been centered in the archway. The brick is recessed from the wall plane by 2'1/2". The archway is 7'10" high x 8'8" wide (at center point).

Door: A modern metal door is centered in the brick infill. The door measures 6'7" high x 3'3-3/4" wide and opens outward. It features two windows. The bottom window is mirrored glass while the top window is clear glass. The door frame is metal and 2" wide. A threshold of concrete and metal sit on a sandstone water-table. The door is hinged on the south side of the opening.



Treatment Type II-C. North elevation, second story, segmental arch. Glazed sash.



Treatment Type II-D and II-E. South elevation, second story, bay 36 and 38.

II-C. Glazed; Wood, Flush Frame (Not illustrated, appears identical to Types II-D and II-E from the exterior.)

Location:

South Elevation, Second Story
- bay 2 (m/t/p), 4 (nailed), 6 (m/t/p)

North Elevation, Second Story
- bay 1 (m/t/p)

General:

Only four (4) segmentally-arched openings exhibit treatments of this type. They are concentrated at the west end of the building. The frame is set into the arch and is flush with the arch face. One of the flush frames is assembled with nails, while the remainding three are mortised, tenoned, and pegged. See Appendix C, "Louvered Blind, Solid Panel, and Sash Treatments" for a detailed description of this treatment type.

II-D. Glazed; Wood, Raised Frame; Mortised, Tenoned, and Pegged

Location:

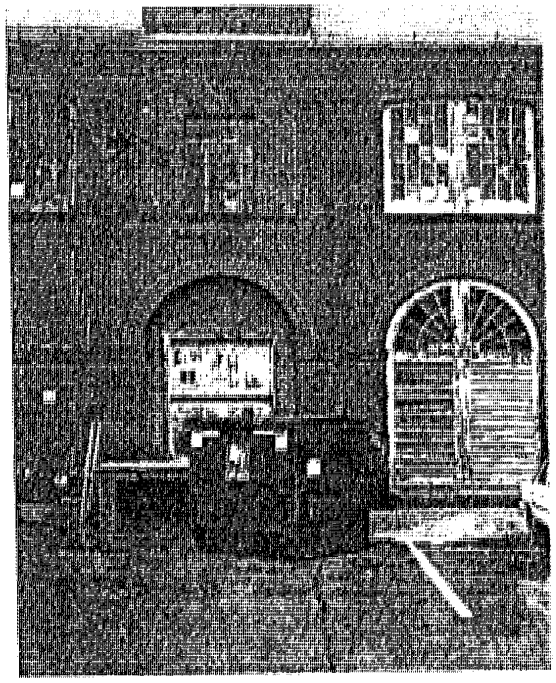
South Elevation, Second Story
- bays 6, 10, 14, 18, 22, 26, 30, 34, 38, 40, 44, 48, 52, 54, 58, 62, 66, 68, 72, 76, 80, 82, 86, 90, 94, 96, 104, 108, 112, 116

North Elevation, Second Story
- bays 13, 17, 21, 25, 29, 33, 37, 39, 43, 47, 51, 53, 57, 59, 61, 65, 67, 71, 73, 75, 79, 81, 85, 89, 93, 95, 99, 103, 111, 115

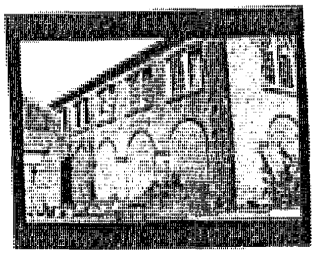
General:

This is the typical treatment for the segmental arches. It is found in fifty-nine (59) openings. The frame is a pre-assembled unit which is set on the interior face of the archway. It is mortised, tenoned and pegged. See Appendix C, "Louvered Blind, Solid Panel, and Sash Treatments" for a detailed description of this treatment type.

Metal sash window



Treatment Type II-F. North elevation, second story, bay 97. Glazed; metal sash.



Treatment Type II-G. North elevation, second story, bay 7 . Louvered blinds.

II-E. Glazed; Wood, Modern Raised Frame; Nailed

Location:

South Elevation, Second Story
- bays 4, 8, 12, 16, 20, 24, 28, 32, 36, 42, 46, 50, 56, 60, 64, 70, 74, 78, 84, 88, 92, 98, 100, 102, 106, 110, 114

North Elevation, Second Story
- bays 3, 5, 83, 87, 91, 101, 105, 107, 109, 113

General:

The frame for this treatment is identical to that described above in item II-D "Raised Frame; Mortised, Tenoned, and Pegged," except that the frame is nailed rather than m/t/p. This treatment type is found in thirty-six (36) arches. See Appendix C, "Louvered Blind, Solid Panel, and Sash Treatments" for a detailed description.

II-F. Glazed; Metal Sash

Location:

North Elevation
- bay 97

General:

This window is smaller than the rest on the second story. It was installed when bay 59 was remodelled to accommodate a freight-elevator. The segmental arch was filled-in with brick and a 16-light window introduced. The window features a metal frame. It appears that the center section of the sash, consisting of two horizontal rows of lights, can slide up and down.

II-G. Louvered Blinds

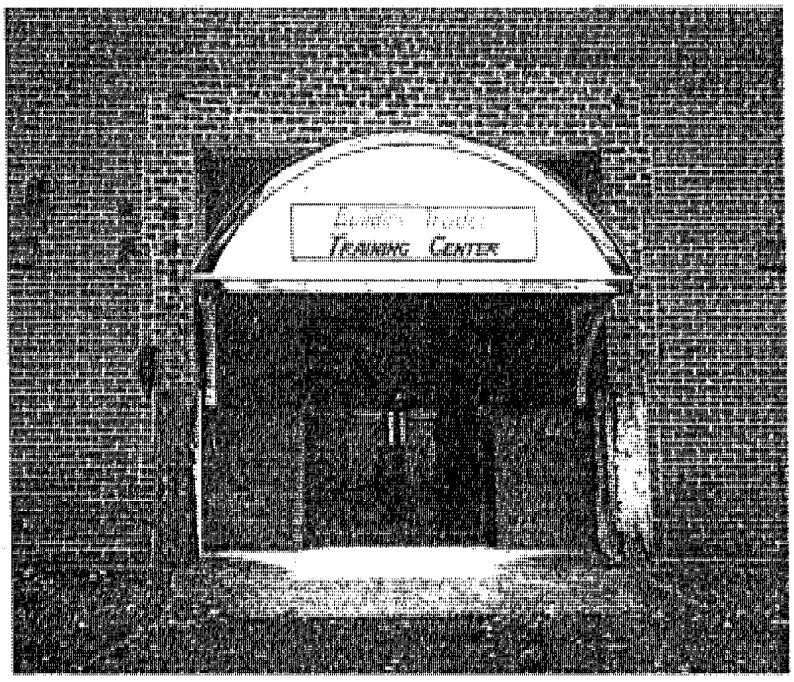
Location:

North Elevation, Second Story
- bays 7, 9, 11, 15, 19, 23, 27, 31, 35, 41, 45, 49, 55, 63, 69, 77

General:

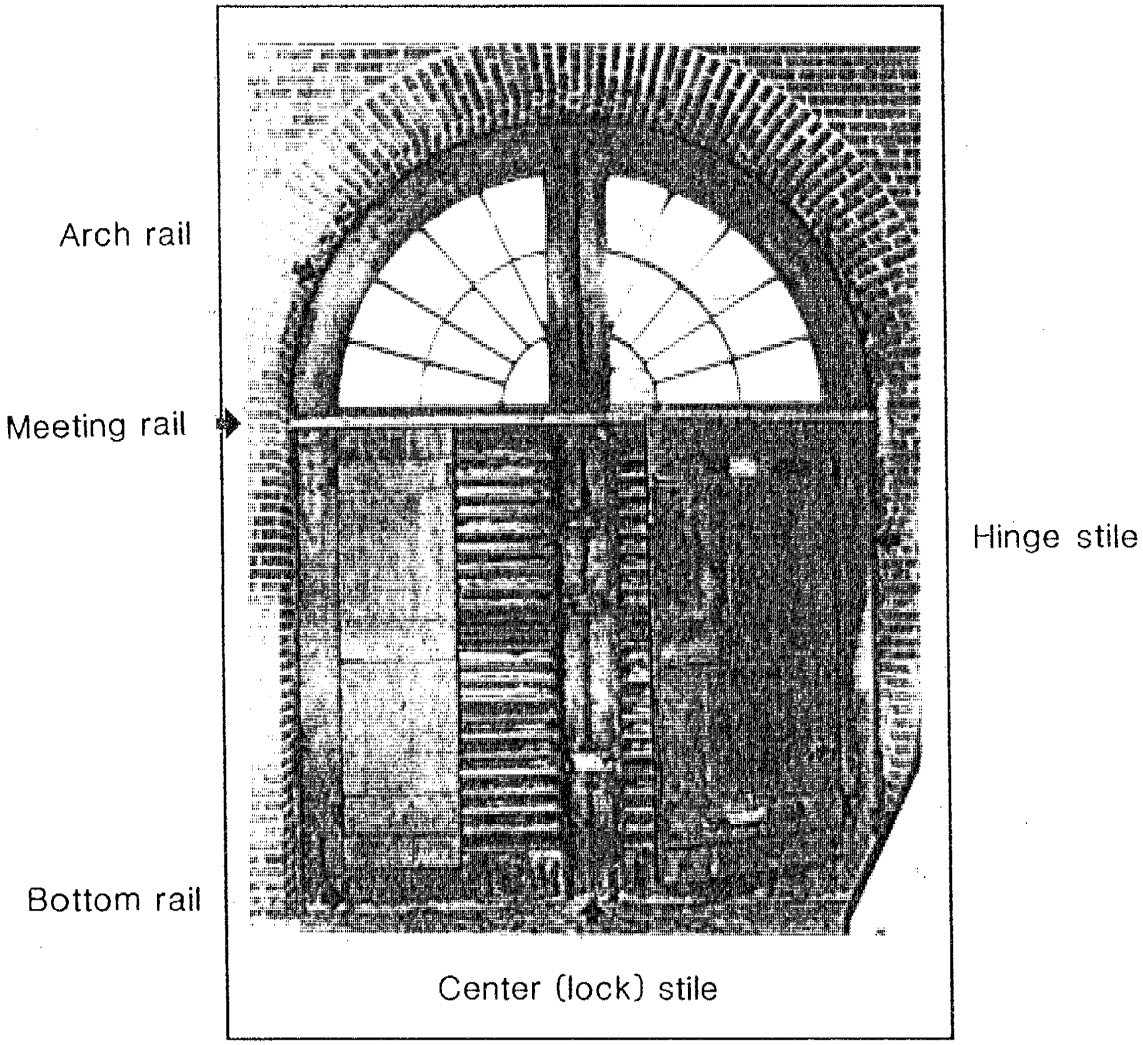
Louvered blinds fill the segmental arches in sixteen (16) bays on the north elevation. The louvered blinds set into the typical segmental arch frame. See Appendix C, "Louvered Blind, Solid Panel, and Sash Treatments" for a detailed description of this treatment type.

III. Rectangular Openings



<u>Treatment Type III-A.</u> West elevation, first story, center bay. Wood and brick infill; glazed door.

I. Semi-Circular Arches



Typical semi-circular arch frame. Interior, bay 51.

I-A. Semi-Circular Arch Frame

Material: Wood.

Dimensions:

General
- Thickness - 3-5/8" (double thickness)
- Height - 13'4"
- Width - 9'9"

Stiles
- Hinge - 9" wide
- Lock - 5-7/8" wide (without bead); 6-3/4" wide (with bead)

Rails
- Bottom - 11-1/2" high
- Meeting - 7-1/2" high
- Arch - 10" high

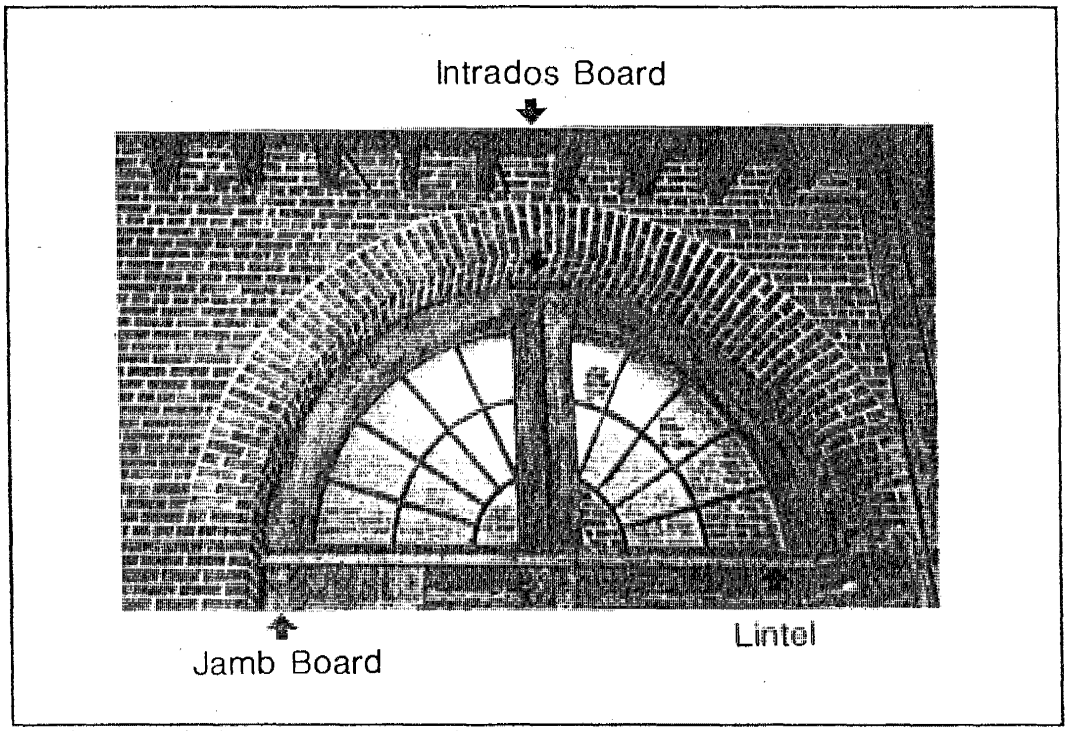
Construction: The semi-circular arch frame is mortised, tenoned, and pegged. (Presumably, they arrived at the site pre-assembled.) Employing two pegs at each joint, the rails are mortised and tenoned into the stiles. The arch rail sets into the hinge stile and is tenoned at an angle. The arch rails extend partially below the spring line of the arch. The frame is secured to the wall by a brace system consisting of toeboards, lintel, jamb boards, and an intrados board.

Design: The frame consists of two halves per archway. Each half features a center (lock) stile, hinge stile, and bottom, meeting, and arch rails. The frame follows the contour of the arch.

Center (Lock) Stile. One lock stile per frame half is extant. These stiles are continuous from the floor level to the crown of the arch. A 3/4" bead is extant on the inside length of one of the stiles. On the south wall the bead on the interior appears on the west stile. On the north wall the bead on the interior appears on the east stile.

Hinge Stiles. The hinge stiles extend from the floor level to the spring line of the arch (lintel line). There is one per half of the frame.

Rails. There are three rails as noted above: a bottom rail at the threshold level; a meeting rail at the impost level of the arch; and an arch rail at the upper arch. The arch rails are molded to follow the contour of the semi-circular arch. They exist in four sections; two per half. There is a seam at the approximate center point of each half.



Typical semi-circular arch fanlight and brace system. Interior, bay 52.

I-B. Semi-Circular Arch Fanlight

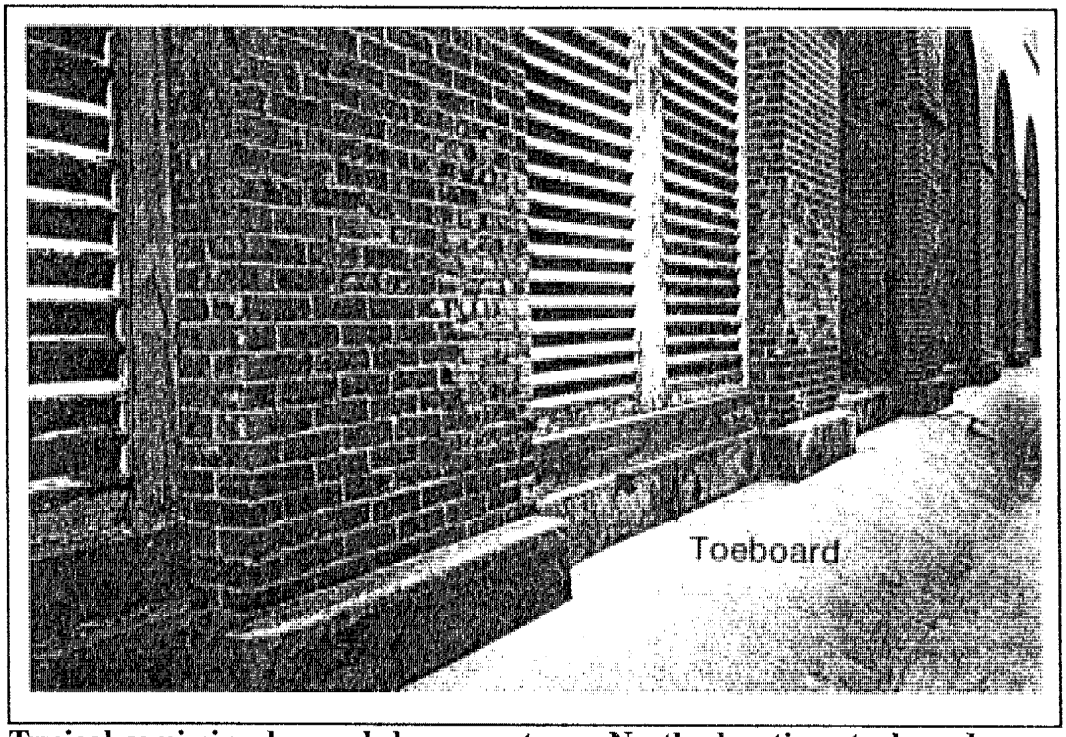
Materials: Wood; metal; and glass.

Dimensions: Centermost arc (metal). 3/4" thick x 1-3/8" deep
Middle arc (wood). 13/16" thick x 1-1/8" deep
Glazing. 1/8" thick

Construction: The rays are screwed into the centermost arc, toenailed to the middle arch, and mortised and tenoned into the frame.

Design: The fanlight consists of four semi-circular (arcs) muntins; two for each half of the fanlight. The arcs follow the contour of the arch. The closest arc muntin to the center is metal. The others are wood. The arc muntins are in sections. These arc muntins are pierced by eight radial muntins; four for each half of the fanlight. The rays commence at the arc muntin closest to the center and extend to the outside frame. They are continuous rays.

Glazing: Historic. The historic glazing exhibits a waviness and imperfections in the glass.
Modern. The modern glazing is clear, without imperfections.



Typical semi-circular arch brace system. North elevation, toeboard.

I-C. Semi-Circular Arch Brace-System: Toeboard, Lintel, Jamb Boards, Intrados Board

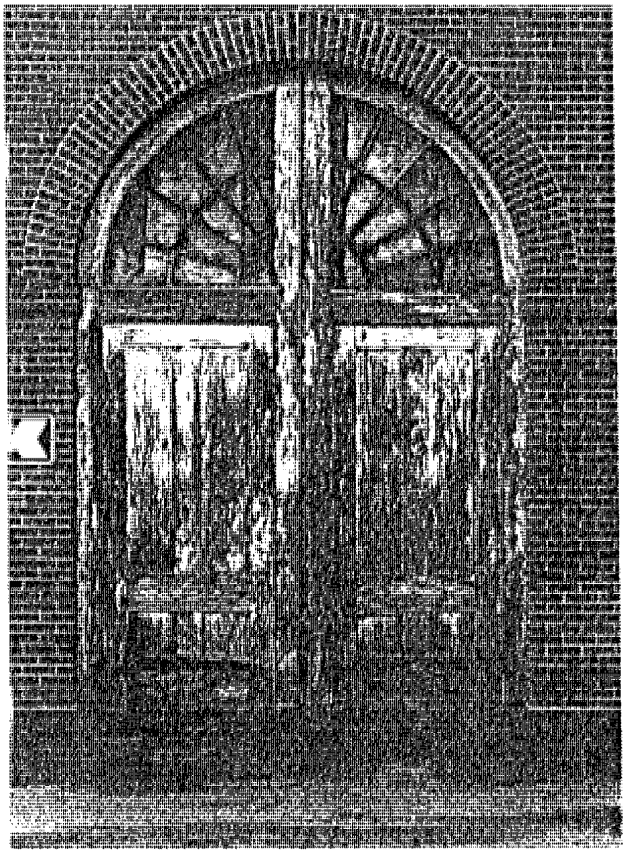
Material: Wood.

Dimensions: Toeboards. 9-1/2" wide x 3/4" thick x 121" long
Lintel. 2" high x 4" wide x 10'5" long
Jamb Boards. 2" deep x 4" wide x 8'2" long
Intrados Board. 3" wide x 2" thick x 15" long (not actual)

Construction: The exterior toeboards are secured with wire nails and feature a sloped upper edge. The lintel exhibits chamfered edges (top and bottom interior face) and is mortised, tenoned, and pegged into the intrados of the archway. The vertical jamb boards are set flush with the floor level and butt the lintel. The intrados board is nailed to the frame by two nails at the lock stiles.

Design: The brace system consists of four major elements, as follows: an exterior toeboard and interior lintel, jamb boards, and intrados board.

The toeboard is attached at the base of the frame on the exterior. The lintel is extant at the meeting rail between the fanlight and lower frame. A jamb board is extant at either side of the jamb at the hinge stile. A wedge-shaped shim is located at the top of the lintel, wedging into the brick at the east and west sides. A wooden peg at each end of the lintel against the brick, assists in arresting lateral movement. An intrados board is secured at the crown of the brick arch.



