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1325-16-10-1

MANHATTAN DISTRICT HISTORY  
BOOK IV - PILE PROJECT  
X-10  
VOLUME 5 - CONSTRUCTION  
APPENDIX - B, C, D, E

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**APPENDIX B**  
**TABULATIONS AND CHARTS**

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MANHATTAN DISTRICT HISTORY

BOOK IV - PILE PROJECT

VOLUME 5 - CONSTRUCTION

APPENDIX B

CHARTS AND TABULATIONS

<u>No.</u>	<u>Description</u>
1	Tabulation of Mileage from Richland and Hanford to Areas
2	Tabulation of Distances of Existing Centers of Population from Hanford
3	Summary of Purchase Orders
4	Summary of Contracts and Subcontracts
5	Summary of Government Transfers
6	Major Equipment Inventory
7	Cumulative Interviews and Hires
8	Summary of Recruitment Costs
9	Critical Craft Charts
10	Craft Charts
11	Composite Force Chart
12	Tabulation of Work Stoppages
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14	Tabulation of Hanford Camp Capacities
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16	Tabulation of Trailer Camp Capacities and Construction Dates
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26	Tabulation of Rate of Construction of Hanford Camp
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31	Tabulation of Temporary Walk Construction
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33	Tabulation of Tract Houses Used for Bachelor Quarters

<u>No.</u>	<u>Description</u>
34	Tabulation of Miscellaneous Temporary Construction
35	Tabulation of Metal Fabrication and Testing Area Buildings and Facilities
36	Charts and Tabulations of Metal Fabrication and Testing Area Construction Progress
37	Tabulation of Subcontracts for Metal Fabrication and Testing Area Construction
38	Tabulation of Pile Area Buildings and Facilities
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53	Tabulations of Area and Off-Area Bus Schedules
54	Tabulation of Safety Meetings
55	Tabulation of Safety Program Results
56	Summary of Construction Costs
57	Charts of Hanford Area Engineer's Organization
58	Chart of Prime Contractor's Organization

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AREA MILEAGE TABULATIONS

<u>AREA</u>	<u>MILEAGE TO HANFORD</u>	<u>MILEAGE TO RICHLAND</u>
Metal Fabrication and Testing Area	16.2	7.4
B-Pile Area	17.7	38.0
D-Pile Area	10.8	37.4
F-Pile Area	8.3	30.2
North Separation Area	10.8	31.0
East Separation Area	9.6	28.7
West Separation Area	13.9	30.8
Hanford	-	23.2
Richland	23.2	-

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✓ DISTANCES OF EXISTING CENTERS OF POPULATION FROM HANFORD

<u>Name</u>	<u>Population</u>	<u>Distance from Hanford (Miles)</u>
Kennewick	1918	36.5
Pasco	8500	37.5
Benton City	300	25.0
Grandview	1876	46.0
Sunnyside	3500	44.0
Prosser	2250	39.0
Connell	450	33.0
Yakima	28,840	62.0

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(1)

- b Where do the 43,000 orders referred to by Vol. 5, page 3.3 apply?
- c What does "RPG" mean?
- d What does "A.E. - 27385" on sheet 2 mean?
- e Are the H.E.W. Orders those referred to by page 3.7 of the text.
- f Page 3.7 indicates that half numbers originate at the Wilmington office. Whole numbers must originate at Hanford. Also see page 3.9.

HANFORD ENGINEER WORKS

ANALYSIS OF PURCHASE ORDERS  
SHOWING REASON SUPPLIER SELECTED

REASON SUPPLIER SELECTED	ORDERS PLACED BY HANFORD		ORDERS PLACED BY WILMINGTON		TOTAL	
	NO. OF ORDERS	VALUE OF ORDERS	NO. OF ORDERS	VALUE OF ORDERS	ORDERS PLACED	VALUE OF ORD.
1	18,309	\$ 34,346,058	1,938	\$ 28,646,837	20,247	\$ 62,991,890
2	4,956	3,310,068	199	1,249,782	5,155	4,559,850
3	7	172,058	None	None	7	172,058
4	5,953	1,777,933	745	4,305,532	6,698	6,083,465
5	446	753,777	2	359,885	448	1,113,662
6	484	1,130,666	274	6,746,206	738	7,876,872
7	98	18,918,185	3	431,861	101	19,550,046
8	11,796	21,523,634	2,114	23,693,512	13,910	45,217,146
			GRAND TOTAL		47,304	\$147,364,989

\* Legend:

- |                    |                                 |                                 |
|--------------------|---------------------------------|---------------------------------|
| (1) Lowest Price   | (4) Required Design             | (7) As per Contract             |
| (2) Early Delivery | (5) Only Available Source Known | (8) 80% To Expedite Procurement |
| (3) Better Quality | (6) Price Agreement             | 10% Services Rendered           |
|                    |                                 | 5% C.P.A. Allocations           |
|                    |                                 | 5% Miscellaneous                |

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SUMMARY OF WHOLE NUMBER PURCHASE ORDERS  
ADDENDUM NO. 1

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Explanation of "Reason Supplier Selected" No. 8, Miscellaneous:

<u>Purchase Order No.</u>	<u>Explanation</u>
RPG 1108	Corps of Engr. Award - A.E. - 27385
" 1190	Corps of Engr. Award - A.E. - 25095
" 1280	Corps of Engr. Award - A.E. - 30638
" 3010	Corps of Engr. Allocation
" 4322	Best organization and qualifications
" 6929	W.P.B. Directive
" 24462	Corps of Engr. Allocation - A.E. - 38640-3

SUMMARY OF WHOLE NUMBER PURCHASE ORDERS

<u>Vendor</u>	<u>Address</u>	(see) Reason Supplier Selected	<u>Material</u>	<u>Amount</u>	<u>RFG No.</u>
Brooks Lumber Co.	Bellingham, Wash.	1	Wood pipes	\$ 111,022.80	287
G. A. Pehrson	Old Nat'l Bank Bldg. Spokane, Wash.	1	Arch. & Eng. Serv. in const. of Highland	881,012.15	402
G. P. Atkinson Co. By	662 Russ Bldg. San Francisco, Calif.	1	Field labor, equipment, for R. R. Construction	3,035,090.18	403
Ford J. Twaits Co. and Morrison- Knudson, Inc.	451 S. Boylston St. Los Angeles, Calif.	1	labor, material, equip- ment, etc. for const. 290 housing units in Highland	2,353,833.08	404
Meyers Bros. - E. K. Bell & Sons	Los Angeles, Calif.	7	Excavating and roads	3,983,072.61	407
Sewbery-Chandler-Lord	1058 Venice Blvd. Los Angeles, Calif.	3	Installation of elec- trical systems	172,700.00	408
Twaits-Morrison- Knudson	Box 3159-Terminal Annex, Los Angeles, Calif.	7	labor, material, equipment for utilities road const.	478,883.07	409
Hanford Concrete Contractors	Winona, Minn.	1	Ready-mix concrete and installation of mix plant	5,500,159.62	410
Hankes-James- Zahniser, -Warren	E. 925 First Nat'l Bank Bldg. St. Paul, Minnesota	3	Installation of piping systems	502,000.00	411

<u>Vendor</u>	<u>Address</u>
H. W. Dunham Lab.	Seattle, Wash.
A. A. Durand & Sons	Walla Walla, Wash.
Weyerhaeuser Sales Co.	Tacoma, Wash.
Dant & Russell, Inc.	Portland, Ore.
Moore Mill & Lumber Co.	Pandon, Ore.
Chain Belt Co.	Milwaukee, Wis.
Erie City Iron Works	Erie, Pa.
Mugget Coal	860 N. 3rd St. Laramie, Wyo.
Curtis Gravel Co.	Spokane, Wash.
Smith, Hoffman & Wright	Portland, Ore.
Chas. K. Brower & Co.	114 Virginia St. Seattle, Wash.

(see)  
Reason  
Supplier  
Selected

	<u>Material</u>	<u>Amount</u>	<u>RPO No.</u>
1	Sample and Test Const. material	\$ 104,568.50	414
1	Water wells	291,064.22	415
8	Lumber	148,472.49	1108
8	Lumber	146,941.31	1190
8	Lumber	144,775.52	1280
5	Pumpoutos	269,173.07	2120
8	Boilers	114,730.85	3010
1	Coal	118,971.24	3748
1	Concrete	201,743.56	4321
8	Richland Village	17,011,647.38	4322
1	Thermal insulation	232,662.00	4323

<u>Vendor</u>	<u>Address</u>	(***) <u>Reason Supplier Selected</u>	<u>Material</u>	<u>Amount</u>	<u>RFG No.</u>
American Pipe & Construction Co.	P.O. Box 3428 Terminal Annex, Los Angeles, 54, Calif.	7	Concrete Pipe	\$1,594,292.02	4324
Wm. Vail	Box 3869, Portland, Ore.	2	Construction	203,722.35	4332
Guerin Bros.	208 S. Linden Ave. San Francisco, Calif.	1	Excavation, road const. R.R. widening	1,741,152.81	4334
Nat'l Gunite Contracting Co.	322 Bond Bldg. Washington, D. C.	1	Gunite const.	438,402.29	4335
G. B. Jessen & J. C. Wright Const. Co.	1212 South State St. Salt Lake City, Utah	1	mfg. of concrete blocks and bricks	278,469.97	4336
G. F. Atkinson Co.	662 Russ Bldg. San Francisco, Calif.	1	excavation of channel in river and laying pipe line	536,046.00	4337
Guy F. Atkinson Co.	662 Russ Bldg. San Francisco, Calif.	1	Railroad	1,846,269.95	4339
Bell & Simpson	Berkley, Calif.	1	Hauling	126,023.65	4341
Smith, Hoffman & Wright	Portland, Ore.	1	Highland Utilities	1,789,838.03	4344

<u>Vender</u>	<u>Address</u>
Arizona Iron Works	Box 750 Phoenix, Ariz.
Bunker Hill Smelter	Kellog, Idaho
A. B. Stoves, Inc.	Battle Creek, Mich
Reynolds-Updike Coal Co. - Sales Agent for Echeta Coal Co.	Grain Exchange Bldg. Omaha, Neb.
Camp Lewis Tent & Awning Co.	1107 - 1st Ave. Seattle, Wash.
Camp Lewis Tent & Awning Co.	1107 - 1st. Ave. Seattle, Wash.
Hobbs Industries	8901 Fox Ave. Seattle, Wash.
Hobbs Industries	8901 Fox Ave. Seattle, Wash.
Hobbs Industries	8901 Fox Ave. Seattle, Wash.

<u>Reason Supplier Selected</u>	<u>Material</u>	<u>Q.</u>	<u>Amount</u>	<u>Inv No.</u>
(***)				
1	Cast iron forms		\$ 104,476.37	0378
1	Lead		125,070.00	5607
8	Stoves		124,800.00	0925
2	Coal		202,960.00	7638
1	Cots, linens, mattresses		189,840.00	10636
1	Bunks, mattresses		102,400.00	10830
1	Huts		468,602.80	21882
1	Wardrobe lockers		142,700.00	23636
1	Hutments		179,020.00	23640

<u>Vendor</u>	<u>Address</u>	(***) Reason Supplier Selected	<u>Material</u>	<u>Amount</u>	<u>RFG No.</u>
Bethlehem Steel Co.	Portland, Oregon	8	Steel	\$ 114,160.00	24462
Hobbs Industries	6901 Fox Ave.	1	Hutments	163,960.00	25315

Total value of whole order number purchase orders \$100,000.00 or more each - 45,774,359.76 \*\*

Total value of whole order number purchase orders less than \$100,000.00  
each - 29,260,208.29 \*\*

Total value of all whole order number purchase orders issued - \$ 75,034,568.05 \*\*

\* Fixed Fee - Does Not include cost.

\*\* These figures are based on the most accurate information available at this time and do not include results of renegotiations.

\*\*\* Legend -

1. Lowest Price
2. Early Delivery
3. Better Quality
4. Required Design
5. Only Available Source Known
6. Price Agreement
7. As Per Contract
8. Miscellaneous



SUMMARY OF HALF NUMBER PURCHASE ORDERS

ADDENDUM NO. 1

Explanation of "Reason Supplier Selected" No. 8, Miscellaneous:

<u>Purchase Order No.</u>	<u>Explanation</u>	<u>Purchase Order No.</u>	<u>Explanation</u>
RPG 53 $\frac{1}{2}$	Negotiated	RPG 325 $\frac{1}{2}$	Use of former competition on RPG 302 $\frac{1}{2}$ (Lowest Price)
" 75 $\frac{1}{2}$	To expedite design and procurement	" 404 $\frac{1}{2}$	Use of former competition on RPG 125 $\frac{1}{2}$ (Lowest Price)
" 99 $\frac{1}{2}$	To expedite design and procurement	" 408 $\frac{1}{2}$	Required design by W.P.B. Directive
" 123 $\frac{1}{2}$	To expedite design and procurement	" 419 $\frac{1}{2}$	Lowest bid meeting requirements
" 150 $\frac{1}{2}$	To expedite design and procurement	" 582 $\frac{1}{2}$	To expedite design and procurement
" 151 $\frac{1}{2}$	To expedite design and procurement	" 645 $\frac{1}{2}$	Required design
" 159 $\frac{1}{2}$	Lowest price of sources developed to meet specifications	" 664 $\frac{1}{2}$	Required design and procurement
" 192 $\frac{1}{2}$	Economy of operation	" 674 $\frac{1}{2}$	Required design and procurement
" 199 $\frac{1}{2}$	Use of former competition (Lowest Price)	" 694 $\frac{1}{2}$	Required design and procurement
" 211 $\frac{1}{2}$	To expedite procurement	" 1005 $\frac{1}{2}$	Required design and procurement
" 212 $\frac{1}{2}$	To expedite procurement	" 1012 $\frac{1}{2}$	Required design and procurement
" 258 $\frac{1}{2}$	To expedite design and procurement	" 1045 $\frac{1}{2}$	To expedite design and procurement
" 285 $\frac{1}{2}$	To expedite design and procurement	" 1220 $\frac{1}{2}$	To expedite design and procurement

SUMMARY OF HALF NUMBER PURCHASE ORDERS - ADDENDUM NO. 1

<u>Purchase Order No.</u>	<u>Explanation</u>
RPG 1556 $\frac{1}{2}$	To expedite design and procurement
" 1949 $\frac{1}{2}$	To expedite design and procurement
" 1993 $\frac{1}{2}$	To expedite design and procurement
" 2365 $\frac{1}{2}$	To expedite design and procurement
" 2872 $\frac{1}{2}$	To expedite design and procurement
" 3534 $\frac{1}{2}$	To expedite design and procurement
" 4018 $\frac{1}{2}$	To expedite design and procurement
" 4021 $\frac{1}{2}$	To expedite design and procurement
" 4040 $\frac{1}{2}$	Vendor only firm of four contacted which had necessary equipment, personnel and capacity
" 4061 $\frac{1}{2}$	To expedite design and procurement
" 4350 $\frac{1}{2}$	To expedite design and procurement

SUMMARY OF HALF NUMBER PURCHASE ORDERS

<u>Vendor</u>	<u>Address</u>	(***) Reason Supplier Selected	<u>Material</u>	<u>Amount</u>	<u>RPG No.</u>
Whiting Corp.	New York, N. Y.	1	Switch devices	\$ 208,501.80	16 $\frac{1}{2}$
Allegheny Ludlum Steel	Philadelphia, Pa.	6	Stainless steel	242,255.58	33 $\frac{1}{2}$
Olympic Commissary Co.	302 S. Canal St. Chicago, Ill.	8	Commissary Operations	284,000.00*	53 $\frac{1}{2}$
National Carbon Co., Inc.	30 E. 42nd St. New York, N.Y.	8	Graphite Bars	198,042.36	75 $\frac{1}{2}$
International Graphite Electrode Corp.	St. Mary, Pa.	8	Graphite Bars	124,100.00	99 $\frac{1}{2}$
National Carbon Co.	30 E. 42nd St. New York, N.Y.	8	Graphite Bars	2,986,160.00	123 $\frac{1}{2}$
Roberts Filter Mfg.	Darby, Pa.	1	Steel mixing chambers	469,488.00	125 $\frac{1}{2}$
Allegheny Ludlum Steel	Philadelphia, Pa.	6	Stainless Steel	533,583.62	142 $\frac{1}{2}$
Bethlehem Steel Co.	Broad St. Station Bldg. Philadelphia, Pa.	8	Steel plates	504,781.83	150 $\frac{1}{2}$

<u>Vendor</u>	<u>Address</u>	<u>Reason Supplier Selected</u>	<u>Material</u>	<u>Amount</u>	<u>RPG No.</u>
Lukens Steel Co.	Coataville, Pa.	8	Stainless Steel	\$ 659,265.91	151 $\frac{1}{2}$
Fanellitt Display	Chicago, Ill.	4	Instrument fabrication	272,573.73	152 $\frac{1}{2}$
Porcelain Metal Product Co.	Carnegie, Pa.	8	Steel	102,500.00	159 $\frac{1}{2}$
Joshua Handy Iron Wks.	New York, N. Y.	8	Turbine Pumps	163,586.35	192 $\frac{1}{2}$
Permutit Co.	330 W. 42nd St. New York, N. Y.	1	Water demineralizing plant	2,188,814.78	198 $\frac{1}{2}$
Roberts Filter Mfg. Co.	Darby, Pa.	8	Filtering Plant	469,583.00	199 $\frac{1}{2}$
Combustion Engineer- ing Co.	Philadelphia, Pa.	1	Steel	869,743.37	207 $\frac{1}{2}$
General Electric Co.	1406 Locust St. Philadelphia, Pa.	8	Transformers	348,680.00	211 $\frac{1}{2}$
Westinghouse Elec. & Mfg. Co.	Philadelphia, Pa.	8	Circuit breakers	300,165.00	212 $\frac{1}{2}$
Clinton Bridge Works	Clinton, Iowa	1	Steel fabrication	1,523,824.97	241 $\frac{1}{2}$
Globe Steel Tubes Co.	Philadelphia, Pa.	8	Stainless steel	137,884.47	243 $\frac{1}{2}$
Babcock & Wilcox Co.	Packard Bldg. Philadelphia, Pa.	8	Boilers	164,521.23	258 $\frac{1}{2}$

<u>Vendor</u>	<u>Address</u>	(see) Reason Supplier Selected	<u>Material</u>	<u>Amount</u>	<u>RFO No.</u>
Vistorsen Instrument Co.	5806 Hough Ave. Cleveland, Ohio	8	Meters	124,064.00	285½
Erie City Iron Works	908 City Center Bldg Philadelphia, Pa.	1	Steam Generating Units	519,788.25	306½
Combustion Engineering Co.	New York, N. Y.	1	Boilers	422,930.26	307½
Cochrane Corp.	Philadelphia, Pa.	8	Deserating Equip.	747,479.33	325½
York Corp.	1616 Walnut St. Philadelphia, Pa.	1	Refrigeration Equip.	819,985.00	350½
Roberts Filter Mfg.	Darby, Pa.	8	Filtration Equip.	464,873.00	404½
Gen. Cable Corp.	123 So. Broad St. Philadelphia, Pa.	8	Aluminum	183,855.39	408½
Ingersoll Rand Co.	200 W. 9th St. Wilmington, Del.	8	Turbine driven preliminary process water pumps	196,368.00	419½
Bird Machine Co.	South Walpole, Mass.	4	Centrifugal machines	549,434.11	532½
Westinghouse Electric	3001 Walnut St. Philadelphia, Pa.	1	Steam Turbines	114,570.00	543½
Hust Eng. Co.	Pittsburgh, Pa.	1	Reinforced Concrete Chimney	189,214.47	566½
Aluminum Co. of America	123 S. broad St. Philadelphia, Pa.	8	Aluminum Tubes	243,617.50	582½

<u>Vendor</u>	<u>Address</u>	( <u>see</u> ) <u>Reason</u> <u>Supplier</u> <u>Selected</u>	<u>Material</u>	<u>Amount</u>	<u>RFQ No.</u>
Masonite Corp.	111 W. Wash. St. Chicago, Ill.	4	Masonite	\$ 763,664.30	584 $\frac{1}{2}$
Westinghouse Elec.	3001 Walnut St. Philadelphia, Pa.	2	Special type motors	228,290.62	601 $\frac{1}{2}$
Chicago Bridge	1700 Walnut St. Philadelphia, Pa.	1	Steel water storage tanks	241,171.43	637 $\frac{1}{2}$
Patch-Jagor Co.	75 Rutland, Vt.	8	Block assemblies	225,560.79	645 $\frac{1}{2}$
Link Belt Co.	2045 W. Hunting Park Ave., Philadelphia, Pa.	1	Equipment for 2 coal handling systems	200,290.42	658 $\frac{1}{2}$
Link Belt Co.	2045 W. Hunting Park Ave., Philadelphia, Pa.	1	Equipment for 3 coal handling systems	399,024.75	659 $\frac{1}{2}$
Swind Mach. Co.	Broad St. Station Bldg. Philadelphia, Pa.	5	Boring - drilling and milling machines	143,960.50	664 $\frac{1}{2}$
Head Machinery Co.	York, Pa.	8	Laminated block assem- blies, welding assemblies	381,722.02	674 $\frac{1}{2}$
Alco Products Div. American Locomotive Works	30 Church St. New York, N. Y.	8	Steel plates	276,416.92	684 $\frac{1}{2}$

<u>Vendor</u>	<u>Address</u>	(see) Reason Supplier Selected	<u>Material</u>	<u>Amount</u>	<u>EPG No.</u>
Beverly Copper & Brass Inc.	230 Park Ave. New York, N. Y.	1	Labor and Equipment used in Extrusion of Material	\$ 764,000.00	704 $\frac{1}{2}$
Westinghouse Electric & Mfg. Co.	3001 Walnut St. Philadelphia, Pa.	4	Refrigeration unit	171,270.76	773 $\frac{1}{2}$
Worthington Pump & Machine Corp.	847 Delaware Trust Bldg., Wilmington, Del.	1	Steam jet air ejectors	101,548.00	792 $\frac{1}{2}$
Philadelphia Iron Works	Philadelphia, Pa.	1	Boiler breechings	104,131.15	808 $\frac{1}{2}$
Chicago Bridge & Iron Co.	Philadelphia, Pa.	1	Neoprene Lining	255,999.47	823 $\frac{1}{2}$
Joyce Machine Co.	2080 Wheatshaf Lane Frankfort, Phila., Pa.	1	Steel jaws and pins	211,244.88	888 $\frac{1}{2}$
Waldrip Eng. Co.	Hollydale, Cal.	1	Fabrication of pipe	109,726.01	932 $\frac{1}{2}$
Toledo Scales Co.	200 W. Ninth Wilmington, Del.	1	Platform Scales	101,622.40	974 $\frac{1}{2}$
Warren City Mfg. Co.	Warren, Ohio	8	Laminated Block Assemblies	820,841.84	1005 $\frac{1}{2}$

<u>Vendor</u>	<u>Address</u>	(***) <u>Reason Supplier Selected</u>	<u>Material</u>	<u>Amount</u>	<u>RPG No.</u>
Lukens Steel Co.	Coatsville, Pa.	8	Processing steel plates	\$ 106,891.20	1012 $\frac{1}{2}$
Allegheny Ludlum	944 Broad St. Station Bldg., Philadelphia, Pa.	6	Stainless steel	1,089,206.27	1028 $\frac{1}{2}$
International Harvester	180 N. Mich. Ave. Chicago, Ill.	1	Fabrication of sleeves	324,542.09	1033 $\frac{1}{2}$
Balmar Corporation	3500 Clipper Road Woodberry, Baltimore, Md.	6	Sub-block assemblies	365,986.16	1046 $\frac{1}{2}$
Chapman Valve Mfg. Co.	203 Hampshire Indian Orchard, Mass.	4	Gate valves	247,770.00	1107 $\frac{1}{2}$
Warren City Mfg. Co.	Warren, Ohio	8	Masonite and drills	111,017.40	1220 $\frac{1}{2}$
Haughton Elevator Co.	1730 Ludlow St. Philadelphia, Pa.	1	Electric elevators	322,113.74	1245 $\frac{1}{2}$
Lynchburg Foundry	Lynchburg, Va.	1	Cast Iron blocks	119,937.46	1351 $\frac{1}{2}$
Schutte & Koerting Co.	12th & Thompson St. Philadelphia, Pa.	1	Steam jet siphons	244,644.60	1370 $\frac{1}{2}$
Struthers-Wells Co.	30 Rockefeller Plaza New York, N. Y.	1	Stainless steel tanks & covers	252,702.50	1381 $\frac{1}{2}$



<u>Vendor</u>	<u>Address</u>	(see) Season Supplier Selected	<u>Material</u>	<u>Amount</u>	<u>HPG No.</u>
Carpenter Steel Co.	P. O. Box 118 Roselle, New Jersey	8	Stainless steel welded tubing	\$ 306,850.30	1410½
Morrison-Knudsen Co. Bechtel-McCone Parsons Corp., W. A. Bechtel Co.	319 Broadway Boise, Idaho	1	Storage tanks	6,690,035.42	1451½
Asbestos Supply Co.	First Ave. at Jackson Seattle, Wash.	1	Thermal insulation for piping, valves, and equipment	861,996.34	1473½
Herring-Hall-Marvin Safe Co.	Grand Boulevard Hamilton, Ohio	1	Cast iron sleeves	101,306.31	1522½
Joyce Machine Co.	2080 Wheatleaf Lane Frankfort, Philadelphia, 24, Pa.	1	Cast iron sleeves	109,076.62	1624½
Wolverine Tube Div. of Calumet and Hecla Consolidated Copper Co.	1411 Central Ave. Detroit, Mich.	8	Pig Tails	357,936.19	1566½
Whiting Corp.	136 Liberty St. New York, N. Y.	1	Cranes (elect.)	124,542.00	1720½
A. O. Smith	156 E. 44th St. New York 17, N. Y.	1	Pipes and fittings	170,591.00	1929½

<u>Vendor</u>	<u>Address</u>	(***) <u>Reason Supplier Selected</u>	<u>Material</u>	<u>Amount</u>	<u>RPG No.</u>
Whiting Corporation	136 Liberty St. New York & N. Y.	8	Spare parts for motor winches	\$ 248,716.39	1949 $\frac{1}{2}$
Aluminum Co. of America	123 S. Broad St. Philadelphia, Pa.	8	Die and tubing	189,200.00	1923 $\frac{1}{2}$
G. O. Carlson, Inor	Thorndale, Pa.	1	Forgings	105,840.00	2012 $\frac{1}{2}$
D. S. Rubber	5th & Locust Sts. Philadelphia, Pa.	1	Rubber lining of fabricated piping	133,321.07	2027 $\frac{1}{2}$
Triplett & Barton	1705 Victory Place Burbank, Calif.	1	Tank welds, x-rayed on 75" and 20" Dia. radiographs where repair work is performed	325,061.74	2115 $\frac{1}{2}$
Ben F. Shaw Co.	2nd & Lombard Sts. Wilmington, Del.	1	Steel pipes fabricated, pipe ells, pipe loops, pressure headers, overflow headers, all fabricated	102,651.00	2168 $\frac{1}{2}$
The Fulton Syphon Co.	2400 Cumberland Ave. Knoxville 4, Tenn.	8	Bellow assemblies	106,933.60	2365 $\frac{1}{2}$
Larion Mch. Foundry & Supply Co.	Larion, Ind.	1	Nozzle assemblies	142,628.20	2551 $\frac{1}{2}$
Du Pont	Wilmington Shops Wilmington, Delaware	1	Valve assemblies	226,525.00	2718 $\frac{1}{2}$

<u>Vendor</u>	<u>Address</u>	(***) Beston Supplier Selected	<u>Material</u>	<u>Amount</u>	<u>RPG No.</u>
DuPont	Wilmington Shops Maryland Ave. & South St. Wilmington, Del.	8	Rod assemblies	109,460.00	2872 $\frac{1}{2}$
Allegheny Ludlum Steel Corp.	Philadelphia, Pa.	8	Steel	165,493.82	3160 $\frac{1}{2}$
Blaw Knox Div. Blaw Knox Co.	Philadelphia, Pa.	1	Steel	122,808.00	3243 $\frac{1}{2}$
Alco Products Div.	New York, N. Y.	8	Tie Straps	106,085.58	3534 $\frac{1}{2}$
Allegheny Ludlum Steel Corp.	Philadelphia, Pa.	8	Stainless steel	133,959.62	3733 $\frac{1}{2}$
Carpenter Steel	Roselle, W. J.	8	Stainless welded tubing	206,314.29	3744 $\frac{1}{2}$
C. H. Schnerr & Co.	643 R. R. St. Springdale, Pa.	8	Machining of slugs	228,250.00	4018 $\frac{1}{2}$
McKinney Tool & Mfg. Co.	1688 Arabella Road Cleveland, Ohio	8	Machining of slugs	125,000.00	4021 $\frac{1}{2}$
Quality Hardware & Machine Corp.	5812 Ravenswood Ave. Chicago, Ill.	8	Casing Slugs	218,798.06	4040 $\frac{1}{2}$
Aluminum Co. of America	123 S. Broad St. Philadelphia, Pa.	8	Aluminum tubing	101,282.50	4061 $\frac{1}{2}$

<u>Vendor</u>	<u>Address</u>	(***) Reason Supplier Selected	<u>Material</u>	<u>Amount</u>	<u>RPG No.</u>
DuPont	Wilmington Shops Maryland Ave. & South Sts. Wilmington, Del.	8	Elevator cabs	\$ 108,300.00	4350 $\frac{1}{2}$
Aluminum Co. of America	123 S. Broad St. Philadelphia, Pa.	5	Lead dummies	117,893.46	4742 $\frac{1}{2}$

Total value of half number purchase orders of \$100,000.00 or more each - \$36,820,083.69

Total value of all half number purchase orders of less than \$100,000.00  
each - 27,624,502.87\*\*

Total value of all half number purchase orders issued - \$64,444,586.56

\* Fixed Fee - Does not include cost.

\*\* These figures are based on the most accurate information available at this time and do not include results of renegotiations.

\*\*\* Legend:

1. Lowest Price
2. Early Delivery
3. Better Quality
4. Required Design
5. Only Available Source Known
6. Price Agreement
7. As per Contract
8. Miscellaneous

DIRECT GOVERNMENT CONTRACTS

<u>CONTRACT NUMBER</u>	<u>FIRM</u>	<u>TYPE OF CONTRACT OR MATERIAL</u>	<u>COST</u>	<u>REASON FOR SELECTION OF CONTRACTOR</u>
W 14-108-eng-31	Pacific Power & Light Co.	Service; furnish electric power; and lease of facil- ities.	37,081.72	Competition impracticable; con- tractor public utility serving this area, only source available.
W 14-108-eng-32	Pacific Mutual Door Co.	Supply - furnish plywood	15,146.41	Allocation by Central Procuring Agency for Lumber, Office - Chief of Engineers.
W 14-108-eng-36	St. Johns Welders Supplies	Supply - furnish work gloves.	9,187.17	Two bids received after solicit- ation. Award split this contractor and contractor under W 14-108-eng- 37 in order to meet project deliv- ery dates.
W 14-108-eng-37	Harry R. Hibbs Co.	Supply - furnish work gloves.	11,373.12	Two bids received after solicit- ation. Award split this contractor and contractor under W 14-108-eng- 36 in order to meet project deliv- ery dates.
W 35-058-eng-47	The American Tobacco Co.	Supply - furnish cigarettes.	49,012.23	Allocation - Lucky Strike brand, which were sold to project em- ployees thru project facilities.
W 35-058-eng-48	R. J. Reynolds Tobacco Co.	Supply - furnish cigarettes	35,257.57	Allocation - Camel brand, which were sold to project employees thru project facilities

<u>CONTRACT NUMBER</u>	<u>FIRM</u>	<u>TYPE OF CONTRACT OR MATERIAL</u>	<u>COST</u>	<u>REASON FOR SELECTION OF CONTRACTOR</u>
W 35-058-eng-49	The American Tobacco Co.	Supply - furnish cigarettes	43,246.08	Allocation - Lucky Strike brand, which were sold to project employees thru project facilities.
W 35-058-eng-50	R. J. Reynolds Tobacco Co.	Supply - furnish cigarettes	6,054.45	Allocation - Camel brand, which were sold to project employees thru project facilities.
W 35-058-eng-51	The American Tobacco Co.	Supply - furnish cigarettes.	28,830.72	Allocation - Lucky Strike brand, which were sold to project employees thru project facilities.
W 35-058-eng-52	R. J. Reynolds Tobacco Co.	Supply - furnish cigarettes.	7,207.68	Allocation - Camel brand, which were sold to project employees thru project facilities.
W 38-094-eng-60	Prefabrication Engineering Co.	Rehabilitating electric wiring systems in prefabricated houses in Richland Village.	71,435.97	Specialized qualifications - contract for expert services.
W 38-094-eng-62	Federal Prison Industries McNeil Island	Salvage Services	10,440.00	Productive utilization of inmate labor available after harvest season.
W 38-094-eng-61	S.P. Michelson Co.	Supply - furnish lug boxes for fruit and vegetables.	5,005.35	Only bid after solicitation.

<u>CONTRACT NUMBER</u>	<u>FIRM</u>	<u>TYPE OF CONTRACT OR MATERIAL</u>	<u>COST</u>	<u>REASON FOR SELECTION OF CONTRACTOR</u>
W 42-069-eng-60	J. G. Ungerech	Construction of area telephone building.	9,709.95	Competitive bidding - lowest.
W 42-069-eng-61	Yakima Tent & Awning Co.	Supply - furnish canvas shoe covers.	7,160.00	Lowest of two bids received.
W 42-069-eng-62	McAtee & Heath and Curtis Gravel Co.	Drainage Correctional and surfacing of streets.	100,000.00	Lowest bid
W 7401 eng-153	National Homes Corp.	Supply - 2 Sample houses as models.	5,603.62	Negotiated at Oak Ridge. Order signed by Col. Marsden
W 7407 eng-51	Business Supply Co.	(Contract written by New York Office of Manhattan District)	22,860.00	
W 7407 eng-80	Stewart Warner Corp.	Supply - furnish automotive heaters.	23,815.00	Only available source meeting project requirements as to type and delivery.
✓ W 7407 eng-84	Southern Iron & Equipment Company	Supply - furnish railroad locomotives.	47,200.00	Lowest bidder.
W 7407 eng-85	Wesix Electric Heater Co.	Supply - furnish electric heaters.	228,445.35	Only bid received.
W 7407 eng-86	Maxwell Petroleum Co.	Supply - furnish lubricating oil.	8,904.00	Lowest of three (3) bids solicited.
W 7407 eng-87	Munnell & Sherrell	Supply - furnish work gloves.	5,026.86	Best delivery time.

<u>CONTRACT NUMBER</u>	<u>FIRM</u>	<u>TYPE OF CONTRACT OR MATERIAL</u>	<u>COST</u>	<u>REASON FOR SELECTION OF CONTRACTOR</u>
W 7407 eng-88	General Petroleum Corp. of California	Supply - furnish lubricating oil.	8,681.40	Lowest of three (3) bids solicited.
W 7409 eng-77	L.B. Smith Inc.	Services - re-modeling or re-converting Government owned dump trucks	10,815.00	Office, Chief of Engineers entered into a contract for general over-hauling, re-converting, and re-conditioning of Government-owned construction equipment under Corps of Engineers' jurisdiction during the war.
W 7409 eng-79	Utility Trailer Co.	Supply - furnish automotive truck trailers.	24,432.00	Lowest bid and best delivery.
W 7409 eng-80	Graybar Electric Co.	Supply - furnish electric cable	8,157.21	Only available source meeting delivery required.
W 7409 eng-81	Graybar Electric Co.	Supply - furnish electric cable.	13,886.14	Only available source meeting delivery required.
W 7409 eng-82	The Sherwin-Williams Co.	Supply - furnish spray materials for orchards, vineyards, etc.	10,229.32	Lowest of four (4) bids solicited.
W 7409 eng-83	The Shaw Walker Co.	Supply - furnish file cabinets.	15,250.00	Lowest of four (4) bids solicited.
W 7409 eng-85	Transportation Equipment Co.	Supply - furnish semi-trailers (truck)	45,520.50	Lowest bidder.



<u>CONTRACT NUMBER</u>	<u>FIRM</u>	<u>TYPE OF CONTRACT OR MATERIAL</u>	<u>COST</u>	<u>REASON FOR SELECTION OF CONTRACTOR</u>
W 7409 eng-86	W. J. Reynolds Tobacco Co.	Supply - furnish cigarettes.	108,855.97	Allocation - Camel brand, which were sold to project employees thru project facilities.
W 7409 eng-87	Ford Motor Co.	Supply - furnish automobile parts.	16,910.50	Only available source capable of supplying as required, due to priority and allocation restrictions.
W 7412 eng-76	Dalian Steel Products Inc.	Supply - furnish tracks and trails.	80,000.00	Only available source for immediate delivery.
W 7412 eng-78	Chas. G. Stott & Co., Inc.	Supply - furnish paper cups.	71,318.32	Lowest of five (5) bids solicited.
W 7412 eng-79	Defense Plant Corporation	Supply - furnish steel scaffolding	51,082.98	Transfer of excess material with reimbursement from Government-owned corporation.
W 7412 eng-81	Jenkins Motor Co.	Supply - furnish tractor-tracks.	20,350.00	Only available source for immediate delivery
W 7412 eng-82	Harper Hages, Inc.	Supply - furnish sand equipment.	28,893.24	Contractor represented the only type of equipment acceptable to Prime Contractor on HEM project. Required design in accordance with engineer specifications.
W 7412 eng 83	Osceola Laska Co.	Supply - furnish bakery equipment.	6,052.71	Only available source acceptable to the field.
W 7412 eng-86	Reed Industrial Co.	Supply - furnish work gloves.	6,922.67	Lowest bid received.

<u>CONTRACT NUMBER</u>	<u>FIRM</u>	<u>TYPE OF CONTRACT OR MATERIAL</u>	<u>COST</u>	<u>REASON FOR SELECTION OF CONTRACTOR</u>
W 7412 eng-87	Defense Plant Corporation	Supply - furnish welding machines.	5,742.80	Transfer of excess material with reimbursement from Government-owned corporation.
W 7412 eng-88	The American Tobacco Co.	Supply - furnish cigarettes.	138,747.84	Allocation - Lucky Strike brand, which were sold to project employees thru project facilities.
W 7418 eng-75	Smith, Hoffman & Wright	Construction of Columbia Prison Camp.	144,277.97	Negotiated - best available source.
W 7418 eng-76	Federal Prison Industries	Maintain and harvest crops.		Army provided complete Prison Camp (see above) and furnished facilities for same as well as harvesting equipment. F.P.I. received returns from sale of produce.
W 7418 eng-77	Prefabrication Engineering Company.	Supply prefabricated houses on already constructed foundation.	3,637,811.13	Lowest bid.
W 7418 eng-92	Benton Rural Electric Association	Service - furnish electricity to Columbia Prison Camp.	5,480.55	Competition impracticable; contractor public utility serving this area; only source available.
W 7418 eng-79	West Disinfecting Co.	Supply - furnish disinfectant	5,338.82	Lowest bidder meeting specifications.
W 7418 eng-80	Standard Oil Co. of California	Supply - furnish fog oil	8,353.86	Lowest of three (3) bids solicited.

<u>CONTRACT NUMBER</u>	<u>FIRM</u>	<u>TYPE OF CONTRACT OR MATERIAL</u>	<u>COST</u>	<u>REASON FOR SELECTION OF CONTRACTOR</u>
W 7418 eng-81	Pilot Butte Transit Line	Supply - furnish semi-trailer and truck unit.	6,567.00	Only available source for immediate delivery
W 7418 eng-84	Rogue Valley	Supply - furnish buses and auto-tractors.	27,860.00	Only available source for immediate delivery.
W 7418 eng-85	J. B. Stringfellow	Supply - furnish truck-tractors.	11,542.00	Only available source for immediate delivery.
W 7418 eng-86	Trailer Transport	Services - Transportation of house trailers.	170,659.30	Negotiated - best available source
W 7418 eng-88	Baily H. Patterson	Supply - furnish truck-tractors.	13,500.00	Only available source for immediate delivery.
W 7418 eng-91	Prefabrication Engineering Company	Supply - furnish prefabricated houses.	1,489,839.00	Lowest bid.
W 7418 eng-93	Smith, Hoffman & Wright	Construction - additions to camp.	42,506.19	Negotiated best available source.
W 7412 eng-1	E.I. du Pont de Nemours & Company	CEAFF - basic contract for HEW project.	197,618,177.95	Negotiated - best source
W 42-069-eng-56	A.A. Durand	Telephone Grounding Service Well.	3,017.20	Best available source

**NOTE:** All supply contracts contained the provision that prices were not in excess of existing OBA prices.

All contracts for automotive equipment (trucks, trailers, buses, etc.) were generally purchased only after a source had been found, Office of Defense Transportation giving the necessary release or authorization of the sale.

All contracts were lump sum with the exception of; the Prime Contract, which was Fixed Fee; Power contracts, which were billed on a monthly basis as per contractual agreement; expert service and contracts.

SUMMARY OF SUBCONTRACTS

<u>Type of Contract</u>	<u>Firm's Name</u>	<u>Home Office</u>	<u>Class of Work</u>	<u>Cost</u>	<u>RFG NO.</u>
L. S.	A. A. Durand & Son	Walla Walla, Wn.	Drilling of Wells	\$ 30,844.20	401
L.S.	G. A. Pehrson	Spokane, Wash.	Arch. Engr. Services	581, 012.13	402
✓ L.S.	Guy F. Atkinson Co.	San Francisco, Calif.	Railroad Constr.	3,035,090.18	403
✓ L.S.	Twaits-Morrison-Knudsen	Los Angeles, Calif.	Housing	2,353,883.08	404
L.S.	Northwest Testing Labs.	Seattle, Wash.	River Water Analysis	750.00	405
L.S.	St. Dept. of Highways	Olympia, Wash.	Aggreg. Test Pits	2,719.08	406
L.S.	Myers Bros.- Ball & Sons	H. M. Los Angeles, Calif.	Excav. & Rd. Constr.	3,983,072.61	407
C.P.F.F.	Newbery-Chandler-Lord	Los Angeles, Calif.	Electrical Work	173,500.00*	408
			(Amount of fixed fee only)		
× L.S.	Twaits-Morrison-Knudsen	Los Angeles, Calif.	Utilities	478,583.07	409
L.S.	Hanford Concrete Contractors	Winona, Minn.	Ready-Mix Concrete	5,500,159.62	410
C.P.F.F.	Hankee-James Zahniser & Warren	St. Paul, Minn.	Piping Work	302,000.00	411
L.S.	Sullivan Valve & Engr. Co.	Butte, Mont.	Camp Area Boilers	92,641.91	412
L.S.	A. A. Durand & Son	Walla Walla, Wn.	Wells	4, 450.00	413

SUMMARY OF SUBCONTRACTS

<u>Type of Contract</u>	<u>Firm's Name</u>	<u>Home Office</u>	<u>Class of Work</u>	<u>Cost</u>	<u>RFG NO.</u>
L.S.	H. W. Dunham Labs.	Seattle, Wn.	Test of Materials	\$ 80,516.01	414
L.S.	W. T. Batcheller	Seattle, Wn.	Expedite Design and Procurement (Engr. Services)	17,439.88	415
L.S.	A. A. Durand & Son	Halla Halla, Wn.	Drilling of Wells	291,064.22	416
L.S.	Curtis Gravel Co.	Spokane, Wn.	Furnishing of Aggr.	201,743.56	4321
L.S.	Smith, Hoffman & Wright	Portland, Oregon	Housing	18,715,944.62*	4322
L.S.	Chas. R. Brewer & Co.	Seattle, Wn.	Insulation	232,662.00	4323
L.S.	American Pipe & Constr. Co.	Los Angeles, Calif.	Reinforced Concrete Pipe	1,594,292.02	4324
L.S.	Brunswick-Balke-Collender	Chicago, Ill.	Pool, Snooker & Billiard Tables	17,183.72	4325
L.S.	California Waterproofing Co.	Los Angeles, Calif.	Roofing Subcontract #1	12,011.64	4327
L.S.	McManama & Co.	Seattle, Wn.	Erection of Boilers	17,452.35	4328
L.S.	Wm. Vail	Portland, Oregon	Built-up Roofing	203,722.35	4332
L.S.	Fentren Steel Works	Seattle, Wn.	Service Stations	6,102.17	4333

<u>Type of Contract</u>	<u>Firm's Name</u>	<u>Home Office</u>	<u>Class of Work</u>	<u>Cost</u>	<u>HPG No.</u>
L.S.	Guerin Bros.	San Francisco, Cal.	Excav., Road Constr. & Railroad Widening	\$1,741,152.81	4334
L.S.	National Granite Contracting Co.	Washington, D. C.	Granite Reservoirs	310,717.96*	4335
L.S.	G. H. Jessen & J. C. Wright	Salt Lake City, Utah	Concrete Block	278,469.97	4336
L.S.	Guy F. Atkinson Co.	San Francisco, Cal.	Channel Excavation	536,846.09	4337
L.S.	Guy F. Atkinson Co.	San Francisco, Cal.	Railroad Subcon. #2	1,846,269.95	4338
L.S.	Hall & Simpson	Berkeley, Cal.	Hauling of Aggreg.	126,023.65*	4341
L.S.	Smith-Hoffman & Wright	Portland, Oregon	Utilities	1,854,405.73*	4344
L.S.	H. R. Parsons Tile Co.	Spokane, Wn.	Asphalt Tile & Linoleum	12,089.07	4354
L.S.	General Electric X-Ray Corp.	Seattle, Wn.	Installation of X-Ray Equip.	549.91	4355
L.S.	DeWitt C. Griffin & Associates	Seattle, Wn.	Engineering Services	24,000.00	29304
L.S.	Fryer-Knosles	Seattle, Wn.	Acid Proof Mastic Finish	13,169.32	29312
L.S.	U. S. Rubber Co.	Philadelphia, Pa.	Repairs to Rubber Lined Equipment	6,701.58*	29328
L.S.	Alphons-Custodis Chimney Constr. Co.	Chicago, Ill.	Installation of Clean-out door	650.00	29331

<u>Type of Contract</u>	<u>Firm's Name</u>	<u>Home Office</u>	<u>Class of Work</u>	<u>Cost</u>	<u>BFG No.</u>
L.S.	Pacific Power & Light Co.	Portland, Ore.	Operation of Hanford Substation	\$ 13,797.97	29332
L.S.	Pittsburgh-Des Moines Steel Co.	New York, N. Y.	Steel Storage Tank	14,087.61	50 $\frac{1}{2}$
C.P.F.T.	Olympic Commissary Co.	Chicago, Ill.	Commissary Operations	284,000.00	65 $\frac{1}{2}$
L.S.	Haughton Elevator Co.	Philadelphia, Pa.	Freight Elevators	38,087.41	54 $\frac{1}{2}$
L.S.	Ramsay Water Collector Corp.	Louisville, Ky.	Water Investigation	16,202.00	67 $\frac{1}{2}$
L.S.	International Water Supply	Seattle, Wa.	Water Investigation	36,308.09	68 $\frac{1}{2}$
L.S.	General Electric X-Ray Co.	Chicago, Ill.	X-Ray Equipment	6,911.69	69 $\frac{1}{2}$
L.S.	Westinghouse Elec. & Mfg. Co.	Philadelphia, Pa.	Photofluoroscopic Equipment	1,679.00*	63 $\frac{1}{2}$
L.S.	Chicago Bridge & Iron Co.	Philadelphia, Pa.	Steel Storage Tanks	11,476.00	78 $\frac{1}{2}$
L.S.	Tate-Jones & Co., Inc.	Leetsdale, Pa.	Heat Treating Furnace	44,180.27	170 $\frac{1}{2}$
L.S.	Kust Engineering Co.	Pittsburgh, Pa.	200' Chimneys	95,184.36	173 $\frac{1}{2}$
L.S.	Clinton Bridge Works	Clinton, Iowa	Structural Steel	1,523,824.97	241 $\frac{1}{2}$



<u>Type of Contract</u>	<u>Firm's Name</u>	<u>Home Office</u>	<u>Class of Work</u>	<u>Cost</u>	<u>HFG No.</u>
L.S.	Babcock & Wilcox Co.	Philadelphia, Pa.	Boilers	\$161,442.96	258½
L.S.	Erie City Iron Works	Erie, Pa.	Boilers	652,806.00*	306½
L.S.	Combustion Engr. Co.	New York, N.Y.	Boilers	422,830.26	307½
L.S.	Alphons Custodia Chimney Constr. Co.	New York, N.Y.	Radial Brick Chimney	10,785.57	434½
L.S.	Alphons Custodia Chimney Constr. Co.	New York, N.Y.	200' Chimney-Concrete	14,685.00	488½
L.S.	National Gunite Constr. Co.	Washington, D.C.	Concrete Tank	10,520.07	489½
L.S.	W. E. Caldwell Co.	Louisville, Ky.	Elevated Wood Tanks	49,125.41	565½
L.S.	Rust Engineering Co.	Pittsburgh, Pa.	Concrete Chimneys	189,214.47	566½
L.S.	W. E. Caldwell Co.	Louisville, Ky.	Elevated Wood Tanks	89,352.54	567½
L.S.	Rust Engineering Co.	Pittsburgh, Pa.	Concrete Chimneys	97,004.94	567½
L.S.	Chicago Bridge & Iron Co.	Philadelphia, Pa.	Elev. Steel Storage Tanks	241,171.43	637½
L.S.	Link-Belt Co.	Philadelphia, Pa.	Coal Handling Systems	200,290.42	658½
L.S.	Link-Belt Co.	Philadelphia, Pa.	Coal Handling Systems	399,024.65	659½
L.S.	Stephenson-Adamsen Mfg. Co.	New York, N. Y.	Coal Handling Systems	34,397.80	708½
L.S.	Philadelphia Iron Works	Philadelphia, Pa.	Boiler Breechings	104,131.15	808½

<u>Type of Contract</u>	<u>Firm's Name</u>	<u>Home Office</u>	<u>Class of Work</u>	<u>Cost</u>	<u>EPG No.</u>
L.S.	Chicago Bridge & Iron Co.	Philadelphia, Pa.	Process water storage tanks	\$1,246,906.35*	823½
L.S.	Grinnell Co., Inc.	Providence, R. I.	Sprinkler system	55,366.59	889½
L.S.	W. E. Caldwell Co.	Louisville, Ky.	Elevated wood tanks	42,252.20	938½
L.S.	Condery Constg. Co.	Philadelphia, Pa.	Forced Draft Ducts	29,771.72	1170½
L.S.	Haughton Elevator Co.	Philadelphia, Pa.	Elevators-100 Area	322,113.72	1245½
L.S.	Morrison-Bechtel-McCone	Boise, Idaho	Composite Tanks	5,690,035.42	1451½
L.S.	Asbestos Supply Co.	Seattle, Wn.	Thermal Insulation	861,996.34	1473½
L.S.	National Granite Contracting Co.	Washington, D.C.	Pre-Stressed Concrete Tanks	40,587.37	1588½
L.S.	Haughton Elevator Co.	Philadelphia, Pa.	Electric Elevators	30,886.91*	1678½
L.S.	Alphone Custodis Chim. Constr. Co.	New York, N. Y.	Concrete Chimneys	29,211.69	1862½
L.S.	Triplett & Barton, Inc.	Burbank, Calif.	X-Ray Inspection Composite Tanks	325,061.74	2115½
L.S.	National Granite Contracting Co.	Washington, D. C.	Catch & Settling Tanks	76,810.62*	3564½
L.S.	E.F. Hauserman Co.	Cleveland, Ohio	S/S Enclosures	9,138.05	3778½
L.S.	Clinton Bridge Works	Clinton, Iowa	Steel Tower	25,349.63	4633½
L.S.	Haughton Elevator Co.	Philadelphia, Pa.	Elec. Hoist	10,736.21	4754½
L.S.	Graver Tank & Mfg. Co.	New York, N.Y.	Condensers	8,658.51	5286½

\*Complete Amount to Date Only.

55,992,316.35  
 Sheet No. 14 of 14 sheets

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H. E. W. GOVERNMENT TRANSFERS

In receiving materials, supplies and equipment from other projects and other Government Agencies, beginning April 1943 to July 1944, figures are given as approximate values of such received each month until July 1944.

April 1943	-	\$ 250,000.00
May	"	265,000.00
June	"	500,000.00
July	"	650,000.00
August	"	850,000.00
Sept.	"	1,200,000.00
Oct.	"	1,700,000.00
Nov.	"	2,000,000.00
Dec.	"	2,200,000.00
Jan. 1944	-	2,000,000.00
Feb.	"	1,250,000.00
March	"	1,000,000.00
April	"	700,000.00
May	"	400,000.00
June	"	250,000.00

The approximate number of ICL (less than carload) shipments on Government transfers received from April 1943 until July 1944, each month as follows:

April 1943	-	28
May	"	32
June	"	32
July	"	68
August	"	88
Sept.	"	150
Oct.	"	210
Nov.	"	215
Dec.	"	120
Jan. 1944	-	120
Feb.	"	85
March	"	90
April	"	88
May	"	110
June	"	<u>48</u>

Approx. Grand Total 1484

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The approximate number of carload lot shipments on Government transfers received from April 1943 until July 1944, each month as follows:

April 1943	-	10
May	"	14
June	"	14
July	"	20
August	"	27
Sept.	"	50
Oct.	"	70
Nov.	"	72
Dec.	"	35
Jan. 1944	-	35
Feb.	"	27
March	"	35
April	"	30
May	"	38
June	"	<u>25</u>

Approx. Grand Total 502

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MAJOR EQUIPMENT INVENTORY

EQUIPMENT	GOVERNMENT OWNED	GOVERNMENT RENTED	SUB CONTRACTOR CONTROLLED	TOTAL
Sedans	549			549
Buses	908	2		910
Station Wagons	98			98
Carryalls	68			68
Panel	38		8	46
Pickups	767	2	158	927
Motorcycles	98			98
Jeeps	88			88
Military Cars	101			101
Fire Trucks	29			29
Ambulances	20			20
Scoters	8			8
Concrete Hoppers	41			41
Batch Plants & Bins	9			9
Retread Pavers	1			1
Tar Kettles	31			31
Rotary Brooms	4		12	16
Boilers	242			242
Lead Luger Buckets	20			20
Concrete Buckets	88			88
Air Compressors	201		31	232
Conveyors	10	1		11
Crushers	1		28	29
Engines	49			49
Graders	57	4	38	99
Loaders	4		2	6
Mixers, concrete (transit mix)	134	4	8	146
Pit & Quarry Plants	1			1
Pumpjacks	18			18
Snow Plows	18			18
Pumping units	688	8	98	794
Rippers, Rosters	19		13	32
Rollers	42		24	66
Scrapers	38	1	71	110
Spreaders	11			11
Tractors - crawlers	279	38	122	439
Trailers	161			161
Trenching machines	1		1	2
Dump Trucks	558		417	975
Flat Trucks	948	42	148	1138
Tank & Grease trucks	84	8	153	245
Tractor & Trailers	216	13	11	240
Refrigerator Trucks	13			13
Vibrators	314			314
Athay Wagons	141			141

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MAJOR EQUIPMENT INVENTORY  
(cont. -2-)

EQUIPMENT	GOVERNMENT OWNED	GOVERNMENT RENTED	SUB-CONTRACTOR CONTROLLED	TOTAL
Welders	619	.	119	738
Light Plants	450		164	614
Low Boys	31		6	37
Lumber Carriers	12	3	7	22
Farm Implements	102			102
Earth Augers	15			15
Chlorinators & X-Ray	31	1		32
Boats	24	3		27
Tanks	15			15
Turnpulls			32	32
Oil Distributors - road			5	5
Mixing machines - road			4	4
Euclids, Kochring tractor trucks	32		22	54

TRAFFIC

EQUIPMENT	GOVERNMENT OWNED	GOVERNMENT RENTED	SUB-CONTRACTOR CONTROLLED	TOTAL
Locomotives	37	5	2	44
Flat Cars	41	15	20	76
Gondolas, bottom dumps & hoppers	249	123	12	384
Inspection	2			2
Push cars & motor cars	73			73
Passenger (business)	1			1
Caboose	6	2		8
Oil Tankers	13	1		14
Tool cars	2			2

CRANE AND RIGGING

EQUIPMENT	GOVERNMENT OWNED	GOVERNMENT RENTED	SUB-CONTRACTOR CONTROLLED	TOTAL
Clam buckets	42			42
Drag buckets	58	1		59
Cranes	155	24	62	241
w/Clam buckets	29			29
w/Drag buckets	41			41
Derricks	3	1		4
Hoisting units	72			72
Locomotive cranes	5			5
Pile Hammers	9	6		14
GRAND TOTAL - - - - -	9076	301	1792	11,169

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**MAJOR EQUIPMENT INVENTORY  
(cont. -3-)**

A total of 3,676 government owned small tools, consisting of saws, electric drills, grinders, metal shop tools and air tools were used in the construction shops.

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EXHIBIT B

CUMULATIVE INTERVIEWS AND HIRES BY REGION AS OF 1/13/45

REGION	I N T E R V I E W S				TOTAL INT.	H I R E S						TOTAL HIRES
	DU PONT*	N.O.L.	H.J.Z.W.	OLY.COMM.		DU PONT	N.O.L.	S.H.W.	H.J.Z.W.	OPERATIONS	OLY.COMM.	
I	3689		68		3757	909			31	19		959
II	5849	71	95		6015	2081	59		52	9		2201
III	11018	125	25		11168	4125	106		25	3		4259
IV	3000		66		3066	904			30	17		951
V	4209		46		4255	1516			9	4		1529
VI	31662	356	142		32160	10822	266		92	40		11220
VII	10045	91	218		10354	2830	41		80	29		2980
VIII	19244	273	76		19593	8695	195	15	36	13		8954
IX	50492	236	306		51034	18598	167	32	159	78		19034
X	30751	657	384		31792	11543	321	24	159	109		12156
XI	20455	116	38		20609	6932	110	9	32	55		7138
XII	65376	954	1263	229	67822	21626	495	55	397	208	132	22913
CANADA	415				415	13						13
<b>TOTAL</b>	<b>256205</b>	<b>2879</b> <b>2897</b>	<b>2727</b>	<b>229</b>	<b>262040</b>	<b>90594</b>	<b>1760</b>	<b>135</b>	<b>1102</b>	<b>584</b>	<b>132</b>	<b>94307</b>

EXHIBIT B

\* Includes S.H.W. and Operations, since Int. on these programs were not reported separately.



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COSTS % FROM BEGINNING OF RECRUITMENT THROUGH  
JULY, 1944.

1. Salaries and Wages:	25.25%	\$ 11.53
2. Wilmington Office Expenses:	0.57%	.28
3. Transportation & Travel (Field Men)	12.93%	5.91
4. Field Medical Examinations:	1.22%	.56
5. Advertising - Newspaper & Radio:	21.33%	9.75
6. Telephone & Telegraph:	3.98%	2.72
7. Teletype	0.31%	.14
8. Rent and Electric Current - Gray Bldg.	0.31%	.14
9. Rent - Field Offices & Equipments:	0.03%	.01
10. Postage:	0.32%	.15
11. Freight & Express:	0.24%	.11
12. Printing & Office Supplies:	0.48%	.23
13. Passes Bus Service:	1.70%	.78
14. Passes Bunkhouse Operation	1.94%	.89
15. Meals Served Recruits in Passes:	1.56%	.85
16. Personnel Inter-Plant Transfer Expense:	0.21%	.10
17. Miscellaneous	<u>0.01%</u>	<u>.00</u>
18. Recruitment Operational Costs:	74.66%	34.13
19. Losses on T & S Advances:	<u>25.34%</u>	<u>11.58</u>
	100.00%	\$ 45.70

Average Cost per:

Interview	\$12.33
Hire	33.90
Arrival	45.70

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COSTS OF RECRUITMENT - FINAL AS OF  
JANUARY 1948

1. Local Payroll:	\$ 752,122.77
2. Wilmington Payroll Expense:	75,232.41
3. Wilmington Office Expense:	15,315.77
4. Personal Expense Accounts:	695,365.36
5. Medical Examinations:	30,872.60
6. Advertising:	938,699.25
7. Telephones (Gray Bldg.):	63,566.44
8. Telegraph (Gray Bldg.):	67,885.10
9. Teletypes:	8,914.50
10. Rent and Utilities:	11,151.57
11. Rent - Field Offices:	1,448.69
12. Postage:	8,550.44
13. Freight & Express:	6,332.90
14. Printing & Office Supplies:	14,279.22
15. Pass Bus Services:	55,950.14
16. Pass Bankhouse Services:	63,638.12
17. Pass Meals to Recruits:	59,289.88
18. Inter-Plant Transfer Personnel:	5,947.84
19. Miscellaneous:	<u>294.01</u>
Total:	\$2,874,424.79
20. Losses on T & S Advances:	<u>1,013,413.57</u>
	3,887,838.36
Accounts Rec'd (Sub-Contractors)	<u>6,582.00</u>
Net Expenditures:	3,881,256.78
Average Cost per:	
Interview	\$14.60
Hire	41.10
Arrival	52.38

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**CRITICAL CRAFTS**  
**100-B AREA**  
 PROJECT 9536

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
12/19/65	578	800	222	264	268	2	200	24	80	78	78	—	20	18	18	5	5	—	22	22	—	20	18	18	0	0	—
12/26/65	728	780	50	670	670	—	114	204	19	70	70	—	20	20	—	3	3	—	20	22	—	40	20	20	5	5	—
1/2/66	908	880	28	1100	1100	—	200	284	84	78	78	—	70	86	18	5	5	2	20	20	20	40	20	20	5	5	—
1/9/66	908	880	28	1100	1080	20	200	280	100	78	78	—	70	70	—	5	5	—	20	20	20	40	20	20	5	5	—
1/16/66	1180	900	280	1200	1000	200	288	128	181	78	78	—	70	60	10	10	0	5	20	20	20	40	20	—	5	5	—
1/23/66	1480	884	596	1300	1000	300	300	100	200	78	70	5	128	24	28	18	0	5	120	20	20	40	20	—	7	7	—
1/30/66	1480	800	680	1400	984	416	240	188	240	78	78	5	128	128	—	18	7	0	120	20	24	40	20	—	5	5	—
2/6/66	1480	812	668	1400	1200	200	240	288	240	98	70	20	128	118	26	18	0	10	120	118	20	20	20	18	18	18	—
2/13/66	1480	887	593	1400	1400	0	240	140	208	98	78	20	128	174	24	20	0	22	200	98	107	20	40	40	18	18	—
2/20/66	1480	800	680	1400	1000	400	240	140	200	100	85	18	178	180	128	40	0	21	220	97	128	160	60	20	20	20	—
2/27/66	1000	800	200	1300	1080	220	280	140	110	118	118	—	228	190	128	48	18	28	200	127	128	128	20	20	20	20	—
3/6/66	1100	880	220	1300	1080	220	228	140	80	128	128	—	200	200	—	20	18	7	210	120	20	128	40	20	20	0	25
3/13/66	1100	800	300	1300	1100	200	140	140	80	128	128	—	200	200	—	20	18	11	178	118	20	78	20	20	20	20	—
3/20/66	1100	828	272	1300	1080	220	140	140	—	128	128	—	240	200	40	20	18	5	178	128	20	78	78	—	20	20	—
3/27/66	1080	800	280	980	900	80	160	100	—	110	110	—	220	220	—	20	20	—	200	128	178	78	78	—	20	20	—
4/3/66	900	700	200	800	800	—	78	78	—	100	100	—	278	278	—	28	22	5	220	128	206	20	78	18	20	20	—
4/10/66	800	680	120	700	700	—	80	80	—	100	100	—	200	200	—	40	40	—	200	128	128	20	20	—	20	20	—
4/17/66	700	524	176	800	800	—	80	60	—	100	100	—	228	128	—	48	40	5	200	128	228	108	20	18	20	20	—
4/24/66	700	600	100	400	400	—	40	60	—	128	128	—	220	220	—	48	22	22	278	207	178	128	24	27	20	20	—
5/1/66	700	600	100	300	300	—	80	80	—	128	128	—	240	240	—	78	27	48	278	207	178	128	24	27	20	20	—
5/8/66	800	500	300	278	278	—	80	80	—	128	128	—	240	240	—	78	28	28	278	218	168	128	24	27	20	20	—
5/15/66	800	480	320	278	278	—	80	80	—	128	128	—	200	200	—	28	28	—	278	208	168	160	108	—	20	20	—
5/22/66	400	480	80	280	280	—	80	80	—	100	100	—	240	240	—	48	40	5	278	208	168	100	100	—	20	20	—
5/29/66	400	488	88	200	188	12	18	18	—	100	100	—	278	220	58	40	40	—	278	128	128	60	20	—	20	20	—
6/5/66	280	480	200	208	188	20	18	18	—	100	100	—	200	200	20	40	28	5	260	120	120	20	20	—	20	20	—
6/12/66	280	400	120	128	128	—	10	10	—	100	98	2	278	284	121	40	28	5	220	120	40	20	20	—	20	20	—
6/19/66	280	280	—	128	128	—	5	5	—	88	88	—	220	220	—	40	24	2	220	120	20	20	20	—	20	20	—
6/26/66	200	200	—	180	180	—	5	5	—	88	88	—	220	224	4	28	28	10	120	120	—	70	70	—	18	18	—
7/3/66	280	230	50	180	130	50	5	5	—	88	88	—	220	220	—	20	20	—	140	140	—	20	20	—	5	5	—
7/10/66	200	200	—	78	78	—	5	5	—	20	20	—	150	180	—	18	18	—	200	100	—	20	20	—	5	5	—
7/17/66	180	180	—	60	60	—	0	0	—	0	0	—	78	78	—	5	5	—	20	20	—	20	20	—	5	5	—
7/24/66	100	100	—	18	18	—	0	0	—	0	0	—	28	28	—	1	1	—	28	28	—	5	5	—	1	1	—
7/31/66	150	150	—	18	18	—	0	0	—	0	0	—	28	28	—	2	2	—	18	18	—	5	5	—	1	1	—
8/7/66	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—

SHEET 1 OF 11 SHEETS

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# CRITICAL CRAFTS 100-D AREA PROJECT 9536

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
12/19/63	90	18	74	100	78	28	35	0	28	8	3	---	18	0	18	2	2	---	8	2	6	0	0	---	0	0	---
12/26/63	80	100	20	180	180	---	38	0	38	38	38	---	36	7	29	4	4	---	5	8	---	0	0	---	0	0	---
1/2/64	184	100	84	248	248	---	67	11	56	28	28	---	44	17	27	8	1	8	12	8	7	10	8	8	1	1	---
1/9/64	188	78	107	200	100	100	67	11	54	28	28	---	44	17	27	8	1	8	12	8	7	10	8	8	0	0	---
1/16/64	135	80	78	230	80	170	87	11	56	48	48	---	32	15	17	4	1	8	14	4	10	8	8	---	0	0	---
1/23/64	108	78	34	120	90	30	40	18	21	48	36	10	24	10	24	2	2	---	8	4	8	8	8	---	1	1	---
1/30/64	188	90	88	180	128	---	60	30	10	34	42	8	32	18	18	8	2	1	7	7	---	8	8	---	1	1	---
2/6/64	140	100	60	148	148	---	60	40	20	34	28	11	28	27	1	8	2	4	12	12	---	18	8	15	0	0	---
2/13/64	85	80	8	130	130	---	38	38	---	38	28	18	28	28	---	8	8	---	12	12	---	8	8	1	2	2	---
2/20/64	182	80	72	300	188	44	84	22	32	40	28	18	28	27	1	4	4	---	24	12	12	8	8	1	2	2	---
2/27/64	208	80	128	284	188	96	84	22	32	44	28	18	30	28	4	4	8	2	24	12	14	22	8	17	2	2	---
3/6/64	444	84	380	640	188	228	108	20	88	78	30	48	38	32	4	7	4	8	28	8	20	24	8	29	8	8	3
3/13/64	410	80	380	800	188	312	108	20	88	96	31	64	38	38	---	7	4	8	30	4	28	48	8	40	8	8	---
3/19/64	508	88	420	840	288	184	87	80	87	80	38	18	121	121	---	12	12	1	48	8	40	21	18	8	8	8	---
3/26/64	610	80	520	620	288	234	87	97	---	80	40	10	84	77	11	8	8	---	62	8	84	51	51	---	8	8	---
4/2/64	748	180	498	788	481	314	114	114	---	70	82	18	88	88	---	8	3	---	92	8	82	22	22	1	8	8	---
4/9/64	820	180	370	800	481	48	128	128	---	88	32	8	78	71	8	8	8	1	48	28	17	22	61	2	7	8	8
4/16/64	820	200	320	800	600	---	128	128	---	88	84	1	78	78	---	8	8	---	67	28	24	23	18	8	7	7	---
4/23/64	328	200	128	688	688	30	128	128	---	80	80	10	120	120	31	8	8	1	100	28	77	40	18	28	7	7	---
4/29/64	484	200	288	710	628	88	148	148	---	100	80	32	100	100	---	8	8	8	98	8	97	78	12	68	8	8	---
5/6/64	780	248	488	880	628	234	180	180	---	88	78	7	148	108	48	8	8	8	108	8	97	89	12	18	8	8	---
5/13/64	720	488	228	900	628	278	180	180	---	98	98	---	180	140	10	10	8	4	100	24	88	88	18	25	8	8	---
5/20/64	870	548	322	1028	778	227	210	198	14	100	84	18	180	188	80	20	8	12	180	24	88	88	18	25	10	10	---
5/27/64	900	680	280	1100	800	300	210	204	8	100	88	14	200	188	7	20	20	---	120	44	88	84	26	11	12	12	---
6/3/64	900	880	80	1100	980	170	228	200	28	180	90	18	210	210	---	28	20	8	128	44	88	48	84	21	18	18	---
6/10/64	700	880	188	1000	960	88	178	170	8	188	188	---	280	280	---	28	20	8	128	70	88	68	24	21	18	18	---
6/17/64	700	880	180	1000	960	80	178	170	8	188	188	---	280	180	100	28	20	8	128	70	88	68	24	11	18	18	---
6/24/64	700	900	200	800	900	---	188	188	---	180	188	8	280	188	100	20	28	8	140	90	88	88	68	8	18	18	---
7/1/64	880	900	80	1318	960	378	242	180	92	188	124	80	248	188	480	31	28	88	248	88	188	188	80	112	23	28	---
7/8/64	900	900	---	900	880	88	128	128	18	188	120	---	300	120	270	80	12	28	280	90	180	100	70	88	28	28	8
7/15/64	888	800	48	770	700	70	80	80	---	100	308	---	400	120	270	40	12	28	280	90	240	80	78	8	23	28	---
7/22/64	888	780	48	780	780	---	80	80	---	102	180	---	480	181	228	48	18	28	288	100	288	100	88	48	28	24	1
7/29/64	688	640	28	728	680	48	80	80	---	100	100	---	800	122	288	80	18	28	287	180	287	80	88	7	28	24	---
8/5/64	740	810	130	828	818	10	50	80	---	120	120	---	700	180	540	70	28	48	310	204	108	100	90	10	20	20	---
8/12/64	780	700	80	828	828	---	80	80	30	180	148	10	880	280	300	40	22	8	288	200	88	184	88	88	20	18	---
8/19/64	780	700	80	887	887	---	80	88	18	188	180	---	780	288	282	70	48	27	298	298	8	188	181	28	20	20	---
8/26/64	780	680	100	880	800	80	80	70	10	180	180	---	780	242	208	70	24	14	291	291	---	180	180	---	28	24	---
9/2/64	800	800	---	400	400	---	70	70	---	100	100	---	780	780	---	70	70	---	278	278	---	110	110	---	18	18	---
9/9/64	800	800	---	240	240	---	70	70	---	128	128	---	800	780	80	78	78	---	280	280	---	110	100	10	18	18	---
9/16/64	1000	800	400	300	300	---	48	48	---	100	100	---	780	780	---	74	74	---	228	228	---	90	90	---	18	18	---

SHEET 2 OF 11 SHEETS

**SECRET**  
**CRITICAL CRAFTS**  
**100-D AREA**  
**PROJECT 9536**

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
9/13/64	---	---	100	290	225	65	85	85	---	75	75	---	850	850	---	85	85	20	225	225	---	90	90	---	10	10	---
9/20/64	800	800	---	280	280	---	25	25	---	75	75	---	850	750	100	85	70	15	270	225	45	90	80	10	10	10	---
10/7/64	480	480	---	280	280	---	20	20	---	75	75	---	780	710	80	75	74	1	225	225	---	80	80	---	10	10	---
10/14/64	512	580	✓ 150	280	280	---	25	10	9	100	75	25	800	730	80	81	70	11	210	200	10	110	80	30	10	10	---
10/21/64	600	680	✓ 80	400	280	120	11	11	---	80	80	---	1000	760	240	100	85	25	180	180	---	80	80	---	10	10	---
10/28/64	680	680	✓ 800	310	310	---	20	20	---	100	90	10	800	780	20	81	71	10	190	180	10	80	80	---	10	10	---
11/4/64	800	800	---	400	400	---	10	10	---	80	75	5	1000	900	100	100	80	11	180	180	---	80	78	2	10	10	---
11/11/64	500	425	77	300	300	---	8	8	✓ 2	80	75	5	700	780	✓ 80	70	70	---	150	145	5	80	80	---	5	5	---
11/18/64	300	290	10	225	225	---	4	8	✓ 4	80	85	5	800	640	61	80	81	10	100	100	---	60	40	✓ 9	5	5	---
11/25/64	280	108	44	125	125	---	1	1	---	80	45	5	280	261	✓ 11	25	27	✓ 2	180	180	---	60	60	---	5	5	---
12/2/64	180	180	---	45	45	---	1	1	---	80	80	---	75	140	✓ 65	8	9	✓ 1	60	80	15	80	45	15	5	5	---

SHEET 3 OF 11 SHEETS

**SECRET**

**SECRET**

# CRITICAL CRAFTS 100-F AREA PROJECT 9536

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
12/28/53	15	22	7	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/8/54	22	12	10	20	20	0	0	0	0	0	0	0	2	0	2	0	0	0	4	2	2	0	0	0	0	0	0
1/18/54	22	12	10	24	12	12	0	0	0	0	0	0	10	0	10	0	0	0	4	0	4	0	0	0	0	0	0
1/28/54	22	0	22	22	0	22	0	0	0	0	0	0	10	0	10	0	0	0	4	0	4	0	0	0	0	0	0
1/30/54	22	12	10	24	22	2	0	0	0	0	0	0	10	0	10	0	0	0	4	0	4	0	0	0	0	0	0
1/30/54	22	12	10	24	22	2	10	0	10	0	0	0	4	0	4	1	0	1	4	0	4	0	0	0	0	0	0
2/8/54	42	22	20	22	22	0	22	22	22	0	0	0	4	0	4	1	0	1	2	2	0	0	0	0	0	0	0
2/12/54	42	22	20	122	122	0	22	22	22	12	0	0	4	0	4	1	0	1	2	2	0	0	0	0	0	0	0
2/22/54	24	22	2	122	122	0	22	22	22	12	0	0	4	0	4	1	0	1	4	0	4	0	0	0	0	0	0
3/8/54	24	22	2	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0
3/15/54	24	22	2	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0
3/22/54	24	22	2	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0
3/29/54	24	22	2	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0
4/5/54	24	22	2	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0
4/12/54	172	22	150	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	10	2	2	1	1	1
4/19/54	172	22	150	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	10	10	0	1	1	1
4/26/54	100	22	78	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	0	1	1	1
5/3/54	72	22	50	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	0	1	1	1
5/10/54	122	22	100	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	0	1	1	1
5/17/54	122	22	100	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	0	1	1	1
5/24/54	122	22	100	122	122	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	0	1	1	1
5/31/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
6/7/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
6/14/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
6/21/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
6/28/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
7/5/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
7/12/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
7/19/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
7/26/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
8/2/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
8/9/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
8/16/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
8/23/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
8/30/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
9/6/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
9/13/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
9/20/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
9/27/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
10/4/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
10/11/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
10/18/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
10/25/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
11/1/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
11/8/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
11/15/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
11/22/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
11/29/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
12/6/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
12/13/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
12/20/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0
12/27/54	222	122	100	222	222	0	22	22	22	12	0	0	0	0	0	0	0	0	4	0	4	6	6	2	0	0	0

SHEET 4 OF 11 SHEETS

**SECRET**

**SECRET**

**CRITICAL CRAFTS  
100-F AREA  
PROJECT 9536**

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
9/30/44	800	888	14	480	480	—	70	70	—	180	180	—	800	872	77	85	81	84	200	188	11	80	80	10	28	28	—
10/7/44	800	800	—	280	280	—	80	80	—	180	180	—	600	198	204	80	8	85	200	287	88	80	80	—	28	28	—
10/14/44	800	880	80	200	200	—	48	40	8	130	77	53	400	200	200	80	11	80	200	117	88	78	80	28	28	—	
10/21/44	800	880	80	280	280	—	30	30	—	140	80	60	600	180	190	80	12	80	200	180	70	80	80	—	28	28	—
10/28/44	800	800	—	200	178	22	28	28	—	140	140	—	600	198	202	80	18	88	200	91	108	80	80	10	28	28	—
11/4/44	800	880	80	200	180	20	28	27	1	180	80	100	600	100	600	80	8	81	200	188	88	80	80	10	28	30	2
11/11/44	800	880	80	200	180	20	28	27	1	180	80	100	600	180	488	80	24	44	200	118	88	80	48	18	28	18	8
11/18/44	800	880	80	200	180	20	28	27	1	180	80	100	600	180	288	80	27	28	200	88	111	80	80	—	18	18	2
11/25/44	480	178	272	178	180	16	80	80	—	100	78	22	700	448	288	78	18	87	200	88	111	78	80	18	18	12	—
12/2/44	400	178	212	180	180	—	18	20	8	100	100	—	700	887	148	78	24	80	280	88	161	78	80	18	18	12	—
12/9/44	400	178	212	180	180	—	18	18	—	100	80	20	700	888	42	78	24	80	280	88	161	78	80	18	18	12	—
12/16/44	280	200	80	180	180	—	10	10	—	100	88	4	700	878	28	100	71	80	200	178	88	78	78	—	18	18	—
12/23/44	280	200	80	150	60	90	10	10	—	100	90	10	780	888	88	180	78	28	200	180	80	78	78	—	18	18	—
12/30/44	280	280	—	100	100	—	8	10	2	80	78	6	780	800	180	100	80	80	200	160	80	78	78	—	18	18	—
1/6/45	280	300	20	128	128	—	8	11	3	80	70	10	780	800	180	100	80	80	178	180	88	78	78	—	18	18	—
1/13/45	280	300	20	100	100	—	8	11	3	78	88	10	780	878	278	100	80	80	180	180	80	78	80	18	18	18	—

SHEET 5 of 11 SHEETS

**SECRET**

# CRITICAL CRAFTS

## 105 AREA

### PROJECT 9536

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
12-18-43	180	180	---	182	182	---	24	24	---	12	12	---	24	10	-14	2	2	---	8	8	---	80	60	-20	4	4	---
12-25-43	220	220	---	226	226	---	44	28	-11	12	12	---	22	15	-7	2	2	---	16	20	---	66	66	---	1	1	---
1-2-44	278	278	---	282	282	---	48	48	---	12	12	---	20	10	-10	2	2	---	12	12	---	66	66	---	1	1	---
1-9-44	278	278	---	580	580	---	64	22	-42	12	12	---	14	14	---	2	2	---	6	6	---	64	64	---	1	1	---
1-16-44	208	208	---	704	580	-124	62	60	-2	12	2	-10	22	10	-12	2	2	---	14	12	---	64	64	---	1	1	---
1-23-44	242	688	-446	224	200	-24	126	70	-56	12	12	---	114	26	-88	2	2	---	26	26	---	74	74	---	2	2	---
1-30-44	208	241	-33	280	200	-80	116	72	-44	64	12	-52	22	22	---	2	2	-1	27	27	---	92	90	-2	---	---	---
2-6-44	422	242	-180	280	422	-138	84	70	-14	127	111	-16	101	20	-81	10	2	-8	20	66	-2	120	120	---	27	2	-24
2-13-44	210	278	-68	422	270	-152	22	22	---	124	22	-102	72	20	-52	10	2	-8	42	22	-11	224	124	-100	22	22	---
2-20-44	242	421	-179	422	222	-200	74	22	-52	141	112	-29	102	22	-80	17	2	-12	71	22	-12	276	122	-154	24	24	---
2-27-44	702	407	-295	222	402	-180	72	27	-45	124	112	-12	102	62	-40	12	2	-10	21	22	-12	274	122	-152	24	24	---
3-6-44	242	222	-20	222	222	---	22	22	---	22	22	---	22	22	---	2	2	---	2	2	---	272	122	-150	22	22	1
3-13-44	222	222	---	222	417	-195	44	42	-2	124	22	-102	107	107	---	14	7	-7	24	27	-27	222	121	-101	41	41	---
3-20-44	222	222	---	420	420	---	42	42	---	122	27	-95	27	27	---	12	10	-2	22	72	-4	212	122	-90	27	27	---
3-27-44	212	422	-210	222	222	---	22	22	---	122	22	-100	104	122	-18	12	22	1	22	72	-2	127	127	-4	27	27	---
4-3-44	222	422	-200	222	222	---	22	22	---	122	112	-10	102	102	---	12	12	---	22	22	-17	220	222	-2	22	22	---
4-10-44	222	220	-2	272	272	---	22	22	---	124	112	-12	101	101	---	12	12	---	22	20	-2	222	224	-2	42	42	---
4-17-44	222	422	-200	422	401	-21	44	44	---	122	122	-2	122	24	-11	12	12	---	110	22	-42	472	420	-52	22	22	---
4-24-44	222	247	-25	422	422	---	40	40	---	122	122	-2	121	121	---	22	24	-21	124	101	-22	412	422	-10	22	22	---
5-1-44	222	222	---	422	227	-195	42	42	---	122	122	-2	121	120	-1	24	21	-3	127	101	-42	421	412	-10	120	120	---
5-8-44	722	722	---	422	420	-2	27	27	---	121	121	---	220	122	-98	47	20	-17	122	101	-42	422	222	-100	112	112	---
5-15-44	201	702	-501	420	222	-198	22	22	-12	122	122	-2	220	122	-92	27	22	-4	117	24	-21	272	421	-151	117	117	---
5-22-44	222	722	-500	412	222	-190	22	24	-12	172	122	-50	274	222	-94	27	22	-4	122	27	-42	222	222	-100	22	22	---
5-29-44	722	722	---	412	222	-190	42	42	---	122	127	-5	222	222	---	12	12	-2	121	124	-27	272	222	-150	72	72	-1
6-5-44	722	722	---	222	222	---	42	42	---	127	127	---	222	222	---	22	21	-1	127	122	-21	222	270	-12	42	42	---
6-12-44	272	222	-50	420	222	-198	42	42	---	127	127	---	222	222	---	11	11	---	127	112	-22	222	270	-12	42	42	---
6-19-44	701	701	---	422	222	-198	42	42	---	222	127	-95	222	222	-20	11	11	---	122	117	-22	222	214	-10	44	44	---
6-26-44	222	222	---	222	222	-2	27	44	-12	222	172	-52	222	220	-42	11	11	---	122	122	-20	227	220	-7	72	72	---
7-3-44	222	222	---	422	222	-198	27	24	-3	127	222	-52	222	212	-44	12	2	-2	122	127	-22	270	222	-150	22	22	-12
7-10-44	222	222	---	222	222	-2	27	44	-12	122	172	-52	222	212	-44	12	2	-2	122	127	-22	222	222	-150	22	22	---
7-17-44	222	412	-190	222	222	-2	27	27	-2	122	122	-2	222	222	-124	22	20	1	127	122	-22	104	22	-12	22	27	-2
7-24-44	222	222	---	222	222	-2	22	22	-2	122	122	-2	222	222	-122	40	22	-12	122	172	-12	421	422	-1	40	40	---
7-31-44	222	222	---	222	222	-2	22	22	-2	121	171	-50	222	222	-2	22	22	-12	122	177	-20	427	422	-1	40	40	---
8-7-44	222	422	-200	271	271	---	27	27	---	122	122	---	222	222	-100	40	22	-17	227	122	-42	422	422	-2	40	22	-2
8-14-44	422	401	-21	122	122	---	22	22	---	122	122	---	124	122	-2	40	22	-17	122	122	---	227	220	-7	20	20	---
8-21-44	242	242	---	122	242	---	24	24	---	122	122	---	122	122	-2	40	22	-17	122	122	---	242	242	---	12	12	---
8-28-44	277	244	-33	122	122	---	24	24	---	122	122	---	122	122	-2	40	24	-24	122	122	---	222	222	---	12	12	---
9-4-44	422	222	-200	122	122	---	24	24	---	122	122	---	122	122	-2	40	24	-24	122	122	-2	222	222	-24	12	12	---

