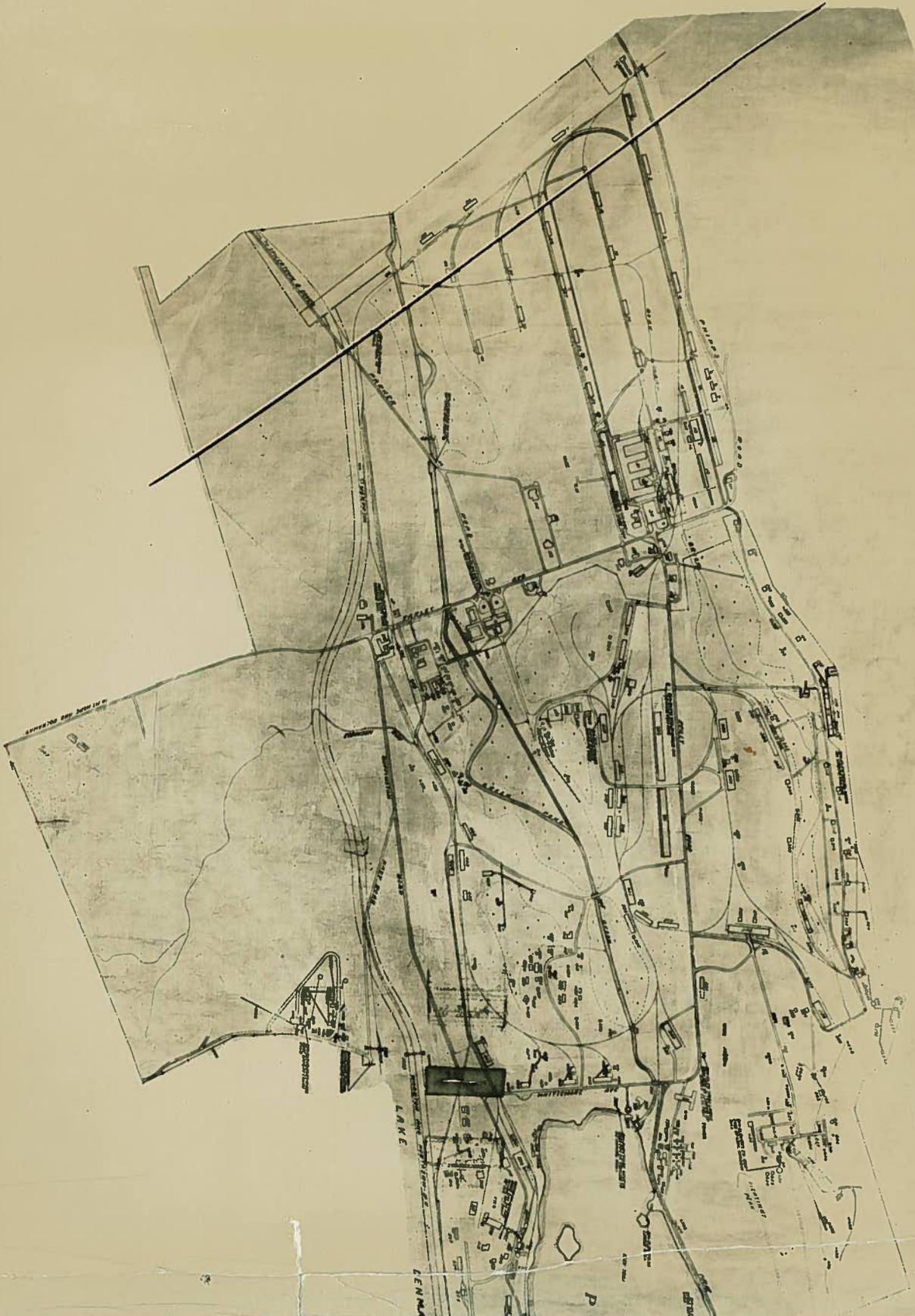


W. P. A.

Picatinny Arsenal

Sept. 19, 1935 - June 30, 1938



The Arsenal is the development and manufacturing center of the Army for all types of ammunition except that for small arms and machine guns.