Typical semi-circular arch solid-panel treatment, south elevation.

I-D. Semi-Circular Arch Solid-Panels

Material: Wood.

Dimensions:

General
- Thickness - 2"
- Height - 7'9"
- Width - 8'1"

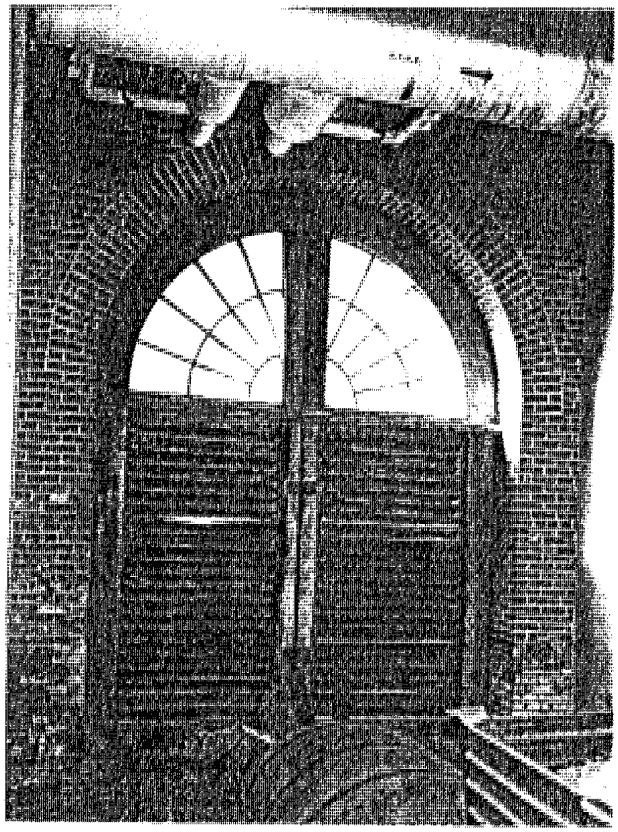
Panels
- Upper - 4'5-1/2" high x 1'3-1/4" wide
- Lower - 10-1/2" high x 1'3-1/2" wide

Stiles
- Lock - 5-3/8" wide
- Hinge - 6" wide

Rails
- Upper - 7-1/2" high
- Middle - 9-7/8" high
- Lower - 11" high

Construction: The stiles are mortised and tenoned into the rails. The upper and lower rails are screwed into the stiles. Two screws are extant on each side.

Design: The solid panels fill both halves of the frame. The panels are recessed and of one plane. They consist of two long panels, surmounting two shorter panels. A narrow bead surrounds each panel.



Typical semi-circular arch louvered-blind treatment.

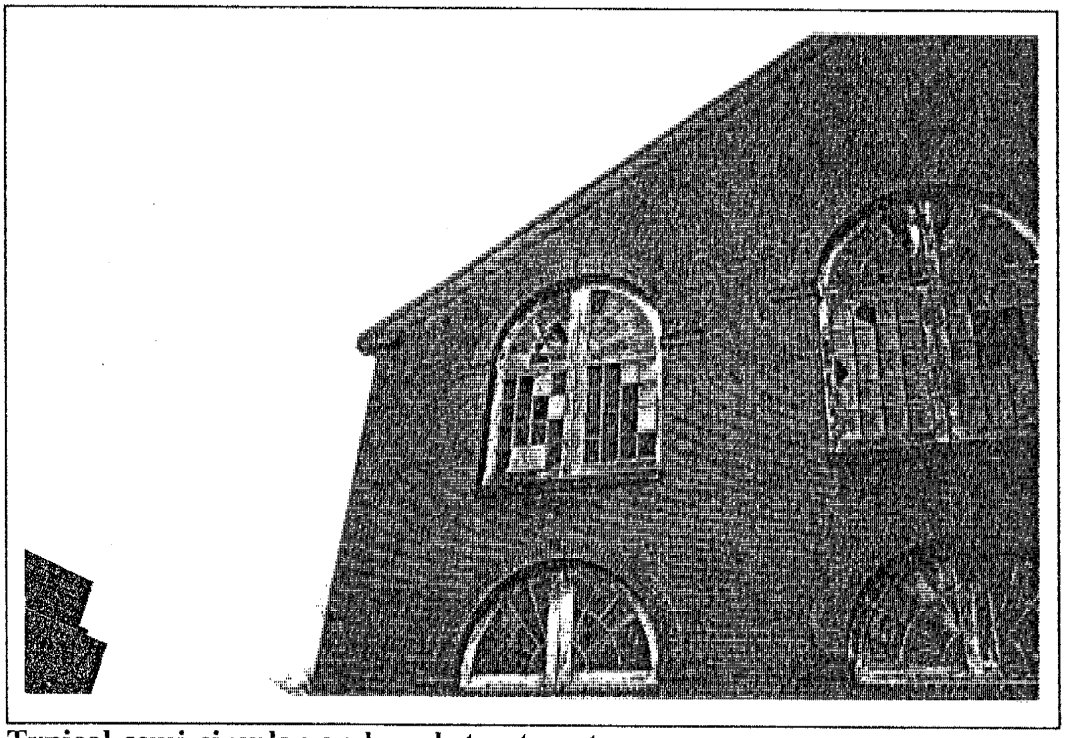
I-E. Semi-Circular Arch Louvered-Blinds

Material: Wood. (Circular saw-marks are visible on some louvers.)

Dimensions: Louvers.
Thickness - 1"
Upper Edge Width - 5-1/2"
Lower Edge Width - 5-1/4"

Construction: The louvered blinds are mortised, tenoned, and pegged. The individual louvers slide into a grooved strip that is integral to the stiles of the frame.

Design: The louvered blinds consist of double panels. They are fixed. The louvers consist of twenty-two sloping slats per panel. The exterior edge features a molded profile, while the interior edge is flush with the frame.



Typical semi-circular arch sash treatment.

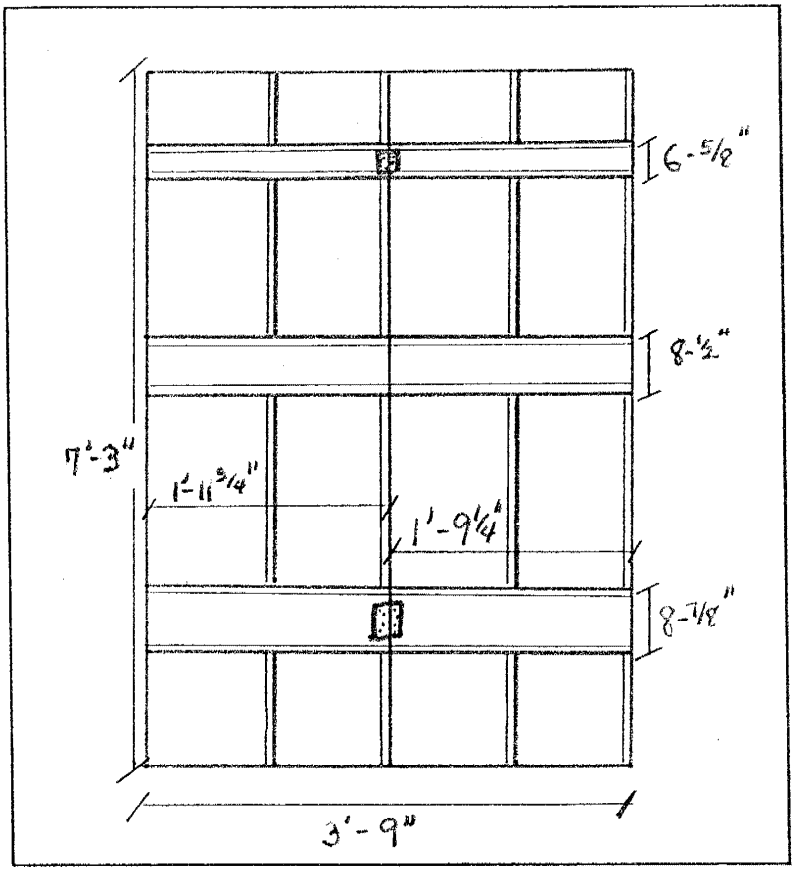
I-F. Semi-Circular Arch Sash

Material: Wood and glass.

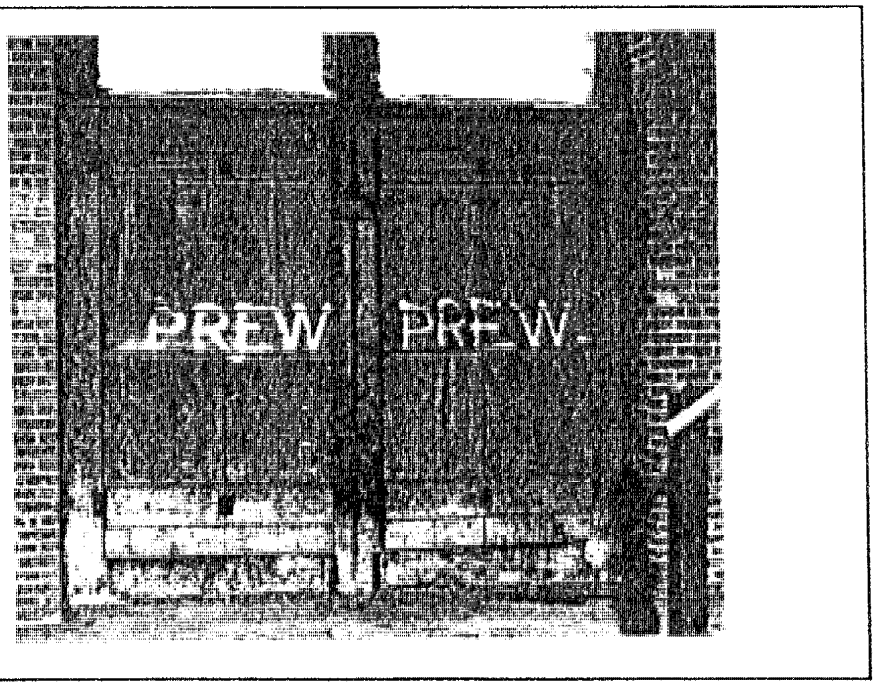
Dimensions: Glazing. 15-1/2" high x 10" wide

Design: The sash refers to that portion of the glazed window below the springing line of the arch, i.e., that portion not including the fanlight. The fanlight is discussed separately, see I-B of this section. Only five bays include sash of this type. They are located on the second story of the west and east elevations. The sash is set in the frame. It consists of two halves like the frame. In each half are twenty lights of glazing.

Glazing: Historic. The historic glazing exhibits a waviness and imperfections in the glass.
Modern. The modern glazing is clear, without imperfections.



Typical semi-circular arch, interior, wide-board shutter.



Typical semi-circular arch folding batten-shutters.

I-G. Semi-Circular Arch Folding Batten-Shutters

Material: Wood.

Dimensions:

General
- Thickness - 7/8"
- Height - 7'3"
- Width - 3'9"

Panels
- Inside at Lock Stile - 1'9-1/4" wide
- Outside at Hinge Stile - 1'11-3/4" wide

Battens
- Upper Batten - 6-5/8"
- Middle Batten - 8-1/2"
- Lower Batten - 8-7/8"

Construction: The boards are tongue-and-grooved. The battens are screwed to the boards. The leaves are hinged at the upper and lower battens connecting the two leaves together. The shutters are hinged to the frame with two hinges per shutter half. The shutters are held shut by three toggle plates and two toggles per plate. The toggle plates are mounted on the frame.

Design: The shutters consist of two halves, with two leaves per half. Each leaf consists of two to four boards. The boards are secured and stabilized by three battens.

The shutter types are identified by the width of the boards which vary between wide and narrow boards. The wide board shutter usually consists of four or five boards per shutter leaf. The narrow boards consist of six or seven boards.

The battens feature a 1/2" bead at their top and bottom edges. The outside edge of the battens are beveled. The battens graduate in width from top to bottom, getting wider.

The boards exhibit an 1/8" bead on one vertical side of the board. Some of the narrower boards feature a bead on both sides.

Inventory of Batten Shutters for Semi-Circular Arches

Window Shutter Type W: Wide Board

Below, the west half of the shutter is noted first, followed by the east half.

West Elevation. First Story.

South Bay. None extant.
Center Bay. None extant.
North Bay. None extant.

Second Story.

South Bay. W 4/4 (2 battens)
Center Bay. W 4/4 (3 battens)
North Bay. W 4/4 (2 battens)

East Elevation. First Story.

South Bay. None extant.
Center Bay. None extant.
North Bay. None extant.

Second Story.

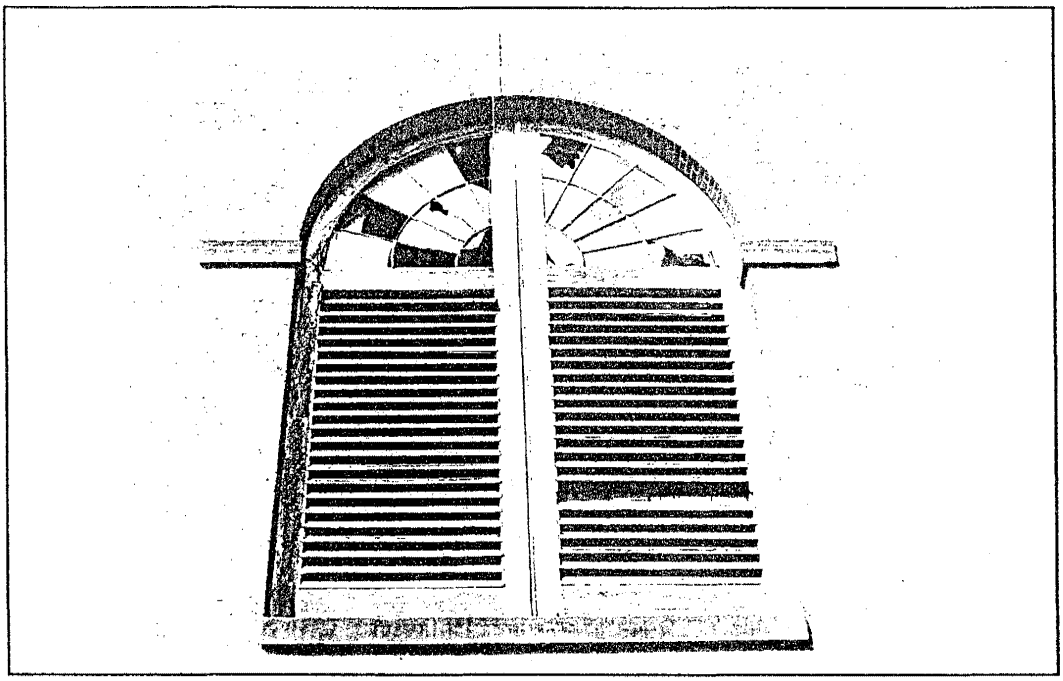
South Bay. W 4/4 (2 battens)
Center Bay. W 5s/4n (3 battens)
North Bay. Missing.

West Addition.	**South Wall Bays.**	**North Wall Bays.**
	2- Missing	1- Inaccessible
	4- Missing	3- Inaccessible
	6- Missing	5- Inaccessible
	8- Missing	7- Missing
	10- Missing	9- Missing
	12- Missing	11- Missing
	14- Inaccessible	13- Inaccessible
	16- Inaccessible	15- Inaccessible
	18- Inaccessible	17- Inaccessible
	20- Inaccessible	19- Inaccessible
	22- Inaccessible	21- Inaccessible
	24- Inaccessible	23- Inaccessible
	26- Inaccessible	25- Inaccessible
	28- Inaccessible	27- Inaccessible
	30- Inaccessible	29- Inaccessible
	32- Missing	31- Inaccessible
	34- W 4/4	33- Inaccessible
	36- W 4/4	35- Inaccessible

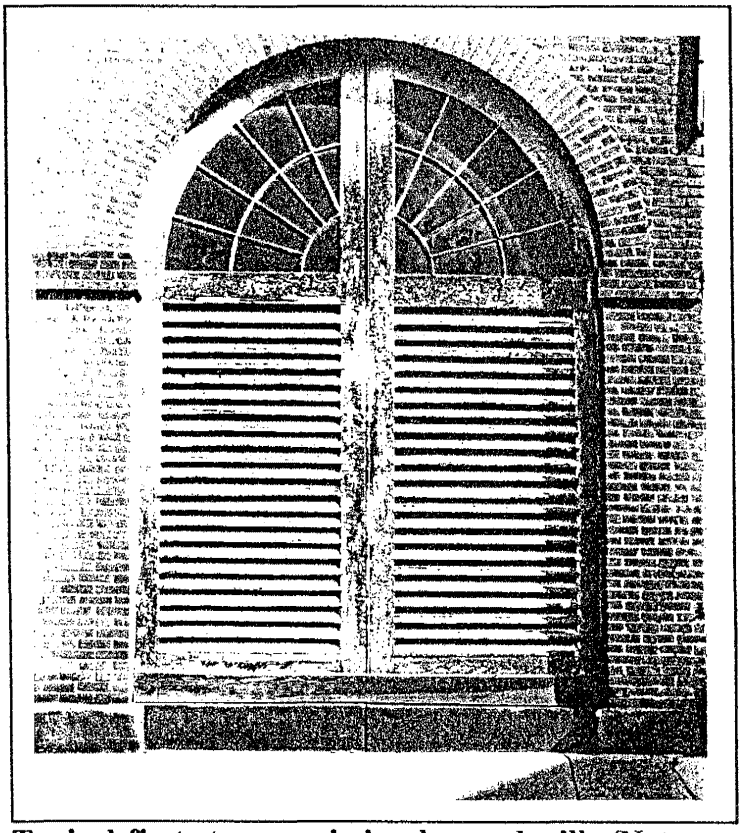
LSH II.	South Wall Bays.	North Wall Bays.
	38- W 4/4	37- W 4/4
	40- W 4/4	39- W 5/5
	42- W 4/4	41- W 4/5
	44- W 4/4	43- W 4/4
	46- W 4/4	45- W 4/4
	48- Inaccessible	47- W 5/5
	50- W 4/	49- Inaccessible
	52- Missing	51- W 5/4
	54- Missing	53- W 3(1/2 missing)/5
	56- Missing	55- W Missing/4
	58- Missing	57- W Missing/4
	60- Missing	59- Missing
	62- Missing	61- W 5/Missing
	64- Missing	63- Missing
	66- Missing	65- W 4/4

LSH I.	South Wall Bays.	North Wall Bays.
	68- Missing	67- Missing
	70- Missing	69- Missing
	72- Missing	71- Missing
	74- Missing	73- Missing
	76- Missing	75- Missing
	78- Missing	77- W 4/4
	80- Missing	79- Missing
	82- W 4/4	81- Missing
	84- Missing	83- W 4/4
	86- Missing	85- W 4/4
	88- Missing	87- W 4/4
	90- Missing	89- W 4/4
	92- Missing	91- W Missing/4
	94- Missing	93- W 4/4
	96- Missing	95- W 4/5

Stables.	South Wall Bays.	North Wall Bays.
	98- Missing	97- Missing
	100- Missing	99- Missing
	102- Missing	101- Missing
	104- Missing	103- Missing
	106- Missing	105- Missing
	108- Missing	107- Missing
	110- Missing	109- Missing
	112- Missing	111- Missing
	114- Missing	113- Missing
	116- Missing	115- Missing



Typical second-story semi-circular arch sill.



Typical first-story semi-circular arch sill. (Note two stones used at opening.)

I-H. Semi-Circular Arch Sill

Material: Sandstone.

Dimension: Generally 1' high x 8" wide.

Design: The sills (water-table) for the semi-circular arches consist of one stone in the West Addition (bays 1-36) and the Stables (bays 97-116) and two stones for Long Storehouse I and II (bays 37-96). There are several exceptions to the two-stone pattern in LSHI and II, as follows: there is only one stone at bays 43, 57, 71, 87, and 95. The sills for the second-story windows are one stone each.

I-I. Semi-Circular Arch Finishes

Frame: Interior. Painted dark brown.
Exterior. Painted white.

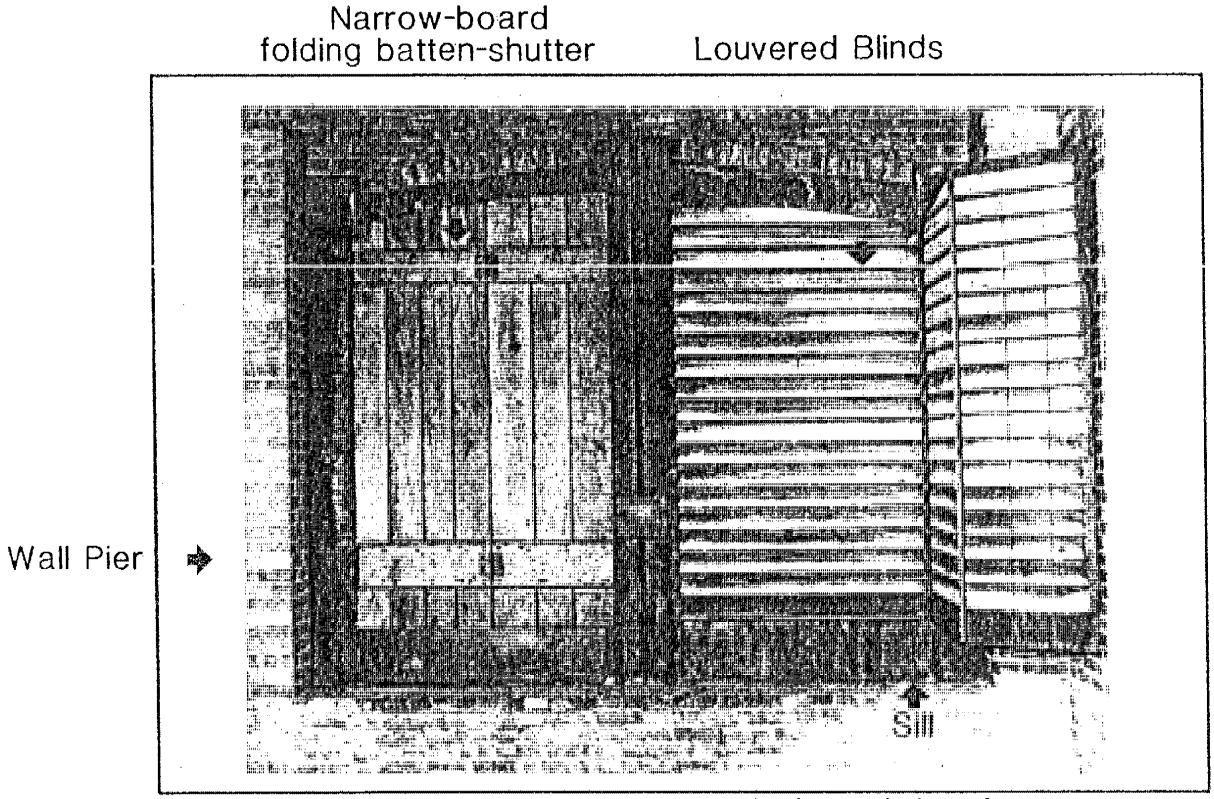
Louvered Blinds: Interior. Painted dark brown.
Exterior. Painted white.