SHEET 6 OF 11 SHEETS



~~SECRET~~

# CRITICAL CRAFTS

## 105 AREA

### PROJECT 9536

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
9-15-44	265	287	-22	180	180	---	19	19	---	150	150	---	190	155	-35	40	17	-23	155	140	-15	332	332	---	18	18	---
9-22-44	272	256	-16	180	180	---	19	19	---	160	160	---	215	178	-37	35	17	-18	156	141	-14	309	309	---	18	18	---
9-30-44	328	328	---	180	120	---	14	14	---	180	180	---	225	220	-5	35	17	-18	180	145	-35	319	270	-49	18	18	---
10-7-44	328	328	---	180	120	---	14	14	---	138	138	---	280	275	-5	30	24	-6	200	145	-55	319	278	-41	18	18	---
10-14-44	328	370	+42	180	120	---	14	10	-4	135	112	-23	260	230	-30	28	23	-5	202	145	-57	355	271	-84	6	6	---
10-21-44	288	370	+82	180	120	---	12	12	---	140	108	-32	280	240	-40	28	26	-2	182	165	-17	352	268	-84	51	41	-10
10-28-44	258	280	+22	120	108	-12	12	12	---	130	115	-15	280	218	-62	28	23	+5	182	150	-32	338	279	-59	65	65	---
11-4-44	288	248	-40	180	120	---	12	12	---	110	108	-2	300	239	-61	28	23	-5	207	170	-37	310	280	-30	62	50	-12
11-11-44	298	298	---	180	120	---	8	10	+2	120	95	-25	278	238	-40	25	25	---	202	163	-39	297	287	-10	62	59	-3
11-18-44	120	288	+168	180	120	---	8	8	---	120	105	-15	360	269	-91	31	23	-8	182	136	-46	15	222	+207	65	65	---
11-25-44	120	91	-29	180	120	---	8	8	---	120	95	-25	350	248	-102	28	20	-8	187	128	-59	15	15	---	65	65	---
12-2-44	80	88	+8	80	80	---	4	4	---	70	88	+18	180	201	+21	18	19	+1	122	118	-4	10	10	---	53	53	---
12-9-44	80	55	-25	80	80	---	4	4	---	90	88	-2	200	200	---	18	17	-1	154	120	-34	10	10	---	53	53	---
12-16-44	80	55	-25	80	80	---	4	4	---	75	78	+3	220	200	-20	19	18	---	134	120	-14	10	10	---	55	40	-15
12-23-44	80	55	-25	80	45	-35	4	4	---	80	80	---	200	185	-15	18	18	---	130	110	-20	15	15	---	23	23	---
12-30-44	80	50	-30	80	45	-35	4	4	---	80	80	---	300	185	-115	18	18	---	130	110	-20	10	10	---	23	23	---
1-6-45	80	40	-40	60	40	-20	4	4	+2	80	80	---	240	175	-65	24	15	-9	180	120	-60	12	12	---	6	6	---
1-13-45	80	50	-30	60	40	-20	2	4	+2	80	40	-40	240	175	-65	24	15	-9	170	130	-40	12	11	-1	6	6	---
1-20-45	80	50	-30	60	35	-25	2	2	---	80	40	-40	240	160	-80	24	15	-9	155	105	-50	12	10	-2	6	6	---
1-27-45	80	45	-35	60	35	-25	2	2	---	15	15	---	200	145	-55	20	20	---	135	105	-30	12	10	-2	6	4	-2
2-3-45	80	30	-50	60	25	-35	2	2	---	15	10	-5	180	135	-45	15	15	---	140	105	-35	12	12	---	6	6	---

SHEET 1 OF 11 SHEETS

~~SECRET~~

# CRITICAL CRAFTS 200-W AREA PROJECT 9536

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
12/19/43	480	81	399	416	297	118	26	10	16	48	45	---	28	10	18	2	2	---	20	8	16	20	16	4			
12/26/43	480	482	12	416	416	---	26	20	6	48	46	---	28	6	17	3	3	---	20	7	16	20	16	4			
1/2/44	480	480	---	600	600	---	40	40	---	58	56	---	28	28	---	3	3	---	40	12	28	20	16	4			
1/9/44	480	408	72	680	700	160	60	40	20	60	60	---	60	60	---	8	8	---	60	17	35	28	26	---			
1/16/44	500	408	92	1060	700	360	70	40	30	68	61	7	68	49	19	6	3	3	68	28	33	16	16	---			
1/23/44	680	260	300	1300	700	600	100	38	62	78	70	8	98	64	29	8	0	8	70	26	46	60	30	20			
1/30/44	800	228	372	1800	700	1100	128	40	88	98	78	19	140	84	78	10	8	8	70	48	28	60	30	20			
2/6/44	680	200	480	1800	1000	800	160	40	110	110	78	34	180	86	64	16	8	9	90	63	27	80	30	30			
2/13/44	680	200	480	1700	1000	700	160	100	60	126	78	49	178	92	83	20	9	11	90	63	27	80	30	30			
2/20/44	800	280	520	1750	1000	750	178	100	78	126	78	49	160	117	33	20	9	11	90	63	27	80	30	36			
2/27/44	800	260	540	1800	1014	786	180	100	80	160	82	68	180	148	36	26	12	13	100	83	17	80	26	46			
3/5/44	800	280	520	1700	1014	686	180	100	80	180	109	41	180	139	41	26	16	9	100	76	26	90	26	66			
3/12/44	800	200	600	1700	1098	602	160	148	4	160	106	44	180	148	32	30	14	16	116	68	50	30	40	50			
3/19/44	800	200	600	1860	1200	660	180	160	---	180	130	30	210	207	3	30	22	8	126	70	56	100	70	30			
3/26/44	800	300	500	1800	1378	222	170	170	---	180	130	30	230	180	50	30	26	6	136	64	71	110	90	20			
4/2/44	800	374	426	1800	1600	100	120	120	---	178	144	31	240	240	---	30	30	---	170	64	108	120	90	30			
4/9/44	800	306	494	1880	1600	280	180	180	---	190	164	36	280	260	20	30	28	2	190	70	120	136	90	46			
4/15/44	800	300	500	1860	1600	260	180	180	---	210	167	43	310	310	---	30	30	---	180	76	106	160	113	37			
4/22/44	800	300	500	1860	1660	200	180	180	---	210	190	20	320	247	73	30	28	2	190	103	87	160	97	63			
4/29/44	800	330	470	1700	1662	38	180	180	---	200	190	10	340	300	40	30	17	13	200	103	97	170	109	61			
5/6/44	800	300	500	1700	1662	38	180	180	---	210	190	20	360	343	7	30	17	13	226	103	122	190	109	61			
5/13/44	800	400	400	1700	1546	154	180	180	---	220	220	---	370	360	20	36	20	16	240	110	130	210	106	101			
5/20/44	725	400	325	1600	1500	100	160	160	---	220	211	9	400	389	11	36	24	11	260	110	140	220	109	111			
5/27/44	700	600	200	1800	1600	---	180	180	---	200	200	---	420	389	31	36	31	4	260	131	129	230	184	46			
6/3/44	650	650	100	1200	1200	---	160	146	16	180	180	---	440	440	---	36	32	3	260	137	123	236	139	36			
6/10/44	650	700	50	1100	1000	100	116	116	3	180	180	---	480	480	---	40	36	4	270	160	110	240	180	60			
6/17/44	800	650	150	960	900	60	116	116	---	180	180	---	700	500	200	60	42	8	330	220	110	226	204	110			
6/24/44	800	900	100	900	900	---	90	90	---	180	178	2	826	591	234	60	67	3	340	240	130	250	240	10			
7/1/44	800	800	---	800	800	---	100	90	10	160	160	---	760	690	160	66	60	6	360	266	94	300	261	60			
7/8/44	760	760	---	600	600	---	75	66	10	160	160	---	760	608	342	70	32	38	360	247	103	300	300	---			
7/15/44	650	650	---	760	760	---	75	76	---	160	160	---	760	430	320	70	68	12	360	230	120	300	300	---			
7/22/44	650	600	50	800	800	---	70	70	---	160	160	---	760	396	364	70	36	36	360	268	94	300	300	---			
7/29/44	650	600	100	800	800	---	70	70	---	160	160	---	760	440	310	70	40	30	360	300	60	300	300	---			
8/5/44	600	486	114	700	700	---	66	66	---	139	139	---	760	470	280	70	63	17	360	380	---	300	300	---			
8/12/44	600	426	174	600	600	---	66	66	---	160	160	---	760	488	262	70	66	6	360	300	80	300	276	26			

SHEET 8 OF 11 SHEETS

~~SECRET~~  
**CRITICAL CRAFTS**  
**200-W AREA**  
**PROJECT 9536**

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
8/19/44	600	428	78	600	500	---	50	50	---	125	125	---	580	560	---	75	65	10	240	280	---	300	288	12			
8/25/44	600	480	60	600	500	---	50	50	---	125	125	---	580	480	100	75	65	10	240	280	---	300	288	12			
9/1/44	600	480	60	450	450	---	25	25	---	125	125	---	580	600	180	70	55	15	280	300	---	180	180	---			
9/8/44	600	480	60	300	300	---	50	88	16	125	125	---	575	400	175	65	53	12	300	300	---	180	184	16			
9/15/44	600	480	60	300	300	---	50	80	---	125	125	---	560	418	142	70	66	4	300	300	---	300	194	106			
9/22/44	380	360	---	250	200	50	20	20	---	75	75	---	600	500	---	50	50	---	200	200	---	175	175	---			
9/30/44	275	275	---	150	150	---	20	20	---	85	85	---	400	419	✓ 19	80	80	---	180	180	---	175	180	5			
10/7/44	350	360	---	185	188	---	15	15	---	75	75	---	600	628	✓ 28	60	65	✓ 5	175	180	5	175	180	5			
10/14/44	350	368	✓ 8	180	180	---	15	10	5	75	65	10	375	430	✓ 55	60	61	✓ 1	180	180	10	160	160	---			
10/21/44	280	328	✓ 48	130	130	---	2	2	---	80	75	5	400	375	25	52	41	✓ 9	240	200	40	120	120	---			
10/28/44	290	385	✓ 95	150	150	---	12	12	---	70	88	18	375	418	✓ 40	55	25	✓ 4	300	300	---	180	160	---			
11/4/44	200	200	---	118	105	10	0	0	---	80	65	15	385	320	75	60	30	10	300	180	120	110	110	---			
11/11/44	200	180	20	100	100	---	0	0	---	80	65	15	315	340	✓ 25	33	33	---	230	165	65	95	95	---			
11/18/44	180	180	---	80	75	5	0	0	---	50	45	5	315	344	29	30	41	✓ 11	300	180	120	90	90	---			
11/25/44	160	108	52	70	64	6	0	0	---	50	45	5	300	300	---	30	32	✓ 2	300	155	145	75	75	---			
12/2/44	140	120	20	30	28	2	0	0	---	40	40	---	200	200	---	20	18	2	150	150	---	80	80	---			
12/9/44	120	120	---	75	75	---	0	0	---	30	30	---	180	180	---	15	15	---	90	90	---	90	90	---			

SHEET 9 OF 11 SHEETS

**LEGEND:**  
 REQ. Number of men requested by the Division Engineer for work in the above area.  
 ALLOC. Number of men allocated by the Planning & Scheduling Department to work in the above area.  
 SHORT Number of men short daily not including absenteeism.

**CRITICAL RAFTS**  
**200-E AREA**  
 PROJECT 9536

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
12/12/43	80	16	64	46	48	---	2	0	2	6	6	---	8	0	8	1	1	---	4	0	4	2	2	---			
12/26/43	144	200	56	80	180	100	2	0	2	6	8	---	3	0	3	1	1	---	6	4	2	4	2	2			
1/2/44	260	76	176	192	186	6	2	2	---	8	6	---	12	0	12	1	1	---	8	4	2	2	0	2			
1/16/44	300	76	226	192	80	132	4	2	2	10	10	---	12	12	---	0	2	2	8	0	8	2	0	2			
1/30/44	100	16	84	80	32	68	2	0	2	10	10	---	12	4	8	0	0	---	8	0	8	2	2	---			
2/13/44	86	16	69	46	16	32	4	0	4	10	10	---	21	0	21	1	0	1	18	0	18	2	2	---			
2/20/44	100	16	84	100	16	84	4	0	4	10	18	8	26	10	16	0	0	---	24	0	24	2	2	---			
2/27/44	100	16	84	100	16	84	4	0	4	18	9	9	10	9	1	1	1	---	24	0	24	2	2	---			
3/6/44	100	16	84	100	20	80	4	0	4	18	10	8	26	9	16	1	1	---	24	0	24	6	0	6			
3/13/44	100	32	68	100	48	52	4	0	4	18	16	2	26	20	6	1	5	4	24	16	9	6	0	6			
3/20/44	100	32	68	100	48	52	4	4	---	18	16	2	26	14	11	1	4	3	24	16	9	6	6	---			
3/27/44	68	32	34	108	80	28	3	2	1	18	18	---	17	16	1	1	7	6	7	6	1	8	6	3			
4/3/44	36	32	4	148	148	---	2	2	---	18	18	---	19	14	4	1	3	2	7	7	---	8	6	3			
4/10/44	48	48	---	146	146	---	4	4	---	24	24	---	24	24	---	2	2	---	12	11	1	16	16	---			
4/17/44	90	50	40	184	180	4	7	7	---	32	29	3	60	34	16	3	1	2	13	10	3	13	13	---			
4/24/44	169	100	69	200	200	---	24	24	---	20	20	---	48	48	---	2	2	---	30	16	14	16	16	---			
4/30/44	216	100	116	200	200	---	36	36	---	30	26	6	66	60	6	2	2	---	28	27	1	20	16	4			
5/7/44	216	60	166	220	200	20	36	36	---	36	26	11	62	62	---	4	4	---	30	27	3	32	16	14			
5/14/44	216	50	166	288	200	88	40	40	---	36	30	6	63	69	6	4	4	---	46	16	29	32	20	12			
5/21/44	260	80	200	328	200	128	44	44	---	46	18	29	63	63	---	4	4	---	46	18	29	56	20	36			
5/28/44	260	80	190	266	200	66	44	44	---	44	16	28	66	66	1	6	4	1	50	16	34	46	20	26			
6/4/44	260	82	168	280	184	96	64	64	---	44	44	---	66	82	4	6	4	1	50	16	34	46	20	26			
6/11/44	260	82	168	320	184	136	66	64	2	50	36	14	66	66	27	6	2	3	50	16	34	46	24	11			
6/18/44	260	82	178	366	184	172	76	64	24	60	36	14	108	70	30	6	2	4	46	16	23	20	20	---			
6/25/44	180	160	---	320	210	110	82	80	2	68	60	8	66	66	1	8	4	2	40	16	24	24	20	4			
7/2/44	238	260	22	600	336	164	123	123	---	70	70	---	76	76	---	9	4	5	40	16	24	46	20	26			
7/9/44	342	360	18	672	336	336	148	146	2	78	78	---	129	70	59	13	4	9	46	16	30	61	36	16			
7/16/44	362	482	100	676	360	326	128	128	---	83	78	6	139	66	74	6	6	---	44	8	36	46	40	6			
7/23/44	396	396	---	782	464	296	134	110	4	126	70	56	147	66	92	10	6	4	44	8	36	60	36	24			
7/30/44	432	396	36	886	608	247	130	66	62	123	70	53	163	70	112	12	4	8	60	8	42	60	60	---			
8/6/44	392	379	63	943	600	343	133	83	50	132	66	64	176	66	110	16	4	11	73	12	61	73	60	13			
8/13/44	406	329	97	927	600	327	131	66	63	136	66	68	208	64	139	19	7	8	66	12	66	64	60	14			
8/20/44	430	310	120	901	619	282	129	77	62	126	73	56	183	60	133	19	10	9	66	12	66	64	60	14			
8/27/44	414	286	128	811	779	32	106	96	6	126	96	27	196	67	131	20	10	10	61	60	31	96	93	3			
9/3/44	428	306	122	790	790	---	103	90	13	134	106	26	212	72	140	20	20	---	61	60	31	100	96	16			
9/10/44	379	286	94	664	664	---	106	90	13	134	128	6	217	60	139	20	20	---	61	61	---	92	66	7			
9/17/44	363	286	66	647	647	---	103	90	13	140	129	11	217	60	167	20	20	---	66	66	---	107	107	---			
9/24/44	363	266	66	636	636	---	77	77	---	83	83	---	217	30	167	20	6	14	96	76	20	120	130	---			
9/30/44	330	266	66	641	641	---	76	76	---	80	60	---	236	67	161	27	6	21	100	61	16	126	120	6			
10/7/44	280	266	14	633	633	---	67	61	6	80	80	---	246	67	168	20	12	8	92	90	2	30	30	---			

SHEET 16 OF 11 SHEETS

~~SECRET~~  
**CRITICAL RAFTS**  
**200-E AREA**  
 PROJECT 9536

WEEK ENDING	LABORERS			CARPENTERS			REINF. ROD SETTERS			RIGGERS			PIPEFITTERS			PIPE WELDERS			ELECTRICIANS			MILLWRIGHTS			MWT. WELDERS		
	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT	NO. REQ.	NO. ALLOC.	NO. SHORT
9/23/44	280	280	---	390	380	10	44	44	---	80	80	---	245	57	188	12	6	6	92	92	---	25	25	---			
9/30/44	300	280	20	360	360	---	44	44	---	80	80	---	245	160	85	21	6	15	80	80	---	50	25	25			
10/7/44	293	293	---	340	332	8	34	34	---	78	78	---	239	162	77	19	14	5	78	68	10	80	25	25			
10/14/44	288	325	✓ 37	380	380	---	28	20	8	85	85	---	229	163	78	19	18	1	98	78	40	70	25	45			
10/21/44	240	310	✓ 70	350	300	50	33	30	3	80	85	5	235	221	4	22	25	✓ 4	100	55	45	70	50	20			
10/28/44	268	325	✓ 57	350	350	---	28	28	---	85	85	---	227	222	5	21	29	✓ 8	98	55	45	80	25	35			
11/4/44	275	275	---	360	217	143	22	22	---	80	45	15	250	100	150	25	10	15	100	60	50	70	50	20			
11/11/44	300	180	120	400	331	69	16	22	✓ 6	80	45	15	250	105	145	25	25	---	150	50	100	100	50	50			
11/18/44	330	150	180	440	325	115	18	30	✓ 2	85	45	20	300	167	167	30	22	8	185	45	122	100	100	---			
11/25/44	330	100	230	400	340	60	30	30	---	85	40	15	300	188	147	30	14	16	200	43	157	100	85	15			
12/2/44	300	145	155	350	345	5	30	32	✓ 2	85	45	20	300	191	109	30	20	10	220	60	160	100	85	15			
12/9/44	275	160	125	300	300	---	30	27	3	85	55	10	300	279	21	30	30	---	220	127	93	150	122	28			
12/16/44	275	175	100	235	225	10	32	29	3	75	71	4	300	260	40	30	24	4	200	138	62	150	144	4			
12/23/44	308	220	80	275	275	---	24	27	✓ 3	75	72	3	275	260	15	28	28	---	200	170	30	160	160	---			
12/30/44	300	200	100	275	257	18	20	22	✓ 2	75	65	10	350	260	90	35	25	7	210	150	60	130	150	---			
1/6/45	300	164	144	225	225	---	12	16	✓ 4	70	62	6	350	225	125	35	25	9	210	125	85	120	120	---			
1/13/45	300	250	50	160	160	---	10	13	✓ 3	85	61	4	450	382	68	40	30	10	225	148	79	110	100	10			

SHEET 11 OF 11 SHEETS

LEGEND

REQ. Number of men requested by the Division Engineer for work in the above area.  
 ALLOC. Number of men allocated by the Planning & Scheduling Department to work in the above area.  
 SHORT Number of men short daily not including absenteeism.



[REDACTED]

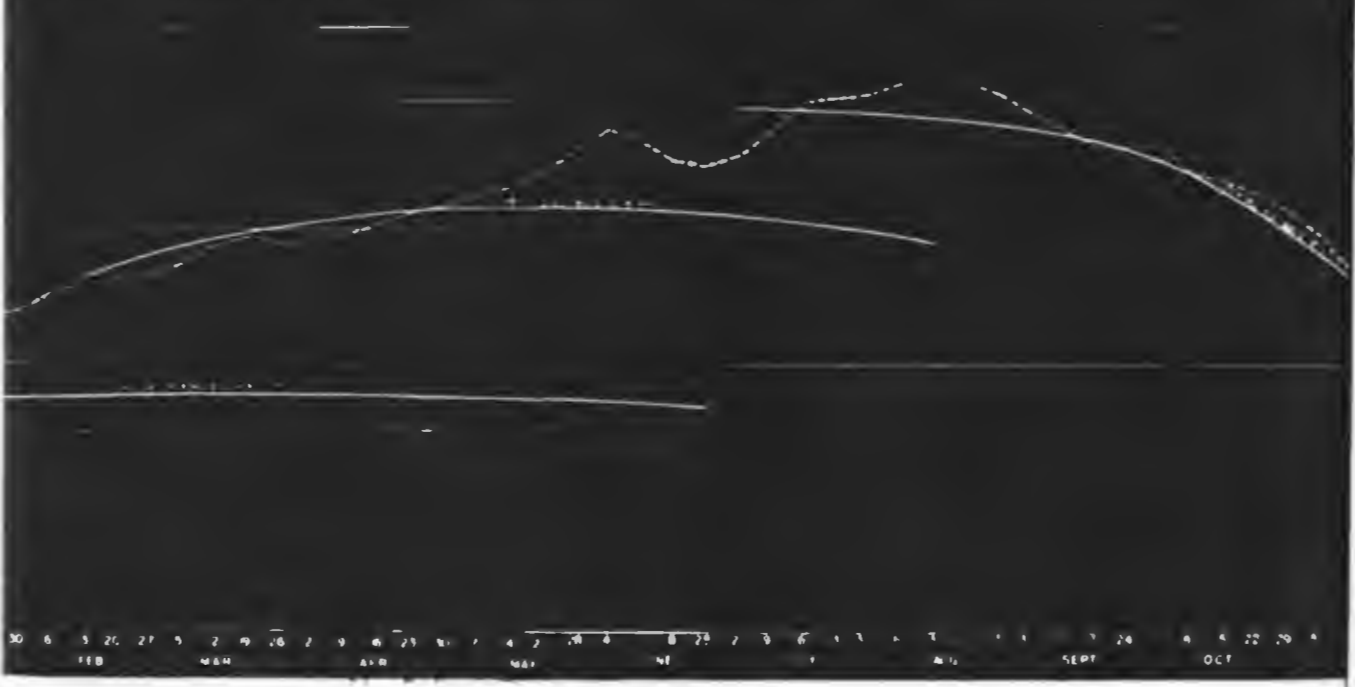
# MECHANICAL CRAFT CURVE

HANFORD ENGINEER WORKS

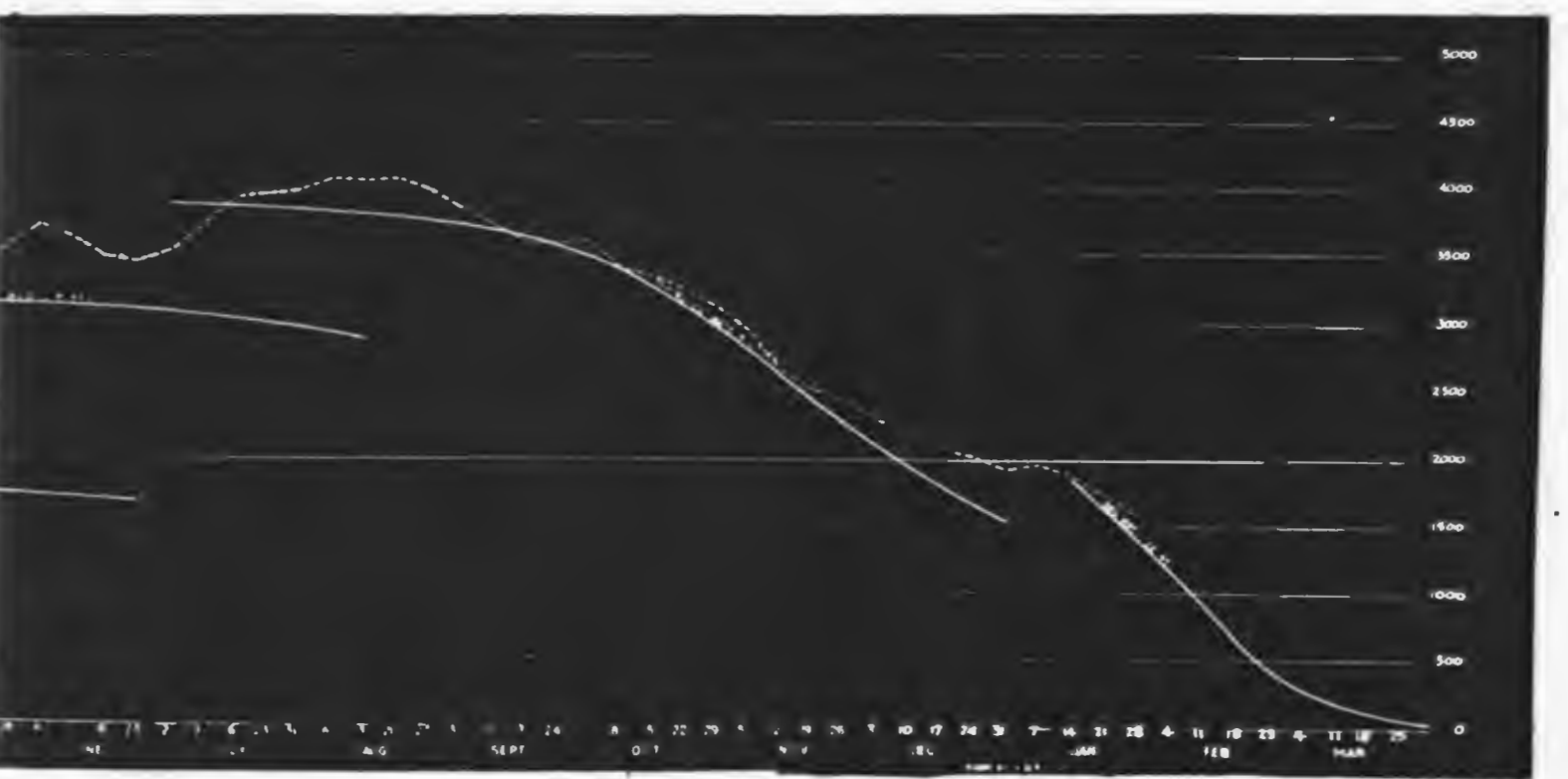
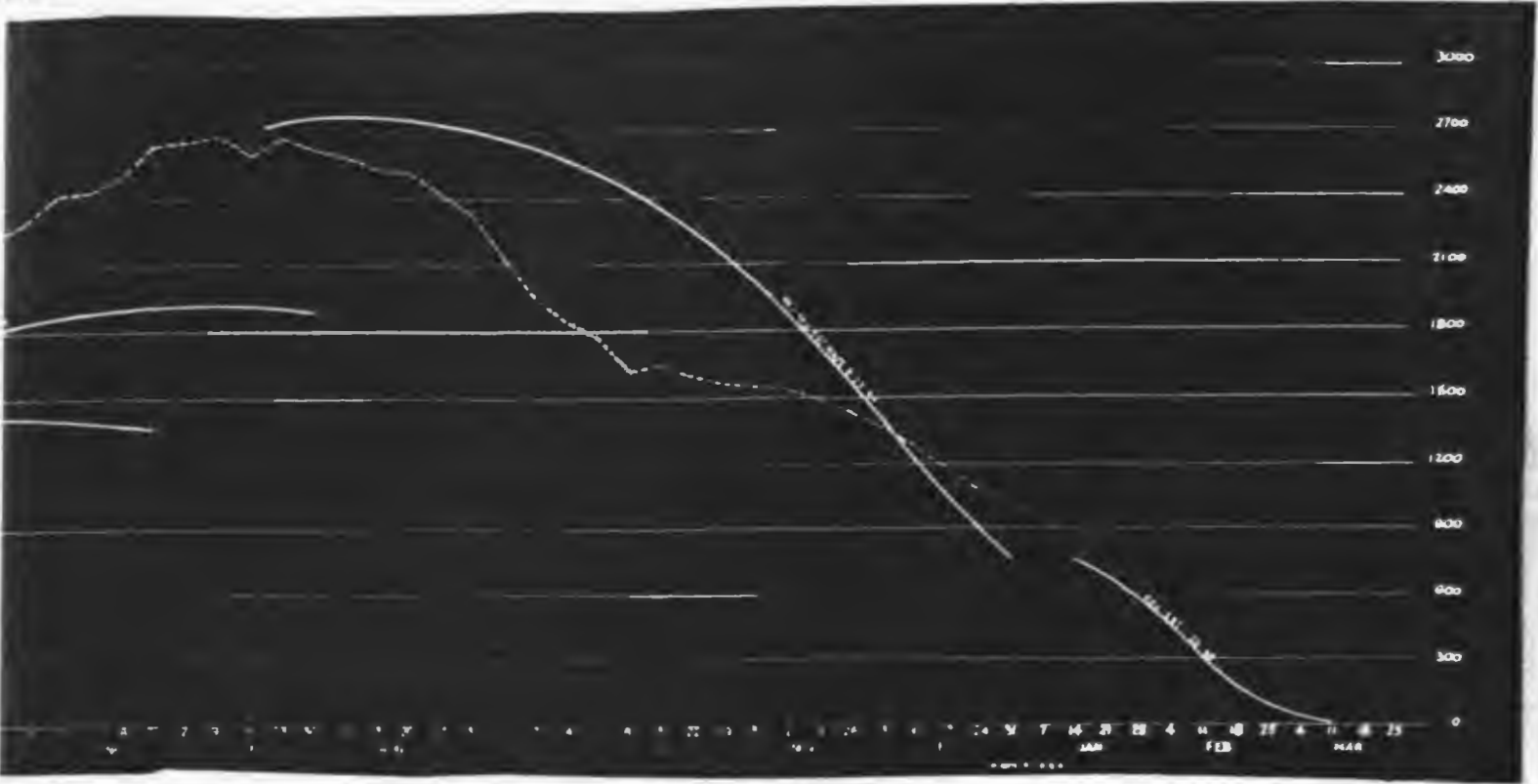


# SPORTATION CRAFT CURVE

HANFORD ENGINEER WORKS



[REDACTED]



W

1405

BIO



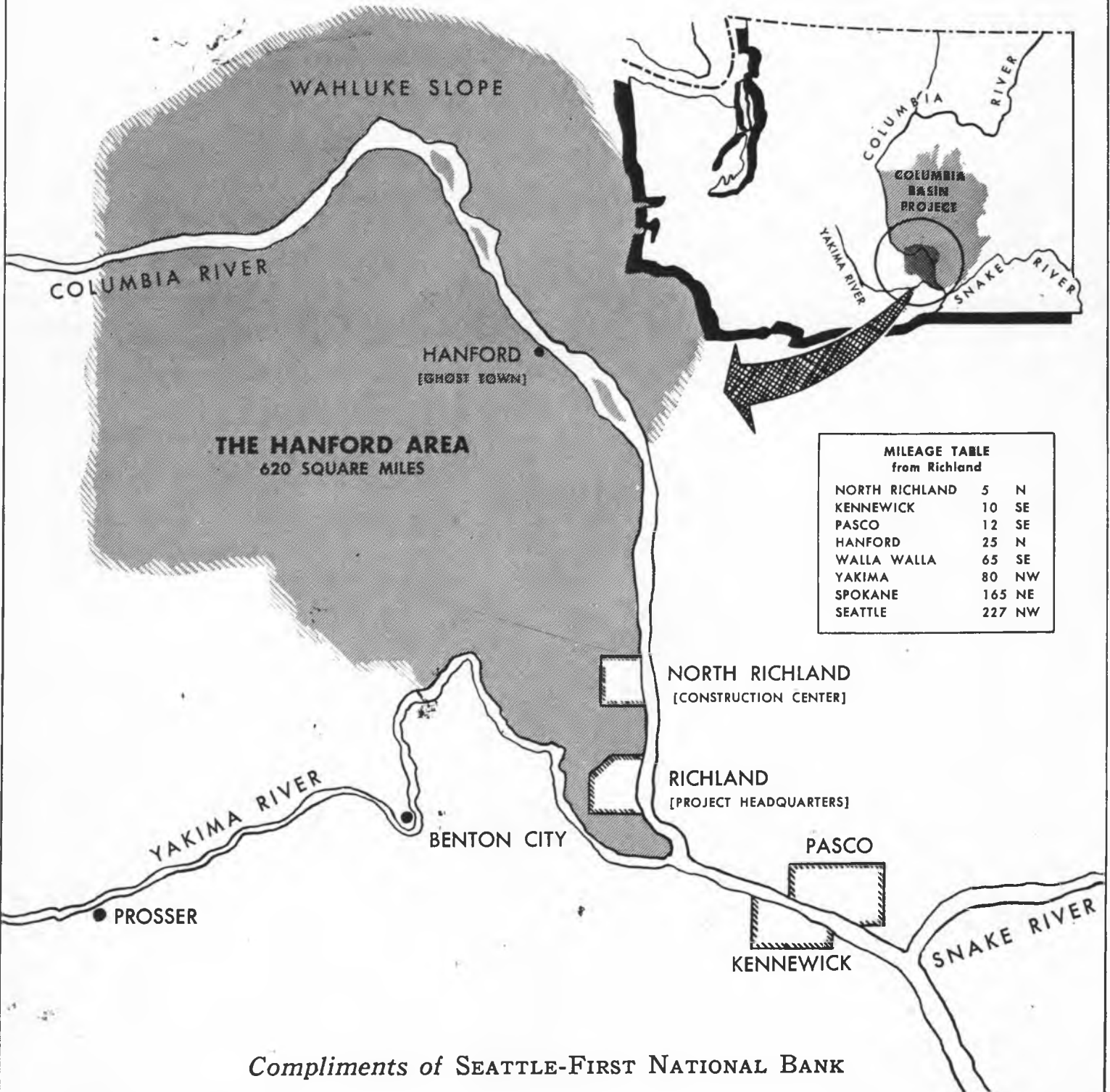
# PACIFIC NORTHWEST HANFORD WORKS INDUSTRIES

SEATTLE-FIRST  
NATIONAL BANK



DECEMBER • 1948

## THE HANFORD WORKS



Compliments of SEATTLE-FIRST NATIONAL BANK

THE MEN WHO DIRECT HANFORD



FRED C. SCHLEMMER

Fred C. Schlemmer became the second civilian manager of Hanford Operations Office on September 15, 1948, succeeding Carleton Shugg who moved to Washington, D. C., as Deputy Manager for AEC. Prior to Mr. Shugg there were two military commanders of the operation, Col. F. T. Mattias during the war and Col. Frederick J. Clarke, the peacetime manager until September 1, 1947.

Mr. Schlemmer, a native of New York, has had 30 years experience in engineering and construction management including the organization and supervision of self-sufficient communities at large construction operations. From 1933 to 1946 he was a key member of the TVA construction staff where he supervised the construction of several major dams in North Carolina and Tennessee. Prior to that he worked for the J. G. White Engineering Corporation of New York on various industrial construction jobs. Since leaving TVA Mr. Schlemmer has been an executive of the Peerless Woolen Mills Company of Rossville, Georgia. In 1946 he went to India as a consultant on the development of river systems. For the past year he has been an engineering consultant for AEC and in that capacity has conducted surveys for the construction programs at Hanford and Los Alamos.

**ATOMIC ENERGY COMMISSION  
HANFORD OPERATIONS OFFICE**

- Manager:* Fred C. Schlemmer.
- Deputy Manager:* David F. Shaw
- Assistants to the Manager:* James E. Travis, Lloyd Bergeson
- Operations Division:* Roy C. Hageman
- Construction and Maintenance Division:* Wm. P. Cornelius
- Office of Counsel:* Roger I. Harris
- Office of Budget:* Verne Lewis
- Office of Information Control:* Milton R. Cydell
- Office of Security:* Vernon K. Schumann
- Office of Safety:* Vincent R. Holmquist
- Office of Community Management:* Norman D. Fuller
- Office of Organization and Personnel:* Henry E. Thurston
- Office of Administrative Services:* Rudolph Hoglund
- Office of Finance:* Chas. F. Schank



GEORGE R. PROUT

George R. Prout was named Assistant General Manager of the G.E. Nucleonics Department effective November 1, 1948. He will become General Manager on January 1, succeeding Roy C. Muir, who returned from retirement last April to head the department. Mr. Muir will continue as a consultant.

Mr. Prout has been a vice-president of the company and General Manager of the Air Conditioning Department since 1944. He has been associated with the General Electric Company since his student days, when he enrolled in the M.I.T.-G.E. Cooperative Course for student engineers in 1920. Subsequently he served the company in various capacities in the Southwest where he established a reputation in the petroleum industry. In 1929 he received the Charles A. Coffin Award for his engineering contributions in the application of electrical equipment to oil pipe line pumping. Later he became District Manager of the Industrial Department of G. E.'s Southwestern District, and in 1939 was transferred to Schenectady as Sales Manager of the Industrial Control Division. He became manager of this division in 1941. Subsequently, when the Air Conditioning Department was established, he became General Manager with headquarters in Bloomfield, N. J.

**GENERAL ELECTRIC COMPANY  
NUCLEONICS DEPARTMENT**

- V. Pres. and General Manager:* R. C. Muir, April 8, 1948-Dec 31, 1948. George R. Prout, Jan. 1, 1949-
- Assistant Manager:* R. S. Neblett (Schenectady operations)
- Assistants to the General Manager:* J. R. Rue, expense control and budgetary matters; Dr. Winton I. Patnode, technical and educational matters; G. G. Lail, general administrative matters (also manager of the service divisions)
- Nucleonics Dept. Comptroller (also an Assistant Secretary of G.E.):* Forrest E. Baker
- Counsel for Nucleonics Department:* Lewis F. Huck
- Manufacturing Divisions:* C. N. Gross
- Technical Divisions:* Dr. A. B. Greninger
- Design and Construction Divisions:* Frank R. Creedon
- Richland Community Divisions:* E. L. Richmond, Community Manager
- Service Divisions:* G. G. Lail
- Health Instrument Divisions:* Dr. H. M. Parker
- Medical Divisions:* Dr. W. D. Norwood
- Employee and Community Relations Division:* H. E. Callahan

This special issue of Pacific Northwest Industries is prompted by widespread interest in the Hanford Works, both as a unique industrial enterprise and as a major factor in the Northwest's economic life. The Seattle-First National Bank is proud that it has served the project since its inception.

Additional copies of this report will be furnished upon request without charge. Permission is granted to quote or reproduce any information contained herein. Mention of source will be appreciated.

We acknowledge with sincere thanks the cooperation of AEC's Office of Information Control and other officials of the government and the General Electric Co. We are also greatly indebted to the Tri-City Herald, which made available a complete file of its series of articles on the Hanford Works published in August and September this year.

INDUSTRY ANALYSIS SECTION  
MAIN OFFICE, SEATTLE-FIRST NATIONAL BANK  
SEATTLE 14, WASHINGTON

## THE HANFORD WORKS

Hanford Works is one of the biggest things in the Northwest. Here in the desert of Southeastern Washington Uncle Sam during the war invested \$350 million in the world's first plants for the manufacture of plutonium. Currently additional funds in the neighborhood of \$20 million a month are being poured into a program of expansion and renovation which will bring the total investment by 1952 or 1953 close to a billion dollars. Almost 9,000 workers are employed by the General Electric Company: in operating the plants, supervising construction and running the City of Richland for the government. Sub-contractors are employing another 16,000 on construction.

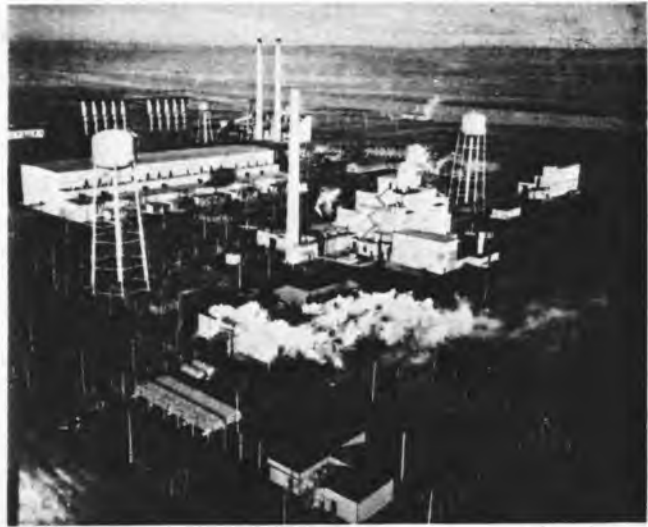
### **A Major Northwest Industry**

Quite apart from the national and international significance of the product, this development, by its very size, is of major importance to the region. Here is the Northwest's second largest payroll; the largest, if the current construction program is included. Here is an industry which ranks with such other major industries as light metals and plywood in its importance to the Northwest's economy. Here is a new market—one of the state's largest—created by the new city of Richland and the rapid growth of Pasco and Kennewick. Indeed, the entire Northwest would have an interest in a project of this size, whether the product was plutonium or pretzels. It is well to take a good look at Hanford Works, not only to satisfy our curiosity, but also to gauge its long-range effect on Northwest business.

### **Nature of Activity**

What goes on at Hanford Works? To some extent, the notion still prevails that the entire affair is secret. On the contrary, such general items as employment, organization, and community development are public information. Even with regard to the industrial processes, we now can learn as much as most of us are able to understand.

Hanford Works is one of three major installations of the atomic energy program. The other two are at Oak Ridge, Tennessee, and Los Alamos, New Mexico. Hanford does not make bombs. It produces plutonium, a radio-active element which is basic both to bombs and to other applications of atomic energy. The raw material is uranium, and the production process subjects uranium to atomic bombardment in a "pile." The second installation—Oak Ridge—is devoted to separating the U-235 isotope from U-238, using an entirely different process, a process of "gaseous diffusion." The third, Los Alamos, is the home of the atomic bomb, the place where materials produced at Hanford and Oak Ridge are utilized in the atomic weapon program. Of the three installations, Hanford and Oak Ridge are about equal in size, Los Alamos a good deal smaller. Hanford now has more than one-fourth of all employees engaged in atomic energy operations and two-thirds of those engaged in construction.



*The Heart of Hanford Works—one of the plants*

### **More About Atomic Energy**

In addition to these three major installations, the total program includes laboratories at Chicago (The Argonne National Laboratories), at Patchogue, Long Island (The Brookhaven National Laboratories), and at Schenectady (The Knolls Atomic Power Laboratories). Oak Ridge and Los Alamos also have important laboratories but research at Hanford is limited largely to improvements in the production process. The Schenectady laboratories—because they, like Hanford, are run by the G. E. Company—are administratively part of the Hanford Works. Their purpose is research in peacetime applications of atomic power.

All of these installations are under the direction of the Atomic Energy Commission, the civilian agency which was created by the Atomic Energy Act of 1946 and took over from the Manhattan District of the Army Engineers at the beginning of 1947. The Commission itself consists of five men chaired by David Lilienthal. In Washington, D. C., the Commission has a general manager, 38-year-old Carroll Wilson, and a relatively small staff. Under civilian control the program has been decentralized to the extent that the managers of installations like Hanford can make decisions involving millions of dollars.

The Commission carries on its operations through contractors. At Hanford the General Electric Company is the prime contractor for all activities—construction, operations, and services. At Los Alamos the University of California is the contractor for scientific work, but the management of the construction program and the town is contracted to a local concern, the Zia Company. The major contractor at Oak Ridge is the Carbide and Carbon Chemicals Company, a subsidiary of Union Carbide and Carbon.

# PACIFIC NORTHWEST INDUSTRIES • THE HANFORD WORKS

## **Agreement with General Electric**

The agreement between AEC and the General Electric Company is a document comprising 68 pages plus amendments and appendices. In essence, it provides for management of this huge enterprise by G. E. on a cost-plus basis with a return to the company of exactly one dollar. The du Pont Company, which handled the development of the project during the war, operated on the same basis. All new discoveries are reported to the Commission and, under the terms of the law, become the property of the government. The Commission itself has less than 400 employees at Hanford Works. All construction contractors and all commercial enterprises in the area do business with G. E. rather than directly with the government.

## **Physical Lay-Out**

Physically Hanford Works is scattered over 396,000 acres or 620 square miles. Richland, the city of 20,000 created out of nothing to serve the project, is at the Southeast corner of this area, near the junction of the Yakima and Columbia Rivers. The plants, of which there are several, are located as much as 35 or 40 miles from Richland. Of the entire project area, some 79,000 acres were public domain before the war. Another 127,000 have been purchased outright, and the remaining 190,000 are leased. The Government is now engaged in purchasing the leased land in order to establish permanent boundaries.

Most of this land was and still is desert. The government's holdings include, however, 50,000 acres of the Wahluke Slope scheduled for irrigation as part of the Columbia Basin Project. The precise permanent boundaries of the Hanford reservation have not been fixed in this area, but it is likely that AEC will retain the 50,000 acres and further request that the development of the entire Wahluke Slope be delayed indefinitely. The Slope in its entirety comprises 238,000 acres, including 156,000 irrigable which are 15% of the entire Basin Project.

In addition to Richland, the Hanford area includes two other towns whose names have been associated with the development. The first is Hanford, which is some 25 miles up the Columbia River from Richland. During the war Hanford was the headquarters of the vast construction program and reached a population of 51,000 late in 1944. Today it has been completely evacuated and its buildings, all temporary, have been removed for other uses. The second town is North Richland, which is the headquarters of the present construction program. North Richland is five miles north of Richland and has a population of 13,500. The town consists of dormitory and barracks accommodations for 6,000 persons, 2,200 trailer shelters occupied by privately-owned trailers, and 200 pre-fabricated houses, the latter for the families of supervisory personnel. The one-story barracks were moved from Hanford, the two-story barracks and a hospital from the Pasco Naval Air Station, and the 200 houses from a project near Bremerton. North Richland has a certain life of four or five years, the duration of the present construction program. It probably will continue beyond that period, since permanent construction activity of some magnitude is more than likely.

## **Current Expansion Program**

Currently the construction program at Richland includes 1,000 new homes, enlargement of the high school, a junior high, two grade schools (one of them at North Richland), and enlargement of three other grade schools. In addition, sites are being prepared for new central and residential business districts which will include 94 facilities. These things can be seen by anyone. The largest part of the construction activity, however, is within the barricaded area where the plants are located. Part of this activity involves entirely new facilities; part is directed to adapting the original plants to the latest developments in atomic research. This is a program of several years duration. Meanwhile, Richland will become a city of 25,000 population by next summer and may grow somewhat beyond that. North Richland, the construction town, will remain at approximately its present size throughout the plant construction program, since every effort is being made to avoid peaks and valleys of employment.

## **History of the Project**

The history of Hanford Works is highlighted by the following events:

### *December, 1942—Site Selection.*

Hanford was selected primarily for four reasons: (1) Isolation, (2) Small number of residents to be displaced, (3) Electric power supply, and (4) Availability of cold water. Hanford Works has pumping facilities adequate to furnish water for a city the size of New York. The power consumption still is restricted information.

### *March, 1943—Ground broken.*

By this time the difficult task of land acquisition was sufficiently advanced to permit the start of construction. The project at this time and throughout the war was under the direction of the Manhattan District of the Army Engineers and was contracted to E. I. du Pont de Nemours and Company.

### *November, 1944—Peak of construction; first operations.*

Hanford had grown from a town of 500 to 51,000; the project was employing 45,000 workers. At about this same time the first atomic pile was placed in operation.

### *August, 1945—Hiroshima and Nagasaki; end of the war.*

The first use of the atomic bomb removed the veil of secrecy from Hanford. Until this time practically none of the workers, even in the plant area, had any idea what product was being manufactured.

### *August, 1946—Atomic Energy Act passed.*

Congress made the decision for civilian control and created the AEC as the administrative agency. This was followed by the lengthy controversy over confirmation of Lillenthal which delayed the actual transfer of authority to the Commission.

### *September, 1946—G. E. replaced du Pont as prime contractor.*

Du Pont had requested release from this responsibility after the war since its interest is not primarily in the field of nucleonics. G. E. was selected because of its outstanding work in this field.

### *January, 1947—AEC replaced Manhattan Engineers.*

Officially, the AEC took over at midnight, December 31, 1946. Carleton Shugg, the first civilian manager, was not appointed until September, however. Under civilian control the name was changed from Hanford Engineer Works to Hanford Works.

### *August, 1947—Expansion program announced.*

AEC announced the program of expansion which is now in progress. Richland at that time had a population of 15,000 or 16,000.

# PACIFIC NORTHWEST INDUSTRIES • THE HANFORD WORKS

## Organization—AEC and G. E.

In large part the AEC organization at Hanford is merely representing the interest of the government in matters which have been contracted to G. E. This requires very little staff, but staff of high calibre. In certain matters, however, AEC has primary responsibility. These include security, acquisition of land, administration of several outside contracts, and relationships with local governmental units.

The Commission staff is small relative to the size of the project—less than 400 altogether. Only a handful of scientists are required directly on the government payroll. The top men represent a variety of backgrounds in government and private employment.

In the G. E. organization, the Hanford operation is known as the Nucleonics Department, one of eleven major departments in the company headed by a vice-president and general manager. Several of the leading scientists and, of course, practically all of the lesser personnel, were taken over from the du Pont staff which developed the project during the war.

Until recently the government has barred collective bargaining in the operation of the project by an agreement with NLRB not to hold union elections. This policy has been rescinded, and currently the A. F. of L. is engaged in organizing project workers.

## Sub-Contractors

Dozens of sub-contractors and sub-sub-contractors contribute to the total of 16,000 construction workers in the Hanford area. The largest are Atkinson-Jones, which has the major contract in the plant area; and Nettleton-Baldwin-Anderson and Sound Construction Company, a combination which is building 1,000 ranch-type houses in Richland. Atkinson-Jones is a joint venture of the Guy F. Atkinson Company of San Francisco and the J. A. Jones Construction Company of Charlotte, North Carolina, represented at the site by Mr. John Davidson. The head man on the job for Nettleton-Sound is L. E. Baldwin.

Several other contractors should be mentioned:

Morrison-Knudsen Company of Boise—industrial plant construction.

L. G. McNeil Company of Los Angeles—Richland school expansion program.

J. A. Terteling and Sons of Boise—Richland services and utilities.

C. C. Moore and Company of San Francisco—boiler plant installation in North Richland and the plant area.

## Notes on Project Operations

Much of the activity at Hanford holds no more interest for the outsider than the working of any large business or industrial organization. A few particulars, however, point up the magnitude and unique character of the development:

**Manufacturing.** Within the manufacturing divisions of G. E. the real core of the plutonium-making process is contained in two units with the un-revealing titles of "P" and "S" divisions. Production is on a 24-hour per day, seven-day week basis. Most of the jobs in manufacturing are not technical, although more than 200 college graduates are employed. Employment on production, of course, is far less than G. E.'s total of approximately 9,000, since the total includes such varied supplementary activities as running the town, supervising construction, and developing safety devices. Since many members of the manufacturing force are on shift

work, the number of workers actually engaged in production of plutonium at any one time is comparable to other industrial operations of rather moderate size.

**Technical.** The technical divisions contain most of the brain power. Here are the scientists whose job it is to insure the safe operation of control systems and to develop greater efficiency in the production process. Here again the three divisions have been given nondescript titles: "100", "200", and "300" Technical. In addition to Dr. Greninger, who is in charge of this work, the prominent scientists include Dr. O. H. Graeger, Dr. C. W. J. Wende, and T. W. Hauff, who head the three divisions; and Dr. Paul Gast, Dr. W. K. Woods, and Dr. F. W. Albaugh.

**Security.** It is common knowledge that all new employees on the project must undergo a thorough investigation by the F.B.I. This applies both to employees of the Commission and of G. E. Applicants for commercial leases at Richland and North Richland likewise are subject to a security check. Indirectly, this process has more results than just weeding out subversives, since credit rating, character, and morals are considered in rating the desirability of prospective employees. Another aspect of the AEC security program is the protection of shipments of atomic materials. There is also a government air patrol which covers the plant area to spot unauthorized vehicles and individuals and to prevent aircraft from flying over the area. It is noteworthy that the air base at Moses Lake has been reactivated and that one of its principal responsibilities will be air protection for the Hanford Works.

**Safety.** The safety record at Hanford is the best of any G. E. manufacturing works, the best of any atomic energy installation, and one of the best for any type of plant in the United States. In 1947 there were 0.81 lost-time injuries per million man-hours worked, which compare with 5 to 6 per million man-hours in most plants of this general type.

**Health Instruments.** One of the proudest boasts of Hanford management is the complete success of safeguards against radiation injuries. The health instrument divisions of Hanford Works provide detection instruments in the manufacturing areas, recommend maximum exposure levels, and conduct research on the effect of radiation on living tissue. Personnel in areas subject to radiation wear film badges and pocket meters which immediately warn of harmful rays. The average worker is exposed to no more radiation in a year than he would receive from an annual chest X-ray.

**Medical.** The medical divisions operate a modern hospital (Kadlec Hospital), a medical and dental clinic, and industrial and public health programs. There are 30 doctors and 13 dentists in general practice, 10 doctors in the industrial program and one in public health. All receive a guaranteed income from General Electric. Charges to the residents are comparable to other areas.

**Cooperation with Local Governments.** The Atomic Energy Act makes provision for payments to local governmental units where the Commission finds that the burdens placed on such units exceed the benefits. The Federal government built the schools in Richland and North Richland, but their operation was turned over to county-state jurisdiction. The residents of Richland pay all taxes except property taxes, but the apportionment of state funds for the schools does not keep pace with the population growth. Accordingly, the Commission last year contributed \$573,000 to the \$1,400,000 budget of the Richland schools. An additional \$750,000 (which includes the purchase price of several school buses) was allocated to outside school districts. No financial assistance has been given to outside communities for facilities other than schools, although there has been heavy local pressure for the Federal government to finance sewage and other improvements. This is true particularly in the Kennewick area, where water supply and sewage disposal are major problems. The Commission's attitude has been that local communities cannot expect Uncle to bail them out of all their problems, and that the benefits to local business from the project more than offset the cost of needed improvements. Currently the Commission has hired an impartial research organization to determine the amount of its responsibility, if any.

**Community Management.** In effect, the mayor or city manager of Richland is E. L. Richmond, who heads G. E.'s Richland Community divisions and has the title of Community Manager. There is no city government, but the residents shortly will elect an advisory council. There has for some time been an appointed advisory council, and in every way possible the desires of the residents have been controlling in the development of the community. The community manager not only runs the police depart-

# PACIFIC NORTHWEST INDUSTRIES • THE HANFORD WORKS



RICHLAND, WASHINGTON—1948

ment, fire department, water works, sewage system, and steam plant; he also manages all of the housing, including repair, re-painting and re-decorating, and plans and leases all commercial facilities. Naturally, the manager has a very sizable staff engaged in these activities. He also makes use of outside consultants. Among these have been J. Gordon Turnbull and Associates, engineers and city planners; and Graham, Anderson, Probst and White, architects.

## The Development of Richland

Richland is by all odds one of the most unusual cities in the world.

It has a very young population and a birth rate of 35 per thousand, 21% above the national average. Kadlec Hospital has delivered more than 2,000 babies.

It has a population of unusual intelligence, and probably the highest family income in the country, about \$3,800 per year. There is no wealth and no poverty.

It has no major crime, and had no traffic fatalities in the last year.

It has no privately owned homes, no city government and no property tax.

It ranks with the 10 largest cities in the state, but delights in calling itself "The Village."

Richland was first planned as a city of 16,000, which was adequate to serve the Hanford operation on the scale provided by the original construction program. The homes and the commercial facilities were largely built as permanent structures, sharing some of the shortcomings of other wartime construction, but generally adequate for a modern, planned community. Last year, before the

new expansion program was announced, Richland's population was about as planned, but more commercial facilities still were needed. Since then the population has increased to 20,000 with the expectation of 25,000 by next summer. A major expansion of commercial facilities is planned.

When the present residential program is completed, there will be 5,683 family dwellings in Richland, plus some 15 or 20 "tract houses" (structures constituting the village of Richland before the war), and dormitory accommodations for about 1,000 single persons.

## FAMILY HOUSING — Richland

Original program .....	3,840
Pre-fabs .....	1,333
Standard duplex .....	1,856
Standard detached .....	651
1947-48 program (completed).....	843
Pre-cut .....	450†
Standard .....	329‡
Apartments .....	64
1948-49 program .....	1,000
(all ranch-type homes)	

†Built by John L. Hudson Co. and known in the community as "Hudson houses."

‡Built by Atkinson-Jones; "A-J houses."

# PACIFIC NORTHWEST INDUSTRIES • THE HANFORD WORKS

About 250 of the new homes are completed and occupied. For the other 750 there are 700 more applications than there are houses. This virtually assures that there will be a further home construction program if the Commission can get the money from Congress. This year there is no further authorization. The applicants for housing all are persons already on the permanent payroll of G. E., the Commission, or commercial facility operators. Some are waiting to bring their families, some live in the surrounding area, and some are doubled up with other families in Richland.

The "master plan" for Richland calls for 94 additional business enterprises where today there are only 38. They run the gamut from groceries to fur stores to camera shops to pool halls—everything a normal community needs. The plan includes a second central commercial area a mile north of the present one; also the development of several new neighborhood shopping centers. The plan is based on a population of 25,000, but sufficient space is being reserved to accommodate facilities for 35,000.

Originally, the government constructed the necessary buildings and permitted their operation on a use permit. That no longer is the plan. Today land is available on long-term lease for private capital to construct its own facilities, either individual buildings or shopping centers to be sub-leased. This reflects two things: first, the desire of the management to make Richland as nearly like a normal city of its size as possible; and second, the judgment that the permanence of the community justifies the encouragement of private capital investment.

G. E., under its contract with the Commission, handles the selection of all commercial operators. Selection is made on the basis of experience, trade connections, character and financial resources, as well as the rental bid. The bid, generally expressed as a percentage of gross, must be sufficient to cover electricity and water, which are not metered in Richland, plus sewage, municipal services and a reasonable return on the land. The first step for interested operators is that of contacting G. E.—the Commercial Facilities Division, Building 761, Richland, Washington. The telephone is Richland 248 or 384. This division is headed by R. J. Pederson and is one of the activities under the general direction of E. L. Richmond, the Community Manager.

Usually an applicant first is given some general information and an application form which covers his experience and background. Subsequently, when there is an opening for a business of his type, he is invited to bid in accordance with specifications established by G. E.

## Growth of the Tri-City Area

Pasco has grown from 3,900 population in 1940 to 8,000; Kennewick, from 1,900 to 6,800. The Tri-City area—Pasco, Kennewick, Richland and their environs—has a population close to 65,000. Some notion of the area's growth can be derived from the state's records on taxable retail sales in Benton and Franklin Counties. Richland and Kennewick are the principal cities in Benton County, Pasco in Franklin County.

## TAXABLE RETAIL SALES Benton and Franklin Counties

Fiscal year*	Total sales	Percent of state total
1937-38 ..... (pre-war)	\$ 3,312,000	0.56%
1941-42 ..... (early war period)	5,415,000	.50
1943-44 ..... (Hanford under way)	16,371,000	1.21
1944-45 ..... (construction peak)	31,253,000	2.06
1946-47 ..... (post-war)	22,006,000	.95
1947-48 ..... (new program started)	36,405,000	1.39
May-June, 1948 ..... (latest data)	8,787,000 (two months only)	1.92

\*Fiscal years ending April 30.

The entire area is booming. In addition to residential construction at Richland, there have been in the past 18 months some 450 new homes in Pasco and 925 in Kennewick. Nettleton-Baldwin-Anderson has announced plans to build 376 homes in one development at Kennewick. Pasco and Kennewick both have an unusually high percentage of home ownership, about 80%. The area, of course, does not depend entirely on the Hanford project for its growth. It is benefiting from irrigation projects, and will benefit further from McNary Dam and the series of projected developments on the Snake River.

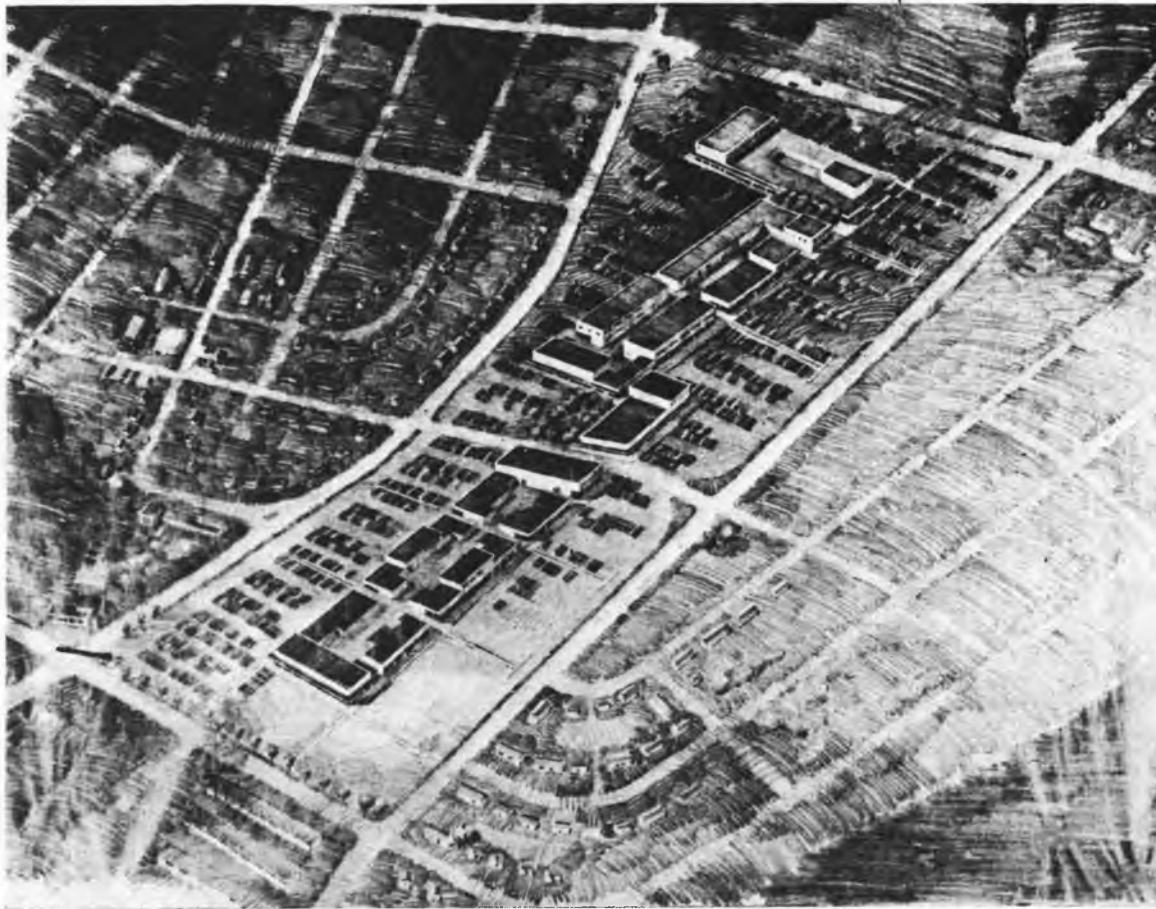
## The Future of Hanford Works

The opportunities for business in Richland are intriguing. The nature of the community—its income, its age groups, its stable population—make it an ideal market. There is virtually no credit risk. The community is almost insulated against business recessions, since the single payroll does not depend on general economic conditions. It is, of course, extremely sensitive to Congressional appropriations, but it appears unlikely that the country will fail to make maximum use of the Hanford facilities in war or in peace.

To some extent, one feels uncertainty about the project because it is so new and so dependent upon a science which the layman does not understand. There comes to mind the sobering thought that some scientist may learn to make plutonium in a bath tub. Obsolescence of the entire plant is, of course, a possibility, but the possibility is very remote. The research out of which Hanford developed is not so new that it will change over night. Nuclear physics dates back at least a generation. The secret of Hanford is not some sleight-of-hand, some secret scientific knowledge that may be out-dated next year; rather it is the tremendous engineering development necessary to apply the discoveries of science in this field.

The plant will have to keep pace with the scientists, of course. But this portends greater activity, rather than less. Above all, the development of peacetime uses for atomic power is likely to make Hanford Works an industry basic not only to defense, but to an expanded peacetime economy. Most of the product being turned out even now may eventually find its way to peacetime uses. Plutonium retains its usefulness for several thousand years.

PACIFIC NORTHWEST INDUSTRIES • THE HANFORD WORKS



Artist's sketch of the proposed new commercial center in Richland

COMMERCIAL ENTERPRISES — Richland, Washington

	Present Number	Anticipated New Number	Anticipated Total		Present Number	Anticipated New Number	Anticipated Total		Present Number	Anticipated New Number	Anticipated Total
<b>FOOD GROUP</b>				<b>GAS STATIONS</b> .....	4	7	11	Photo Studio .....	1	1	2
Combination Stores (Grocery and Meat) ..5	6	11	<b>LUMBER-BUILDING MATERIAL GROUP</b>				Sporting Goods Stores .....	0	2	2	
Milk Dealers .....	1	2	Lumber-Building Material Dealers .....	0	1	1	Gift Shops .....	0	3	3	
Delicatessen—			Heating-Plumbing Equipment .....	1	1	2	Optical Shop .....	1	1	2	
Fish Market .....	0	1	<b>HARDWARE STORE</b> .....	1	1	2	<b>PERSONAL SERVICE</b>				
Bakeries .....	1	2	<b>LUGGAGE AND LEATHER GOODS STORE</b> .....	0	1	1	Barber Shops .....	1	5	6	
<b>GENERAL MERCHANDISE GROUP</b>			<b>DRUG STORES</b> .....	3	5	8	Beauty Shops .....	1	5	6	
Department Store .....	1	2	<b>EATING PLACES</b>				Cleaning and Dyeing Plant .....	1	2	3	
Variety Stores .....	1	2	Cafeterias .....	1	0	1	Laundry .....	1	0	1	
<b>APPAREL GROUP</b>			Restaurants .....	2	3	5	Funeral Director .....	0	1	1	
Men & Boys' Clothing & Furnishings .....	1	2	Restaurants (Drive-In) .....	0	1	1	Sewing Center .....	0	1	1	
Women's Ready to Wear .....	2	3	Malt Shop and Dairy Lunch .....	0	4	4	Custom Tailoring .....	0	1	1	
Women's Accessory Store .....	0	1	Candy Store .....	0	1	1	Shoe Repair .....	1	1	2	
Shoe Stores (All Kinds) .....	1	2	<b>OTHER RETAIL STORES</b>				<b>DISINFECTING &amp; EXTERMINATING SERVICE</b> .....	0	1	1	
Fur Shop .....	0	1	Jewelry Stores .....	1	1	2	<b>SERVICES ALLIED TO TRANSPORTATION</b>				
<b>FURNITURE—HOUSEHOLD—RADIO GROUP</b>			Book and Stationery Store .....	0	2	2	Warehouse (Cold Storage) .....	0	1	1	
Furniture Stores .....	0	2	Cigar Store and News Stand .....	0	1	1	Warehouse (Others) .....	0	1	1	
Floor Coverings, Drapery Store .....	0	1	Florist .....	1	2	3	<b>CABINET SHOP</b> .....	0	1	1	
Household Appliance Dealer and Electric Shop .....	1	2	Nursery, Greenhouse & Garden Supply Store .....	0	1	1	<b>DRINKING PLACES</b>				
Paint Store .....	0	1	Music Store .....	0	1	1	Taverns .....	1	0	1	
<b>AUTOMOTIVE GROUP</b>			Photo Supply—Camera Shop .....	0	1	1	Liquor Store .....	1	0	1	
Motor Vehicle Dealers (New) .....	1	4					Beverage Store .....	0	1	1	
Auto Supply Store .....	0	1					<b>ENTERTAINMENT</b>				
Garage .....	0	1					Theaters .....	2	(1000-seat or 1 over)	3	
							Bowling Alleys .....	1	1	2	
							Pool Rooms .....	1	1	2	




UNITED STATES  
ATOMIC ENERGY COMMISSION

CLASSIFIED REPORT RECEIPT

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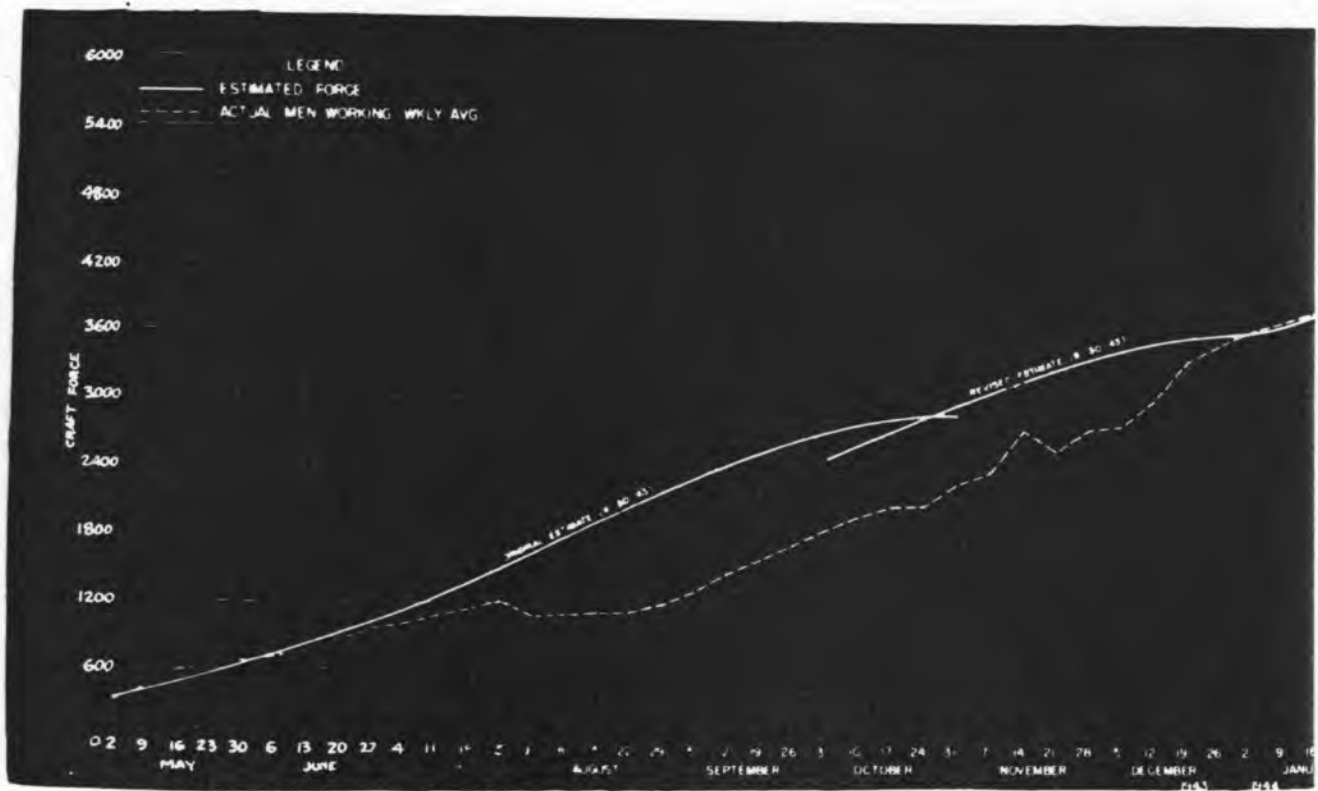
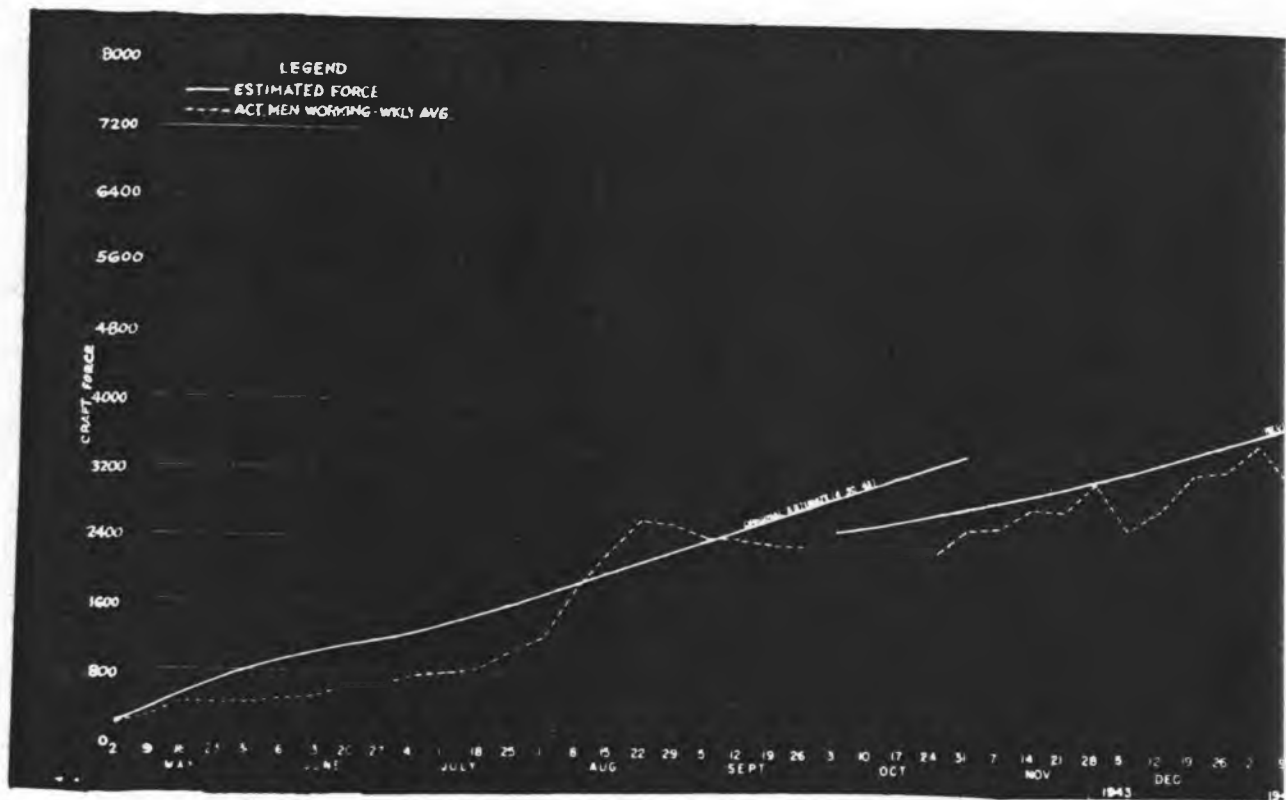
REPORT NO.	COPY AND SERIES	CLASSIFICATION	DATE OF TRANSMITTAL
MEM Rk. IV. Vol. 5	3 A	SECRET	6/4/52
MEM Rk. IV. Vol. 5. Appendix A	3 A	SECRET	6/9/52
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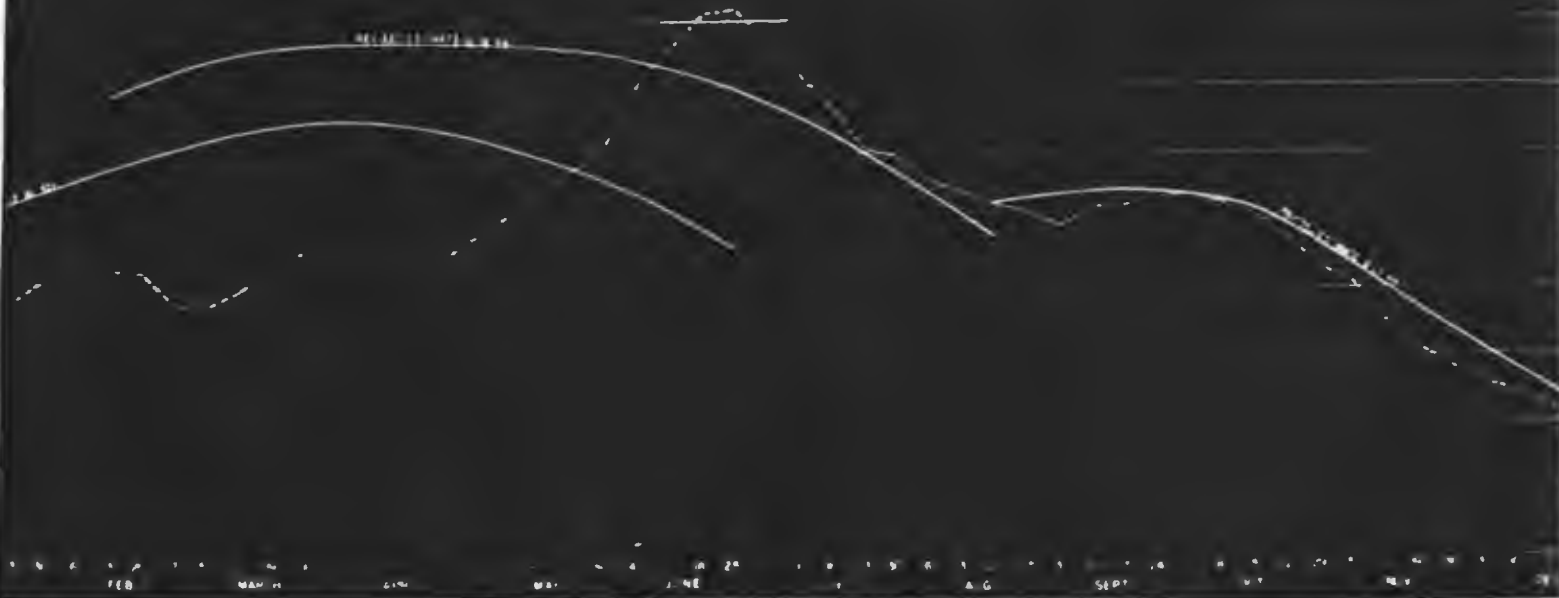
Date received 6/4/52 Signature FDM

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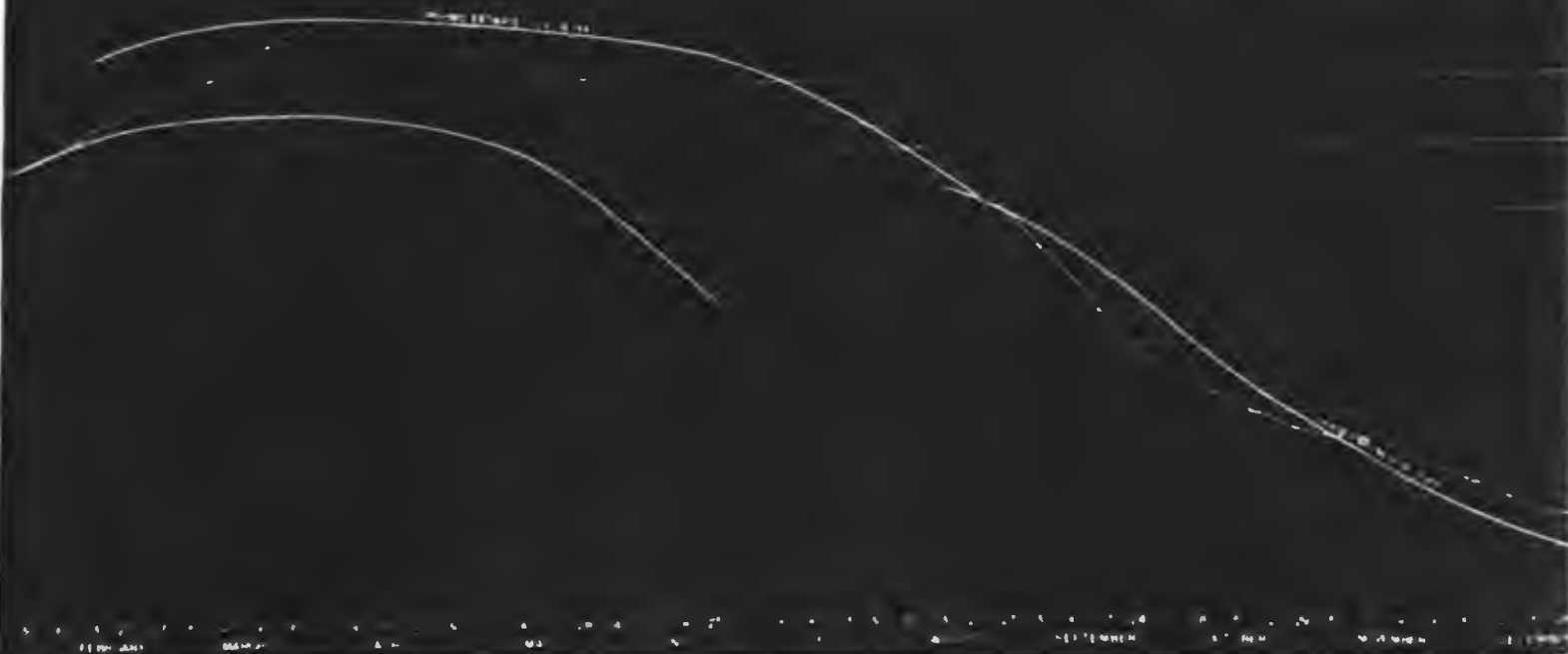