The most important mission of the Arsenal is to keep alive the art of munitions manufacture and to have available up-to-date designs and production plans for use in emergency by commercial industry which must bear the brunt of producing the enormous quantities of munitions required by a major emergency.

Equipment includes chemical and physical laboratories, machine shops, loading and assembly shops, powder factory, high explosives plant, pyrotechnic shop, power plant, warehouses and utilities.

Products on experimental and peace production scales are smokeless powder, high explosives, fuzes and primers, assembled rounds of artillery ammunition, bombs, grenades, airplane flares, and military pyrotechnics.

There are at present 2,177 Civil Service employees and 1,696 W.P.A. employees, the latter most usefully engaged in badly needed repairs and improvements of lasting value.

PICATINNY ARSENAL

June 30, 1938

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PICATINNY ARSENAL STATISTICAL DATA

LOCATION

5 miles north of Dover, Morris County, New Jersey.

AREA

2,297 acres. Extends along valley of Green Pond Brook about 4-1/2 miles.

ROAD AND RAILROAD CONNECTIONS

U.S. owned concrete road to Dover-Sparta Highway.
Wharton & Northern Railroad.

INTERNAL ROADS AND RAILROAD

19 miles concrete
1 mile improved
8 miles unimproved
18 miles standard gauge railroad
2 miles narrow gauge railroad

BUILDINGS

431 varying in size from very small ones for hazardous operations and storage to large laboratory, shop, storage and office buildings. Widely separated to minimize hazard.

STORAGE SPACE

Warehouse 361,840 square feet.

VALUE OF PLANT

Land	- - - - -	\$ 191,799.00
Buildings	- - - - -	4,563,335.97
Machinery, etc.	- - - - -	3,179,930.84
Utilities	- - - - -	2,871,190.28
Total	- - - - -	<u>\$10,806,256.09</u>

FISCAL

F.Y. 1938

Civil Service Payroll	- - -	\$ 2,759,005.
W.P.A. Expenditures	- - -	863,104.
All other Expenditures	- - -	<u>6,624,167.</u>
Total	- - -	<u>\$10,246,276.</u>

Picatinny Arsenal Statistical Data (Cont'd.)

MAJOR DIVISIONS OF PLANT

Powder Factory Area
Machine Shop Area
Service Shops
Fuze Loading Area (Artillery Fuzes, Primers, etc.)
Bag Loading Area (Assembly Powder Charges, etc.)
Melt Loading Area (Loading Shell with High Explosive)
Complete Rounds Area (Assembly Complete Rounds Artillery Ammunition)
Tetryl Area (Manufacture High Explosives)
Pyrotechnic Area (Airplane Flares and Military Signals)
Storage Area
Laboratory and Experimental Area
Testing Ground
Power Plant

PRE-ARSENAL HISTORY

Occupied from 1749 for over 100 years by various forges, using water power. Supplied cannon, shot, bar iron, and iron implements to Revolutionary Army. Two hundred and fifty Hessian prisoners were used.

DEVELOPMENT OF ARSENAL

1880 - Storage Depot established.
1897 - Assembly of powder charges for cannon begun.
1902 - Loading of projectiles begun.
1907 - Powder Factory established.
1917-1918 - Large number storage magazines built.
1919-1926 - Expansion of manufacturing and loading facilities.
1926 - Badly damaged by explosion at adjacent Naval Depot.
1926 to Date - Rehabilitation and expansion to principal center of ammunition development and manufacture of U. S. Army.

June 30, 1938.

GENERAL DATA

W. P. A. Funds Spent - - - - -	\$2,114,394.00
Estimated value of completed work - - - - -	2,769,800.00
Average Number of Employees - - - - -	1,051
Maximum Number of Employees - - - - -	1,903
Number of Employees June 30, 1938 - - - - -	1,696

June 30, 1938.