Solid Panels: Interior. Unrecorded, except at bay 96 where a dark finished was noted.
Exterior. Painted white.

Shutters: Interior. Painted light brown.
Exterior: Painted dark brown.

Hardware: Painted like feature.

II. Segmental Arches



Second story, segmental-arch treatment. Raised window frame.

II-A. Segmental-Arch Frame

The description below refers to the frame type designated as raised/mortised, tenoned, and pegged.

Material: Wood.

Dimensions:

General
- Thickness - 3-3/4"
- Height - 8'
- Width - 9'9"

Stiles
- Hinge - 7'6-1/2" high x 9-1/2" wide
- Lock - 8' high x 5-7/8" wide (without bead), 6-3/4" wide (with bead)

Rails
- Top - 7-1/2" wide
- Bottom - 11" wide

Opening
- Height at Lock Stile - 6'1-1/2"
- Height at Hinge Stile - 5'8-1/2"
- Width - 3'6-1/2"

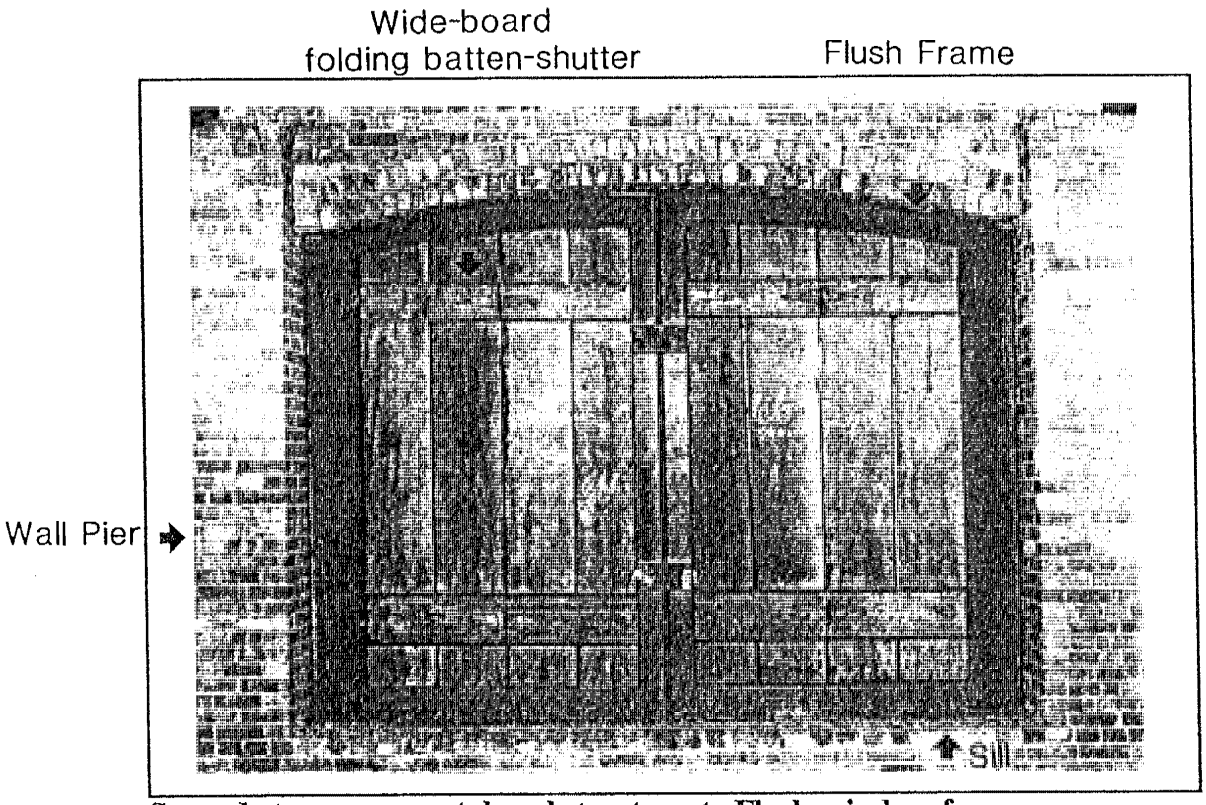
Pegs
- WA, LSHII, LSHI - 5/8" diameter
- Stables - 1/2" diameter

Construction: The frames are mortised, tenoned, and pegged. (Presumably, they arrived at the site pre-assembled.) Employing two pegs each, the rails are mortised and tenoned into the stiles. The frame is secured to the wall by iron hardware anchors. (See section III- for a description of the hardware.)

Design: Raised/MTP. There are (75) extant of the this type. The frame is recessed approximately 1' from the wall pier plane.

The frame sits on the sill ledge in the recessed segmental arched niche designed to hold the window. It is free standing and raised from the wall plane. The hinge and lock stiles extend beyond the top rails. The upper rail and extended stiles partially obscure the arch gauged brickwork. The frame is designed to hold either louvered blinds or glazed sash. A bead is extant on one of the lock stiles, as follow: on the south wall, it is on the west lock stile; on the north wall, it is on the east lock stile. The upper rail is curved to follow the contour of the arch.

There appears to be nuances of differences in the dimensions for the frames found in the Stables from those found in other sections of the building.



Second story, segmental-arch treatment. Flush window frame.

Variation: There are two variations to the above described frame, as follows:

Raised/Nailed. The first is identical in shape to the raised/mtp frame, but is constructed differently. It is constructed with nails and the rails and stiles do not terminate at the stile but extend across. As a result, the part of the stile that extends beyond the top rail is separate from the stile which extends below the rail. See inventory of segmental arch window frames for the location of these frames. There are (36) in total.

Flush. The second variation, sits completely within the segmental arch. The arch is completely visible. This frame because it sits within the arched niche does not have extended stiles. The flush frame is found only at the west end of the building at bays 1, 2, 4, and 6. Bay 1, 2, and 6 are mortised and pegged, while bay 4 is assembled with nails.

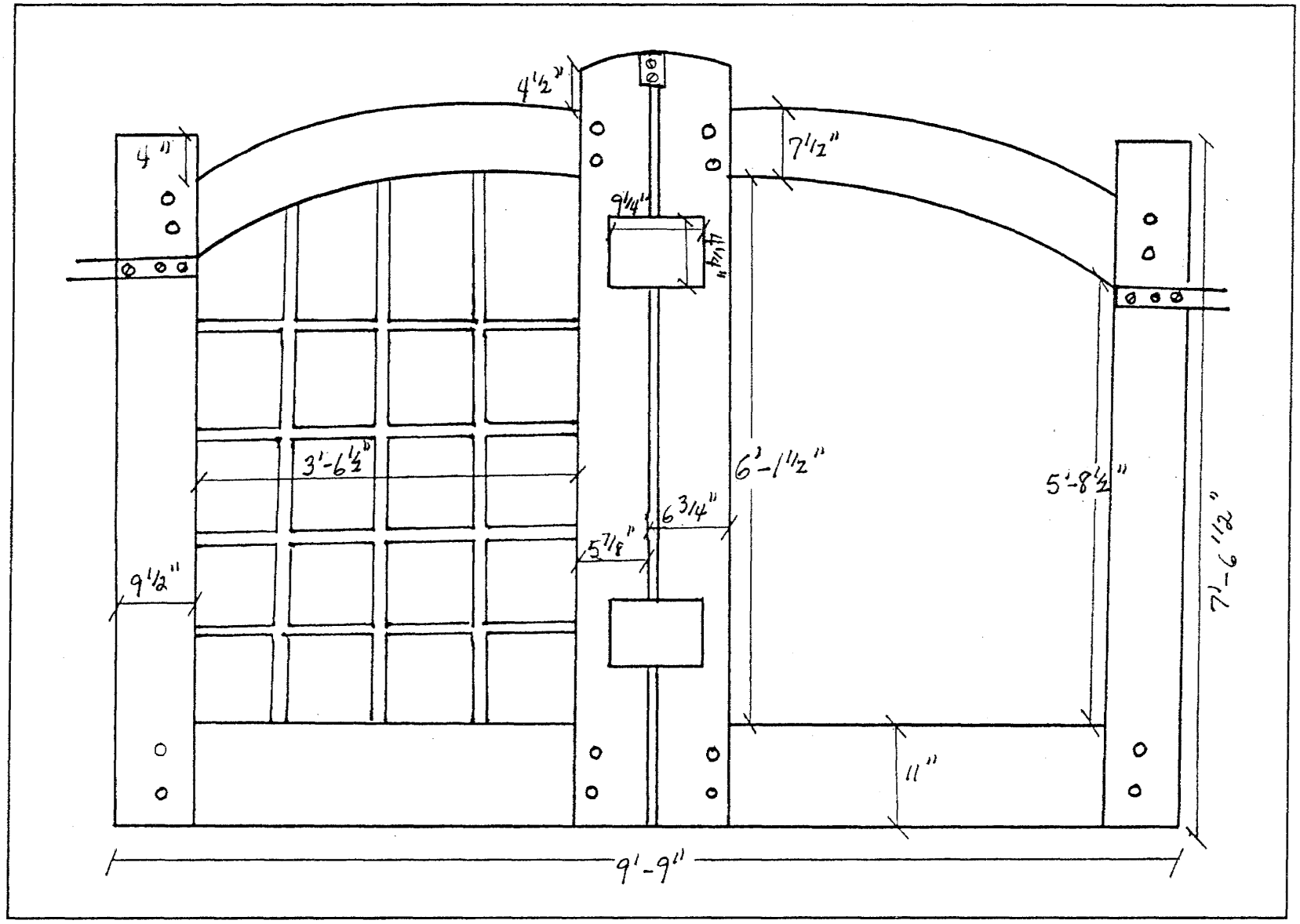
The dimensions of the flush frame are different from the other types, as follows:

General
- Thickness - 3-1/2"
- Height - 7'4"
- Width - 9'9"

Stiles
- Hinge - 6'9" high x 9-3/8" wide
- Lock - 7'4" high x 6" wide (without bead), 6-5/8" wide (with bead)

Rails
- Top - 6" wide
- Bottom - 8-1/4" wide

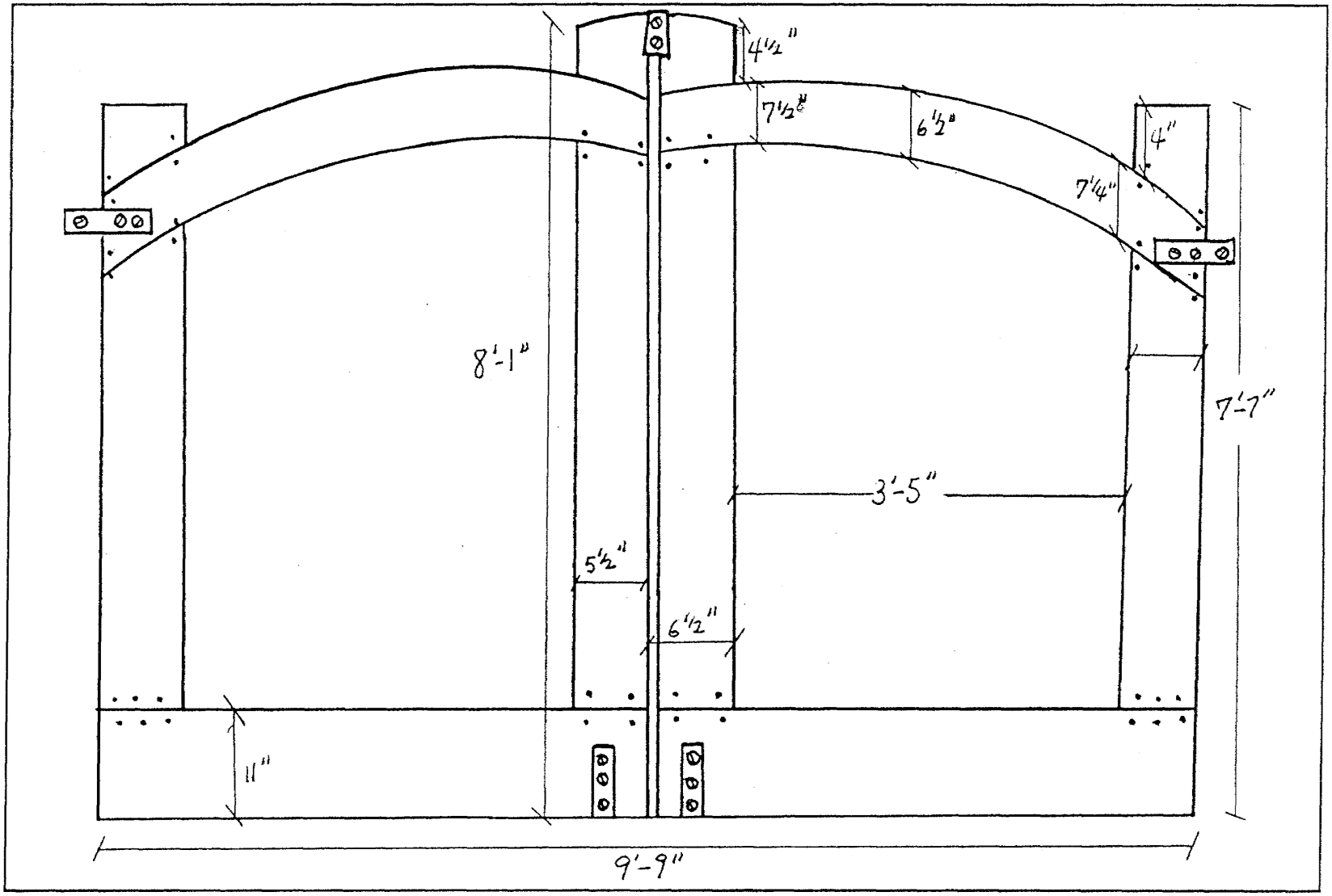
Opening (similar to raised/mtp frame type)
- Height at Lock Stile - 6'1-1/2"
- Height at Hinge Stile - 5'8-3/4"
- Width - 3'6-1/4"



SEGMENTAL ARCH - RAISED WINDOW FRAME

(Mortised, Tenoned, Pegged)

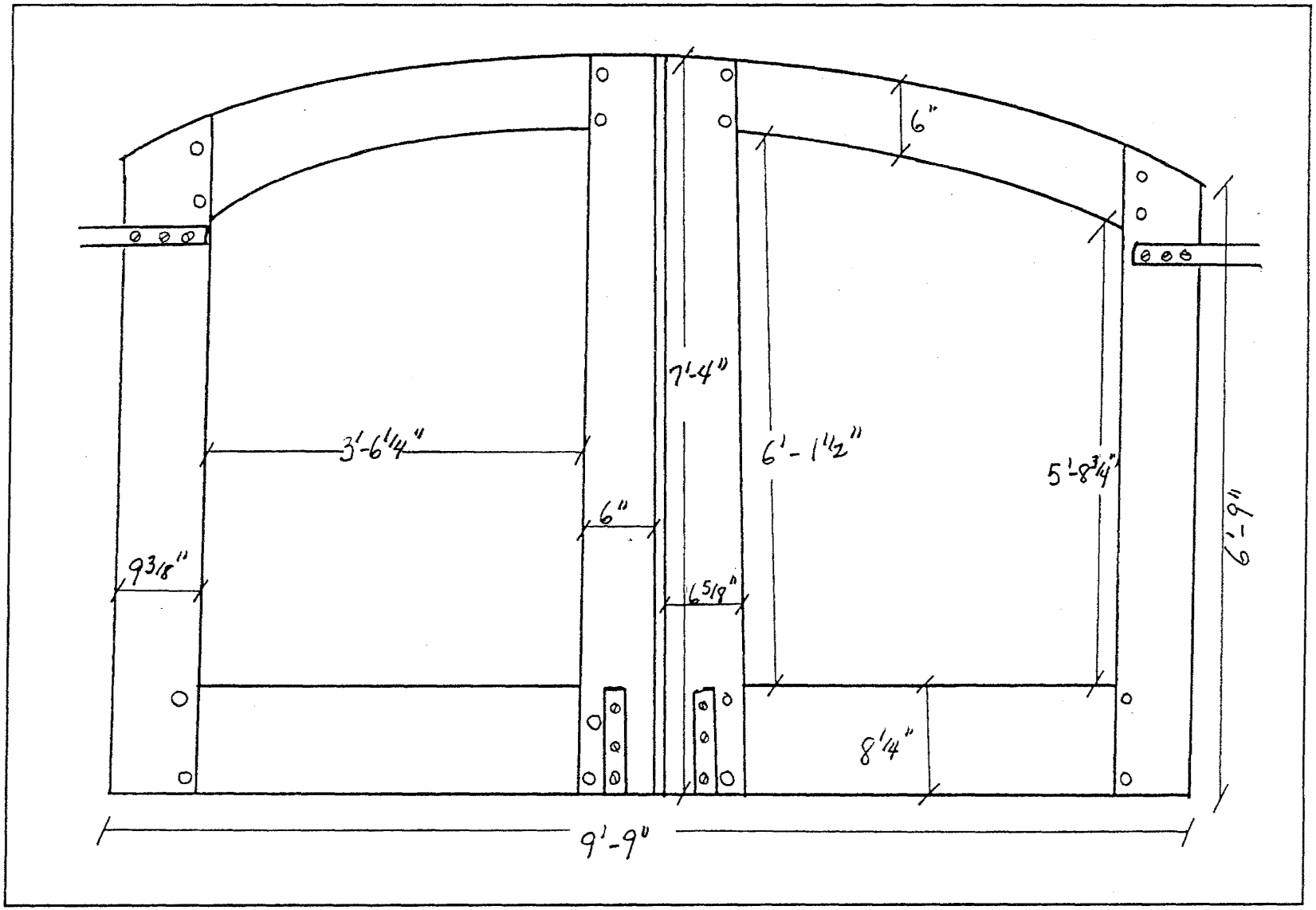
5/8" pegs (except in Stables where pegs are 1/2".)



SEGMENTAL ARCH - RAISED WINDOW FRAME

(Modern, Nailed)

Muntins: 3/4" (Same for all sash.)
Frame thickness: 3 1/2" (Same for all frames.)



SEGMENTAL ARCH - FLUSH WINDOW FRAME

(Bays 1, 2, 4, 6)

Bays 1, 2, 6 are pegged.
Bay 4 is nailed.

Inventory of Frame Types for Segmental Arches

West Addition.	**South Wall Bays.**	**North Wall Bays.**
	2-Flush; pegs	1-Flush; pegs
	4-Flush; nails	3-Raised; nails
	6-Flush; pegs	5-Raised; nails
	8-Raised; nails	7-Raised; pegs
	10-Raised; pegs	9-Raised; pegs
	12-Raised; nails	11-Raised; pegs
	14-Raised; pegs	13-Raised; pegs
	16-Raised; nails	15-Raised; pegs
	18-Raised; pegs	17-Raised; pegs
	20-Raised; nails	19-Raised; pegs
	22-Raised; pegs	21-Raised; pegs
	24-Raised; nails	23-Raised; pegs
	26-Raised; pegs	25-Raised; pegs
	28-Raised; nails	27-Raised; pegs
	30-Raised; pegs	29-Raised; pegs
	32-Raised; nails	31-Raised; pegs
	34-Raised; pegs	33-Raised; pegs
	36-Raised; nails	35-Raised; pegs
LSH II.	**South Wall Bays.**	**North Wall Bays.**
	38-Raised; pegs	37-Raised; pegs
	40-Raised; pegs	39-Raised; pegs
	42-Raised; nails	41-Raised; pegs
	44-Raised; pegs	43-Raised; pegs
	46-Raised; nails	45-Raised; pegs
	48-Raised; pegs	47-Raised; pegs
	50-Raised; nails	49-Raised; pegs
	52-Raised; pegs	51-Raised; pegs
	54-Raised; pegs	53-Raised; pegs
	56-Raised; nails	55-Raised; pegs
	58-Raised; pegs	57-Raised; pegs
	60-Raised; nails	59-Raised; pegs
	62-elevator	61-Raised; pegs
	64-Raised; nails	63-Raised; pegs
	66-Raised; pegs	65-Raised; pegs

LSH I.

South Wall Bays.	North Wall Bays.
68-Raised; pegs	67-Raised; pegs
70-Raised; nails	69-Raised; pegs
72-Raised; pegs	71-Raised; pegs
74-Raised; nails	73-Raised; pegs
76-Raised; pegs	75-Raised; pegs
78-Raised; nails	77-Raised; pegs
80-Raised; pegs	79-Raised; pegs
82-Raised; pegs	81-Raised; pegs
84-Raised; nails	83-Raised; nails
86-Raised; pegs	85-Raised; pegs
88-Raised; nails	87-Raised; nails
90-Raised; pegs	89-Raised; pegs
92-Raised; nails	91-Raised; nails
94-Raised; pegs	93-Raised; pegs
96-Raised; pegs	95-Raised; pegs

Stables.