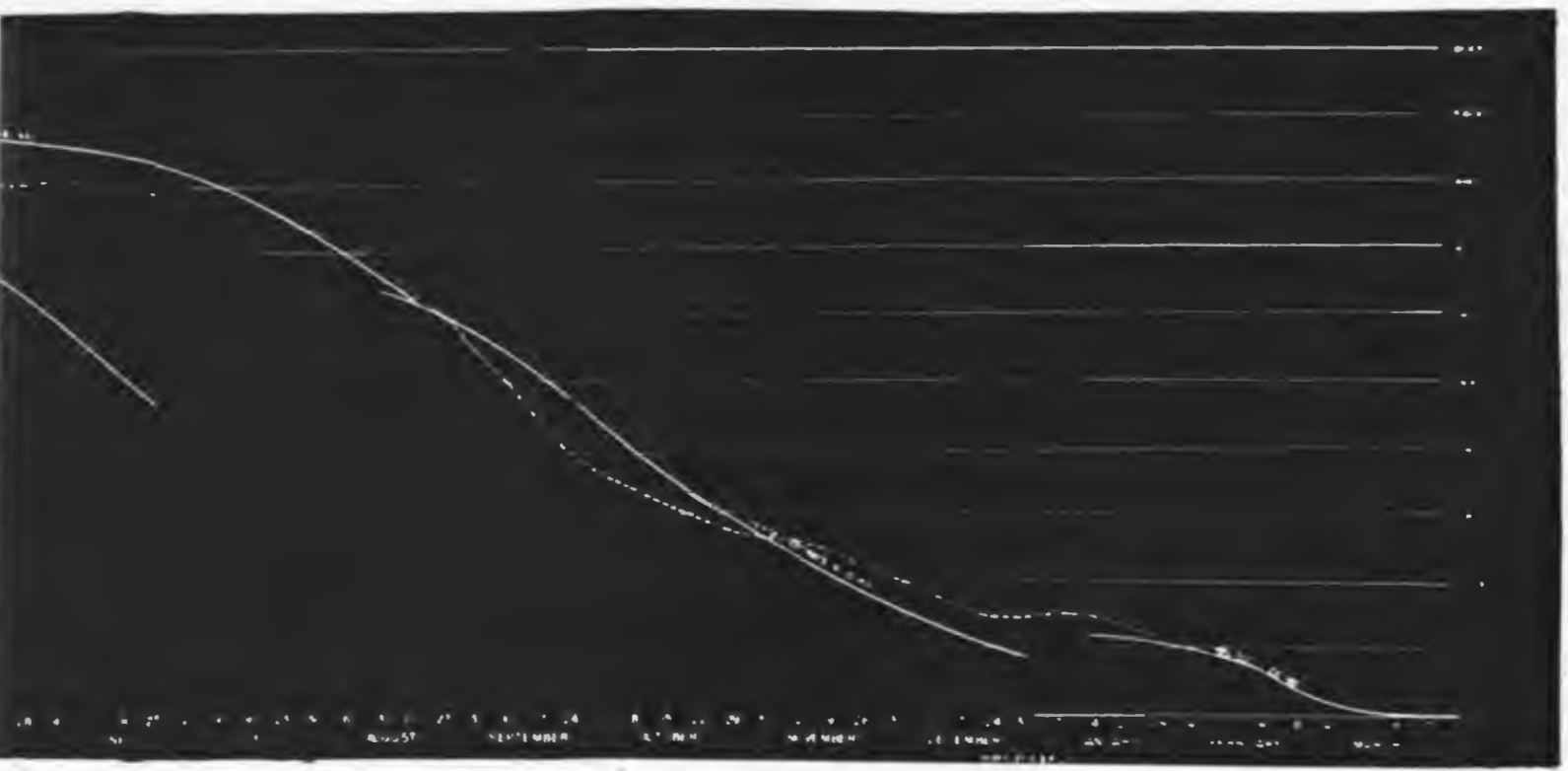
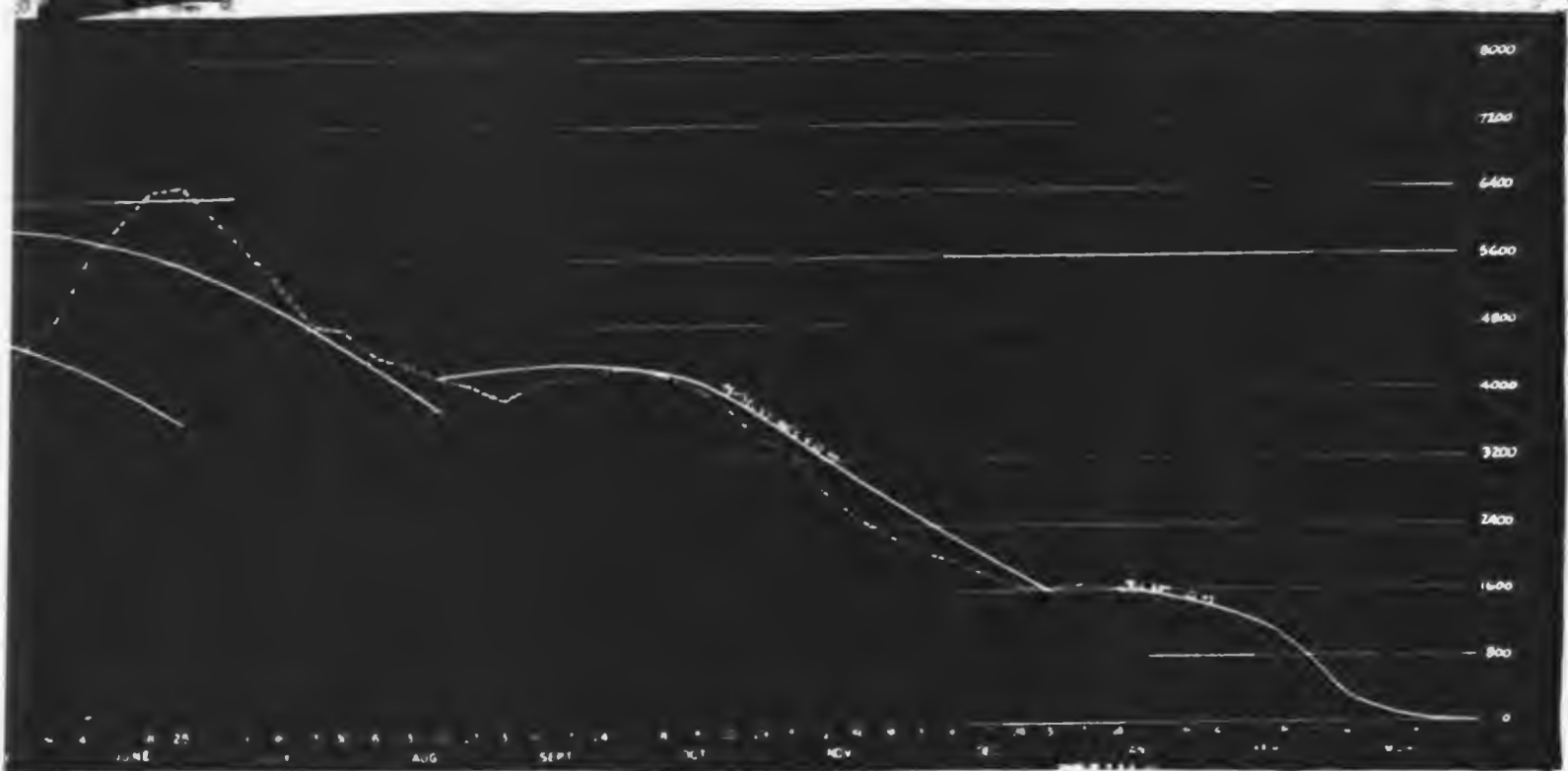


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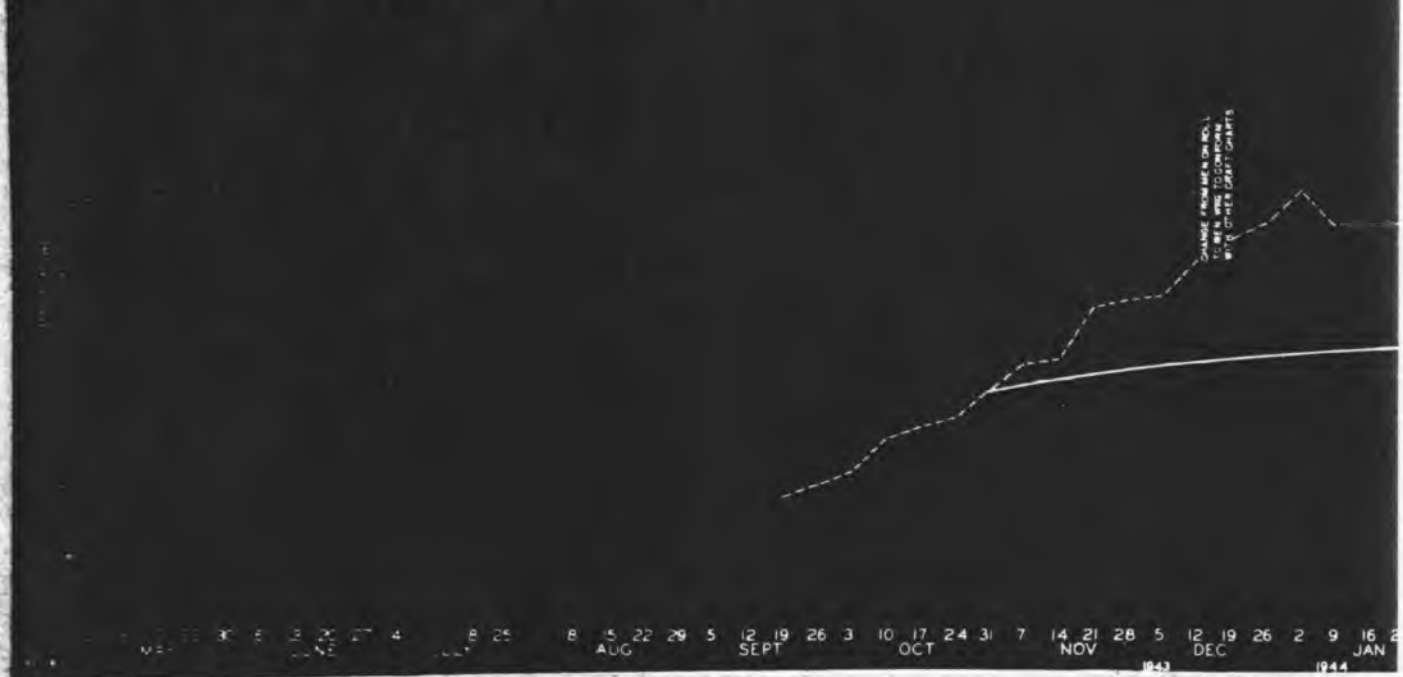
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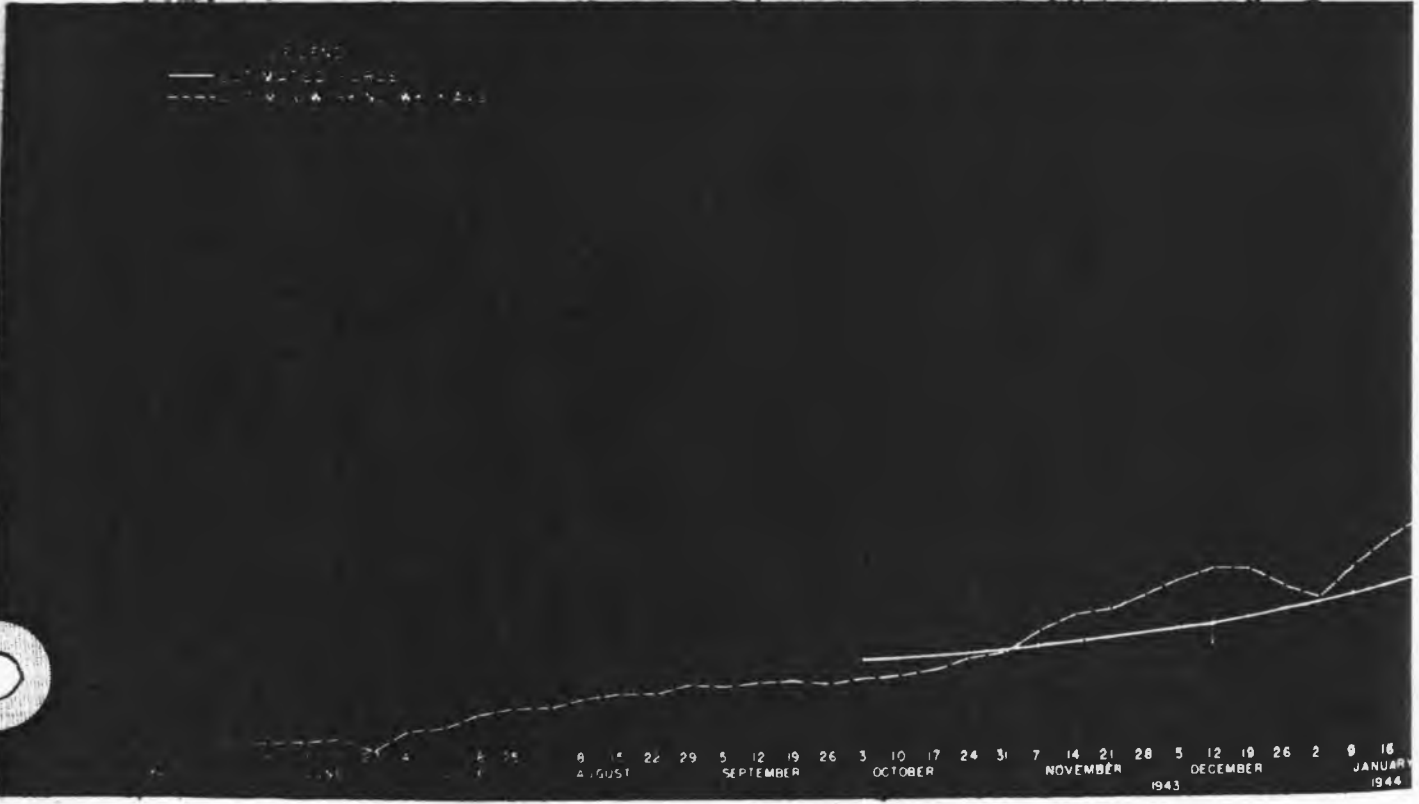


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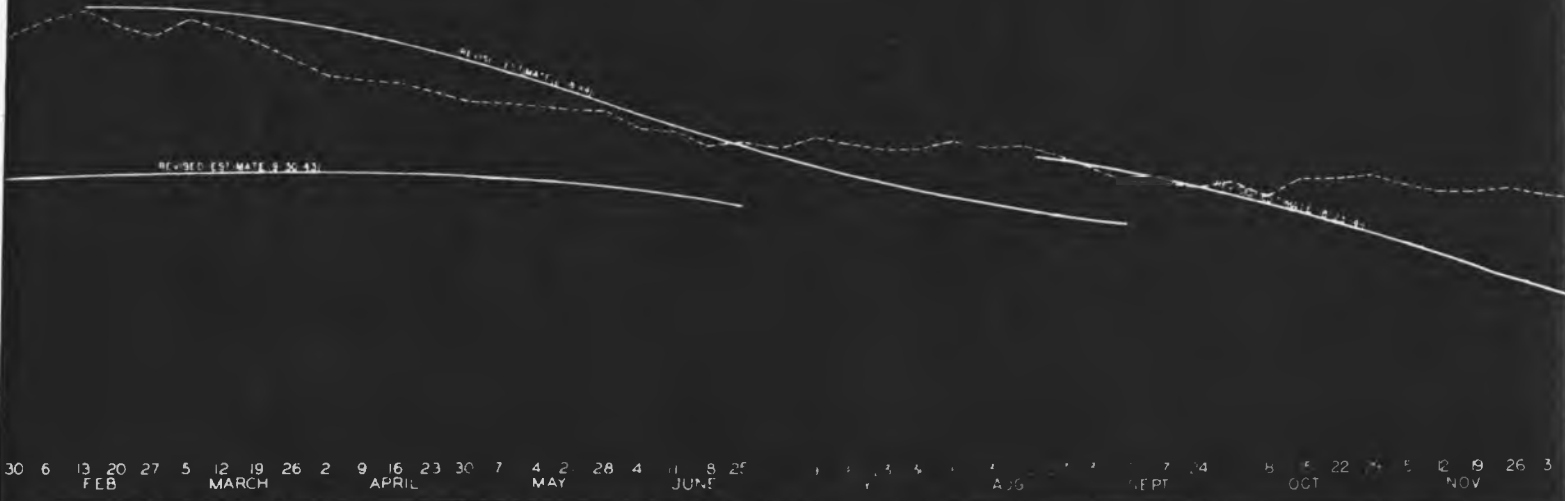


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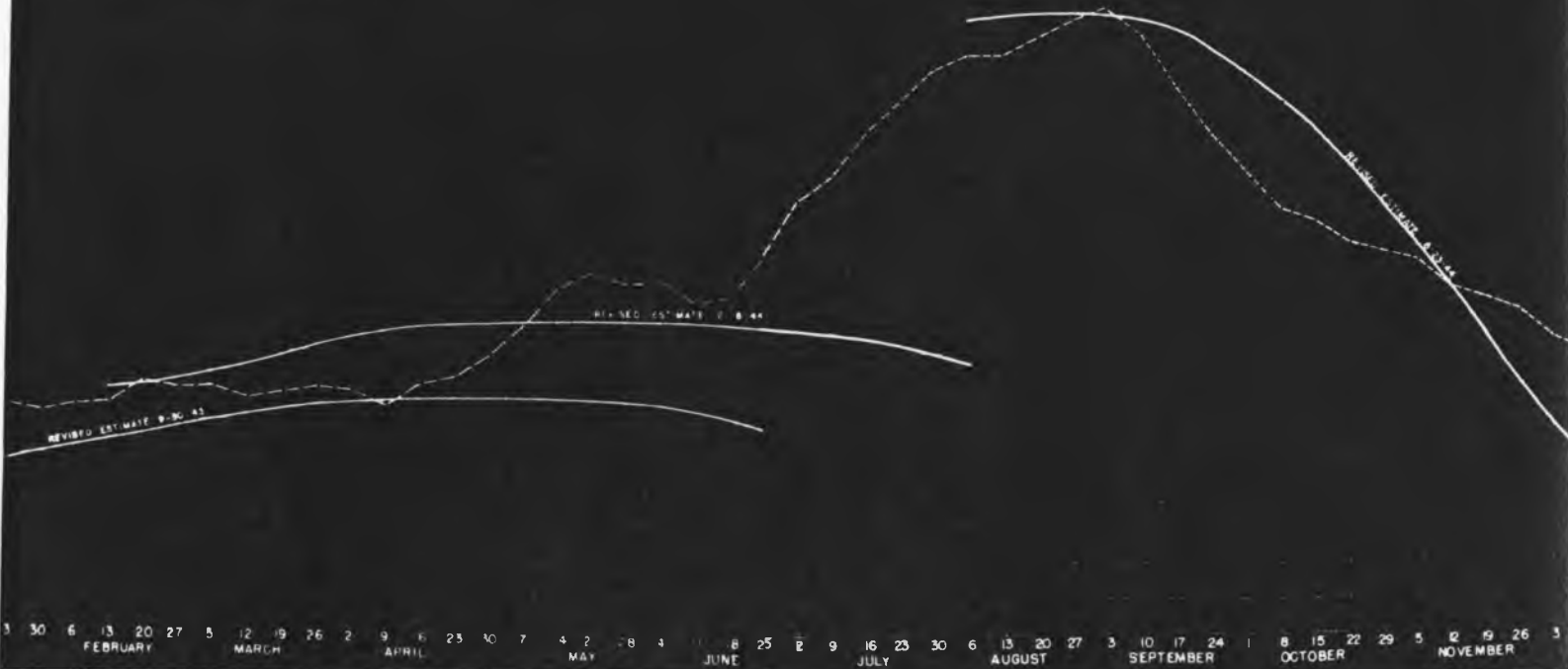
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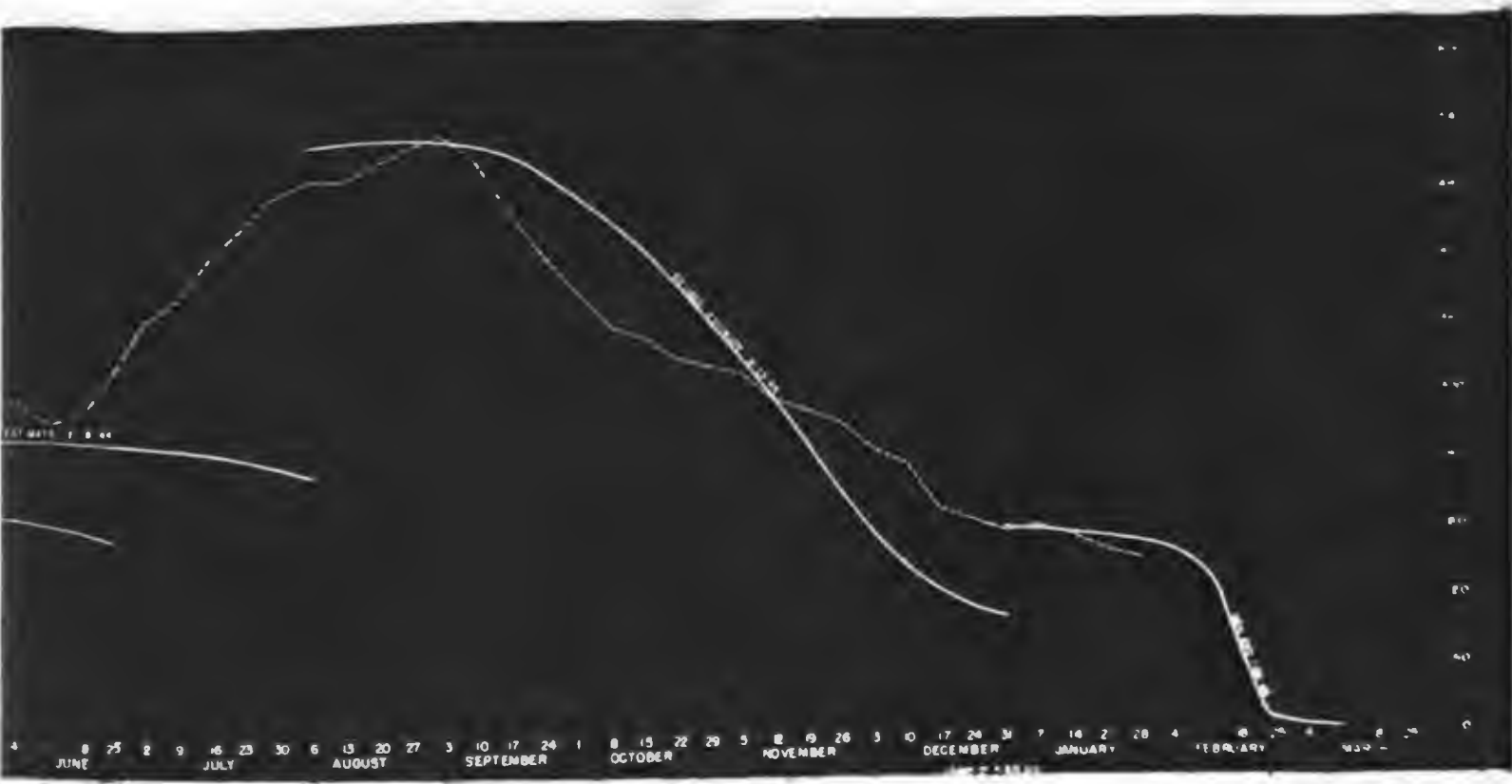
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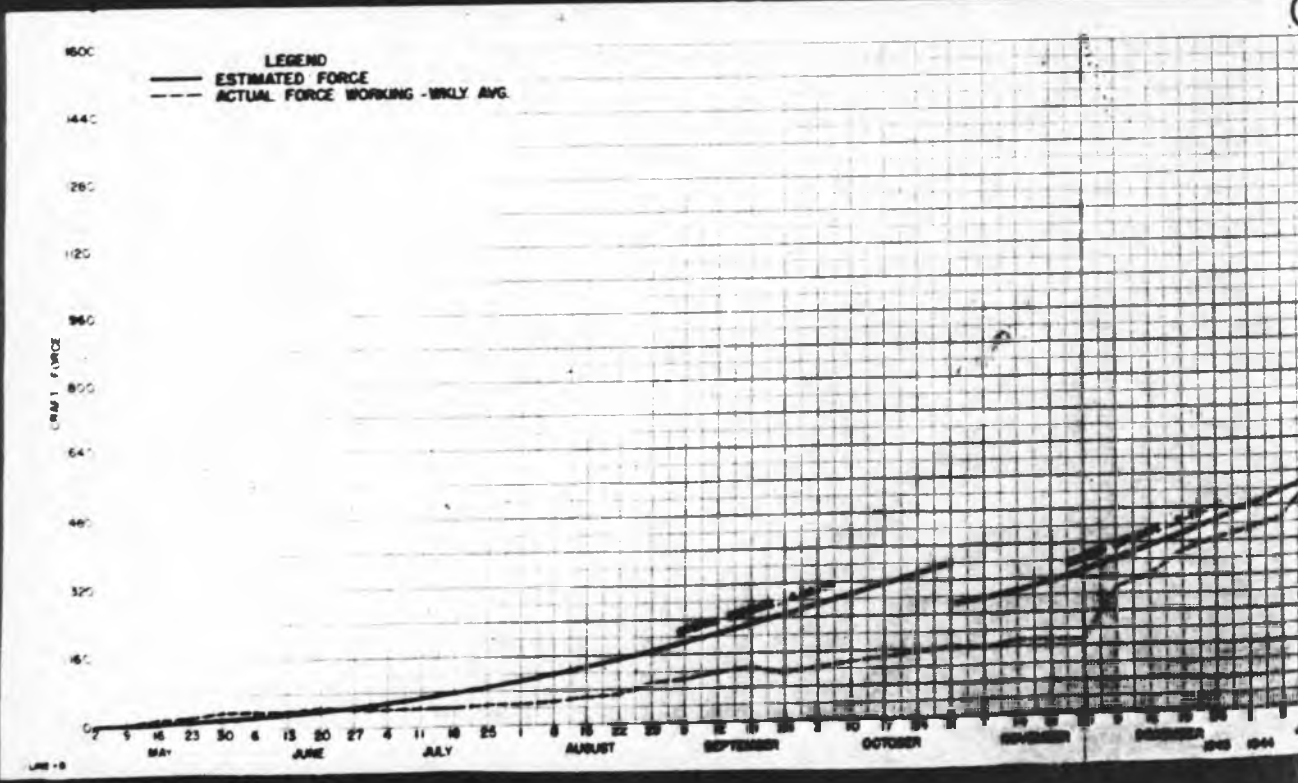
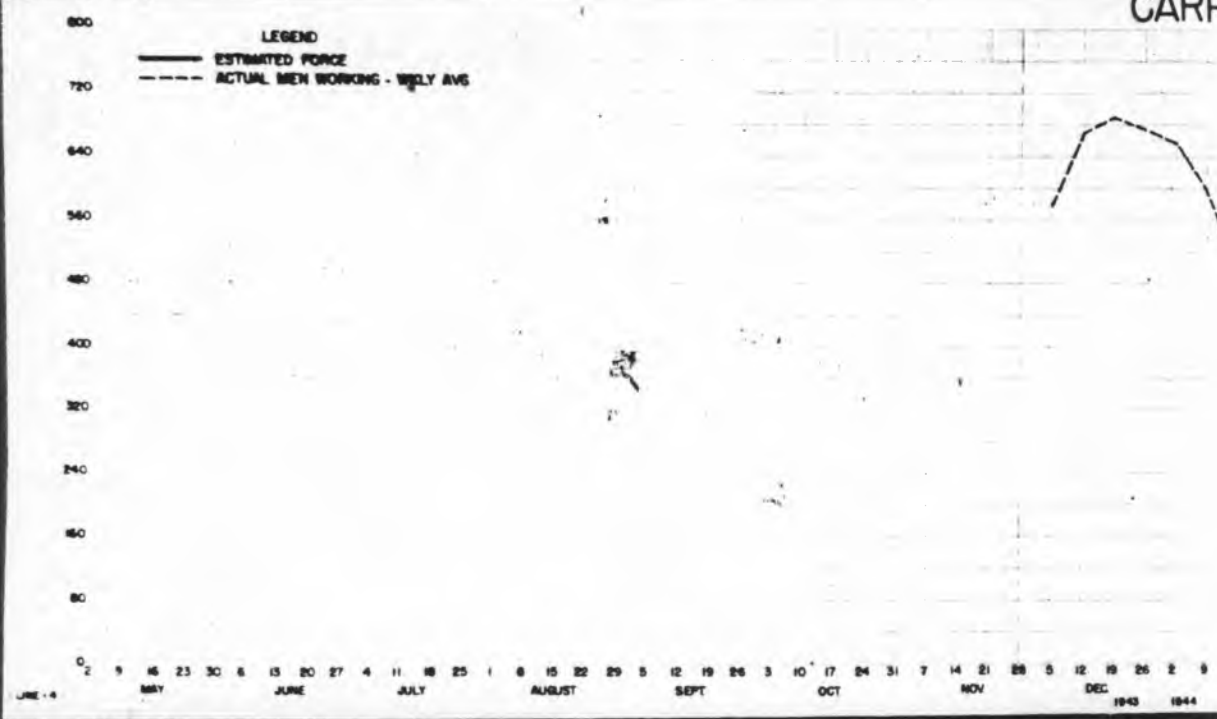


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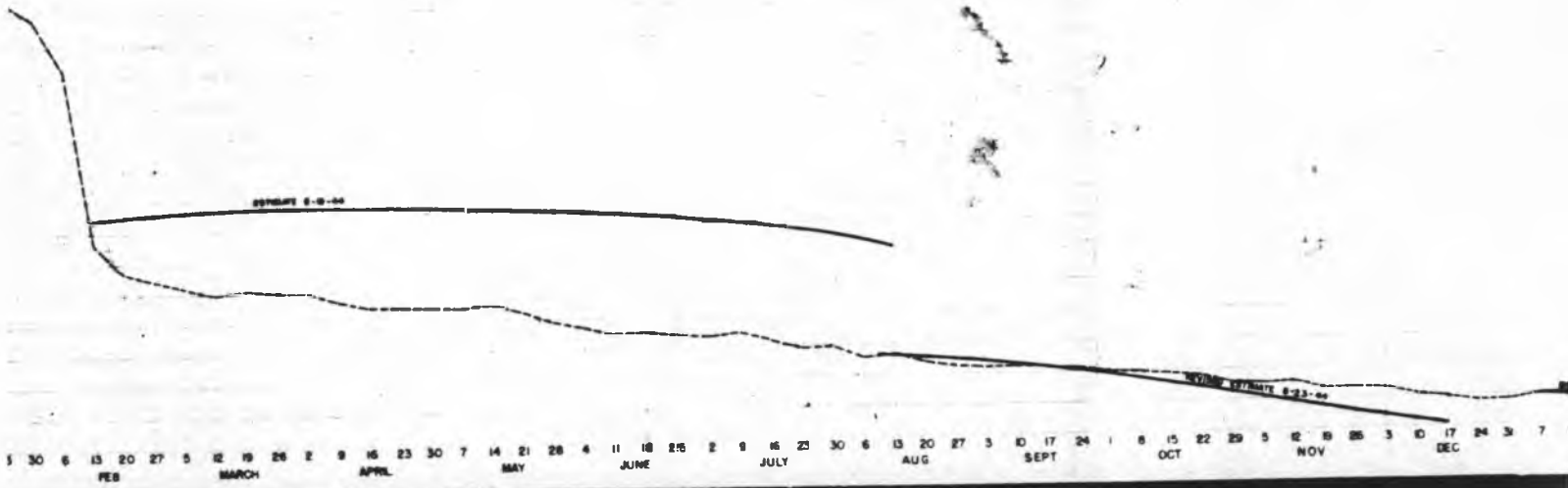






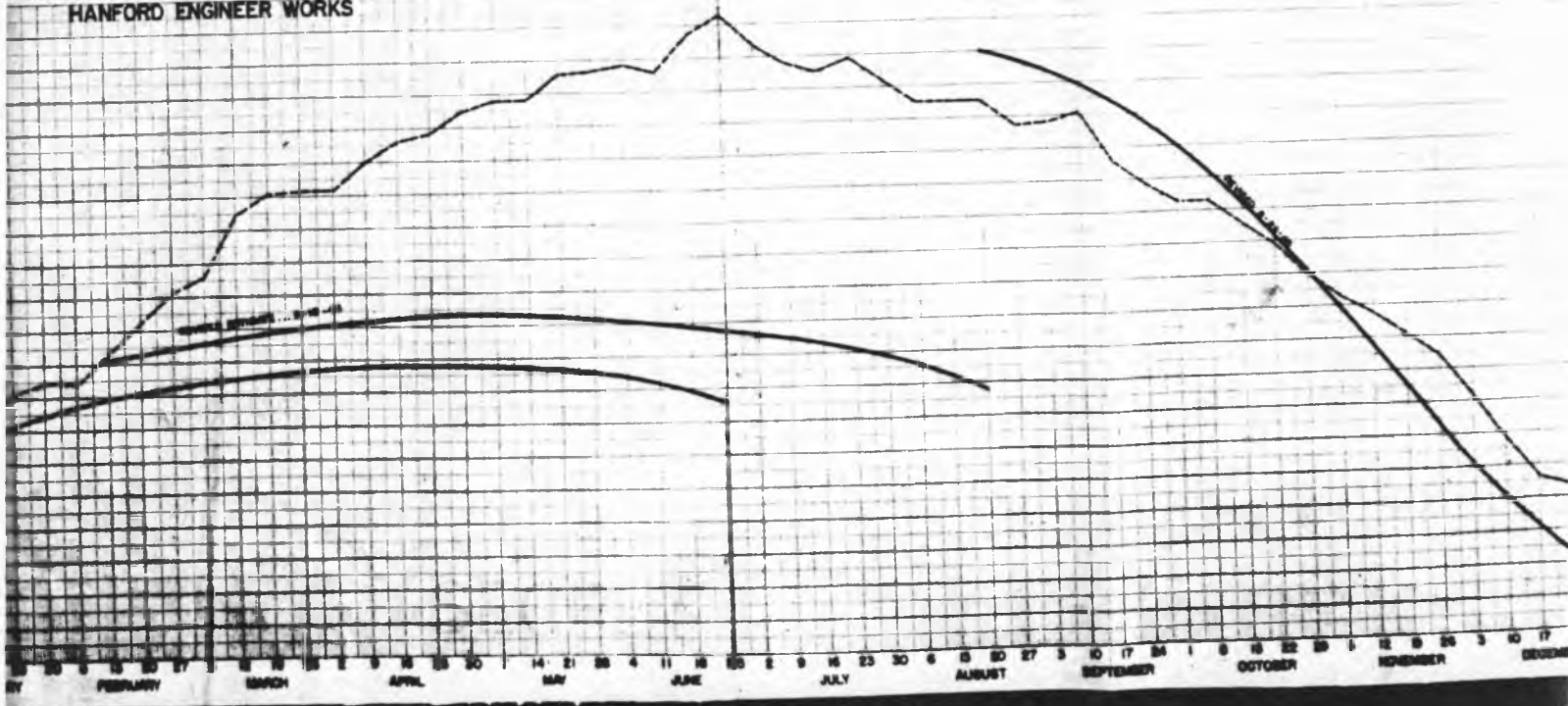
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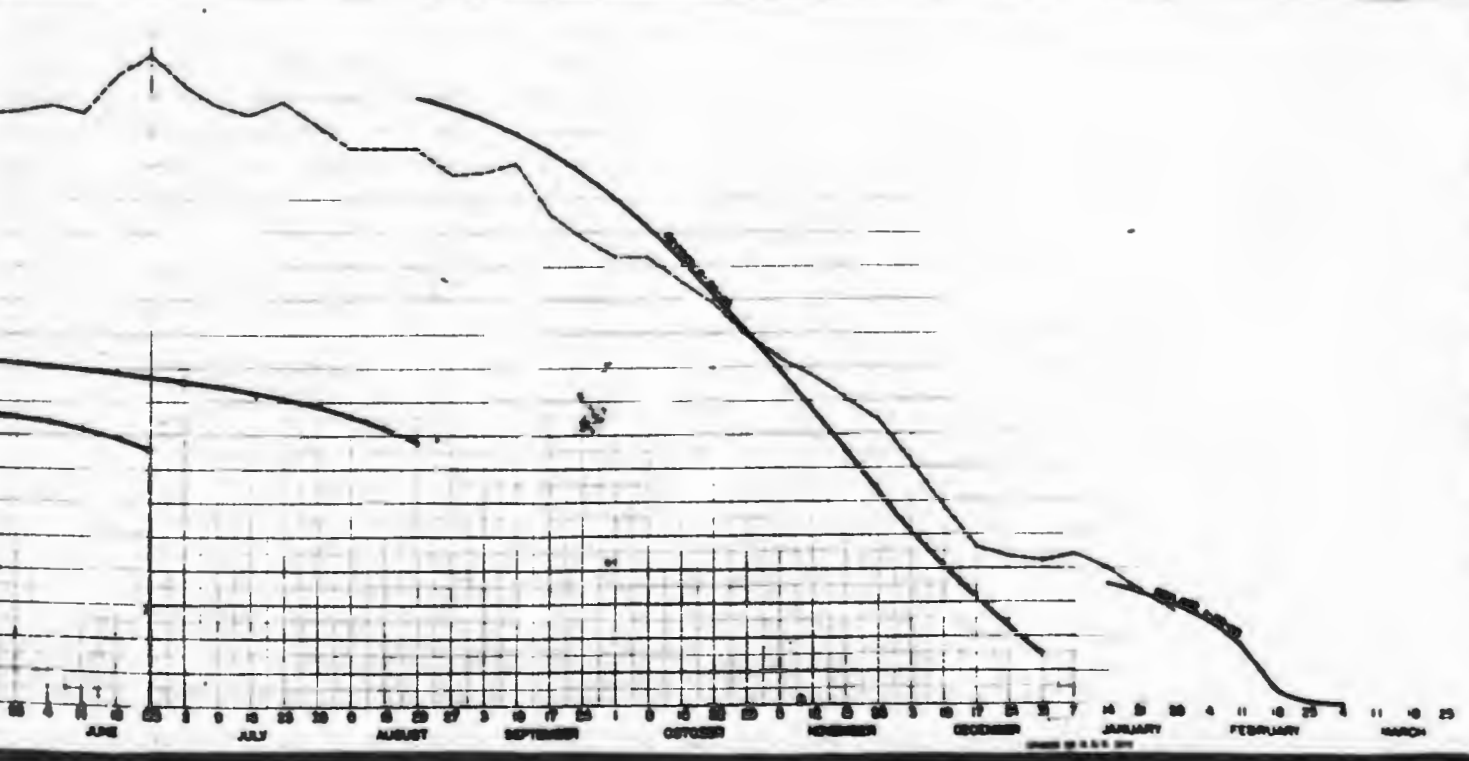
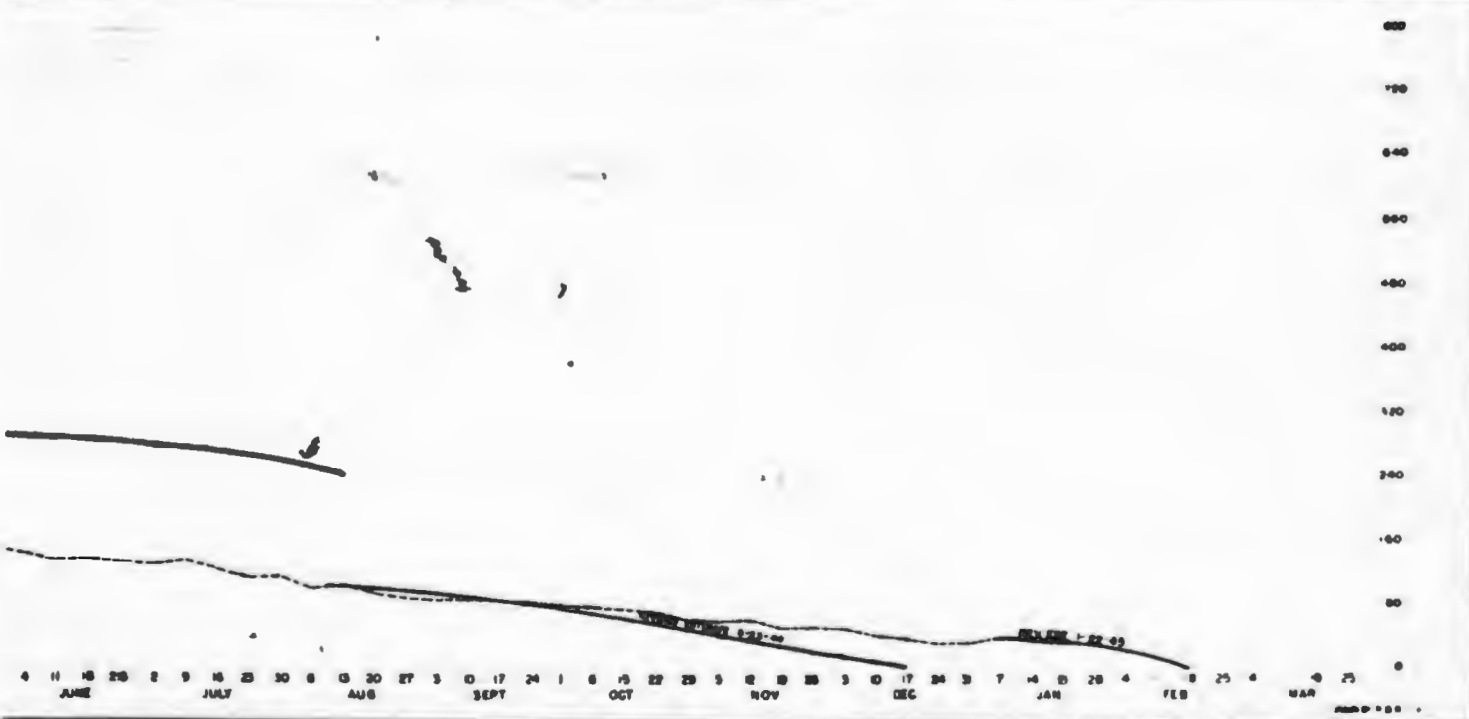
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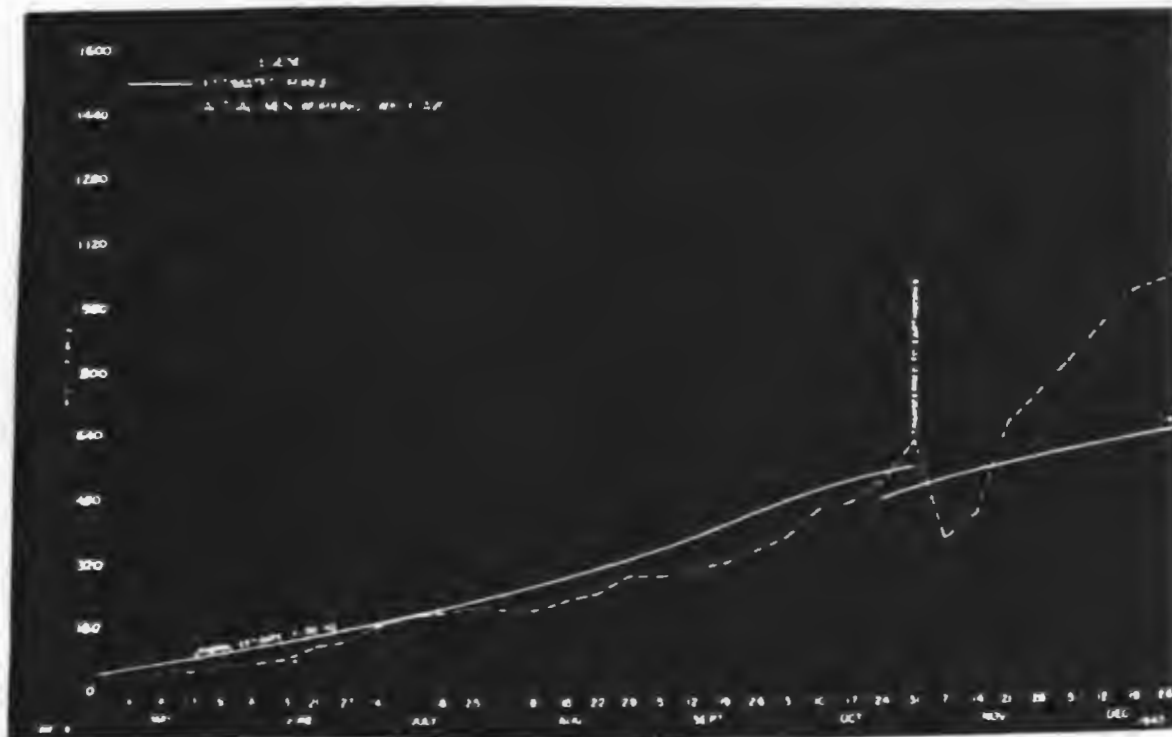
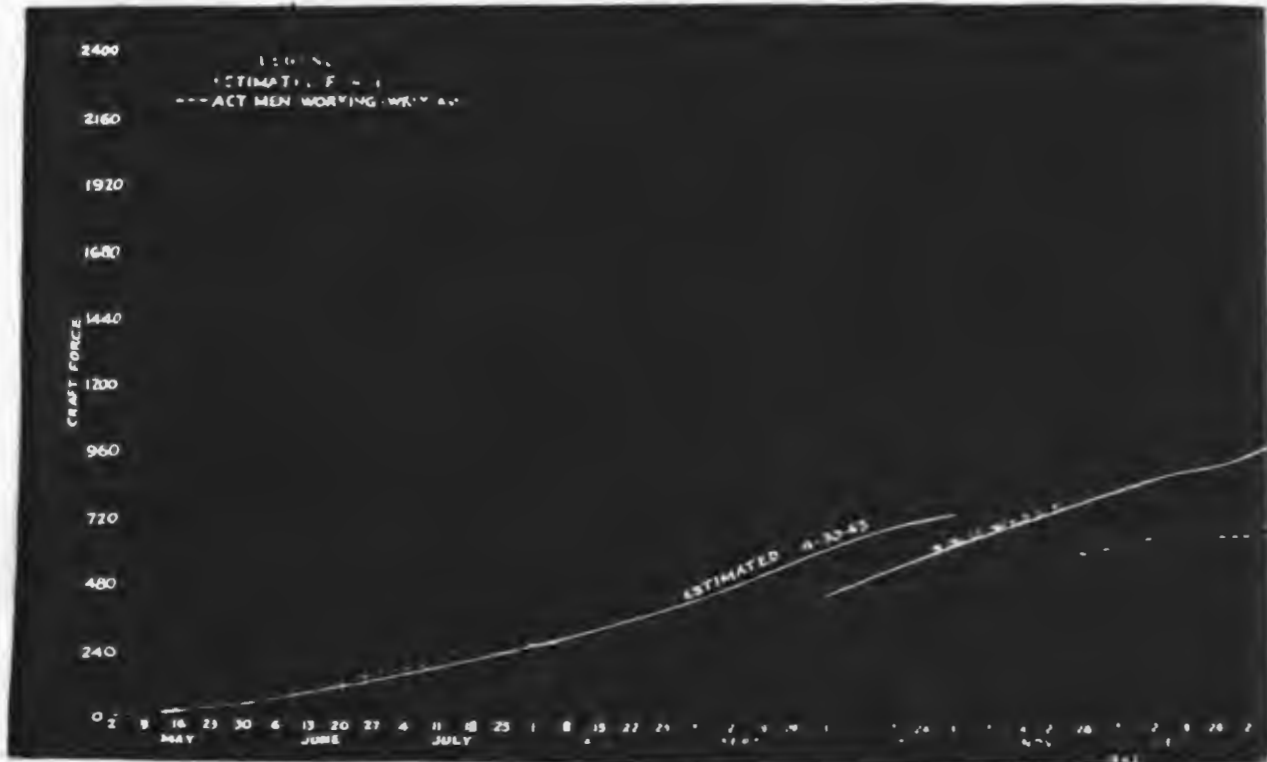


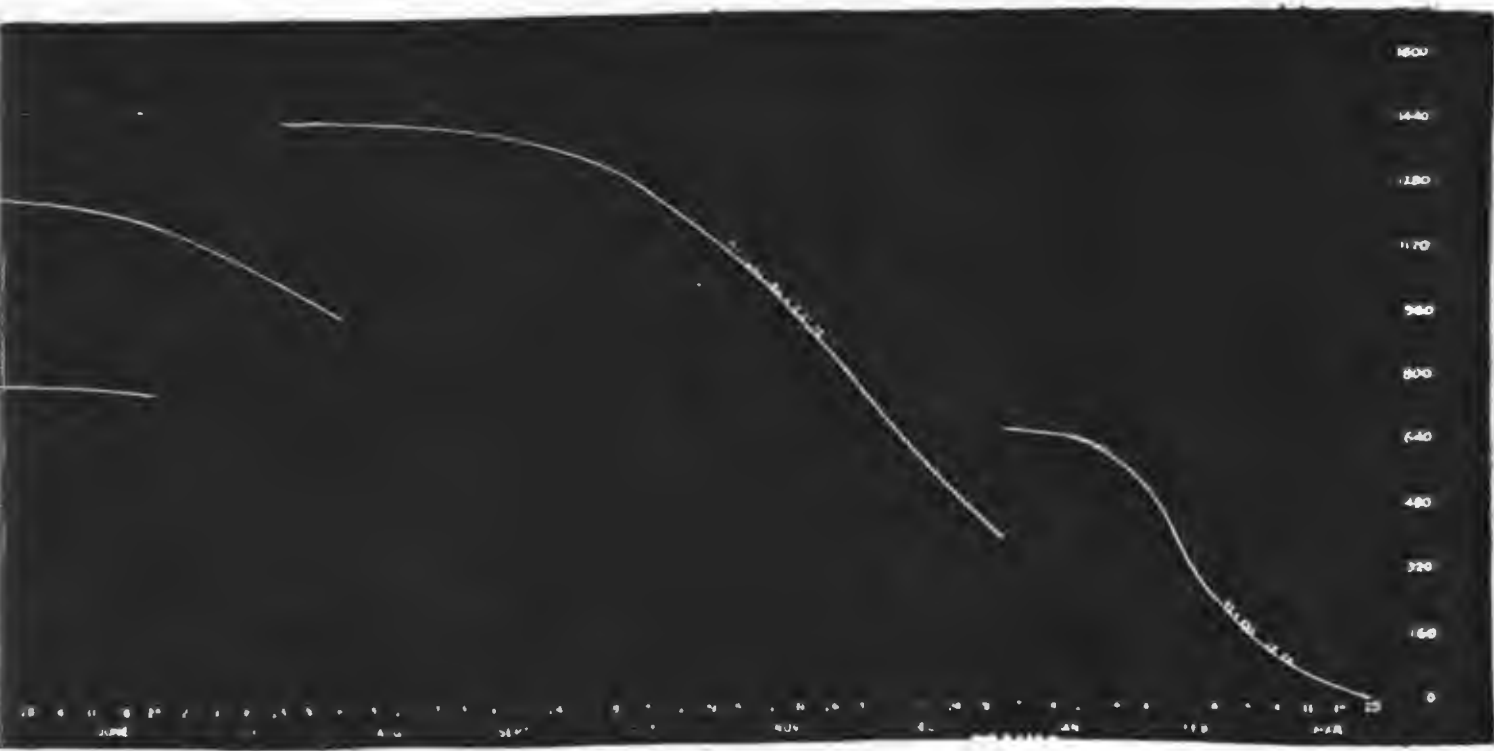
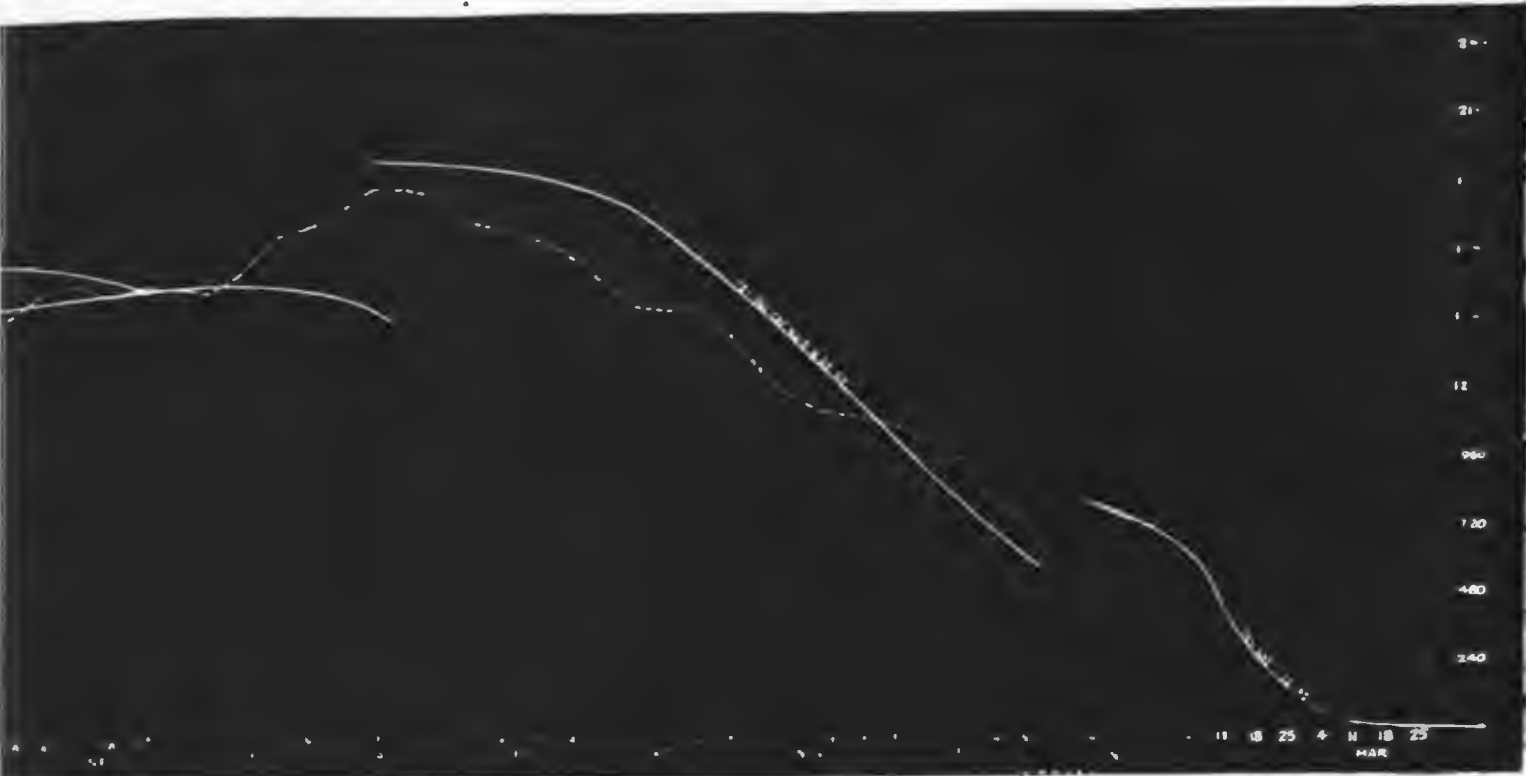
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# ELECTRICAL CRAFT CURVE

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# RIGGER CRAFT CURVE

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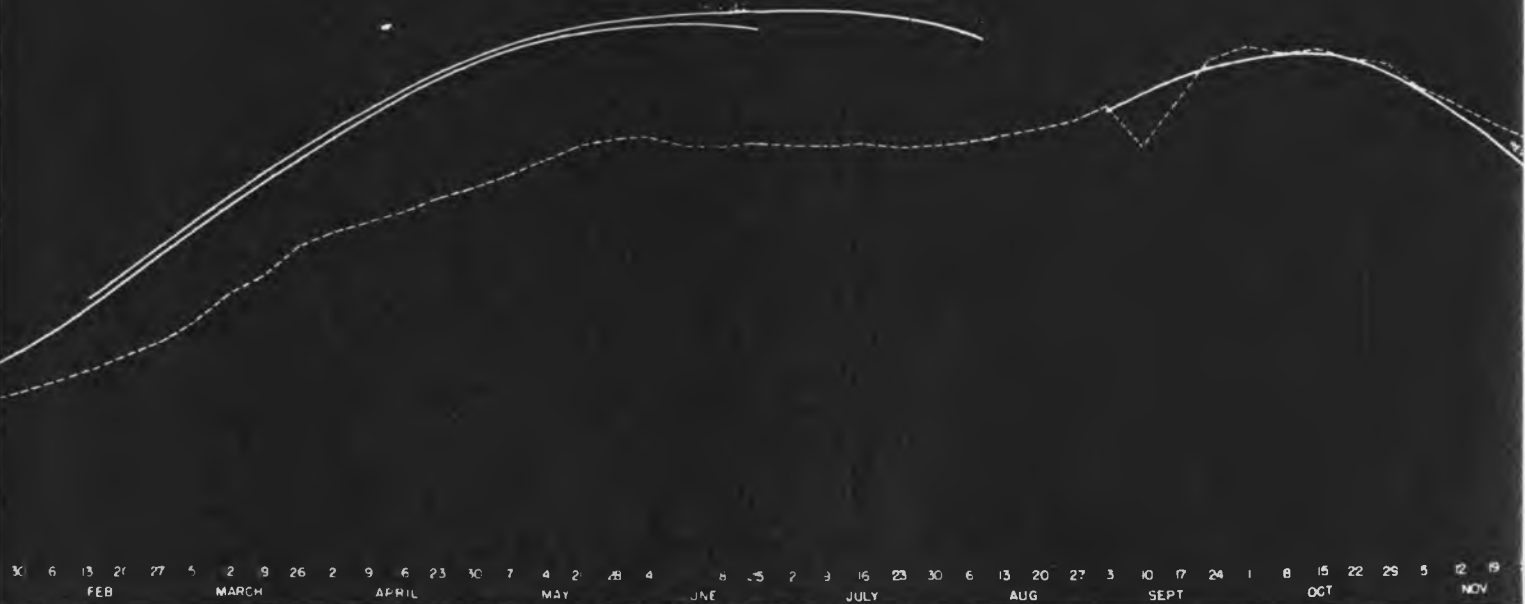
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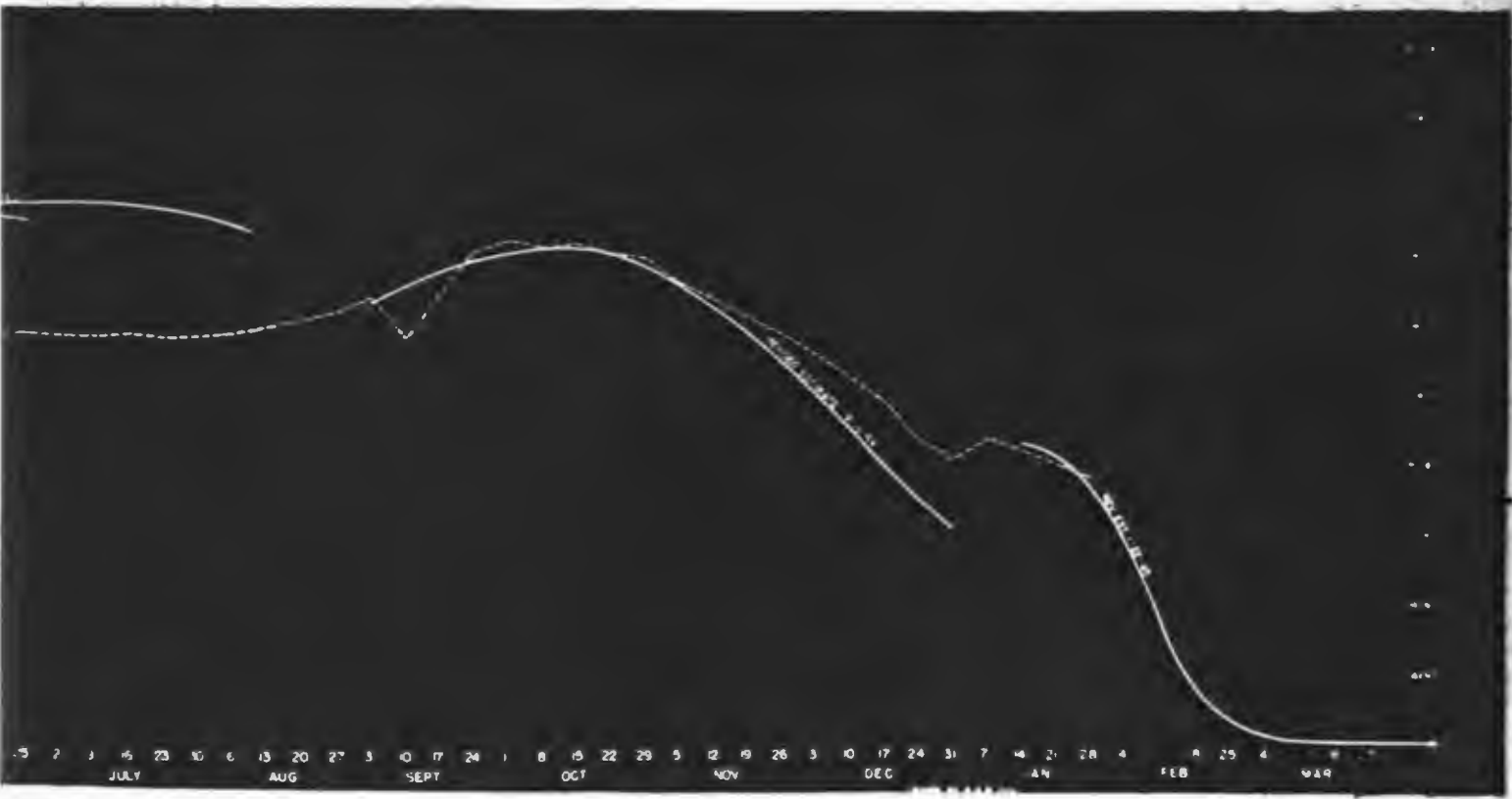
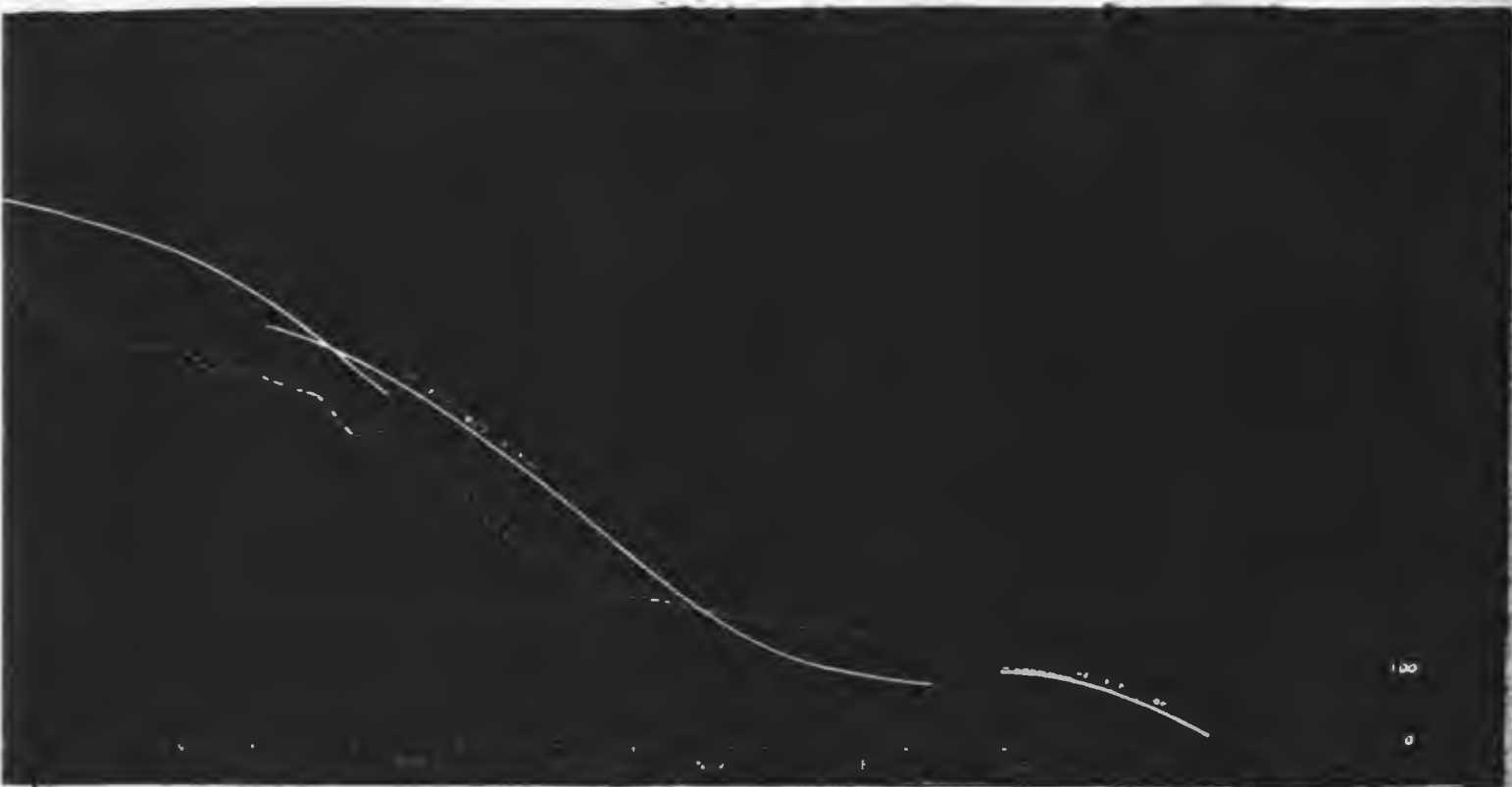


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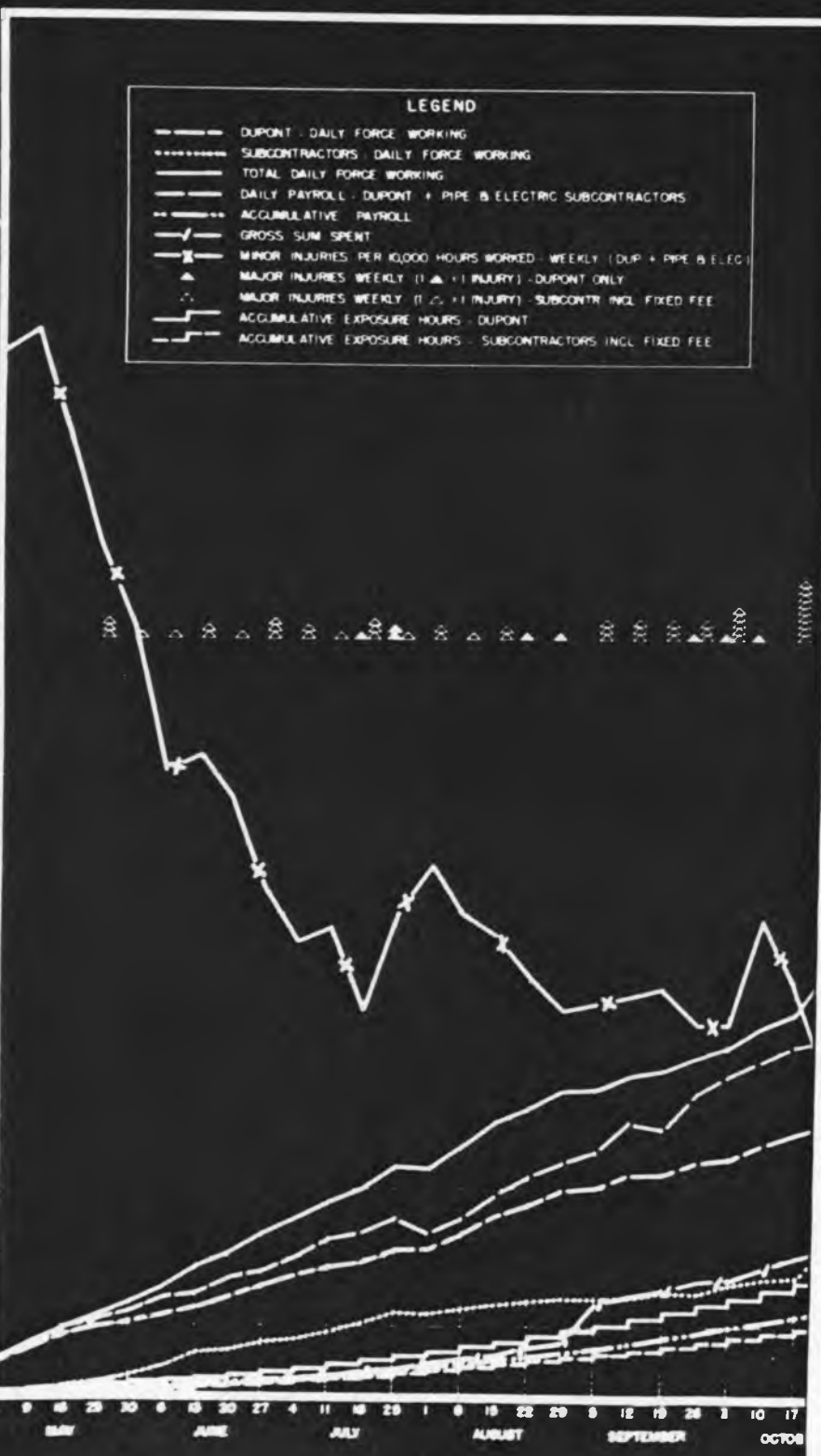
WORK STOPPAGE REPORT

<u>DATE</u>	<u>CRAFT</u>	<u>REASON</u>	<u>ACTION TAKEN</u>	<u>MAN HOURS LOST</u>
7 February to 8 February 1944	Welders - Heavy Equipment	22 men objected to the transfer of a member of the crew from day shift, contending that the change was influenced by a grudge existing between the Assistant Area Superintendent and welder.	By discussing with the men advising them to present grievances through the normal channels established for this purpose	192
13 March to 13 March 1944	Sheet Metal	13 sheet metal workers refused to start work Monday the 13th, because they had not been permitted to work the preceding Sunday. These men demanded that they be given 70 hours per week, claiming that the other crafts working in this Area were receiving this time and that for the previous three weeks they had worked 70 hours.	Supervision explained to the men that only certain phases of the work, classified as emergency work, was on a 70 hour schedule and as soon as practicable, these phases would be returned to the normal 54 hour work schedule. This explanation was accepted.	13
7 July 1944 to 8 July 1944	Riggers and Pipefitters	Jurisdictional dispute over the handling of pipe, castings, and fittings which was being claimed by both crafts.	Men returned to work pending official clarification of respective jurisdiction	1260
7 September to 8 September 1944	Steamfitters & Plumbers - vs - Machinists & Boilermakers	Dissatisfaction of certain employees with their Union representatives. Protest of certain UA members to the actions of their duly appointed or elected officers who sent in other Union craftsmen to man the job.	International representative agreed to recognize and consider grievances presented by committee at weekly meetings. Employees elected to go back to work pending settlement with reference to the use of other Union crafts for piping work under jurisdiction of the UA	13595

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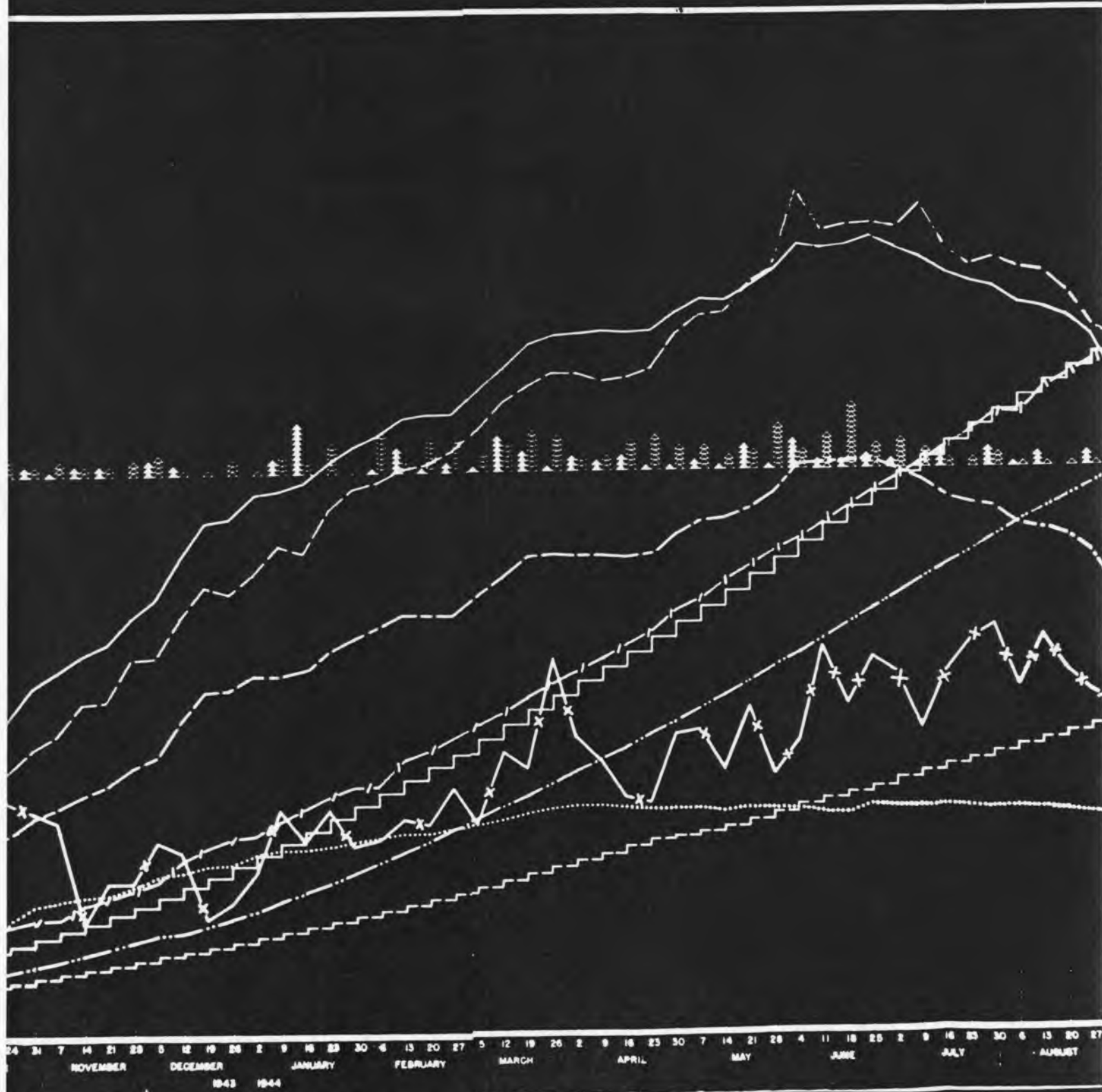
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95,000,000	4.75	570,000	19	190,000,000	390,000,000
90,000,000	4.37	540,000	18	180,000,000	360,000,000
85,000,000	4.00	510,000	17	170,000,000	340,000,000
80,000,000	3.63	480,000	16	160,000,000	320,000,000
75,000,000	3.25	450,000	15	150,000,000	300,000,000
70,000,000	2.88	420,000	14	140,000,000	280,000,000
65,000,000	2.50	390,000	13	130,000,000	260,000,000
60,000,000	2.13	360,000	12	120,000,000	240,000,000
55,000,000	1.75	330,000	11	110,000,000	220,000,000
50,000,000	1.38	300,000	10	100,000,000	200,000,000
45,000,000	1.00	270,000	9	90,000,000	180,000,000
40,000,000	0.63	240,000	8	80,000,000	160,000,000
35,000,000	0.25	210,000	7	70,000,000	140,000,000
30,000,000	0.00	180,000	6	60,000,000	120,000,000
25,000,000	0.00	150,000	5	50,000,000	100,000,000
20,000,000	0.00	120,000	4	40,000,000	80,000,000
15,000,000	0.00	90,000	3	30,000,000	60,000,000
10,000,000	0.00	60,000	2	20,000,000	40,000,000
5,000,000	0.00	30,000	1	10,000,000	20,000,000
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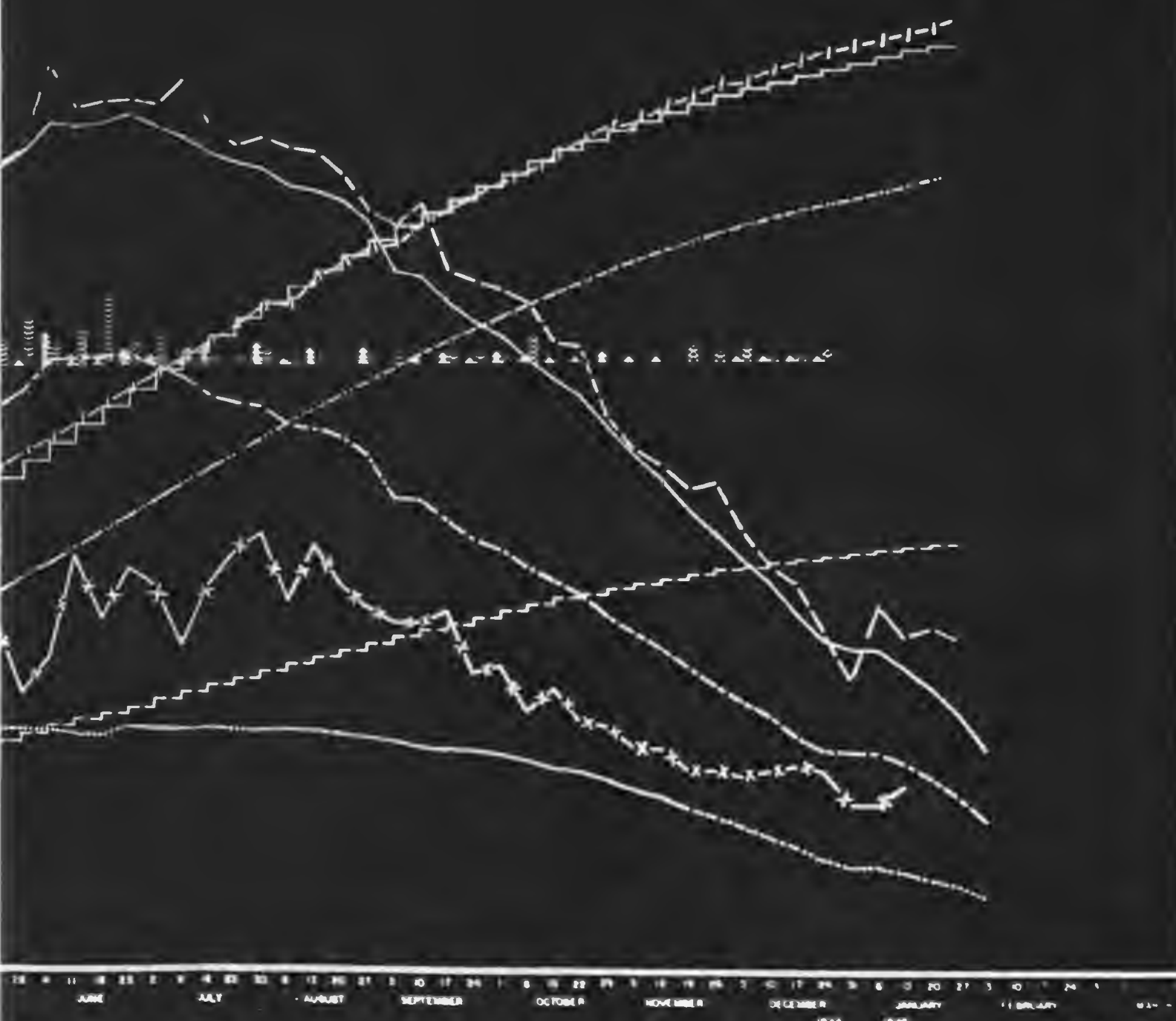
# COMPOSITE CHART

## HANFORD ENGINEER WORKS

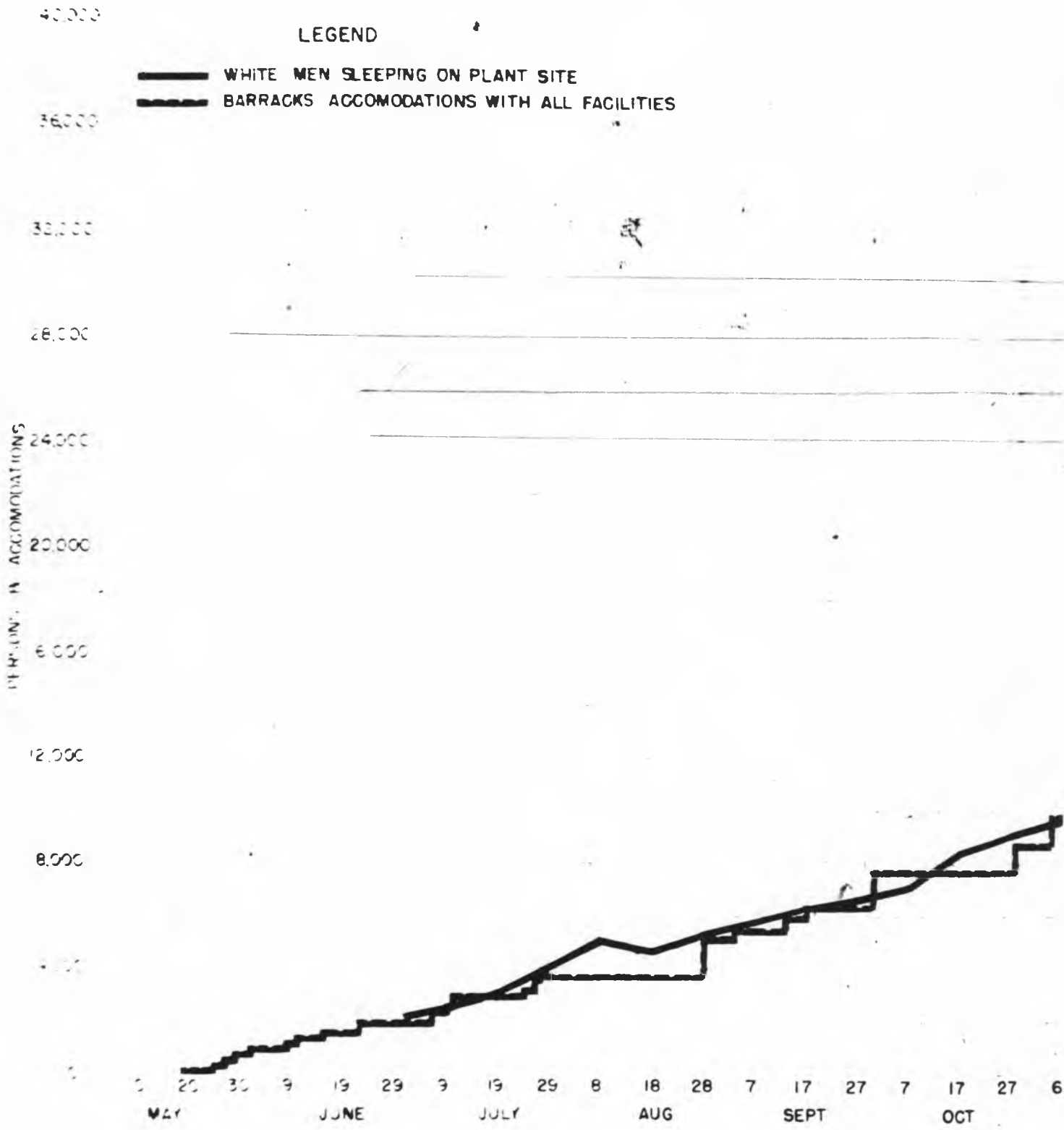
### PROJECT 9536



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 NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST  
 1943 1944