Note: \$839,526 available for the period July 7, 1938 to February 28, 1939 will finance an average of 1,674 W.P.A. employees.

Picatinny Arsenal
June 30, 1938.

MAJOR ITEMS OF COMPLETED WPA WORK

- 65 Tile magazines (157,000 sq. ft.) completely rehavilitated, including in many cases complete new floors and roofs.
- 102 Small buildings rehabilitated.
 - 2 Tile central storage buildings constructed (27,800 sq. ft.).
 - 4 Tile lumber and projectile storage buildings constructed (90,000 sq. ft.).
 - 7 Brick warehouses reconstructed (32,500 sq. ft.).
 - 7 Sets of modern brick officers' quarters, recreation room and transients' quarters provided by reconstruction of old brick buildings.
- 10 Sets of quarters completely reconstructed.
 - 1 Officers' club constructed.
 - 1 Employees' athletic club constructed.
- 23 Permanent garages for residents of the Arsenal constructed.
 - 4 Tennis courts rehabilitated.
 - 1 Main garage doubled in size and housing for fire apparatus, gas-electric locomotives and automotive shop added. Area of completed building is 17,000 sq. ft.

Gasoline service station installed.
 - 1 Shelter for fireless locomotive constructed.
- 685,474 Square feet of painting, roofs, windows, doors, walls, floors, Ceilings, and jackets of recovered steam and sewer lines.
 - 1 Greenhouse constructed - 4,300 sq. ft. tile.
 - 1 Artillery primer shop reconstructed and enlarged.
 - 1 Pyrotechnic factory constructed - 8,900 sq. ft. tile.
 - 1 Experimental fuze plant and technical building completely reconstructed and second story added. Building is brick 50 x 200 ft.

Major Items of Completed WPA Work (Cont'd.)

6-30-38

- 1 Plating plant constructed and equipped. Main building is tile 50 x 150 ft.
- 1 Sand blasting and shell cleaning building constructed - 2700 sq. ft. tile.
- 1 Chip spinning and oil recovery building constructed - 500 sq. ft. tile.
- 1 Rock crushing plant installed (200 yard per day capacity).
- 8 Barricades constructed in high explosive magazine area.
Piers for outdoor storage of railroad material, etc. constructed.
Railway equipment repair shop provided in existing building.
Railway and truck scales thoroughly overhauled.
- 20 Hose houses constructed and installed.
- 191 Fire extinguishers and other hand fire apparatus repaired and winter-proofed.
- 650 Luminous signs indicating degree of hazard in explosive and inflammable buildings fabricated and installed.
- 550 Fire hydrants, service water valves and drinking water valves painted and marked with stainless steel signs.
Drinking fountains provided where necessary throughout plant.
- 11,400 Feet of 6-inch and 8-inch water main laid.
- 36 Fire hydrants installed or relocated.
- 14,310 Feet of other water pipe laid.
New deep well pump and house installed.
Sewerage disposal plant reconstructed.
- 2,760 Feet of sewer installed.
- 41,525 Feet of "Climb-proof" fence constructed.
- 44,551 Lineal feet of concrete road constructed.

Major Items of Completed WPA Work (Cont'd.)

6-30-38

400 Jobs of carpentry, plumbing, electrical repair, etc., (approx.) all forming a useful part of the general Arsenal rehabilitation program.

28,835 Lin. feet, Steam and Sewer Lines recovered, with weather-proof jacket.

24 Railroad Crossings installed.

28,600 Square Feet, complete new roofs installed.

19,840 Square Feet, new concrete floors laid.

2,400 Lineal feet, concrete curbing installed.

Coal Trestle at Power Plant reconstructed.

Master Sampl. building constructed.

Experimental Powder Factory constructed.

1,802 Each, steel posts and Banjo hangers for recovered steam line supports.