South Wall Bays.	North Wall Bays.
98-Raised; nails	97-Metal
100-Raised; nails	99-Raised; nails
102-Raised; nails	101-Raised; nails
104-Raised; pegs	103-Raised; pegs
106-Raised; nails	105-Raised; nails
108-Raised; pegs	107-Raised; nails
110-Raised; nails	109-Raised; nails
112-Raised; pegs	111-Raised; pegs
114-Raised; nails	113-Raised; nails
116-Raised; pegs	115-Raised; pegs

II-B. Segmental-Arch Sash

Material: The sash is constructed of wood.

Dimensions:

Muntins

Historic: 1-3/4" deep x 3/4" wide

Modern: 1-11/16" deep x 3/4" wide

Glazing

13-5/8" high x 10-1/4" wide x 3/16" thick.

Design: The sash is set in the frame. It consists of two halves, like the frame. In each half are twenty lights of glazing. The historic sash sill exhibits a slight angle, while the modern is flat. The modern sash features a rabbeted edge, surrounding the entire sash.

Glazing: Historic. The historic glazing exhibits a waviness and imperfections in the glass.

Modern. The modern glazing is clear, without imperfections.

II-C. Segmental-Arch Louvered-Blinds

Material: The louvered blinds are constructed of wood.

Dimensions: Thickness - 3-3/4"
Upper Width - 5-1/2"
Lower Edge Width - 5-1/4"

Construction: The louvered blinds are mortised and tenoned. The individual louvers slide into a grooved strip that attaches to the stiles of the frame.

Design: The louvered blinds consist of double panels. They are fixed. The louvers consist of 18 louvers and 1/2 to accommodate the upper arch, per panel. The individual louvers feature a molded outside edge.

Inventory of Glazed and Louvered-Blind Treatments for Segmental Arches

Notations: The word or number to the left of the treatment designation represents the bay.

The number in parentheses to the right of the treatment designation is the number of missing or broken lights.

West Addition.	**South Wall Bays.**	**North Wall Bays.**
	2-Glazing(17)	1-Glazing(18*)
	4-Glazing(4)	3-Glazing(38)
	6-Glazing(5)	5-Glazing(39)
	8-Glazing(4)	7-Louvered
	10-Glazing(6)	9-Louvered
	12-Glazing(1)	11-Louvered
	14-Glazing(8)	13-Glazing(15)
	16-Glazing(2)	15-Louvered
	18-Glazing(2)	17-Glazing(5)
	20-Glazing(2)	19-Louvered
	22-Glazing(3)	21-Glazing(9)
	24-Glazing(1)	23-Louvered
	26-Glazing(9)	25-Glazing(8)
	28-Glazing(4)	27-Louvered
	30-Glazing(12)	29-Glazing(10)
	32-Glazing(5)	31-Louvered
	34-Glazing(3)	33-Glazing(18)
	36-Glazing(1)	35-Louvered

LSH II.	**South Wall Bays.**	**North Wall Bays.**
	38-Glazing(2)	37-Glazing(12)
	40-Glazing(4)	39-Glazing(19)
	42-Glazing(2)	41-Louvered
	44-Glazing(0)	43-Glazing(23)
	46-Glazing(1)	45-Louvered
	48-Glazing(3)	47-Glazing(15)
	50-Glazing	49-Louvered
	52-Glazing(1)	51-Glazing(8)
	54-Glazing(5)	53-Glazing(17)
	56-Glazing(2)	55-Louvered
	58-Glazing(2)*	57-Glazing(17)
	60-Glazing(0)	59-Glazing
	62-Glazing(1)	61-Glazing(9)
	64-Glazing(1)	63-Louvered
	66-Glazing(3)	65-Glazing(16)

* Bay 1 - west window muntins are missing.
Bay 58 - a 6-light window is inset into east window panel.

LSH I.	South Wall Bays.	North Wall Bays.
	68-Glazing(4)	67-Glazing(12)
	70-Glazing(1)	69-Louvered
	72-Glazing(6)	71-Glazing(16)
	74-Glazing(0)	73-Glazing(18)
	76-Glazing(5)	75-Glazing(16)
	78-Glazing(2)	77-Louvered
	80-Glazing(8)	79-Glazing(10)
	82-Glazing(1)	81-Glazing(4)
	84-Glazing(0)	83-Glazing(7)
	86-Glazing(4)	85-Glazing(3)
	88-Glazing(0)	87-Glazing(1)
	90-Glazing(3)	89-Glazing(8)
	92-Glazing(1)	91-Glazing(3)
	94-Glazing(2)	93-Glazing(9)
	96-Glazing(6)	95-Glazing(20)

Stables.	South Wall Bays.	North Wall Bays.
	98-Glazing(0)	97-New Metal(1)
	100-Glazing(8)	99-Glazing(10)
	102-Glazing(0)	101-Glazing(3)
	104-Glazing(3)	103-Glazing(9)
	106-Glazing(0)*	105-Glazing(1)
	108-Glazing(2)	107-Glazing(2)
	110-Glazing(1)	109-Glazing(0)
	112-Glazing(0)	111-Glazing(6)
	114-Glazing(1)	113-Glazing(0)
	116-Glazing(7)	115-Glazing(7)

* Bay 106 - a 6-light window is inset into west window panel.

II-D. Segmental-Arch Folding Batten-Shutters

Material: The folding batten-shutters are constructed in wood.

Dimensions:

General
- Thickness: 7/8"
- Height: 6'5" (lock end); 5'11-1/2" (hinge end)
- Width: 3'9" (each half)

Battens
- Thickness: 7/8"
- Upper Batten: 6-3/8" wide
- Lower Batten: 8-3/8" wide

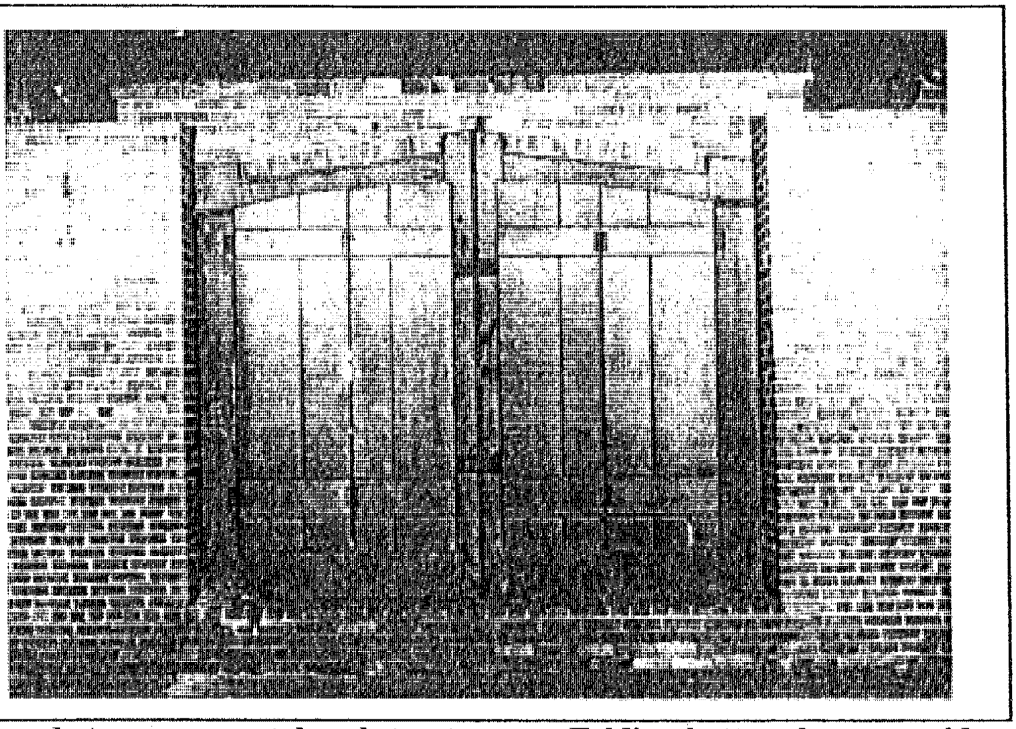
Construction: The boards are tongue-and-grooved. The battens are screwed to the boards. The leafs are hinged at the upper and lower battens. The shutters are hinged to the frame with two hinges per shutter half. The shutters are held shut by two toggle plates and two toggles per plate. The toggle plates are mounted on the frame.

Design: The shutters consist of two halves, with two leaves per half. Each leaf consists of two to four boards. The boards are secured and stabilized by an upper and lower batten. The leaves of the shutters are hinged so that they may fold inward.

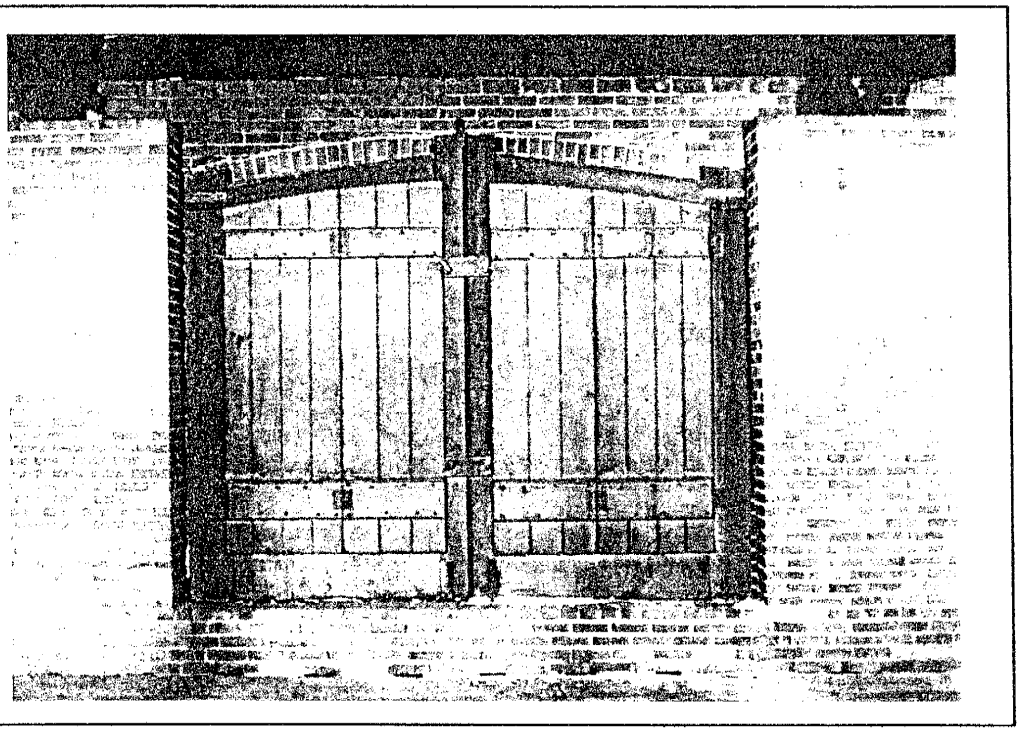
The shutter types are identified by the width of the boards which vary between wide and narrow boards. The wide board shutter usually consists of four or five boards per shutter leaf. The narrow boards consist of six or seven boards.

The battens features a 1/2" bead at their top and bottom edges. The outside edge of the battens are beveled. The upper batten is narrower in width than the lower.

The boards exhibit an 1/8" bead on one vertical side of the board. Some of the narrower boards feature a bead on both sides.

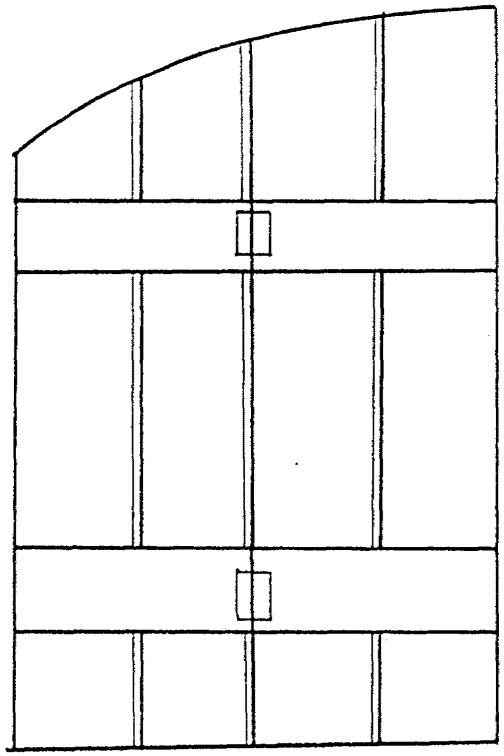


Second story, segmental-arch treatment. Folding batten-shutters, wide board.

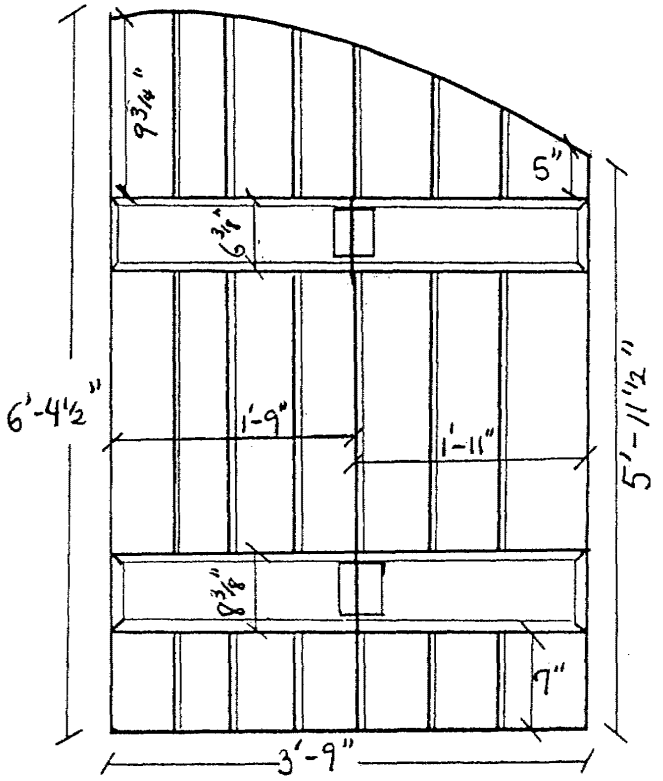


Second story, segmental-arch treatment. Folding batten-shutters, narrow board.

7/8" thick



Wide Board Shutter



Narrow Board Shutter

SEGMENTAL ARCH

FOLDING BATTEN-SHUTTERS

Shutters 7/8" thick.

Segmental-Arch Folding Batten-Shutters

Notations: The letter designation W represents "wide board" while the letter designation N represents "narrow board."

The west side of the shutter is listed prior to the east.

West Addition.	South Wall Bays.	North Wall Bays.
	2- W 5/4	1- W 4/5
	4- W 4/4	3- N 7/6
	6- W 4/4	5- N/7 W/4
	8- W 4/4	7- W 5/5*
	10- W 5/4	9- W 4/5*
	12- W 4/4	11- N 6/6*
	14- W 5/0	13- W 4/4
	16- W 4/4	15- N 6/4
	18- W 5/5*	17- W 3+/4
	20- W 4/4	19- N 7/6
	22- W 4/4	21- W 4/5
	24- Missing	23- N 7/6
	26- W 5/4	25- W 5/4
	28- W 4/4	27- N 6/6
	30- Missing	29- W 4/4
	32- W 4/4	31- N 7/7
	34- W 5/4	33- W 4/4
	36- Missing	35- W 4/4

LSH II.	South Wall Bays.	North Wall Bays.
	38- W 4/4	37- W 4/4*
	40- W 4/4	39- W 4/4
	42- W Missing/5	41- W 5/4
	44- W 4/4	43- W 4/4
	46- W 5/5	45- W 5/5
	48- W 4/4	47- W 4/4
	50- W 4/4	49- W 5/5
	52- W 4/4	51- W 4/4
	54- W 4/4	53- W 4/4
	56- W 5/4	55- W 5/4
	58- W 4/4	57- W 4/4
	60- W 5/5	59- N 7/7
	62- Missing	61- W 4/4
	64- W 4/4	63- W 4/5
	66- W 4/4	65- W 4/4

* 7 east - one missing board, inside west shutter leaf.
9 west - one missing board.
11 east - one missing board.
15 east - inside east shutter leaf missing.
17 west - (3) boards; one leaf of west shutter (east) missing.

LSH I.

South Wall Bays.	North Wall Bays.
68- W 4/4	67- W 4/4
70- Missing	69- W 4/5
72- W 4/4	71- W 4/4
74- Missing	73- Missing
76- W 4/4	75- W 4/4
78- Missing	77- W 4/5
80- W 4/4	79- W 4/4
82- W 4/4	81- W 4/4
84- Missing	83- Missing
86- W 4/4	85- W 4/4
88- Missing	87- Missing
90- W 4/4	89- e. W 4
92- Missing	91- W 5/4
94- w.W 4/e. N 6	93- Missing
96- W 4/4	95- W 4/4

Stables.

South Wall Bays.	North Wall Bays.
98- Missing	97- Missing
100- Missing	99- Missing
102- Missing	101- Missing
104- Missing	103- Missing
106- N 6/7	105- N 6/6
108- W 4/5	107- e. N 6
110- Missing	109- N 7/6
112- Missing	111- Missing
114- N 6/7	113- N 7/7
116- N 7/7	115- N 6/7

II-E. Finishes

Raised/MTP Frame:	Interior.	Painted dark brown.
	Exterior.	Painted white.
Raised/Nailed Frame:	Interior.	Painted black.
	Exterior.	Painted dark brown.
Louvered Blinds:	Interior.	Painted dark brown.
	Exterior.	Painted white.
Shutters:	Interior.	Painted light brown.
	Exterior.	Painted dark brown.
Hardware:	Painted like feature.	

APPENDIX D.

Inventory of Hardware for Louvered Blind, Solid Panel, and Sash Treatments.

INTRODUCTION

General Comments: This inventory includes the typical hardware found used in treatments for louvered blind, solid panel, and sash throughout the building. The appendix begins with schematic sketches of typical hardware that is cited in the inventory that follows. The actual inventory is divided according to type of arch, semi-circular and segmental.

I. **Illustrations of Typical Hardware** (Similar hardware was used on both arch types, so the drawings do not specify type of arch.)

A. Frame Anchoring Hardware

B. T-Hinge
Strap Hinge

C. 2-Knuckle Butt Hinge
5-Knuckle Butt Hinge (Baldwin Patent)

D. 5-Knuckle Butt Hinge (Decorative Ball)
5-Knuckle Butt Hinge (N. Eng. Butt Co. Wire Joints)

E. 5-Knuckle Butt Hinge (no manufacturers' name visible)
5-Knuckle Butt Hinge (T. & C. Clark's Best Broad)

F. 5-Knuckle Butt Hinge (T. & C. Clark Patented)

G. Toggle Plate and Toggle Fastener

II. **Inventory of Hardware for Semi-Circular Arch Treatments**

A. West Wall
First Story
Second Story

B. East Wall
First Story
Second Story

C. South Wall
West Addition (even-numbered bays between 1-36)
Long Storehouse II (even-numbered bays between bays 37-66)
Long Storehouse I (even-numbered bays between bays 67-96)
Stables (even-numbered bays between 97-116)

E. North Wall

West Addition (odd-numbered bays between 1-36)
Long Storehouse II (odd-numbered bays between 37-66)
Long Storehouse I (odd-numbered bays between 67-96)
Stables (odd-numbered bays between 97-116)

III. Inventory of Hardware for Segmental-Arch Treatments

A. East Wall

Basement

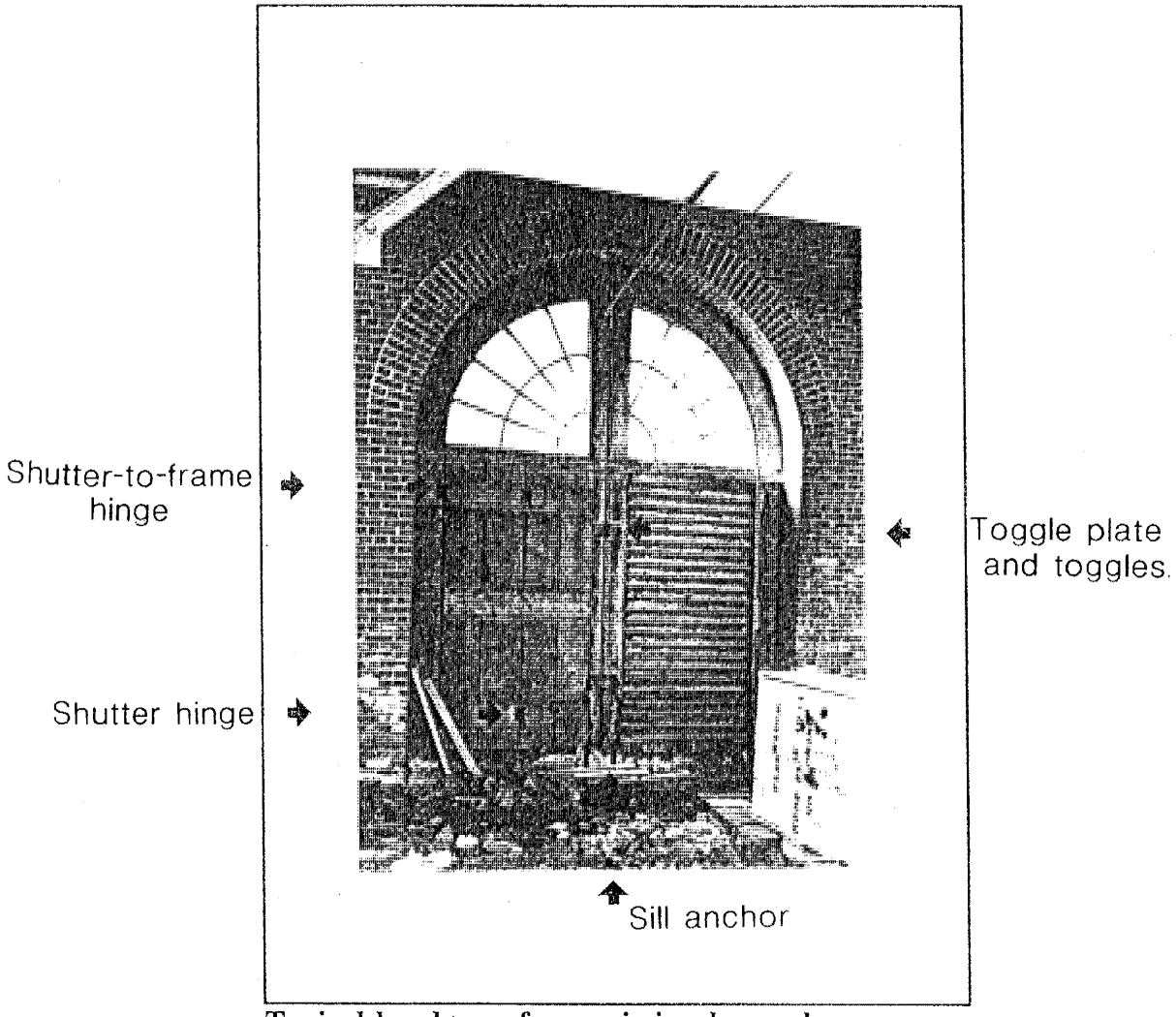
B. South Wall

West Addition (even-numbered bays between 1-36)
Long Storehouse II (even-numbered bays between bays 37-66)
Long Storehouse I (even-numbered bays between bays 67-96)
Stables (even-numbered bays between 97-116)