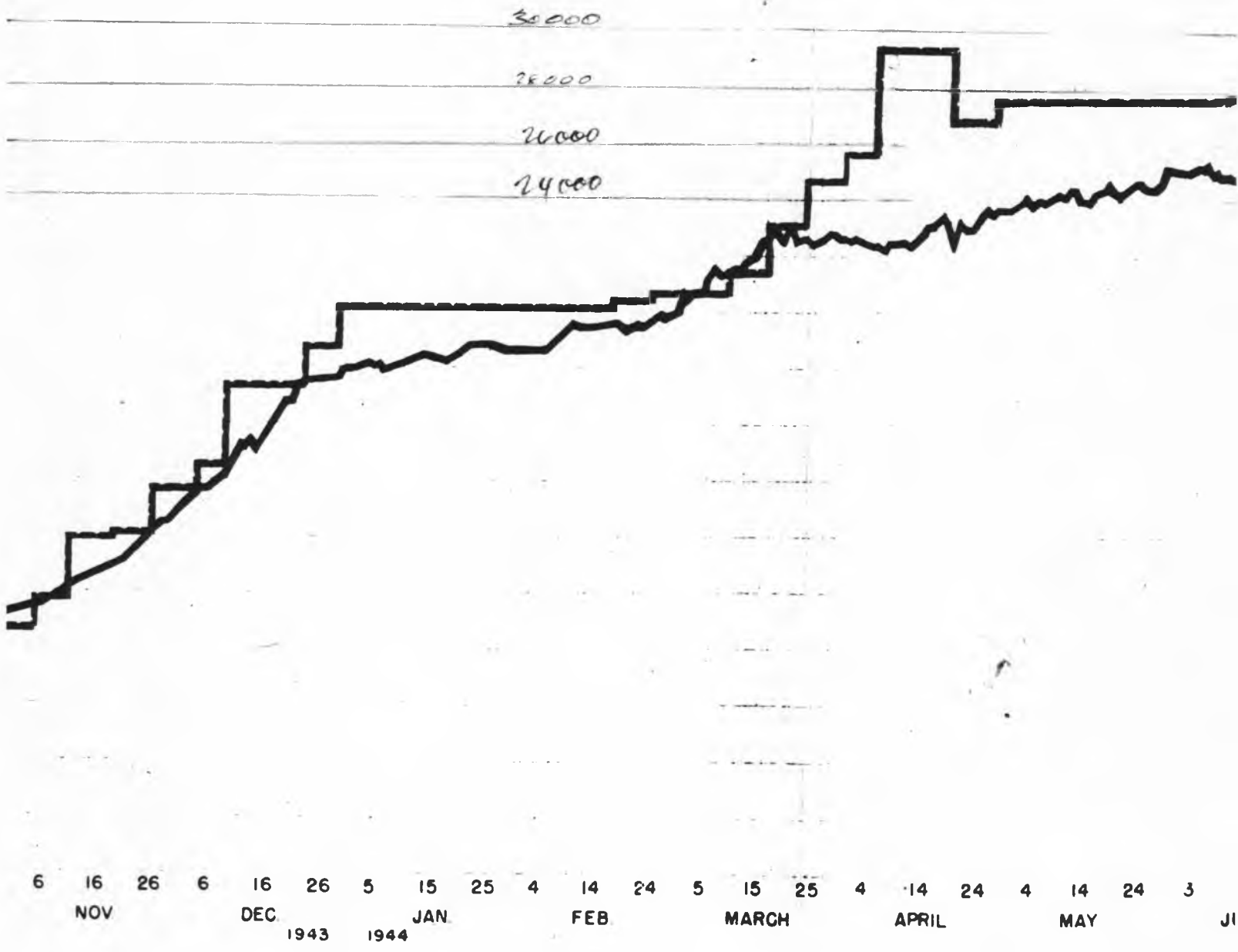


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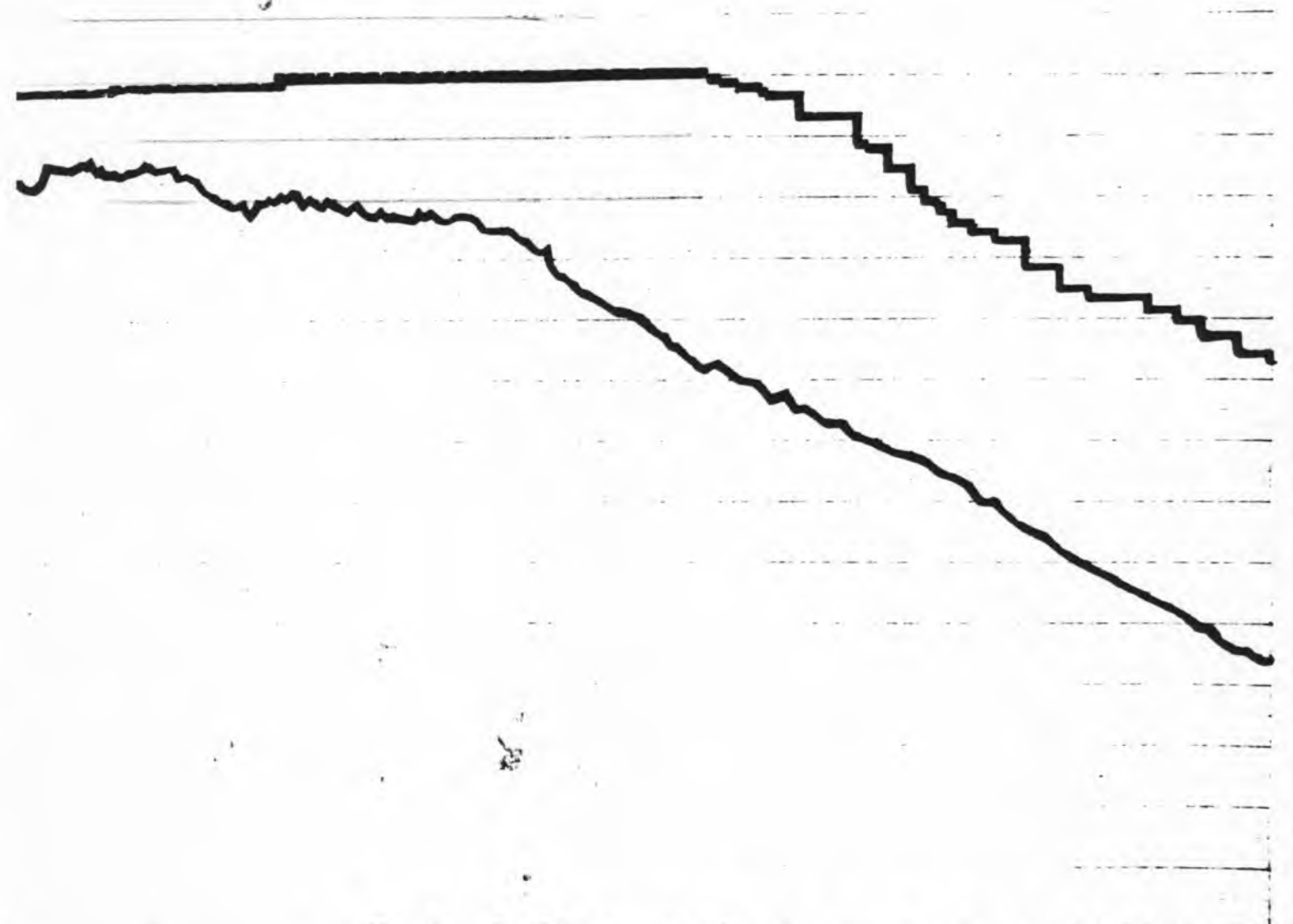


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MALE EMPLOYEES - BARRACKS ACCOMODATIONS  
H E W - 9536

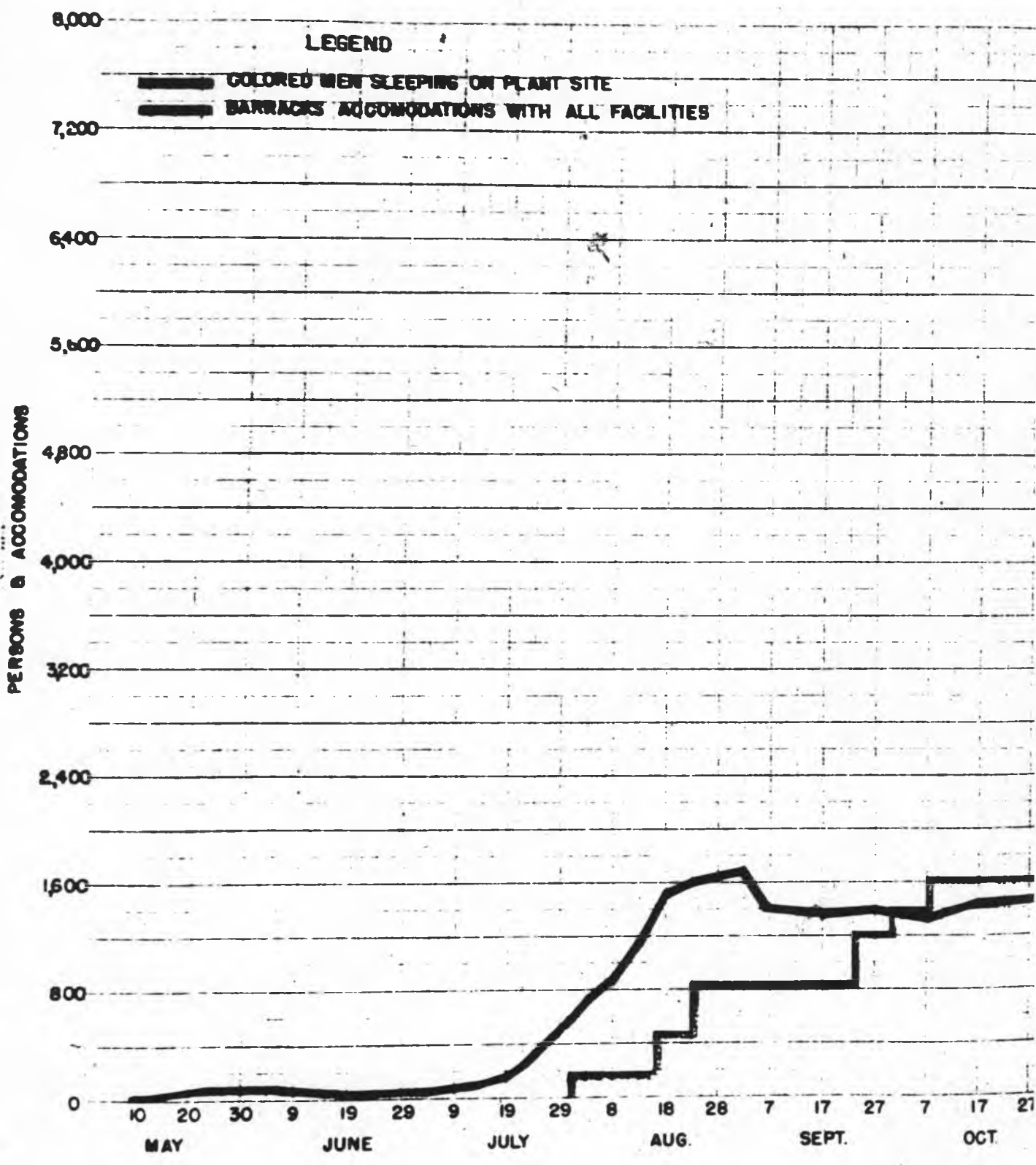


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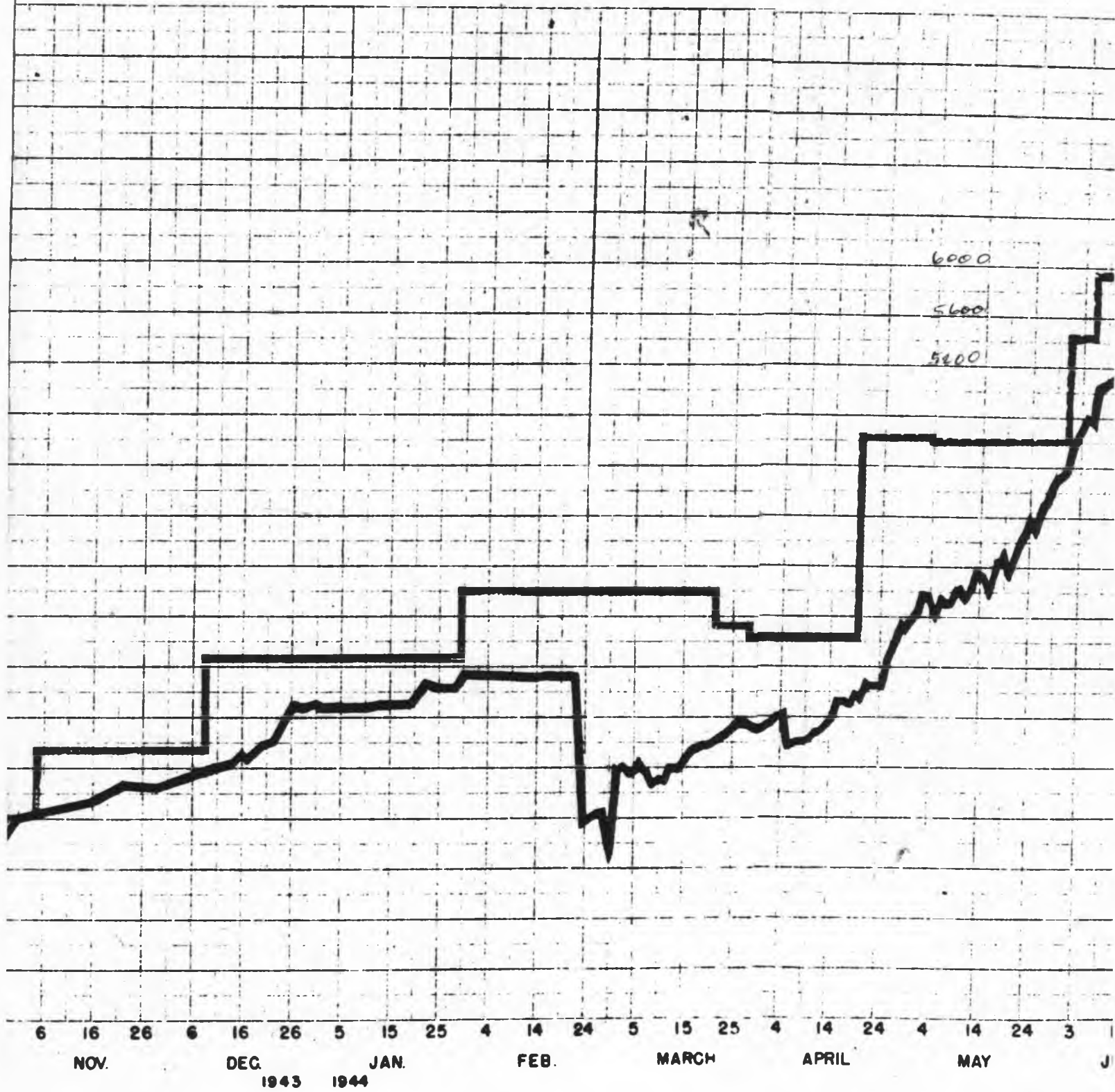
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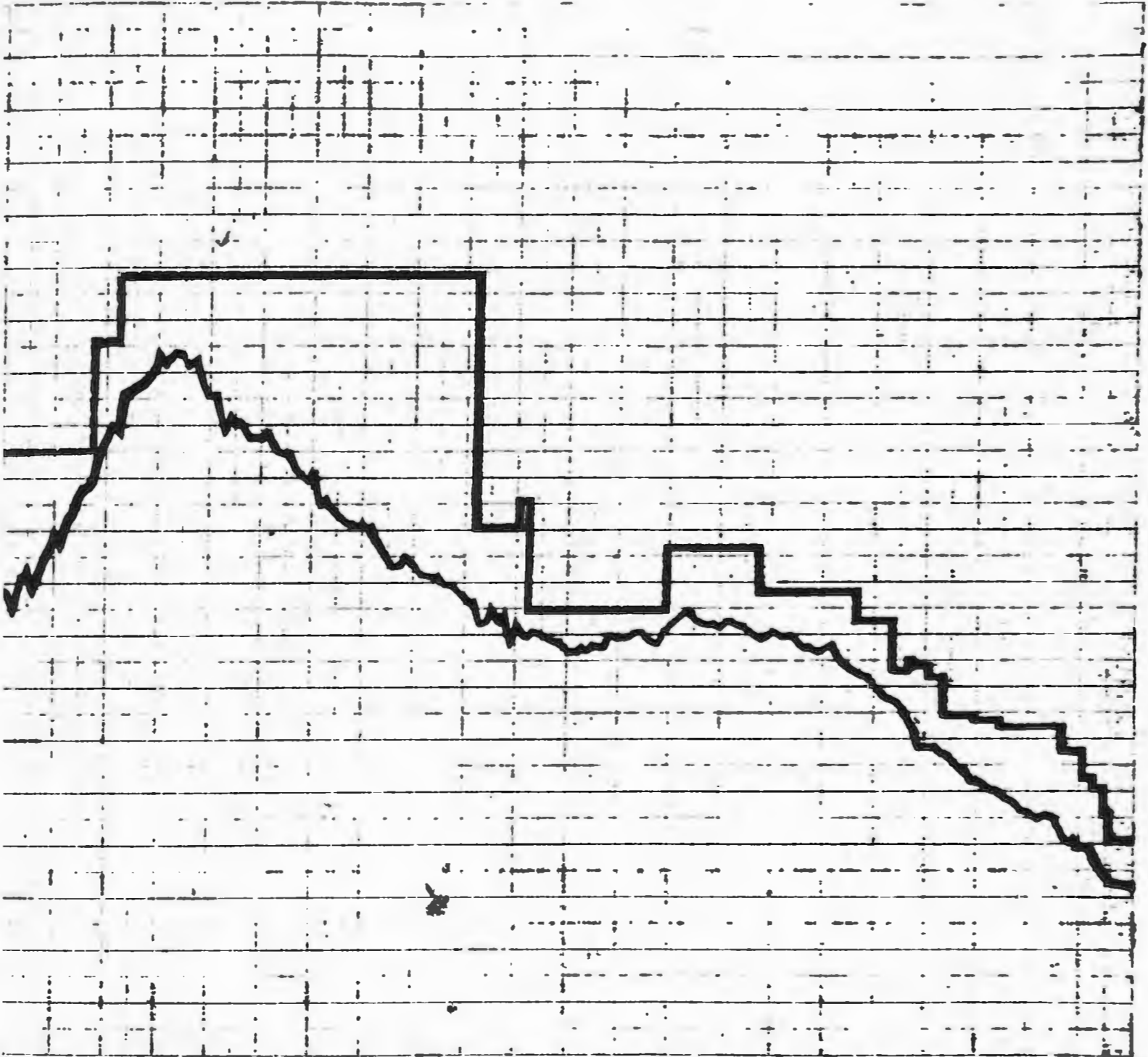
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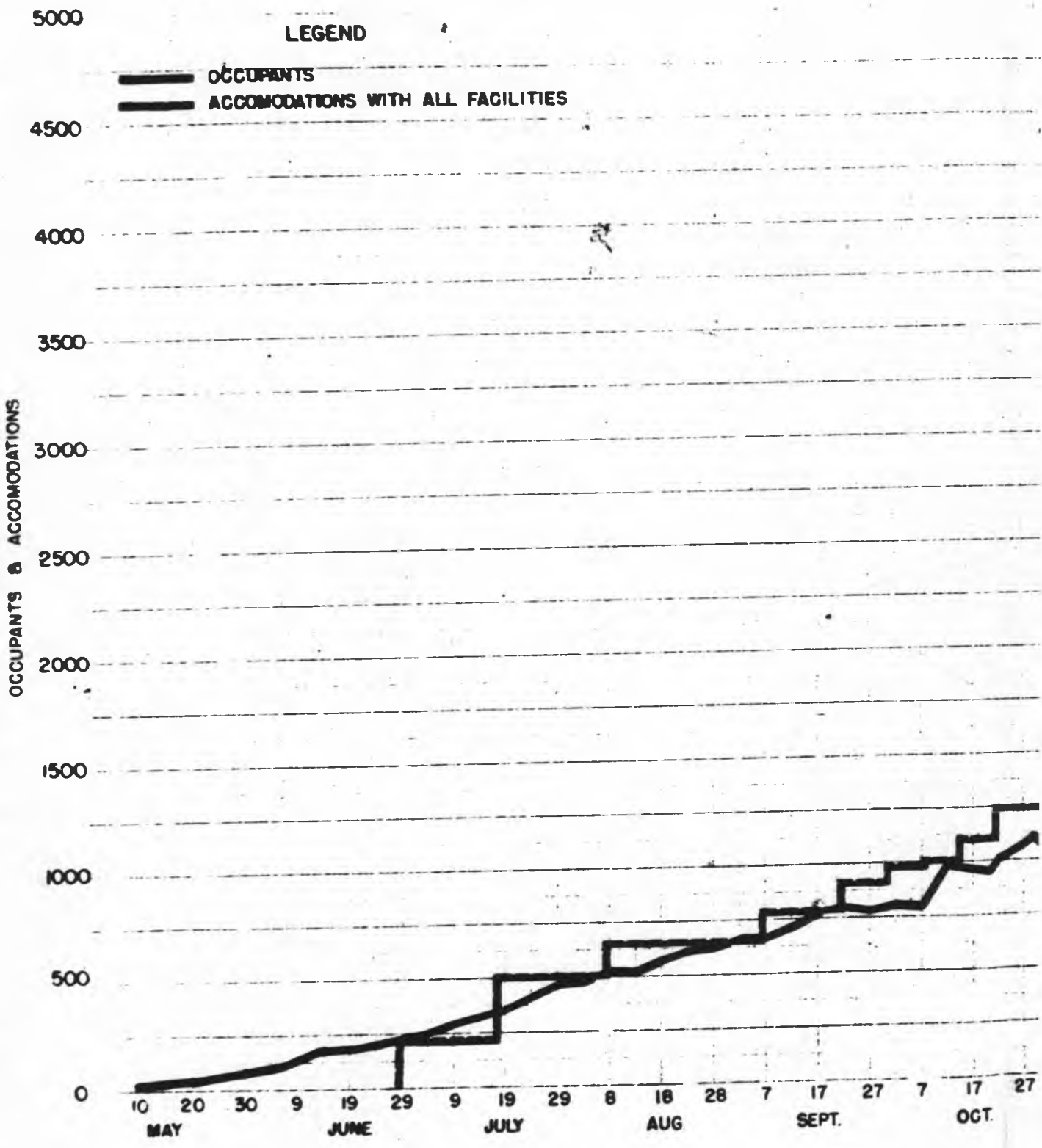


COLORED MALE EMPLOYEES - BARRACKS AND ACCOMODATIONS  
H.E.W. 9536



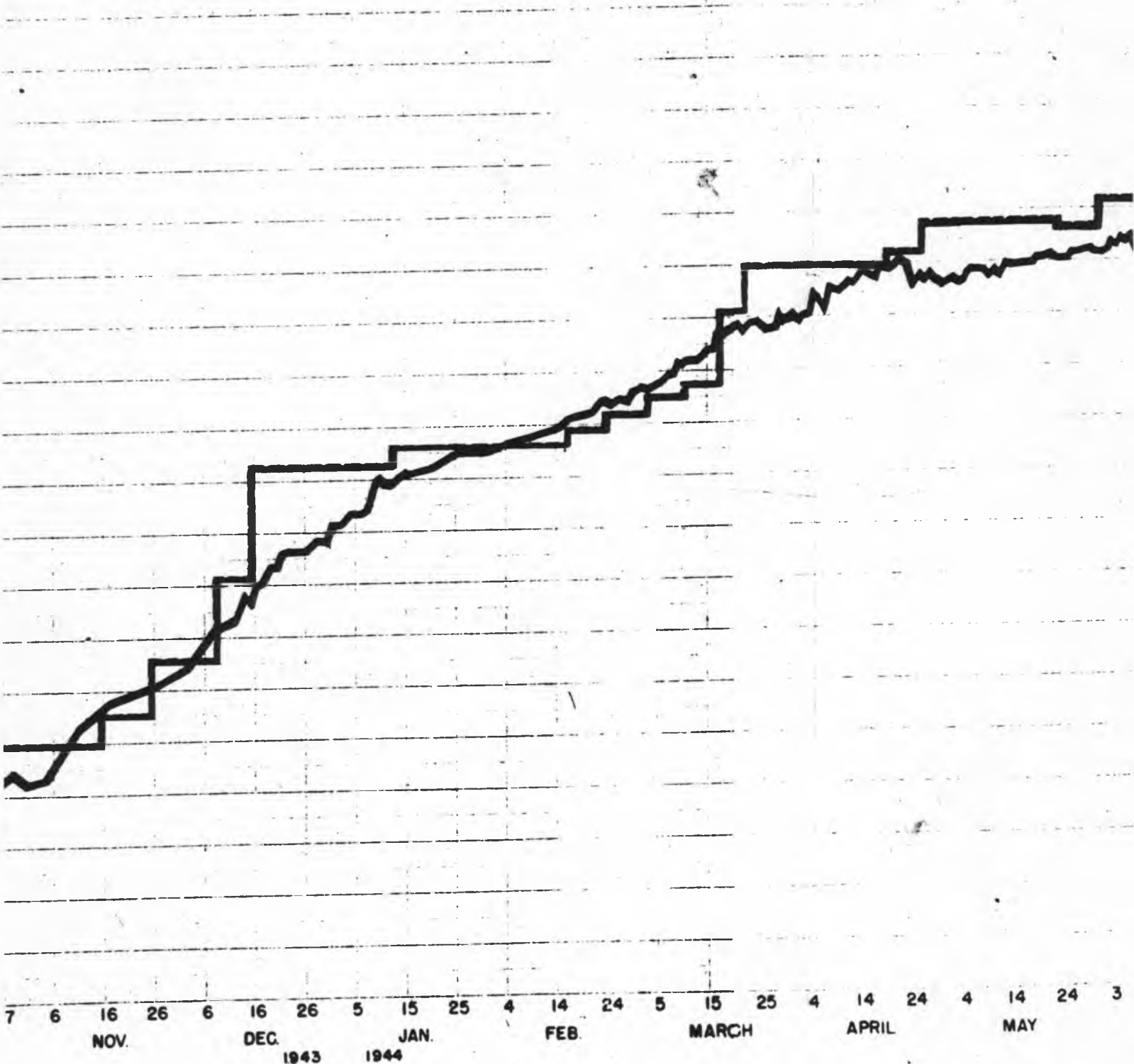


DRAWN BY R.B.R. DM 3-18-66

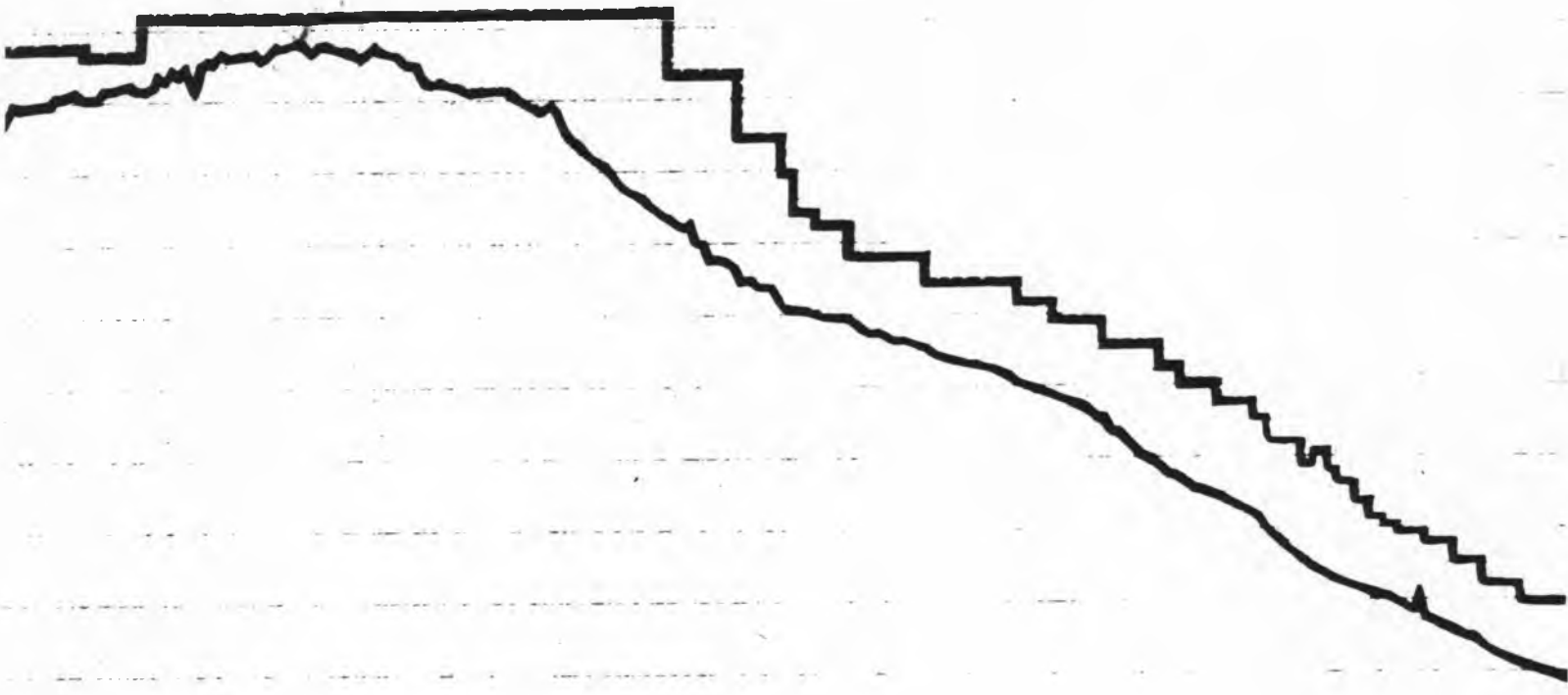


WOMEN'S BARRACKS - OCCUPANTS & ACCOMODATIONS  
H E.W. 9536

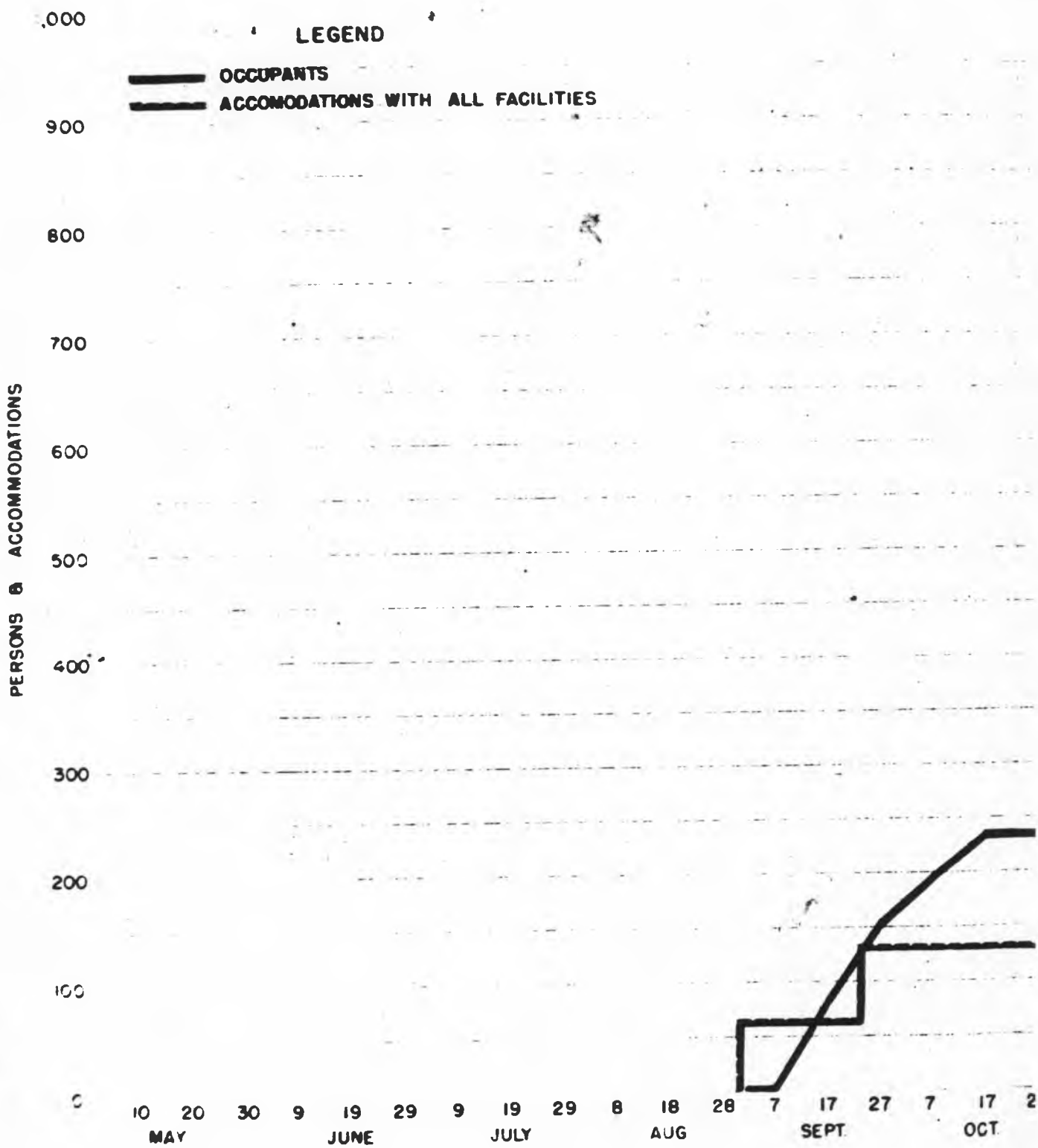
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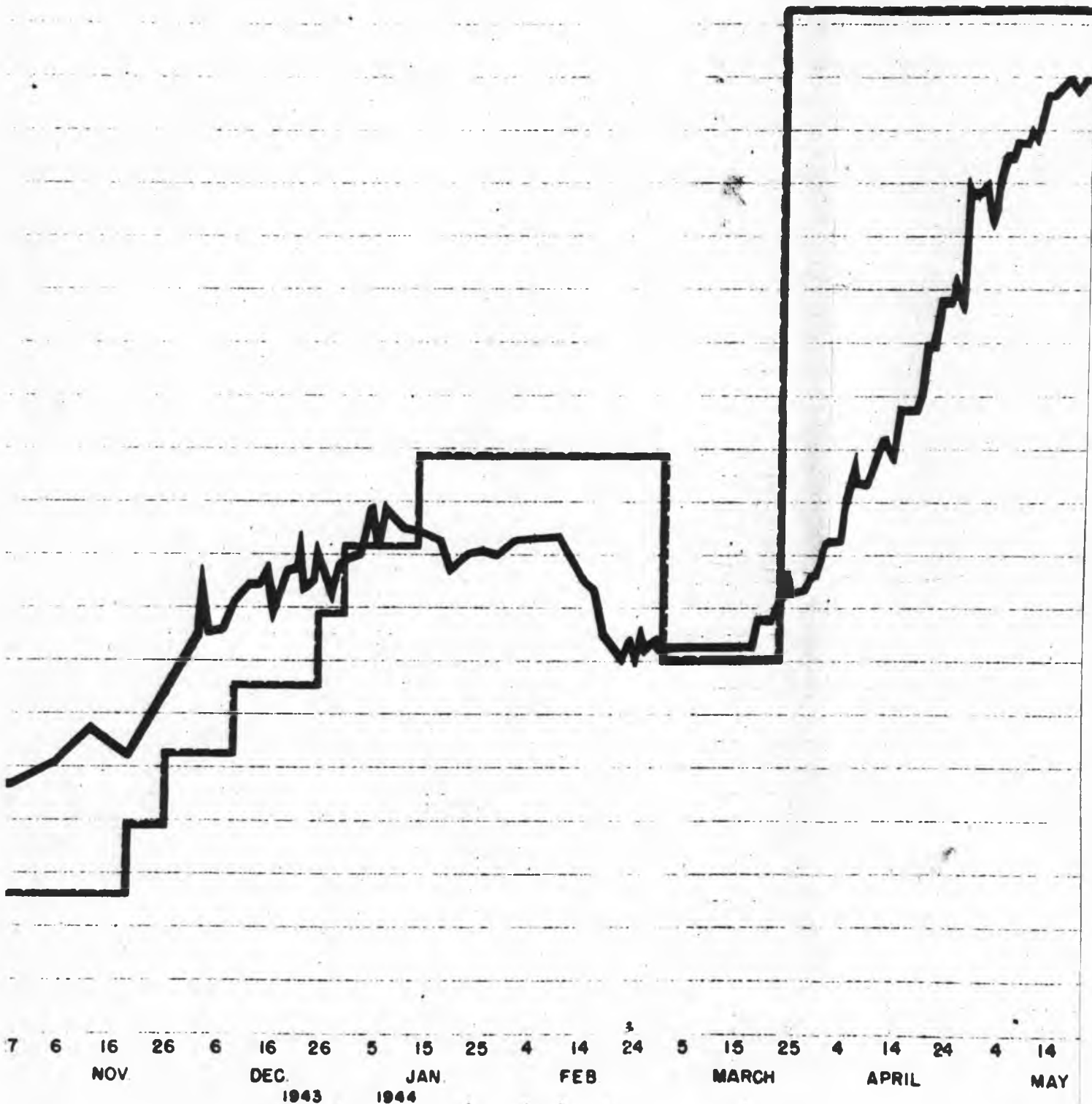


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 MAY JUNE JULY AUG. SEPT OCT NOV DEC  
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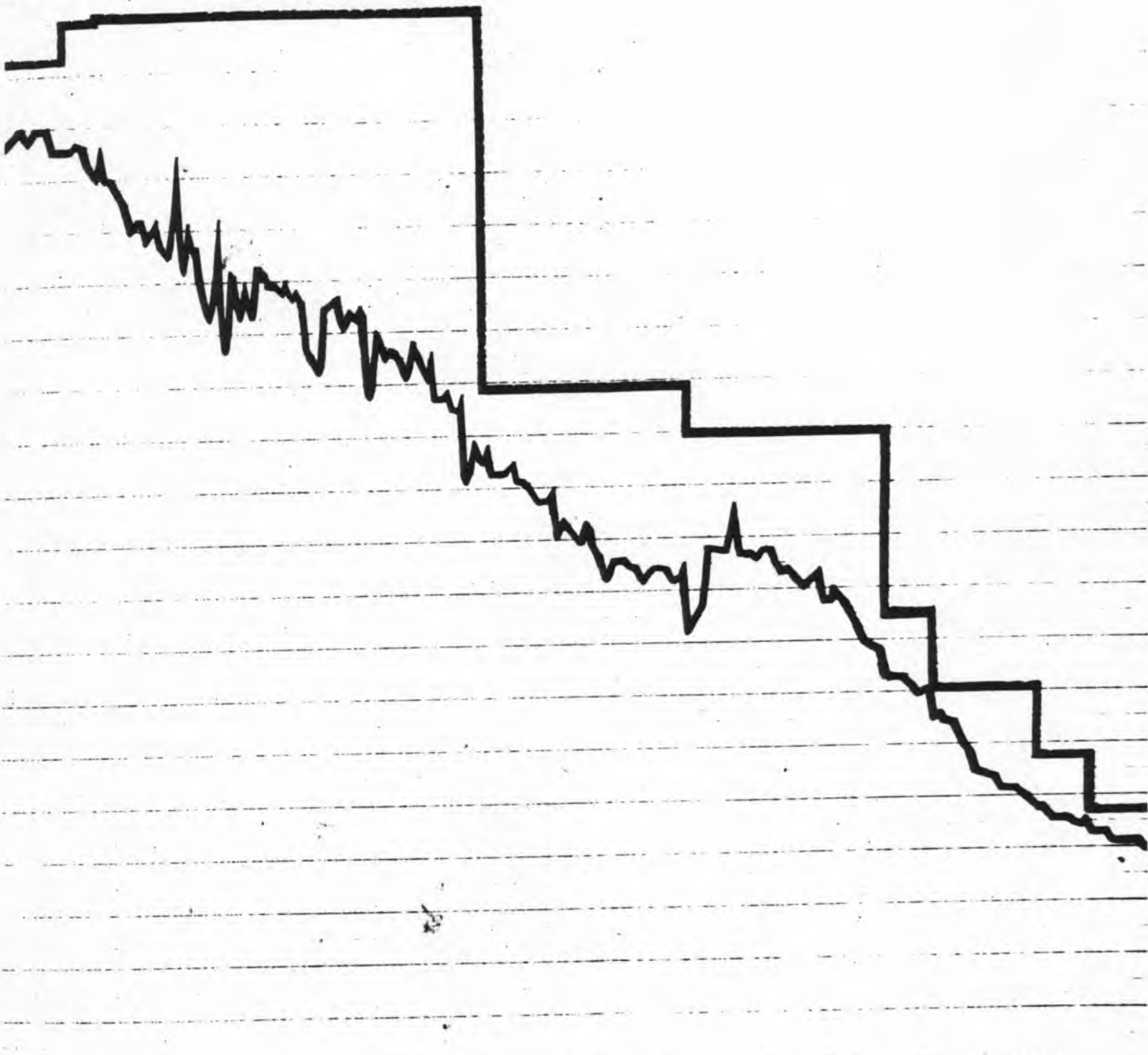
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COLORED WOMENS BARRACKS - OCCUPANTS AND ACCOMODATIONS  
H E W 9536



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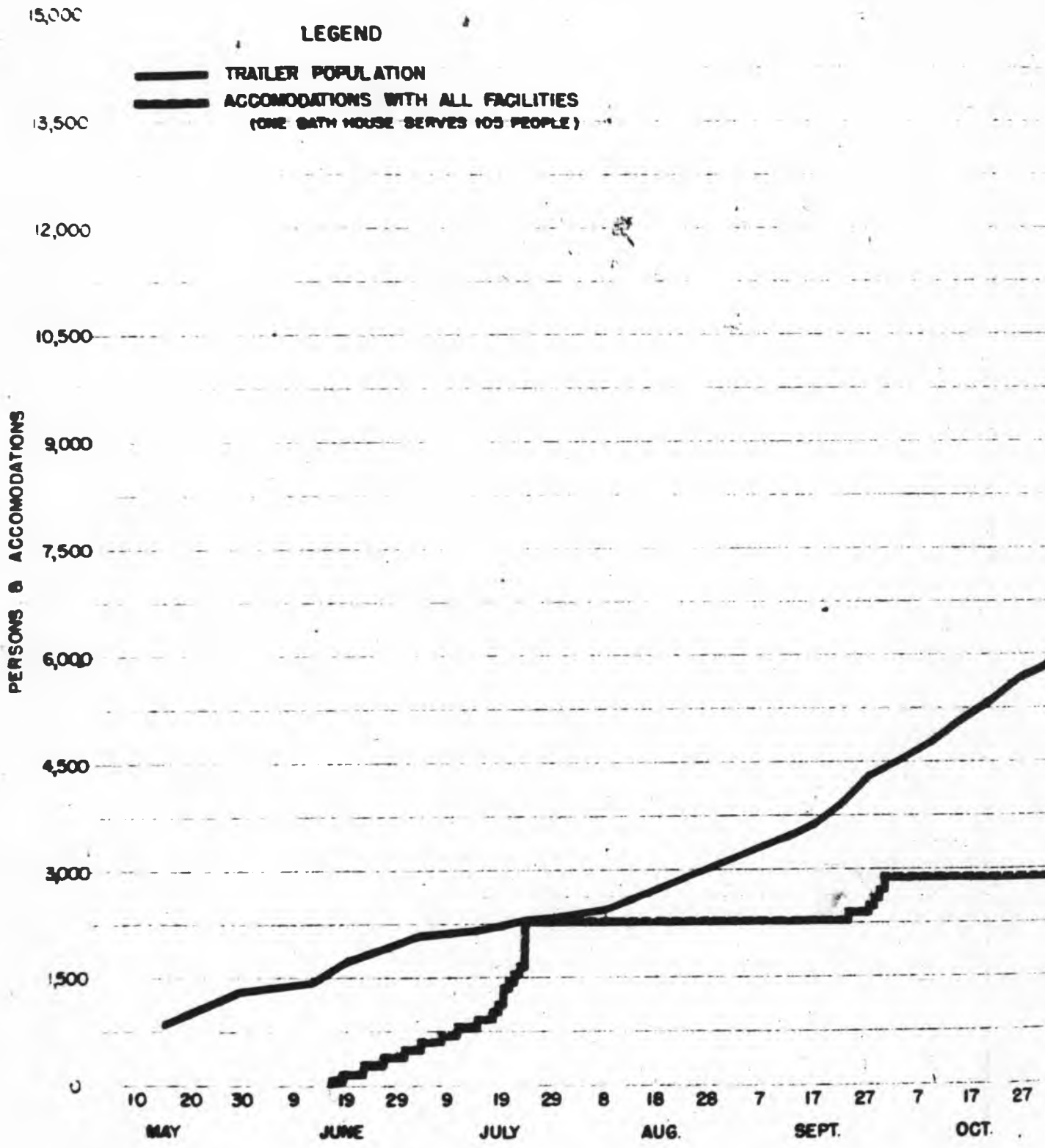
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 MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.

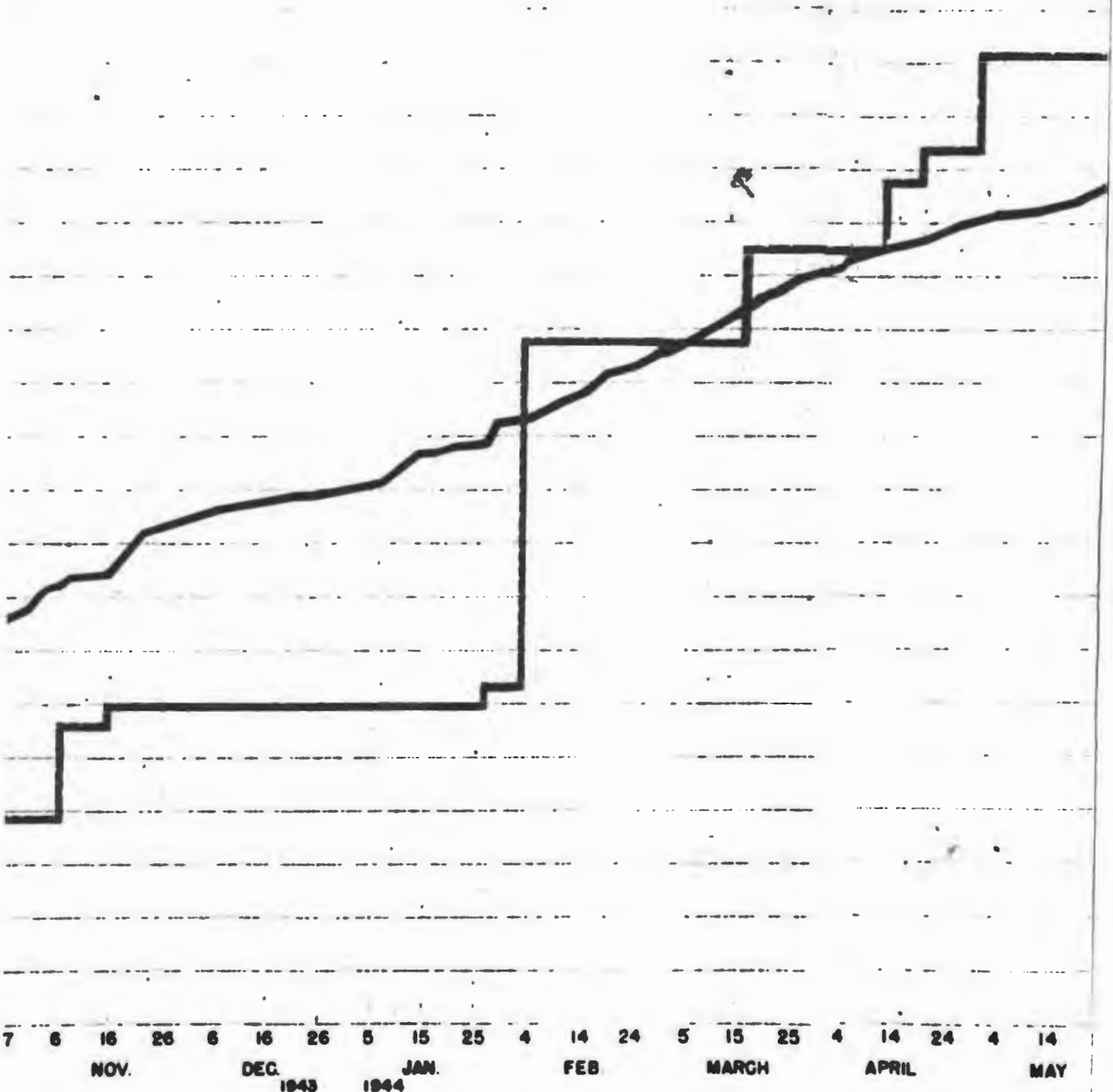
DRAWN BY R B R DIX 3-12



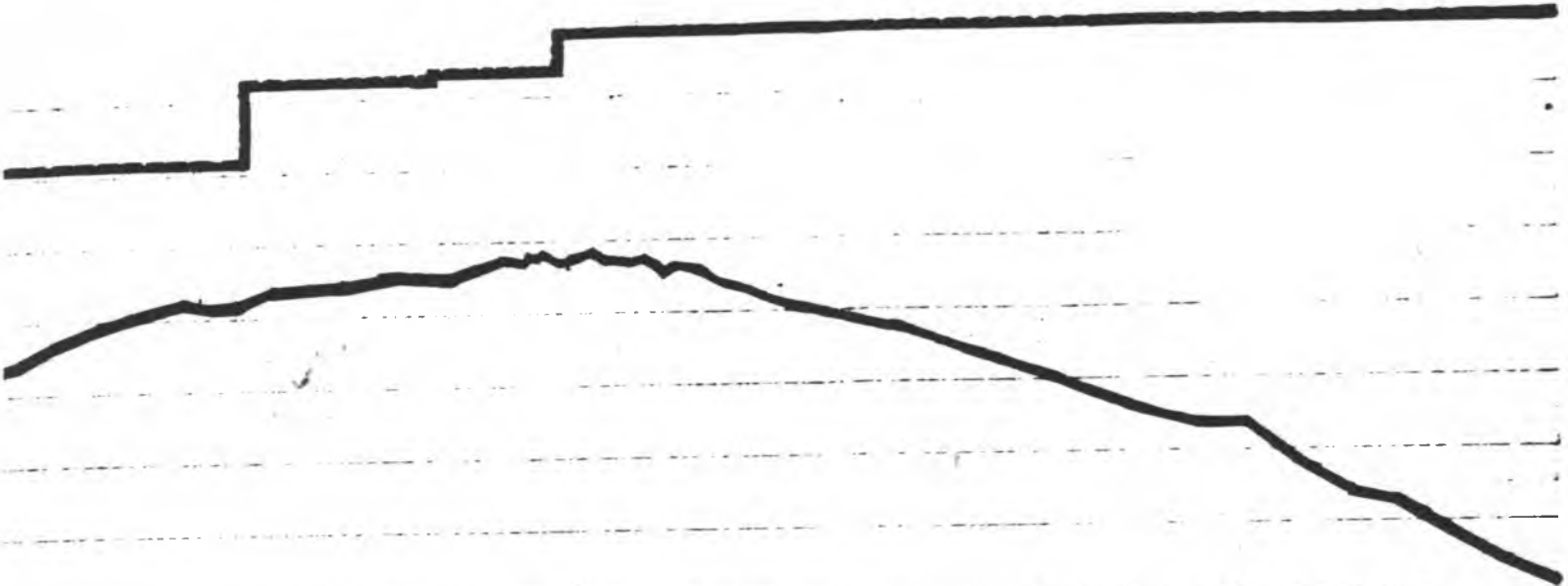


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# TRAILER CITY - POPULATION & ACCOMODATIONS HEW 9536



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 MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC

DRAWN BY R. & R. D. L. 3-17-41

A This appendix lists a total of 193 barracks. App. B56 refers to 195 barracks.

B 18 Barracks shown by App. B-15

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HANFORD CAMP CAPACITIES

WHITE MEN

BARRACKS (Total of 110 constructed)

20 - each accommodating 199 men or	3,980	
90 - each accommodating 191 men or	<u>17,190</u>	21,170
Less Wing C of Bks. 146 (used for baggage)	48	
Less Wing C of Bks. 60 (used by Training and Relations Dept.)	<u>50</u>	
		<u>98</u>

Total usable barrack spaces - -21,072

HUTMENTS (Total of 330 80' units erected)

307 - each accommodating 20 men	6,140	
or accommodating 22 men		6,754
12 - each accommodating 20 men	240	
or accommodating 22 men (Temp.)		264
8½ - each accommodating 12 men	102	102
(Service)		
2½ huts used for offices*	<u>0</u>	<u>0</u>

Total usable hutment spaces - - 7,120

Total ultimate capacity - - - - 28,192

COLORED MEN

BARRACKS

21 - each accommodating 191 men or	<u>4,011</u>	4,011
Less 1 barrack used as Community Building for colored employees	191	
Less 3 barracks used for colored women	<u>573</u>	<u>764</u>

Total usable barracks spaces - - 3,247

HUTMENTS

240 - each accommodating 10 men	2,400	
or accommodating 11 men		2,640
4 - each accommodating 10 men	40	
or accommodating 11 men (Temp.)		44
5 - each accommodating 6 men (Ser.)	30	30
2 huts (Olympic Commissary Offices)	0	0

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HANFORD CAMP CAPACITIES (Continued)

COLORED MEN

HUTMENTS (Continued)

1 hut (Training & Relations Dept.) 0      0

Total usable hutment spaces - - 2,714

Total ultimate capacity - - - - 5,961

WHITE WOMEN

BARRACKS (Total of 64 constructed)

64 - each accommodating 70 women or 4,480  
4,480

Less 7 used for colored women 490

Loss Barracks #11 (used as Recreation Hall) 70

Loss Wing-B of Barracks #12 (used by Women's Army Corps) 38

598

Total usable barracks spaces - - 3,888

Total ultimate capacity - - - - 3,888

COLORED WOMEN

BARRACKS

7 - each accommodating 70 women or 490

3 - each accommodating 180 women\*\*or 540  
1,030

Less part of 1 barracks used as office space 18      18

Total usable barrack spaces - - 1,012

Total ultimate capacity - - - - 1,012

GRAND TOTAL CAMP CAPACITY 39,050

Legend:

\* 1 Hanford Housing Office (1/2 hut); 2 Olympic Commissary Co. Bedroll Offices (2 half-huts); 2 Linon Rooms (2 half-huts)

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HANFORD CAMP CAPACITIES (Continued)

Legends: (Continued)

\*\* Three 4-wing type men's barracks were used to house colored women.

NOTE: The above capacity figures include the following temporary spaces which were not available for permanent assignment:

White Men	264
Colored Men	44
White Women	38
Colored Women	17

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Tabulation of Barracks Construction Dates

White Men's Barracks

<u>Barracks Unit No.</u>	<u>No. of Units</u>	<u>Started</u>	<u>Completed</u>
Group 61 - 60	10	April 6, 1943	November 27, 1943
Group 61 - 70	10	May 14, 1943	November 18, 1943
Group 71 - 80	10	June 29, 1943	October 16, 1943
Group 81 - 90	10	September 30, 1943	November 27, 1943
Group 91 - 100	10	August 2, 1943	October 28, 1943
Group 101 - 103)			
Group 106 - 106)	6	September 24, 1943	November 27, 1943
Group 111 - 120	10	September 3, 1943	November 18, 1943
Group 121 - 130	10	November 11, 1943	December 16, 1943
Group 131 - 140	10	October 16, 1943	November 27, 1943
Group 141 - 150	10	November 23, 1943	December 24, 1943
Group 151 - 160	10	November 1, 1943	December 11, 1943
Group 161 - 164	4	November 28, 1943	February 19, 1944
	<u>118</u>		

Colored Men's Barracks

Group 201 - 205	5	June 17, 1943	October 30, 1943
Group 208 - 210	3	August 9, 1943	November 27, 1943
Group 211 - 215*	4	September 3, 1943	December 8, 1943
Group 218 - 224	9	September 23, 1943	December 30, 1943
	<u>21</u>		

\* No Barracks Number 218

White Women's Barracks

Group 1 - 10	10	June 20, 1943	September 28, 1943
Group 11 - 20	10	July 28, 1943	October 19, 1943
Group 21 - 30	10	October 27, 1943	November 27, 1943
Group 31 - 40	10	November 1, 1943	December 7, 1943
Group 41 - 50	10	January 27, 1944	March 8, 1944
Group Z - Y	2	February 4, 1944	April 22, 1944
Group V, W, X	3	March 24, 1944	April 22, 1944
Group Q - R	2	April 20, 1944	March 27, 1944
	<u>57</u>		

Colored Women's Barracks

Group 251 - 252	2	August 18, 1943	October 13, 1943
Group 253 - 258	3	November 8, 1943	December 8, 1943
Group 256 - 257	2	November 11, 1943	January 1, 1944
	<u>7</u>		

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Tabulation of Trailer Lot Construction Dates

<u>Camp Number</u>	<u>Capacity</u>	<u>Started</u>	<u>Completed</u>
Trailer Camp No. 1	480	May 20, 1943	July 24, 1943
Trailer Camp No. 2	709	July 19, 1943	November 16, 1943
Trailer Camp No. 3	789	October 19, 1943	January 1, 1944
Trailer Camp No. 4	780	November 4, 1943	January 29, 1944
Trailer Camp No. 5	560	February 15, 1944	April 22, 1944
Trailer Camp No. 6	265	March 10, 1944	August 2, 1944
Trailer Camp No. 7*	76	February 15, 1944	June 1, 1944
Total - -	<u>3,689</u>		

\* Colored Trailer Camp

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**HANFORD CAMP SERVICES & FACILITIES**

Listed below are the various "HC-Commercial Facilities" constructed to serve the Hanford Camp.

<u>Code Number</u>	<u>Name</u>	<u>Number of Buildings</u>		
		<u>New</u>	<u>Existing</u>	<u>Total</u>
HC-1	Bunkhouse Buildings	831	--	831
HC-2	Trailer Camp Buildings	146	2	148
HC-3	Mess Hall Buildings	19	--	19
HC-4	Commercial Store Buildings	14	4	18
HC-5	Theater Buildings	2	--	2
HC-6	Commissary Buildings	4	1	5
HC-7	Garages & Service Stations	1	1	2
HC-8	Combined Store Buildings	2	--	2
HC-9	Laundry	2	1	3
HC-10	Bank	1	--	1
HC-11	Post Office	1	--	1
HC-12	Bowling Alley	1	--	1
HC-13	Churches & Community Bldgs.	2	1	3
HC-14	Auditorium - Gymnasium	2	--	2
HC-15	Commercial Bus Depot	1	--	1
	<b>Totals</b>	<b>1,029</b>	<b>10</b>	<b>1,039</b>

Below is a tabulation giving overall length of services, regardless of size or classification, and the number of new and used buildings required in Hanford for each:

<u>Code Number</u>	<u>Services</u>	<u>Length</u>	<u>Building</u>	
			<u>New</u>	<u>Existing</u>
TC-5	Roads	368,300'	-	-
TC-5	Walks	254,400'	-	-
TC-4.5	Water Lines	317,675'	26	1
TC-4.6	Electric Lines	321,300'	-	-
TC-4.8	Sewers & Septic Tanks	214,250'	9	-
TC-9	Fences	112,310'	-	-
TC-4.13	Public Address System		33 Installations	
TC-15	Steam Lines and Boiler			
	Houses	169,180	18	-
TC-16	Telephone Lines	152,500'	-	-
	<b>Totals</b>		<b>53</b>	<b>1</b>

<u>Code Number</u>	<u>Building Facilities</u>	<u>Building</u>		<u>Total</u>
		<u>New</u>	<u>Existing</u>	
TC-4.9	Miscellaneous Temporary Construction (Offices, Shops, etc.)	53	12	65
TC-4.10	Fire Stations	5	-	5
TC-4.11	School Buildings	6	2	8
TC-4.12	Locomotive and Boiler Repair Shop	1	-	1
TC-12	Employee's Recreational Facilities	<u>3</u>	<u>1</u>	<u>4</u>
	Totals	68	15	83

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# HANFORD ENGINEER WORKS

PROJECT 9536

## HC - HANFORD COMMERCIAL CONTRACTS

NAME	TYPE	LOCATION	INCEPT. DATE	TERMS	CANC. DATE
American Cold Storage	Frozen Food Lockers & Coffee Shop	Tract Bldg. - B-1828 (White Bluffs)	1-4-44	\$60.00 per month flat rental	6-30-44
Associated Cleaning & Pressing	Cleaning & Pressing establishment	Tract Bldg. B-141 (one room)	4-3-44	12% gross sales	2-10-45
Associated Laundry	Laundering Service	Tract Bldg. B-141 (one room)	3-27-44	2% gross sales	2-10-45
Barton Trailer Supplies	Selling Trailer Equipment	Bldg. owned by operator	4-17-44	2% gross sales	2-10-45
Basin Sage Company	Shoe Repair Shop	Tract Bldg. B-64	10-4-43	\$25.52 per month flat rental	6-31-44
Barto Garbage Collection	Collecting Garbage	Collecting from Mess Hall #1	3-4-44	\$25.00 per month flat rental	2-23-45
Brown Barber Shop	Barbering Services	Tract Bldg. B-1820 (White Bluffs)	8-1-43	\$15.00 per month flat rental	6-30-44
Buck's Cash Market	Grocery Store	HC-4.1	6-10-43	\$85.00 per month flat rental (Renegotiated 11-10-43) \$243.19 per month flat rental (Renegotiated 11-1-44 @ 2% gross sales)	2-23-45
Burdett Garbage Collection	Collecting Garbage	Collecting from Mess Hall #6	7-1-44	\$75.00 per month flat rental	2-20-45
Burrill Insurance Brokerage	Insurance Agency	Bldg. HC-9	7-13-44	10% gross sales	8-31-44
Canney LaSalle Extension Courses	Correspondence Courses	Office space in Training & Relations Bldg.	10-24-44	10% gross sales	1-31-45
Chalable Meat Company	Meat Market	HC-4.1	11-23-43	\$115.00 per month flat rental	2-23-45
Contractors Sales & Service	Garage & Oil Station	Tract Bldg. B-128	8-16-43	\$15.00 plus \$30.00 (Renegotiated 4-1-44) 1¢ per gallon for all gasoline sold 2% on all trunk rubber sold 2% on all other sales	2-24-45
Day Barber Shop	Barber Shop	B-wing of Barracks #201	8-3-44 (Contract never completely signed)	10% gross sales	8-30-44
Day Beauty Shop	Beauty Shop	B-wing of Barracks #201	8-9-44	10% gross sales	8-30-44
Demany Drug Store	Drug Store	HC-9	12-4-43	\$200.82 per month flat rental (Attempting to negotiate the contract to percentage basis at present time).	2-24-45
Employee's Garage	Garage	Bldg. owned by operator	2-1-44	2% gross sales	2-19-45
English Drug Store	Drug Store	B-1821 (White Bluffs)	8-1-43	\$40.00 per month flat rental	8-30-44
English Foot Beer Stand	Soft drink stand	Butment	8-3-44	10% gross sales	12-18-44
English Soda Fountain	Soda Fountain	HC-9	7-3-44	5% gross sales	2-10-45
Eure's Beauty Salon	Beauty Shop	HC-9.1	8-10-44	5% gross sales	12- 5-44
Foley Game of Skill	Mechanical games of skill	To be in bowling alley	7-9-43 (Contract did not go into operation)	50% gross sales	12-23-43
Foley Tavern	Tavern	B-1849 #5 (White Bluffs)	11-16-43	\$61.34 per month flat rental	6-31-44
Goodrich Tire Store	Selling Tires	Butment	9-12-44	12% gross sales	2-20-45
Hanford Clothing Store	Clothing Store	Butment	7-1-44	2 1/2% gross sales	2-10-45
Hanford Drug Store	Drug Store	HC-9.1	8-12-44	2-3/4% gross sales (Renegotiated 7-13-44 \$206.53 per month flat rental)	11-22-44
HC Employees Association	Coca Cola Distribution	Field Area	7-24-44	10¢ per case for all Coca Cola sold under this contract.	
HC Employees Association	Social dancing		12-21-43	\$80.00 for each day of operation	
	Bowling Alley		3-18-44	\$480.00 per month	
	Games of Skill		12-23-43	\$1.00 per month each machine	1-15-45
Hanford Food Shop	Grocery Store	HC-41.8	3-15-44	2 1/2% gross sales	2-10-45
Hanford Shoe & Shoe Repair	Shoe Store & Repairing	D-222 #1	3-21-44	2% gross sales	2-18-45
Harcam Battery Lubric Agency	Licensing & Meterizing	HC-9	8-1-44	5% gross sales	2-24-45
Hollywood Shoppe	Clothing store	B-141	4-3-44	4% gross sales (Net to exceed \$200.00 per month)	2-10-45
Jackson Beauty Salon	Beauty Parlor	B-wing of Barracks #201	7-1-44	10% gross sales	1-31-45
Johansen Optometrist Shop	Optical Shop	D-222 #2	2-14-44	2% gross sales	11-20-45
Lewis Tire Company	Tire repair & Garage	Bldg. owned by operator	3-18-44	1 1/2% gross sales	2-10-45
Mohsin Garbage Collection	Collecting Garbage	Collecting from Mess Hall #6		\$25.00 per month flat rental	8-12-44

SHEET 1 OF 2 SHEETS

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# HANFORD ENGINEER WORKS

PROJECT 9536  
HC - HANFORD COMMERCIAL CONTRACTS

NAME	TYPE	LOCATION	INCEPT. DATE	TERMS	CANC. DATE
McBain Garbage Collection	Collecting Garbage	Collecting from Mess Halls #6 & #7	2-12-44 (Contract as yet unsigned)	\$25.00 per month for each Mess Hall	#6 Cancelled 11-11-44 #7 Cancelled 9-23-44
Mary's Alteration Shop	Clothing alteration & repair	B-161	3-27-44	6% gross sales	2-10-46
Mess Hall - Little Fasco	Feeding new recruits	Little Fasco Bar, Phase, Washington	6-12-44	6% gross sales	11-7-44
Midstate Amusement Corp.	Motion Pictures	Yeast	10-30-43	\$218.61 per month flat rental	1-1-44
Midstate Amusement Corp.	Motion Pictures	HC-6	1-1-44	\$614.54 per month flat rental (Renegotiated 11-1-44) 18% gross admission receipts from theatre 6% gross sales candy, pop, soda and confections	2-11-48
Miller's Outdoor Theatre	Motion Pictures	Playground Park	10-1-43	\$25.00 per month flat rental	10-21-43
Miller's Hanford Roller Rink	Roller Skating Rink	Tract belonging to operator	6-8-44	10% gross sales	11-26-44
Woodham Filling Station	Oil station & garage	D-220	2-17-43	\$80.00 per month flat rental	2-6-44
C'Hearns Outdoor Theatre	Motion Pictures	Between Bar. 71-C & 71-D (Outdoors)	8- 9-43	\$15.00 per month flat rental	
Pacific Power & Light Co.	Balling Equipment & Power	E-1824 (White Bluffs)	6- 1-43	\$25.00 per month flat rental	12-31-43
Guigley Riding Academy	Renting horses	D-5 & D-3 all structures on Tract CC-180	2-12-44	6% gross sales	11- 1-44
Railway Express Agency	Shipping	B-64	12-23-43	\$21.55 per month flat rental	
Katloff Fix-It Shop	Repairing items	Batment	7-22-44	6% gross sales	2-15-48
Richardson Garage	Garage	B-99	1-15-44	\$18.00 per month flat rental	4-30-44
Richfield Oil Corporation	Service Station & Garage	HC-8	2- 5-44	\$0.0125 per gallon sold	2-16-48
Robertson Garbage Collection	Collecting Garbage	Collecting from Mess Halls #8, #9, & #6	4-25-44	\$25.00 per month per Mess Hall	#8 Mess Hall 9- 3-44 #9 Mess Hall 2- 1-44 #6 Mess Hall 1-19-44
Rager Pop Corn Stand	Pop corn	Hdg. owned by operator	6- 2-44	6% gross sales	2- 4-44
Saylor Hanford Beauty Salon	Beauty Shop	D-222 #8	8- 9-43	\$27.19 per month flat rental	11-11-43
Saylor Hanford Beauty Salon	Beauty Shop	HC-9	12-7-43	\$24.26 per month flat rental	2-10-45
Schick Service Station	Service Station	B-1846 (White Bluffs)	7-20-43	\$18.00 per month flat rental	6-30-44
Sears Roebuck & Company	General Merchandise Store	D-222	2- 9-43	\$23.79 per month flat rental	2- 3-44
Sears Roebuck & Company	General Merchandise Store	B-161	12-1-43	\$24.50 per month flat rental	2- 3-44
Sears Roebuck & Company	General Merchandise Store	HC-4.2	2- 4-44	\$263.00 per month flat rental	1-31-45
Shoen-Layman-Shoen	Barber Shop	D-222 #6 (and all other barber shops in Hanford)	2-6-43	10% gross sales	2-18-44
Shoen Barber Shop	Barber Shop	HC-8.1	4-27-44	10% gross sales	11-26-44
Date Barber Shop	Barber Shop	B-wing of Barracks #801	8-21-44	10% gross sales	2-18-48
Umkle's Fix-It Shop	Repairing items	Batment	6- 9-44	6% gross sales	7-22-44
Union Oil of California	Bulk Station	Q-1647 (White Bluffs)	8-27-43	\$15.00 per month flat rental	10-18-44
Valley Theatre Corp.	Motion Pictures	HC-53	7- 1-44	18% gross admissions; 6% gross sales candy, et cetera	
Victory Laundry	Laundry & Cleaning Service	B-161	5- 5-43 (Contract never signed)	\$1.00 to cover entire period	3-21-44
Wagner-Littlejohn Barber Shop	Barber Shop	B-wing of Barracks #801	7- 1-44	10% gross sales	6-21-44
Weinfield & Goldberg Jewelry Store	Jewelry Shop	Batment	7- 1-44	10% gross sales	2-10-45
Western Union	Telegraph messages	HC-4	2-20-44	\$28.76 per month flat rental	
Woods-LaSalle Extension Courses	Correspondence courses	Office space in Training & Relations Bldg.	10-24-44	10% gross sales	1-31-48
Yakima-Hanford Stage Company	Bus Service	HC-17	2- 8-44	\$25.00 per month flat rental	2-24-45

SHEET 2 OF 2 SHEETS

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HANFORD CAMP BUILDING CONSTRUCTION DATES

Below is a list of the major "HC Building Construction," other than housing facilities, giving dates when construction was originally started (including additions and major revisions) and completed. In almost all cases these buildings were occupied long before the final completion dates shown here, as these dates reflect late deliveries of heating, ventilating, refrigeration, and cooling equipment.

<u>Code Number</u>	<u>Building Name</u>	<u>Started</u>	<u>Completed</u>
HC-3	Mess Hall No. 1	April 14, 1943	Sept. 10, 1943*
	Mess Hall No. 2	May 19, 1943	Nov. 20, 1943*
	Mess Hall No. 3	June 13, 1943	Sept. 8, 1943
	Mess Hall No. 4	May 18, 1943	Nov. 20, 1943
	Mess Hall No. 5	May 18, 1943	Nov. 20, 1943
	Mess Hall No. 6	Nov. 15, 1943	Jan. 1, 1944
	Mess Hall No. 7	Nov. 29, 1943	Feb. 12, 1944
	Mess Hall No. 8	Feb. 2, 1944	March 18, 1944
	Sandwich Shop	Nov. 21, 1943	Jan. 8, 1944
	Evisceration Building	Nov. 19, 1943	March 30, 1944
HC-4	Grocery Store No. 1	Oct. 18, 1943	Nov. 25, 1943
	Grocery Store No. 2	Jan. 31, 1944	March 4, 1944
	Sears, Roebuck and Co.	Dec. 15, 1943	Jan. 15, 1944
HC-5	Western Union	March 6, 1944	March 23, 1944
	Hanford Theater	Oct. 20, 1943	Dec. 18, 1943
HC-6	Valley Theater	June 6, 1944	June 30, 1944
	Commissary No. 1	July 5, 1943	March 15, 1944*
HC-8	Commissary No. 2	Feb. 28, 1944	April 15, 1944
	Commissary No. 3	July 17, 1944	August 30, 1944
	Commissary No. 4	June 5, 1944	July 29, 1944
	Gas & Service Stn. No.1	Dec. 21, 1943	Feb. 12, 1944
HC-7	Gas & Service Stn. No.2	Jan. 23, 1944	March 25, 1944
	HC-9	Combined Stores Bldg.	
No. 1		Oct. 18, 1943	Nov. 27, 1943
HC-10	Combined Stores Bldg.		
	No. 2	May 22, 1944	June 20, 1944
HC-9	Laundry		
HC-10	Bank	July 6, 1943	Nov. 10, 1943**
HC-11	Post Office	June 29, 1943	Dec. 10, 1943*
HC-12	Bowling Alley	Jan. 3, 1944	Feb. 19, 1944
HC-13	Community Service and		
	Welfare Building	Dec. 13, 1943	Jan. 10, 1944
HC-14	Auditorium - Gymnasium	May 29, 1944	June 30, 1944
HC-15	Commercial Bus Depot	Jan. 3, 1944	Jan. 27, 1944
SW	Hanford Lake	July 4, 1944	July 18, 1944

- \* First Addition
- \*\* Second Addition

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**MEDICAL DIVISION**  
**AT PEAK OF ORGANIZATION—AUGUST 14, 1944**

MEDICAL SUPERVISOR  
 DR. J. M. WETHERHOLD

ASST. MEDICAL SUPERVISOR  
 DR. J. P. GRIFFIN

ASSISTANT IN  
 INDUSTRIAL MEDICINE  
 DR. G. V. SWICKARD

ASSISTANT IN  
 HOSPITAL & CLINICS  
 DR. J. P. GRIFFIN

SPECIALIZED HOSPITAL STAFF

ASSISTANT IN  
 PUBLIC HEALTH ADMINISTRATION  
 DR. R. R. SACHS

ASSISTANT IN  
 BUSINESS & CONTROL  
 C. B. NEIGHBORS

**FUNCTIONS:**  
 1. TREATMENT ALL INDUSTRIAL CASES FROM A MINOR SURGICAL NATURE ONLY  
 2. PRE-EMPLOYMENT, PERIODIC AND SPECIAL PHYSICIAN EXAMS.  
 3. INDUSTRIAL MEDICAL SURVEYS  
 4. OPERATION FIRST AID FACILITIES  
 5. DISABILITY WAGE

**FUNCTIONS:**  
 1. OPERATION OF GEN HOSPITAL UNITS  
 2. OPERATION LAB. & X-RAY FACILITIES  
 3. OPERATION HOSPITAL PHARMACIES  
 4. OPERATION OF PRIVATE OUT-PATIENT CLINIC  
 5. OPERATION OF HOSPITAL FEEDING FACILITIES  
 6. DIAGNOSIS, HOSPITALIZATION AND TREATMENT OF ALL CONTAGIOUS DISEASES

**FUNCTIONS:**  
 1. COMPLETE HANDLING OF ASSIGNED PATIENTS  
 2. CONSULTATION SERVICE TO PROFESSIONAL PERSONNEL  
 3. INSTRUCTION AND GUIDANCE OF PROFESSIONAL PERSONNEL

**FUNCTIONS:**  
 1. PUBLIC HEALTH PROGRAM—ALL PHASES  
 2. CONTAGIOUS DISEASE CONTROL—EPIDEMIOLOGY  
 3. SANITARY ENGINEERING CONTROL  
 4. ORGANIZATION OF PUBLIC HEALTH CLINICS  
 5. VITAL STATISTICS

**FUNCTIONS:**  
 1. BUSINESS ADMINISTRATION AND CONTROL  
 2. CLERICAL CONTROL  
 3. PURCHASING, RECEIVING AND STOCK CONTROL  
 4. REPORTS AND RECORDS  
 5. ACCOUNTING AND FINANCE  
 6. CONSULTANT ON COMPANY PLANS AND POLICIES

PERSONNEL	
EXAMINATIONS	
PHYSICIANS	(3)
NURSES AIDES	(2)
FIRST AID STATIONS	
SUPV PHYSICIANS	(1)
PHYSICIANS	(8)
MESSENGERS	(2)
TYPIST	(1)
STENOGRAPHERS	(4)
NURSES	(44)
NURSES AIDES	(8)
FIRST AID ATTN	(4)
CLERKS	(38)

PERSONNEL	
PHYSICIANS (10)	
SUPV NURSES	(1)
NURSES	(109)
NURSES AIDES	(87)
ORDERLIES	(30)
LABORATORIES	
X-RAY TECHNICIANS	(5)
CLINICAL TECHNICIANS	(8)
PHARMACY	
PHARMACISTS	(2)
DIETITIANS	
SUPV DIETITIAN	(1)
KITCHEN HELPERS	(22)
DISWASHERS	(13)
COOKS	(7)

PERSONNEL	
SURGERY	
CHIEF SURGEON	(1)
ASST. CHIEF SURGEON	(1)
SURGEONS	(3)
ANAESTHETISTS	(1)
NURSES	(8)
NURSES AIDES	(1)
INTERNAL MEDICINE	
CHIEF PHYSICIAN	(1)
EYE, EAR, NOSE AND THROAT	
PHYSICIANS	(1)
UROLOGIST	
	(1)
OBSTETRICS	
PHYSICIANS (CONSULTANT)	(1)
PEDIATRICS	
PHYSICIANS	(1)
DENTISTS	
	(2)

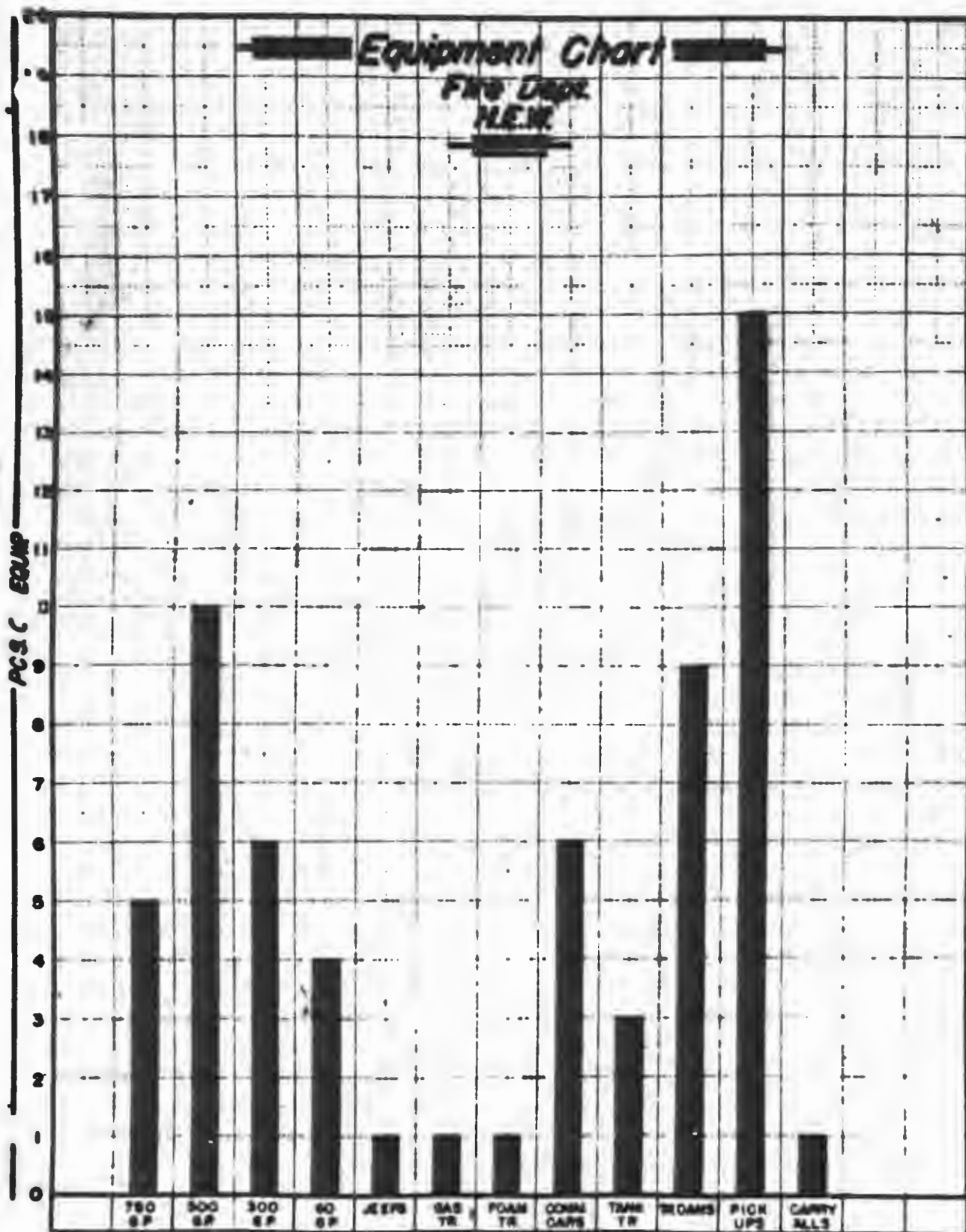
PERSONNEL	
PART TIME DOCTORS FROM OTHER PHASES ASSIST	
SANITARY ENGINEER	
	(1)
SANITARY INSPECTORS	
	(2)
PUBLIC HEALTH NURSES	
	(11)
SUPV NURSE	
	(1)
PUBLIC HEALTH LABORATORY	
HEALTH EDUCATOR	(1)
BACTERIOLOGIST	(1)
TECHNICIANS	
	(2)
TECHNICIAN HELPERS	
	(1)
CLERKS	
	(9)
STENOGRAPHERS	
	(3)
TYPISTS	
	(1)

PERSONNEL	
SUPERVISORY CLERKS	
	(3)
HOSPITAL ADMITTANCE CLERKS	
	(11)
CASHIER-BOOKKEEPERS	
	(12)
RECEPTIONISTS	
	(2)
FILE CLERKS	
	(23)
MATERNAL CLERKS	
	(8)
RECEIVING CLERKS	
	(7)
REPORTS AND RECORDS CLERKS	
	(4)
LAUNDRY CLERKS	
	(9)
SEWING CLERKS	
	(2)
MESSENGERS	
	(11)
CLERKS	
	(17)
STENOGRAPHERS	
	(13)
TYPISTS	
	(3)
CAR POOL CLERKS	
	(2)
CHARGE CLERKS	
	(4)
JANITORS	
	(27)

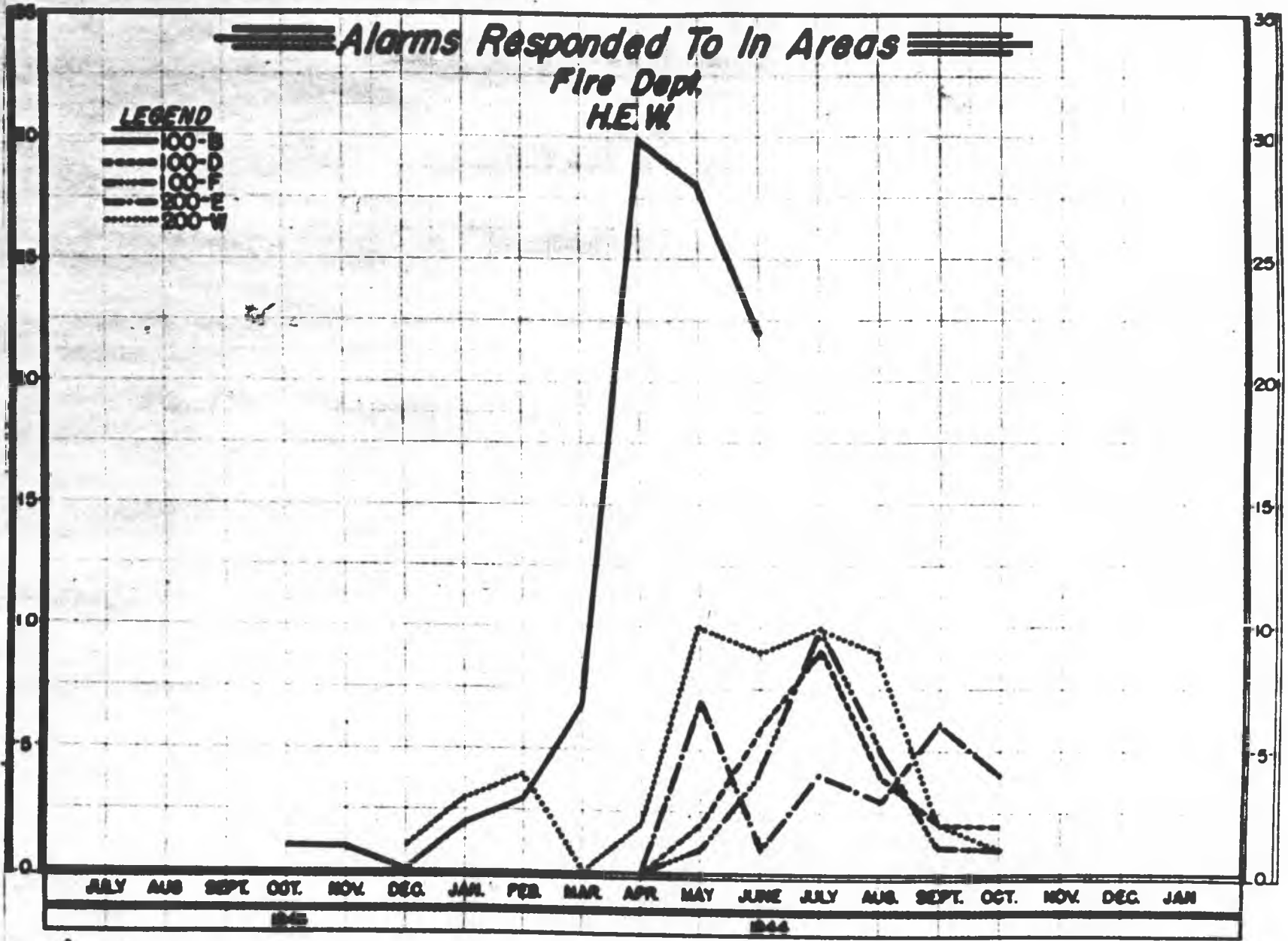
810 EMPLOYEES

DRAWN BY G. D. SMITH, R. B. R. DN. 10-17-44

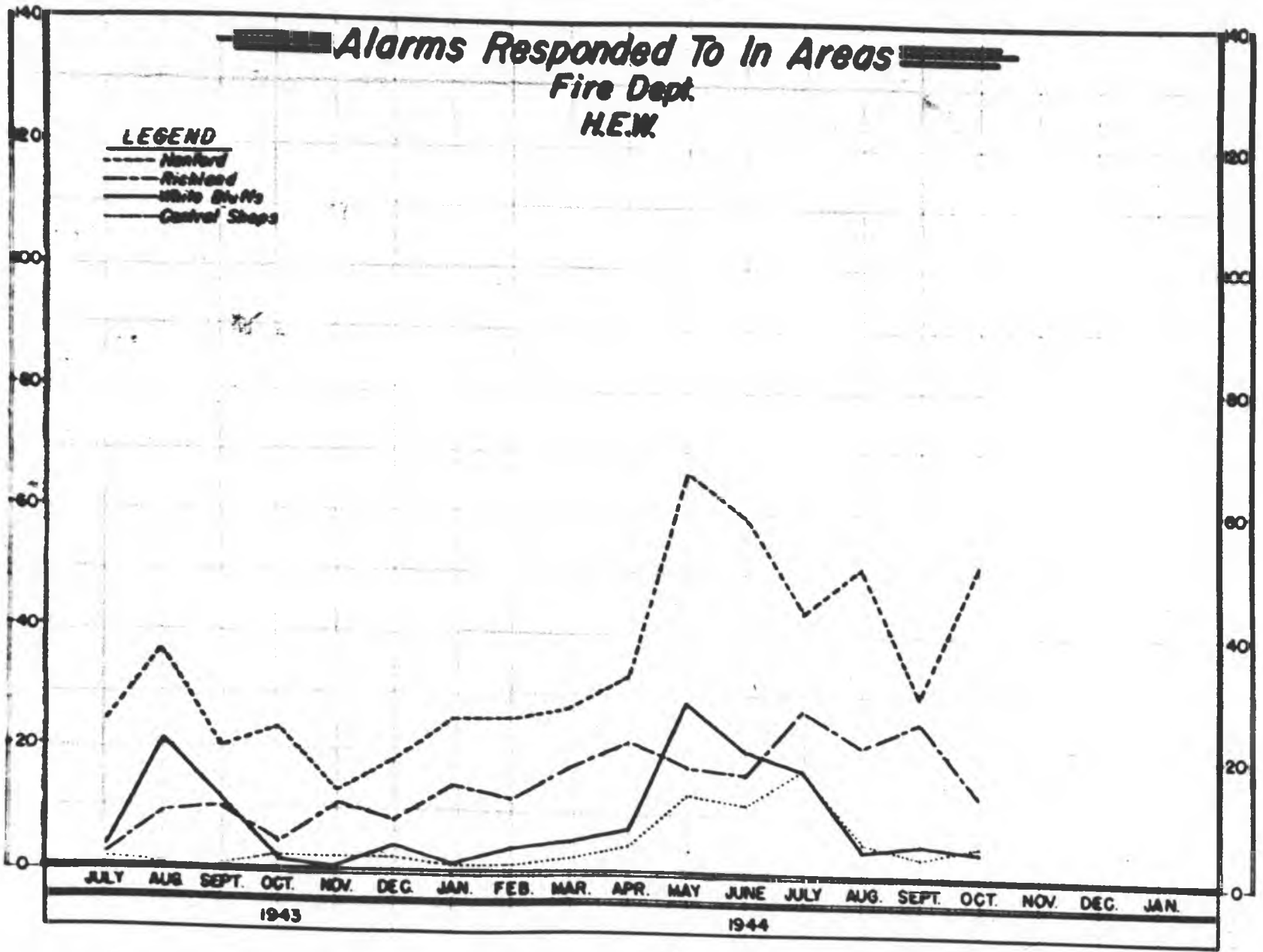
B20







B22



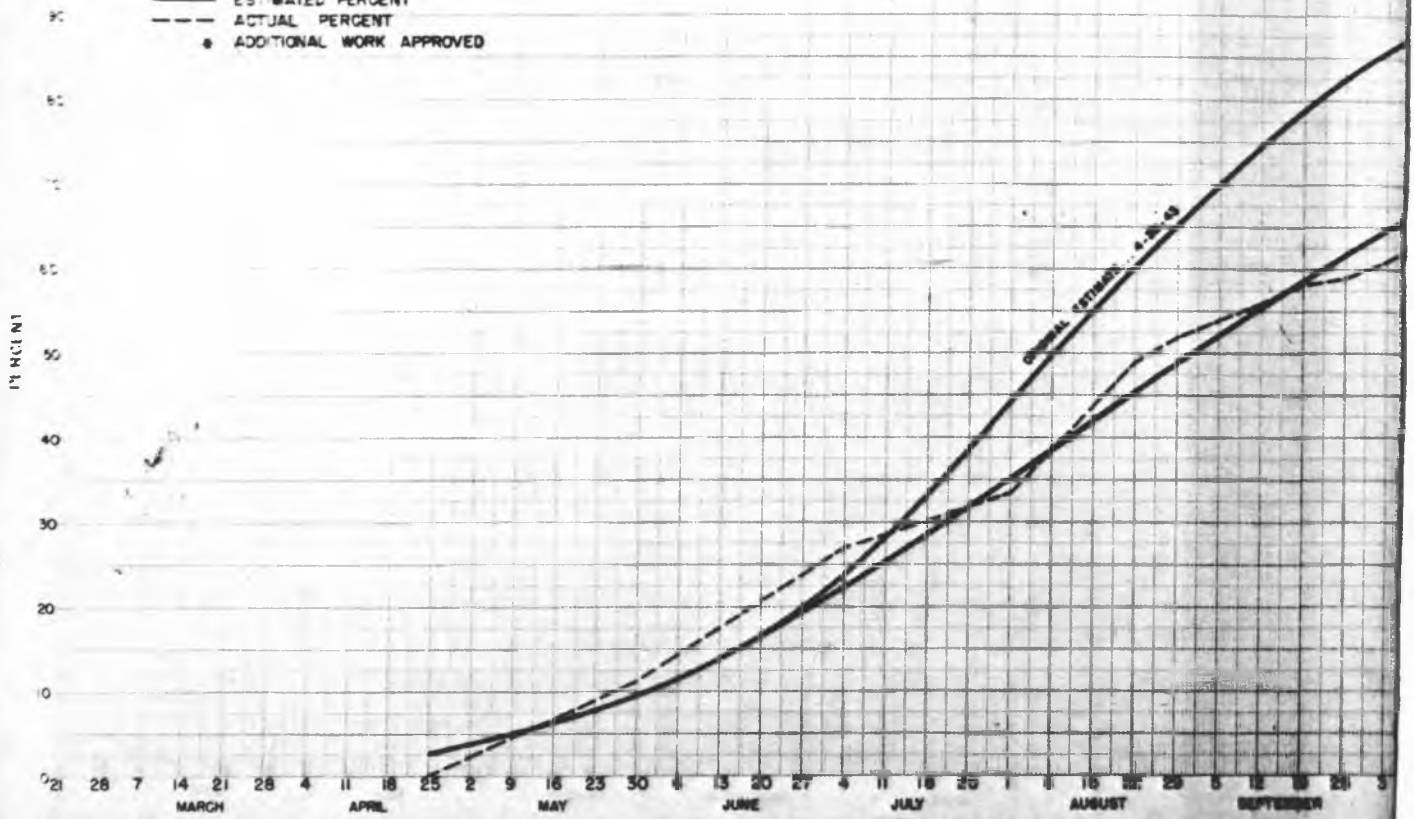
  
HANFORD CAMP SUBCONTRACTS

Below is a tabulation of major subcontracts awarded, giving name of subcontractor and scope of work:

<u>RFQ Number</u>	<u>Subcontractor</u>	<u>Scope of Work</u>
50 $\frac{1}{2}$	Pittsburg-Des Moines Steel Company	Dismantling and erecting elevated storage tanks.
57 $\frac{1}{2}$	Ramsay Water Collector Corp.	Investigation Water Supply
58 $\frac{1}{2}$	Internation Water Supply, Ltd.	Well Drilling & Test Pumping
401 & 416	A. A. Durand & Sons	Well Drilling & Test Pumping
408	Newberry, Chandler & Lord	Electrical
411	Hanke-James-Zahniser & Warren	Piping
412	Sullivan Valve and Engineering Co.	Installation Boilers, No. 1 Boiler House
4323	Charles R. Brower	Insulation
4325	Brunswick-Balke-Collender Co., Inc.	Pool Tables
4333	Fentron Steel Works	Service Station No. 1
4334	Guerin Brothers	Surfacing Roads and Walks.