Major Items of Completed WPA Work (Cont'd.)

6-30-38

6,700 Lineal feet macadam road constructed.

1,324 Lineal feet steel guard rail installed along road.

5,461 Square feet concrete side walk constructed.

7 Steel girder and concrete bridges built or rebuilt.

41 Concrete culverts constructed.

Dam, spillway, seawall, and control mechanism at lower end of Picatinny Lake completely reconstructed.

57 Miles of roads, railways and electrical lines cleared along sides to provide interior fire breaks.

65 Railroad cars completely overhauled and painted.

13,390 Lineal feet of railroad constructed.

22,850 Lineal feet of railroad removed.

18 Miles of railroad completely rehabilitated.

86 Permanent railway crossing and traffic signs.

12 $\frac{1}{2}$ Miles of electrical lines completely rehabilitated.

3,650 Lineal feet of outside steam lines constructed.

Considerable landscaping, tree planting, and ground improvement.

One runway landing field constructed (2,800 feet plus approach).

125 Old foundations, piers, shacks, etc. demolished to remove hazards and improve appearance of Arsenal.

44 Unserviceable buildings salvaged.

700 Window and door screens thoroughly repaired.

247 Articles of furniture thoroughly repaired.

1,140 Drawings required in connection with the work completed.

MAJOR ITEMS OF MATERIAL USED

21,532 Ea.	Rail road Ties
33,729 Ea.	Tie Plates
67,235 Ft.	Railroad Rails
35 Ea.	Complete Switches
5,500 Cu. Yds.	Slag Ballast
177,804	Hollow Tile and Concrete Blocks
170,350 Bags	Cement, Lime, Plaster, Etc.
73,652 Tns	Crushed Stone
32,872 Tons	Sand
2,500 Tons	Field Stone
1,422,699 Bd.Ft.	Lumber
119,764 Lin.Ft.	Pipe and Pipe Covering
100,616 Lbs.	Solder, Lead, Salt, Roofing Cement, Zinc, Fire Fire Hydrants Clay, etc.
24 Ea.	Bath Tubs, Sinks, Toilets, Lavatories, etc.
405	Electrical Conduit
30,185 Lin. ft.	Electrical Wire and Cable
235,458 Lin. ft.	Wall Board, Sheet Rock, Tile, Etc.
179,980 Sq. ft.	Brick
650,028 Ea.	White Lead, Putty, Joint Cement, Etc.
49,812 Lbs.	Paint, Oils, Turpentine, Varnish, Etc.
11,594 Gals.	Nails
59,975 Lbs.	Ridge Roll, Gutters and Leader Pipe
13,405 Lin. ft.	Windows, Doors, Storm Sash, Frames, Screens, Etc.
3,283	Sash Chain
9,420 Lin ft.	Roofing Sheets
506,585 Sq. ft.	50-Ft. Roof Trusses, Steel
142 Ea.	Ventilators
78 Ea.	Shingles, Roofing Paper, Etc.
333,977 Sq. ft.	Bolts, Rivets, Clips, Etc.
218,541	Structural Steel
935,109 Lbs.	Reinforcing Rods
306,271 Lbs.	Steel Fence Posts
3,122 Ea.	Telephone Poles
106 Ea.	Cross Arms, Braces and other Electric Pole
2,921 Ea.	Transformers Fixtures
32 Ea.	30-inch Steel Barrels, with Lids
300 Ea.	Road Tar
35,442 Gals.	Oxygen and Acetylene
1,700 Tanks	Motor Fuel
76,554 Gals.	Road Asphaltum Strip
51,681 Lin. ft.	Welded Steel Fabric for Concrete Roads
546,544 Sq. ft.	Wire, Steel, Barbed and Smooth
637,515 Ft.	Filling for Embankments, Road Bcbs, Etc.
44,700 Cu. yds.	Radiators
546 Ea.	Skylights
12 Ea.	Street Washers
36 Ea.	