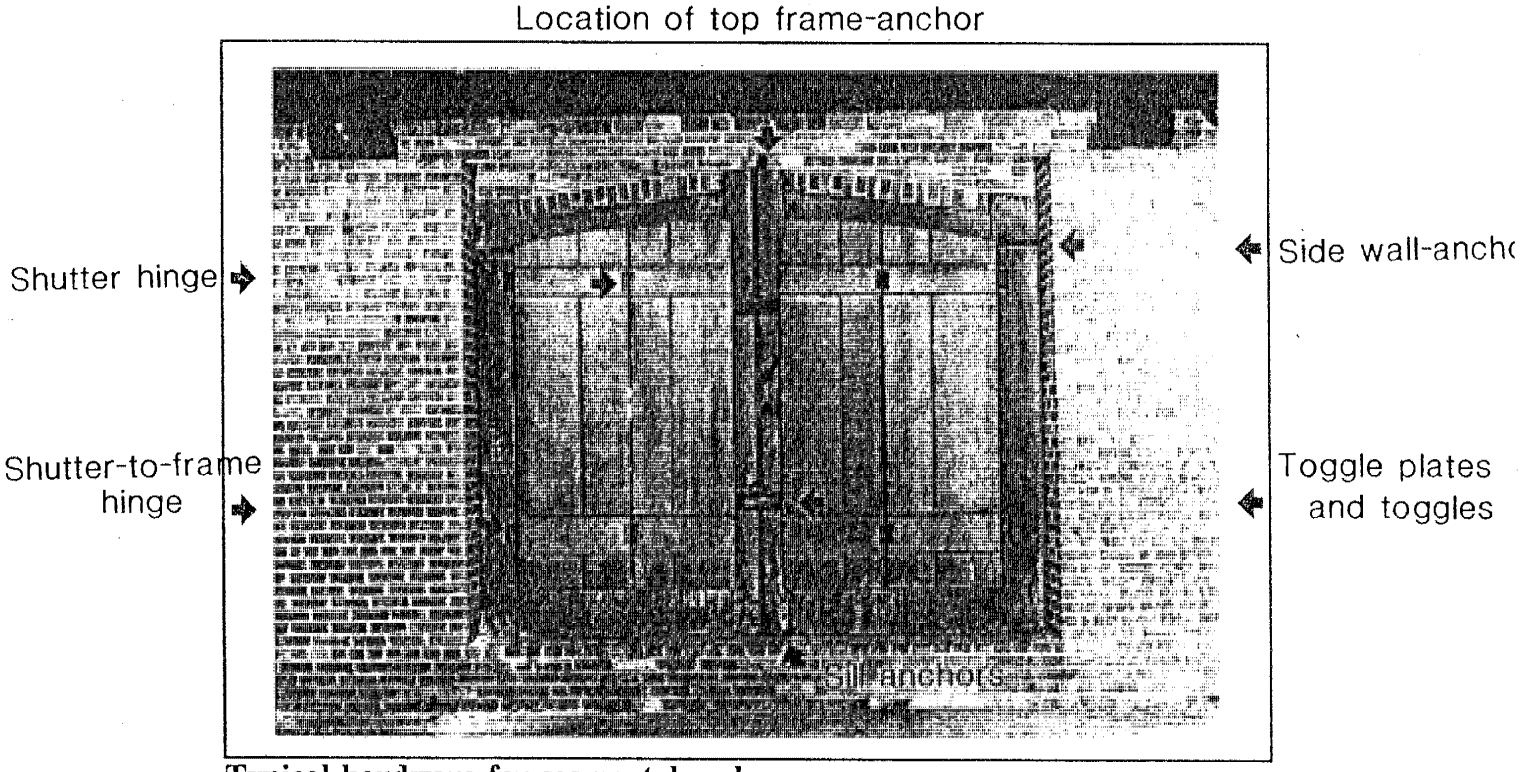
C. North Wall

West Addition (odd-numbered bays between 1-36)
Long Storehouse II (odd-numbered bays between 37-66)
Long Storehouse I (odd-numbered bays between 67-96)
Stables (odd-numbered bays between 97-116)

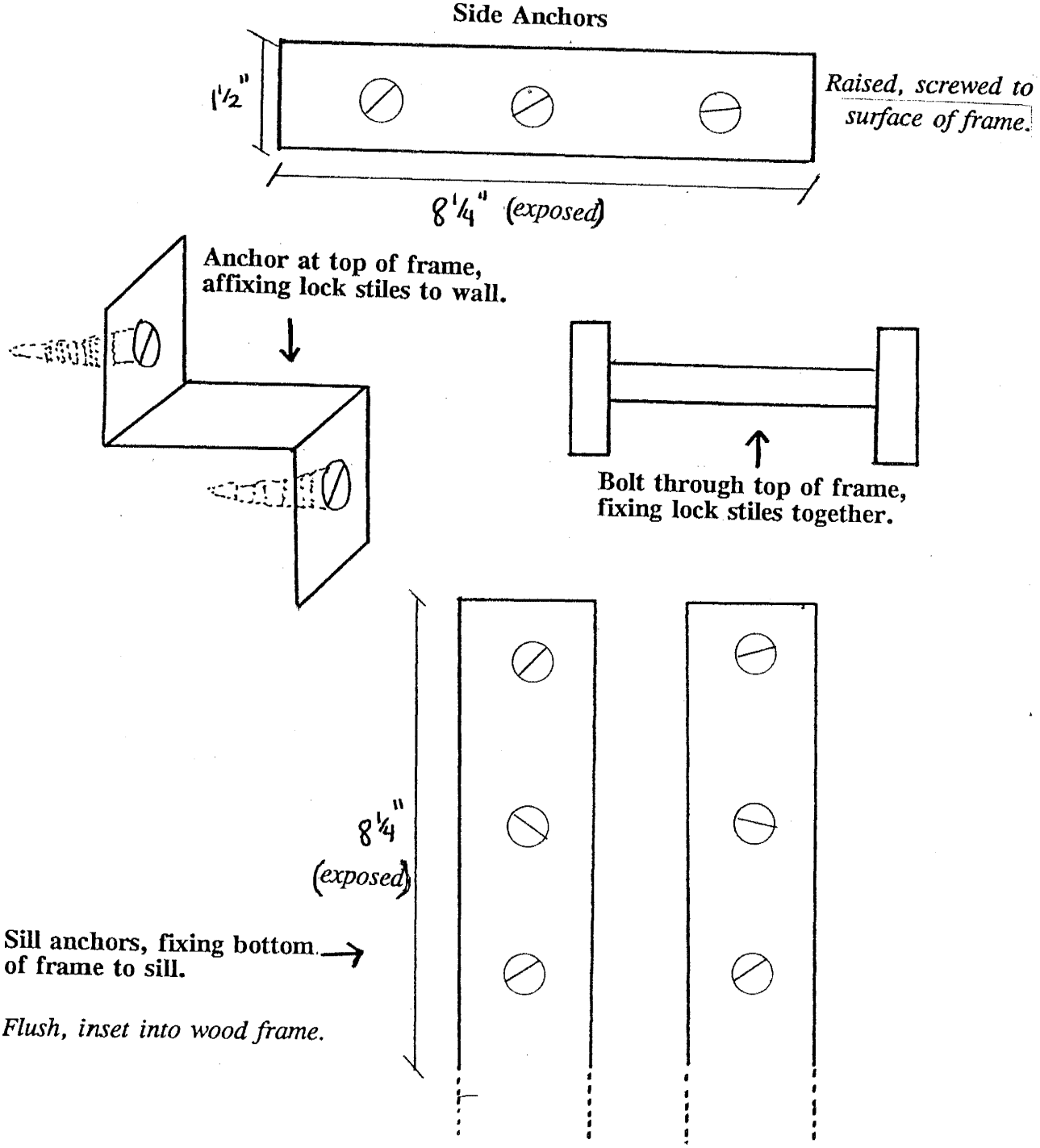
I. Illustrations of Typical Hardware



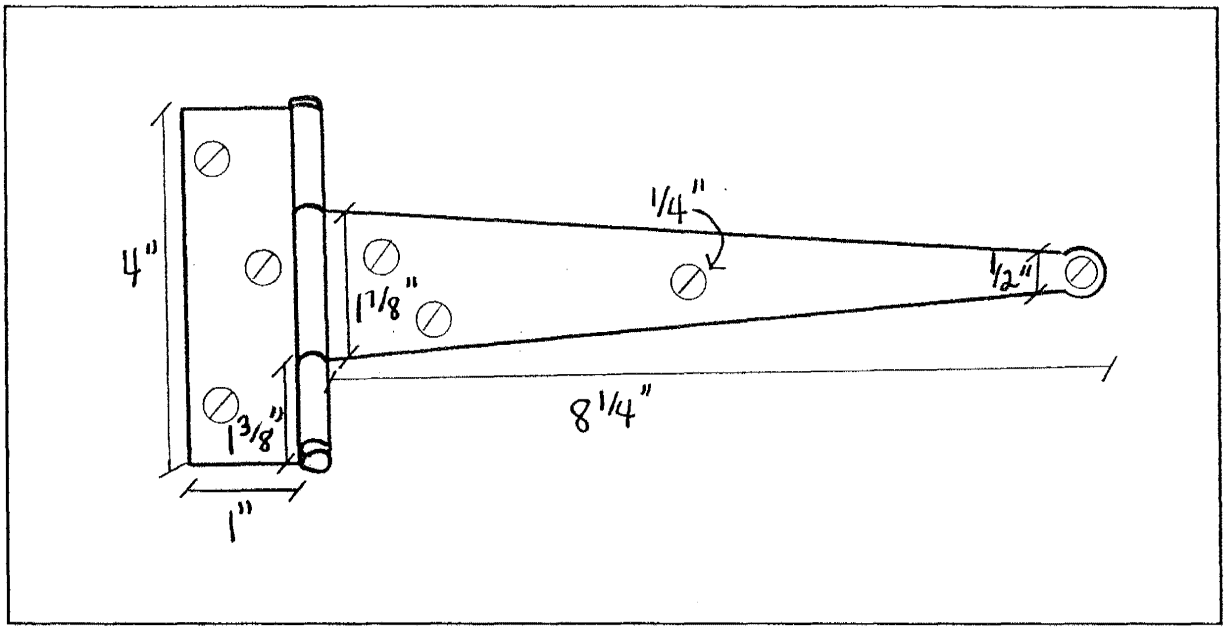
Typical hardware for semi-circular arches.



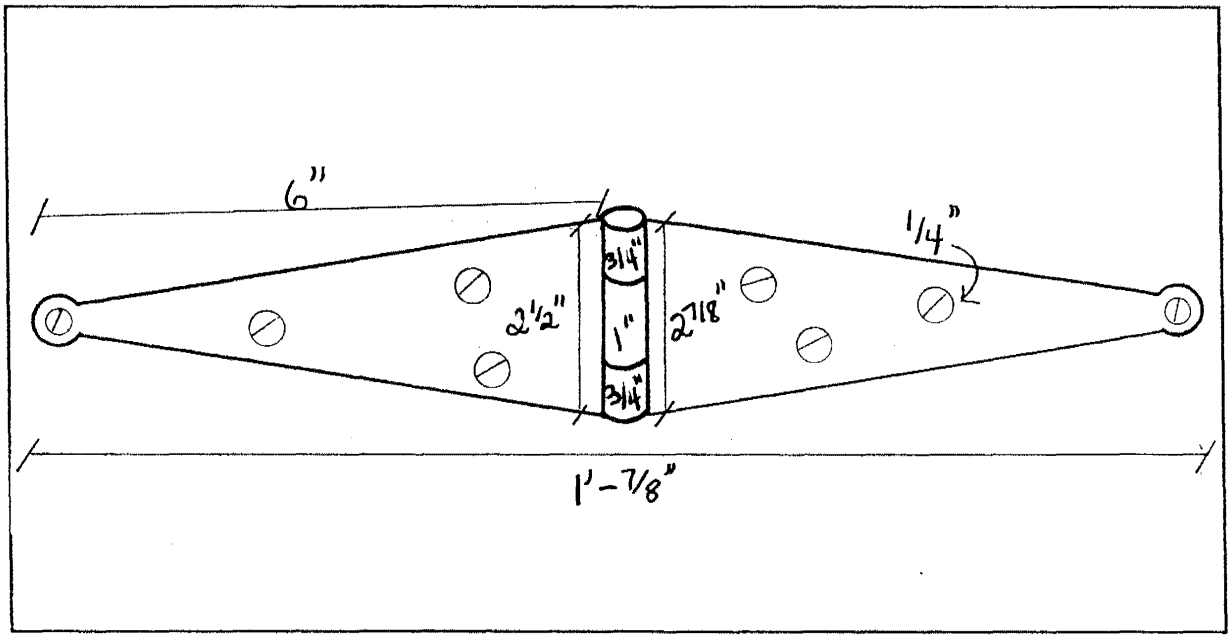
Typical hardware for segmental arches.



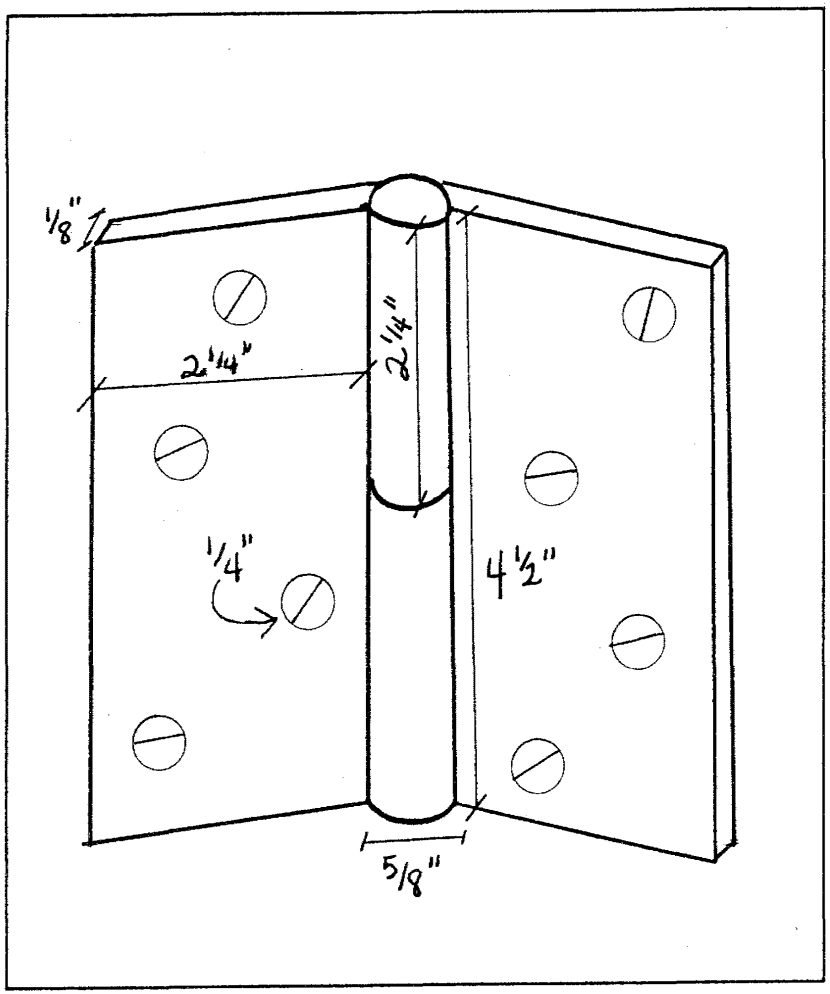
FRAME ANCHORING HARDWARE



T-HINGE

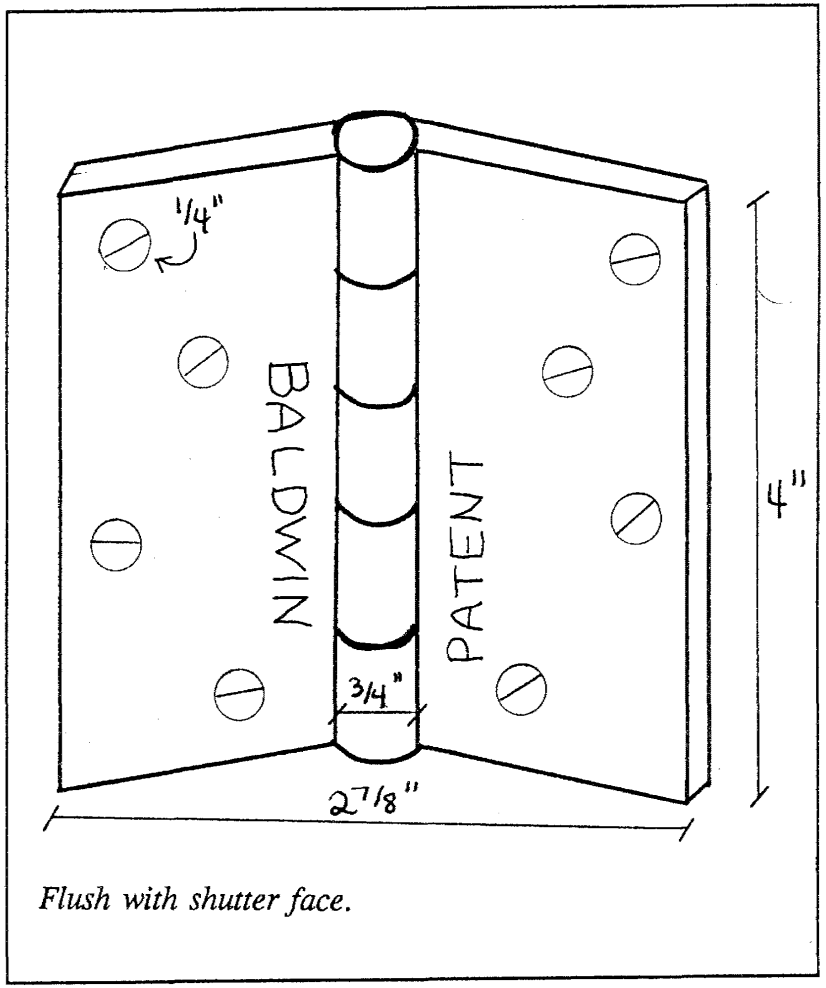


STRAP HINGE



SEGMENTAL ARCH - INTERIOR SHUTTER

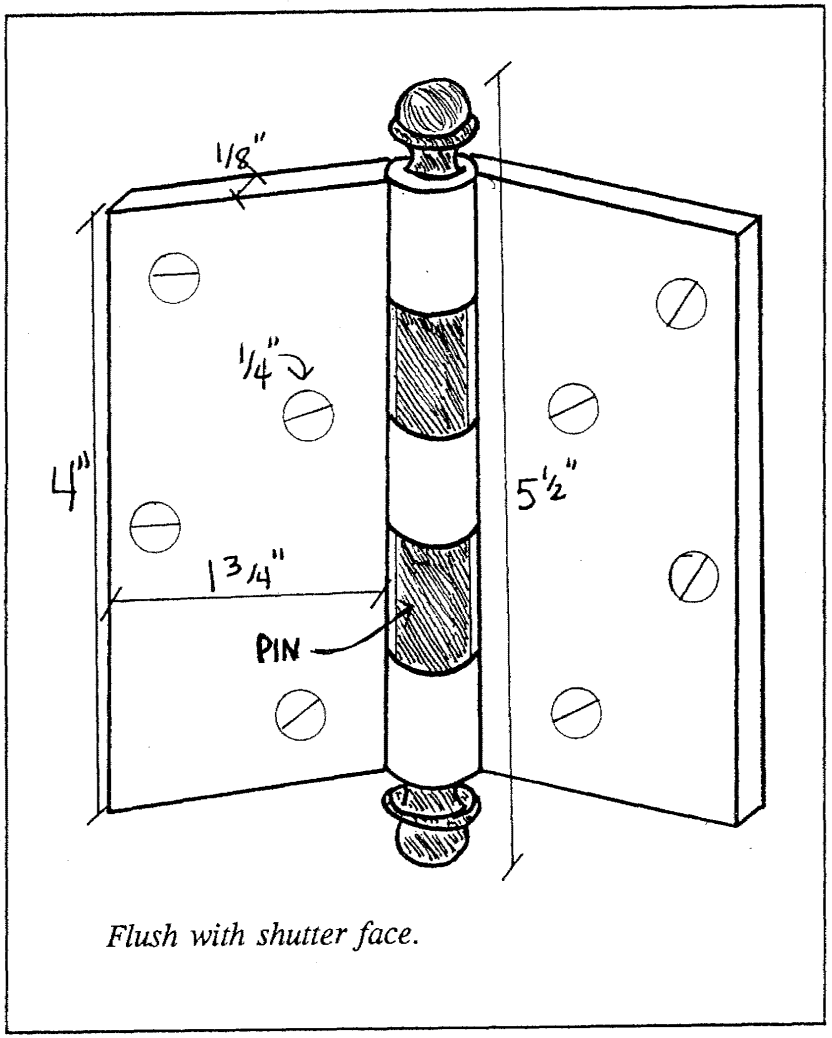
2-KNUCKLE BUTT HINGE



Flush with shutter face.