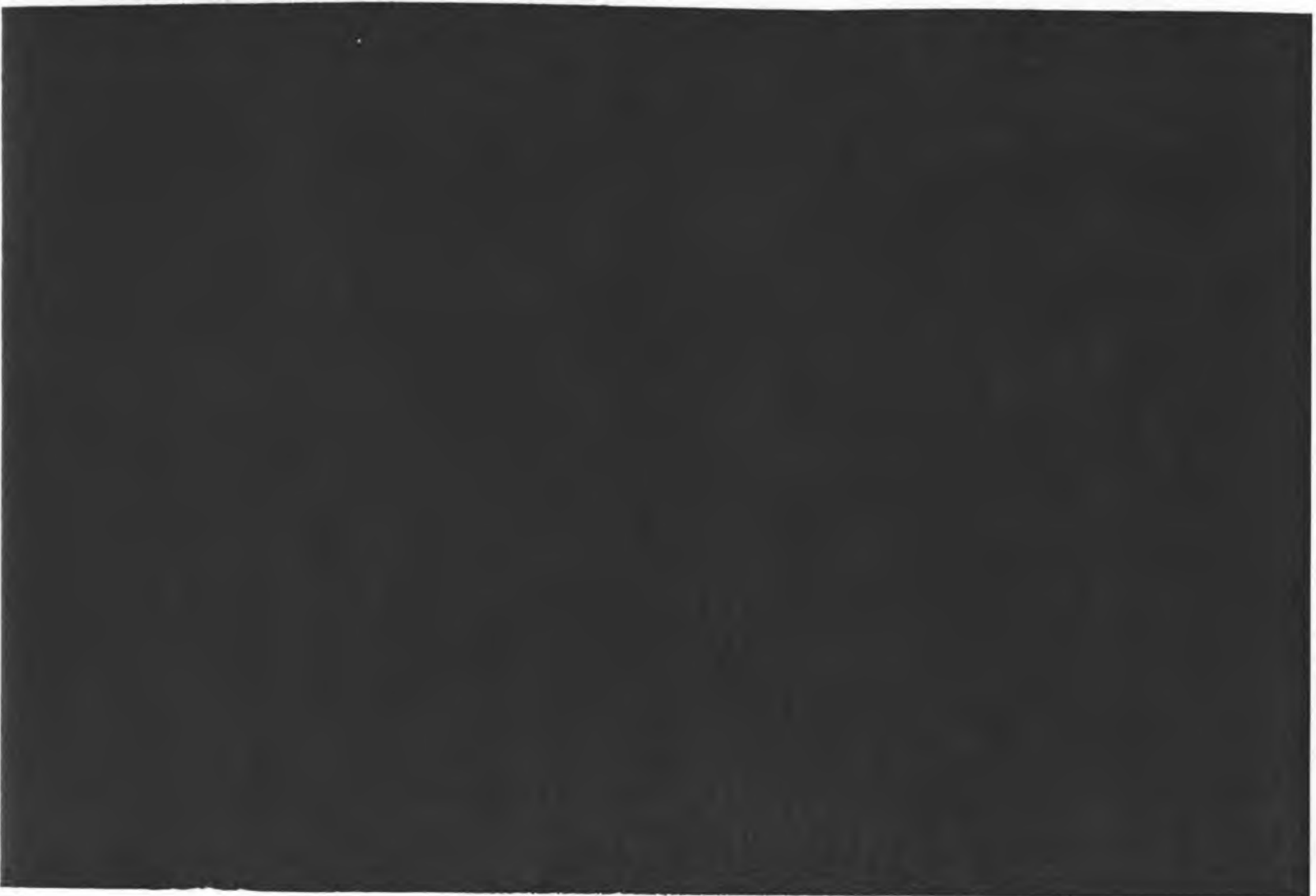
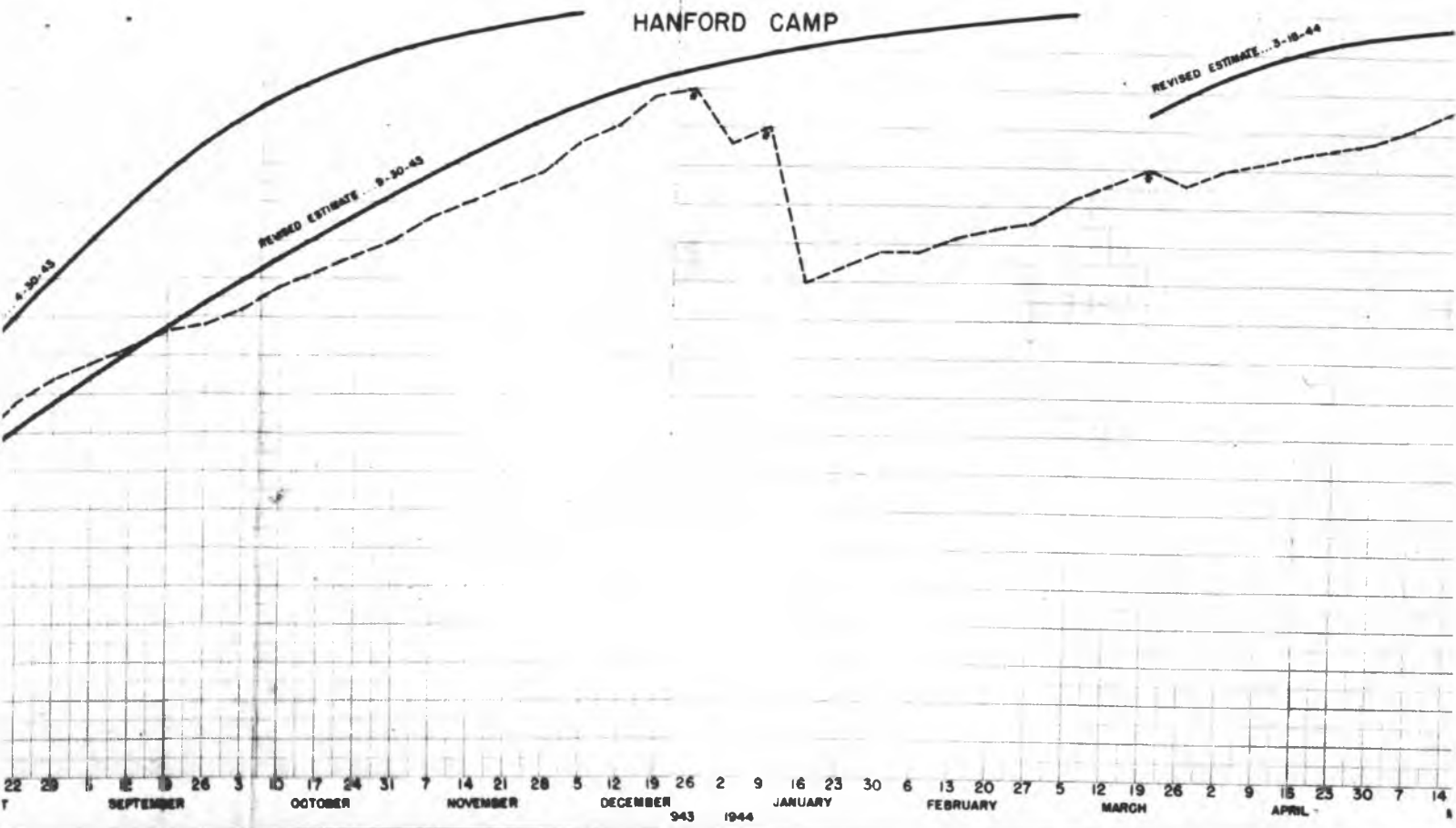
**LEGEND**

- ESTIMATED PERCENT
- - - ACTUAL PERCENT
- ADDITIONAL WORK APPROVED

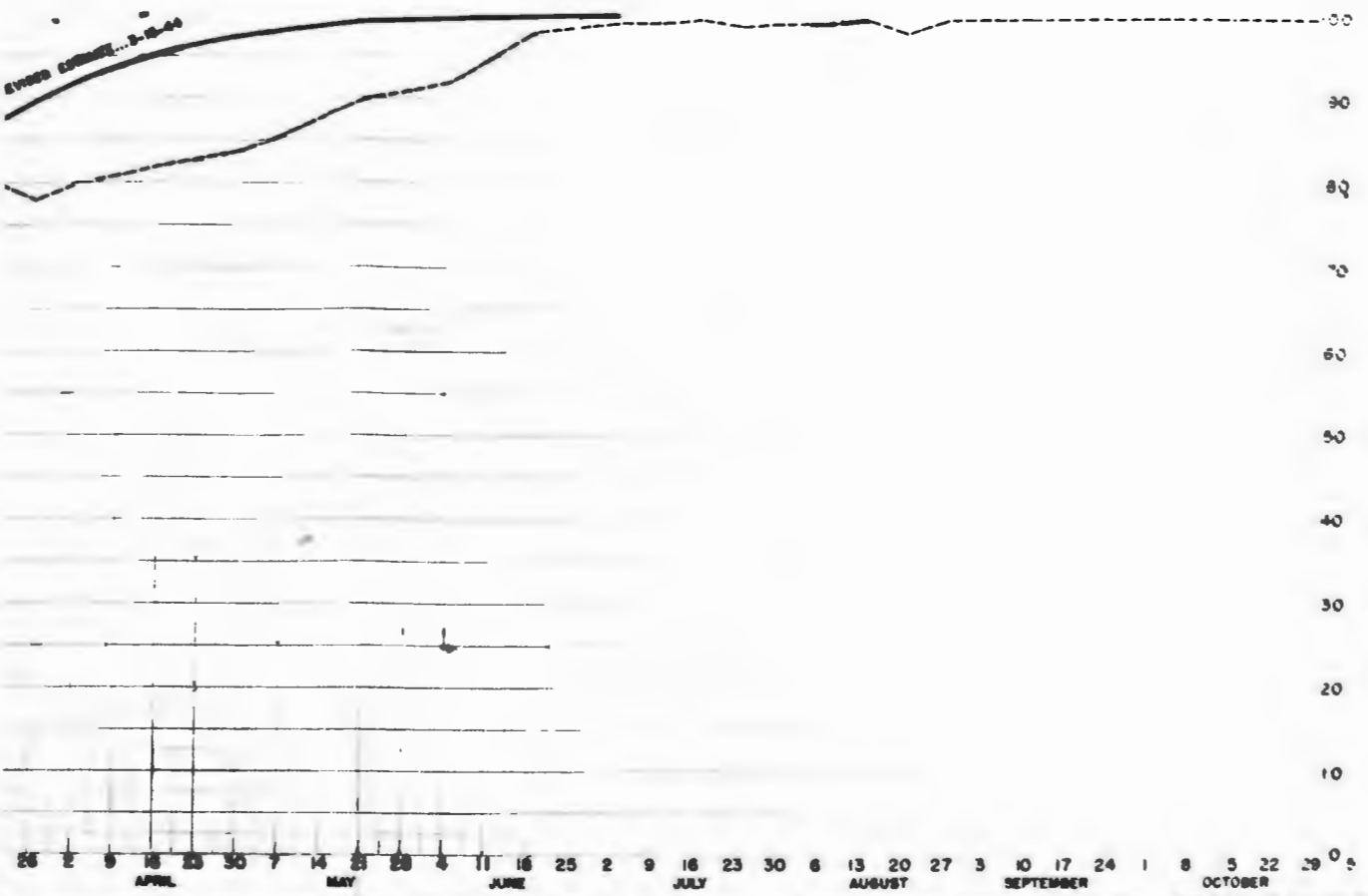


# COMPLETION FORECAST

## HANFORD CAMP



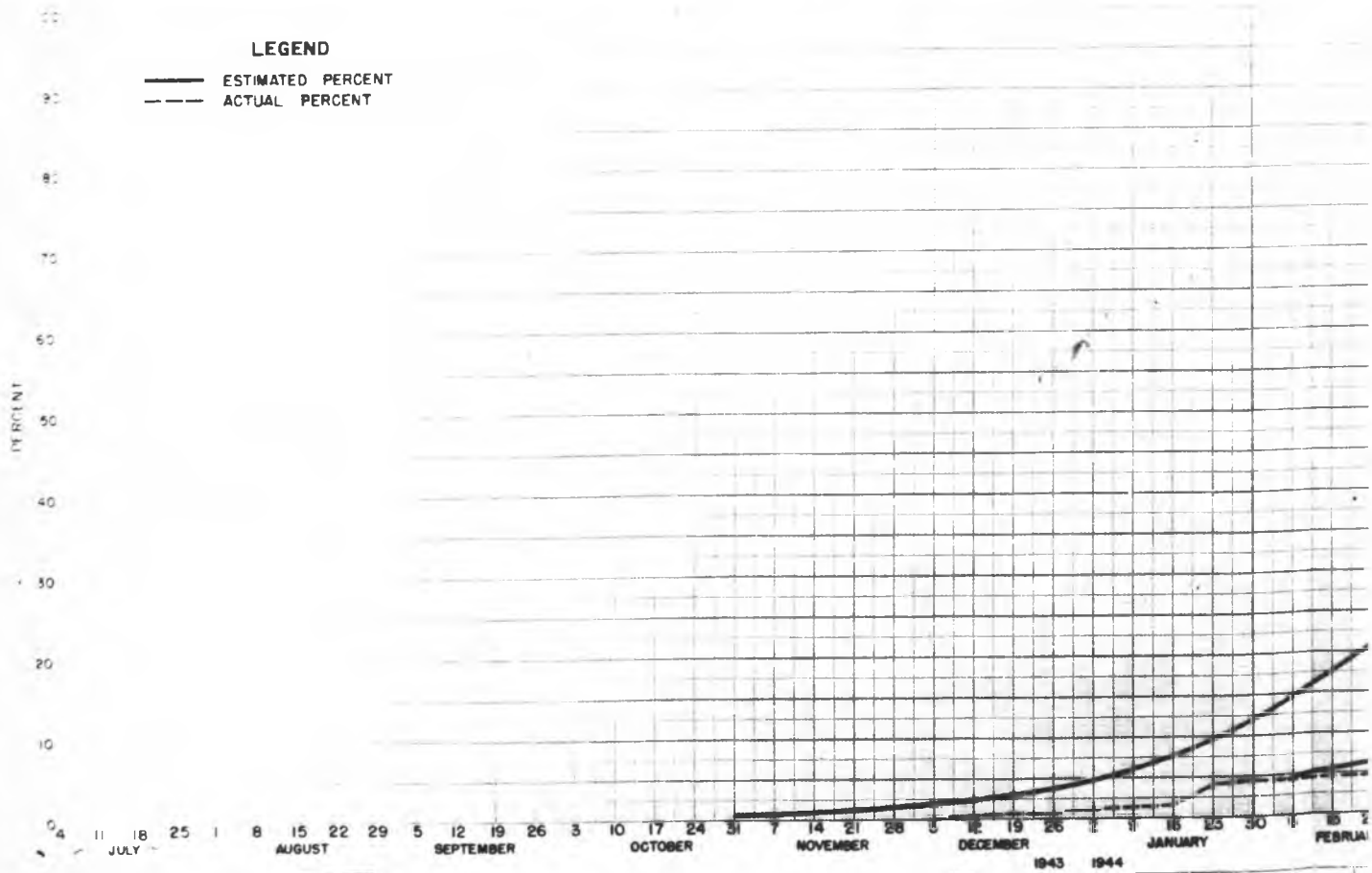
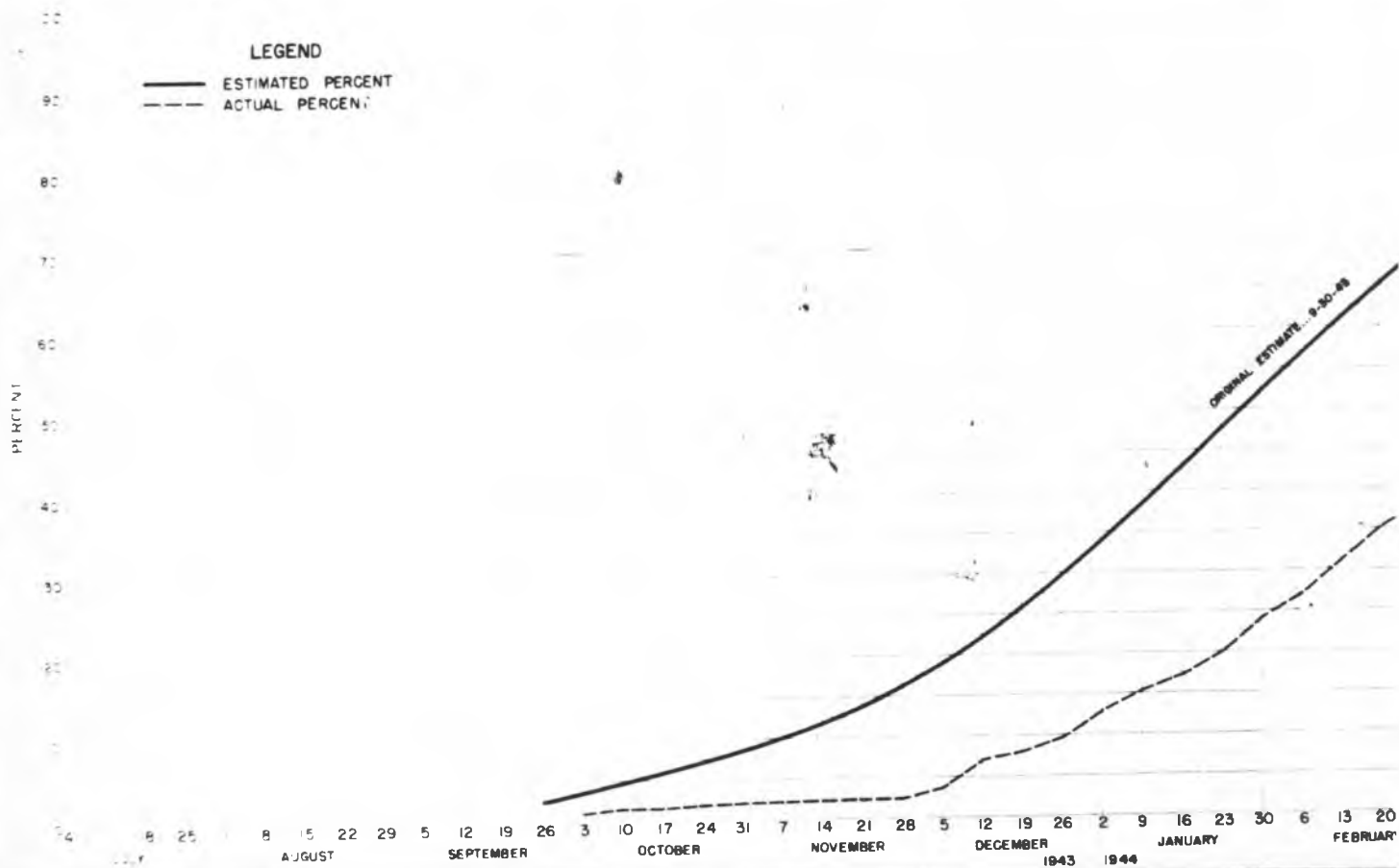
SWISS ENGINE... 3-12-44



26 2 9 16 23 30 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27 3 10 17 24 1 8 5 22 29 0 5

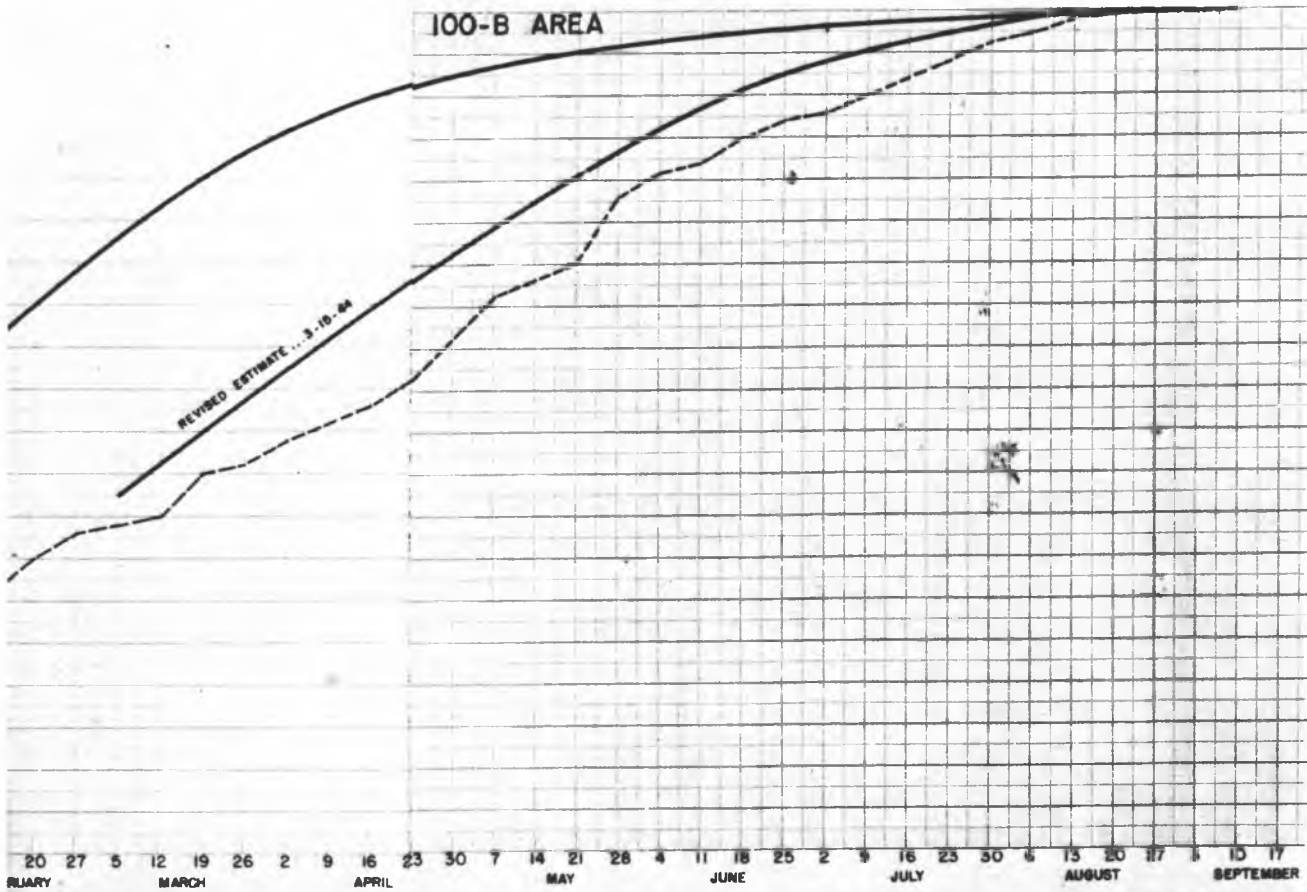
APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER

Drawn by G. G. G. 3 28 44



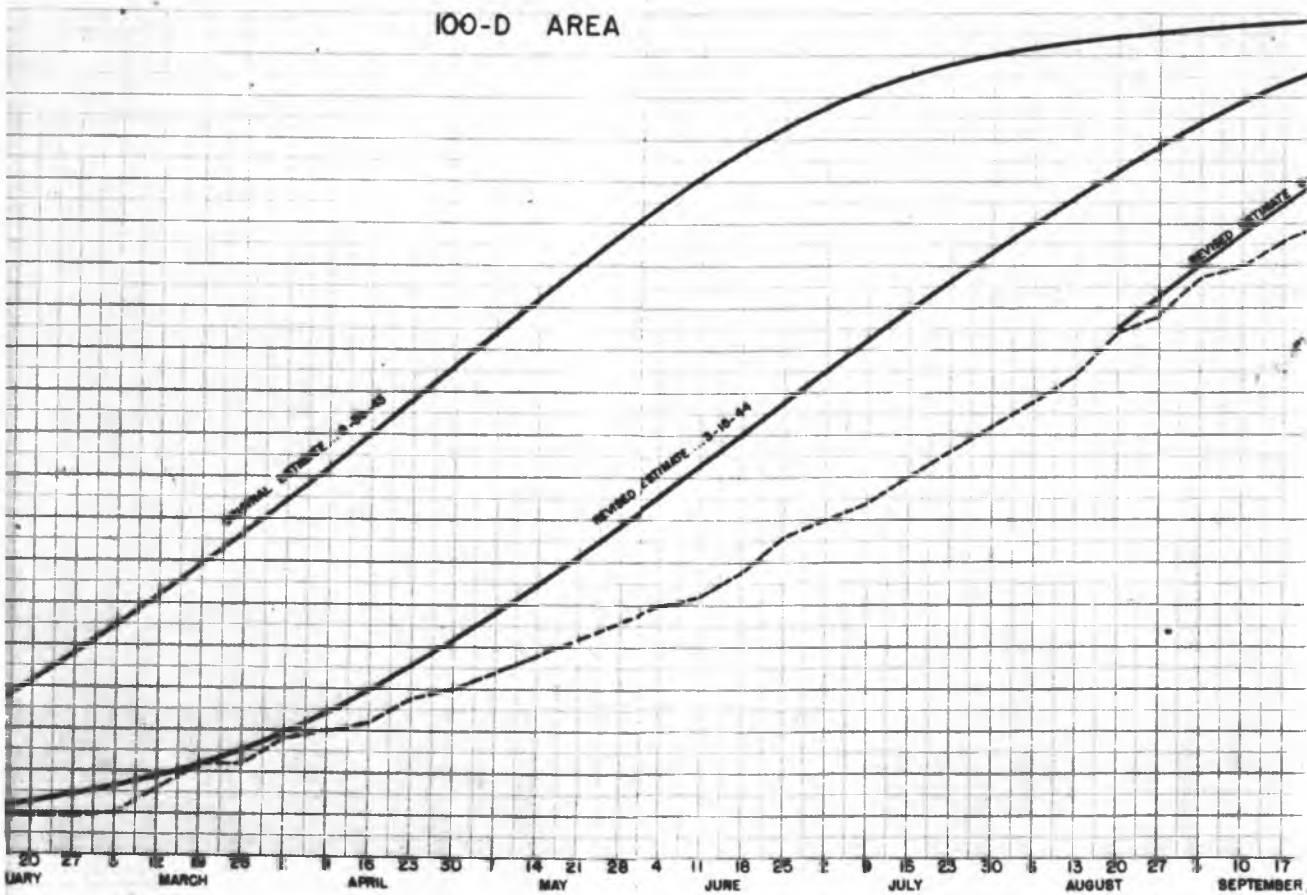
# COMPLETION FORECAST

100-B AREA



# COMPLETION FORECAST

100-D AREA







A clearer prints should be provided.

LEARN

40

30

20

10

0

1 18 2  
JULY

2

4 R 25

COMPLETION REPORT

[Illegible text line]

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20

19

18

17

16

15

14

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12

11

10

5 10 15 20 24 28 31 4 7 10 14 18 21 24 28  
944 945

100

90

80

70

60

50

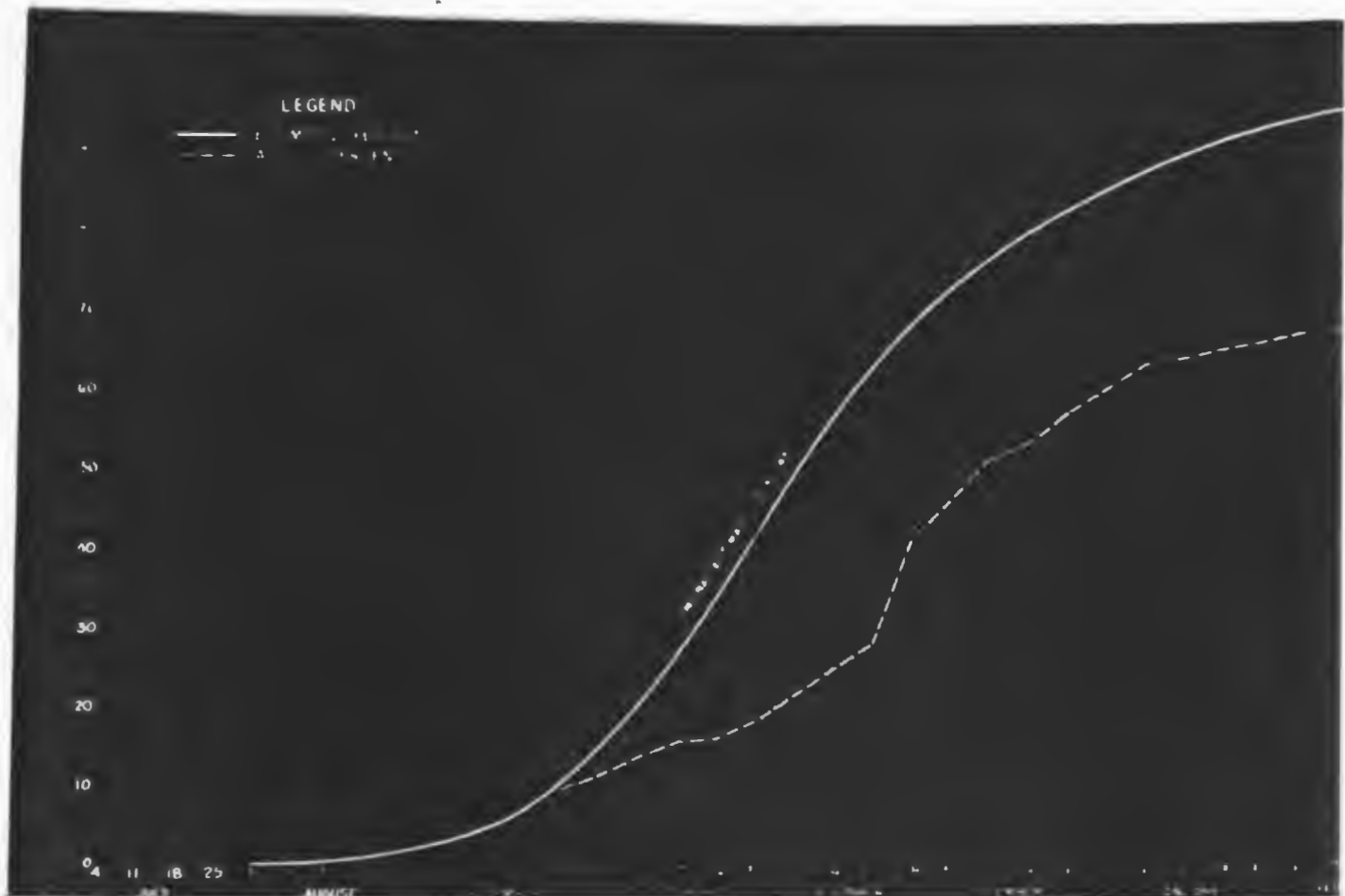
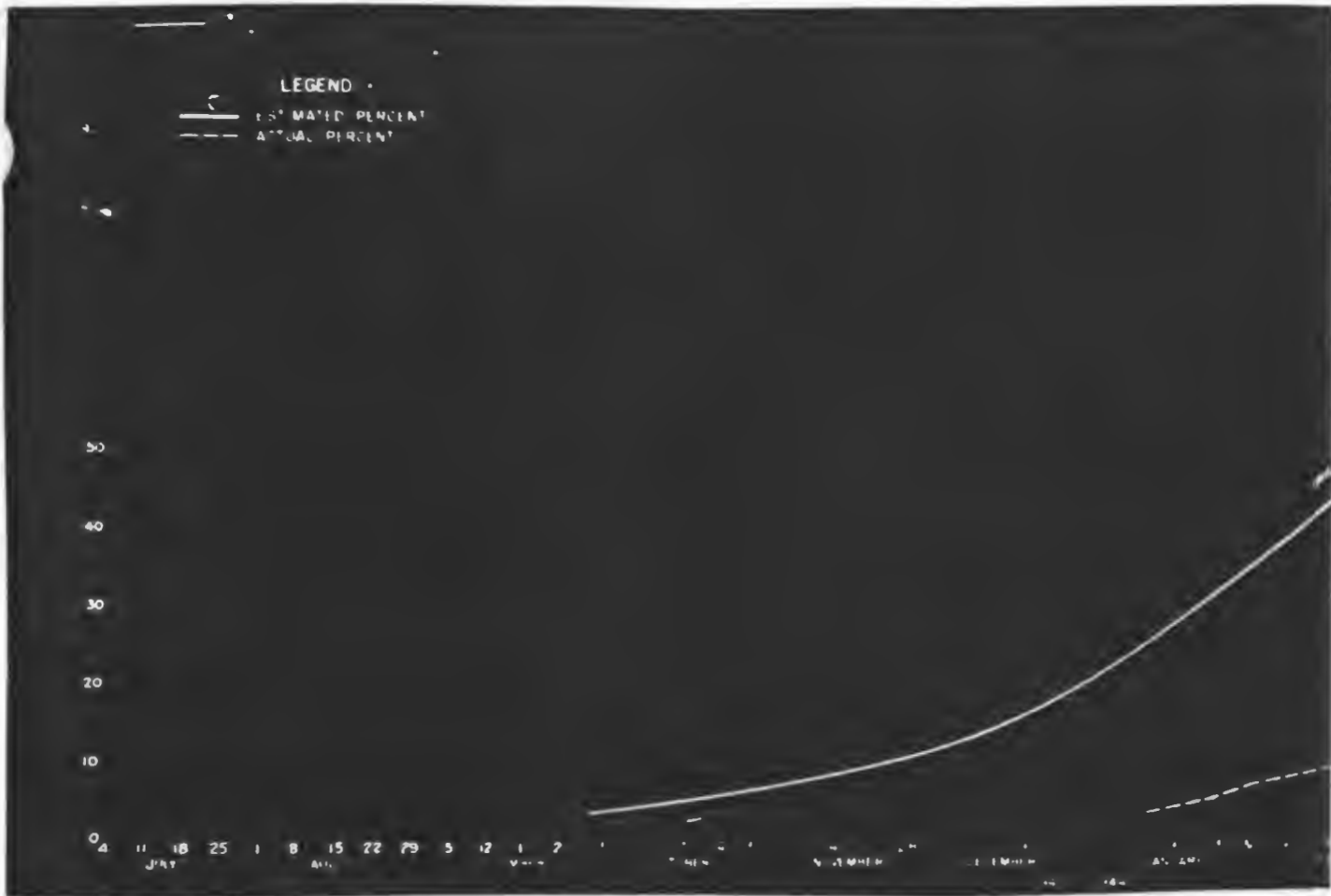
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30

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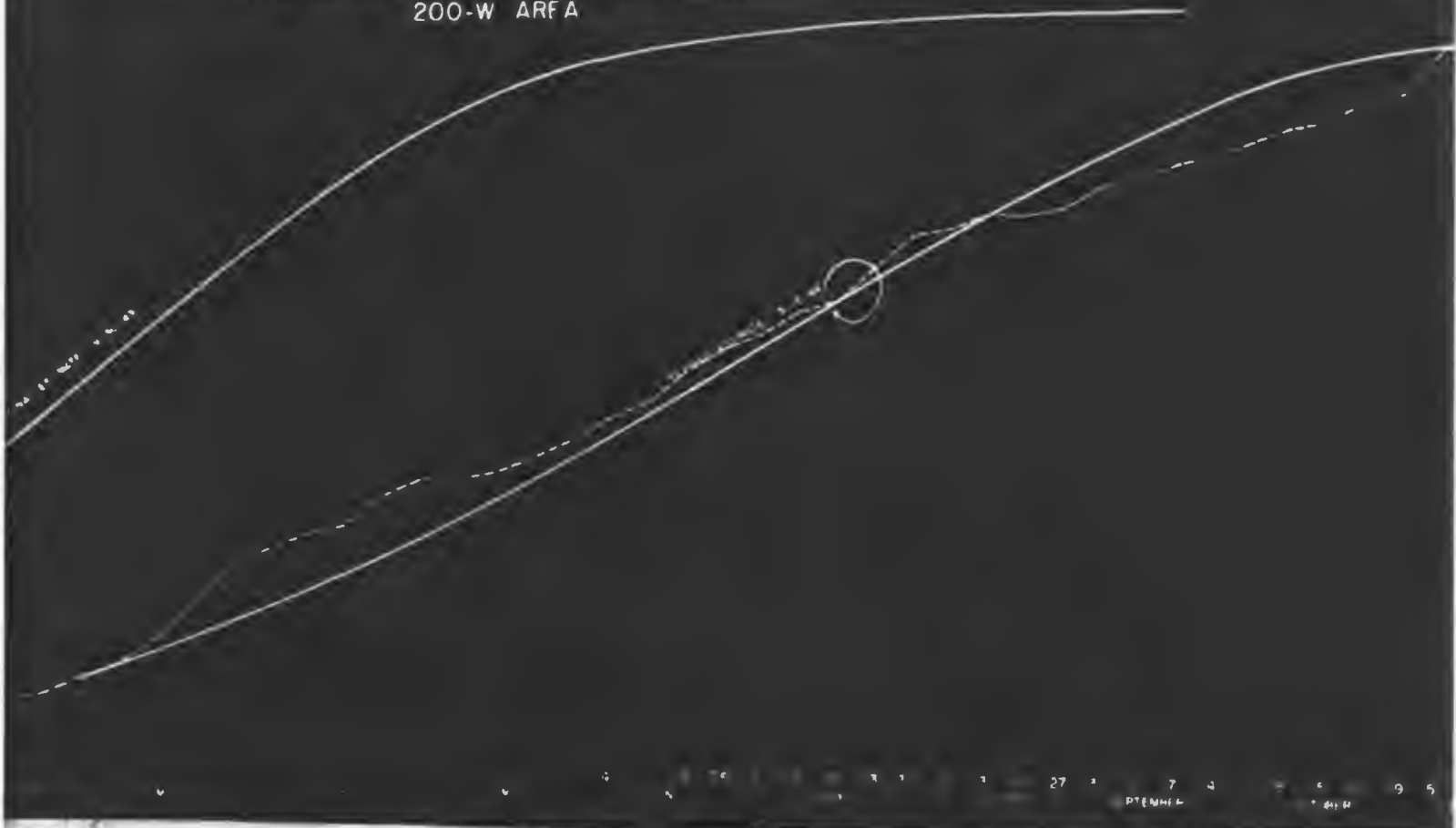
10

12 21 28 4 1 18 25 2 11 18 25  
FEBRUARY MARCH



# COMPLETION FORECAST

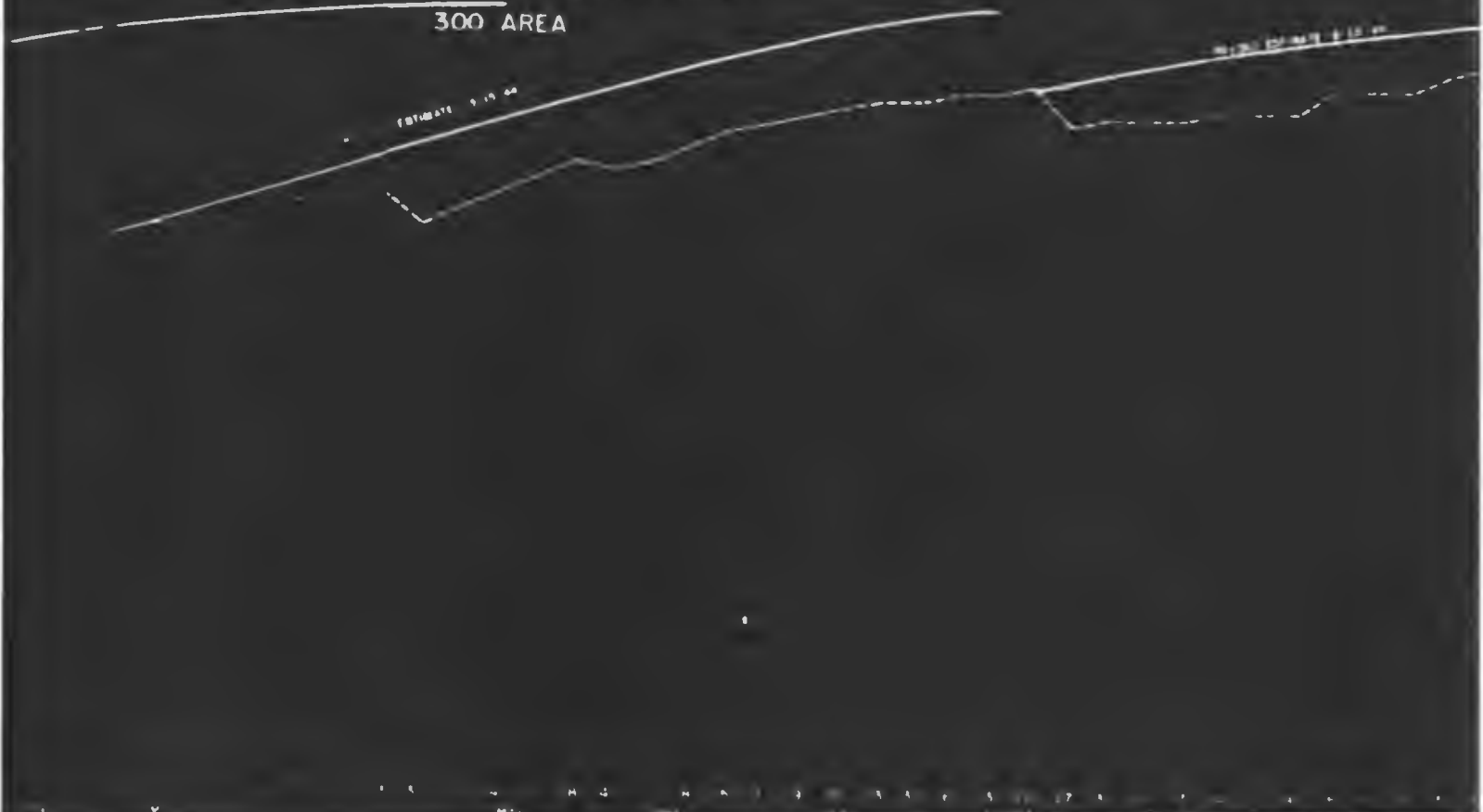
200-W AREA

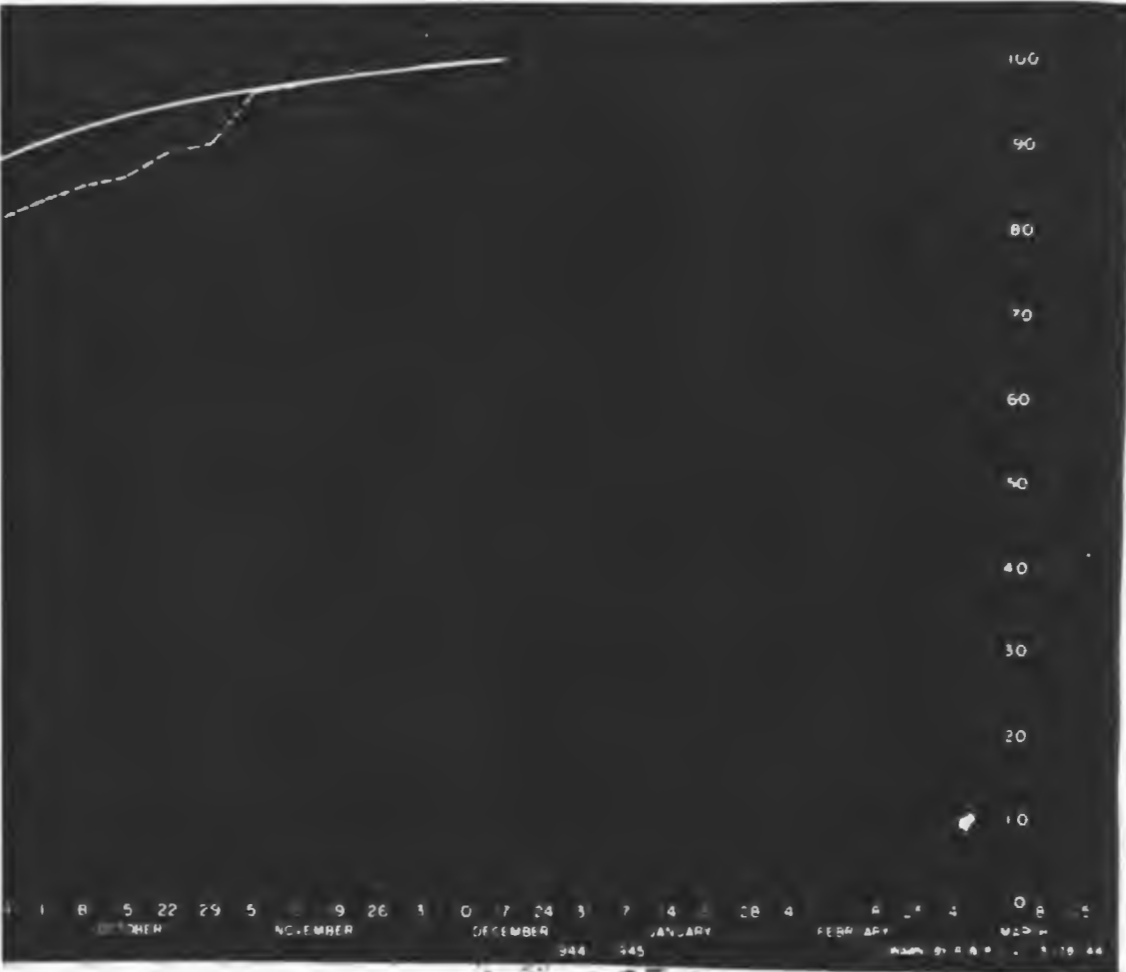


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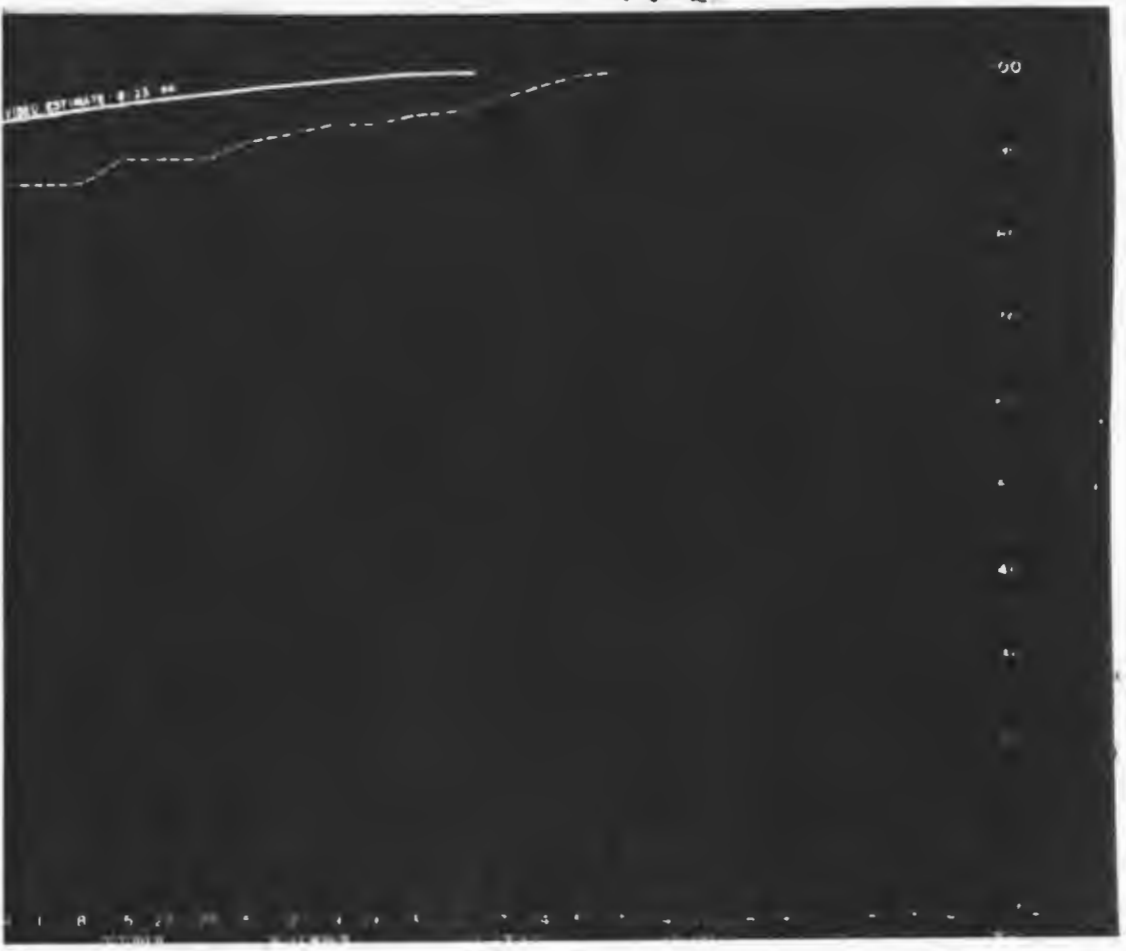
# COMPLETION FORECAST

300 AREA

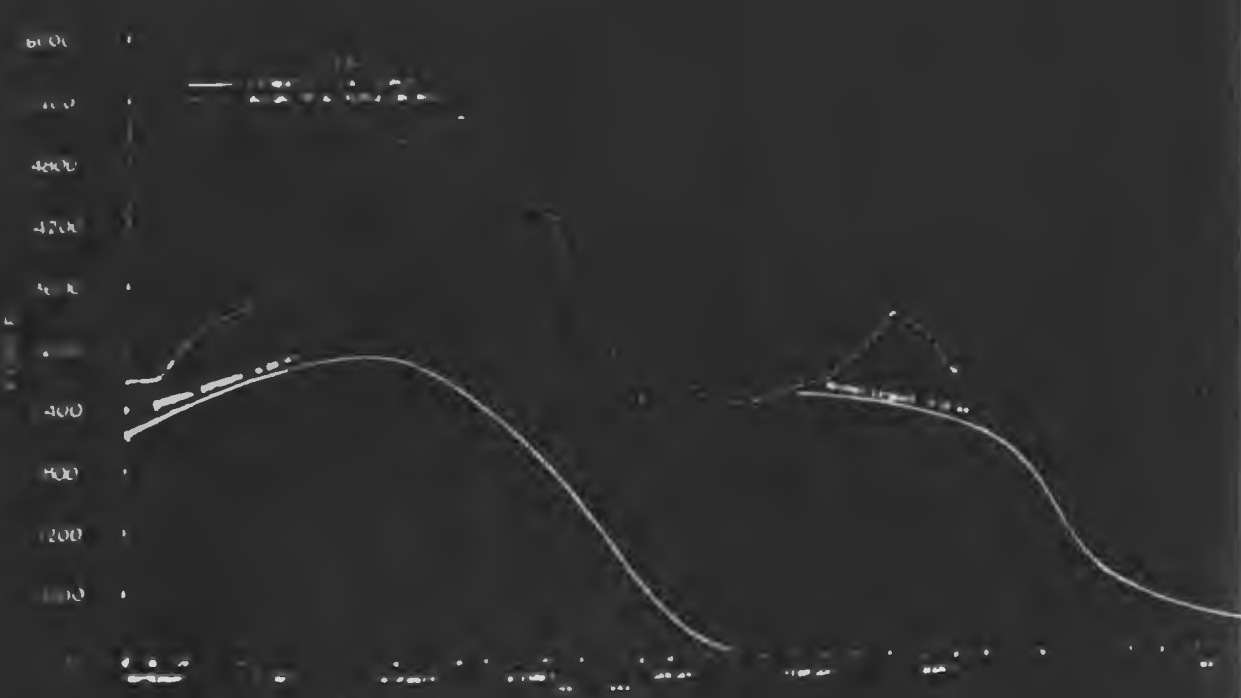




SHEET NO. 4 OF 4 SHEETS







HANFORD ENGINEER WORKS  
**AREA FORCE CURVES**

GENERAL SERVICES

TRANSPORTATION, SHOPS,

WATER SUPPLY, LIN. CANALS, LABORATORY ETC.

HEAVY UNLOADING

INCREASED CAMP B RIGGERS TO  
 TO STEP UP CRATING FOR EXCESS  
 MATERIALS

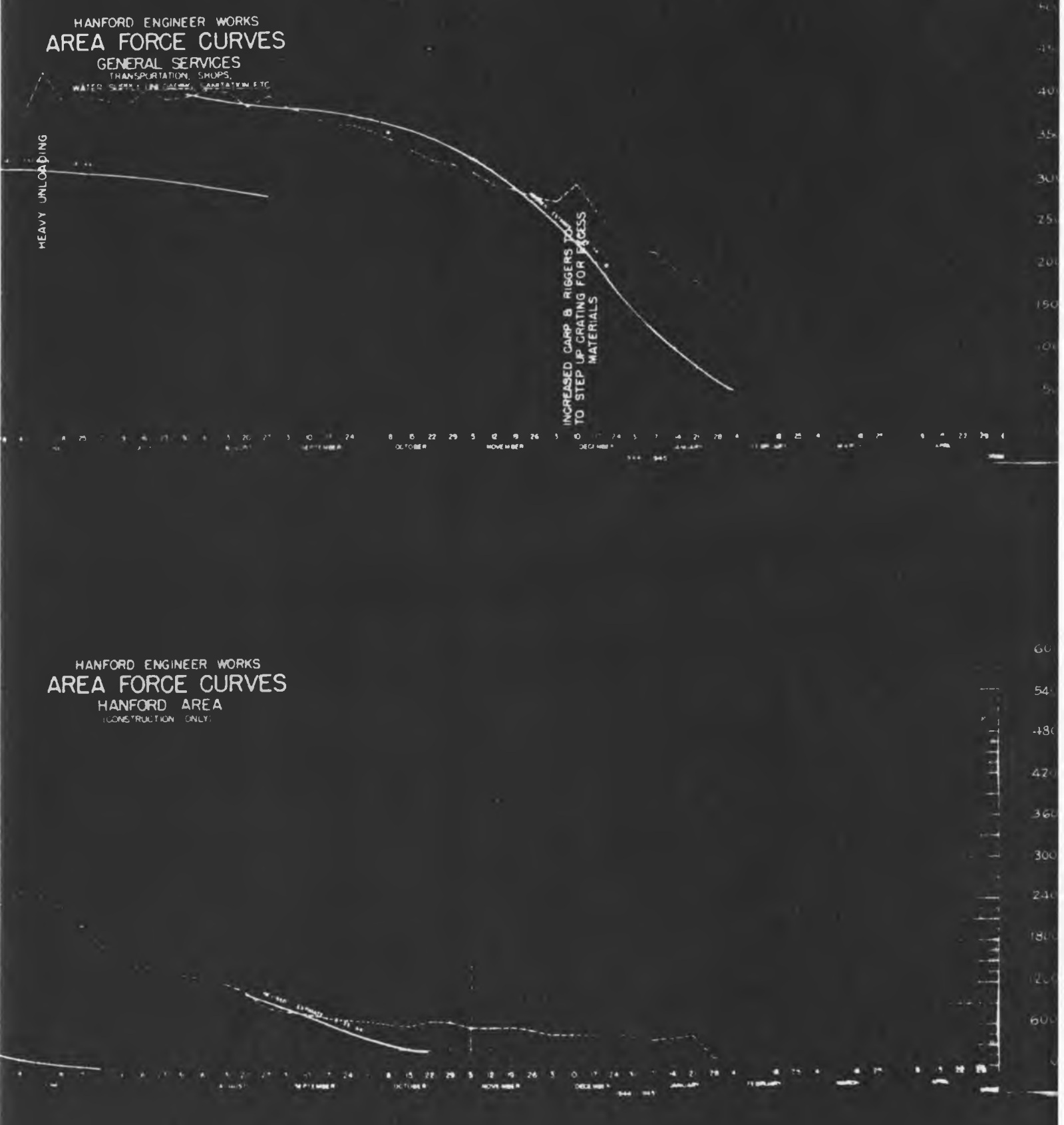
50  
45  
40  
35  
30  
25  
20  
15  
10  
5

HANFORD ENGINEER WORKS  
**AREA FORCE CURVES**

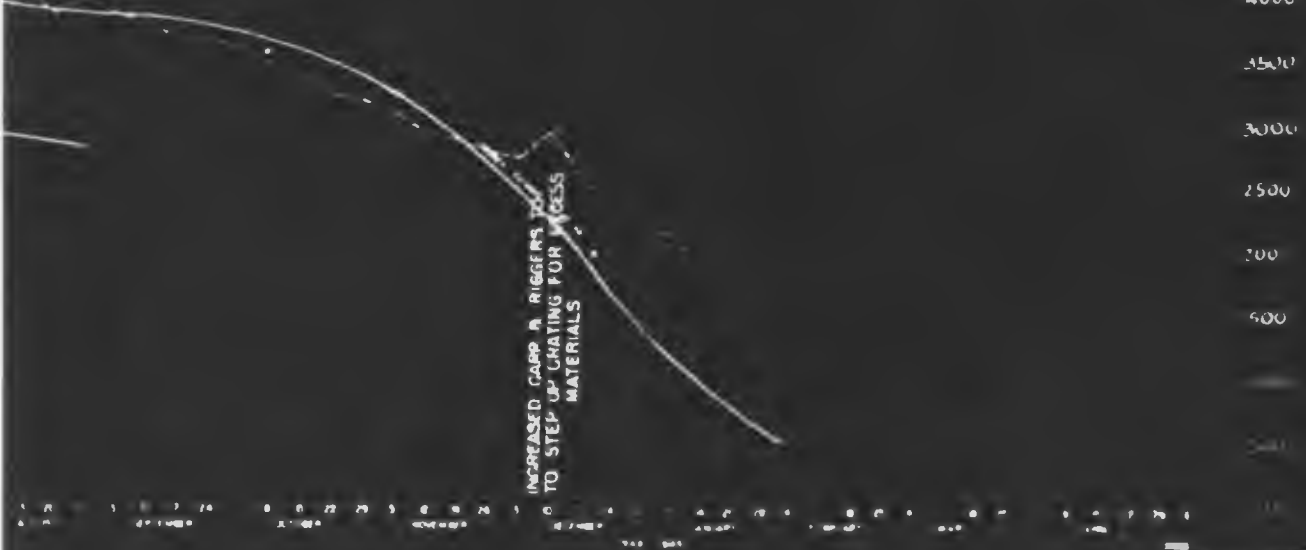
HANFORD AREA

(CONSTRUCTION ONLY)

60  
54  
48  
42  
36  
30  
24  
18  
12  
6  
0



WORKS  
CURVES  
CES  
ETC



WORKS  
CURVES

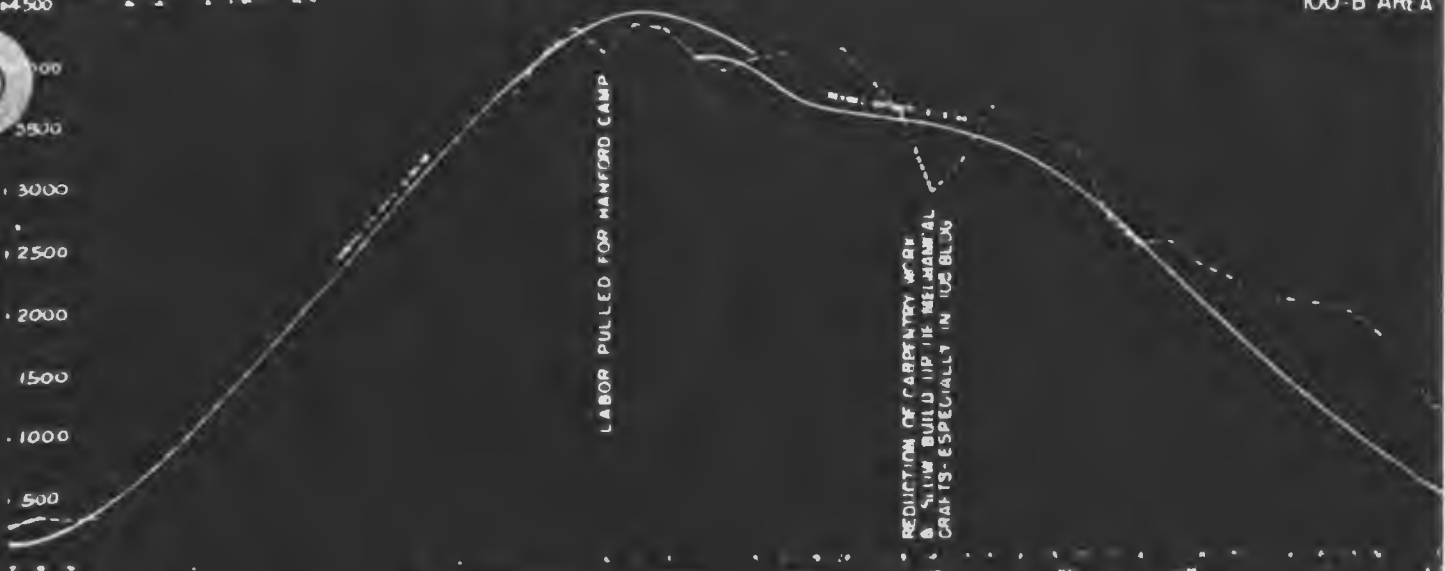


HANFORD ENGINEER  
 AREA FORCE CUR  
 100-B AREA

5000  
 4500  
 4000  
 3500  
 3000  
 2500  
 2000  
 1500  
 1000  
 500  
 0



FORCE



HANFORD ENGINEER  
 AREA FORCE CUR  
 100-D AREA

5000  
 4500  
 4000  
 3500  
 3000  
 2500  
 2000  
 1500  
 1000  
 500  
 0



FORCE



HANFORD ENGINEER  
 AREA FORCE CUR  
 100-F AREA

6400  
 5600  
 4800  
 4000  
 3200  
 2400  
 1600  
 800  
 0



FORCE



HANFORD ENGINEER WORKS  
**AREA FORCE CURVES**  
 100-B AREA

NIGHT FORCE WENT ON 185-190  
 FOR PIPE WORK  
 BUILD UP OF LABOR FORCES FOR EMERGENCY  
 REPAIR OF CONCRETE PRESSURE SEWER

5000  
 4500  
 4000  
 3500  
 3000  
 2500  
 2000  
 1500  
 1000  
 500  
 0

FORCE

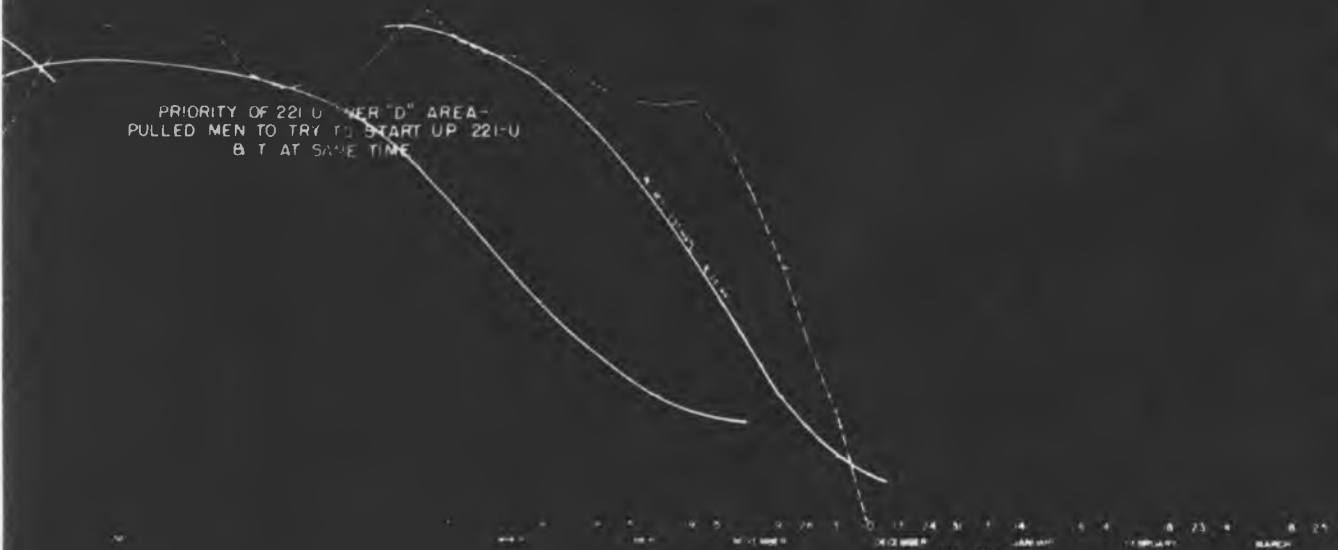


HANFORD ENGINEER WORKS  
**AREA FORCE CURVES**  
 100-D AREA

PRIORITY OF 221-U OVER "D" AREA -  
 PULLED MEN TO TRY TO START UP 221-U  
 B & T AT SAME TIME

5000  
 4500  
 4000  
 3500  
 3000  
 2500  
 2000  
 1500  
 1000  
 500  
 0

FORCE



HANFORD ENGINEER WORKS  
**AREA FORCE CURVES**  
 100-F AREA

REDUCTION OF CARPENTRY, ETC, PULLED  
 FITTERS FOR 100-D AREA

6400  
 5600  
 4800  
 4000  
 3200  
 2400  
 1600  
 800  
 0

FORCE





FORCE

7200

6000

5000

4000

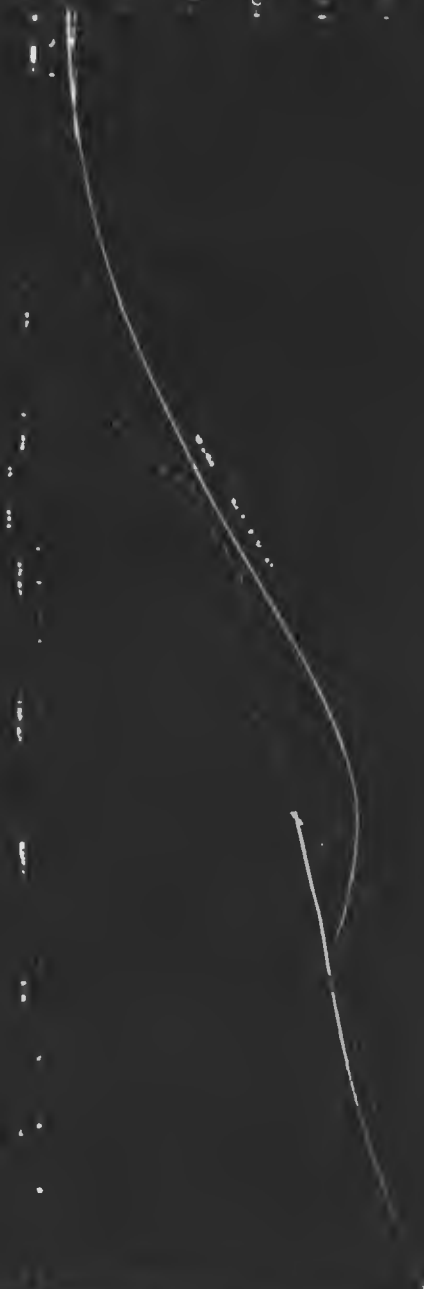
3000

2000

1000

0

(10)



ARE



FORCE

- 7200 +
- 6400 +
- 5600 +
- 4800 +
- 4000 +
- 3200 +
- 2400 +
- 1600 +
- 800 +

1. 2. 3.  
 (1) (2) (3)  
 (4) (5) (6)

CARPENTERS & LABOR PUT IN AREA FOR PURPOSE OF  
 COMPLETING TC BLDGS, ESPECIALLY THE WAREHOUSES

ENGINEERING WORK  
EA FORCE CURVES  
W AREA

REMARKS: [Illegible text]  
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[Illegible text]

7200  
6400  
5600  
4800  
4000  
3200  
2400  
1600  
800

FORCE

ENGINEERING WORK  
EA FORCE CURVES  
W AREA

7200  
6400  
5600  
4800  
4000  
3200  
2400  
1600  
800

FORCE



8000

7000

6000

5000

4000

3000

2000

1000

0

FORCE

CARP  
MECH  
LE 1

800  
1000  
1100  
1200  
1300  
1400  
1500  
1600

SHEET NO. 3 OF 4 SHEETS

FORCE

150

300

450

600

750

900

1050

1200

1350

LEGEND  
—— ESTIMATED TOTAL FORCE  
- - - - ACTUAL TOTAL FORCE ON ROLL

DESIGN ESTIMATE 4-30-43

DESIGN ON 313 BLDG  
HELD

ADDITTON TO 3706  
RELEASED

BARRACKS FOR 3000 AREA

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

# HANFORD ENGINEER WORKS AREA FORCE CURVES 300 AREA

NIGHT SHIFT 313 &  
CARPENTERS ON 321

NIGHT SHIFT ON 314

DECLINE OF CARP 321  
& SLOW DELIVERY OF  
EQUIP.

REVISED ESTIMATE

REVISED





**SECRET**

**RATE OF CONSTRUCTION OF HANFORD CAMP**

<u>Month Ending</u>	<u>Per Cent Complete</u>	<u>Progress During Month</u>
March 1943	00	2
April	2	9
May	11	14
June	25	8
July	33	19
August	52	8
September	60	10
October	70	11
November	81	9
December	90	22
January, 1944	68*	5
February	75	7
March	80	5
April	85	6
May	91	6
June	97	1
July	98	1
August	99	0
September	99	1
October	100	

\* Adjusted percentage based on additional work in the area.

**SECRET**

A Portions of sheets 10 and 18 are non-readable

EC - COMMERCIAL CONTRACTS & FACILITIES  
3000 AREA CAMP

ROOM	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VALUE CIV. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
EC-41	MESS HALL BUILDINGS	5	110 x 334 x 13 (Overall)	43,880 sq	257,640 \$	H-shaped, wood frame, gable roof structure with toilet and shower room located along the cross bar. Outside gypsom board siding, roll roofing, concrete foundations and floor in shower room.	Power, lighting, heating, ventilation, steam, water, hot water, toilet and wash room facilities and sewer.	West of messhall paralleling (south-southwest) road.
	BARBER & SHAVE S		30 x 148 x 13	17,040	221,820			
	MESS AND UTILITY ROOM	1	30 x 88 x 13	7,640	36,330	Same as above except	None as above.	West of messhall.
	4' HALL S		3 x 10 x 9	270	1,800			
	BARBER - 2-ROOM TYPE	1	111 x 147 x 13 (Overall)	16,110	129,610	Same as above except	None as above.	West of messhall.
	2 ROOM S		30 x 147 x 13	8,820	114,640			
	MESS ROOM	1	24 x 30 x 13	721	9,360	Same as above except	None as above.	West of messhall.
	LAVATORY ROOM		13 x 30 x 16	240	2,600			
	UTILITY ROOM	1	10 x 21 x 9	210	1,690	Same as above except	None as above.	West of messhall.
	2 HALL S		3 x 10 x 9	270	900			
LINEN CLOSET	1	14 x 40	1,280	11,540	Same as above except	None as above.	West of messhall.	
STORAGE CLOSET		14 x 40	640	3,740				
EC-42	MESS HALL	1	208 x 238 x 13.3 (Overall)	11,528	433,690	Wood frame, steel and gable roof, post and girder construction, gypsum board siding, roll roofing, concrete foundations and flooring in kitchen and warehouse. The messhall is L shaped with a warehouse attached to East end of the kitchen and office portion.	Power, lighting, ventilation, heating, steam, water, hot water, refrigeration, sewer, toilet and wash room, telephone.	Between Type 1 and 2 flag messhalls.
	STITCHES AND OFFICES	1	40 x 148 x 19	5,920	118,080	Same as above except	None as above.	West of messhall.
	USING ROOM	1	90 x 136 x 13	12,240	159,120			
	MESS ROOM	1	235 x 32 x 14	1,322	17,108	Same as above except	None as above.	West of messhall.
	POUCHES		10 x 13 x 10	130	1,110			
	SHOWER ROOM	1	16 x 22 x 13	352	3,872	Same as above except	None as above.	West of messhall.
	CLOCK ALLEY	1	12 x 16 x 10	192	1,920			
	TOILETS	10	8 x 8.1 x 9	648	6,120	Same as above except	None as above.	West of messhall.
	ICE HOUSE		8 x 10 x 9	72	720			
	S.F. PLATFORM	1	30 x 136 x 15	7,200	111,600	Same as above except	None as above.	West of messhall.
	10 x 44 x 4	440	1,760					
EC-43	MESS	1	32 x 87 x 14	2,144	30,016	Wood frame, steel roof building, post and girder construction, gypsum board siding, roll roofing, concrete foundations and floor.	Power, steam heat, lighting, sewer, air, water, and sewer. Concrete ground pit and air compressor.	Between Type 1 and 2 flag messhalls.
EC-5	ROAD	1,000'	2' wide	-	-	8" black water bound gravel.	None	Area 436.
	WATER LOT	1	800' x 600'	480,000	-	Same as above.	Lighting, heating and sewer.	West end of camp.
EC-7	WELL HOUSE	1	8 x 8 x 9	182	1,728	Wood frame steel roof building.	Power, lighting. 1 day well pump.	Approximately 2000' East of Camp Area.
	TRANSFORMER HOUSE	1	8 x 8 x 9	64	576	Wood frame steel roof building.	Lighting, electrical heating, calculator equipment.	West of Storage Tank.
	CONCRETE WATER STORAGE TANK	1	50,000 gal.	-	-	Steel tank	None	Approximately 2000' East of Camp Area.
	WATER LINES	1000'	4" S	-	-	Welded and screwed Schedule 40 steel pipe buried approximately 4 ft.	Upstream.	Area 436.
EC-8	ELECTRIC LINES	10,000'	2/0 wire	-	-	3-wire line carried on walking stick type poles.	None	Service from Richmond.
	TRANSFORMER BANK	1	10 x 20	200	-	Open frame, enclosed by 4" x 4" wood frame.	3 - 100 KVA Transformer P 2900 and 200 & 1 - 75 KVA Transformer P 2900, 220/110 S	At Messhall.

Note: All other buildings from drawings.

B27  
H





III - COMMERCIAL CONTRACTS & FACILITIES  
 3000 AREA CAMP

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC-9	FENCE	800'	12' High			Type #1	None	Surrounding 3-Bay Type Barrack.
TC-11	SEWER LINES	1600'	12" Ø			Vitrified and concrete pipe with concrete joints buried approximately 5'.	None	Area wide.
		800'	10" Ø					
		450'	8" Ø					
		300'	6" Ø					
	SETTLING POND	1	25' x 60' x 4'	1,500	6,000	Earth Dyke.	None	South of Camp Area.
	SEWER TANKS	1	20' x 60' x 8'	1,200	9,600	Type #7	None	Same
	GREASE TRAP	1	4 x 6 x 4	24	96	Wood Box Underground	None	At messhall.
TC-15	STEAM LINES	1200'	4" Ø			Welded Schedule 40 Steel pipe lagged with Air Cell insulation and carried on wooden overhead pipe supports.	None	Area wide.
		300'	3" Ø					
		300'	2" Ø					
		150'	1 1/2" Ø					
	BOILER HOUSE	1	24' x 40' x 14	1,104	15,456	Wood frame, shed roof building, post and girder construction.	Water, lighting. 2 - 100 H.P. Boiler, Pump and water Storage Tank.	Northwest of messhall.

~~SECRET~~

BUILDING LIST - TELEGRAPH CONSTRUCTION

CENTRAL SHOPS AREA

Sheet 1

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 29	FIRST AID BUILDING	1	25 x 43 x 10 x 4 x 8 x 8	1107	11006	Wood Frame Cable Roof Building with Lean-to Attached to South Side	Lighting, Water, Steam Heat, Toilet and Washroom Facilities, Telephone	4th Street
	SERVICE DIVISION ENGINEER'S OFFICE	1	24 x 96 x 11 & 8 x 18 x 9	2448	26630	Wood Frame Cable Roof Building with Toilet Room Lean-to Attached East Side	Lighting, Telephone, Steam Heating, Water, Toilet and Washroom Facilities	On "A" Ave. E. of 2nd St.
	LAYOUT DIVISION ENGINEER'S OFFICE	1	24 x 125 x 11 & 10 x 24 x 8	3240	36920	Wood Frame Cable Roof Building with Lean To Brick Vault & Wood Frame Toilet Room Lean Attached to East Side		Same
	GOV'T DIVISION ENGINEER'S OFFICE	1	24 x 92 x 11	2208	24288	Wood Frame Cable Roof Building	Lighting, Telephone, Steam Heating, Water Toilet and Washroom Facilities	On "A" Ave. E. of 2nd St.
	CONCRETE LABORATORY	1	24 x 76 x 11 & 12 x 56 x 10	2486	26784	Wood Frame Cable Roof Building with Concrete Floor & Apron on S. & E. Sides and Lean-to on East Side Only	Lighting, Power, Telephone, Steam Heating, Water, Toilet and Washroom Facilities	2nd and "A" Avenues
	PAINT SHED (SIGNS)	5	22 x 48	5280	45600	Butler Mission Type Sheet Metal Sides	Lighting, Heating, Telephone	2nd Street
	CHAFT SUPERINTENDENT'S OFFICE	1	(1st Wing 30 x 19 x 11 2nd Wing 30 x 110 x 11 3rd Wing 50 x 12 x 10 Penthouse Addn. 30 x 22 x 10	10320	121200	Wood Frame L-shaped Cable Roof Bldg. with 3-Story Penthouse on E. End of 2nd Wing & with Lean-To Attached to E. Side of 1st Wing & S. Side of 2nd.	Lighting, Power, Ventilation, Air Cooling, Steam Heating, Water, Telephone, Toilet and Wash Room Facilities	2nd & "A" Avenues
	SALVAGE PLATFORM	1	40 x 100	4000	---	Wood Frame & Decked 4' High	None	3rd & "B" Avenues
	HEAVY EQUIPMENT PARTS WAREHOUSE	2	80 x 180 x 12 80 x 60 x 12	14400 4800	172800 57600	Wood Frame Shed Roof Buildings, Post & Girder Construction	Lighting, Water	Same
	RIDDERS' LEPT	1	24 x 156 x 10 & 24 x 60 x 10	5184	51840	Wood Frame Cable Roof Building L-Shaped with 4 x 50 x 4 Deck on East Side	Lighting, Telephone, Water, Steam Heating, Toilet & Washroom Facilities	4th & "A" Avenues
	FIRE STATION	1	48 x 128 x 14 & 8 x 12 x 16	6144	87542	Wood Frame Cable & Shed Roof Bldg. with Lean-To along S. Side & Ross Tower 80' High, Concrete Floor & Apron	Lighting, Power, Steam Heating, Telephone, Water, Toilet & Washroom Facilities, Cooking and Barrack Facilities	1st & "A" Avenues
	HEAT METAL & MACHINING SHOP	1	78 x 245 x 15	19910	298650	Wood Frame Post & Girder & Truss Construction Bldg. with Concrete Floor & Lean-To Attached to E. & N. Sides	Lighting, Power, Water, Steam Heating Telephone, Air, Toilet & Washroom Facilities, Monorail System	4th Street
	PUMPHOUSE PARTS STORAGE BUILDING	3	22 x 48	3168	27360	Butler Mission Type Sheet Metal Sides	Lighting, Heating, Telephone	4th Street
	PUMPHOUSE REPAIR SHOP	1	(40 x 92 Overall 40 x 62 x 14 30 x 48 x 20 26 x 32 x 15	3680	53760	Wood Frame Shed Roof Bldg. Post & Girder Const. with Conc. Floor-Penthouse on N. End	Lighting, Power, Telephone, Steam Heating, Monorail and Mail Systems	Same
	INSPECTORS' OFFICE	1	24 x 112 x 11	2688	25908	Wood Frame Cable Roof Building	Lighting, Telephone, Steam Heating, Water, Toilet and Washroom Facilities	On "A" Ave. E. of Fire St
	600 AREA LABOR UNIT OFFICE	1	22 x 48	1056		Butler Mission Type Sheet Metal Sides	Lighting, Heating, Telephone	1st and "A" Ave.
	SALESMAN STORAGE BUILDING	1	22 x 48	1056		Butler Mission Type Sheet Metal Sides	None	Same
	LABORATORY ROAD MATERIALS	1	20 x 32 x 11	640	7040	Wood Frame Cable Roof Building	Lighting, Telephone, Steam Heat, Water	South of Station Office
	ENGINE REPAIR SHOP & OFFICE	1	50 x 407 Overall 50 x 132 x 16 42 x 50 x 30 27 x 50 x 10	10350	191000	Wood Frame Shed & Cable Roof Bldg. Post & Girder Const. with Conc. Floor, 2 Pent-houses 30' High & a Lean-to on N. Side	Lighting, Power, Water, Steam Heating, Air, Water, Toilet & Washroom Facilities Telephone	5th & "A" Avenues
	VALVE TESTING OFFICE	1	18 x 20 x 10	360	3600	Wood Frame Cable Roof Building	Lighting, Telephone, Steam Heating	2nd St. S. of "A" Ave.
	VALVE TEST SHOP	1	18 x 20 x 10	360	3600	Wood Frame Cable Roof Building	Lighting, Water, Air, Steam Heating	2nd St. S. of "A" Ave.

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BUILDING LIST - T-22 L-3 BY CONSTRUCTION

CENTRAL SHOPS AREA

Sheet 2

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 29	IRON CUTTING SHOP	1	20 x 60 x 14 & 16 x 24 x 10	1584	20640	Wood Frame Gable Roof Building with Lean-To Attached to S.W. Corner	Lighting, Power, Heating	4th Street
	MILLRIGHT SHOP (TRAINING)	1	20 x 90 x 10	1000	10000	Wood Frame Gable Roof Building	Lighting, Heating	Base
	WELDING SHOP (SCHOOL)	1	20 x 70 x 11	1400	14000	Same	Lighting, Power, Heating, Ventilation	Base
	BATTERY & RADIATOR SHOP	1	40 x 100 x 12	4000	48000	Wood Frame Shed Roof Building, Post and Girder Construction	Lighting, Power, Heating, Steam Heat, Water, Air, Telephone	3rd St. & "B" Avenue
	STORAGE HUTMENTS, BURGERS'	2	22 x 48	2112	18240	Butler Mission Type Sheet Metal Hats	Lighting	4th Street
	TRANSFORMATION SAFETY OFFICE	1	22 x 48	1056	9120	Same	Same	4th & "B" Avenue
	GAS STATION	1	6 x 6 x 8 Attendant's Off.	---	---	1 - Electric Pumps 2 - Underground Station Tanks 3 - 2000 Gal. 1 - 2000 Gal.	Lighting, Power, Water, Air	2nd St. & "A" Avenue
	TIRE STORAGE & REPAIR SHOP	1	75 x 110 x 14	8250	112500	Wood Frame Shed Roof Bldg. Post & Girder Const. with Brick Firewall Dividing Storage Part from Repair Shop Having 10' Loading Dock on North Side of Building	Lighting, Power, Steam Heat, Air, Water, Telephone	3rd St. E. of "B" Ave.
	ICE HOUSE	1	40 x 40 x 11	1600	17600	Wood Frame Gable Roof Building 10' Deck 4' High on S. & E. Sides	Lighting, Water	Water Limitation Lot
	AUTOMOTIVE & HEAVY EQUIPMENT WELDING SHOPS	2	22 x 48	2112	18240	Butler Mission Type Sheet Metal Hats	Lighting, Heating, Power	E. of Crane Repair Bldg.
	SAFETYWORKS OFFICE & STORAGE BLDG.	2	22 x 48	2112	18240	Butler Mission Type Sheet Metal Hats	Lighting, Heating, Telephone	2nd & "A" Avenue
	MAKERS OFFICE	1	16 x 48 x 9	768	6912	Wood Frame Hip-Roof Bldg., Gable Roof	Lighting, Telephone, Water, Steam Heating	On "A" Ave. Between 1st & 2nd Street
	MECHANICAL OFFICE	1	16 x 48 x 10	768	7680	Wood Frame Gable Roof Frame-Bldg.	Lighting, Steam Heating, Telephone	2nd Street
	COST OFFICE	1	16 x 48 x 10	768	7680	Wood Frame Gable Roof Building	Same	Base
	ELECTRICAL REPAIR SHOP	2	17 x 31 x 11 20 x 32 x 11	2967	32639	Wood Frame Gable & Shed Roof Buildings with Lean-To on N. & W. Sides of Main Bldg.	Lighting, Heating, Telephone, Power	2nd Street
	AUTO INSPECTION BUILDING	1	48 x 176 x 14	8448	114272	Wood Frame Shed Roof Building, Post & Girder Const., Concrete Floor & Pits	Lighting, Power, Water, Air, Roof Ventilators	3rd & "B" Avenue
	CRANE JACK (PLATFORM)	1	40 x 40	1600	---	Wood Platform 4' High	None	Oil Storage Yard
	CRANES & SHED BACKS	1	40 x 86 x 14	3440	48160	Wood Frame Gable Roof Bldg., Post and Girder Const. with Conc. Floor Pits	Lighting, Power, Water, Air, Telephone, Steam Heating	3rd & "B" Avenue
	AUTOMOTIVE REPAIR SHOPS (AUTS)	1 Bldg.	30 x 326 x 14	9780	136920	Wood Frame Shed Roof Building with Post & Girder Const. with Concrete Floor	Lighting, Power, Telephone, Steam Heating, Water, Air	Between 3rd & 4th Streets & 7th Avenue
	AUTOMOTIVE REPAIR SHOPS (TRUCK)		38 x 180 x 14	6840	95760	Wood Frame Shed Roof Building, Post & Girder Construction with Concrete Floor	Lighting, Power, Telephone, Steam Heating, Water, Air	3rd Street - 4th
	TRANSFORMATION TOILET		10 x 25 x 8	250	3000	Wood Frame Shed Roof Building	Lighting, Water, Toilet & Washroom Fac.	S. of Heavy Ship Repair
	SMALL PARTS REPAIR (CAR, DIST.,)		18 x 40 x 12	720	8640	Wood Frame Shed Roof Building	Lighting, Power, Steam Heating	Attached to South Corner of Automotive Repair Bldg.
	STOCK ROOM & OFFICE		80 x 80 x 15 & 32 x 110 x 10 & 12 x 22 x 8	10184	133312	Brick Wall Building with Wood Frame Shed Roof - Venthouse	Lighting, Steam Heat, Ventilation, Water, Telephone, Toilet & Washroom Fac.	3rd & "A" Avenue

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BUILDING LIST - TEMPORARY CONSTRUCTION

CENTRAL SHOPS AREA

Sheet 3

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 29	HEAVY EQUIPMENT REPAIR	Cons'd	40 x 400 x 14	16800	105200	Wood Frame Shed Roof Building, Post and Girder Construction with Concrete Floor	Lighting, Air, Water, Power, Steam Heating	N. End "A" Avenue Wing
	TOOL ROOM	1	20 x 40 x 12	800	9600	Wood Frame Shed Roof Building, Cons. Floor	Lighting, Steam Heating, Telephones	Attached to S. Side of Heavy Equip. Repair Wing
	TRANSIT MIX REPAIR SHOP	1	42 x 120 x 15	5040	75600	Wood Frame Shed Roof Bldg., Post & Girder Const. with Cons. Floor, Open one side	Lighting, Power, Water, Air.	On "A" Ave. E. of 4th St.
	TRANSIT MIX GREASE RACK	1	20 x 42	840	---	Wood Frame with Ramp 5' High, Not Covered	Lighting, Air	Same
	CLOCK ALLEY - CENTRAL SHOPS	1	30 x 54 x 12	1620	19440	Wood Frame Gable Roof Bldg. Part Open	Lighting, Telephone, Heating	
	WATER DISTRIBUTION OFFICE	1	30 x 60 x 10	1200	12000	Wood Frame Gable Roof Building	Lighting, Heating, Telephone	Water Sanitation Lot
	BARREL RACK PLATFORM	1	150 x 150	22500	---	Wood Platform on Sleepers	Lighting, Water	Same
	TRANSFORMATION AREA OFFICE	1	12 x 20 x 8	240	1920	Wood Frame Shed Roof Bldg. on Skids	Lighting, Telephone, Heating	3rd St. S. of "B" Avenue
	RAILROAD TIRE MOUNDS	2	12 x 14 x 8	336	2496	Wood Frame Gable Roof Building	None	On R.R. East of 1st St.
	FUEL STORAGE YARD & TANKS	2	1 - 180 x 190 1 - 190 x 220	76000	---	Fence Area with Tanks Surrounded by Earth Dykes Incl. Truck Unloading Spots	Lighting, Power, Water, Transfer Pumps 5-25,000 Gal. Tanks, 2-12,000 Gal. Tanks	Same
	J.I.T. BUILDING	1	22 x 48	1056	9120	Butler Mission Type Sheet Metal Mt	Lighting, Heating	4th Street
	TRANS. MISC. STORAGE & REPAIR HUTS	5	22 x 48	5280	45400	Same	Same	B Ave. S. of 4th Street
TC 5	ROADS		6500' - 40' Side Gravel Road			Water Bound Gravel 12" Thick	None	Area Side
			7500' - 20' Side Gravel Road			Same	None	Same
	WALKS		6000' - 6' Side Gravel Walks			Water Bound Gravel 6" Thick	None	Same
	BUS PARKING LOT	1	600 x 600	360000		Water Bound 12" Thick	Lighting	"A" Avenue
	CAR PARKING LOT	2	400 x 400	72000		Water Bound 12" Thick	Lighting and Stops	Same
	WATER SANITATION LOT	1	300 x 600	180000		Fenced and Stabilized	Water and Lighting	North of "A" Avenue
	STEEL STORAGE YARD	1	320 x 420	134400		Same	Lighting and Hooks	N. of Millwright Shop
	MISCELLANEOUS STORAGE LOTS		500000 Sq. Ft.		185185	Quys. Stabilized 12" Thick	None	Area Side
TC 7	ELEVATED STORAGE TANK	1	100000 Gal.			Wood Stave Tank on Wood Frame Approx. 40' Above Ground	Water, Steam, Lighting	"B" Ave. S. of "B" Boiler
	STEEL LINES		( 2250 18875 1500 1000 1600 500			Wood Slip Joint, Welded Steel and Screwed Pipe buried Approx. 4' deep	Hydraulics	Area Side
TC 8	Transformer Bank	1	20 x 20	200		Open Framing Enclosed by 4000' Fence	3-75 KVA Trans 1 6000/440/220 S	At Transp. Garage Building
	Transformer Bank	1	20 x 20	200		Same	2-75 KVA " 1 6000/440/220 S	At Crane Repair Bldg.

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BUILDING LIST - TEMPORARY CONSTRUCTION

CENTRAL SHOPS AREA

Sheet 4

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 8	TRANSFORMER BANK  ELECTRIC LINES	1	10 x 20	200	---	Open Framing Enclosed by Wood Fence	0-230 KVA Trans. P 6900/110/220 S 1-75 KVA Trans. P 6900/220/110 S	At Millwright Shop
TC 9	FENCES		4420' - 10' High 2320' - 5' High	---	---	4" x 4" x 12' Wood Post & Seven Wire Topped with 5 Strands of Barb Wire Same	Same Same	Area Side Same
TC 10	TOILET BULK	40	Approx. 4 x 7 x 4	1680	6720			Area Side
	TOILETS	20	8 x 10 x 8	1600	12800			Same
		5	6 x 6 x 8	180	3600			Same
	SHACKS	3	6 x 6 x 8	108	864			Same
		1	8 x 8 x 8	64	512			Same
		20	8 x 10 x 8	1600	12800			Same
		1	6 x 14 x 8	84	672			Same
		2	10 x 12 x 8	240	1920			Same
		2	12 x 14 x 8	336	2688			Same
TC 12	CHANG ROOMS	8	4 x 6 x 7	192	1344			Same
	LAVATORY LOCKERS	12	1 x 2 x 7	24	168			
	WREN PLATFORMS	2	30 x 30	1800	---			Same
TC 11	SEPTIC TANKS	1	30 x 60	---	---	Wood Box Underground	Chlorinator House	East of 1st Street
	SETTLING BASIN	3	30 x 60	---	---	Earth Dyke Construction	Same	Same
	SEWERS		4000 (Approx) 8" Vit. Clay Bell & Spigot 2400 (Approx) 4" Vit. Clay Bell & Spigot					Area Side Same
TC 13	STEAM LINES		2130 - 4" 1200 - 3" 400 - 2" 500 - 1 1/2"	---	---	Insulated Welded & Screwed Steel Pipe Sub. 40 Same Same Same	Suspended on Overhead Pipe Supports Same Same Same Same	Area Side Same Same Same
TC 14	BOILER HOUSE (A)	1	26 x 32 x 15	432	1280	Wood Frame Shed Roof Bldg. Post and Girder Construction	Lighting, Water, Steam, 2-75 HP Boiler, Pump, and Wood Tank	E. E. of Craft Dept. Office
	BOILER HOUSE (B)	1	24 x 32 x 16	768	12288	Wood Frame Shed Roof Building, Post & Girder Construction	Lighting, Water, Steam, 1-50 HP Boiler, Pump & Wood Tank	E. E. of Trans. Garage

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WORLDWIDE 111 - TEMPORARY CONSTRUCTION

CENTRAL SHEFS AREA

Sheet 5

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES AVAILABLE	LOCATION
TC 15	BOILER HOUSE (C)	1	22 x 26 x 14	576	8008	Wood Frame Shed Roof Building, Post and Girder Construction	Lighting, Water, Steam, 1-72 HP Boiler Pump, Wood Tank	S.W. of Niggers' Office
	BOILER HOUSE (D)	1	22 x 26 x 12	632	11628	Wood Frame Shed Roof Building, Post & Girder Construction	Lighting, Water, Steam, 1-72 HP Boiler Pump, & Wood Tank	4th Street
	BOILER HOUSE (E)	1	10 x 14 x 12	140	1680	Wood Frame Shed Roof Building	Lighting, Water, Steam, 1-30 HP Boiler	Water Sanitation Lot
TC 16	TELEPHONES	26 Bldgs. Served				Cable, Open Ironwire & Twisted Pair	84 phones & approx. 20 extensions through 1-20 position manually oper. switchboard	area 11c

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BUILDING LIST - TEMPORARY CONSTRUCTION

100-B AREA

Sheet 1

NO.	BUILDING NAME	N. OF BLDG.	SIZE	FLOOR AREA S. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
30	General Information							
	DIVISION ENGINEER'S OFFICE	1	35 x 12 1/2 x 10 & 8 x 9 x 8	4515	45150	Wood Frame, Cable Roof Bldg. with Lean-To S. & E. Sides	Telephone, Lighting, Water, Heating, Toilet and Wash Room	"C" St. & 2nd Street
	LABOR & CONCRETE OFFICE	1	24 x 40 x 10	960	9600	Wood Frame, Cable Roof Bldg. wood frame	Telephone, Lighting, Heating	"C" St. & 2nd Street
	PIPE SHOP	1	30 x 76 x 16	5320	85120	Truss Roofed Building	Telephone, Lighting, Power, Heating, Water, Toilet & Wash Room	and St. S. of "C" St.
	U.S. ENGINEER'S OFFICE	1	30 x 24 x 10 & 8 x 9 x 8	792	7776	Wood Frame, Cable Roof Bldg. with Lean-To Toilet Room Attached	Telephone, Lighting, Heating, Water, Toilet & Wash Room	"C" St. & 2nd Street
	AREA ESTABLISHMENT OFFICE	1	12 x 40 x 9	420	2160	Wood Frame, Cable Roof Building	Lighting, Telephone	"C" St. & 2nd Street
	LAYOUT OFFICE	1	22 x 48	1056	9120	Butler Sheet Metal Hut	Telephone, Lighting, Heating	"C" St. & 2nd Street
	PAINT OFFICE	1	22 x 48	1056	9120	Butler Sheet Metal Hut	Telephone, Lighting, Heating	"C" St. & 2nd Street
	COST & SAFETY OFFICE	1	22 x 48	1056	9120	Butler Sheet Metal Hut	Telephone, Lighting, Heating	"C" St. & 2nd Street
	ELECTRICALS OFFICE	1	22 x 48	1056	9120	Butler Sheet Metal Hut	Telephone, Lighting, Heating	"C" St. & 2nd Street
	NIGHTMIGHT SHOP	1	80 x 144 x 12 & 20 x 34 x 11	14180	145720	Wood Frame, Shed Roof Bldg. with Conc. & Girder Floor, Post & Girder Const.	Telephone, Power, Lighting, Heating, Water, Toilet & Wash Room	"F" St. & 2nd Street
	MS PIPE WAREHOUSE & TOOL ROOM	1	64 x 175 x 12	11200	134400	Wood Frame Shed Roof, Post & Girder Const.	Telephone, Lighting, Heating	"C" St. N. of Mt. Shop
	PIPE WAREHOUSE DOCK	1	10 x 160	1600	---	Wood Frame Platform 2' High	None	East Side of Warehouse
	ELECTRIC OFFICE & SHOP	1	40 x 95 x 10	3800	38000	Wood Frame Shed Roof Bldg. Post & Girder Construction	Telephone, Lighting, Water, Heating	"C" St. Between 2nd & 3rd.
	ELECTRICAL STORAGE SHED	1	50 x 75 x 10	3750	37500	Same except has open end and no floor	Lighting	"C" St. Between 2nd & 3rd.
	MS WAREHOUSE	1	80 x 208 x 14	16640	432960	Wood Frame Shed Roof Building, Post & Girder Construction	Lighting, Telephone, Heating, Water	"H" St. Between 2nd & 3rd.
	MS WAREHOUSE DOCKS	3	8 x 50 x 4 10 x 144 x 4 14 x 112 x 4	400 1440 1568	---	Wood Platform	None	
	TRANSPORTABLE	1	46 x 90 x 16	3600	57600	Wood Frame, Cable Roof Building with Concrete Floor	Telephone, Lighting, Heating, Air, Water	"H" St. & 5th Street
	TRANSPORTABLE WELDING SHOP	1	20 x 30 x 14	600	8400	Wood Frame Cable Roof Bldg. - Ends Open	Lighting	"H" St. & 5th Street
	TIRE REPAIR STORAGE BUILDING	1	17 x 40 x 9	340	3060	Wood Frame Cable Roof - Open Shed	None	"H" St. & 5th Street
	GREASE STORAGE PLATFORM	1	16 x 16 x 4	256	---	Wood Platform on Skids	None	"H" St. & 5th Street
	CHECKS' & DISPATCHERS' BUILDING	1	16 x 18 x 9	288	2592	Wood Frame Cable Roof Bldg. on Skids	Lighting	"H" St. & 5th Street
	TIRE REPAIR PLATFORM	1	40 x 40	1600	---	Wood Platform Level with Ground	None	"H" St. & 5th Street
	Gas STAIRS	1	4 x 30	120	---	No Structure - Only Concrete Island with two electric pumps	Lighting, Water, Air	"H" St. & 5th Street
	RIGGERS' OFFICE & LOFT	1	24 x 60 x 10	1440	14400	Wood Frame Cable Roof Building	Lighting, Telephone, Heating	On 5th St. N. of "H" St.
	RIGGERS' DOCK	1	8 x 50 x 4	400	---	Wood Platform	None	On N. & E. Side Rigger Loft
	CRANE OFFICE & LOFT	1	15 x 50 x 9	750	6750	Wood Frame Shed Roof Building	Lighting, Heating, Telephone	On N. & E. Side Rigger Loft
	CARPENTER SHOP	1	40 x 110 x 12	4400	52800	Wood Frame Cable Roof Bldg. (Part Open)	Power, Lighting, Telephone, Heating	Lumber Fabricating Yard
	SAN SHELTERS	2	12 x 36 x 9	432	3888	Wood Frame Cable Roof Open Shed	Power, Lighting	Lumber Fabricating Yard
	SAN SHELTER	1	32 x 45 x 10	1440	14400	Wood Frame Cable Roof Open Shed	Power, Lighting	Lumber Fabricating Yard
	REINFORCING STEEL SHOP	1	46 x 85 x 14	3400	47600	Wood Frame Cable Truss Support Roof Bldg.	Power, Lighting	E. of 105-B Building
	REINFORCING STEEL OFFICE	1	20 x 24 x 10	480	4800	Wood Frame Cable Roof Building	Lighting, Heating, Telephone	E. of 105-B Building
	CONCRETE, LABOR & STORAGE SHED	1	16 x 36 x 12	576	6912	Wood Frame Cable Roof Building	Lighting, Heating	"C" St. S. of Coal Storage
	WAREHOUSE FOR 184 BUILDING	1	40 x 80 x 14	3200	44800	Wood Frame Shed Roof, Post & Girder Const.	Lighting, Heating	"C" St. E. of Coal Storage
	RIGGERS' LOFT	1	24 x 60 x 10	1440	14400	Wood Frame Cable Roof Building	Lighting, Heating, Telephone	"H" St. & 3rd Street
	BOILER SHED FOR 184 BUILDING	1	1 x 18 x 10	216	2160	Wood Frame Shed Roof Building	Lighting, Heating, Water	"C" St. E. of Coal Storage
	LABOR OFFICE & SHOP FOR 184 BLDG.	1	18 x 36 x 12	648	7776	Wood Frame Shed Roof Bldg. (Part Open)	Lighting, Heating	"C" St. S. of Coal Storage

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BUILDING LIST - TEE GRAY CONSTRUCTION

100-B AREA

Sheet 3

CODE	BUILDING NAME	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 8	TRANSFORMER BANK	1	10 x 16	---	---	Open Framing enclosed by good fence	3-75 KVA Trans. + 6900/220/110 S	At 19C-B Building
	TRANSFORMER BANK	1	10 x 30	---	---	Same	(2-333 KVA Trans. + 6900/440/220 S 1-75 KVA Trans. + 6900/220/110 S	Concrete slab
TC 9	FENCE	15330 Ft.		---	---	4" x 4" x 12" Wood Post & Java Wire Fence with 5 Strands of barbed wire on top	None	Area side
TC 10	CHANG BOOTHS	17	4 x 6 x 8	408	3264			Same
	TOILETS	62	10' x 8' x 8	4960	39680			Same
	TOILET BOXES	286	4' x 7' x 4'	8008	32032			Same
	GUARD HOUSES	9	6 x 6 x 8	324	2592			Same
	MISCELLANEOUS SHACKS	35	10' x 12' x 8	4200	33600			Same
	FIELD BENS	13	3 x 4 x 4	---	---			Same
	LAY-UP LOCKERS	6	1 x 2 x 7	---	---			Same
	DISTRIBUTORS' SHACKS	2	8 x 8 x 8	64	512			Same
TC 11	SEWER & SEPTIC TANK	2	4' x 6' Septic Tanks 500 Ft. 6" Dia. Clay Bell & Spigot Pipe			Wood Frame Box with Tile Field	None	At Div. Engr's Office
TC 15	STEAM LINES		3000' - 3" 2000' - 2" 3000' - 1"	---	---	Wood Frame Shed Roof Building	None	S. of Bus Parking Lot
	TRANSPORTATION BUS WASHING BOILER HOUSE	1	12 x 12 x 10	144	1440	Wood Frame Shed Roof Building	None	S. of Bus Parking Lot
	T. C. KEELER HOUSE	1	14 x 16 x 12	256	3872	Same	Water, Lighting	At 181-B Building
TC 17	TELE BLASS	21 Blggs. Served		---	---	Cable, Open Iron Wire, & Twister Wire	61 Telephones & Approx. 10 Extensions 1 Two-position Manually Operated Switch Board.	Area side

SHEET NO. 3

BUILDING - TABLE AT RESTRICTIONS

100-U - 200

Sheet 1

CODE	NAME OF BUILDING	NO. OF BAYS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	SPECIAL FEATURES	REMARKS
TC 31	WATER MAINS	1	24 x 94 x 10 & 8 x 20 x 8	2424	24000	Steel Frame Gable Roof Bldg. with lean-to Tallies Room Attached to E.C. Corner	Lighting, Heating, Sewing, Water & Electric Power Facilities	East of North Street
	U.S. ENGINEER	1	12 x 24 x 9 & 8 x 6 x 8	324	2800	Steel Frame Gable Roof Bldg. with Tallies Room Attached to E. Side	None	East of North Street
	ELECTRIC SHOP - BUILDING 181	1	20 x 27 x 12	540	4480	Steel Frame Gable Roof Bldg. One Side Open	Lighting, Heating	SE of 21st St. on Silver St.
	RAVINE ENGINEER'S BUILDING	1	13 x 40 x 9	600	5600	Steel Frame Shed Roof Building	Lighting, Heating, Telephone	Corner of E. & S. Street
	LABEL AND CORRUGATE	1	24 x 40 x 10	960	9600	Steel Frame Gable Roof Building	Lighting, Heating, Telephone	East 21st Street Street
	PAINT SHOP	2	15 x 20 x 9	300	2700	Steel Frame Shed Roof Building	Lighting, Telephone, Sewing	East 21st Street Street
	FIRE SHOP	1	70 x 75 x 14	5250	8600	Steel Frame Shed Roof Building	Lighting, Power, Water, Telephone, Sew- ing, Universal System	East 21st Street Street
	MILLRIGHT SHOP	1	80 x 124 x 15	11520	169940	Steel Frame Shed Roof Bldg. with a Girder Sub-structure, Part Concrete Floor	Lighting, Power, Water, Sewing, Telephone	SE Corner S. & S. Street
	TEMPORARY HO STAGES & LIFE JACKS	1	120 x 174 x 12	13376	180512	Steel Frame Shed Roof Bldg. with a Girder Sub-structure	Lighting, Heating, Telephone	Corner S. & S. Street
	HO STAGES DOCK	2	10 x 140	3200	---	Steel Frame Platform A' High	None	East of North Street
	SMALL TOOLS & INSTRUMENTS	1	18 x 40 x 10	720	7200	Steel Frame Gable Roof Building	Lighting and Heating	East of North Street
	LAYOUT OFFICE	1	22 x 48	1056	9120	Butler Wood Metal Deck	Lighting, Heating, Telephone	North of North Street
	SAFETY OFFICE	1	22 x 48	1056	9120	None	None	None
	SAFETYWORKS OFFICE	1	22 x 48	1056	9120	None	None	None
	COST OFFICE	1	22 x 48	1056	9120	None	None	None
	A.I.T. BUILDING	1	15 x 20 x 9	300	2700	Steel Frame Shed Roof Building on Skids	None	None
	ELECTRIC SHOP & BARRACKS	1	40 x 132 x 11	4780	4780	Steel Frame Shed Roof Building, Part a Steel Construction	None, One Shop	E. of North St.
	CONCRETE ROAD AND REPAIR BUILDING	1	14 x 42 x 10 & 20 x 20 x 8	988	9080	Steel Frame Gable Roof Bldg. with lean- to on E. Side	Lighting and Heating	E. of North St.
	COMBUSTION ENG. LABORATORY & OFFICE	1	48 x 80 x 14	2640	57600	Steel Frame Shed Roof Bldg. with a Girder Sub-structure	Lighting, Heating, Telephone	East of North St.
	HO STAGES LABORATORY	1	80 x 200 x 12	19200	199680	Steel Frame Shed Roof Bldg. with a Girder Sub-structure	Lighting, Heating, Telephone, Sewer	East of North St.
	HO STAGES DOCK	2	10 x 100	2000	---	Steel Frame Platform A' High	None	E. of North St.
	TEMPORARY SHOP	1	40 x 110 x 14 & 14 x 16 x 9	1424	62416	Steel Frame Gable Roof Bldg. with lean- to on East Attached to E.C. Corner	Lighting, Heating, Telephone	E. of North St.
	HO STAGES	6	10 x 20 x 9	1200	10800	Steel Frame Gable Roof Open Shop	Power, Lighting	None
	WASH & DOCK SHOP	1	40 x 104 x 14	4340	39360	Steel Frame Shed Roof Bldg. with a Girder Sub-structure	Lighting	None
	RIGGING LIFT	1	24 x 44 x 10	1040	14880	Steel Frame Shed Roof Building	Heating, Lighting, Telephone	E. of North St.
	MECHANIC LACKS	2	12 x 24	288	---	Steel Frame Platform 3' High	None	None
	CRANE HOISTWAY	1	14 x 40 x 9	560	5040	Steel Frame Shed Roof Building	Heating, Lighting, Telephone, Power, Sewing, Sewer, Water, Sewing, Telephone	E. of Building 179
	BATCH PLANT & PURCHASE BUILDING	1	22 x 28 x 11	1834	33912	Steel Frame Gabled Roof Bldg. Open - Floor	None	E. of Building 179
	REINFORCING STEEL OFFICE	1	14 x 20 x 9	280	2520	Steel Frame Gable Roof Building	Telephone, Lighting, Heating	East of Bldg. 100
	REINFORCING STEEL SHOP	1	40 x 84 x 15	3360	30240	Steel Frame Gable Roof Building	Power, Lighting	East of Bldg. 100
	CONCRETE BUILDING	1	14 x 20 x 10	280	2500	Steel Frame Gable Roof Building	Lighting	East of Bldg. 100
	TEMPORARY TRANSPORTATION OFFICE	1	40 x 90 x 14	2400	20400	Steel Frame Gable Roof Bldg. Open - Floor	Lighting, Sewer, Telephone, Heating, Air	E. of Bldg. 100
	HO STAGES	1	3 x 25	---	---	2 On Piers & Underground Storage Tanks	Lighting, water, air	None
	TEMPORARY HO STAGES	1	80 x 30 x 14	600	6400	Steel Frame Shed Roof Building with lean-to on East Side	None	E. of Bldg.
	PRIVATE CAR WASH ALLEY	1	12 x 12 x 9	144	1296	Steel Frame Gable Roof Partially Open	Lighting & Heating	SE Corner S. & S. Street, 115
	CLOCK ALLEY	1	8 x 45 x 9	360	3240	Steel Frame Shed Roof Bldg. Open Shop	Lighting & Heating	SE Corner S. & S. Street, 115
	LAYOUT OFFICE	1	12 x 20 x 9	240	2160	Steel Frame Shed Roof Building	Lighting, Heating	SE Corner S. & S. Street, 115
	HO STAGES BUILDING	1	14 x 20 x 9	280	2520	Steel Frame Shed Roof Building	Lighting, Heating	SE Corner S. & S. Street, 115

SECRET

BUILDING LIST - TEMPORARY CONSTRUCTION

100-D AREA

Sheet 2

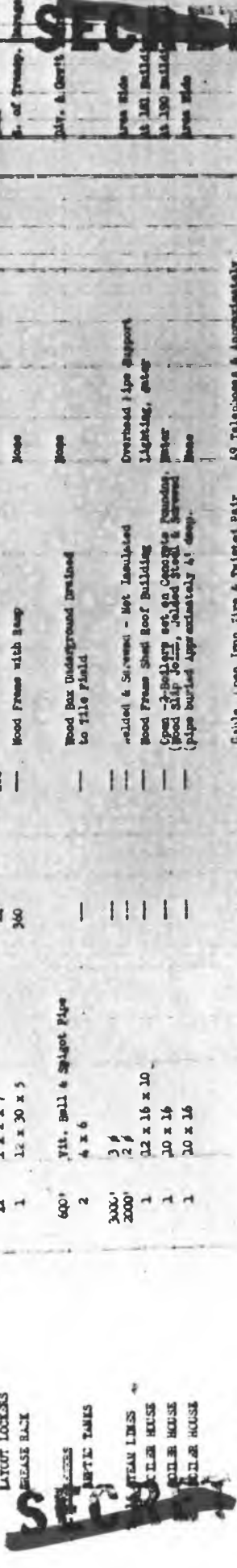
CODE	NAME OF BUILDING	NO. OF BLDGS.	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 31	ASBESTOS GAS BAKES	3	10 x 30 x 12	900	10800	Wood Frame Shed Roof Open Slatted Building on Skids	None	1 - N. of Mt. Shop 2 - At MS Warehouse
	FIRE STATION BARRACKS	1	25 x 70 x 10	1800	17950	Wood Frame Gable Roof Building, Outside Covered with 1" Gypsum Board	Telephone, Lighting, Power, Heating, Water, Toilet and Wash Room Facilities	At 1700-D Building
	VALVE PLATFORMS	3	50 x 70	10500	---	Wood Decking on Sleepers	None	N. of MS Warehouse
	WATER SANITATION LOT	1	300 x 30	9000	---	Fenced and Stabilized Area	Water	E. of Main Substation
	ICE HOUSE	1	20 x 40 x 10	400	4000	Wood Frame Shed Roof Building	Lighting	Water Sanitation Lot
	BARREL PLATFORM	1	60 x 60	3600	---	Wood Platform	Water	Same
	MIXER MIXING PLATFORM	1	30 x 30	900	---	Wood Platform 4' High	Water	S. of Main Substation
FIRE ALARM PLATFORM	1	40 x 40	1600	---	Wood Platform on Sleepers	None	N. End of Trans. Garage	
TC 5	ROAD	10000 Ft.	8 1/2" Gravel roads	---	---	Water bound 12" Thick	None	Area 4.10
	RAILS	5000 Ft.	6" Gravel rails	---	---	Water bound 6" Thick	None	Same
	GRASS PAVING LOT	1	1250 x 1250	1562500	---	Stabilized and Fenced	Railings & Steps, Lighting	South Gate
	GRASS PAVING LOT	1	450 x 550	277500	---	Same	Same	South Gate
	MISCELLANEOUS STORAGE LOTS	---	11,575,500 Sq. Ft.	429000 Cu. Yds.	---	Stabilized Gravel & Sand 1' Thick	None	Area 4.10
	OIL STORAGE TANK	1	100 x 100	10000	---	Same	None	N. of small Tank
TC 6	RAILROADS	19335 Ft.	65# - 85# Rail	---	---	Used Rail #8 Turnout & Hand-Throw Switches	None	Area 4.10
	WATER LINES	(11525 - 8" # 3025 - 4" # 5000 - 3" # 650 - 1 1/2" #	---	---	---	Wood Slip Joint, welded steel & Screwed Pipe Buried approximately 4' Deep	None	Area 4.10
TC 7	MARINE PUMP HOUSE	1	14 x 14 x 8	196	1568	Floating Pump House	Power, Lighting	S.E. of Bldg. 121
	WOODEN TANK SET ON MID SILLS	1	100,000 GAL.	---	---	Wooden Tank Set on Mid Sills	Water Lines	S.E. of Bldg. 121
	BOOSTER STATION	1	12 x 10 x 8	120	960	Wood Frame Shed Roof Building	Lighting, Power, Water	So. of Bldg. 121
TC 8	ELECTRIC LINES	---	---	---	---	---	---	---
	TRANSFORMER STATION	1	75 x 70	5250	---	Open Frame, Enclosed - Wooden Fence	1-3000 KV. Transformer Primary 6900/5700 S. (2-100 KV. Trans. P. 6900/440/220 S (1-50 KV. " P. 6900/220/110 S	N. of 105-D Building
	TRANSFORMER STATION	1	30 x 30	900	---	Same	(2-333 KV. Trans. P. 6900/440/220 S (1-10 KV. " P. 6900/220/110 S	At Booster Station
	TRANSFORMER STATION	1	30 x 20	600	---	Same	(2-37.5 KV. " P. 6900/440/220 S (1-50 KV. " P. 6900/220/110 S	At Millwright Shop
	TRANSFORMER STATION	1	18 x 30	540	---	Same	(3-333 KV. Trans. P. 6900/440/220 S (1-75 KV. " P. 6900/220/110 S	At 124-D Building
	TRANSFORMER STATION	1	15 x 30	450	---	Same	(2-150 KV. Trans. P. 6900/440/220 S (1-75 KV. " P. 6900/220/110 S	At Mixer Plant
	TRANSFORMER STATION	1	10 x 40	400	---	Same	(2-150 KV. Trans. P. 6900/440/220 S (1-75 KV. " P. 6900/220/110 S	At 1700-D Building
	TRANSFORMER STATION	1	10 x 40	400	---	Same	(2-150 KV. Trans. P. 6900/440/220 S (1-75 KV. " P. 6900/220/110 S	At 1700-D Building

BUILDING LIST - T-3 BARRACKS CONSTRUCTION

100-0 AREA

Sheet 3

LINE	NAME OF BUILDING	N. OF BLDGS.	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATIONS
TC 8	WATER TOWER	1	10 x 30	300	---	Open Framing Enclosed by Screen Fence	(2-37.5 KVA Trns., P. 6900/440/220 & (2-30 KVA	At Carpenter Shop
TC 9	FENCES	13450'	-(105-0 Area Excluded)	---	---	4" x 4" x 10' Post. Heavy Wire with 5 Strands of Barbs Wire on Top	None	Area slide
TC 10	CL. DRUM PLATFORM	1	10 x 30	300	---	Wood platform - 4' High	None	E. of Transportation Camp
	TOILET BUILDS	370	4 x 7 x 4	5600	23100			Area slide
	TOILETS	80	8 x 10 x 8	4800	34000			Area slide
	SHACKS	54	10 x 12 x 8	6480	51840			Area slide
	CHECK BATHS	12	7 1/2 x 6 x 7	288	2016			Area slide
	FIELD BUSES	12	4 x 4'	192	---			Area slide
	LAYOUT LOCKERS	12	1 x 2 x 7	24	168	Wood frame with ramp	None	E. of Transport.
	GREASE RACK	1	12 x 30 x 5	360	---			Area slide
	ENTRANCES	600'	Vit. Ball & Spigot Pipe	---	---	Wood Box Underground Drained to Tile Field	None	At 100 Ballid
	WATER TANKS	2	4 x 6	---	---			Area slide
	WATER LINES	3000'	3"	---	---	welded & Screened - Not Insulated	Overhead Pipe Support	At 100 Ballid
	WATER HOUSE	2000'	2"	---	---	Wood Frame Shed Roof Building	Lighting, gate	At 100 Ballid
	BOILER HOUSE	1	12 x 16 x 10	---	---	Open 2-Boltery set on Concrete Foundation (Wood slip joints, Jailed steel & Screened (pipe buried approximately 4' deep.	None	At 100 Ballid
	WATER HOUSE	1	10 x 16	---	---			Area slide
	WATER HOUSE	1	10 x 16	---	---			Area slide
TC 10	WATER PUMP LINES	21 Buildings	Jarred	---	---	Cable, open Iron Wire & Twisted Pair	19 Telephones & Approximately 20 Extensions	Area slide



BUILDING LIST - THE GREAT SUBSTATION

100-F AREA

Sheet 1

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
10 22	DIVISION ENGINEERS' OFFICE	1	40' x 100' x 11' 8" x 16' 8"	4,128	45,152	Joist Frame, Gable Roof Bldg., Gypsum Board Siding, with Lean-To Toilet Room on S.W. Corner	Lighting, Telephone, Meter, Toilet & Shower Facilities, Heating	N.E. of Bldg. 100-F
	U. S. ENGINEERS' OFFICE	1	30' x 40' x 11' 8" x 8' x 9'	1,264	13,776	Same	Same	Same
	WILLIAMSON SHOP	1	80' x 145' x 11'	11,600	127,600	Joist Frame, Gable Roof Bldg., Feet & Girder Constr., Concrete Floor	Lighting, Power, Water, Telephone, Ventilation	E. of Bldg. 100-F
	FIVE BARRACKS	1	65' x 145' x 12'	9,425	113,100	Joist Frame, Gable Roof Bldg., Feet & Girder Construction	Lighting, Telephone	E. of Bldg. 100-F
	WALK PLATFORM	2	100' x 100'	20,000	—	Wood Platforms Laid on Mud Sills	None	Same
	TRANSPORTER GARAGE	1	50' x 90' x 16' & 12' x 36' 7/8, 30'	5,172	78,720	Joist Frame, Gable Roof Bldg., Feet & Girder Constr., Concrete Floor, with Lean-To on North Side	Lighting, Power, Telephone, Water, Air Heating	E. of Coal Storage
	REINFORCED STEEL OFFICE	1	20' x 30' x 10'	600	6,000	Joist Frame, Gable Roof Bldg., Gypsum Board Siding	Heating	E. of Bldg. 100-F
	REINFORCED STEEL SHOP	1	40' x 85' x 14'	3,400	47,600	Joist Frame Bldg., Feet & Girder Constr., Truss Supported Roof, Open on 3 Sides	Power	Same
	ENGINEER LOFT	1	15' x 60' x 20'	1,500	15,000	Joist Frame, Gable Roof Bldg., Gypsum Board Siding, 6' Platform on Corner	Telephone	E. of Bldg. 100-F
	CRAFTS OFFICE	1	20' x 100' x 11' 8" x 20' x 9'	3,160	34,440	Joist Frame, Gable Roof Bldg., Gypsum Board Siding with Lean-To Toilet Room on South Side	Lighting, Heating, Telephone, Water, Toilet & Shower Facilities	E. of Bldg. 100-F N. of Coal Storage
	HEAVY BARRACKS & OFFICE	1	40' x 100' x 12'	6,000	72,000	Joist Frame, Gable Roof Bldg., Feet & Girder Constr., Covered with Tarpaper	Lighting, Telephone	White Sheds East, E. of Bldg. 100-F
	ENGINE OPERATOR'S OFFICE	1	15' x 30' x 10'	525	5,250	Joist Frame, Shed Roof Bldg., Wood Siding Covered with Tarpaper	Telephone	Same
	10 BARRACKS BARRACKS & OFFICE	1	80' x 120' x 12'	8,800	105,600	Joist Frame, Gable Roof, Feet & Girder Construction, Gypsum Board Siding	Telephone, Lighting, Heating	East of Bldg. 100-F
	ENGINEER'S SHED	1	15' x 30' x 10'	750	7,500	Joist Frame, Shed Roof Bldg., Tarpaper	Lighting	N. of Barracks
	WALK SHED	1	15' x 40' x 9'	680	3,400	Joist Frame, Shed Roof Bldg., Wood Siding Covered with Tarpaper	None	Under Sub. 200
	CARRIAGE	1	40' x 140' x 12'	5,600	67,200	Joist Frame, Gable Roof, Feet & Girder Constr., Gypsum Board Siding, Part Open	Power, Lighting, Telephone, Heat, Telephone	E. of 100-F Area
	ENGINEER'S SHED	1	30' x 40' x 11'	1,200	13,200	Joist Frame, Gable Roof Bldg., Siding	None	Under Sub. 200
	CLOCK ALLEY	1	10' x 100' x 9'	1,100	9,900	Joist Frame, Gable Roof, Open Shed Bldg.	Lighting	W. of Coal
	TEMPORARY BARRACKS FOR FRAMES	1	30' x 75' x 10'	2,250	22,500	Joist Frame, Gable Roof Bldg., Gypsum Board Siding	Lighting, Power, Heating, Telephone, Cooking Facilities, Toilet & Shower Facilities	E. of 100-F Area
	FORM FABRICATION PLATFORM	1	60' x 80'	4,800	—	Wood Platform Laid on Mud Sill	None	Under Sub. 200
	WALK SHEDS	7	16' x 20' x 9'	2,240	20,148	Joist Frame, Gable Roof, Open Shed	Lighting, Power	Same
	WALK SHED SHED	1	20' x 100' x 10'	2,000	20,000	Joist Frame, Gable Roof, Feet & Girder	Power, Lighting	Same
	ENGINEER'S SHED	1	22' x 40'	1,084	9,120	Butler Sheet Metal Shed, Hinson Type	None	East of 100-F Bldg.
	ENGINEER'S SHED	1	15' x 30' x 9'	750	6,750	Joist Frame Bldg., Shed Roof, Siding & Tar Paper Covering	Lighting	E. of 100-F Bldg.
	BARRACKS OFFICE	1	15' x 30' x 9'	450	4,050	Joist Frame, Shed Roof Building	Telephone	E. of 100-F Bldg.

BUILDING LIST - TEMPORARY CONSTRUCTION

Sheet 2

100-F AREA

JOB	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	EQUIPMENT INCLUDED	LOCATED
TC 34	BATCH PLANT	1	12' x 30'	360				No. of 100-F Bldg.
	LAYOUT & CARPENTER OFFICE	1	12' x 14' x 9'	168	1,512	Steel Frame, Shed Roof Bldg., on Skids, Steel Siding and Paper Covering	None	No. of 1707-Q Bldg.
	FIVE TANKATION SMELTER	1	12' x 10' x 10'	240	2,400	Steel Frame, Shed Roof Bldg., Open on All Sides, with Concrete Floor	Lighting, Pumps	None
	FIRST AID WAITING SMELTER	1	14 x 24 x 9	306	3,456	Steel Frame, Shed Roof Bldg., Steel Siding	Lighting, Heating	None
	AREA REPAIRS' LOFT	1	15 x 28 x 9	378	8,100	Steel Frame, Shed Roof Bldg., The Paper Covered	None	No. of 100 Bldg.
	OFFICE BLDG	1	22 x 24	1,056	9,120	Galvalume Sheet Metal Mason Type Bldg	Lighting, Telephone	N.E. of Mr. Sawyer's Office
	TIRE REPAIR SHED	1	30 x 30 x 14	1,260	15,120	Steel Frame, Cable Roof, Open Sided	Lighting	No. of Trans. Garage
	WELDING SHOP - TRANSPORTATION	1	28 x 30 x 14	600	9,600	Steel Frame, Cable Roof Bldg., with Concrete Floor	None	None
	GAS STATION	1	No Building Structure			2-Pumps; 1-Underground Storage Tanks	Lighting, Air, Water	Transp. Garage
	FIRE EQUIPMENT STORAGE BAY FOR REPAIR SHED	1	22 x 24	528	4,260	Galvalume Sheet Metal Mason Type Bldg Steel Frame Loop-Up Shed Covered with Tarps	Lighting	No. of Bldg. 1709 New Parking Lot
TC 5	WATER SANITATION LOT	1	900 x 150	135,000		Stabilized Area Enclosed by Fence	Water	No. of Bldg. 204
	LUMBER YARD	1	750 x 1500	1,125,000		Stabilized Area Composed of Water Bound Gravel, Approx. 18" Thick	Water, Lighting	Area Wide
	ROADS	10,000'	30' Wide			Water Bound Gravel		
	BUS PARKING LOT	1	1000 x 1000	1,000,000				
	CAR PARKING LOT	1	500 x 500	250,000				
	100-F TO SHED AREA	1	450 x 1500	675,000				
	100-F INTERNAL SURROUND AREA	1	400 x 1500	600,000				
	100-F TO SHED AREA	1	1-300 x 2500 1-400 x 800	500,000 320,000				
	CLOCK ALLEY	1	400 x 400	240,000				
	RAILROADS		7,389.97'			Wood Rail 60# to 80# 96 Truss, Shed-Shed Wood Sillings		Area Wide
TC 7	SHARON PUMP STATION	1	8 x 10 x 8	64	640	Steel Frame Shed Set on a Floating Raft	Power, Lighting & Elec. Driven Pump	At River Pump Sta. 100 Bld
	GROUND STORAGE TANK	1	200,000 Gal.			Steel Frame Tank Set on Ground	None	N. of River Pump Sta. "
	BOOSTER STATION	1	12 x 14 x 8	168	1,536	Steel Frame, Cable Roof Building	Power, Lighting 1-Elec. Driven Pump 1-Gravity Driven Pump	N. of " " "
	WATER LINES	6000'	6" d			Welded & Flanged Steel Pipe SCH 40 Buried Approx. 4' Deep	Hydraulic & Motor Pumps	Area Wide
		4450'	4" d			None	None	
1000'		8 1/2" d			Surveyed & Coupled Steel Pipe SCH 40 Buried Approx. 3' Deep	None		
1000'		8" d			None	None		
500'	3" d			None	None			

BUILDING LIST - TEMPORARY CONSTRUCTION

100-F AREA

Sheet 3

CODE	NAME OF BUILDING	BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATED
TC 8	MAIN SUBSTATION	1	75 x 75	5,625	—	Open Framing, with Truss. Set on Concrete. Enclosed by Wooden Frame	1-3,000 KVA Tramp. P-6900/220 V.S.	East of 105 Building
	TRANSFORMER BANK	1	36 x 30	1080	—	Open Framing with Truss. Set on Ground. Enclosed by Wooden Frame	3-75 KVA Tramp. P-6900/220 V.S. 1-75 KVA Tramp. P-6900/220/210 V.S.	At 104 Building
	TRANSFORMER BANK	1	30 x 30	900	—	Open	2-50 KVA Tramp. P-6900/220 V.S. 1-50 KVA Tramp. P-6900/220/210 V.S.	At Killright Shop
	TRANSFORMER BANK	1	6 x 10	60	—	Open Framing, Truss. Set on Elevated Platform	2-50 KVA Tramp. P-6900/220 V.S. 1-50 KVA Tramp. P-6900/220/210 V.S.	At Booster Station
	TRANSFORMER BANK	1	30 x 30	900	—	Open Framing, Truss. Set on Ground. Enclosed by Wooden Frame	1-2000 KVA Tramp. P-6900/220 V.S. 2-75 KVA Tramp. P-6900/220/210 V.S.	At Pumproom Building
	TRANSFORMER BANK	1	14 x 12	168	—	Open Framing, Truss. Elevated	2-50 KVA Tramp. P-6900/220 V.S. 1-50 KVA Tramp. P-6900/220/210 V.S.	At Carpenter Shop
TC 9	WATER SANITATION LOT FENCE	700'				Type #1 - 9' High, 2 Courses, Spaced Wire	None	104 Building
	WATER & 2ND PARKING LOT FENCE	3700'				Type #1 - 12' High, with 4 Strands Barb Wire at Top	None	South Boundary
	100-F FENCE	4200'				Open	None	Around 105-F Bldg. & Working Areas
TC 10	WATER PLATFORM	1	50 x 70	3,500	—			
	ICE HOUSE	1	20 x 40 x 2	1,600	16,000			
	GRASSY BACK	1	14 x 30 - 4' High	420	—			Area 104
	CHEMICAL STORAGE BUILDING	1	14 x 30 x 10	420	4,200			
	STEEL STORAGE	1	10 x 30 x 8	300	2,400			
	WATER HOUSE	432	6 x 7 x 4	12,960	48,384			
	STEEL BUILDING	1	6 x 6 x 8	216	1,728			
	ICE HOUSE	1	6 x 6 x 6	216	1,600			
	STEEL HOUSE ON RAILS	1	6 x 6 x 7	252	990			
	STEEL HOUSE	1	6 x 6 x 7	252	126			
	CHEMICAL STORAGE BUILDING	1	6 x 16 x 10 x 10 6 x 16 x 10	1,440	14,400			
	STEEL OFFICE	1	10 x 10 x 8	800	6,400			
	ICE HOUSE	1	6 x 6 x 6 (approx)	216	1,200			
TC 11	STEEL PIPE	1000'	6 x 6	3,600	—	See City Dept. Records for details		East, West, & South
	STEEL PIPE	1000'	6 x 6	3,600	—	See City Dept. Records for details		East, West, & South

SECRET

BUILDING LIST - TEMPORARY CONSTRUCTION

105 AREA

Sheet 1

NO.	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	REMARKS
<b>SPECIAL FABRICATION &amp; WAREHOUSE AREA</b>								
TC 28	Special Fabrication No. 1	1	60 x 155 x 18	9300	167600	Wood Frame Shed Roof Building, Post & Girder Construction	Lighting, Water, Monorail System	Oil Spill - White Hoofle
	Special Fabrication No. 2	1	50 x 100 x 18	5000	54000	Wood Frame Gable Roof Building Covered with 1/2" Gypsum Board	None	Same
	White Bluff - Warehouse	1	80 x 110 x 13 12 x 100 x 4 12 x 150 x 4	11800	108400	Wood Frame Shed Roof Building, Post & Girder Construction with Loading Docks on North & South Sides	Lighting, Telephone, Heating	Same
	Special Fabrication S&S Metal & Machine Shop	1 building	84 x 96 x 38	7896	300048	Steel & Wood Frame Bldg. with Steel Frame Supported Roof Covered with Corrugated Sheet Iron, Side Covered with Gypsum Board Partial Const. Floor	Telephone, Water, Steam Heat & Monorail System, Lighting & Power, Exhaust System	Same
	Warehouse		70 x 30 x 12	2100	45200	Wood Frame Gable Roof Bldg. Const. Floor	Lighting, Power, Water, Exhaust System Monorail System	Attached to east side
	Finished Fabrication Warehouse		64 x 100 x 12 & 20 x 100x3	8400	82800	Wood Frame Shed Roof Bldg. Post & Girder Const. with Load Deck Attached to N. Side	Lighting & Monorail System, Water, Steam Heat	Attached to E. Side
	Raw Material Warehouse		90 x 90 x 10 & 16 x 14 x 9	8392	81000	Wood Frame Shed Roof Bldg. Post & Girder Const. with Lean-To Office Attached to S.E. Corner	Lighting, Water, Steam, Heat, Telephone	Same
	Raw Material Warehouse	1	70 x 80 x 12	5600	67200	Wood Frame Shed Roof, Post & Girder Const. Lighting, Steam Heat	None	Same
TC 8	Transformer Bank	1	10 x 16	160	—	Open Framing Enclosed by Wooden Fence	2 - 250 kVA Trans. P 6900/440/240 S 1 - 50 kVA Trans. P 6900/220/110 S	At special Fab. Warehouse
TC 9	Fences	1100'	Type #2			4"x4"x6" Wood Post & Barb Wire	None	Same
TC 15	Water House	1	10 x 16 x 12	160	1920	Wood Frame Shed Covered with Corrugated Sheet Iron	Lighting Water 1-30 HP Boiler	at special Fab. Warehouse
	Steel Pipes	300' - 3" 200' - 2"				Welded & Flanged, Screw & Coupled Steel Pipe Sch. 40	None	Same

NOTE: Other Facilities Included in White Bluff - Building List of Temporary Construction.

105-B AREA

	Officer's Quarters' Office	1	30 x 20 x 10	2400	24000	Gypsum Board Siding	Lighting, Heating, Telephone, Water	W69400-880455
	105 Draft Office	1	30 x 40 x 10	1200	12000	Same	Same	W69411-880394
	Draft Offices & Shops	1	30 x 125 x 10	3750	37500	Same	Lighting, Power, Heating, Telephone, Water	W69411-880355
	Warehouse	1	60 x 90 x 12	16800	64800	Wood Frame Shed Roof Bldg. Post & Girder Constn, Gypsum Board Siding	Lighting, Heating, Water, Telephone	W69411-880171
	Change House	1	40 x 24 x 10	2840	28400	Same	Lighting, Steam Heat, Water, Toilet & Washroom Facilities	W69100-880780
	Air Lock	2	18 x 96 x 12 & 72 x 90 x 12	9236	96096	Wood Frame Shed & Gable Roof Building, Concrete Floor	Water, Lighting, 1-72 HP Boiler	W69100-880780
	Sheet Metal Office	1	27 x 36 x 10	972	9720	Wood Frame Shed, Wood Siding	Lighting, Heating	W69457-880531



BUILDING LIST - TEMPORARY CONSTRUCTION

105 AREA

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYP. OF CONSTRUCTION	FACILITIES INSTALLED	AREA
TC 18	LABOR OFFICE	1	12 x 24 x 8	288	2,304	wood frame shed, Tar paper siding	Lighting, Heating	105-100-4000
	DEPARTMENT OFFICE	1	24 x 36 x 8	864	6,912	Same	Same	105-100-4057
	LAYOUT OFFICE	1	12 x 36 x 8	43	3,456	Same	Same	105-100-4057
	CYCLON TANK STORAGE	1	12 x 15 x 10	180	1,800	wood frame wood joist gable roof Bldg.	None	105-100-4080
	BAILER OFFICE	1	15 x 23 x 10	460	4,660	wood frame gable roof Building, Gypsum board siding	Lighting Heating	105-100-4080
	DETACHMENT SHED	1	12 x 15 x 10	300	3,000	wood frame shed roof Building	Lighting, Heating	105-100-4080
	STAFF OFFICE SHED	1	15 x 20 x 10	300	3,000	Same	Same	105-100-4080
TC 15	B. I. A. HOUSE	1	24 x 20 x 10	480	4,800	wood frame shed roof Bldg. Conc. Floor	Water, Lighting, 1-75 HP Boiler	105-100-4080
	B. I. A. HOUSE	1	12 x 18 x 10	216	2,160	wood frame shed roof Bldg. Conc. Floor	Lighting, Water, 1-75 HP Boiler	105-100-4080
	STEAM LINES		300' - 4" φ 240' - 2" φ	---	---	(Welded & Flanged, Screwed & Coupled (Sched. 40 Steel Pipe - Not Insulated (Buried 4' Deep	None	Area side
TC 16	MARINE DETAIL	4	1' x 50' x 9'	3,600	27,000	wood frame, green gypsum board siding	Lighting, Heating	105-100-4080
	BLACK MACHINS' SHED	1	24 x 27 x 10	648	6,480	wood frame shed roof Building	Same	Area side
	TAIL BUILDING	75	4 x 7 x 4	2,100	8,400		Same	Area side
	FIELD BUILDING	10	8 x 10 x 8	800	3,200		Same	Area side
	GUARD BUILDING	3	5 x 5 x 8	75	600		Same	Area side
TC 8	TRANSPORTATION BUNK	1	10 x 20	200	---	(Open Framing Enclosed by Wood Fence	1-100 EVA Trans. 1. 6900/220/110 J 2-150 EVA " 1. 6900/440/220 J	Area side
	WATER LINES		500' - 4" φ 300' - 2 1/2" φ	---	---	(Welded & Flanged, Screwed & Coupled (Sched. 40 Steel Pipe - Not Insulated	None	Area side

NOTE: TC - 5, 6, 9, & 16 Facilities Included in 100-B Area Building List of Temporary Construction.

TC 18	LABOR OFFICE	1	48' x 20' x 10'	960	9,600	wood frame Gypsum board Siding	Light, Heat, Telephones	105-100-4000
105-p	DIVISION ENGINEERS' OFFICE	1	56 x 30 x 10	1,680	16,800	Same	Light, Heat, Telephones, Water	105-100-4057
	DRAFT BUILDING	1	155 x 30 x 10	4,650	46,500	Same	Same	105-100-4057
	LABOR HOUSE	1	100 x 24 x 12	2,400	28,800	Same	---	105-100-4050
	CHANGE HOUSE	1	60 x 24 x 10	1,440	14,400	Same	Light, Heat, Water	105-100-4050
	AIR LOCK	2	18 x 96 x 12 & 72 x 90 x 12	8100	98,500	Same	Light, Heat, Telephones, Water Compressed Air	105-100-4050
	AIR LOCK OFFICE	1	40 x 25 x 12	1,000	12,000	Same	Light, Heat, Telephones, Water	105-100-4050
	LABOR	1	24 x 12 x 8	288	2,304	Same	Light, Heat, Telephones	105-100-4050
	LABOR	1	36 x 24 x 8	864	6,912	Same	Light, Heat, Telephones	105-100-4050

BUILDING LIST - 105 AREA CONSTRUCTION

105 AREA

Sheet 3

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZES	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATED
<u>105-D AREA (Cont'd.)</u>								
TC 28	LAYOUT OFFICE	1	36 x 12 x 8	432	3456	Wood Frame Gypsum Board Siding	Light, Heat	AREA 25 - 28
	SHEET METAL SHED	1	20 x 38 x 10	760	7600	Wood Frame, Vertical Board Siding	Light, Heat, Telephone	AREA 25 - 28
TC	7 WATER LINES	4"	590'			Welded & Flanged, Screw & Coupled Steel Pipe	None	Area Side
TC	8 AIR LINES	4"	150'			Same	4 Air Compressors	Same
	TRANSFORMER BANK	1	10 x 10	100	---	Open Road Fenced Structure	1 - 75 KVA Trans. P 6900/220/110 S	AREA 25 - 28
TC 15	BOILER	1	10 x 12 x 10	120	1200	Wood Frame Shed Roof Bldg.	Lighting, Water 1-32 HP HRT Boiler	Same
	STEAM LINES	2"	150'			Same	None	Same
TC 10	TOOL BLDGS	9	4 x 7 x 4	2212	8848			Area Side
	FIELD PRIVIES	9	8 x 10 x 8	720	5660			Area Side
	GRAND SHEDS	2	6 x 6 x 8	72	576			Area Side
<u>105-F AREA</u>								
TC 28	105 - DIV. ENGRS. FIELD OFFICE	1	40' x 65' x 10 & 8 x 12 x 8	2,096	26,768	Wood Frame, Gable Roof, Wood Siding, Tar Paper Siding	Lighting, Heating, Telephone, Water, Toilet & Sanitron Facilities	105-F Area
	105 - FIELD CRAFT SHEDS	1	60' x 185' x 11	11,100	122,100	Same as above with Post & Girder Constr. with Lean-To Shed on east side	Power, Lighting, Heating, Water, Telephone	105-F Area
	105 - WAREHOUSE	1	60' x 80' x 12'	4,800	57,600	Post & Girder Constr. Shed Roof Bldg.	Lighting	Same
	BOLT SHOP	1	20 x 50 x 9	1,000	9,000	Wood Frame, Shed Roof, Gimber Floor	Lighting	Same
	LABOR OFFICE	1	16 x 20 x 10	320	3,200	Wood Frame, Gable Roof Bldg., Wood Siding with Tar Paper Covering	Lighting, Heating	Same
	CARPENTER OFFICE	1	30 x 16 x 9	480	4,320	Wood Frame, Gable Roof Bldg., Wood Siding with Tar Paper Covering	Lighting, Telephone, Heating	Same
	LAYOUT OFFICE	1	16 x 26 x 10	416	4,160	Wood Frame, Gable Roof Building	Lighting, Heating	Same
	BAZAR OFFICE	1	20 x 30 x 10	600	6,000	Wood Frame, Gable Roof, Drop Siding	Lighting, Heating, Telephone	Same

105 - SPECIAL FABRICATION AREA

BUILDING LIST - BOY-COAST COMMUNITIES

200 GALT AREA

CODE	NAME OF BUILDING	N. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VALUE \$1000	TYPE OF CONSTRUCTION	REMARKS
25	PAVING BUSINESS OFFICE	1	20 x 20 x 11 & 10 x 8 x 9	1,720	47,700	wood frame, brick and tile, roof & interior concrete, gypsum board ceiling	wood frame, brick and tile, roof & interior concrete, gypsum board ceiling
	COLLEGE SHOP	1	140 x 70 x 13	10,900	141,900	wood frame, steel roof, brick walls & interior, gypsum board ceiling	wood frame, steel roof, brick walls & interior, gypsum board ceiling
	BOYS' LOFT	1	24 x 40 x 11	1,040	19,800	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	TRANSPORTATION	1	40 x 90 x 10	3,600	57,600	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	HEALTHY LUNCH SHOP & CATERING	1	20 x 30 x 9 & 20 x 30 x 11	2,000	49,400	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	2700 SHOP	1	70 x 75 x 10	5,250	94,500	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	700 GARAGE	1	60 x 170 x 13	10,200	144,400	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	RECREATION STEEL	1	40 x 60 x 16	3,360	47,000	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	LABORERS	1	200 x 20 x 15	14,400	29,600	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAINT & CONCRETE	1	24 x 40 x 10	960	9,600	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	LABOR	1	24 x 40 x 10	960	9,600	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	LABORERS SHOP	1	40 x 130 x 13	5,200	49,400	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAVING FABRICATION SHOP	1	30 x 60 x 9	1,800	27,000	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAINT SHOP	1	10 x 30 x 9	300	4,500	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAVING REPAIR SHOP	1	20 x 32 x 9	740	4,912	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	W. B. MICHIGAN'S FIELD OFFICE	1	6 x 6 x 8 & 8 x 30 x 10	756	7,488	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAVING SHOP	1	22 x 40	1,004	9,120	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	RECREATION STEEL OFFICE	1	18 x 24 x 9	432	3,480	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAINT & CONCRETE SHOP & OFFICE	1	13 x 40 x 9	600	3,480	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAINT & CONCRETE SHOP & OFFICE	1	20 x 30 x 10	1,800	18,000	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAINT & CONCRETE SHOP & OFFICE	1	23 x 70 x 10	1,790	17,900	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAINT & CONCRETE SHOP & OFFICE	1	22 x 26	528	5,008	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling
	PAINT & CONCRETE SHOP & OFFICE	1	6 x 13 x 8	96	748	wood frame, brick and tile, roof & interior, gypsum board ceiling	wood frame, brick and tile, roof & interior, gypsum board ceiling

BUILDING LIST - TEMPORARY CONSTRUCTION

200 EAST AREA

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	UTILITIES REQUIRED
20 - 5	STORAGE SHED & OFFICE	2	1-14 x 15 1-14 x 15	7,056	101,320	Galval Sheet Metal Slat	Lighting
	YARD REPAIR PLATFORM	1	40 x 30	1,200	—	W' Wood Decking laid on Steel Stringers	Lighting, Air
	WELDING SHED	1	20 x 20 x 14	620	7,400	Wood Frame, Shed Roof Building	None
	MECHANICAL BUILDING	1	15 x 30 x 8	650	1,600	Wood Frame, Shed Roof Building	Lighting, Heating, Power, Water, Sewer, Storm Drain
	EQUIPMENT STORAGE BUILDING	1	30 x 30 x 7	1,508	10,500	Wood Frame, Shed Roof Building	None
	SAFETY OFFICE SHED	1	22 x 26	528	1,040	Galval Sheet Metal Slat	Lighting
	GAS SHED	7	16 x 20 x 10	2,240	22,400	Wood Frame, Open Shed Buildings	Power, Lighting
	AREA ENGINEER & LAYOUT OFFICE	1	22 x 40	1,056	9,120	Galval Sheet Metal Slat	Lighting, Heating, Telephone
	COMMERCIAL FIRE EXTINGUISHER SHED	1	24 x 40 x 9	1,040	9,360	Wood Frame, Partially Open Shed	Lighting, Heating, Telephone
	AREA CARPENTERS' OFFICE	1	25 x 28 x 9	625	5,625	Wood Frame, Shed Roof Building	None
	SHED SHED	1	36 x 44 x 10	2,314	23,140	Wood Frame, Open Shed Building	Gas and Electric
	AREA TOOL ROOM	1	14 x 16 x 8	256	2,048	Wood Frame, Shed Roof Building	Lighting
	AREA PIPE SHOP	1	30 x 40 x 9	1,200	10,800	Wood Frame, Partially Open Shed Bldg.	Lighting, Telephone, Heating
	AREA ROSSER SHED	1	14 x 44 x 8	704	5,632	Wood Frame, Shed Roof Building	Lighting, Heating
	AREA ENGINEER'S LOFT	1	14 x 28 x 9	352	3,168	Wood Frame, Shed Bldg. On Skids	None
	PUMPING BUILDING	1	32 x 66 x 9 & 32 x 44 x 12	2,112	35,904	3-Story Wood Frame Bldg. with Shed Roofs Finished 3-Story, Concrete Floor	Lighting, Power, Water, Sewer, Telephone
	AREA ELECTRIC SHEDS	2	16 x 30 x 10	960	9,600	Open Wood Frame Shed	Lighting, Power
	BRIDGE ENGINEER'S OFFICE	1	30 x 80 x 10 & 4 x 20 x 9	2,540	55,660	Wood Frame, Gable Roof Bldg., Foot & Girder Const., Gypsum Board Siding	Lighting, Telephone, Air Conditioning, Heating, Water, Power, Sewer, Storm Drain, Storm Sewer
	BARGE OFFICE	1	20 x 26 x 9	480	4,320	Wood Frame, Gable Roof Bldg., Gypsum Board Siding	Lighting, Telephone, Heating
	SPECIAL EQUIPMENT WAREHOUSE	1	90 x 100 x 11	9,000	99,000	Wood Frame, Shed Roof Bldg., Foot & Girder Construction	Lighting, Water, Telephone, Heating
	EQUIPMENT STORAGE SHEDS	2	120 x 218 x 10 & 100x100x10	36,560	365,600	Wood Frame, Open Shed Bldg., Foot & Girder Construction	None
	FIRST AID WAITING SHELTER	1	16 x 26 x 10	388	3,880	Wood Frame, Shed Roof Bldg. on Skids	None
	BLACKSMITH SHOP	1	30 x 30 x 10	900	9,000	Open Wood Frame Shed	Lighting, Water, Power
	MACHINE SHOP	1	45 x 45 x 12	2,085	25,020	Wood Frame, Shed Roof Bldg., Foot & Girder Construction	Lighting, Power, Water
	STORAGE PLATFORM	1	100 x 100 x 4	10,000	—	Wood Frame Platform w' Decking	None
	PAINT OFFICE	1	14 x 20 x 9	280	2,520	Wood Frame, Gable Roof Bldg., on Skids	Lighting
20 - 5	ROADS, PARKING LOTS, & WORKING AREAS						
	ROADS	5400'	30' wide			Water Bound Gravel 12" Thick	None
	ROADS	21900'	20' wide			Same	None
	WATER SANITATION LOT	1	300 x 300	90,000	—	Stabilized Area with Sand & Gravel Approximately 12" Thick	Water
	BUS PARKING LOT	1	1,000 x 1,000	1,000,000	—	Stabilized Area with Sand & Gravel, Approximately 12" Thick	Lighting, Bus Lanes & Car Stops
	TEMPORARY CONSTRUCTION AREAS	3	1-1200 x 2100 1-1200 x 1500 1-400 x 300	4,520,000		Stabilized Area, Sand & Gravel 12" Thick	Lighting, Water



BUILDING LIST - TEMPORARY CONSTRUCTION

200 EAST AREA

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	DETAILS INCLUDED
NO 10	BASEMATES LOT OFFICE	1	8 x 12 x 8	96	768	Wood Frame, Shed Roof Bldg. on Skids	Lighting, Water
	BARREL PLATFORM & SHELTER	1	30 x 30	2,700	—	2" Wood Decking Laid on Skidways	Lighting, Water
	CYLINDRICAL STORAGE BUILDINGS	2	14 x 32 x 11	896	9,076	Wood Frame, Open Slat Bldg. on Skids	None
	CHUNK ROOMS	20	4 x 6 x 7	280	2,480	—	—
	OIL STORAGE PLATFORM	1	14 x 10	140	—	Wood Frame, Shaded Platform - At Skid	None
	TOILETS	30	8 x 10 x 8	4,000	32,000	—	—
	TOOL ROOMS	130	4 x 7 x 4	4,760	19,936	—	—
	ICE ROOMS	6	4 x 6 x 6	144	864	—	—
INSURMENT LOCKERS	12	1 x 2 x 7	24	288	—	—	
NO 11	SEWERS	900'	4" dia	—	—	V2" Clay & Conc. Pipe (conc. Joints)	None
	SEPTIC TANK	1	8 x 12 x 6	96	576	Wood Frame & Siding	None
NO 15	BOILER HOUSE	1	16 x 26 x 10	368	3,680	Wood Frame, Shed Roof Building	Lighting, Water, Steam
	STEAM LINES	200'	3" dia	—	—	Galvanized & Flanged 200' dia Pipe Unlagged	Insulated Pipe Supports
	200'	2" dia	—	—	—	—	—
	TELEPHONES	26 Buildings Served				Used Form. Cable System & Switch Boards 3-Stage Features: Normally Opened Station	None
						Twisted Pair and Open Iron Wire Two-Office	Boards with a Capacity of 100 Lines Approx. 70 Construction Drawings Were Detailed

BUILDING LIST - TOM GRANT CONSTRUCTION

Sheet 1

400 EAST AREA

CODE	BUILDING NAME	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATIONS
<u>GENERAL SHED AREA</u>								
TC 35	PAINT SHED	1	22 x 48	1056	9120	Butler Sheet Metal Hut	Lighting, Heating and Telephone	8th Street & C-Avenue
	CEMENT SHED	1	24 x 48 x 11	1152	12672	Wood Frame Gable Roof Building	Lighting	7th Street & C-Avenue
	CEMENT SHED DOCK	1	12 x 48	576	---	3' High - Wood Frame	None	7th Street & C-Avenue
	CEMENT SHED PUNCH	1	9 1/2 x 48	456	---	3' High - Wood Frame	None	7th Street & C-Avenue
	CRANE LOFT	1	15 x 50 x 9	750	6750	Wood Frame Shed Roof Building	Lighting, Telephone	7th Street
	RIDDERS' OFFICE & LOFT	1	64 x 60 x 11	1440	15840	Wood Frame Gable Roof	Lighting, Heating, and Telephone	7th Street
	RIDDERS' LOFT DOCKS	4	1 - 8 x 30 1 - 8 x 30	496	---	Wood Frame 3' High	None	7th Street
	TRANSPORTATION GARAGE	1	40 x 90 x 15	3600	54000	Wood Frame - Concrete Floor Post and Girder Construction	Lighting, Heating, Telephone, Water, Air	Between 6th & 7th Street
	GAS STATION	1	3 x 40	120	---	2 Elec. Pumps Set on Concrete Island	Lighting, Power, Jetty. Air	Between 6th & 7th Street
	COIL STORAGE PLATFORM	1	16 x 16 x 3'	256	---	Wood Frame 3' High on Skids	None	Between 6th & 7th Street
	LABORATORY & CONCRETE OFFICE	1	24 x 40 x 11	960	10560	Wood Frame on Skids Gable Roof	Telephone, Heating, Lighting	5th Street & C-Avenue
	LAYOUT OFFICE	1	24 x 40 x 11	960	10560	Wood Frame on Skids Gable Roof	Telephone, Heating, Lighting	5th Street & C-Avenue
	WELDLIGHT SHED	1	80 x 145 x 12	11600	139200	Wood Frame, Concrete & Earth Floor Post and Girder Construction	Lighting, Power, Heating, Telephone, Water, Ventilation	5th Street
	REINFORCING STEEL SHED	1	41 x 85 x 12	3485	41820	Wood Frame, Truss Supported	Lighting, Power	5th Street
	REINFORCING STEEL OFFICE	1	40 x 46 x 10	480	4800	Wood Frame Gable Roof on Skids	Lighting, Telephone, Heating	5th Street
	AS - STORAGE BUILDING	1	41 x 190	6190	94200	Butler Sheet Metal Hut Wood Frame Shed Roof, Post and Girder Construction	Lighting Lighting, Heating, Water, Sewer, Telephone Toilet & Wash Room Facilities	4th Street & C-Avenue
	SUBVISON ENGINEERS' OFFICE	1	48 x 170 x 11 & 16 x 40 x 11	7091	78001	Same (Gable Roof)	None	4th Street & C-Avenue
	M. S. ENGINEERS' OFFICE	1	24 x 30 x 11 & 7 x 8 x 9	776	8224	None	None	C-Avenue Between
	HEALTH AND SAFETY OFFICE	1	22 x 48	1056	9120	Butler Sheet Metal Hut	Lighting, Heating, and Telephone	4th & C-Avenue
	AS - WAREHOUSE	1	80 x 49 x 12	16720	200640	Wood Frame, Shed Roof Post & Girder	Lighting, Heating, Telephone, Water Fire Protection System	3rd & C-Avenue
	AS - WAREHOUSE DOCK	4	8 x 51 x 12 x 103	1644	---	Wood Frame 3' High	None	3rd & C-Avenue
	CYCLING STORAGE BUILDINGS	4	12 x 21 x 13	768	9672	Wood Frame - Slate	None	3rd & C-Avenue
	PIPE SHED	1	70 x 77 x 17	5590	91620	Wood Frame Truss Supported Wood Frame, Post & Girder Construction Shed Roof	Power, Lighting, Water, Sewerall System, Telephone, Heating, Ventilation	6th & B-Avenue
	PIPE SHED	1	60 x 100 x 12 x 15 x 45 x 8	4675	52400	Wood Frame, Shed Roof, Post & Girder Construction	Lighting, Telephone, Heating, Water, Ventilation, Air-Conditioning	6th & B-Avenue
	AS - PIPE DOCK	1	64 x 177 x 12	11328	135936	Wood Frame - 3' High	None	6th & B-Avenue
	AS - PIPE DOCK	4	1 - 12 x 100 1 - 12 x 100	3660	---	Wood Frame - 3' High	None	6th & B-Avenue
	AS - PIPE DOCK	1	12 x 160	1920	---	Wood Frame - 3' High	None	6th & B-Avenue
	SHEDS SHED	1	48 x 65 x 10	3120	31200	Wood Frame, Open Shed, Lean-To	None	6th & B-Avenue
	4 DOCKS SHED	1	40 x 40 x 9	400	3600	Wood Frame, Open Shed, Lean-To	None	6th & B-Avenue
	CAR ON LIFT, OFFICE, & SAW SHED	1	40 x 48 x 10 40 x 50 x 12	5004	47540	Wood Frame, Gable & Shed Roof, Partially Open	Power, Lighting, & Heating	In Lumber Yard
	SAW SHED	1	12 x 46 x 10	552	5520	Wood Frame, Lean-To, Open Front	None	In Lumber Yard
	STORAGE SHED	1	15 x 100 x 9	1500	13500	Wood Frame, Lean-To, Shed Roofs	Heating & Lighting	In Lumber Yard
	CAR LIFT, OFFICE BUILDING	1	15 x 100 x 9	1500	13500	Wood Frame, Lean-To, Shed Roofs	Heating & Lighting	In Lumber Yard
	PIPE SHED DOCK SHED	1	40 x 32 x 10	640	4400	Wood Frame, Shed Roof, Open Front	Lighting	In Lumber Yard
	SAW SHED	2	15 x 43 x 10	4760	47600	Wood Frame, Lean-To & Gable Roofs Open Sheds	Lighting & Power	In Lumber Yard