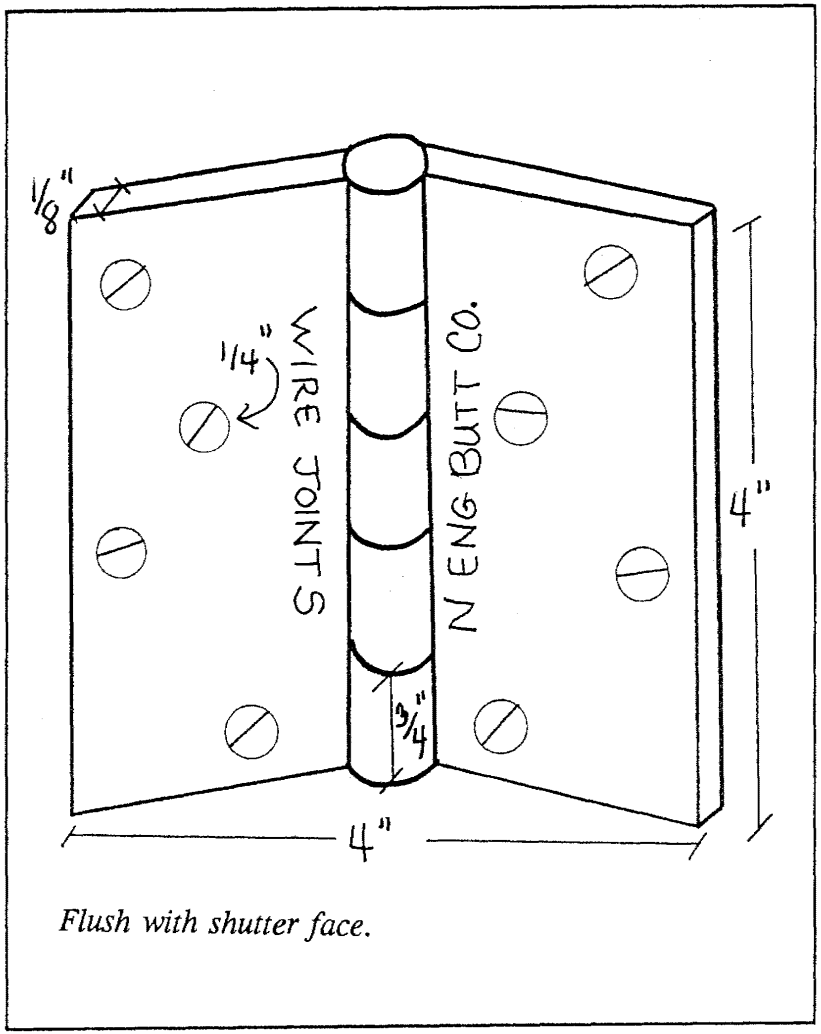
SEGMENTAL ARCH - INTERIOR SHUTTER

5-KNUCKLE BUTT HINGE
(Baldwin Patent)



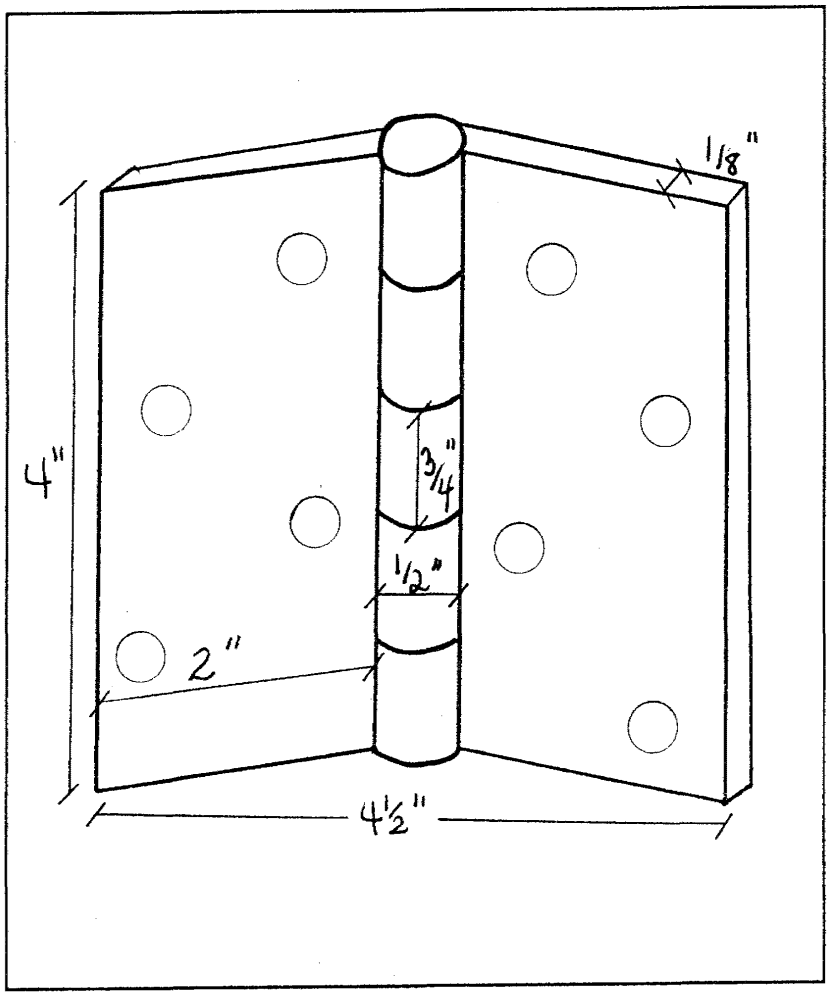
Flush with shutter face.

5-KNUCKLE BUTT HINGE
(Decorative Ball)

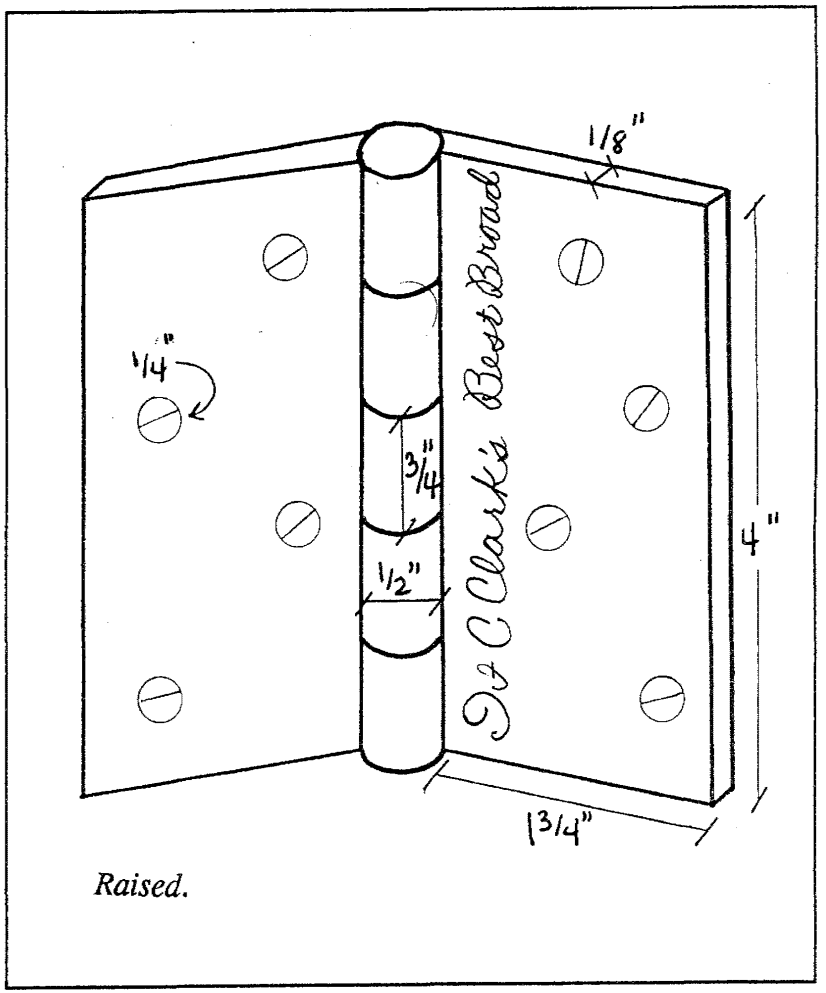


Flush with shutter face.

5-KNUCKLE BUTT HINGE
(N. Eng. Butt Co. Wire Joints)

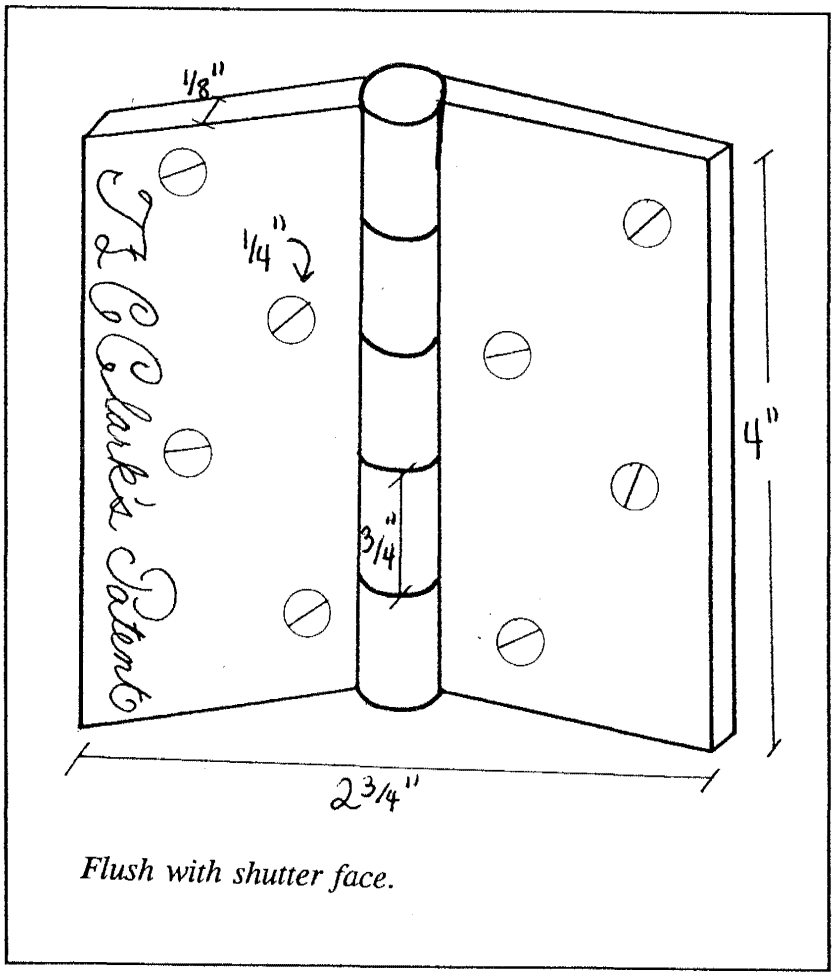


5-KNUCKLE BUTT HINGE
(No manufacturers' name visible.)



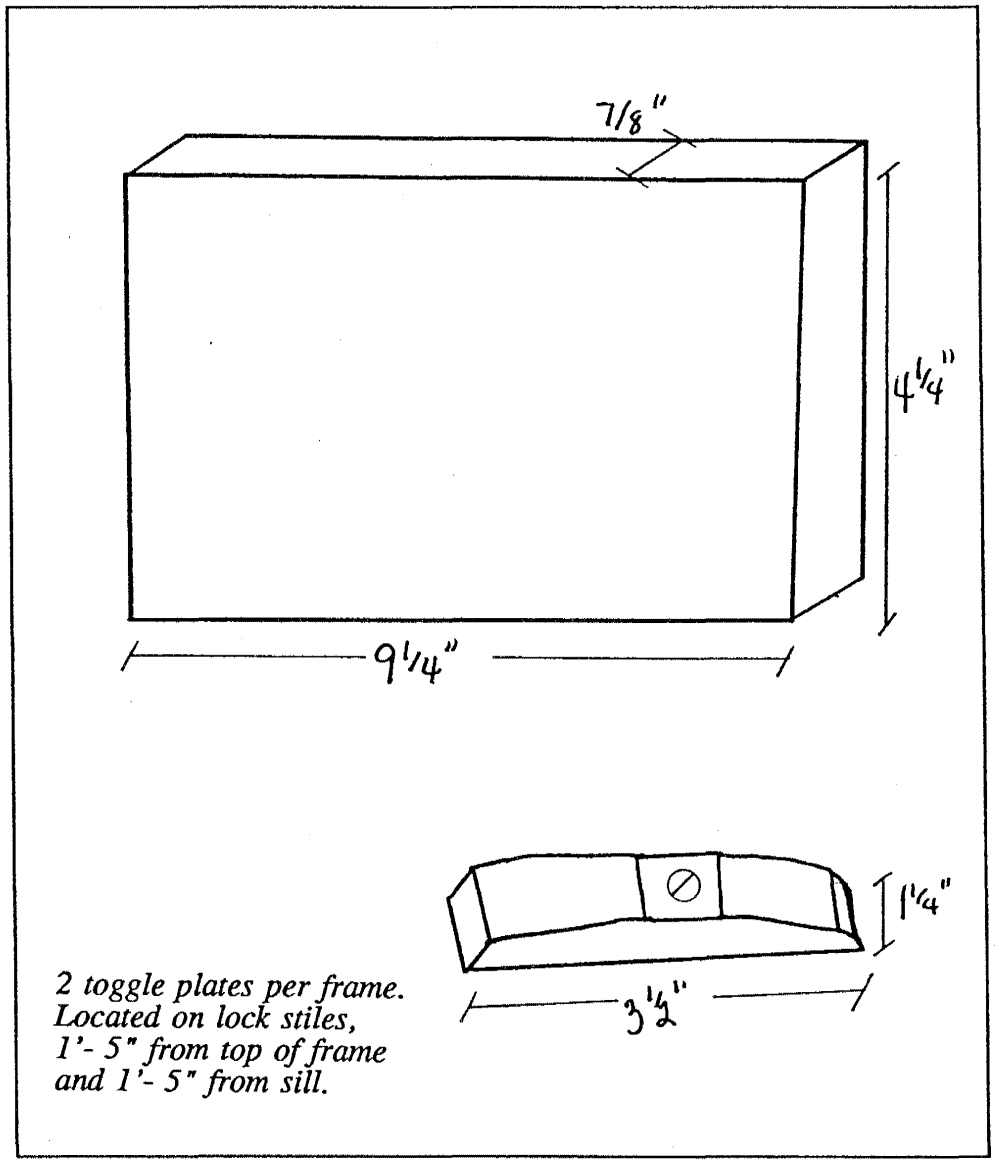
Raised.

5-KNUCKLE BUTT HINGE
(T. & C. Clark's Best Broad)



Flush with shutter face.

5-KNUCKLE BUTT HINGE
(T. & C. Clark Patented)



2 toggle plates per frame. Located on lock stiles, 1'- 5" from top of frame and 1'- 5" from sill.

TOGGLE PLATE AND TOGGLE FASTENER

II. Inventory of Hardware for Semi-Circular Arch Treatments

Inventory of Hardware for Semi-Circular Arch Treatments

* * *

West Wall

First Story

South brick infill

Center semi-circular arch removed; rectangular opening introduced

North interior inaccessible

Second Story

South	Frame Anchors:	sill - intact; south - loose
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact; one loose
	Toggles:	(1) intact; other - missing
Center	Frame Anchors:	sill - intact; south - loose
	Shutter Boards:	(4) 5-knuckle butt hinges (north and south, upper - **T & C Clark;** south, lower - **Baldwin**)
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates:	intact; upper - raised
	Toggles:	intact
North	Frame Anchors:	sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates:	intact
	Toggles:	intact

* * *

East Wall

First Story

South brick infill and fanlight

Center brick infill and fanlight

North brick infill and fanlight

Second Story

South	Frame Anchors:	sill - intact; south - enlarged
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best ?)**
	Toggle Plates:	(1) intact; upper - missing
	Toggles:	(1) intact; others - missing
Center	Frame Anchors:	sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (type not discernible)
	Toggle Plates:	intact
	Toggles:	(3) intact; upper north - missing
North	interior inaccessible for detailed study; shutters - missing	

* * *

South Wall

West Addition

2	brick infill
4	brick infill
6	brick infill
8	brick infill
10	wood garage door; fanlight
12	wood garage door; fanlight
14	interior inaccessible
16	interior inaccessible
18	interior inaccessible
20	interior inaccessible
22	interior inaccessible
24	interior inaccessible
26	interior inaccessible
28	interior inaccessible
30	freight elevator door and brick infill

32 wood matchboard, sliding door

Frame Anchors:	sill - removed
Shutter Boards:	removed with shutters
Shutter/Frame:	removed with shutters
Toggle Plates:	removed
Toggles:	removed

34

Frame Anchors:	sill - removed
Shutter Boards:	removed with shutters
Shutter/Frame:	removed with shutters
Toggle Plates:	removed
Toggles:	removed

36

Frame Anchors:	sill - intact
Shutter Boards:	(4) strap hinges
Shutter/Frame:	(4) 2-knuckle hinges
Toggle Plates:	intact
Toggles:	west - intact; east - missing

Long Storehouse II

38

Frame Anchors:	sill - intact; bent, not set into sill
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
Toggle Plates:	missing
Toggles:	missing

40

Frame Anchors:	sill - missing
Shutter Boards:	(2) 5-knuckle butt hinges **(T & C Clark)**
	(2) strap hinges
Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
Toggle Plates:	upper - new; lower - intact
Toggles:	upper - intact; lower - missing

42

Frame Anchors:	sill - missing
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges (types not discernible)
Toggle Plates:	(1) intact; mounted lower than original at mid-point
Toggles:	(2) intact

44

Frame Anchors:	sill - extant; rusted, broken
Shutter Boards:	inaccessible
Shutter/Frame:	(2) 5-knuckle butt hinges **(T Clark Best)**
	(2) inaccessible
Toggle Plates:	upper - moved to mid-point; lower - missing
Toggles:	(2) intact; upper - extant, lower - missing

46 Frame Anchors: sill - missing
Shutter Boards: (2) 5-knuckle butt hinges **(Baldwin)**
(2) inaccessible
Shutter/Frame: (2) 5-knuckle butt hinges (not discernible)
(2) inaccessible
Toggle Plates: upper - moved to mid-point; lower - missing
Toggles: upper west - intact; upper east and lower - missing

48 interior inaccessible

50 Frame Anchors: sill - inaccessible
Shutter Boards: (2) 5-knuckle butt hinges **(Baldwin)**
(2) inaccessible
Shutter/Frame: (2) 5-knuckle butt hinges **(Baldwin)**
(2) inaccessible
Toggle Plates: inaccessible
Toggles: inaccessible

52 open archway

54 open archway

56 open archway

58 open archway (location of former fire door)

60 open archway

62 elevator freight door and brick infill

64 open archway

66 open archway

Long Storehouse I

68 open archway

70 open archway

72 open archway

74 open archway

76 open archway

78 open archway

80 open archway

82 Frame Anchors: sill - removed
Shutter Boards: (4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame: (2) 5-knuckle butt hinges **(T Clark Best)**
Toggle Plates: (2) intact
Toggles: (3) intact

84 open archway

86 open archway

88 open archway

90 open archway

92 open archway

94 open archway

96 Frame Anchors: sill - intact, at sides
Shutter Boards: none extant
Shutter/Frame: none extant
Toggle Plates: none extant
Toggles: none extant

Stables

98 Lavatory; wood partition up to fanlight
Frame Anchors: removed
Shutter Boards: removed
Shutter/Frame: removed
Toggle Plates: removed with shutters
Toggles: removed with shutters

100 semi-circular arch removed; rectangular opening introduced

102 semi-circular arch removed; rectangular opening introduced

104 semi-circular arch removed; rectangular opening introduced

106 semi-circular arch removed; rectangular opening introduced

108 brick infill; fanlight

110 brick infill; fanlight

112 semi-circular arch removed; rectangular opening introduced

114 semi-circular arch removed; rectangular opening introduced

116 brick infill; fanlight

* * *

North Wall

West Addition

1 brick infill; interior inaccessible

3 brick infill; interior inaccessible

5 brick infill; interior inaccessible

7 brick infill; interior inaccessible

9

Frame Anchors:	sill - none extant
Shutter Boards:	removed with shutters
Shutter/Frame:	removed with shutters
Toggle Plates:	none extant
Toggles:	none extant

11

Frame Anchors:	sill - none extant
Shutter Boards:	removed with shutters
Shutter/Frame:	removed with shutters
Toggle Plates:	none extant
Toggles:	none extant