BUILDING LIST - TEMPORARY CONSTRUCTION

Sheet 2

400 WEST AREA

NO.	BUILDING NAME	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
<u>221 - T AREA</u>								
T-35	FOUR PART. BUILDING "T"	1	34 x 62 x 22	1920	42240	Wood Frame with Overhead Truck Ramp Concrete Floor	Lighting, Power, Water, Steam Htg., Telephone	E. of 221-T Building
	METALLOGY BUILDING	1	15 x 24 x 9	360	3240	Wood Frame Shed Roof Building	Lighting and Heating	At 291-T Building
	JOB SHED	1	12 x 15 x 9	180	1620	Wood Frame -Lean-To -Open Shed	Lighting and Power	N. of 221-T Building
	FIELD WAREHOUSE	1	30 x 68 x 8	4040	16320	Wood Frame - Shed Roof Building	Lighting and Heating	E. of 221-T Building
	PIPE TEST SHED	1	30 x 30 x 9	900	8100	Wood Frame -Lean-To -Open Shed	Lighting and Water	on A-avenue E. of 221-T
	EARTHWORK PIPE SHED	1	15 x 30 x 11	450	4950	Wood Frame -Lean-To -Open Shed	Lighting	E. of 221-T Building
	WARMING SHEDS (CRAFTS)	2	15 x 100 x 9	3000	27000	Wood Frame -Shed Roof Building	Lighting and Heating	E. of 221-T Building
	OFFICE (CRAFT)	1	15 x 100 x 9	1500	13500	Wood Frame -Shed Roof Building	Lighting and Heating	E. of 221-T Building
	CRAFT OFFICE HUTS	3	22 x 48	3168	27360	Roller Sheet Metal Huts	Lighting, Telephone & Heating	E. of 221-T Building
	MILLWRIGHT SHOP	1	15 x 40 x 10	600	6000	Wood Frame -Lean-To - Open Shed	Lighting	E. of 221-T Building
	ELECTRIC SHOP	1	15 x 40 x 10	600	6000	Wood Frame -Lean-To - Open Shed	Lighting	E. of 221-T Building
	WELDING SHOP	1	14 x 40 x 10	280	2800	Wood Frame -Lean-To - Open Shed	Lighting	E. of 221-T Building
	PIPE FABRICATION SHED	1	16 x 30 x 9	480	4320	Wood Frame -Lean-To - Open Shed	Lighting	N. of 221-T Building
	PIPE FABRICATION SHED	1	30 x 40 x 9	1200	10800	Wood Frame -Lean-To - Open Shed	Lighting	N. of 221-T Building
	BRIDGE SHED	1	20 x 30 x 20	600	6000	Wood Frame Gable Roof Bldg. on Skids	Lighting	S.E. Corner 221-T
<u>221 - U AREA</u>								
	FOUR PART. BUILDING "U"	1	34 x 62 x 22	1920	42240	Wood Frame with Overhead Truck Ramp Concrete Floor	Lighting, Power, Water, Steam Htg., Telephone	N. of 221-U Building
	CRAFT OFFICE HUTS	3	22 x 48	3168	27360	Roller Sheet Metal Huts	Lighting, Heating, Telephone	E. of 221-U Building
	WARMING SHED	1	15 x 100 x 9	1500	13500	Wood Frame - Shed Roof Building	Lighting & Heating	E. of 221-U Building
	OFFICE BUILDING	1	15 x 100 x 9	1500	13500	Wood Frame - Shed Roof Building	Lighting & Heating	E. of 221-U Building
	FIELD SHED	1	30 x 68 x 8	4040	16320	Wood Frame -Lean-To -Open Shed, with Racks	Lighting	E. of 221-U Building
	PIPE FABRICATION SHED	1	30 x 30 x 9	900	8100	Wood Frame -Lean-To -Open Shed	Lighting & Water	Ave., E. of 221-U Building
	EARTHWORK PIPE SHED	1	15 x 30 x 11	450	4950	Wood Frame -Lean-To -Open Shed	Lighting	E. of 221-U Building
	JOB SHED	1	12 x 15 x 9	180	1620	Wood Frame Shed Roof	Lighting & Power	E. of 221-U Building
	WELDING SHED	1	14 x 40 x 10	280	2800	Wood Frame -Lean-To -Open Shed	Lighting	E. of 221-U Building
	PIPE SHED	1	15 x 40 x 10	600	6000	Wood Frame -Lean-To -Open Shed	Lighting	E. of 221-U Building
	FIELD SHED	1	40 x 30 x 12	600	7200	Wood Frame -Lean-To -Open Shed	Lighting	E. of 221-U Building
	WELDING SHED	2	15 x 30 x 9	900	8100	1 - Bldg. Closed 1 - Bldg. Open Shed	Lighting	E. of 221-U Building
<u>WILSON/ARCADE AREA TO</u>								
T-35	WARMING SHED	1	15 x 70 x 9	1050	9450	Wood Frame -Shed Roof Building	Lighting & Heating	N. of 271 Building
	BRIDGE SHED	1	16 x 16 x 9	256	2304	Wood Frame -Gable Roof Building	Lighting, Telephone, & Heating	At 272-4 Building
	WARMING BUILDING	1	14 x 20 x 8	280	2520	Wood Frame -Shed Roof Bldg. on Skids	Lighting, Telephone, & Heating	At 276 Building
	PIPE FABRICATION ADDITION	1	45 x 70 x 10	1800	17550	Wood Frame -Gable Roof -Ext. Open Halls	Power, Lighting, Telephone, Water, Heating, Toilet & Wash Room Facilities, Sinks	At 2709 Building



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BUILDING LIST - TEMPORARY CONSTRUCTION

200 WEST AREA

CODE	BUILDING NAME	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 35	CLOCK ALLEYS	2	12 x 54 x 11	1344	14784	Wood Frame - Gable Roof - Open Shed	Lighting	At East Gate
	CLOCK OFFICES	2	10 x 12 x 11	240	2640	Wood Frame - Gable Roof Building	Lighting & Heating	At East Gate
	ELECTRIC SHOP	1	28 x 30 x 8	840	6720	Wood Frame - Lean-To - Open Shed	Lighting	At 221 Building
	P.V.E. SHOP	1	30 x 48 x 10	940	9600	Wood Frame - Lean-To - Open Shed	Lighting	At 222 Building
	WELDER'S SHOP	1	18 x 44 x 10	792	7920	Wood Frame - Lean-To - Open Shed	Lighting	At 222 Building
	CARPENTER OFFICE	1	16 x 32 x 9	576	5184	Wood Frame - Shed Roof - On Skids	Lighting & Heating	At 222 Building
	ELECTRIC SHOP	1	2 x 14 x 9	192	1728	Wood Frame - Lean-To - Open Shed	Lighting	At 231 Building
	CRAFT OFFICES & STORAGE SHED	1	5 x 40 x 9	600	5400	Wood Frame - Shed Roof Building	Lighting	At 231 Building
	ICE HOUSE	1	3 x 15 x 10	280	2880	Wood Frame - Gable Roof 3' Above Ground Level	Lighting	At Water Sanitation Yard
	WATER SANITATION OFFICE	1	4 x 14 x 8	256	2048	Wood Frame - On Skids	Lighting	At Water Sanitation Yard
	PAPER STORAGE SHED	1	10 x 30 x 8	900	7200	Wood Frame - Canvas Covered - Wood Floor	Water	At Water Sanitation Yard
	ELECTRIC COAL TYPHE	1	7 x 8 x 6			Wood Frame 20' High	None	S. of 22 Building
	TC 3	WORKING GROUNDS	1	00 x 300 x 14				
INDUSTRIAL STORAGE YARD		1	00 x 300			Wood Post - Wire Frame	None	At 231 Building
WATER SANITATION YARD		1	00 x 300			Wood Post - Wire Frame Ground Surf. Area	Water	3rd St. & D-Avenue
TRUCK & CAR PARKING LOTS		2	00 x 300	120000		Peppercorn & Stabilized	Lighting, Wood Sheds & Buildings	Just Gates
EMERGENCY DRAYS			300 ft. x 20 ft. gravel			Water Bound 1 1/2" Thick		Area 240
EMERGENCY DRAYS			300 ft. x 6 ft. gravel			Water Bound 6" Thick		None
EMERGENCY STORAGE AREAS		12		72000		Water Bound Gravel 1 1/2" Thick	Flood Lighting Partially	Area 240
TC 6	RAILROAD		3000 ft. x 60 ft. x 4 1/2' Rail			Wood Rail 60 Turn-Outs	None	Area 240
TC 7	UNDERGROUND					Underground Piped, Slip Joint & Covered	None	Area 240
TC 8	CONCRETE FOUNDATION			1200		Open Type - Surrounded by Wooden Frame	1-5000 KVA Transformer, 4400V/4900V 2.	3rd & J-Avenue
	CONCRETE FOUNDATION			450		None	3-333 KVA	At 221-B Building
	CONCRETE FOUNDATION			450		None	1-4000 KVA	At 221-B Building
	CONCRETE FOUNDATION			450		None	1-2000 KVA	At Hillwright Shop
	CONCRETE FOUNDATION			150		None	1-75 KVA	At 221-B Building
	CONCRETE FOUNDATION			150		None	1-333 KVA	At 221-B Building
	CONCRETE FOUNDATION			150		None	1-333 KVA	At 221-B Building
	CONCRETE FOUNDATION			80		None	1-333 KVA	At 221-B Building
	CONCRETE FOUNDATION			80		None	1-333 KVA	At 221-B Building
	CONCRETE FOUNDATION			80		None	1-333 KVA	At 221-B Building
TC 9	EMERGENCY BRICK					4" x 4" x 12" Wood Post & Stone Sill	None	Area 240
	EMERGENCY BRICK					4" x 4" x 8" Wood Post & Stone Sill	None	Surrounding 20-7 & 8 Process Buildings

BUILDING LIST - TELEGRAPH CONSTRUCTION

200 WEST AREA

Sheet 4

CODE	BUILDING NAME	BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES DETAILLED	LOCATION		
TC 10	TOY STORE	362	4 x 7 x 4	10936	40544			Area Wide		
		17	4 x 10 x 4	680	2720			Same		
		34	8 x 40 x 8	4320	34560			Same		
		14	6 x 6 x 8	304	4032			Same		
		4	3 x 8 x 8	96	768			Same		
		1	5 x 5 x 8	25	200			Same		
		3	6 x 7 x 8	126	1008			Same		
		3	8 x 8 x 9	192	1728			Same		
		8	8 x 12 x 9	768	6912			Same		
		8	10 x 14 x 9	1120	10080			Same		
		1	12 x 15 x 9	180	1420			Same		
		1	14 x 14 x 9	196	1764			Same		
		16	4 x 6 x 7	384	2898			Same		
		8	4 x 5 x 7	160	1120			Same		
		15	0 x 4 x 4	180	720			Same		
		8	1 x 2 x 7	16	112			Same		
		1	6 x 8 x 4	48	392			Same		
1	12 x 14	168				Same				
1	24 x 24	336				Same				
TC 11	CHECK ROOMS	2	4 x 6 x 7	384	2898			Same		
		8	4 x 5 x 7	160	1120			Same		
		15	0 x 4 x 4	180	720			Same		
		8	1 x 2 x 7	16	112			Same		
		1	6 x 8 x 4	48	392			Same		
		1	12 x 14	168				Same		
		1	24 x 24	336				Same		
		1	4 x 6 x 7	384	2898			Same		
		8	4 x 5 x 7	160	1120			Same		
		15	0 x 4 x 4	180	720			Same		
TC 12	WARD ROOMS	2	22 x 45 x 10	1980	19800	Wood Frame Shell Roof Open End - Conv. Found	Brace 4-100 H.P. H.R.T. Millers - Lighting, Water	at 241-T & U Building		
		1	10 x 16 x 10	116	1160	Same	Same	At 223-T Building		
		1	11 x 14 x 10	154	1540	Not Insulated	Lighting, Water	At 282 Building		
		2	12 x 16 x 10	384	1920	Wood Frame Shell Roof Building	Lighting, Water	1 - At 2707 Building 1 - At 2704 Building		
		1	14 x 20 x 10	320	3200	Same	Same	Near "T" Magazine Bldg.		
		3000 Ft. 2-6				Insulated & Gabled - Not Insulated	Same	Area Wide		
		2000 Ft. 3-6								
		TC 13	SEWER LINES & SEPTIC TANKS	700 Ft.	6" & 7 1/2" Clay Ball & Spigot			Wood Insulated Septic Tank & Tile Field	Same	Division & C.S. Engr's Off.
		TC 14	BOILER HOUSE	2	22 x 45 x 10	1980	19800	Wood Frame Shell Roof Open End - Conv. Found	Brace 4-100 H.P. H.R.T. Millers - Lighting, Water	at 241-T & U Building
				1	10 x 16 x 10	116	1160	Same	Same	At 223-T Building
1	11 x 14 x 10			154	1540	Not Insulated	Lighting, Water	At 282 Building		
2	12 x 16 x 10			384	1920	Wood Frame Shell Roof Building	Lighting, Water	1 - At 2707 Building 1 - At 2704 Building		
1	14 x 20 x 10			320	3200	Same	Same	Near "T" Magazine Bldg.		
3000 Ft. 2-6						Insulated & Gabled - Not Insulated	Same	Area Wide		
2000 Ft. 3-6										
TC 15	SEWER LINES			27	Buildings Served			Cable and Open Iron Pipe & Riveted Joint	35 Telephones & Approx 20 teleprinters	Area Wide

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TEMPORARY ROAD CONSTRUCTION

A. New Construction

1. Blacktop (Hanford Camp)

18' width	19.05 miles
24' width	17.01 miles
28' width	3.20 miles
30' width	0.20 miles
40' width	0.20 miles
50' width	<u>0.57 miles</u>

Subtotal 40.23 miles

2. Gravel Surfaced

16' width	11.15 miles
18' width	7.50 miles
20' width	23.16 miles
30' width	1.06 miles
40' width	<u>0.65 miles</u>

Subtotal 43.52 miles

B. Existing Gravel Roads, Improved & Maintained.

20' width	<u>2.50 miles</u>
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Subtotal 2.50 miles

C. Existing Gravel Roads, Maintained Only.

18' width	<u>7.35 miles</u>
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Subtotal 7.35 miles

Grand Total (Without regard to Classification, Width, or Type of Surface). 93.60 miles

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TEMPORARY WALK CONSTRUCTION

TEMPORARY BLACKTOP WALKS (HANFORD & CENTRAL SHOPS)

4' width	30.20 miles
6' width	9.60 miles
10' width	7.10 miles
12' width	0.86 miles
20' width	1.60 miles
25' width	0.02 miles
35' width	0.04 miles
50' width	<u>0.02 miles</u>

Grand Total - Temporary Blacktop Walks 49.44 miles

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LIST OF TEMPORARY SEWERS & SEPTIC TANKS

<u>Area</u>	<u>Length of Sewer Lines</u>	<u>Number of Septic Tanks</u>
100-B	300 Ft.	2
100-D	600 Ft.	2
100-F	1,500 Ft.	2
200-E	900 Ft.	1
200-W	700 Ft.	*0
700 and 1100	1,600 Ft.	2
Central Shops	6,400 Ft.	1
White Bluffs	300 Ft.	1
3000 Area Camp	3,150 Ft.	1
Hanford Camp	<u>214,250 Ft.</u>	<u>76</u>
Total	229,900 Ft.	88

\* Used permanent Power and Service Area Septic Tank.

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TABULATION OF TRACT HOUSE NUMBERS & CAPACITY

<u>Tract House Number</u>	<u>Capacity in Persons</u>
T-181A	13
D- 59	6
B- 73	10
D- 216	7
D- 223	8
D- 226	12
T-1787	10
S-1676	6
Q-145A	22
R-1545	10
F-1301	12
F-1271	10
B- 82	7
B- 113	6

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4-1

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A Portions of sheets 1, 6; and 14 are non-readable

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## BUILDING LIST - TEMPORARY CONSTRUCTION

AREA WIDE - OUTSIDE SPECIFIC AREAS

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION		
TC 5	<u>PLANT WIDE &amp; HANFORD CAMP ROADS, PARKING LOTS &amp; WALKS</u>									
	HANFORD CAMP ROADS			3,000 ft. 50' Wide 1,100 ft. 40' Wide 1,100 ft. 30' Wide 17,000 ft. 28' Wide 90,000 ft. 24' Wide 100,300 ft. 18' Wide 166,800 ft. 20' Wide			Bituminous Surfacing " " " " " " " " " " " " Water Bound Gravel	None None None None None None None None	Hanford Camp Same Same Same Same Same Same Same	
	SALVAGE YARD ROADS			5,000 ft.	---	---	Wood Framing & Decking, 6" Water Bound Gravel, 20' Wide	None	Salvage Yard	
	MACHINE GUN RANGE ROADS			2,000 ft.	---	---	Water Bound Gravel 5" Thick, 20' Wide	None	At North Slope of Gable Mt. Opposite Radio Tower	
	ROADS WHITE BLUFF STORAGE AREA			4,000 ft.	---	---	Water Bound Gravel 5" Thick, 20' Wide	None	White Bluffs Road	
	HONEY HILL ROADS			2,500 ft.	---	---	20' Wide, Water Bound Gravel, 5" Thick	None	Route 4N - Mile 2	
	HONEY HILL SANITATION LOT			400' x 400'	---	---	20' Wide, Water Bound Gravel, 5" Thick	None	Same	
	TC 5	<u>MISC. PARKING AREAS - HANFORD CAMP</u>								
		BUS PARKING LOT #1		1	750 x 900	675,000		Oil Treated	Flood Lighting, Railings, Telephone & Dispatcher's Towers	Division & C-Avenue
		BUS PARKING LOT #2		1	820 x 900	738,000		Same	Same	6th & B-Avenue
CAR PARKING LOT - ADM. BUILDING		1	160 x 1100	185,000		Water Bound Gravel, Partially Oil Treated	Railings and Car Stops	Division Street		
CONTRACTORS' PARKING LOT		1	300 x 1800	540,000		Water Bound Gravel	Car Stops	B-Avenue & 2nd Street		
CAR PARKING LOT - AUDITORIUM		1	500 x 400	200,000		Same	Same	Division St. & C-Avenue		
CAR PARKING LOT - LAKE HANFORD		1	300 x 300	90,000		Oil Treated	Same	Lake Hanford		
CAR PARKING LOT #1 - CONVAL QTRS.		1	200 x 200	40,000		Water Bound Gravel	Same	W. of Conval. Building		
CAR PARKING LOT #2 - CONVAL QTRS.		1	200 x 200	40,000		Same	Same	Same		
CAR PARKING LOT - THEATER		1	150 x 400	60,000		Same	Same	Div. St. Between A & B-Ave.		
CAR PARKING LOT - SHOPPING CENTER		1	200 x 800	160,000		Same	Same	Div. St. & B-Ave. & 5th St.		
CAR PARKING LOT - DIVISION STREET		1	200 x 800	160,000		Same	Same	Division Street		
TRUCK PARKING LOT		1	500 x 400	200,000		Same	Flood Lighting	3rd Street West		
HEAVY EQUIPMENT PARKING LOT		1	200 x 500	80,000		Same	Enclosed by Fence & Flood Lighting	4th & D-Avenue		
TC 5	<u>MISC. WALKS - HANFORD CAMP</u>									
				400 ft. 50' Wide 200 ft. 35' Wide 100 ft. 25' Wide 8,500 ft. 20' Wide 4,200 ft. 12' Wide 38,000 ft. 10' Wide 12,700 ft. 8' Wide 111,800 ft. 4' Wide			Bituminous Surfacing " " " " " " " " " " " " " "	None None None None None None None None	Hanford Camp Same Same Same Same Same Same Same	
	TC 6	<u>MISC. PLANT WIDE RAILROADS</u>								
		HANFORD TO WHITE BLUFFS			53,667.28 Ft.			#6 Turn-Out, Used Rail & Hand Throw Switches	Dispatcher Bldgs., R.R. Maintenance Bldgs., & Telephone System	---
		RICHLAND			2,081.18 Ft.			Same	Same	---
		HAVEN PIT			5,809.78 Ft.		Same	Same	---	

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## BUILDING LIST - TEMPORARY CONSTRUCTION

AREA WIDE - OUTSIDE SPECIFIC AREAS

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
	R. R. AGGREGATE PIT		4,200 Ft.			#8 Turn-Out, Used Rail & Hand Throw Switches	Dispatcher Bldgs., R.R. Maintenance Bldgs., & Telephone system	---
	MISCELLANEOUS TRAIL		12,049.44 Ft.			Same	Same	---
	* NOTE: THE TOTALS SHOWN ON THIS AND FOLLOWING AREA WIDE SUMMARY SHEETS DO NOT INCLUDE FIGURES SHOWN ON OTHER SHEETS FOR SAME TC FACILITIES, TC-6 THROUGH TC 16.							
TC 7	PLANT WATER LINES, STORAGE TANKS & WELLS							
	MOORE BOOSTER STATION	1	18 x 21 x 12	378	4,536	Wood Frame, Gable Roof Bldg. Gypsum Siding	Lighting, Power, Telephone, Water & Heating, 1-Elec. & 1-Gas Driven Pump. 1-40,000 Gal. Wood Stave Ground Storage Tank surrounded by 360' Type #1 Fence	W. of Yazima road barricade
	CHLORINATOR HOUSE	2	10 x 10 x 10	200	2000	Same	Lighting, Heating, Chlorinator	At McGee Well & on Cold Creek Road
	MOORE ELEVATED STORAGE TANK	1	No Bldg. Structure	---	---	1-100,000 Wood Stave Water Tank Set Approx. 10' Above Ground on Wood Damage	Water - Surrounded by 360' Type #1 fence	on Cold Creek Road - W. of 200-W Area
	ELEVATED R. R. WATER TANK	2	No Bldg. Structure	---	---	25,000 Gal. Wood Stave Water Tank set Approx. 25' Above Ground on Wood Frame Damage	Water	Road Crossing at Cold Creek Road & Hanford
	ALLARD COYOTE BOOSTER STATION	1	18 x 26 x 11	488	5,148	Wood Frame, Gable Roof Bldg. Gypsum Board Siding	Water, 1-125,000 Gal. Steel Ground Storage Tank, 2-Gasoline Driven Pumps Surrounded by 300' Type #1 Fence	West of Gable Butte
	ALLARD COYOTE CHLORINATOR HOUSE	1	10 x 10 x 9	100	900	Same	Chlorinator, Lighting, Heating	Same
	ALLARD COYOTE PUMP STATION (EXISTING)	1	30 x 68 x 35	1,950	68,250	Two Story Cons. Bldg. Throughout 1st Floor - Intake & Pump Section 2nd Floor Operating & Control Section	Lighting, Telephone, Heating, Water 2-450 HP Motors -2-18000 GPM Pumps 1-750 HP Motor-1-11000 GPM Pump (New Constr. 1-250 HP Motor -1700 GPM Pump & Misc. Repairs	on Columbia River at Coyote Rapids
	WELL (EXISTING)	No Building Structure		---	---	4' x 4' Concrete Casd	Installed Elect. Driven Vertical Pump	S. of Jessen & Wright. Concrete Block Plant
	WELL #7 HANFORD	1	8 x 8 x 8	64	512	Wood Frame Gable Roof, Gypsum Board Siding	Power, Lighting, 1-Vertical Pump & Chlorinator	W. of 101 Bldg. Hanford
TC 8	ALLARD-COYOTE SUB-STATION (EXISTING)	1	10 x 20 x 18	200	3,600	Wood Frame Shed Covered with Corr. Sheet Iron	3-600 KVA Trans. P 6900/2300 V S	at Allard Coyote Pump Sta.
	TRANSFORMER BANK	1 No Building Structure	10 x 20	200	---	Open Framing Enclosed by Wood Fence	(1-75 KVA Trans. P 6900/440/220 S 2-60 KVA " P 6900/220/110 S	Jessen & Wright Conc. block Plant, Route 1
	TRANSFORMER BANK	1	6 x 12	72	---	Elevated Open Framing	2-150 KVA " P 6900/440/220 S 1-75 KVA " P 6900/220/110 S	Friest Rapids Cold Str. Plant
	SUBSTATION - PACIFIC POWER & LIGHT COMPANY	1	200 x 200	40,000	---	Open Framing with Transformers & Equip. Set on Cons. Pdms. Enclosed By Woven Wire Fence	3-3555 KVA Trans. P 115,000/66,000 V S 3-3000 KVA " P 115,000/66,000 V S 3-200 KVA " P 66,000/6900 V S	"A" Avenue - Hanford
	SWITCH HOUSE	1	24 x 54 x 20 & 24 x 32 x 10	2,084	33,600	Reinforced Cons. & Cons. Block Bldg.	Lighting, Power, Telephone, Water	F.F. & L. Lt. Co. Sub.Sta. Lo
	HANFORD GRAVEL PIT	1 No Building Structure	10 x 20	200	---	Open Framing Enclosed by Wooden Fence	1-200 KVA Trans. P 6900/220/110 S	2-Mi. S. W. of Hanford
	HANFORD GRAVEL PIT	1 No Building Structure	20 x 30	600	---	Same	2-335 KVA Trans. P 6900/440/220 V S 2-15 KVA " P 6900/320/110 V S	1-Mi. east of Hanford
	101 FABRICATION BUILDING	1	20 x 30	600	---	Same	(1-25 KVA Trans. P 6900/220/110 V S 1-30 KVA " P 6900/220/110 V S 1-75 KVA " P 6900/220/110 V S 2-100 KVA " P 6900/440/110 V S 2-150 KVA " P 6900/440/220 V S	N. W. of hanford

SHEET 2 OF 13 SHEETS

# BUILDING LIST - TEMPORARY CONSTRUCTION

AREA WIDE - OUTSIDE SPECIFIC AREAS

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 8	O. S. ELECTRIC LINES		39,360' Transmission Lines			3-#1/0 Copper Wire, Single Pole, Cross Arm & Pin Insulator	66,000 V Three Phase Switching Stations	From P.P. & L. Lgt. Co. KV Line To 100-E, 100-D, 100-F, 200-E, & 200-W Areas
			12,000' Transmission Lines			3-#2 Copper Wire, Single Pole, Cross Arm & Pin Insulator	6900 V Three Phase Switching Stations	From 200-W Area to Central Shops & McGee Well
			40,000' Transmission Lines			3-#6 Copper Wire, Single Pole, Cross Arm & Pin Insulator	6900 V Three Phase	To McGee Well
			10,000' Transmission Lines			Same	Same	To Jessen Wright & Plant
			10,000' Transmission Lines			3-#6 Copper Wire, Single Pole, Cross Arm & Pin Insulator	6900 V Three Phase	From Hanford to Newport Gravel Pit & to Haven Pit
			18,800' Transmission Lines			Same	Same	Same
			8,000' Transmission Lines			3-#2 Copper Wire, Single Pole, Cross Arm & Pin Insulator	6900 V Three Phase	From Hanford To Hanford Gravel Pit
			3,000' Transmission Lines			3-#2 Copper Wire, Single Pole, Cross Arm & Pin Insulator	900 V Three Phase	From Hanford to 101 Fabrication Area
TC 9	<u>MISC. PLANT WIDE &amp; HANFORD CAMP FENCES</u>							
		HANFORD CAMP AREA		108,310' Type #1		Type #1 Wood Post & Woven Wire Fencing 12' High With 5-Strands of Barb Wire on Top	Lighting	Hanford Camp Area
				10,000' Type #2		Type #1 Wood Post & Woven Wire With 4 Strands of Barb Wire 4'6" High	Lighting	Hanford Camp Area
		MS-31 STORAGE YARD FENCE		2,285' Type #2		Type #2 Fence	Lighting	Leaser Spur
		SALVAGE YARD OFFICE		2,084' Type #1		Type #1 Fence	Lighting	Salvage Yard
				1,012' Type #2		Type #2 Fence	Same	Same
		MACHINE GUN RANGE FENCE		3,000' Type #2		Type #2-3 Strands Barb Wire 4'6" High	None	At N. Slope of Gable Mt. Opposite Radio Tower
		AIRPORT FENCE		12,000' Type #2		Type #2 Fence - 3 Strands Barb Wire 5'8" High		2 Mi. West of Hanford
	<u>CONCRETE REPAIR YARD</u>							
TC 10	LINE YARD OFFICE	1	20 x 64 x 10	1,080	10,800	Wood Frame, Gable Roof, Pre-Fab. Bldg.	Telephones, Heating	Allard Pole Yard
	LINE YARD STORAGE WAREHOUSE	1	20 x 46 x 10	920	9,200	Same	Heating	Same
	CONCRETE REPAIR SHOP	1	60 x 100 x 20 & 12 x 12 x 10 & 10 x 14 x 8	8,284	122,560	Wood Frame, Shed & Gable Roof Bldg., Post & Girder Construction, Lean-To-Offices attached to S.E. & N.E. Corners	Lighting, Railroad Tracks, Telephones, Munirell System, Heating	Same
	OFFICE EQUIPMENT WAREHOUSE (Existing Barn)	1	80 x 100 x 20	8,000	100,000	Wood Frame, Gable Roof Barn (Added 2nd Floor and Stairs)	None	W. of White Bluffs
	<u>LEASER SPUR</u>							
TC 10	MS-31 WAREHOUSE	1	80 x 180 x 14 & 12 x 94 x 14	12,882	178,280	Wood Frame, Shed Roof Building, Post & Girder Construction	Lighting, Telephones, Heating	Leaser Spur
	WAREHOUSE #1	1	20 x 60 x 12	1,200	14,400	Wood Frame, Gable Roof, Pre-Fab. Bldg.	None	Same
	WAREHOUSE #2	1	20 x 40 x 14	1,200	14,800	Same	None	Same
	WAREHOUSE #3	1	20 x 60 x 12	1,200	14,400	Same	None	Same
	WAREHOUSE #4	1	20 x 24 x 12	640	7,680	Wood Frame, Gable Roof Building	None	Same
	CRANE OPERATORS' LOFT	1	15 x 26 x 8	380	3,480	Wood Frame Shed Roof Building	Lighting, Heating, Telephones	Same

SHEET 3 OF 13 SHEETS

# BUILDING LIST - TEMPORARY CONSTRUCTION

AREA WIDE - OFFSHORE SPECIFIC AREAS

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION	
	BROOKS' LOFT	1	18 x 20 x 9	480	4,080	Wood Frame Shed Roof Building	Lighting, Heating, Telephone	Logger Spur	
	ICE STORAGE PIT	1	800 x 800 x 12	100,000	1,800,000	Earth Excavation & Backfill, Ice Placed on 8 x 8 Wood Stringers	80,000 Tons of Ice Stored	Hanford White Bluffs Road	
	<u>SALVAGE YARD</u>								
TC 10	SALVAGE STORAGE HUTMENTS	9	22 x 48	9,804	82,080	Butler Sheet Metal Hinson Type Huts	Lighting	Salvage Yard	
	SALVAGE CHECK-IN WAREHOUSE	1	48 x 48 x 12	2,304	27,648	Wood Frame, Shed Roof Bldg., Post & Girder Construction, Gypsum Board Siding, Cons. Floor	Lighting, Telephone, Heating	Same	
	SALVAGE LEADING DOCK	2	18 x 80 x 4 & 18 x 20 Ramp 18 x 22 x 4			Wood Framing and Decking	None	Same	
	SALVAGE PARTS OFFICE (Existing Residence)	1	27 x 20 x 10	810	8,100	J-Block Frame Sheds Connected by Shed Roofs. (Remodeled & Sheds Added)	Lighting, Heating, Telephone	Same	
	SALVAGE HITS WAREHOUSE (Existing Sheds)	1	30 x 70 x 9	2,100	18,900	Wood Frame Gable Roof Building (One Room Added & Facilities)	Lighting Hine	Same	
	MISCELLANEOUS WAREHOUSE	1	24 x 100 x 18	2,400	28,400	Wood Frame, Gable Roof Building	None	Sheep Ranch	
	DOG POUND (Existing Barn)	1	24 x 24 x 20	840	18,000	Concrete and Wood Frame Building (Concrete Floor, Pans & Facilities Added)	Lighting, Heating	1/2 Miles W. of Hanford	
	<u>MACHINE GUN RANGE</u>								
TC 10	CLUB HOUSE	1	40 x 72 x 11	2,880	21,680	Wood Frame, Gable Roof Building, Gypsum Board Siding	Lighting, Water, Heating	At North Slope of Gable Mt. Opposite Radio Tower	
	PISTOL RANGE	1	200 x 250	80,000	---	Oiled Gravel & Sand Rolled Surface	Target and Stands	Same	
	MACHINE GUN RANGE	1	200 x 250	80,000	---	Same as Above	Moving Targets	Same	
	TUMBY GUN RANGE	1	200 x 200	40,000	---	---	Same	Same	
	<u>HANFORD HOUSING WAREHOUSE AREA</u>								
TC 10	FURNITURE WAREHOUSES	5	36 x 200 x 10	7,200	72,000	Wood Frame Gable Roof Bldg. Covered with Sisal-Draft Paper	None	West of 101 Bldg. White Bluffs Road	
	FURNITURE WAREHOUSES	7	16 x 80 x 8	1,280	10,240	Wood Frame Gable Roof, Canvas Covered	None	Same	
	FURNITURE OFFICE	1	12 x 16 x 9	192	1,728	Wood Frame Gable Roof Building	Telephone, Lighting, Heating	Same	
	<u>HANFORD CAMP AREA</u>								
TC 10	CARPENTER ORIENTATION BUILDING	1	20 x 120 x 10	2,400	24,000	Wood Frame Gable Roof, Prefab. Building	Lighting, Heating	West 4th Street	
	DIVISION LAUNDRY & SAFETY OFFICE	1	18 x 48 x 10	768	7,880	Prefab., Wood Frame, Gable Roof Bldg.	Lighting, Heating and Telephone	West 2nd Street	
	PATROL & TRAFFIC HUT	1	16 x 40	640	5,760	Pacific Hut	Lighting, Heating and Telephone	East of N.R. Station-Hanford	
	SAFETY SHOE STORAGE BUILDING	1	20 x 96 x 10	1,920	19,200	Wood Frame, Gable Roof, Prefab., Building	Same	Same	
	TRAIN CREW HUT	1	16 x 40	640	5,760	Pacific Hut	Same	Same	
	UTILITY CRAFT SHOPS	4	40x 80	12,800	200,960	Butler Sheet Metal & Steel Frame Huts	Lighting, Power, Steam Heat, Water, Telephone	"A" Ave. & 1st Street	
	SUPT. HANFORD CAMP OFFICE	1	16 x 48 x 9	768	6,912	Wood Frame, Gable Roof, Prefab., Bldg.	Lighting, Heating, Telephone	"A" Ave. & 2nd Street	
	DIVISION ENGRS. STORAGE HUT	1	16 x 80	1,280	11,520	Pacific Hut	Lighting	By Bolin's Office	
TC 10	FIRE INSPECTION DEPT. BUILDING	1	16 x 40 x 10	640	6,400	Wood Frame, Gable Roof Prefab., Building	Lighting, Heating, Telephone, Air Cooling and Water	"B" Avenue & 1st Street	
	RED CROSS HUTMENTS	2	1-16x 48 x 10 1-16 x 64 x 10	1,792	17,920	Wood Frame Gable Roof Prefab., Buildings	Lighting, Heating	1- 3rd St. West 1- 1st. Between B & C Ave.	

SHEET 4 OF 12 SHEETS

# BUILDING LIST - TEMPORARY CONSTRUCTION

AREA WIDE - OUTSIDE SPECIFIC AREAS

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION	
TC 10	RADIO TRANSMITTER HOUSE	1	16 x 20 x 10	320	3,200	Wood Frame, Gable Roof Building	Lighting, Heating, Telephone, Radio Transmission Equipment	Gable Mountain	
	INSTRUMENT WAREHOUSE	1	80 x 76 x 10	2,280	22,800	Wood Frame, Shed Roof Bldg., Post & Girder Construction, Gypsum Board Siding	Lighting	A - Avenue - Hanford	
	INSTRUMENT BUILDING	1	80 x 80 x 30 x 70 & 17 x 10 Clg. Ave. 12'	8,270	78,240	Wood Frame, Gable Roof Bldg., Post & Girder Const. Lean-To attached to E. Side Gypsum Sldg	Lighting, Steam Heat, Water, Telephone, Toilet & Washroom Facilities	A - Avenue - Hanford	
	BOYS' WORK HUT	1	16 x 40	640	6,760	Pacific Hut	Lighting, Heating	West 3rd Street	
	OLYMPIC COMMISSARY OFFICES	8	4 - 16 x 80 2 - 16 x 40 1 - 22 x 48 1 - 16 x 64 x 10	8,120 2,112 1,056 1,024	44,080 11,628 9,120 10,840	8 - Pacific Huts 1 - Butler Sheetmetal Hut Sams 1 - Wood Frame, Gable Roof Prefab., Bldg	Lighting, Power, Telephone, Water, Air Cooling, Heating	B-Avenue & 2nd Street	
	AMERICAN RAILWAY EXPRESS OFFICE	1	46 x 96 x 10	1,536	18,360	Wood Frame, Gable Roof, Prefab., Bldg.	Lighting, Heating, Telephone	On West 2nd Street	
	SAFETY OFFICES & EQUIP. STORAGE HUTS	3	16 x 40	1,920	17,280	Pacific Huts	Lighting, Air Cooling, Telephones	Division St. & A-Avenue	
	BOYS' WORK HUTS	2	22 x 48 (1) 16 x 40 (1)	1,698	14,880	1 - Pacific Wood 1 - Butler Sheet Metal	Lighting	In School Yard	
	WAC POST EXCHANGE	1	16 x 40	640	2,760	Pacific Hut	Lighting, Heating, Water, Toilet & Washroom Facilities	1st & B-Avenue	
	COAL TIPPERS	2	16 x 22 x 32 High	704	---	Concrete Foundation, Wood Frame, Elevated Bunker	None	1 - At Hanford 1 - At Rickland	
	HANFORD FERRY	1	---	---	---	2 - Ferry Docks, Railings, Fence & Guard Post Buildings	Lighting	At Hanford	
	TRUCK SCALE & COAL HOUSE	1	8 x 10 x 7	80	560	Wood Frame, Shed Roof Building	1 - 30 ton Pit Truck Scale	"D" Avenue & West 5th St.	
	CHEMICAL STORAGE WAREHOUSE	1	80 x 80 x 10	1,800	18,000	Wood Frame, Shed Roof, Post & Girder Construction with 8' leading Platform on South & East Sides	Heating	Honey Hill on Road 4-W Mile 2	
	CAN STREAM PLATFORM	1	60 x 20 x 4' High	1,200	---	Wood Frame Decking	Steam	Same	
	PLATFORMS	2	18 x 20 x 4' High	640	---	Sams	None	Same	
	UTILITIES DIVISION ENGINEER'S OFFICE	1	2 Wings - 16 x 48 x 10 & 1 Corridor - 16 x 32 x 10	2,816	28,160	3 - Wood Frame, Gable Roof Prefab., Bldg. Connected by Gamber Corridor	Lighting, Steam Heating, Water, Toilet & Washroom Facilities, Telephones	A-Ave. North of Admin. Bldg.	
	WATER SANITATION LOT	1	800' x 180'	30,000	---	Stabilized & Enclosed by Type #1 Fence	Water, Lighting	A-Ave. & 5th Street	
	TC 10	WOOD PLATFORM FOR BARRELS	1	40 x 40	1,600	---	Wood Platform Laid on Stringers	Water	A-Ave. & 5th Street
		OFFICE	1	12 x 16 x 8	1,536	12,288	Wood Frame, Shed Roof	Lighting	Same
		ICE HOUSE	1	14 x 16 x 10	224	2,240	Wood Frame, Gable Roof - 8' Above Ground	Lighting	Same
	GARRAGE CAN STREAMING BED	1	30 x 30 x 12	900	10,800	Wood Frame, Open Shed Platform Building	Steam, Water, Lighting	At #8 Settling Basin Hanford Camp - A - Avenue	
	TIE CAN SALVAGE SHED	1	40 x 16 x 10	640	2,400	Sams	Steam	Same	
	TIE CAN SALVAGE YARD	1	80 x 120	6,800	---	Stabilized & Closed by Type #2 Fence	None	Division Engineer's Office	
	JANITORS' HUTMENT	1	16 x 40	640	6,760	Pacific Hut	Lighting	West of Div. & A-Avenue	
	YOUTH ACTIVITY WORK HUTS	2	22 x 48	2,112	16,840	Butler Sheet Metal Mission Type Huts	Lighting, Heating	Same	
	BATH HOUSE	1	40 x 100 x 10	4,000	40,000	Wood Frame, Shed Roof Bldg. Post & Girder Construction, Concrete Floor, Partial Roof	Water, Showers, Shelving	Water Replenishing Basin	

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## BUILDING LIST - TEMPORARY CONSTRUCTION

AREA WIDE - OUTSIDE SPECIFIC AREAS

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION	
TC 10	SUN SHELTERS	2	30 x 30 x 9	1,800	16,200	Wood Frame Construction, Sisal Kraft Paper Roof	None	Water Replenishing Basin	
	CHLORINATOR HOUSE	1	12 x 18 x 8	144	1,162	Wood Frame Shed Roof Bldg.	Chlorinator	Same	
	HOSPITAL EQUIPMENT HUTS	2	16 x 40	1,280	11,620	Pacific Huts	None	East of Convalescent 1 - 5th & B Avenue	
	RATION OFFICE	1	16 x 40	640	8,760	Same	None	8th & C Avenue	
	GARBAGE DISPOSAL PLATFORMS	8	(2 - 16 x 30 (2 - 20 x 20 (1 - 30 x 30	2,340	---	Wood Frame & Decked - 4' High	Lighting, Steam	East of Hanford Camp	
	LINDBERGH'S BARRACKS	7	22 x 48	7,392	63,640	Butler Sheet Metal Hut	Lighting, Heating	Midway Substation	
	TC 10	MISCELLANEOUS SHACKS, TOOL BOXES, ETC., NOT INCLUDED ON OTHER LISTS							
TC 10	FIELD OFFICES	8	4 x 6 x 8	120	960			Area Wide	
		10	8 x 6 x 8	360	3,680			Same	
		1	8 x 6 x 10	36	360			Same	
		1	8 x 8 x 8	48	384			Same	
		40	8 x 10 x 8	8,200	26,600			Same	
		10	8 x 12 x 8	960	7,680			Same	
		10	10 x 12 x 8	1,200	9,600			Same	
		1	10 x 14 x 8	140	1,120			Same	
		1	10 x 18 x 8	180	1,280			Same	
		1	12 x 12 x 8	144	1,152			Same	
		1	18 x 20 x 7	320	2,240			Same	
		10	8 x 10 x 8	800	6,400			Same	
		CLOCK ALLEYS	10	8 x 10 x 8	800	6,400			Same
		TOOL BOXES	329	4 x 7 x 4	4,200	16,800			Same
		TOILETS	167	8 x 10 x 8	10,960	87,680			Same
			30	4 x 4 x 8	480	3,840			Same
		GREASE RACKS	2	18 x 24 x 8	384	2,304			Same
	ICE BOXES	26	4 x 6 x 6	600	3,600			Same	
TC 12	EMPLOYEES' RECREATIONAL FACILITIES								
	BASEBALL DIAMONDS	2	350 x 350	246,000	---	1-Grass Diamond & Bleacher Enclosed By Type #2 Fence 1 Compacted Earth	Wood Bleachers, Backstop, Water, Flood Lighting, Soft Drink Stand Backstop	6th and "D" Avenue 6th and "B" Avenue	
	SOFT BALL DIAMONDS	9	(4 - 650 x 850 (4 - 350 x 600 (1 - 300 x 250	837,600	---	Compacted Earth	Backstop	SW Corner Main Trailer Camp	
	TENNIS COURTS	4							
	OUTDOOR BASKETBALL COURTS	6	60 x 100	30,000	---	Compacted Earth	Back Board	Athletic Field Hanford Camp Area	
	HORSHOE COURTS	144					Same	Hanford Camp Area	

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## BUILDING LIST - TEMPORARY CONSTRUCTION

AREA WIDE - OUTSIDE SPECIFIC AREAS

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 12	PICNIC GROUND	1	Approx. 3 Acres			---	Tables, Benches, Fire-Places, Toilets, Water Barrels	N. Bank Columbia River 1 Mile N. of Ferry Landing
	BATHING BEACH	1	100 x 150	15,000	---		Wood Walkway & Floats	On Columbia River W. of P. P. & L. Lgt. Co. Substation
	LIBRARY	1	20 x 48 x 10	960	9,600	Wood Frame, Gable Roof Prefab., Sldg.	Lighting, Steam Heat	4th Street West
	COMMUNITY BUILDING (Rehab. Masonic Hall)	1	30 x 90 x 18	1,800	27,000	Concrete Slab, Conc. Basement & Foundation Wood Frame, Gable Roof	Lighting, Heating, Water, Cooking Pas., Toilet & Washroom Facilities	Same
	RECREATION HALLS	2	(2 - Wings 50 x 147 x 11 & 50 x 48 x 11 (Fav. 50 x 120 4-Wings 50 x 142 x 11 & 50 x 28 x 11 (Fav. 50 x 60	10,200 8,000 19,200 8,000	112,200 ---	Women's Barracks 11-A & B Converted With Conc. Dance Pavilion, Between Wings Colored Men's Barrack 201 Converted with Conc. Dance Pavilion Between Wings	Power, Light, Air Cooling, Water, Steam Heat, Telephone, Toilet & Wash Room Pas.	Same
TC 14	<u>HANFORD AIRPORT</u>							
	RUNWAYS	2	1-400 x 2400 1-400 x 4000	480,000 800,000	---	Oiled Gravel and Sand-Balled 8" Thick, Field Enclosed by Type #4 Fence	Gas Pump and Storage Tanks, Power	1-Mile West of Hanford
	HANGARS	2	16 x 40 & 12 x 12 (10' Hg.)	1,280	15,680	Wood Frame, Open Shed, T-Shaped	None	Same
	OFFICE	1	16 x 40 x 8	640	5,760	Pacific Mt	Lighting, Heating	Same
TC 15	<u>PLANT WIDE STEAM LINES &amp; BOILER HOUSES</u>							
	NO. 1 BOILER HOUSE	1	48 x 52 x 48 8 x 8 x 48 & 8 x 12 x 48	2,884	124,208	4-Story Wood Frame & Truss Roof Bldg. Conc. 1st & Operating Floor, Wood Sheeting Covered With Tar Paper	Lighting, Power, Water, Telephone, Heating, Toilet & Washroom Facilities, 2-550 HP -S- Drum Boilers & Necessary Equip. 2-64,000 Gal. Elev. Wood Stave Water Storage Tank, 1-48" Ø Sheet Iron Stack	Hanford Camp
	2 - STACK BOILER HOUSES	2	30 x 98 x 18 & 16 x 98 x 8	12,240	254,280	Wood Frame Shed Roof Bldg., Post & Girder Concrt. System Board Siding, Conc. Equip. Foundations, With Wood Ramp & Coal Runner Along One Side, 12-100 H.P. H.R.T. Boilers & Wood Stave Water Storage Tank	Lighting, Water, Power, Steam, 2-100 HP H.R.T. Boilers	Hanford Camp
	7 - STACK BOILER HOUSES	2	20 x 28 x 18 & 10 x 70 x 8	2,680	22,280	Same	Same - 7-100 H.P. Boilers	Hanford Camp
	6 - STACK BOILER HOUSES	7	20 x 78 x 18 & 10 x 60 x 8	14,700	221,200	Same	Same - 6-100 H.P. Boilers	Same
	8 - STACK BOILER HOUSES	2	20 x 48 x 18 & 10 x 30 x 8	2,400	48,000	Same	Same - 2-100 H.P. Boilers	1-101 Building 1-Hanford Camp
	1 - STACK BOILER HOUSE	1	40 x 48 x 18 & 10 x 20 x 8	2,160	20,080	Same	Same - 2-200 H.P. Boiler	Hanford Camp
TC 16	BOILER HOUSE	1	12 x 14 x 12	168	2,016	Wood Frame, Shed Roof Sldg.	1-25 H.P. Boiler, Steel & Wood, Water Storage Tanks	Heavy Hill, Route 48 N.E.
	BOILER HOUSE	1	18 x 24 x 12	432	5,184	Wood Frame Gable Roof Sldg.	1-25 H.P. Vertical Boiler & Steel Water Storage Tanks	
	STEAM LINES	4,680' 12,500' 27,720' 47,700' 24,080' 20,700'	10" 8" 6" 4" 3" 2"			Welded & Flanged, SCH 40 Steel Pipe on Concrete Wooden Pipe Supports With Expansion Joints & Traps. Covered With Air Cell & Magnesia Insulation	None	Hanford Camp Area
	TELEPHONE LINES	4 4	Highland Oliver			Enclosed Lead Cable, Open Iron Wire & Isolated Pair	Approx. 276 Telephones & Single Lines with Approx. 2000 Extensions, Usually Operated Switch Boards	Hanford Camp

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RECORD

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**BUILDING LIST - TEMPORARY CONSTRUCTION**

AREA WITH - OVERSIC SPECIFIC AREA

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 14	TELEPHONE LINES	4 2 2 2 15 5 20	Spruce Spruce Pine Maple Banford Cold Creek Total Frank Lines			(See Previous Page)	(See Previous Page)	Banford Camp
TC 17	TELEPHONE REPAIRER STATION	1	8 x 8 x 8	64	512	Concrete and Concrete Block	Lighting, Telephone Equipment	300 Area
TC 20	ADMINISTRATION & OFFICER QUARTERS	1	30 x 120 x 10	3,600	36,000	Wood Frame, Gable Roof Prefab., Bldg., Drop Siding	Heating, Steam, Water, Telephone, Lighting, Toilet & Washroom Facilities	Columbia River Camp
	INFIRMARY & OFFICER QUARTERS	1	30 x 120 x 10	3,600	36,000	Same	Same	Same
	RECREATION BUILDING (PREFAB.)	1	30 x 120 x 15	3,600	40,000	Same	Heating, Lighting, Water	Same
	BARRACKS	5	20 x 120 x 10	12,000	120,000	Same	Heating, Lighting, Water, Toilet & Washroom Facilities	Same
	BARRACK HUTS (60')	4	16 x 120	1,920	17,280	Pacific Huts	Same	Same
	TRUCK BARRACKS	5	20 x 20	2,000	---	Wood Floor & Side Walls, Pyramidal Canvas Walls	Lighting, Heating	Same
	MESS HALL AND SUPPLY ROOM	1-Shell 1-Shell	20 x 120 x 10 20 x 120 x 10	7,200	72,000	H-Shaped Wood Frame Gable Roof Prefab., Bldg., Drop Siding Conn. Floor in Kitchen	Lighting, Power, Water, Heating, Steam	Same
	BOILER HOUSE	1	10 x 14 x 10	140	1,400	Wood Frame, Shed Roof Building	Water, Lighting	Same
	PUMP HOUSE	1	10 x 20 x 8	200	1,600	Wood Frame, Shed Roof Building	Power, Lighting, Water	Same
	ELEVATED STORAGE TANKS	2	1-6,000 Gal. 1-1,000 Gal.			Wood Stave Tanks and Wood Frame Towers	Water	Same
	GARAGE & STORAGE SHED	1	20 x 120 x 15	2,400	21,200	Wood Frame, Gable Roof Prefab., Bldg.	Lighting	Same
	CARPENTER & WOOD SHOP (PREFAB.)	1	20 x 80 x 10	1,600	16,000	Same	Lighting, Power, Heating	Same
	OFFICERS' RESIDENCES	12	22 x 48	12,072	100,640	Sheet Metal Butler Huts	Water, Light, Heat, Power, Toilet & Washroom Facilities	Same
	PREFABRICATED HOUSES	10	24 x 24 x 8	5,760	46,080	2-Section Plywood Houses, Flat Roof Wood Foundations	Lighting, Electric Heating, Water, Plumbing, Furniture	Same
	RECREATION BLDG. FOR RES.	1	16 x 40	640	2,760	Pacific Hut	Lighting, Heating	Same
<p>NOTE: THE ABOVE BLDGS., ELECTRICAL MATERIAL, PIPING, EQUIPMENT &amp; MATERIAL FOR FACILITIES WAS FURNISHED BY DU PONT. ALL LABOR INVOLVED IN CONSTRUCTION WAS FURNISHED ON A SEPARATE CONTRACT BY THE GOVERNMENT.</p>								

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## BUILDING LIST - TEMPORARY CONSTRUCTION

HANFORD CAMP AREA

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION	
TC 4.8	ELECTRIC LINES	2,300'	#4/0 Copper Wire			Single Pole, Pin Insulation, Configuration 3-Wire Const. Carrying 60,000 Volts		Hanford Camp	
		123,700'	#2 Copper Wire			Single Pole, Single Cross Arm, Pin Insulator Const. Carrying 8900 V		Same	
		68,200'	#4 Copper Wire			Single Pole, Single Cross Arm, Pin Insulator Const. Carrying 2300 V		Same	
		120,200'	#6 Copper Wire			Single Pole, Single Cross Arm, Pin Insulator Const. Carrying 8900 V or 220/110 V	Road and Fence Lights	Same	
	NOTE: THE ABOVE TOTAL ONLY INCLUDES FINAL INSTALLATION AT HANFORD CAMP.								
	SEWER, SEPTIC TANKS & SEWERAGE TREATMENT PLANTS								
		SEWER LINES	2,060'	30" Ø			Vit. Clay & Cons. Pipe with Cons. Joints	Manholes	Hanford Camp
			2,800'	24" Ø			Same		Same
			4,000'	18" Ø			Same		Same
			16,750'	18" Ø			Same		Same
		21,860'	12" Ø			Same		Same	
		28,480'	10" Ø			Same		Same	
		23,400'	8" Ø			Same		Same	
		115,980'	6" Ø			Same		Same	
		2,000'	4" Ø			Same		Same	
	SEPTIC TANKS	13	14' x 32' x 8'	5,824	46,592	Type #1 Wood Frame & Sided Box with Baffles Buried 6" Below Ground Level	Barricades & Vents		
		8	18' x 44' x 10'	8,336	65,360	Type #2 Same	Same	Same	
		9	20' x 50' x 10'	9,000	90,000	Type #3 Same	Same	Same	
		2	8' x 18' x 8'	140	1,120	Type #4 Same	Same	Same	
		1	18' x 42' x 10'	756	7,560	Type #5 Same	Same	Same	
		18	14' x 34' x 10'	7,580	75,800	Type #6 Same	Same	Same	
		32	24' x 40' x 10'	46,080	460,800	Type #7 Same	Same	Same	
		3	13' x 22' x 8'	804	6,432	Type #8 Same	Same	Same	
	GREASE TRAPS	9	4' x 8' x 8'	288	1,728	Type #9 Wood Frame & Sided Box with Baffles Buried to Ground Level		At Mess Hall & Commissary Buildings	
		4	4' x 16' x 8'	256	1,536	Type #10 Same		Same	
	SEWERAGE LIFT SUMPS	3	6' x 6' x 10'	108	1,080	Wood Frame & Sided Box	Power, 3-Elec. Driven Sump Pumps		
	CHLORINATOR HOUSES	3				Wood Frame Gable Roof Building (Cons. & Wood Frame Box with Weirs & Mixing Baffles)	Lighting, Heating, Chlorinator	"A" Ave. betw. 4th & 10th St.	
	CHLORINE CONTACT TANKS	3	13' x 20' x 6'	260	1,300	Mixing Baffles	Chlorine Line	Same	
	SETTLING POND	3	80' x 230' x 4'	18,400		Open Basin Surrounded by Earth Dye, & Wood Outlet Boxes & Flumes	None	Same	
	SETTLING PIT	1	20' x 20' x 6'	400	2,400	Wood Frame box 1" Below Ground Level (Reinforced Open Cons. Pit Built Below)	None	Same	
	FLOCULATORS	3	18' x 36' x 20'	1,788	35,760	(Ground Level)	Light, Air, Flumes, Railings, Walkways	Same	
	FLOCULATOR HOUSES	3	8' x 8' x 8'	144	1,152	Wood Frame Gable Roof Bldg. Cypm. Bd. Siding	Power, Lighting, Air Compressor	Same	
TC 4.9	MISCELLANEOUS TC - HANFORD CAMP								
	MIS-6 WAREHOUSE (Existing Warehouse)	2	1-65 x 130 x 11 1-110 x 140 x 9	8,450 15,400	92,950 136,600	Wood Frame, Shed Roof Bldg. Post & Girder Constn. Partial Concrete Foundn. in Basement 9" Deep	Lighting, Heating, Telephone, Water Shelving, Miscellaneous Remodeling	N. of "A" Ave. near C. L. & N. Company	
	GAS STATION & OFFICES	4	1-Building Structure 18 x 24 x 10	588	3,880	2 Elec. Driven Pumps, Undergr. Storage Tanks 6 Elec. Driven Pumps, Undergr. Storage Tanks 1 Elec. Driven Pump, Undergr. Storage Tanks 1 W. Driven Pump, Undergr. Storage Tanks	Lighting, Water, Heating, Air, Power Same Same Same	Division Street & C-Ave. Bus Parking Lot Hanford Rec. & Unload Lot Major Equip. Storage Yard	

SHEET 10 OF 13 SHEETS

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# BUILDING LIST - TEMPORARY CONSTRUCTION

BARFORD CAMP AREA

CODE	NAME OF BUILDING	No. OF BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
	R. S. & LOAN PUB-PAK.	1	18 x 48 x 30	798	7,680	Wood Frame, Gable Roof, Pre-Pak. Bldg. (Existing Conn. Steel, Wood Gable Frame (Roof Bldg. Conn. 21mm-AA&A 48 x 90 Wood	Lighting, Telephone, Heating, Air Cooling, Water Lighting, Power, Water, Steam, Air.	Area - West of Div. Ward
	RAISED WARE & TIRE REPAIR	1	80 x 90 x 14	8,100	118,400	[Frame Gable Truss Roof, Gyp. M. Siding -	Heating, Telephone	Div. Mt. & A-Avenue
	RAIPOR	1	30 x 90	2,700	—	Wood Decking Laid on Stringers/ Conn. Fl.)	Lighting, Air	West Side of Garage
	REPAIR BATH BUILDING	1	30 x 90 x 14	3,800	88,900	Wood Frame, Shed Roof Bldg. Post & Girder Conn.	Lighting & Air	South of Barford Garage
	REPAIRING'S OFFICE	2	1 - 30' x 30' x 8' 1 - 38' x 30' x 8'	1,880	18,820	Wood Frame, Gable Roof, Gyp. Pl. Bldg. Wood Frame, Shed Roof Building	Lighting, Approx. Vent, Telephone Lighting, Heating, Telephone	Base Utility Office No. 1 Base Lot
	SAFETY & SANITARY OFFICE (Remov.)	1	22 x 40 x 18 x 24 x 10'	1,880	18,800	Wood Frame, Gable Roof Bldg. with Lean-to on North Side	Lighting, Heating, Telephone, Water, and Miscellaneous Remodeling	Division St. Below A-Ave.
	SEMI-OUTDOOR STORAGE (Remodeling)	1	18 x 20 x 11	380	8,980	Wood Frame, Gable Roof Building	Lighting, Heating, Telephone, Miscellaneous Remodeling	East 3rd Street
	SAFETY AND HYGIENE BLDG. (Remov.)	1	20 x 40 x 11	2,000	11,000	Wood Frame, Gable Roof Store Building	Lighting, Heating, Telephone, Toilet & Restroom Facilities, Shelving, Misc. Remodel	3rd Street
	SAFETY PERMIT OFFICE (Including U.S. Passenger Station)	1	28 x 40 x 14	4,208	22,780	Wood Frame Gable Roof Building	Lighting, Telephone, Water, Toilet & Restroom Facilities. (Gen'l Remodeling Work Only)	E. of M-4 Hwy.
	CELLULOSE STORAGE BUILDING	1	10 x 18 x 10	180	1,800	Wood Framing, Shed Roof, Open Sides	None	E. of M-4 Hwy.
	TIRE STORAGE BAY	2	12 x 48	2,112	18,960	Post, Sheet Metal, Various Type Sides	Lighting	E. of M-4 Hwy.
	SE-12 WAREHOUSE (Pre-Pak.)	1	18 x 68 x 8	828	798	Wood Frame, Gable Roof Pre-Pak. Bldg.	Lighting	Same
	BARFORD STORE & CHANG LOFT	1	180' x 18' x 8'	3,240	21,600	Wood Frame, Shed Roof Building	Lighting, Telephone, Heating	"A" Avenue
	CELLULOSE STORAGE BUILDING	2	24 x 10 x 12	720	8,640	Wood Frame, Shed Roof, Open Sides	None	At Barford Depot
	BARFORD TIRE OFFICE	1	18 x 30 x 10	540	4,800	Wood Frame, Shed Roof Bldg. Approx. Wood Siding	Lighting, Telephone, Heating	E.S. of Barford Depot
	PIPE SAFETY OFFICE	1	30 x 30 x 10	900	8,000	Wood Frame, Gable Roof, Gyp-Pl. Bldg.	Lighting, Heating	E. of Pipe Office
	BARFORD REC. & UNCL. ROOM	1	80' x 180' x 16'	9,600	188,000	Wood Frame, Gable Roof Bldg. Post & Girder Conn.	Lighting, Heating, Telephone, Water	E. of Barford Depot
	INDUSTRIAL WELD OFFICE	1	40' x 28' x 10'	880	8,800	Wood Frame, Gable Roof, Gyp-Pl. Bldg.	Lighting, Telephone, Heating	E.S. of Miller House #1
	DRILL STORAGE TANK	1	800 x 800	840,000	—	Stabilized Area	Wood Frame, Unloading Tractor, Flood Light	A-Avenue - Barford
	CARBON RECEIVING CONCRETE'S OFFICE	1	18 x 24 x 8	360	4,840	Wood Frame, Shed Roof Building	Heating, Telephone, Lighting	Same
	LIEBER'S OFFICE	1	30 x 30 x 11	600	6,600	Wood Frame, Gable Roof, Open Sides on Outside	Lighting, Heating, Telephone	Same
	MATERIAL STORAGE BAY	1	18 x 30	1,260	11,520	Paucity of	Lighting	Division Engineer's Office
	WIRE SHED	1	20 x 30 x 10	1,800	18,000	Wood Frame, Gable Roof, Open Sides	Benches	Barford Camp
TC 4-3	BEST METAL BAY	1	30 x 30 x 10	2,400	24,000	Wood Frame Bldg. Gable Roof, Post & Girder Construction	Power, Lighting, Heating	E. of Miller House #1
	SCALES BAY	1	20 x 30 x 8	600	7,800	Wood Frame, Gable Roof	Lighting, Heating, Purge	Same
	MACHINE SHOP STORAGE PLATFORM	1	80 x 100	8,000	—	Wood Material Storage Platform	—	—
	WELLSHOOT BAY	1	24 x 30 x 8	360	6,640	Wood Frame, Shed Roof Building	Lighting, Power, Heating	Same
	MACHINE SHOP	1	80 x 30 x 11	2,640	28,000	Wood Frame, Lean-To Roof Building on West Side, Shed Part of Existing Bldg. Conn. Foundations & Floor Slat	Power, Lighting, Heating, Water	Same
	MILLER SHOP (RETIRED)	1	50 x 70 x 11	3,850	34,850	Wood Frame, Gable Roof Bldg. Dimple Floor	Power, Lighting, Telephone, Heating, Purge, Water, Air	East of Utility Office

SHEET 11 OF 13 SHEETS

# BUILDING LIST - TEMPORARY CONSTRUCTION

HANFORD CAMP AREA

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
	EQUIPMENT STORAGE BUILDING	3	10 x 18 x 8 20 x 24 x 8 10 x 14 x 8	780	8,240	Wood Frame, Shed Roof Building	Lighting	E. of Boiler Repair Shop
	UTILITY STORAGE BUILDINGS	3	1-15 x 60 x 8 1-30 x 64 x 10 1-18 x 30 x 8	3,300	31,140	Wood Frame, Shed Roof Bldg. Larger Bldg. Open on One Side	Lighting & Power	North of Utility Shops
	RAW SHELTERS	7	12 x 20 x 8	1,680	13,440	Wood Frame, Gable Roof, Open Shed Bldg.	Lighting & Power	Lumber Fab. Yard, E. of "A" Avenue
	LUMBER FAB. & STORAGE YARD	2	1-500 x 800 1-300 x 1000	480,000	---	Stabilized	Railroad Spur, Flood Lighting, Telephone	E. of "A" Avenue
	SAFETY EQUIP. STORAGE BUILDING (Rehab. Rec.)	1	14 x 20 x 14	280	2,920	Wood Frame, Gable Roof, 2 Story Bldg.	None - Minor Remodeling	West 3rd Street
	TEMPORARY CONCRETE PLANT	1	No Building Structure 300 x 300	40,000	---	Stabilized Area	Water, Steam, 2 Mobile Concrete Mixers	E. of Evaporation Bldg.
	GARAGE ( CONCRETE TRUCKS )	1	20 x 20 x 12	600	7,200	Wood Frame, Shed Roof Bldg. One Side Open	Lighting	Same
	DIVISION ENGINEER'S OFFICE HANFORD CAMP (Rehab. Rec.)	1	32 x 40 x 20	1,280	28,600	2-Story Wood Frame, Gable Roof Bldg. with Concrete Foundations and basement	Lighting, Telephone, Heating, Water, Toilet and Washroom Facilities, General Remodeling Work	7th and "E" Avenue
	AREA LABOR OFFICE (Rehab.)	2	18 x 32 x 10	576	6,780	Wood Frame, Gable Roof Bldg.	Lighting, Heating, Telephone	7th Street and "E" Avenue
	HANFORD MAJOR EQUIPMENT GARAGE & OFFICE	2	1-50 x 20 x 12 1-12 x 14 x 8	1,192	13,536	Wood Frame, Shed Roof Bldg. Open Front Wood Frame, Gable Roof Bldg.	Lighting, Power, Telephone	4th Street and "C" Avenue
	MAIN CLOCK ALLEY	1	108' x 15' x 9'	1,620	18,800	Wood Frame, Gable Roof Partially Open Shed Bldg.	Lighting, Heating	"A" Avenue
	ORIGINAL MAIN CLOCK ALLEY	1	180 x 20 x 10	3,600	24,000	Same as Above	Same	"B" Avenue
	TEMPORARY CLOCK ALLEYS	4	8 x 30 x 9	960	8,640	Same as Above	Same	Hanford Camp
	EXCAVATION EQUIPMENT OFFICE	1	18 x 18 x 8	192	1,536	Wood Frame Shed Roof Building	Lighting, Heating, Telephone	Near Tennis Courts
	ORIGINAL PIPE SHOP	1	20 x 60 x 10	1,200	12,000	Wood Frame, Gable Roof Building	Lighting, Power, Heating	"A" Avenue
TC 4.8	ORIGINAL BLACKSMITH SHOP	1	40 x 20 x 10	2,000	20,080	Wood Frame, Shed Roof Bldg. Post & Girder Const.	Lighting, Forge	"A" Avenue
	CARP. & LARCH CRAFT OFFICE (REHABILITATED)	1	12 x 20 x 9	360	2,240	Gable & Shed Type Roof Bldg.	Lighting, Heating, Telephone, Gen. Remodeling	5th Street
	ELECTRICAL SHOP (REHAB.)	1	30 x 38' x 10' Ave.	1,140	11,400	Wood Frame, Gable Roof Bldg. with Lean-To Attached to South Side	Lighting, Heating, Telephone, 18' x 30' Lean-To Added to South Side	E. of Carp. Orientation Building
	U.S. ENGINEERS FIELD OFFICE (REHABILITATED)	1	22 x 42 x 10	824	2,240	Wood Frame, Gable & Shed Roof Building	Lighting, Heating, Telephone, Water	1st & B Avenue
	AREA PIPE SHOP	1	24 x 24 x 10	576	5,840	Wood Frame, Open Shed	Power Lighting	1st St. & "B" Avenue
TC 4.10	FIRE STATION	1	50' x 140' x 14'	7,000	68,000	Wood Frame, Gable Roof Bldg. Lean-To Along E. Side, Concrete Floor, Gypsum Board Side & Base Tower	Lighting, Telephone, Steam Heat, Power, Water, Air Cooling, Toilet & Washroom Facilities, & Cooking Facilities	Same
	FIRE TRUCK STORAGE GARAGE	1	50' x 70' x 12'	3,500	42,000	Wood Frame, Gable Roof & Post & Girder Construction, Concrete Floor, Gypsum Board Siding	Lighting, Heating, Water	Same
	EQUIPMENT STORAGE HUTS	2	22 x 24	5,000	25,280	Butler Mason Type Sheet Metal Huts	Steam Heating Water, Air Cooling, Light	Same
	EQUIPMENT STORAGE BUILDING	1	14 x 20 x 8	320	2,480	Wood Frame, Shed Roof Building	Lighting	Same

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**BUILDING LIST - TEMPORARY CONSTRUCTION**

HANFORD CAMP AREA

CODE	NAME OF BUILDING	No. Of BUILDINGS	SIZE	AREA Sq. Ft.	VOLUME Cu. Ft.	TYPES OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 4.11	SCHOOL BUILDING (EXISTING GRADE AND HIGH)	1	151'0" x 55'0" x 24'	8,092	215,408	Stucco & Concrete Building	Lighting, Steam Heat, Telephone, Water, Ventilation, Toilet & Washroom Facilities Miscellaneous Remodeling	MacArthur & "A" Avenue
	ANNEX (TO ABOVE) (EXISTING)	1	60 x 60 x 14	3,600	80,400	Reinforced Concrete & Brick	Lighting, Power, Steam Heating Plant	Same
	SCHOOL BLDG. #1 - 8 CLASSROOMS	1	175'0" x 55'0" x 12'	8,972	119,664	Wood Frame, Gable Roof Bldg. Post & Girder Construction, Gypsum Board Siding	Lighting, Steam Heating, Water, Ventilation, Toilet & Washroom Facilities, Power	Same
	SCHOOL BLDG. #2 - 4 CLASSROOMS	1	115'0" x 55'0" x 12'	6,676	80,112	Same as Above	Same	Same
	WAR PRODUCTION WELDING SCHOOL	1	55 x 55 x 15	1,572	24,336	Wood Frame, Gable Roof, Post & Girder Construction, Gypsum Board Siding	Lighting, Power	D-Avenue & 5th Street
	DAY NURSERY (REHABILITATED)	3	1-34' x 40' x 12' e.l.g. 1-36' x 34' x 18' ave. e.l.g. 1-34' x 50' x 12' e.l.g.	3,456	48,248	Wood Frame, Gable Roof Building, Concrete Foundation & Basement	Lighting, Heating, Water, Toilet & Washroom Facilities, Telephone, General Remodeling	Same
TC 4.11	DAY NURSERY HUT	1	18' x 40' x 10'	640	6,400	Pacific Hut	Lighting	E. of Day Nursery on A-Ave.
TC 4.11	LOCOMOTIVE & SCALER REPAIR SHOP (ADDITION #2)	1	175' x 70' x 18'	12,250	220,600	Wood Frame, Truss Supported, Shed Roof Bldg. Lean-To Along N. Side, Post & Girder Construction, Gypsum Board, Concrete Floor	Lighting, Power, Steam & Steam Heating, Air & Water, Monorail, Vent., Rails & Pits Telephones	2nd St. & "A" Avenue
TC 4.11	PUBLIC ADDRESS SYSTEM	33	Mountings			4 - Speaker per mounting Twisted Pair Lines	Power	Area wide

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300 AREA

Process Buildings

<u>Building No.</u>	<u>Name</u>
301	Storage & Fabrication Building
301-A	Paint Shop
303	9 Fresh Metal Storage Magazines
* 304	Chemical Storage Building
306	Pile Building
313	Metal Fabrication Building
314	Press Building
316	Process Waste Disposal Trench
321	Separation Building
361	Two Primary Substations
363	Transfer Platforms
382	Reservoir and Pump House
384	Heating Plant

\* Later dismantled.

Outside Electrical Facilities

3501	Fence and Road Lighting
3503	Outside Transmission Lines (including poles and hardware)
3505	Fire Alarm System
3506	Telephones and Telephone Cable

General Facilities

3601	Standard Gauge Railroad Track
3603	Roads and Walks
3605	Fence, including 4 Guard Towers

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General Facilities (Continued)

<u>Building No.</u>	<u>Name</u>
3613	Permanent Parking
3614	General Monitoring Stations
3621	Three Emergency Generator Shelters

Service Buildings

3701	Gate House
3704	Supervisors' Office
3706	Laboratory
3706-A	Air Conditioning Equipment Building
3707-A	Change House and Patrol Headquarters
3707-B	Change House
3709	Fire Headquarters
3715	Receiving Storeroom
3716	Fuel Pump
3717	Instrument Shop
3719	First Aid Building
3722	Two Area Shops
3726	Propane Storage Building
3734	Two Cylinder Storage Buildings
3741	Box Storage Building
3745	Standards Building
3746	Control Building

Outside Overhead Pipe Line

3801	Pipe Supports
3802	Steam Lines

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Outside Overhead Pipe Line (Cont'd.)

Building No.

Name

3803

Air Lines

Outside Underground Pipe Lines and Facilities

3901

Water Lines

3902

Fire Lines (including one elevated tank)

3903

Sanitary Sewer Lines

3904

Process Sewer Lines

3905

Wells and Pumps

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**LEGEND**

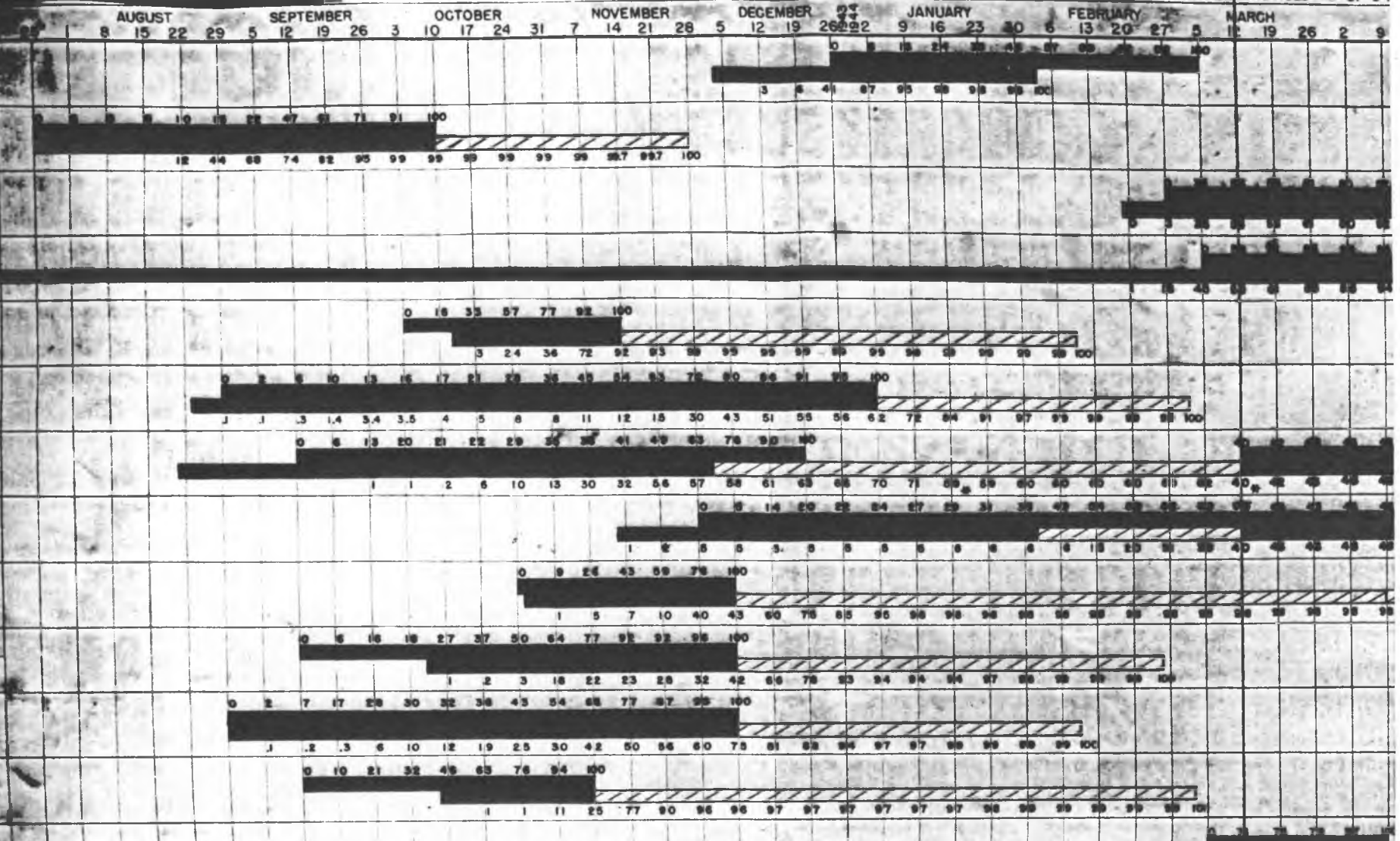
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PROGRESS SCHEDULE.

PERCENTAGE FIGURE INDICATE ACTUAL  
PROGRESS SCHEDULE.

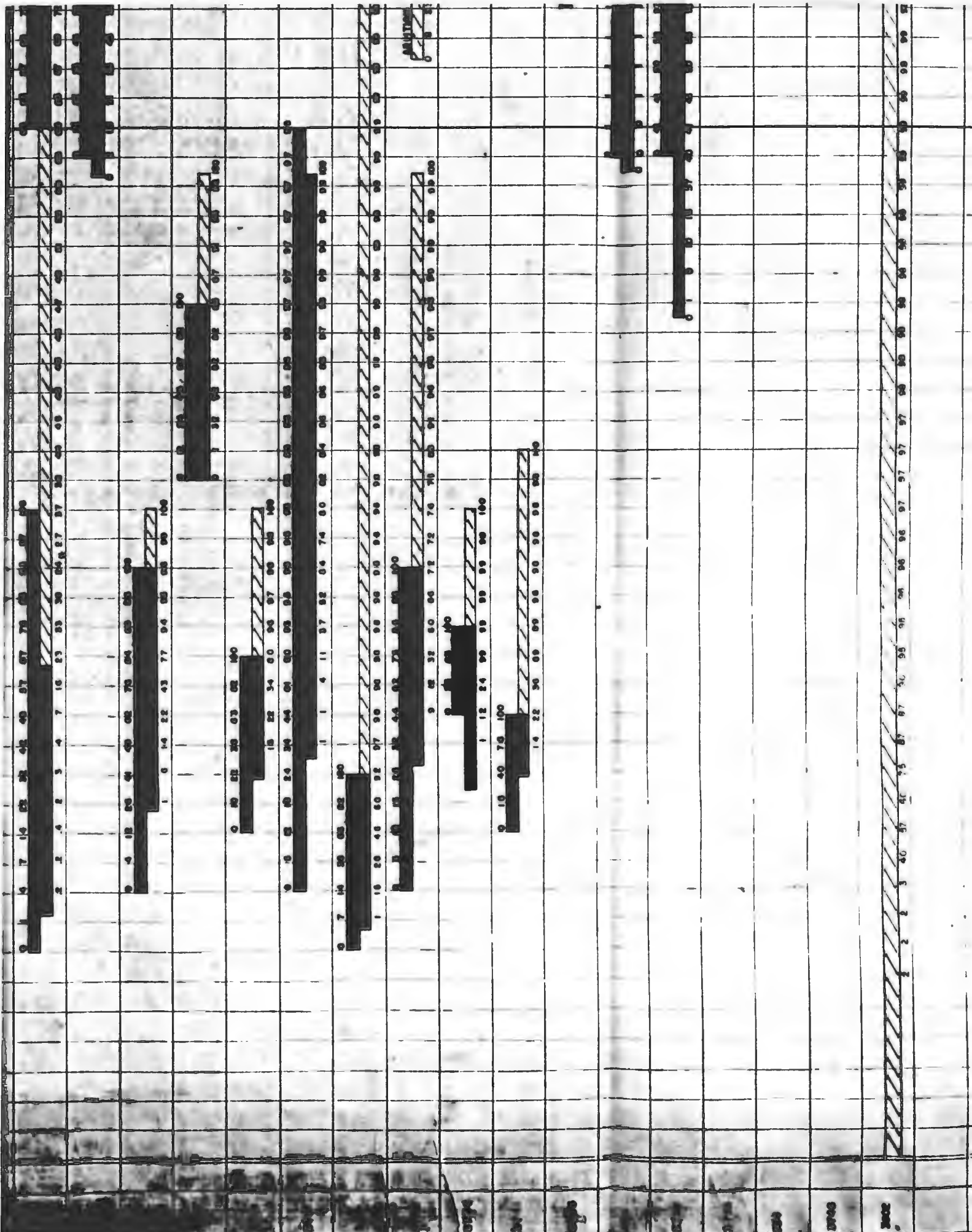
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DIVIDED SCHEDULED PROGRESS.