13 interior inaccessible

15 interior inaccessible

17 interior inaccessible

19 interior inaccessible
21 interior inaccessible

23 interior inaccessible

25 interior inaccessible

27 interior inaccessible

29 interior inaccessible

31 interior inaccessible

33 interior inaccessible

35 interior inaccessible

Long Storehouse II

37
Frame Anchors:	sill - intact; deteriorated and severed
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges **(Patent)**
Toggle Plates:	(2) intact
Toggles:	only lower west intact; others - missing

39
Frame Anchors:	sill - intact; deteriorated
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges **(Patent)**
Toggle Plates:	(2) intact
Toggles:	(4) intact

41
Frame Anchors:	sill - intact; deteriorated
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges (2 - **Baldwin**; 2 - **Patent**)
Toggle Plates:	(2) intact
Toggles:	missing

43
Frame Anchors:	sill - intact
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges **(Patent)**
Toggle Plates:	(2) intact
Toggles:	(1) intact; others - missing

45
Frame Anchors:	sill - intact; deteriorated
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges **(T & C Clark)**
Toggle Plates:	(2) intact
Toggles:	(3) intact; other - missing

47
Frame Anchors:	sill - inaccessible
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	inaccessible
Toggle Plates:	inaccessible
Toggles:	inaccessible

49

Frame Anchors:	sill - intact; deteriorated
Shutter Boards:	inaccessible
Shutter/Frame:	inaccessible
Toggle Plates:	(2) intact
Toggles:	(2) intact

51

Frame Anchors:	sill - intact
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(3) 5-knuckle butt hinges (1 - **T Clark Best**; 2-plain)
	(1) inaccessible
Toggle Plates:	(2) intact
Toggles:	(4) intact

53

Frame Anchors:	sill - intact
Shutter Boards:	removed with shutters; boards nailed instead
Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
Toggle Plates:	(3) intact; top is new
Toggles:	(5) intact

55

Frame Anchors:	sill - intact; deteriorated
Shutter Boards:	(2) 5-knuckle butt hinges (**Baldwin**)
Shutter/Frame:	(2) 5-knuckle butt hinges (plain)
Toggle Plates:	missing
Toggles:	missing

57

Frame Anchors:	sill - inaccessible
Shutter Boards:	(2) 5-knuckle butt hinge **(Baldwin)**
	(2) removed with shutter
Shutter/Frame:	(2) 5-knuckle butt hinge (plain)
	(2) removed with shutter
Toggle Plates:	(1) intact
Toggles:	(2) intact

59 Fire Door - none extant

61

Frame Anchors:	sill - intact
Shutter Boards:	(2) 5-knuckle butt hinges **(Baldwin)**
	(2) removed with shutters
Shutter/Frame:	(2) 5-knuckle butt hinges (plain)
	(2) removed with shutters
Toggle Plates:	(2) intact
Toggles:	(2) intact

63	Frame Anchors:	sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	(1) intact; upper
	Toggles:	none extant
65	Frame Anchors:	sill - intact; bent
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(2) 5-knuckle butt hinges (east - **T Clark Best** broken)
		(2) 5-knuckle butt hinges (west - plain)
	Toggle Plates:	missing
	Toggles:	missing

Long Storehouse I

67	open archway	
69	open archway	
71	open archway	
73	open archway	
75	Frame Anchors:	sill - inaccessible
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	removed
	Toggles:	removed
77	Frame Anchors:	sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	upper - removed; lower - broken
	Toggles:	removed
79	Frame Anchors:	sill - intact; bent
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	removed
	Toggles:	removed
81	high voltage room; inaccessible	

83	Frame Anchors:	sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	upper - removed; lower - intact; mid-point - new plate
	Toggles:	(2) historic on new plate; (1) on lower plate
85	Frame Anchors:	sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges (possibly **Baldwin**)
	Shutter/Frame:	(4) 5-knuckle butt hinges (possibly **T Clark Best**)
	Toggle Plates:	upper - intact, broken;
	Toggles:	(2) toggles
87	Frame Anchors:	sill - intact; corroded
	Shutter Boards:	(4) 5-knuckle butt hinges **(2 - T & C Clark; 2-Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(1 - T Clark Best;** 3 indiscernible
	Toggle Plates:	(2) intact
	Toggles:	(3) intact; lower west - removed
89	Frame Anchors:	sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(2 - T & C Clark;** 2-**Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (2 - **T & C Clark;** 2-indiscernible)
	Toggle Plates:	intact
	Toggles:	intact
91	Frame Anchors:	sill - intact
	Shutter Boards:	(2) 5-knuckle butt hinges **(T & C Clark** - top, broken)
		(2) removed with shutters
	Shutter/Frame:	(2) 5-knuckle butt hinges **(T Clark Best)**
		(2) removed with shutters
	Toggle Plates:	(2) intact
	Toggles:	(4) intact
93	Frame Anchors:	sill - intact
	Shutter Boards:	(2) 5-knuckle butt hinges (1 - plain; 1 - **Baldwin)**
		(2) inaccessible
	Shutter/Frame:	(2) 5-knuckle butt hinges (1 - **T Clark Best;** 2-inaccessible)
	Toggle Plates:	(2) intact
	Toggles:	(4) intact

95	Frame Anchors:	sill - intact; heavily corroded
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(2) 5-knuckle butt hinges (plain)
		(2) inaccessible
	Toggle Plates:	removed
	Toggles:	removed

Stables

97 freight elevator door and brick infill

99 semi-circular arch removed; rectangular opening introduced

101 semi-circular arch removed; rectangular opening introduced

103 brick infill and fanlight

105 brick infill and fanlight

107 brick infill and fanlight

109 brick infill and fanlight

111 brick infill and fanlight

113 brick infill and fanlight

115 brick infill and fanlight

III. Inventory of Hardware for Segmental-Arch Treatments

Inventory of Hardware for Segmental-Arch Treatments

* * *

East Wall

Basement

South Brick Infill

Center Brick Infill and Door

North Brick Infill

* * *

South Wall

West Addition

2	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
4	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) strap hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
6	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact

8	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) strap hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
10	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
12	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) strap hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
14	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(2) removed with shutter (2) T-hinges
	Shutter/Frame:	(2) removed with shutter; partial 2-knuckle hinge plate remains on frame (2) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
16	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) strap hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
18	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) T-hinges; east, bottom - broken
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact

20	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) strap hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	(1) intact
	Toggles:	(2) intact
22	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	(3) intact; other - missing
24	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	none extant
	Toggles:	none extant
26	Frame Anchors:	side - intact; askew top center - intact sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	(3) intact; lower east - missing
28	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) strap hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
30	Frame Anchors:	side - not accessible top center - intact sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	intact
	Toggles:	(3) intact; upper east - missing

32	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) strap hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	(3) intact; other - missing
34	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	none extant
	Toggles:	none extant
36	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	none extant
	Toggles:	none extant

Long Storehouse II

38	Frame Anchors:	side - intact; but loose top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	(1) intact
	Toggles:	(1) intact; other - missing
40	Frame Anchors:	side - intact top center - intact sill - intact; west - repaired (extra metal anchor on west stile)
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates:	intact
	Toggles:	intact
42	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(2) 5-knuckle butt hinges (east - **Baldwin)**
	Shutter/Frame:	(2) 5-knuckle butt hinges (east - plain)
	Toggle Plates:	intact
	Toggles:	(1) intact; others - missing

44	Frame Anchors:	side - intact
		top center - intact
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(2) 5-knuckle butt hinges (west - **Baldwin)**
		(2) 5-knuckle butt hinges (east - **T Clark Best)**
	Toggle Plates:	intact; lower - raised
	Toggles:	intact
46	Frame Anchors:	side - intact
		top center - missing
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	intact
48	Frame Anchors:	side - intact
		top center - intact
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates:	intact
	Toggles:	intact
50	Frame Anchors:	side - intact
		top center - intact
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	intact
52	Frame Anchors:	side - intact
		top center - intact
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates:	intact
	Toggles:	(3) intact; other - missing
54	Frame Anchors:	side - intact
		top center - intact; rod instead of bolt
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact

56

Frame Anchors:	side - intact top center - intact sill - intact
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
Toggle Plates:	intact
Toggles:	intact

58

Frame Anchors:	side - intact top center - intact; shifted sill - intact
Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
Toggle Plates:	intact
Toggles:	(2) intact; others - missing

60

Frame Anchors:	side - intact top center - intact sill - intact
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
Toggle Plates:	intact
Toggles:	intact

62

Frame Anchors:	side - inaccessible top center - inaccessible sill - intact
Shutter Boards:	removed with shutters
Shutter/Frame:	removed with shutters
Toggle Plates:	intact
Toggles:	intact

64

Frame Anchors:	side - intact top center - intact sill - intact
Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
Toggle Plates:	intact
Toggles:	intact

66

Frame Anchors:	side - intact top center - intact sill - intact
Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
Toggle Plates:	intact
Toggles:	(2) intact; others - missing

Long Storehouse I

68	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	missing
	Toggles:	missing
70	Frame Anchors:	side - east, intact; west, missing top center - missing sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	removed; extra toggle plate mounted on east jamb
	Toggles:	removed
72	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (east - **T Clark Best**; west - **Baldwin)**
	Toggle Plates:	intact
	Toggles:	(3) intact; other - missing
74	Frame Anchors:	side - none extant top center - none extant sill - none extant
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	none extant
	Toggles:	none extant
76	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates:	intact
	Toggles:	intact
78	Frame Anchors:	side - intact; extra shim at west anchor top center - intact sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	none extant
	Toggles:	none extant

80	Frame Anchors:	side - intact; extra shim at west anchor
		top center - intact
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	(2) intact; others - missing
82	Frame Anchors:	side - intact; extra shim at east anchor
		top center - intact
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
84	Frame Anchors:	side - intact
		top center - intact
		sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	none extant
	Toggles:	none extant
86	Frame Anchors:	side - intact
		top center - intact
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
88	Frame Anchors:	side - intact
		top center - intact
		sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	none extant
	Toggles:	none extant
90	Frame Anchors:	side - intact
		top center - intact
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates:	intact
	Toggles:	intact

92	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	none extant
	Toggles:	none extant
94	Frame Anchors:	side - intact; extra shim at east anchor top center - intact sill - intact
	Shutter Boards:	(2) 5-knuckle butt hinges **(T & C Clark)** (2) 2-knuckle butt hinges
	Shutter/Frame:	(2) 5-knuckle butt hinges **(Baldwin)** (2) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	(3) intact; other - missing
96	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates;	intact
	Toggles:	intact

Stables

98	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	(2) 2-knuckle remain on west stile of frame
	Toggle Plates:	intact
	Toggles:	(2) intact; others - missing
100	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	intact
	Toggles:	intact
102	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	removed
	Toggles:	removed

104	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	intact
	Toggles:	missing
106	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
108	Frame Anchors:	side - intact; moved upward with an extra shim on west top center - intact; dislodged sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
110	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	intact
	Toggles:	missing
112	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutter
	Shutter/Frame:	removed with shutter
	Toggle Plates:	(1) intact; other - missing
	Toggles:	missing
114	Frame Anchors:	side - intact top center - intact; dislodged sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact

116	Frame Anchors:	side - intact top center - intact; dislodged sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges (top, west - broken)
	Toggle Plates:	intact
	Toggles:	(3) intact; top, east - missing

* * *

North Wall

West Addition

1	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(1) 5-knuckle ball butt hinge (bottom, east) (3) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	(2) intact
	Toggles:	missing
3	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(3) 5-knuckle butt hinges (**N Eng Butt Co**) (1) 5-knuckle ball butt hinge (bottom, west)
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
5	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(2) 5-knuckle butt hinges (west - **N Eng Butt Co**) (2) T-hinges (east)
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	(3) toggles - intact; lower east - missing
7	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	intact

9	Frame Anchors:	side - intact top center - intact; askew sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	intact
11	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N.E. Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	(3) intact; other - missing
13	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) strap hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
15	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N.E. Butt Co)**; top, east-broken
	Shutter/Frame:	(4) 2-knuckle butt hinges; bottom, east - broken
	Toggle Plates:	intact
	Toggles:	intact
17	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
19	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact

21	Frame Anchors:	side - intact
		top center - missing
		sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
23	Frame Anchors:	side - intact
		top center - intact; but askew
		sill - intact
	Shutter Boards:	(2) 5-knuckle butt hinges (west - **N Eng Butt Co**)
		(2) 5-knuckle butt hinges (east - plain)
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	(3) intact; other - missing
25	Frame Anchors:	side - intact
		top center - missing
		sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
27	Frame Anchors:	side - intact
		top center - missing
		sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	(1) intact (lower west); others - missing
29	Frame Anchors:	side - intact
		top center - missing
		sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
31	Frame Anchors:	side - intact
		top center - missing
		sill - intact
	Shutter Boards:	(2) 5-knuckle butt hinges (plain)
		(2) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(2) 2-knuckle butt hinges (west)
		(2) 5-knuckle ball butt hinges (east)
	Toggle Plates:	intact
	Toggles:	intact

33	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) T-hinges
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
35	Frame Anchors:	side - west side intact; east missing top center intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(3) 5-knuckle butt hinges **(Baldwin)** (1) 5-knuckle butt hinge (plain)
	Toggle Plates:	intact
	Toggles:	(3) intact; other - missing

Long Storehouse II

37	Frame Anchors:	side - intact top center - intact; bolt missing sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(3) 5-knuckle butt hinges **(Baldwin)** (1) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
39	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
41	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(2) 5-knuckle butt hinges **(Baldwin)** (2) 5-knuckle butt hinges **(N.E. Butt Co)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	(3) intact; top east - missing
43	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact

45	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	intact
47	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
49	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	intact
51	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
53	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
55	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	intact

57	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
59	Frame Anchors:	side - intact; but lowered top center - intact sill - intact
	Shutter/Boards:	(4) 5-knuckle butt hinges **(N.E. Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
61	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
63	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	(3) intact; east lower - missing
65	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact

Long Storehouse I

67	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact; upper plate - new
	Toggles:	intact

69	Frame Anchors:	side - intact; loose top center - intact; loose sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (3-plain; 1-**T Clark Best**)
	Toggle Plates:	intact; possibly new
	Toggles:	intact
71	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact; possibly new
	Toggles:	intact
73	Frame Anchors:	side - intact; shifted top center - intact; shifted sill - intact; shifted
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	removed; evidence for intact
	Toggles:	removed
75	Frame Anchors:	side - intact top center - intact; some shifting sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact; possibly new
	Toggles:	intact
77	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(Baldwin)**
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact
	Toggles:	intact
79	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact

81	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	intact
	Toggles:	intact
83	Frame Anchors:	side - intact top center - intact sill - west, intact; east, missing
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	none extant
	Toggles:	none extant
85	Frame Anchors:	side - intact; some screws missing top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(T Clark Best)**
	Toggle Plates:	(3) intact
	Toggles:	(6) intact
87	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	intact; nailed on side jambs are (2) plates
	Toggles:	none extant
89	Frame Anchors:	side - intact; appear new top center - intact sill - intact
	Shutter Boards:	(3) removed (1) 5-knuckle butt hinges (top, east - **T & C Clark)** (1) small strap hinge (bottom, east)
	Shutter/Frame:	(2) removed (2) 5-knuckle butt hinges (east - **Baldwin)**
	Toggle Plates:	intact
	Toggles:	intact
91	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(3) 5-knuckle butt hinges **(Baldwin)**; lower, east-missing
	Shutter/Frame:	(4) 5-knuckle butt hinges (plain)
	Toggle Plates:	intact; possibly new
	Toggles:	intact; possibly new

93	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	intact
	Toggles:	intact
95	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(T & C Clark)**
	Shutter/Frame:	(4) 5-knuckle butt hinges **(Baldwin)**
	Toggle Plates:	intact
	Toggles:	intact

Stables

97	Frame Anchors:	side - none extant top center - none extant sill - none extant
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	removed
	Toggles:	removed
99	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	intact
	Toggles:	intact
101	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	intact; extra plate nailed on west jamb of archway
	Toggles:	intact
103	Frame Anchors:	side - intact top center - intact sill - east, intact; west, removed and a new metal plate affixed with (10) screws; a second metal plate is extant on the west side stile
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	intact
	Toggles:	intact

105	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
107	Frame Anchors:	side - intact; shifted, raised several inches top center - intact sill - intact
	Shutter Boards:	(2) removed with west shutter (2) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(2) removed with shutter (2) 2-knuckle butt hinges (east)
	Toggle Plates:	intact
	Toggles:	intact
109	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges (not accessible to see manufacturer's name)
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact
111	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	removed with shutters
	Shutter/Frame:	removed with shutters
	Toggle Plates:	intact
	Toggles:	removed
113	Frame Anchors:	side - intact top center - intact sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact; extra plate nailed to west jamb of archway
	Toggles:	intact
115	Frame Anchors:	side - intact top center - missing sill - intact
	Shutter Boards:	(4) 5-knuckle butt hinges **(N Eng Butt Co)**
	Shutter/Frame:	(4) 2-knuckle butt hinges
	Toggle Plates:	intact
	Toggles:	intact

APPENDIX E.

Inventory of Fire Doors

INTRODUCTION

General Comments: The inventory includes fire doors and a corrugated rolled-door. They are all hung on interior masonry walls. The door at bay 59, although on the north exterior wall, is theoretically an interior door because it leads to the passageway between Buildings 19 and 32. The inventory is organized according to story and wall, proceeding from the first story to the loft and west (PW3) to east (PW7). (PW is the abbreviation used in this report for masonry partition wall.)

Two types of fire-doors were uncovered in the inventory. One manufactured by Coburn and the second by Philipp. The fire doors are very similar to one another. Possibly the manufacturers are still in business or either period trade catalogues may be obtained of the doors to enable a more accurate description of their features.

I. First-Story Fire Doors

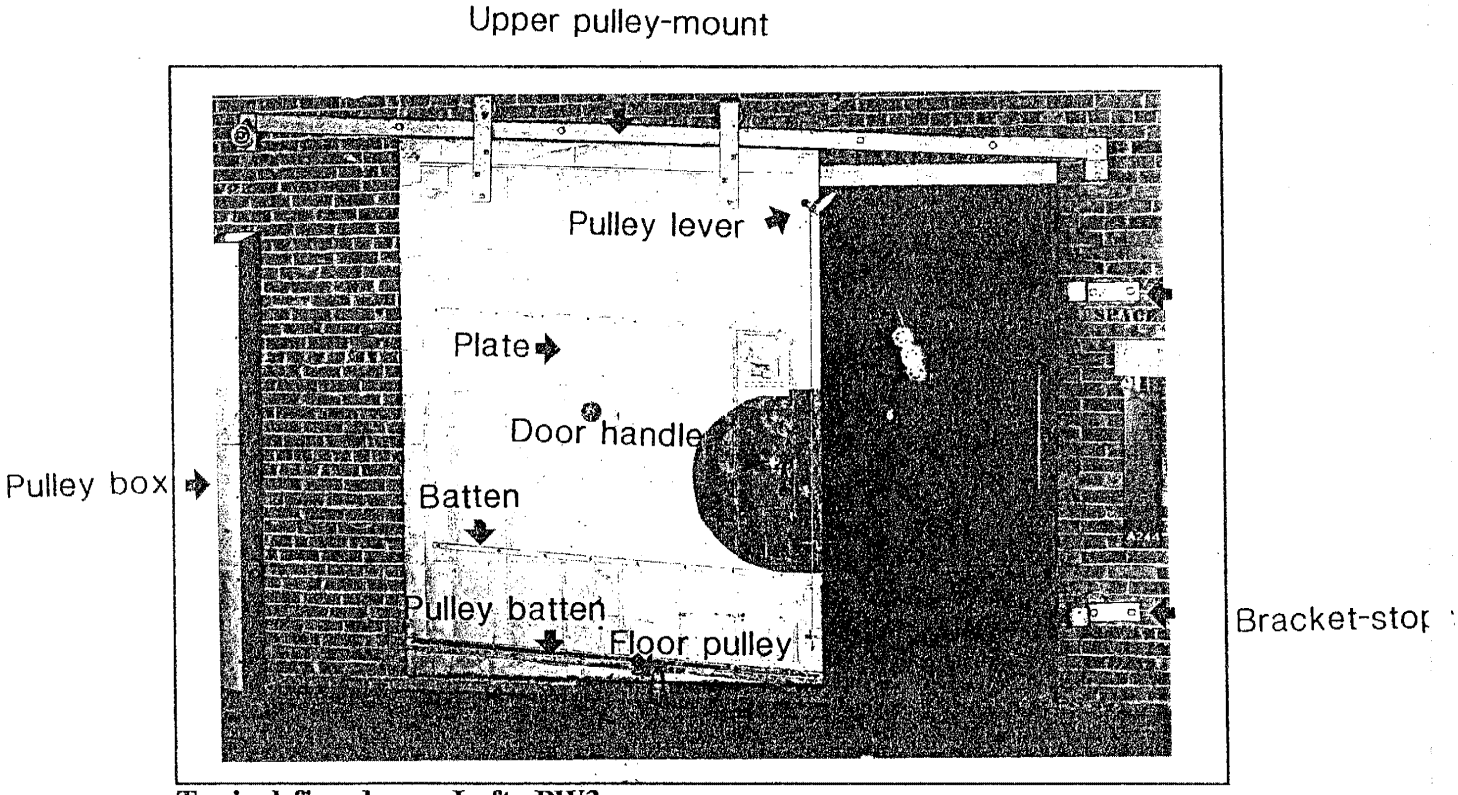
A. PW3, East Side (manufacturer unknown; possibly Philipp)
B. PW5, East Side (Coburn)
C. Bay 59, North Wall, South Side (Philipp)
D. PW7, West Side (manufacturer unknown; corrugated, rolled door)

II. Second-Story Fire Doors

A. PW3, East Side (Coburn)
B. PW5, East Side (Coburn)
C. PW7, West Side (Philipp)

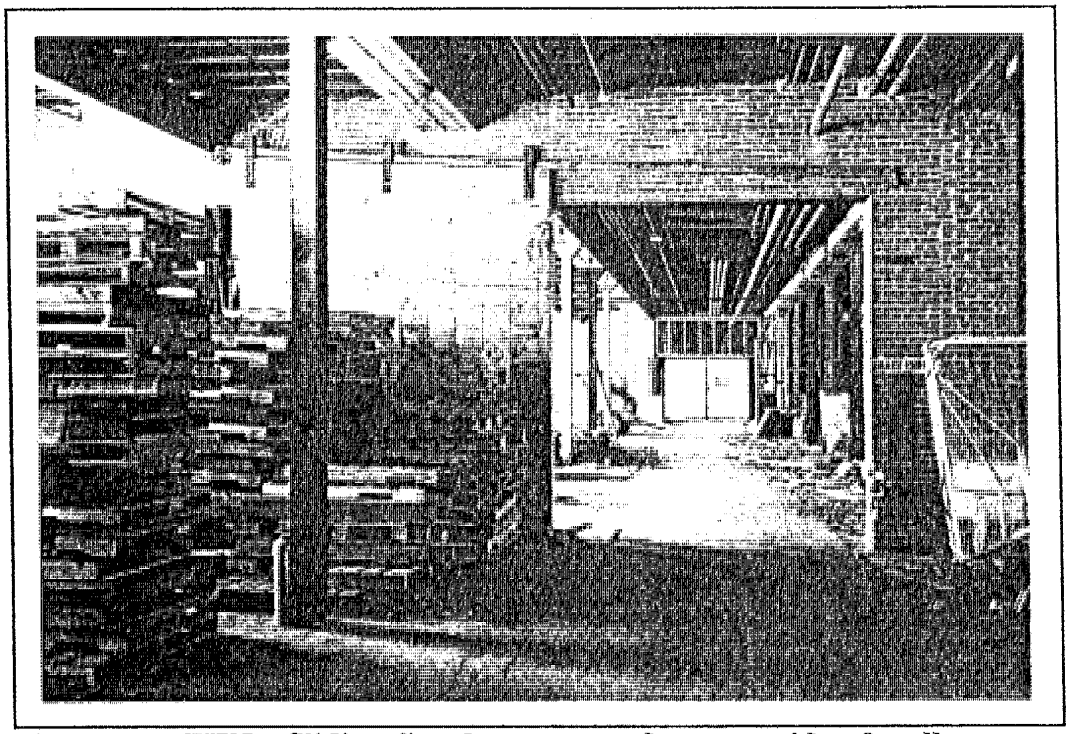
III. Loft-Story Fire Doors

A. PW3, West Side (Coburn)
B. PW5, West Side (Coburn)
C. PW7, East Side (Philipp)



Typical fire door. Loft, PW3.

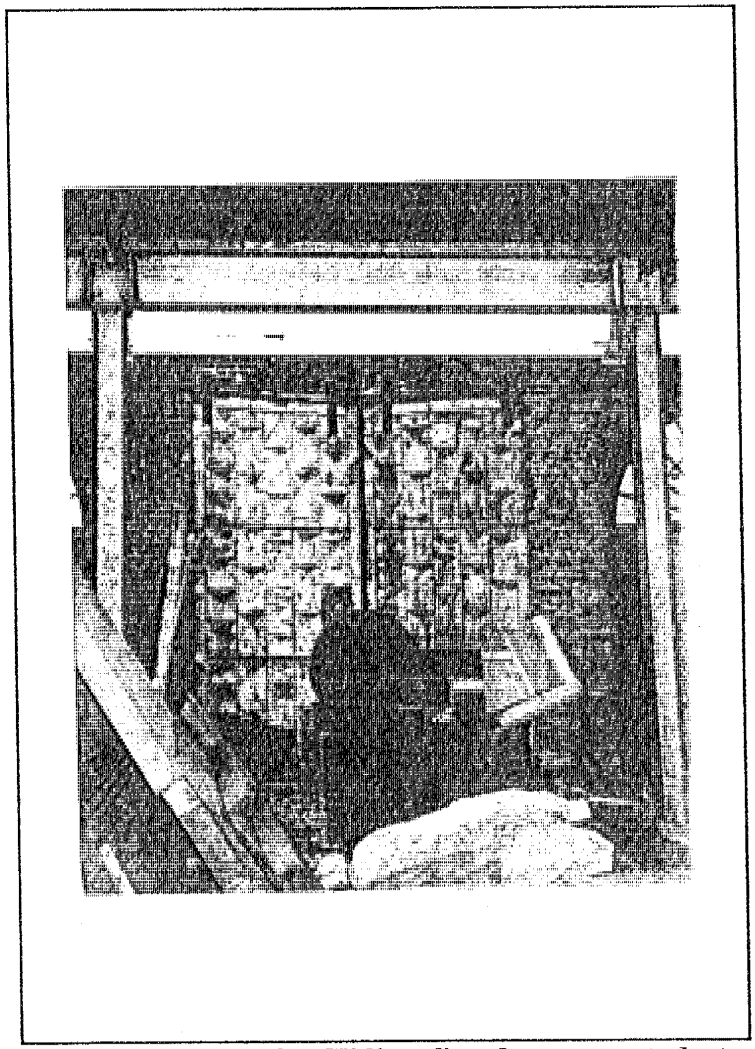
I. First-Story Fire Doors



First story, PW5. Sliding fire-door mounted on east side of wall.

I-B. PW5, East Side

Manufacturer:	Coburn Door Holyoke, Massachusetts
Stamped Plates:	"FIREDOORSTOCK GUARANTEED"
Underwriters Plate:	Not visible.
Dimensions:	Masonry Opening Height - 10'11-1/2" Width - 9'11" Door Thickness - 2-3/4" Height at Opening End - 11'5" Height at Hinge End - not accessible Width - approx. 10'4"
Operation:	Mounted on the east side of PW5 (west wall of LSH I); door slides from north to south.
Cladding:	Plates: 18" high x 10" wide; 5/8" folded-over seams. Battens: Two battens laid horizontally, secured to door with screw/bolts/washers on each side.
Pulley System:	Upper Pulley-Mount: Door/pulley held by three typical brackets; pulley track secured to wall by ten anchors (round design); extends to south beam at center of south arch. Pulley Lever/Rope: Pulley rope/lever intact. Pulley Box: Box front face missing. Pulley Batten: Located on the lower west side.
Bumper Guard:	None extant.
Hardware:	Two side bracket-stops mounted north of opening (top - two round design; bottom - two square design).
Finishes:	Typical; grey with black circle at hardware.
Threshold:	Asphalt, as in center aisle of first-story floor.
Lintel:	Masonry at the edges and iron plates in the center.



First story, bay 59. Sliding fire-door mounted at passageway to Building 32.

I-C. Bay 59, North Wall, South Side

Manufacturer: The Philipp Mfg. Co.
Easthampton, Massachusetts
R 1913

Stamped Plates: "Wheeling * Cop-R-Lot * Fire Door * Standard * Wheeling * Corrugating"

Underwriters Plate: "Underwriters Laboratories, Inc. * Inspected Fire Door * For Opening in Fire Wall * No. 604242"

Dimensions:

Masonry Opening
Not accessible.

Door
Thickness - 2-5/8"
Height at Opening End - 12'3"
Height at Hinge End - 12'7"
Width - 10'8"

Operation: Mounted on north wall; occupies bay 59; double door; one half opens west; other half opens east; door is shorter at center point.

Cladding: Plates: 18" high x 10" wide; 5/8" folded-over seams; a rusted strip stretches the height of the doors at its center.
Battens: Two battens laid horizontally, secured to door with screw/bolts/washers on each side.

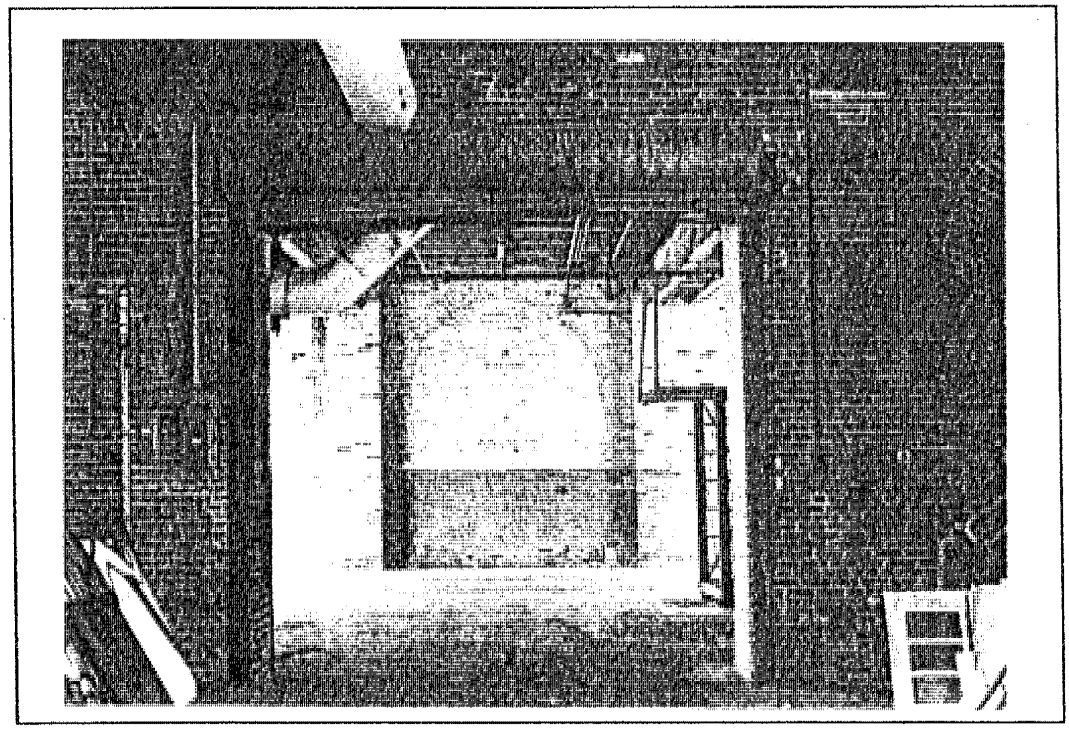
Pulley System: Upper Pulley-Mount: Four typical brackets secure doors; two on each door. Upper pulley-mount is attached on either side, to the gauged brickwork of the respective arches.
Pulley Lever/Rope: Only one rope/lever functional (west functional; east non-functional); both levers intact.
Pulley Box: Only one box is extant, east of the opening; it is dislodged.
Pulley Batten: One mounted on each lower end of the south side of the door.
Floor Pulley: Two mounted at floor level at either side of door.

Bumper Guard: None intact.

Finishes: Plates painted grey; black circle at center point.

Threshold: Not accessible.

Lintel: Not accessible.



First story, PW7. Corrugated rolled door mounted above rectangular opening.

I-D. PW7, West Side

Type: Corrugated, rolled door. Not accessible for close study.

Manufacturer: Manufacturer's name not visible.

Underwriters Plate: None visible.

Dimensions:

Masonry Opening
- Height - 11'
- Width - 11'
- Wall Thickness - 2'4"

Door
- Thickness - inaccessible to measure
- Height at Opening End - inaccessible to measure
- Height at Hinge End - inaccessible to measure
- Width - inaccessible to measure

Operation: Mounted on the west side of PW7; corrugated aluminum rolls upward to lintel; runs on track on either side of door; activated by a pulley chain.

Materials: Corrugated aluminum; iron hardware.

Pulley System: Pulley Track: Vertically mounted at either side of the opening.
Pulley Chain: Mounted to the south of the opening.

Bumper Guard: Either side of masonry opening is a bumper guard 5' high; angle iron; 4" x 4" wide.

Finishes: Appears not to be finished.

Threshold: 1'3" concrete plates on either side of opening and concrete and asphalt in the opening.

Lintel: Metal plate underneath; brick shows on either side and the corners are finished with channel beams.

Conditions: Ironwork very corroded; corrugated door appears bent and non-operable.

II. Second-Story Fire Doors

II-A. PW3, East Side

Manufacturer: Coburn Door
Holyoke, Massachusetts

Stamped Plates: "FIREDOORSTOCK GUARANTEED"

Underwriters Plate: None visible.

Dimensions:

Masonry Opening
Height - 8'
Width - 7'9"

Door
Thickness - 2-1/2"
Height at Opening End - 8'4"
Height at Hinge End - 8'10"
Width - 8'5"

Operation: Mounted on the east side of PW3; door slides from south to north.

Cladding: Plates: 18" high x 10" wide; 5/8" folded-over seams.
Battens: Two battens laid horizontally, secured to door with screw/bolts/washers on each side.

Pulley System: Upper Pulley-Mount: Door/pulley held by three typical brackets; pulley track secured to wall with nine anchors (seven round design; two square/round design).
Pulley Lever/Rope: Pulley rope broken.
Pulley Box: Intact; east side in front of the north bay arch infill.
Pulley Batten: A pulley batten is on the lower east side.
Floor Pulley: Pulley mounted at north jamb of opening, east side.

Bumper Guard: Galvanized aluminum bumper-guard extant on south end of door; from the door handle to the floor.

Hardware: Typical "Coburn" hardware; two side bracket-stops mounted on wall north of opening (one round design; other not visible); door handle on east side; sliding door-pull on west side.

Finishes: Painted grey, black circle at center point; pulley box painted grey.

Threshold: Concrete - 2' wide; length extends from jamb-to-jamb.

Lintel: Metal I-beam and plate. From east to west: a 4" high x 9" wide I-beam; 2-1/2" of exposed brick; 11-1/2" wide, metal plate; and 1" brick.

II-B. PW5, East Side

Manufacturer:	Coburn Door Holyoke, Massachusetts
Stamped Plates:	"FIREDOORSTOCK GUARANTEED"
Underwriters Plate:	None visible.
Dimensions:	Masonry Opening 8'11" square Door Thickness - 2-5/8" Height at Opening End - 8'5" Height at Hinge End - 8'11" Width - 8'8"
Operation:	Mounted on east side of PW5; door slides from south to north.
Cladding:	Plates: 18" high x 10" wide; 5/8" folded-over seams. Battens: Two sets of horizontal battens; molded on the west; secured with eleven screw/bolts.
Pulley System:	Upper Pulley-Mount: Door/pulley held by three brackets; hung in reverse to typical design. Pulley track secured to wall by six brackets/anchors; different design from others. Pulley Lever/Rope: Pulley rope/lever broken. Pulley Box: Wooden box at the end of the pulley (approximately 6-4" high x 9" deep x 7-1/2" wide); shorter than the rest; broken. Pulley Batten: Mounted on the lower east side of the door. Floor Pulley: Mounted on floor north of opening, east side.
Bumper Guard:	None extant.
Hardware:	Two side bracket-stops mounted to south of opening; anchors mounted on the west side of the wall two round and two square design; door handle on east side; sliding door-pull on west side.
Finishes:	Grey, with black circle; paint is more worn than on the Philipp doors.
Threshold:	Concrete; 23-1/2" wide x 196" long (extends 4'3" beyond the jamb on south side of opening; crack at the center.
Lintel:	Rectangular opening; brick and metal plate; from east to west: 2-1/2" exposed brick; 11-1/2" wide, metal plate; 2" exposed brick. Total width 16."

II-C. PW7, West Side (door obstructed)

Manufacturer: Philipp Manufacturing Co.
Easthampton, Massachusetts
R1913

Stamped Plates: Not stamped.

Underwriters Plate: No. 629364 * 1942

Dimensions:

Masonry Opening
Height - 8'1" to current dimension; 114", originally.
Width - 7'10-1/2"

Door
Thickness - 2-5/8"
Height at Opening End - 8'5"
Height at Hinge End - 8'10"
Width - 8'8"

Operation: Mounted on west wall of PW7; door slides from north to south.

Cladding: Plates: 18" high x 10" wide; 5/8" folded-over seams.
Battens: Two horizontal battens extant; molded on the east; secured with eleven screw/bolts on the west.

Pulley System: Upper Pulley-Mount: Door/pulley held by three brackets; pulley track secured to wall and lintel by eight anchors (square design); one missing, therefore would have made nine total; three visible on the east wall.
Pulley Lever/Rope: Pulley/level and rope intact.
Pulley Box: Pulley box mounted on wall to south of opening.
Pulley Battens: Mounted on the lower east side.
Floor Pulley: South of opening, west side.

Bumper Guard: None extant.

Hardware: "Coburn" manufactured hardware; door handle on west side; sliding door-pull on east side; wedge at lower, batten end.

Finishes: Grey, with black circles; pulley box - grey.

Threshold: Concrete and metal; concrete below; and a 3' wide metal plate above, screwed to the concrete.

Lintel: 16" wide lintel; consisting of brick, metal angle-bars and plates; from east to west: 10" high x 2-3/4" wide angle-bar; exposed brick; 6" wide metal plate; 10" high x 2-3/4" wide angle-bar.

III. Loft-Story Fire Doors

III-A. PW3, West Side

Manufacturer: Coburn Door
Holyoke, Massachusetts

Stamped Plates: Not stamped.

Underwriters Plate: "Underwriters Laboratories Inc. * Inspected Fire Door * For Opening in Fire Wall * No. 177758

Dimensions:

Masonry Opening
- Height - 7'9-1/2"
- Width - 6'1"

Door
- Thickness - 2-1/2"
- Height at Opening End - 8'3-1/2"
- Height at Hinge End - 8'8"
- Width - 6'8"

Operation: Mounted on the west wall of PW3; door slides from south to north.

Cladding: Plates: 18" high x 10" wide; 5/8" folded-over seam.
Battens: Two typical battens; molded on the east side; secured with eight screws each.

Pulley System: Upper Pulley-Mount: Door/pulley held by two brackets; pulley track secured to wall by seven anchors, visible on the east wall.
Pulley Lever/Rope: Pulley rope/lever intact.
Pulley Box: Intact, west side, north of opening
Pulley Batten: Mouned on west side.
Floor Pulley: West side, north of opening.

Bumper Guard: None extant.

Hardware: Two side bracket-stops mounted south of opening; four round anchors visible on the east wall; door handle on west side; sliding door-pull on east side.

Finishes: Painted metallic grey, with black circles; pulley box-unpainted.

Threshold: Concrete - 2' wide; runs from jamb to jamb; flush with the floor in the West Addition and meets with ramp in LSH II because floor is lower.

Lintel: Brick and metal plates; from east to west: 1" exposed brick; 15" wide x 4" high metal U plate; the metal plate extends into the wall on either side of the opening for 15" to 17".

III-B. PW5, West Side

Manufacturer:	Coburn Door Holyoke, Massachusetts
Stamped Plates:	"FIREDOORSTOCK GUARANTEED"
Underwriters Plate:	"Underwriters Laboratories, Inc. * Inspected Fire Door * On Opening in Fire Wall * No. 177772 (.1?)
Dimensions:	Masonry Opening Height - 8'5" Width - 6' Door Thickness - 2-1/2" Height at Opening End - 8'3-1/2" Height at Hinge End - 8'8" Width - 6'8"
Cladding:	Plates: 18" high x 10" wide; 5/8" folded-over seams. Battens: Two battens on east side.
Operation:	Mounted on the west wall of PW5; door slides from south to north.
Pulley System:	Upper Pulley-Mount: Door/pulley held by two brackets; pulley track secured to wall by seven anchors (square within a circle design). Pulley Lever/Rope: Pulley rope broken. Pulley Battens: Mounted on the lower west side. Floor Pulley: Secured to floor south of opening, west side.
Bumper Guard:	None extant.
Hardware:	Two side brackets mounted south of opening; door handle on east side; sliding door-pull on west side.
Finishes:	Door painted grey, except for black circle at hardware. Pulley box - painted grey.
Threshold:	Concrete - 1'5-1/2"; appears to stop at jamb opening.
Lintel:	Brick and metal U-plate; from east to west: 4" brick; 15" wide x 4" high metal U-plate; 1-1/2" wide brick. Header course (bricks turned broad side) marks lintel, thirty-nine bricks extending nine bricks beyond the opening. At lintel corners are one brick below.

III-C. PW7, East Side

Manufacturer: The Philipp Manufacturing Co.
Easthampton, Massachusetts * R1913

Stamped Plates: Not stamped.

Underwriters Plate: "Underwriters Laboratories Inc. * EAS 1942 * Inspected Fire Door * For Opening in Fire Wall * No. 629366

Dimensions:

Masonry Opening
- Height - 8'
- Width - 6'

Door
- Thickness - 2-1/2"
- Height at Opening End - 8'4"
- Height at Hinge End - 8'9"
- Width - 6'8"

Operation: Mounted on the east wall of PW7; door slides open from south to north.

Cladding: Plates: 18" high x 10" wide; 5/8" folded-over seam.
Battens: 1" wide; two on each side of the door; molded on the west side; eight round-headed bolts.

Pulley System: Upper Pulley-Mount: Door/pulley held by two brackets; pulley track secured to wall by six anchors (square design); 3 anchors visible on the west side of the wall.
Pulley Lever/Rope: Pulley rope/lever intact.
Pulley Box: Located north of opening, east wall; 7-1/4" deep x 7-3/4" wide x 90" high (with a slanted upper edge).
Pulley Batten. Mounted on the lower east side.
Floor Pulley: Secured to the floor, north of opening, east side.

Bumper Guard: None extant.

Hardware: "Coburn" manufactured hardware; two brackets intact (square within a circle); door handle on east side; sliding door-pull on west side.

Finishes: Painted grey, with black circle at hardware; stencilled in black letters on door "Keep This Door Closed".

Threshold: Concrete; 2' wide x 6' long at opening.

Lintel:Rectangular opening; newer bricks are lighter in color; brick and metal angle-bars; metal lintel extends into the wall on each side; a row of headers sits on the lintel; from west to east: 10" high x 4" wide angle-bar; exposed brick; a metal plate; exposed brick; 10" high x 4" wide angle-bar.