BUILDINGS AND A

ORIGINAL | REVISED AS OF 34







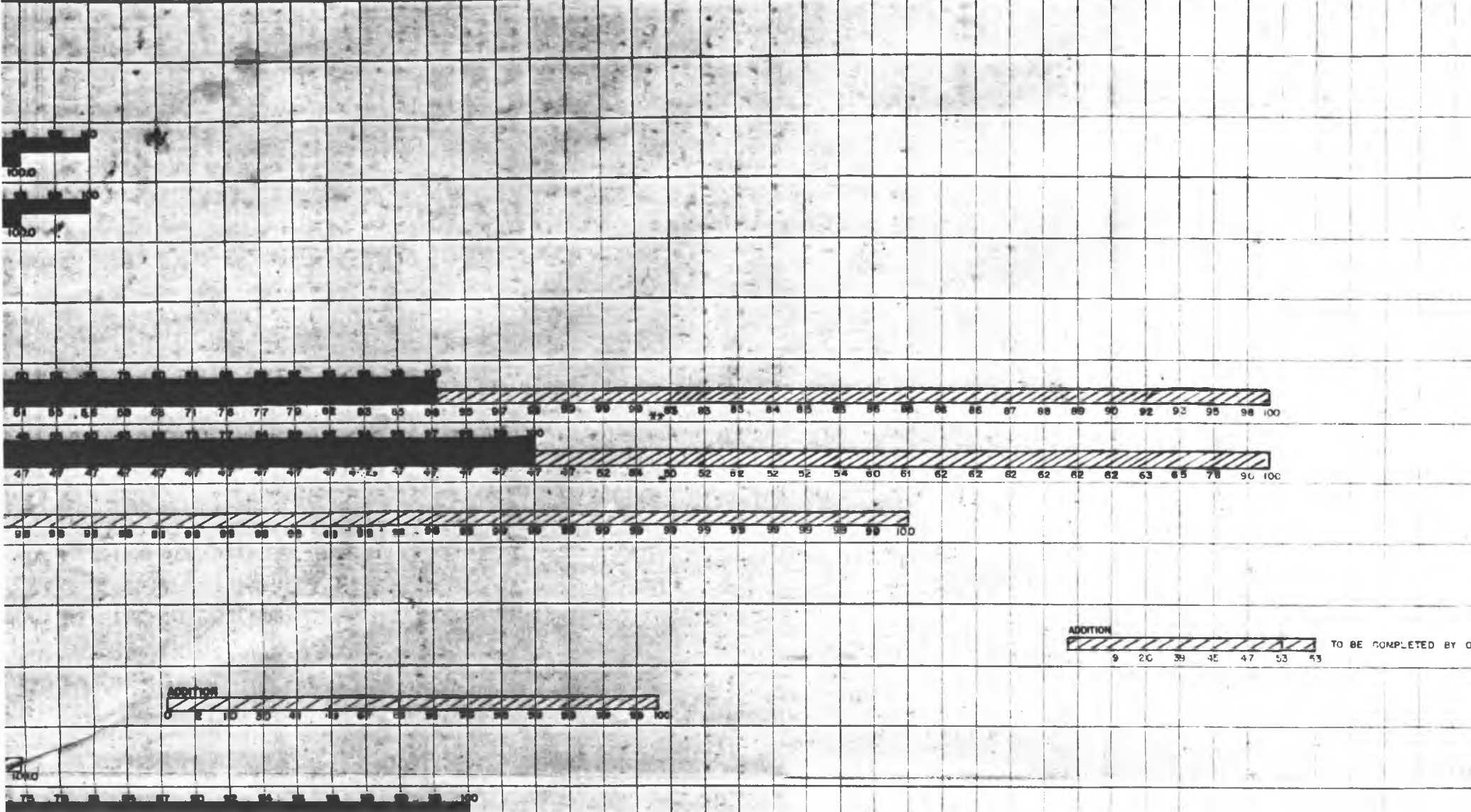
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AREA ESTIMATED AND ACTUAL PERCENT COMPLETE

300

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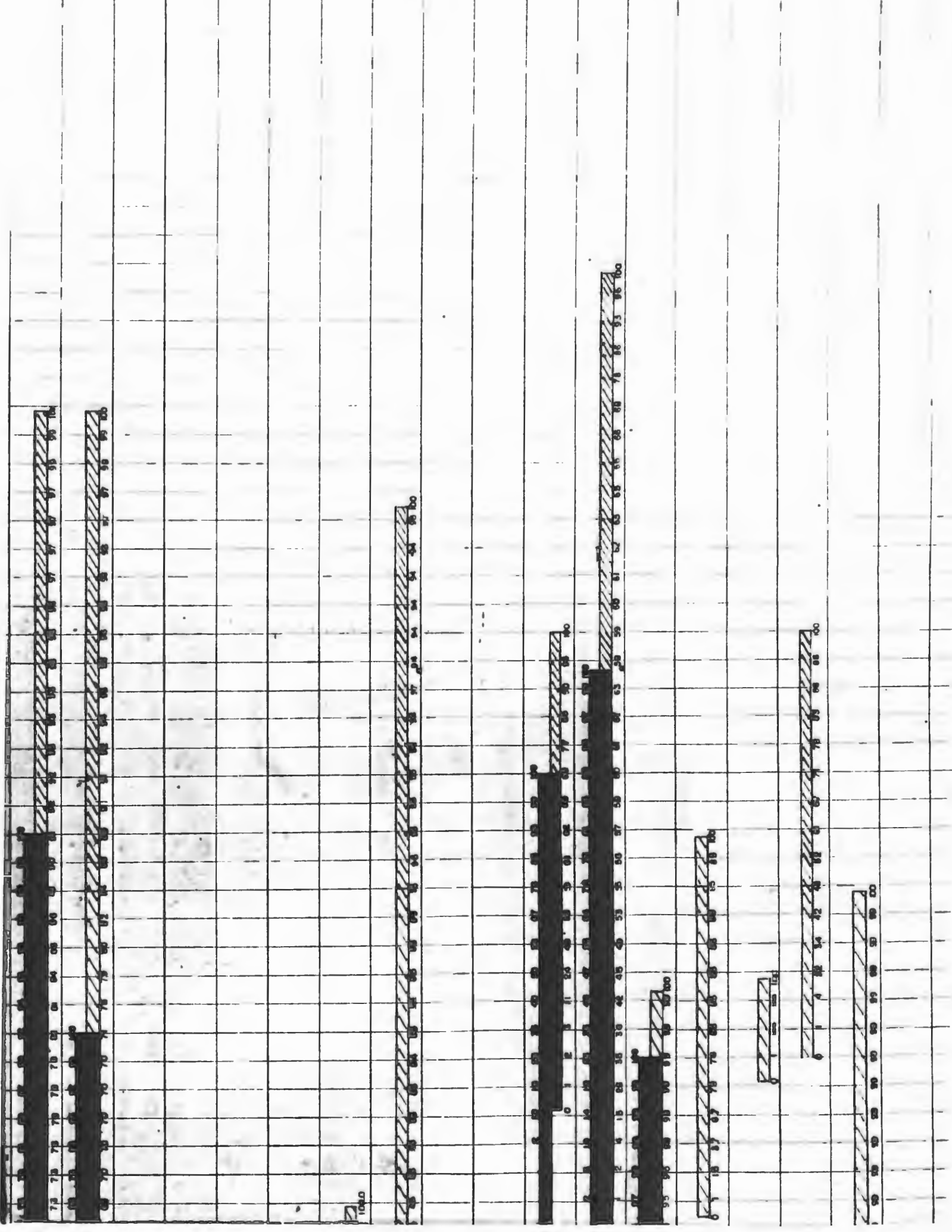
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ADDITION TO BE COMPLETED BY OF 9 20 39 48 47 53 53

ADDITION 0 2 10 30 41 49 67 83 98 99 99 99 99 100

1000 75 77 81 83 87 90 92 94 96 98 99 100





DESIGNED AND MEASUREMENTS  
 BY REGISTERED ENGINEER APPROVED



● PROGRESS OF CONSTRUCTION ●  
BUILDINGS & FACILITIES

300 AREA  
PROJECT 9534

BUILDING NUMBER	NAME	DESIGN RELEASE	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RIGS MAJOR EQUIPMENT		STARTING DATE	COMPLETED DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			PROPOSED	ACTUAL
301	VEAL 300 AREA	11/16/63	6/20/63	12/3/63	12/7/63	—	—	—	—	—	—	—	—	—	1/6/64	4/24/64	4/24/64	4/24/64
301A	Scrap & Fabrication Building	—	12/3/63	—	—	—	—	—	—	—	—	—	—	—	2/2/64	5/2/64	5/2/64	5/2/64
302	Magazines (8)	6/27/63	7/7/63	3/2/64	3/25/64	—	—	—	—	—	—	—	—	—	4/7/64	7/29/64	7/29/64	7/29/64
303	Magazine	6/27/63	10/25/63	10/22/63	10/22/63	—	—	—	—	—	—	—	—	—	10/26/63	1/6/64	1/6/64	1/6/64
304	Sodium Storage Building	5/2/64	5/2/64	5/27/64	5/27/64	—	—	—	—	—	—	—	—	—	5/2/64	5/2/64	5/2/64	5/2/64
305	Pile Building	6/17/63	8/23/63	8/23/63	10/22/63	11/9/63	11/28/63	—	—	—	—	—	—	—	8/2/64	3/23/64	3/23/64	3/23/64
313	Steel Fabrication Building	6/22/63	9/22/63	10/25/64	11/2/64	11/25/64	11/25/64	—	—	—	—	—	—	—	1/23/64	1/23/64	1/23/64	1/23/64
314	Press Building	11/2/63	11/15/63	11/15/63	9/2/64	2/2/64	2/2/64	—	—	—	—	—	—	—	10/21/64	1/23/64	1/23/64	1/23/64
316	Disposal Grounds	12/15/64	12/15/64	—	—	—	—	—	—	—	—	—	—	—	1/2/64	1/2/64	1/2/64	1/2/64
323	Separation Building	2/22/64	3/2/64	5/2/64	7/2/64	—	—	—	—	—	—	—	—	—	11/26/64	12/2/64	12/2/64	12/2/64
354A	Primary Generation	9/26/63	6/20/63	—	—	—	—	—	—	—	—	—	—	—	9/26/63	4/28/64	4/28/64	4/28/64
353B	Primary Generation	10/25/63	10/25/63	—	—	—	—	—	—	—	—	—	—	—	12/15/63	12/15/63	12/15/63	12/15/63
363	Transfer Platform	6/22/63	1/15/64	—	—	—	—	—	—	—	—	—	—	—	3/20/64	4/24/64	4/24/64	4/24/64
362	Motorist and Fire House	7/2/63	10/5/63	—	—	—	—	—	—	—	—	—	—	—	12/15/63	1/23/64	1/23/64	1/23/64
366	Boating Plant	7/28/63	6/20/63	10/2/64	10/29/63	10/19/63	10/19/63	—	—	—	—	—	—	—	1/2/64	2/2/64	2/2/64	2/2/64
366A	Pipes and Bond Lighting	6/10/63	9/22/63	—	—	—	—	—	—	—	—	—	—	—	1/2/64	1/2/64	1/2/64	1/2/64
363	Wood Pulp, Burners and Lines	7/12/63	9/20/63	—	—	—	—	—	—	—	—	—	—	—	12/7/63	12/7/63	12/7/63	12/7/63
365	Fire Alarm System	6/12/63	9/20/63	—	—	—	—	—	—	—	—	—	—	—	10/21/63	10/21/63	10/21/63	10/21/63
366	Telephone System	6/12/63	9/20/63	—	—	—	—	—	—	—	—	—	—	—	10/21/63	10/21/63	10/21/63	10/21/63
367	Support House Railroad Track	5/15/63	2/15/64	—	—	—	—	—	—	—	—	—	—	—	2/15/64	2/15/64	2/15/64	2/15/64
363	Banks and Bldg	5/15/63	6/24/63	—	—	—	—	—	—	—	—	—	—	—	11/2/63	11/2/63	11/2/63	11/2/63
365	Process Unit, (4) Quartz Storage	7/27/63	9/20/63	—	—	—	—	—	—	—	—	—	—	—	9/20/63	9/20/63	9/20/63	9/20/63
367	Quartz Bldg	10/11/63	10/11/63	—	—	—	—	—	—	—	—	—	—	—	10/11/63	10/11/63	10/11/63	10/11/63
367A	Portals, APN	5/14/63	6/23/63	—	—	—	—	—	—	—	—	—	—	—	6/23/63	6/23/63	6/23/63	6/23/63
368	General Warehousing Station	1/2/64	1/20/64	—	—	—	—	—	—	—	—	—	—	—	1/20/64	1/20/64	1/20/64	1/20/64
368A	Emergency Alar, Gen. Stations (3)	10/18/63	9/2/64	—	—	—	—	—	—	—	—	—	—	—	9/2/64	9/2/64	9/2/64	9/2/64
370	Gate House and Clock Allega	5/4/63	10/15/63	11/9/63	11/9/63	—	—	—	—	—	—	—	—	—	11/9/63	11/9/63	11/9/63	11/9/63
370A	Inventory Office	—	9/2/63	—	—	—	—	—	—	—	—	—	—	—	9/2/63	9/2/63	9/2/63	9/2/63
370B	Library	7/7/63	9/7/63	3/27/64	3/27/64	—	—	—	—	—	—	—	—	—	3/27/64	3/27/64	3/27/64	3/27/64
370C	Air Conditioning Equipment Bldg.	2/10/64	2/20/64	6/26/64	6/26/64	—	—	—	—	—	—	—	—	—	6/26/64	6/26/64	6/26/64	6/26/64
370D	Change Bldg	6/1/63	10/4/63	11/9/63	11/9/63	—	—	—	—	—	—	—	—	—	11/9/63	11/9/63	11/9/63	11/9/63
370E	Change Bldg	11/11/63	11/20/63	11/20/63	11/20/63	—	—	—	—	—	—	—	—	—	11/20/63	11/20/63	11/20/63	11/20/63
369	Fire Warehouse	1/15/64	1/20/64	1/20/64	4/26/64	4/26/64	4/26/64	—	—	—	—	—	—	—	4/26/64	4/26/64	4/26/64	4/26/64
371	Refrigerator	5/21/63	10/6/63	10/23/63	11/9/63	—	—	—	—	—	—	—	—	—	10/23/63	10/23/63	10/23/63	10/23/63

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• PROGRESS OF CONSTRUCTION •  
BUILDINGS & FACILITIES

300 AREA  
PROJECT 9536

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETED DATE	DATE ACCEPTED BY		
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			DEFENSE	GOVT.	
3726	Fac. Pump	---	10/9/63	---	---	---	---	---	---	---	---	---	---	---	---	11/2/63	10/23/66	10/23/66	
3727	Instrument Shop	5/25/63	10/16/63	10/15/63	10/15/63	12/26/63	---	---	11/12/63	2/4/64	---	---	---	---	---	3/2/64	7/27/66	7/27/66	
3728	First Aid Building	6/6/63	9/4/63	9/3/63	9/3/63	9/16/63	---	---	9/17/63	10/29/63	---	---	---	---	---	4/15/64	4/28/66	4/28/66	
3722	Area Shop	8/31/63	10/12/63	10/13/63	10/15/63	4/23/64	---	---	10/29/63	7/26/64	---	---	---	---	---	10/4/64	10/4/66	10/4/66	
3722a	Area Shop	---	9/7/63	---	---	---	---	---	---	---	---	---	---	---	---	10/4/63	10/23/66	10/23/66	
372b	Process Storage	4/4/64	4/12/64	4/13/64	4/16/64	4/21/64	---	---	4/28/64	6/2/64	---	---	5/25/64	6/7/64	8/26/64	7/16/66	8/13/66	8/13/66	
373a	Cylinder Storage	6/22/63	10/7/63	10/24/63	10/22/63	11/5/63	---	---	11/1/63	12/10/63	---	---	---	---	---	12/9/63	1/4/66	1/4/66	
373A	Cylinder Storage	9/1/64	9/14/64	9/15/64	9/15/64	10/1/64	---	---	---	---	---	---	---	---	---	10/18/64	10/23/66	10/23/66	
374	Box Storage	6/30/63	10/9/63	10/12/63	10/22/63	10/29/63	---	---	10/22/63	12/15/63	---	---	---	---	---	12/20/63	4/4/64	4/4/64	
3765	Standard Building	4/21/64	5/11/64	5/12/64	5/12/64	6/16/64	---	---	6/2/64	8/26/64	---	---	---	---	---	9/2/64	12/18/66	12/18/66	
3766	Control Building	5/13/64	5/26/64	5/28/64	5/28/64	6/23/64	---	---	6/9/64	8/26/64	---	---	---	---	---	9/2/64	10/23/66	10/23/66	
380	Pipe Supports	7/16/63	10/5/63	---	---	---	---	---	---	---	---	---	---	---	---	---	12/27/63	4/4/64	4/4/64
382	Water Lines	9/29/63	10/18/63	---	---	---	---	---	---	---	---	---	---	---	1/3/64	2/7/64	4/4/64	4/4/64	
383	Air Lines	9/29/63	10/20/63	---	---	---	---	---	---	---	---	---	---	---	12/27/63	2/1/64	4/4/64	4/4/64	
384	Water Lines	6/20/63	7/8/63	---	---	---	---	---	---	---	---	---	---	---	12/29/63	6/30/63	7/3/64	7/3/64	
390	Fire Lines and C. E. Box	6/26/63	7/8/63	---	---	---	---	---	---	---	---	---	---	---	12/29/63	6/30/63	7/3/64	7/3/64	
393	Military Stores	7/13/63	9/20/63	---	---	---	---	---	---	---	---	---	---	---	11/20/63	12/15/63	8/7/64	8/7/64	
396	Process Storage	7/11/63	10/1/63	---	---	---	---	---	---	---	---	---	---	---	12/27/63	1/7/64	8/7/64	8/7/64	
395	Wells (2)	6/20/63	7/30/63	---	---	---	---	---	---	---	---	---	8/19/63	1/26/64	12/19/63	2/18/64	2/17/64	2/17/64	

\* Shows Temporary Construction when Over by Question for Permanent Use.  
NOTE: The dates shown on this sheet reflect the time at which the various major stages of construction were essentially complete. In some cases these dates will vary slightly from the final dates carried in the weekly Progress Report.

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4

SUBCONTRACTORS - 300 AREA

<u>RFG</u>	<u>SUBCONTRACTOR</u>	<u>SCOPE OF WORK</u>	<u>BUILDING</u>
78½	Chicago Bridge & Iron Company	Elevated Steel Tank	902 (All Areas - See App. B-56)
241½	Clinton Bridge Works	Structural Steel	313, 314
434½	Alphone Custodis Chimney Constr. Company	Radial Brick Stack	384
489½	National Gunito Contracting Co.	Pre-stressed Concrete Tank	382
889½	Grinnell Company	Sprinkler Systems	3706, 3717
1473½	Asbestos Supply Companies	Thermal Insulation	305, 313, 314, 321, 382, 384, 3701, 3704, 3706, 3707A, 3707B, 3709, 3713, 3717, 3719, 3722, 3745, 3802, 3746.
403	Guy F. Atkinson Co.	Railroad Construction	Area
407	Myers Bros. & N. M. Ball Sons	Road Construction	Area
408	Newberry-Chandler-Lord	Electrical Work	Area
410	Hanford Concrete Contractors	Aggregate and Cement	Area
411	Hanke-James-Zahniser & Warren	Piping Work	Area
4321	Curtis Gravel Company	Aggregate and Cement	Area
4327	California Waterproofing Co.	Built-up Roofing	3707A
4328	McManama & Co.	Boilers	384

SECRET  
B-37

SECRET

<u>RFG</u>	<u>SUBCONTRACTOR</u>	<u>SCOPE OF WORK</u>	<u>BUILDING</u>
4332	Wm. Vail	Built-up Roofing	301, 303(E), (G), (J), 313, 321 , 3614, 3701, 3706, 3706 A, 3707 B, 3709, 3717, 3719, 3722, 3745, 3746, 3621(A), (B), (C).
4336	Jessen & Wright	Concrete Block	Area
4354	H. R. Parsons Tile Co.	Linoleum & Asphalt Tile	321, 3706, 3746.

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100 AREA

Process Building

<u>Building Number</u>	<u>100-B</u>	<u>100-D</u>	<u>100-F</u>	
103	1	1	1	Fresh Metal Storage
106	1	1	1	Pile Building
107	1	1	1	Retention Basin
108	1	1	1	Chemical Pump House
110	1	1	1	Gas Storage Tanks
111	1	-	-	Test Building
115	1	1	1	Helium Purification Building
116	1	1	1	Stack
145	1	-	-	Water Treatment Building
181	1	1	1	River Pump House
182	1	1	1	Reservoir and Pump House
183	1	1	1	Filter Building
184	1	1	1	Power House (Incl. Coal Storage Pit and Coal Conveyers)
185	1	1	1	Deaerating Plant
186	-	1	-	Demineralising Plant
187	2	2	2	Elevated Process Water Storage Tank
188	1	1	1	Ash Disposal Basin
189	-	1	1	Refrigeration Building
190	1	1	1	Process Pump House
	<hr/>	<hr/>	<hr/>	
	18	18	17	

B-38

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SHEET 1 OF 3 SHEETS

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Outside Electrical Facilities

<u>Building Number</u>	<u>100-B</u>	<u>100-D</u>	<u>100-F</u>	
151	1	1	1	Primary Substation (230KV/13.8KV)
152	10	12	11	Secondary Substation (13.8KV/2300 V ± 2300 V/440-220-110V)
153	8	6	6	Distribution Substations (2300V/440-220-110V)
1501	x	x	x	Fence and Road Lighting
1503	x	x	x	Electrical Distribution Lines
1505	x	x	x	Fire Alarm System
1506	x	x	x	Telephone Cable and Instruments
1601	x	x	x	Standard Gauge Railroad Track
1603	x	x	x	Roads and Walks
1605	x-(11)	x-(10)	x-(8)	Fences-Including Guard Towers
1607	7	6	6	Underground Septic Tanks
1608	-	1	1	Process Waste Dumping Station
1612	x	x	x	Open Drainage Ditches
1613	x	x	x	Permanent Parking Area
1614	3	3	3	General Monitoring Stations
1621	3	3	3	Emergency Generator Shelters
	<u>32</u>	<u>31</u> <del>28</del>	<u>30</u> <del>28</del>	

Service Buildings

1701	1	1	1	Gate House
1704	1	1	1	Supervisors' Office and Laboratory
1706	-	-	1	Test Laboratory
1707	2	2	2	Change House

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Service Buildings (Continued)

<u>Building Number</u>	<u>100-B</u>	<u>100-D</u>	<u>100-F</u>	
1709	1	1	1	Fire Headquarters
1718	3	2	2	Storerooms
1715	1	1	1	Oil and Paint Storage Building
1716	1	1	1	Automotive Repair Shop
1717	1	1	1	Combined Shops
1719	1	1	1	First Aid Building
1720	1	1	1	Patrol Headquarters
1722	2	1	1	Area Shops
1729	1	1	-	Extra Machinery Storehouses
1734	1	1	1	Gas Cylinder Storage
1755	-	1	-	Training Building
	<hr/>	<hr/>	<hr/>	
	17	18	18	

Outside Overhead Pipe Lines

1801	x	x	x	Pipe Supports
1802	x	x	x	Steam Lines
1803	x	x	x	Air Lines
1805	x	x	x	Process Lines

Outside Underground Pipe Lines

1901	x	x	x	Water Lines (Including Elevated Storage Tanks)
1902	x	x	x	Fire Lines (Including Elevated Storage Tanks)
1903	x	x	x	Sanitary Sewer Lines
1904	x	x	x	Process Sewer Lines

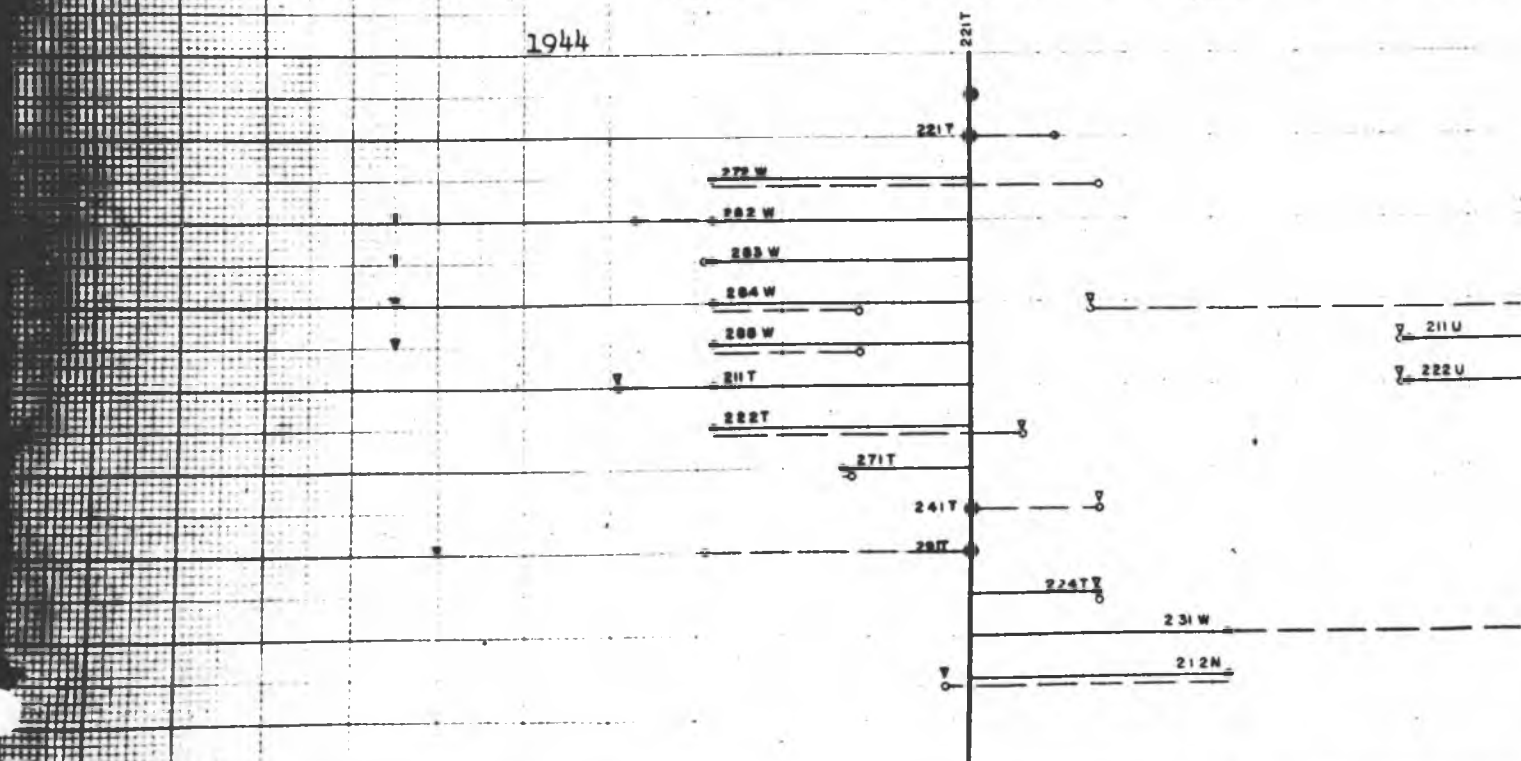
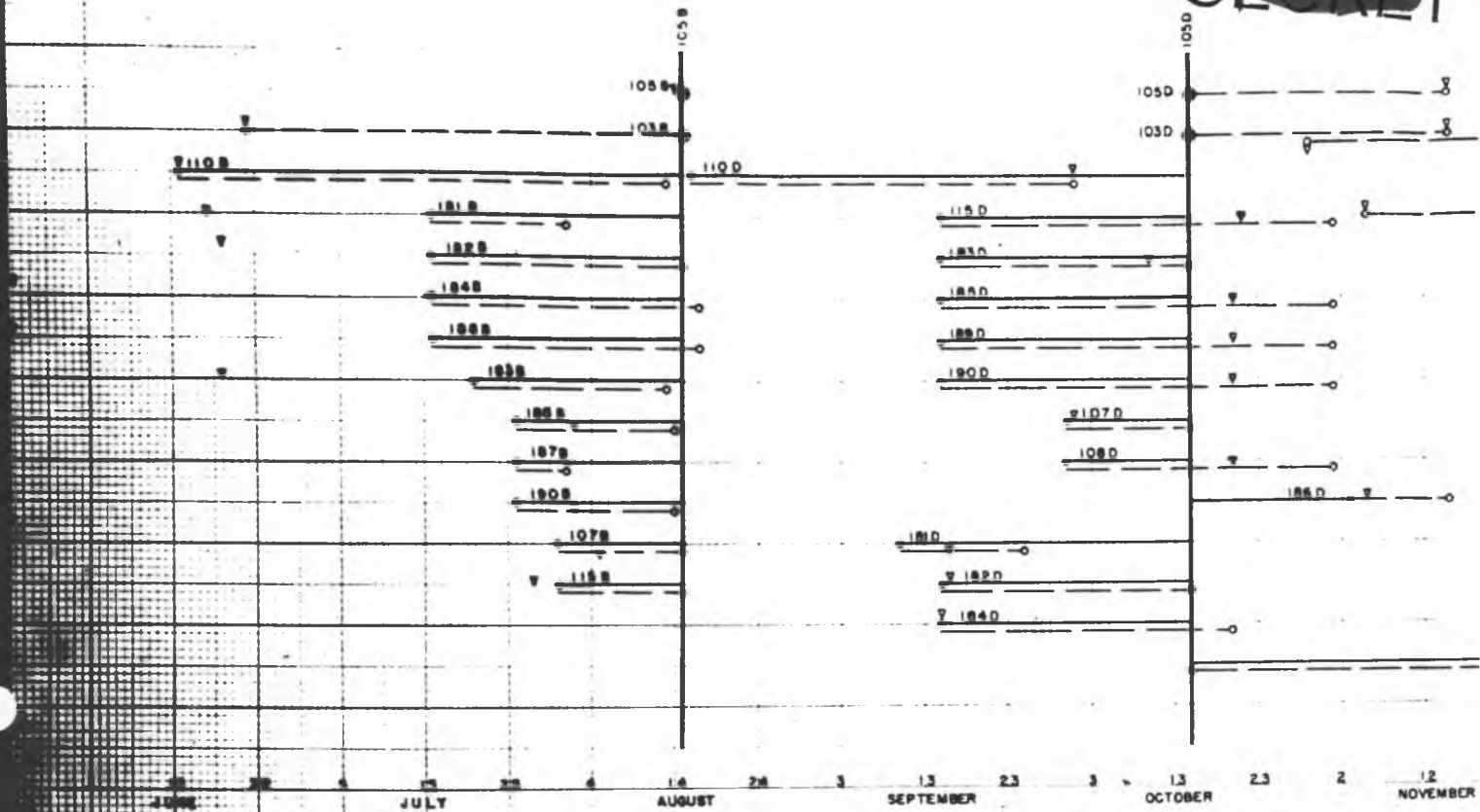
Note: "x" indicates that the above facilities are installed in the respective areas.

SEQUENCE OF START

HANFORD ENGINEER W

PROJ-9536

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# ENCE OF START-UPS

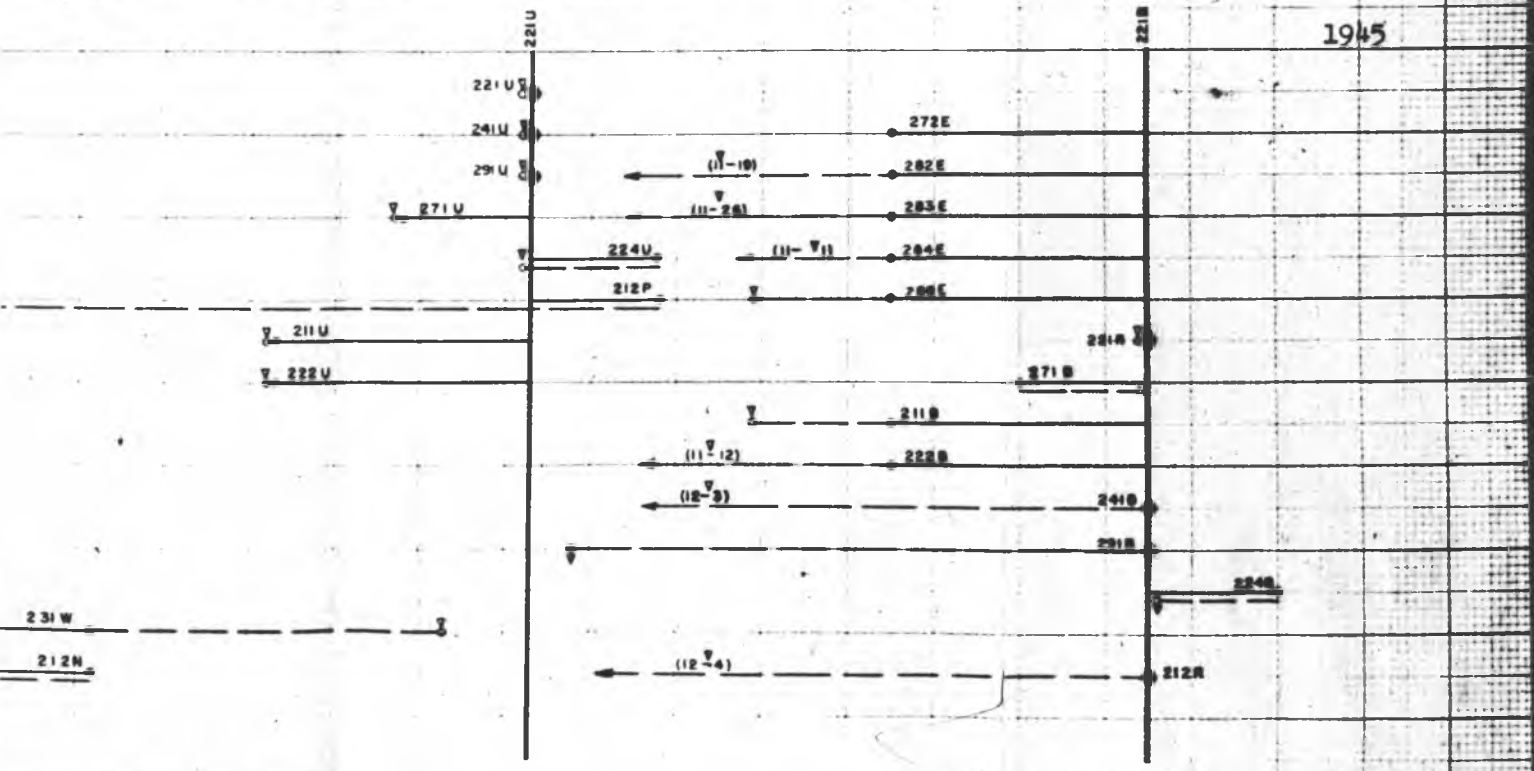
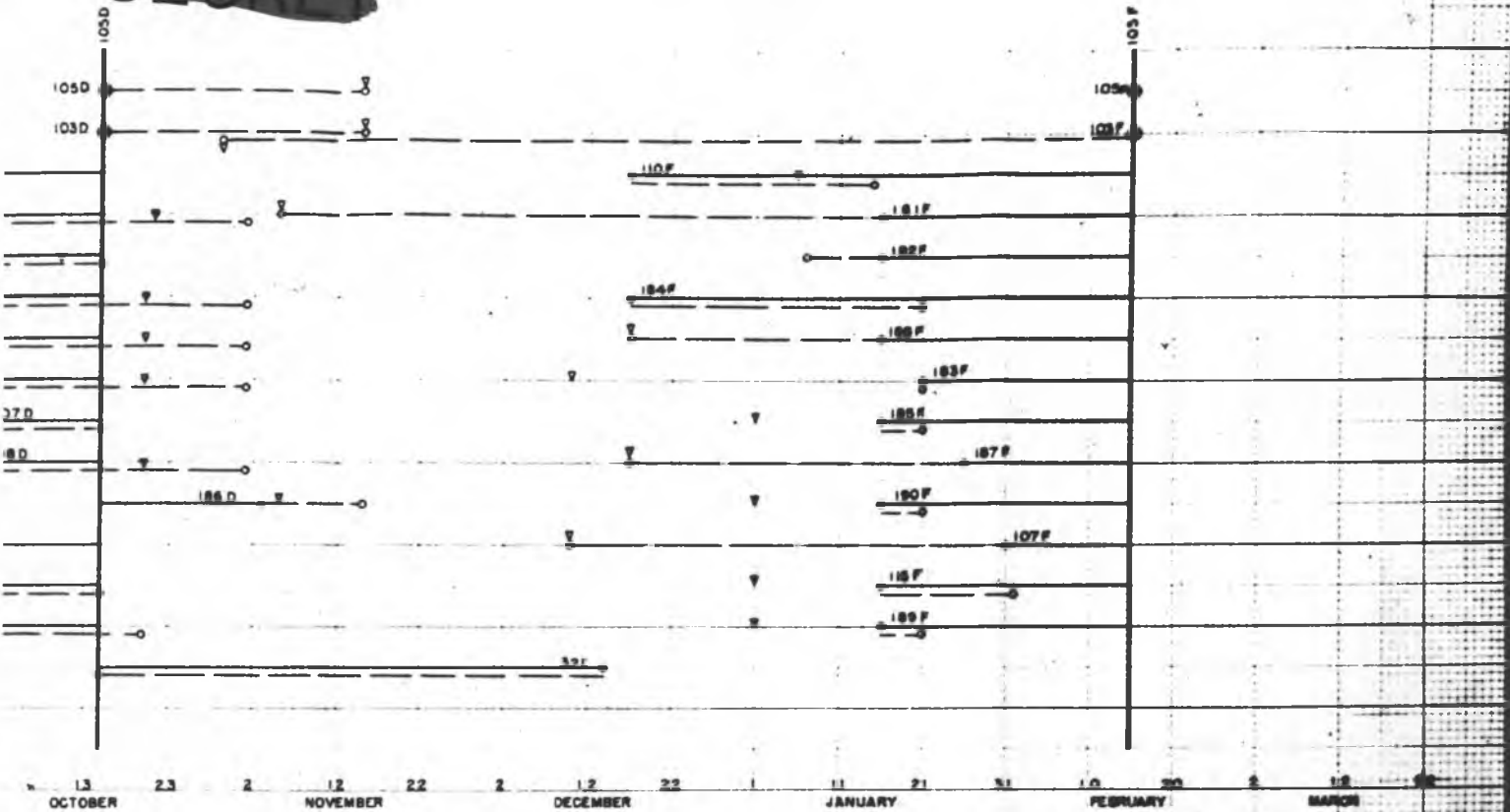
## FORD ENGINEER WORKS

PROJ-9536

### LEGEND

- BLACK DOTS REPRESENT REQUESTED START-UPS
- ∇ BLACK V'S REPRESENT ESTIMATED START-UPS
- BLACK O'S REPRESENT ESTIMATED COMPLETION DATE
- TIME BEFORE OR AFTER REQUESTED START-UPS OF JOB'S BLDG
- - - ESTIMATED TIME BEFORE OR AFTER REQUESTED START-UPS

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A These charts and sheets are non-readable

LEAD

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EXCEPT WHERE SHOWN OTHERWISE BY A DATE AND AUTHORITY

DATE 08-14-2013 BY 60322 UCBAW/STP/STP

HANFORD ENGINEER

# CONSTRUCTION

AMERICAN

100-B

REVISED 05/12/88

NOT TO BE INSTRUMENTED

2

90-

1700

84

# CONSTRUCTION PROGRESS

AREA ESTIMATE AND PERCENT COMPLETE

100-B

OP 5 12 84

Task Number	Start Date	End Date	Percent Complete
1	12/83	1/84	100%
2	1/84	2/84	100%
3	2/84	3/84	100%
4	3/84	4/84	100%
5	4/84	5/84	100%
6	5/84	6/84	100%
7	6/84	7/84	100%
8	7/84	8/84	100%
9	8/84	9/84	100%
10	9/84	10/84	100%
11	10/84	11/84	100%
12	11/84	12/84	100%
13	12/84	1/85	100%
14	1/85	2/85	100%
15	2/85	3/85	100%
16	3/85	4/85	100%
17	4/85	5/85	100%
18	5/85	6/85	100%
19	6/85	7/85	100%
20	7/85	8/85	100%
21	8/85	9/85	100%
22	9/85	10/85	100%
23	10/85	11/85	100%
24	11/85	12/85	100%
25	12/85	1/86	100%
26	1/86	2/86	100%
27	2/86	3/86	100%
28	3/86	4/86	100%
29	4/86	5/86	100%
30	5/86	6/86	100%
31	6/86	7/86	100%
32	7/86	8/86	100%
33	8/86	9/86	100%
34	9/86	10/86	100%
35	10/86	11/86	100%
36	11/86	12/86	100%
37	12/86	1/87	100%
38	1/87	2/87	100%
39	2/87	3/87	100%
40	3/87	4/87	100%
41	4/87	5/87	100%
42	5/87	6/87	100%
43	6/87	7/87	100%
44	7/87	8/87	100%
45	8/87	9/87	100%
46	9/87	10/87	100%
47	10/87	11/87	100%
48	11/87	12/87	100%
49	12/87	1/88	100%
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51	2/88	3/88	100%
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56	7/88	8/88	100%
57	8/88	9/88	100%
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67	6/89	7/89	100%
68	7/89	8/89	100%
69	8/89	9/89	100%
70	9/89	10/89	100%
71	10/89	11/89	100%
72	11/89	12/89	100%
73	12/89	1/90	100%
74	1/90	2/90	100%
75	2/90	3/90	100%
76	3/90	4/90	100%
77	4/90	5/90	100%
78	5/90	6/90	100%
79	6/90	7/90	100%
80	7/90	8/90	100%
81	8/90	9/90	100%
82	9/90	10/90	100%
83	10/90	11/90	100%
84	11/90	12/90	100%
85	12/90	1/91	100%
86	1/91	2/91	100%
87	2/91	3/91	100%
88	3/91	4/91	100%
89	4/91	5/91	100%
90	5/91	6/91	100%
91	6/91	7/91	100%
92	7/91	8/91	100%
93	8/91	9/91	100%
94	9/91	10/91	100%
95	10/91	11/91	100%
96	11/91	12/91	100%
97	12/91	1/92	100%
98	1/92	2/92	100%
99	2/92	3/92	100%
100	3/92	4/92	100%

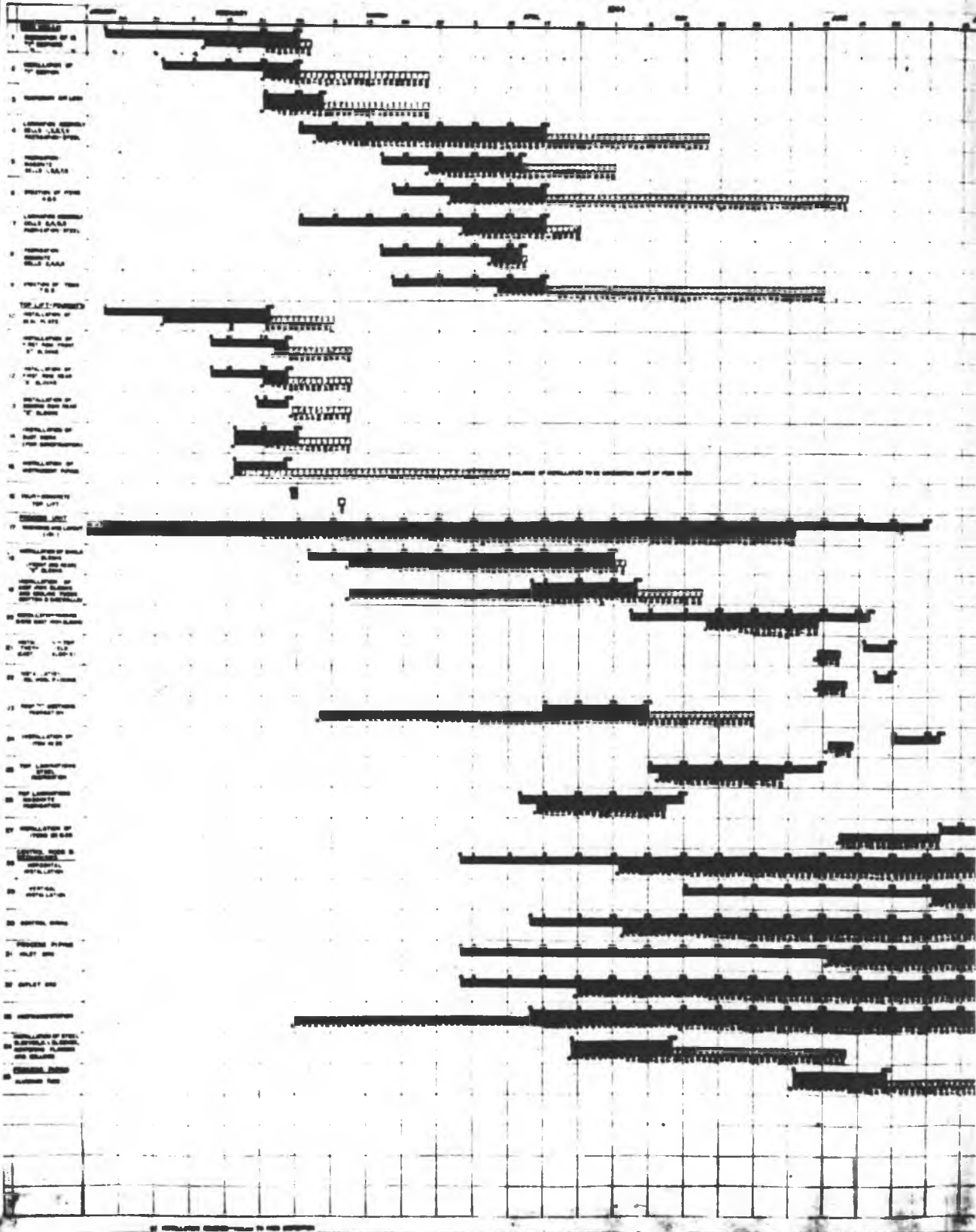
NOT TO BE CONSTRUCTED



SECRET

70

DAILY CONSTRUCTION PROGRESS  
EQUIPMENT INSTALLATION - 105 B BUILDING  
ESTIMATED AND ACTUAL % COMPLETE



SECRET

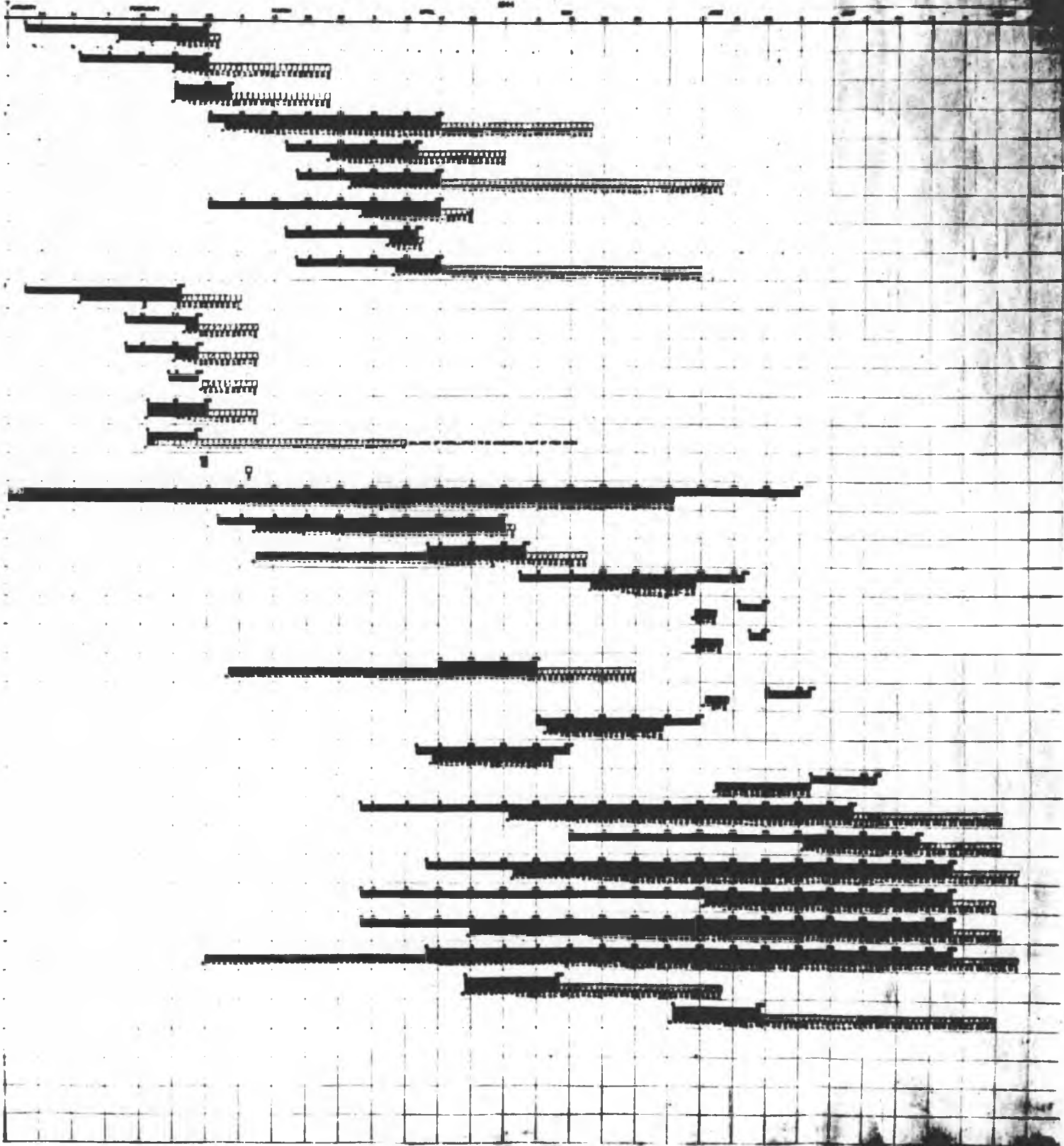
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70

1. WORK ON THE PROJECTS SHALL BE CONTINUED AS SHOWN ON THE ATTACHED SCHEDULE.  
2. WORK ON THE PROJECTS SHALL BE CONTINUED AS SHOWN ON THE ATTACHED SCHEDULE.  
3. WORK ON THE PROJECTS SHALL BE CONTINUED AS SHOWN ON THE ATTACHED SCHEDULE.

REPORT NUMBER 1000  
PROJECT 1000

### DAILY CONSTRUCTION PROGRESS EQUIPMENT INSTALLATION - 106 B BUILDING ESTIMATED AND ACTUAL % COMPLETE



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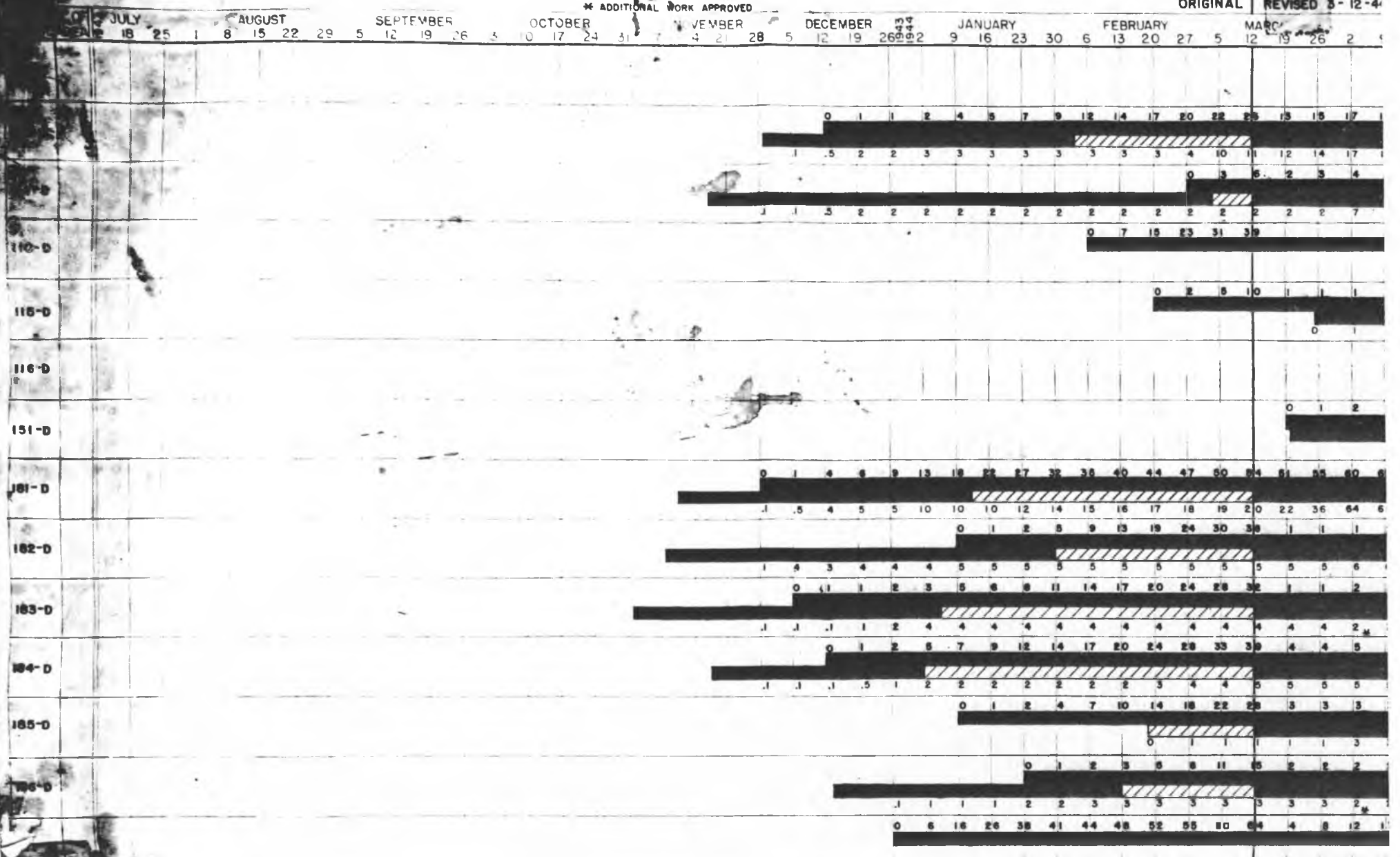
1 INDICATE ESTIMATED CONST. SCHEDULE  
 2 INDICATE ACTUAL SCHEDULE  
 3 NUMBERS BELOW BAR INDICATES THAT ACTUAL  
 4 IS EQUAL TO OR AHEAD OF SCHEDULED  
 5 NUMBERS BELOW BAR INDICATES THAT ACTUAL  
 6 IS BEHIND SCHEDULE  
 7 \*\*\*\*\* INDICATES NUMBER OF WEEKS PROGRESS  
 8 IS BEHIND SCHEDULE

BUILDING

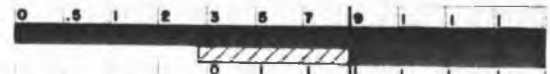
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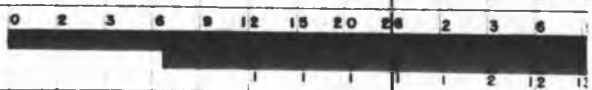
ORIGINAL | REVISED 3-12-44



166-D



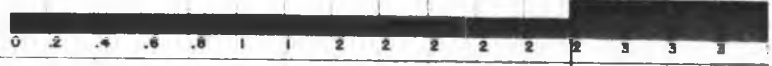
167-D



1701-D



1707-D



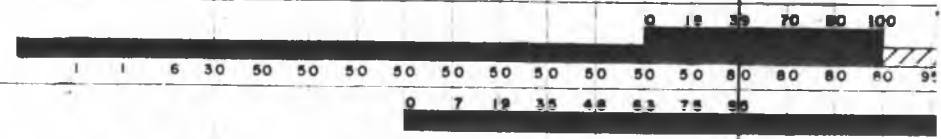
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1715-D



1716-D



1717-D



1718-D



1734-D



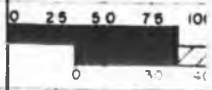
1800



900



709-D



107-D

















**LEGEND**

BLACK BAR ESTIMATED CONSTR SCHEDULE  
 DOW BAR TOTAL CONSTR SCHEDULE

BLACK NUMBER LOW BAR INDICATES THAT ACTUAL PERCENT  
 IS EQUAL TO OR AHEAD OF SCHEDULED PERCENT

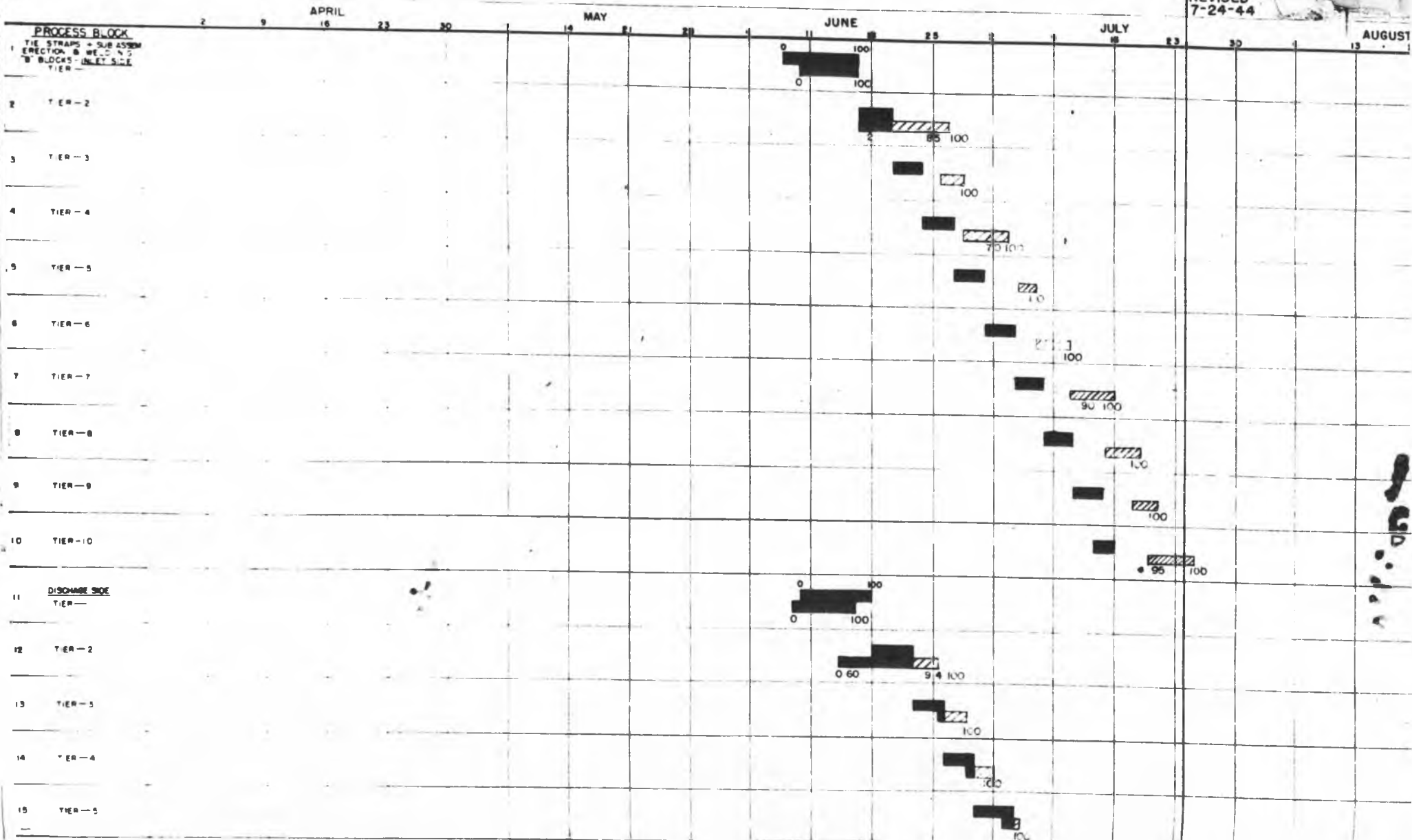
RED NUMBER HIGH BAR INDICATES THAT ACTUAL PERCENT  
 IS BEHIND SCHEDULE

ZZZ INDICATES NUMBER OF WEEKS PROGRESS IS BEHIND  
 SCHEDULE

HANFORD ENGINEER WORKS  
 PROJECT-2088

**CONSTRUCTION PROGRESS**  
**EQUIPMENT INSTALLATION-105D BUILDING**  
 ESTIMATED AND ACTUAL PERCENT COMPLETE

REVISED  
 7-24-44



22 5-12-20 08:15 AM  
1000 1000 1000

23 5-12-20 08:15 AM  
1000 1000 1000

24 5-12-20 08:15 AM  
1000 1000 1000

25 5-12-20 08:15 AM  
1000 1000 1000

26 5-12-20 08:15 AM  
1000 1000 1000

27 5-12-20 08:15 AM  
1000 1000 1000

28 5-12-20 08:15 AM  
1000 1000 1000

29 5-12-20 08:15 AM  
1000 1000 1000

30 5-12-20 08:15 AM  
1000 1000 1000

31 5-12-20 08:15 AM  
1000 1000 1000

32 5-12-20 08:15 AM  
1000 1000 1000

33 5-12-20 08:15 AM  
1000 1000 1000

34 5-12-20 08:15 AM  
1000 1000 1000

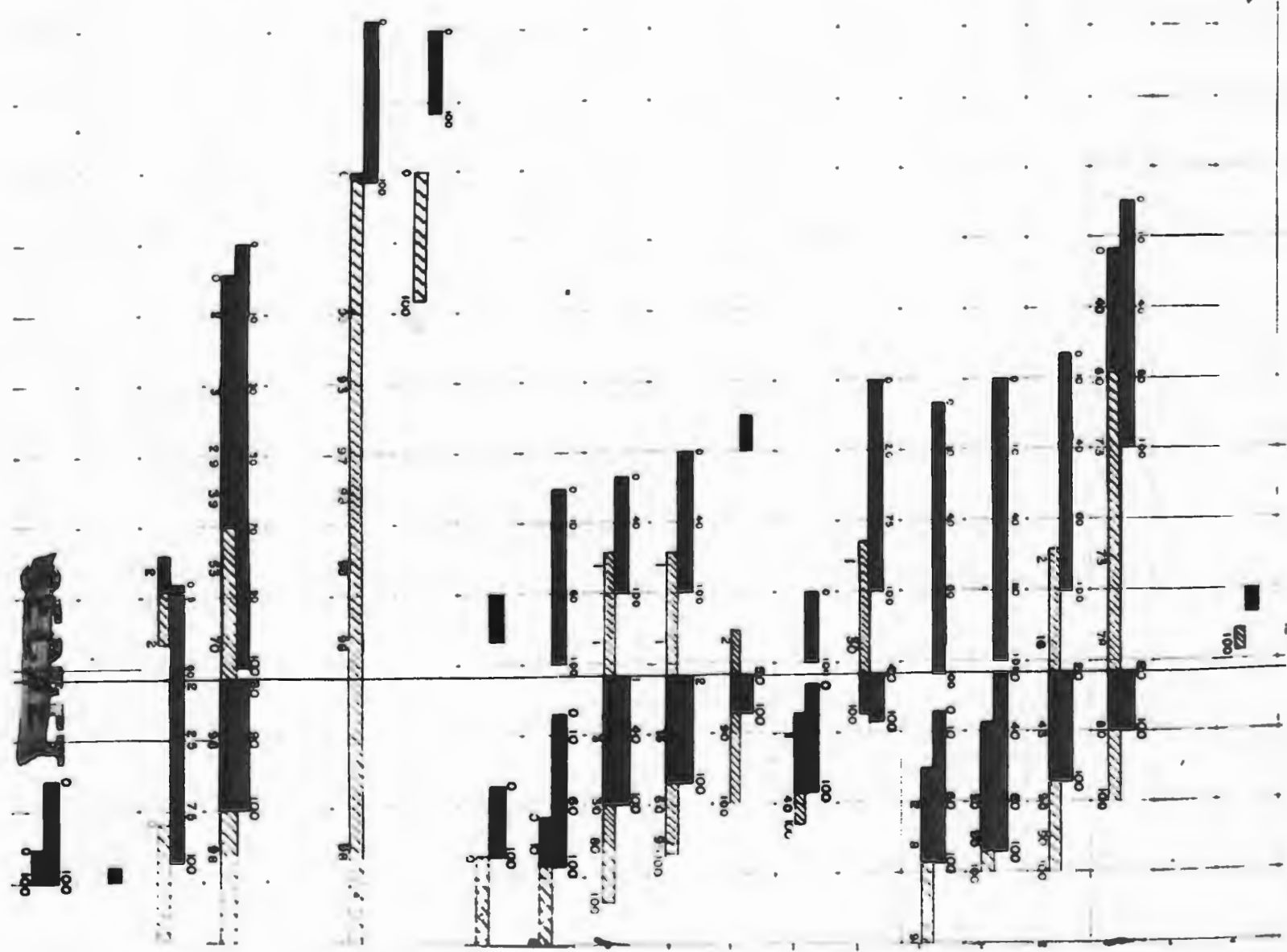
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1000 1000 1000

36 5-12-20 08:15 AM  
1000 1000 1000

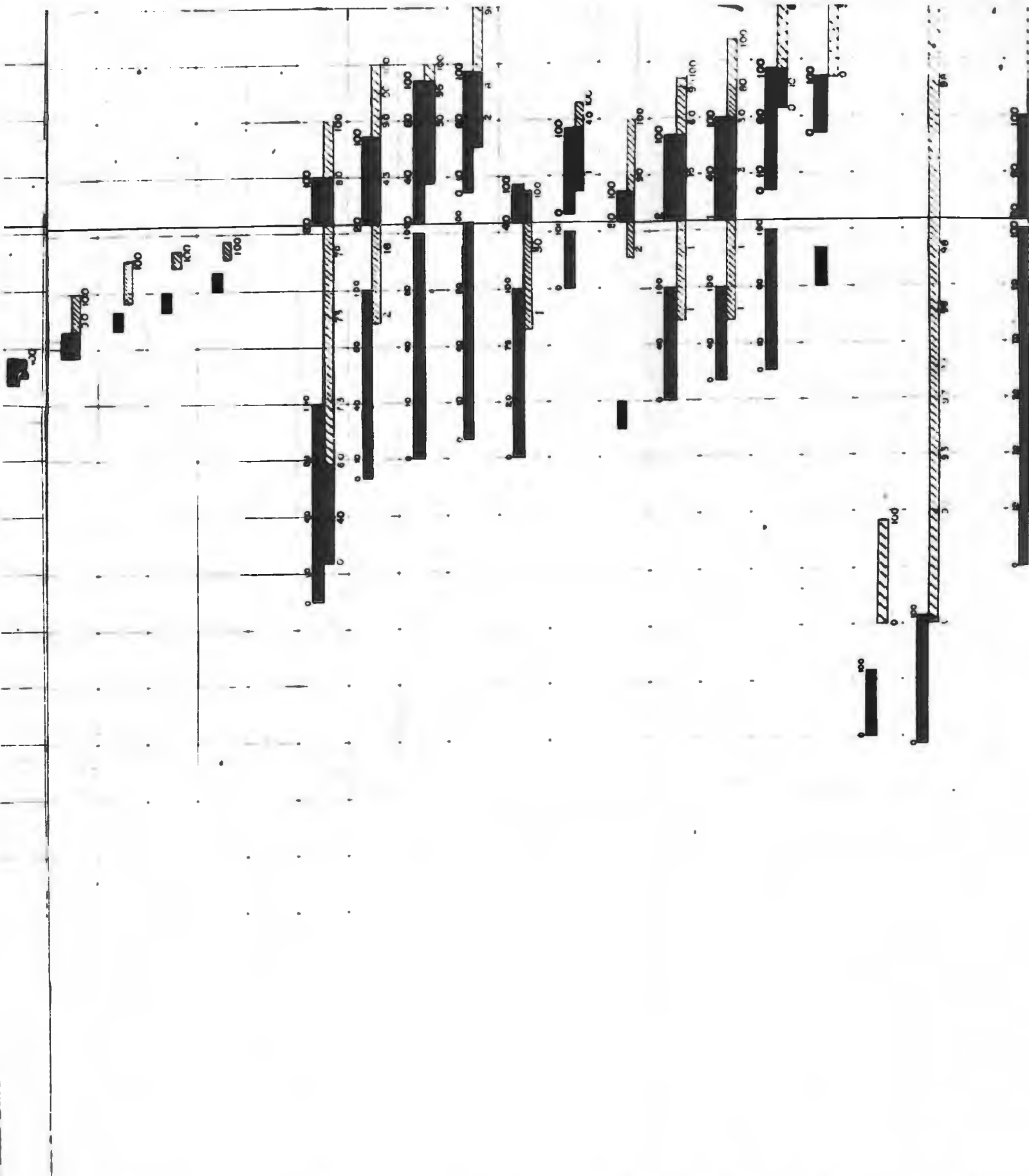
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38 5-12-20 08:15 AM  
1000 1000 1000

39 5-12-20 08:15 AM  
1000 1000 1000







1. 1/2" DIA. HOLE  
 2. 1/4" DIA. HOLE  
 3. 1/8" DIA. HOLE  
 4. 1/16" DIA. HOLE  
 5. 1/32" DIA. HOLE  
 6. 1/64" DIA. HOLE  
 7. 1/128" DIA. HOLE  
 8. 1/256" DIA. HOLE  
 9. 1/512" DIA. HOLE  
 10. 1/1024" DIA. HOLE  
 11. 1/2048" DIA. HOLE  
 12. 1/4096" DIA. HOLE  
 13. 1/8192" DIA. HOLE  
 14. 1/16384" DIA. HOLE  
 15. 1/32768" DIA. HOLE  
 16. 1/65536" DIA. HOLE  
 17. 1/131072" DIA. HOLE  
 18. 1/262144" DIA. HOLE  
 19. 1/524288" DIA. HOLE  
 20. 1/1048576" DIA. HOLE  
 21. 1/2097152" DIA. HOLE  
 22. 1/4194304" DIA. HOLE  
 23. 1/8388608" DIA. HOLE  
 24. 1/16777216" DIA. HOLE  
 25. 1/33554432" DIA. HOLE  
 26. 1/67108864" DIA. HOLE  
 27. 1/134217728" DIA. HOLE  
 28. 1/268435456" DIA. HOLE  
 29. 1/536870912" DIA. HOLE  
 30. 1/1073741824" DIA. HOLE  
 31. 1/2147483648" DIA. HOLE  
 32. 1/4294967296" DIA. HOLE  
 33. 1/8589934592" DIA. HOLE  
 34. 1/17179869184" DIA. HOLE  
 35. 1/34359738368" DIA. HOLE  
 36. 1/68719476736" DIA. HOLE  
 37. 1/137438953472" DIA. HOLE  
 38. 1/274877906944" DIA. HOLE  
 39. 1/549755813888" DIA. HOLE  
 40. 1/1099511627776" DIA. HOLE  
 41. 1/2199023255552" DIA. HOLE  
 42. 1/4398046511104" DIA. HOLE  
 43. 1/8796093022208" DIA. HOLE  
 44. 1/17592186044416" DIA. HOLE  
 45. 1/35184372088832" DIA. HOLE  
 46. 1/70368744177664" DIA. HOLE  
 47. 1/140737488355328" DIA. HOLE  
 48. 1/281474976710656" DIA. HOLE  
 49. 1/562949953421312" DIA. HOLE  
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 97. 1/1584563250285286402712666112" DIA. HOLE  
 98. 1/3169126500570572805425332224" DIA. HOLE  
 99. 1/6338253001141145610850664448" DIA. HOLE  
 100. 1/12676506002282291221701328896" DIA. HOLE

**LEGEND**

BLACK BARS INDICATE ESTIMATED CONSTR SCHEDULE  
 RED BARS INDICATE ACTUAL CONSTR SCHEDULE

BLACK NUMBERS BELOW BAR INDICATES THAT ACTUAL PERCENT  
 IS EQUAL TO OR AHEAD OF SCHEDULED PERCENT

RED NUMBERS BELOW BAR INDICATES THAT ACTUAL PERCENT  
 IS BEHIND SCHEDULE

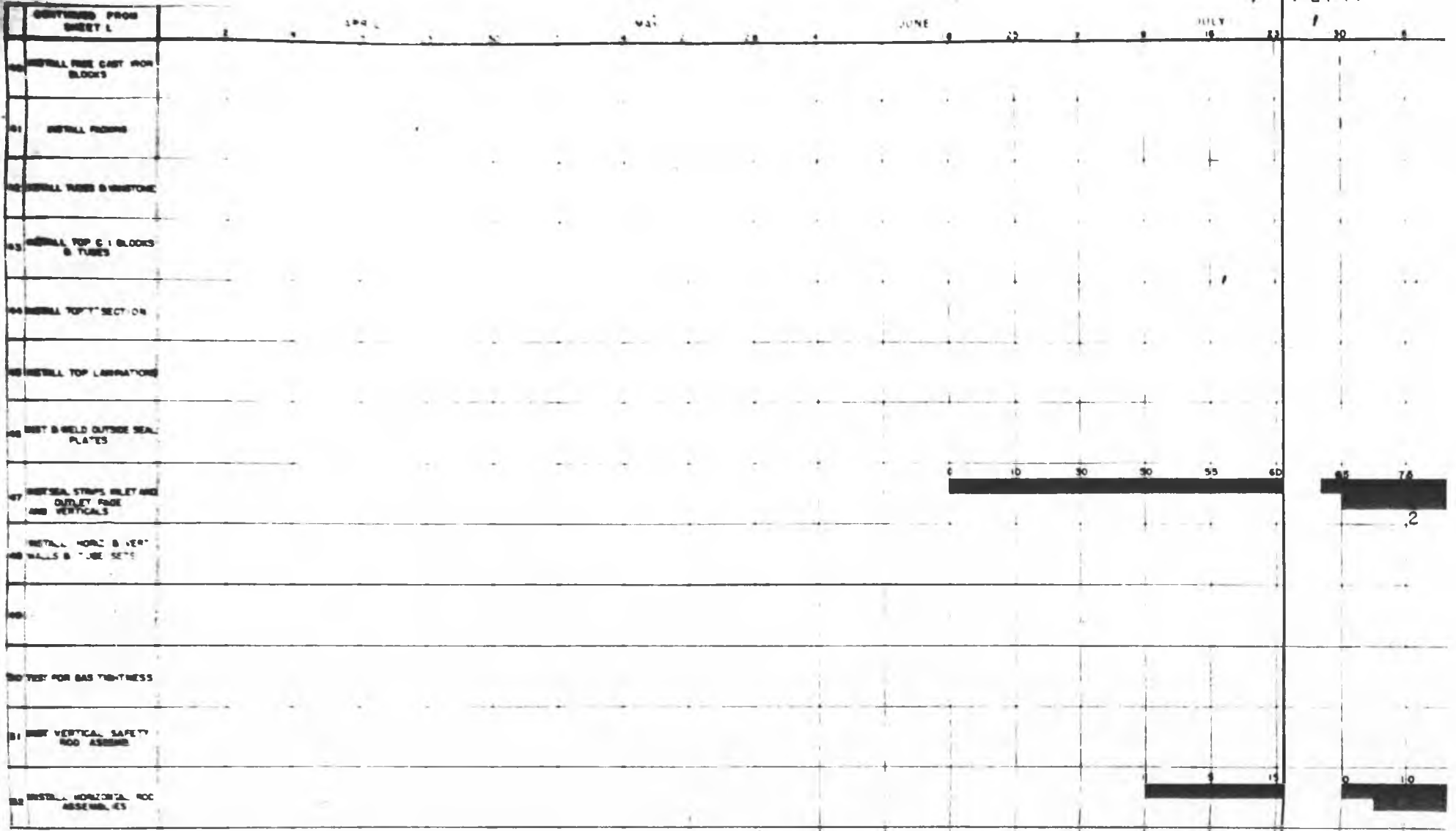
/// INDICATES NUMBER OF WEEKS THE WORK IS BEHIND  
 SCHEDULE

INFORD

**CONSTRUCTION  
 EQUIPMENT INSTALLATION**  
 ESTIMATED AND ACTUAL P

ORIGINAL

REVISED  
 7-24-44







# PROGRESS

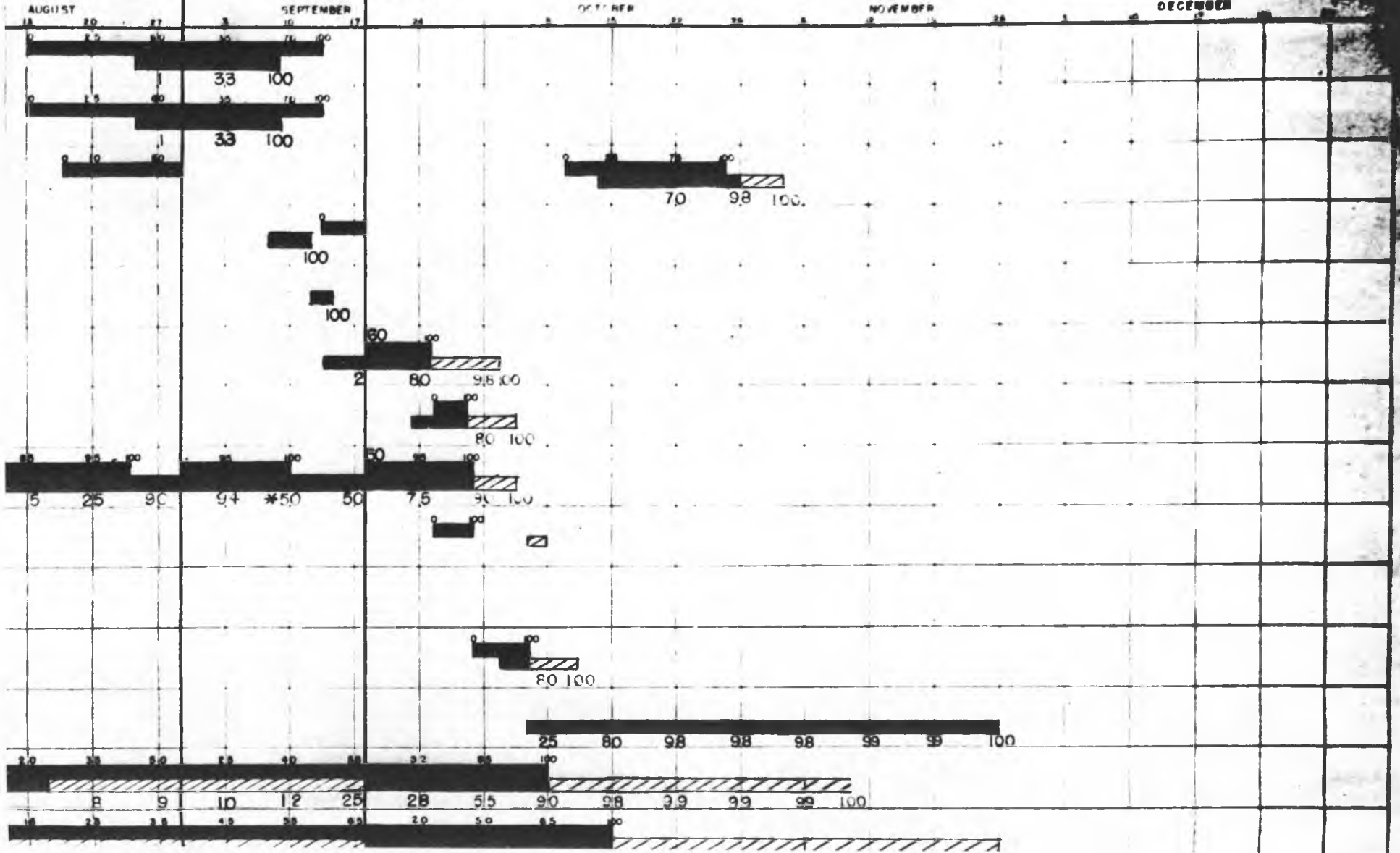
## ON-105 D BUILDING

PERCENT COMPLETE

**SECRET**

REVISED  
8-29-44

REVISED  
9-18-44

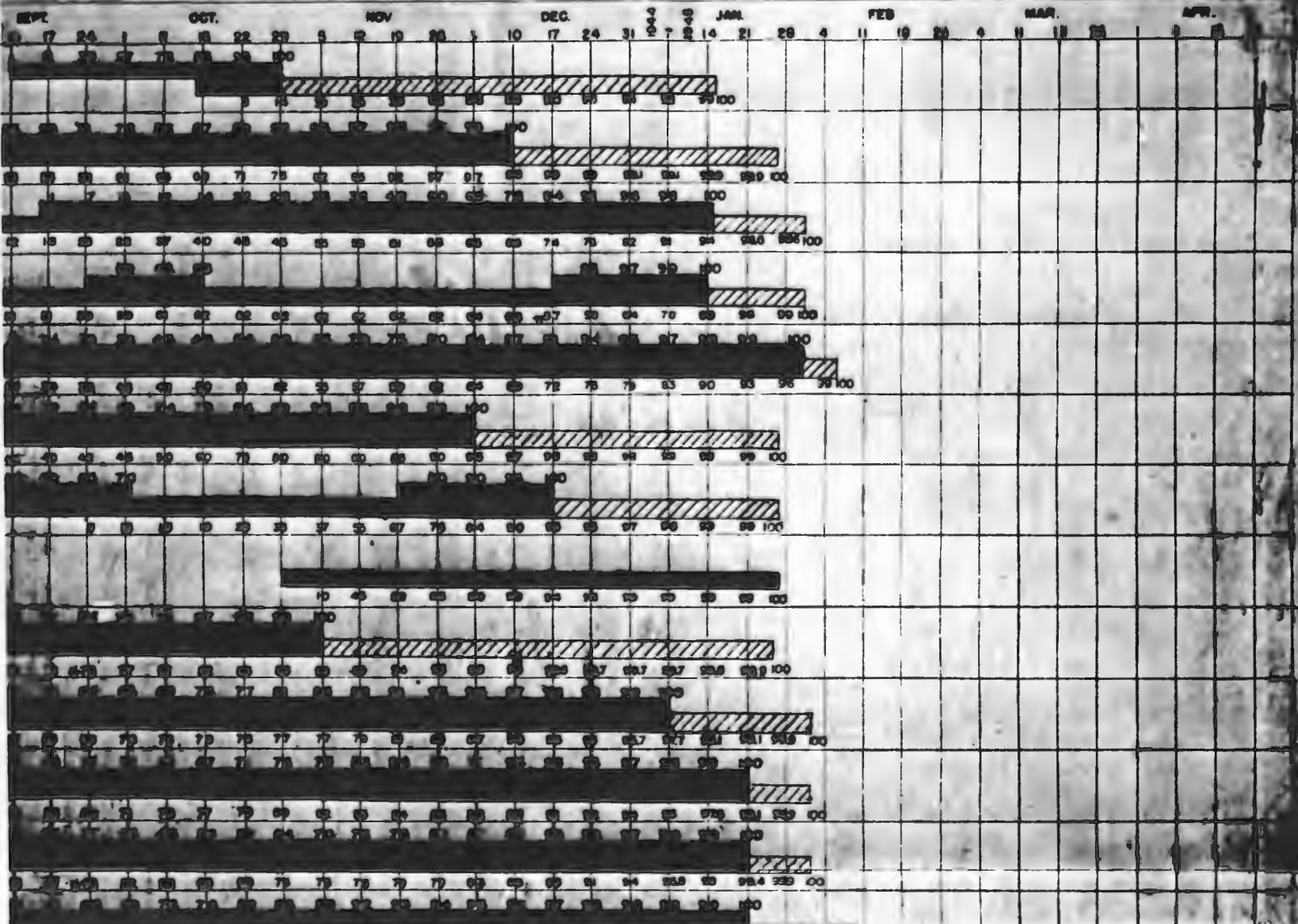






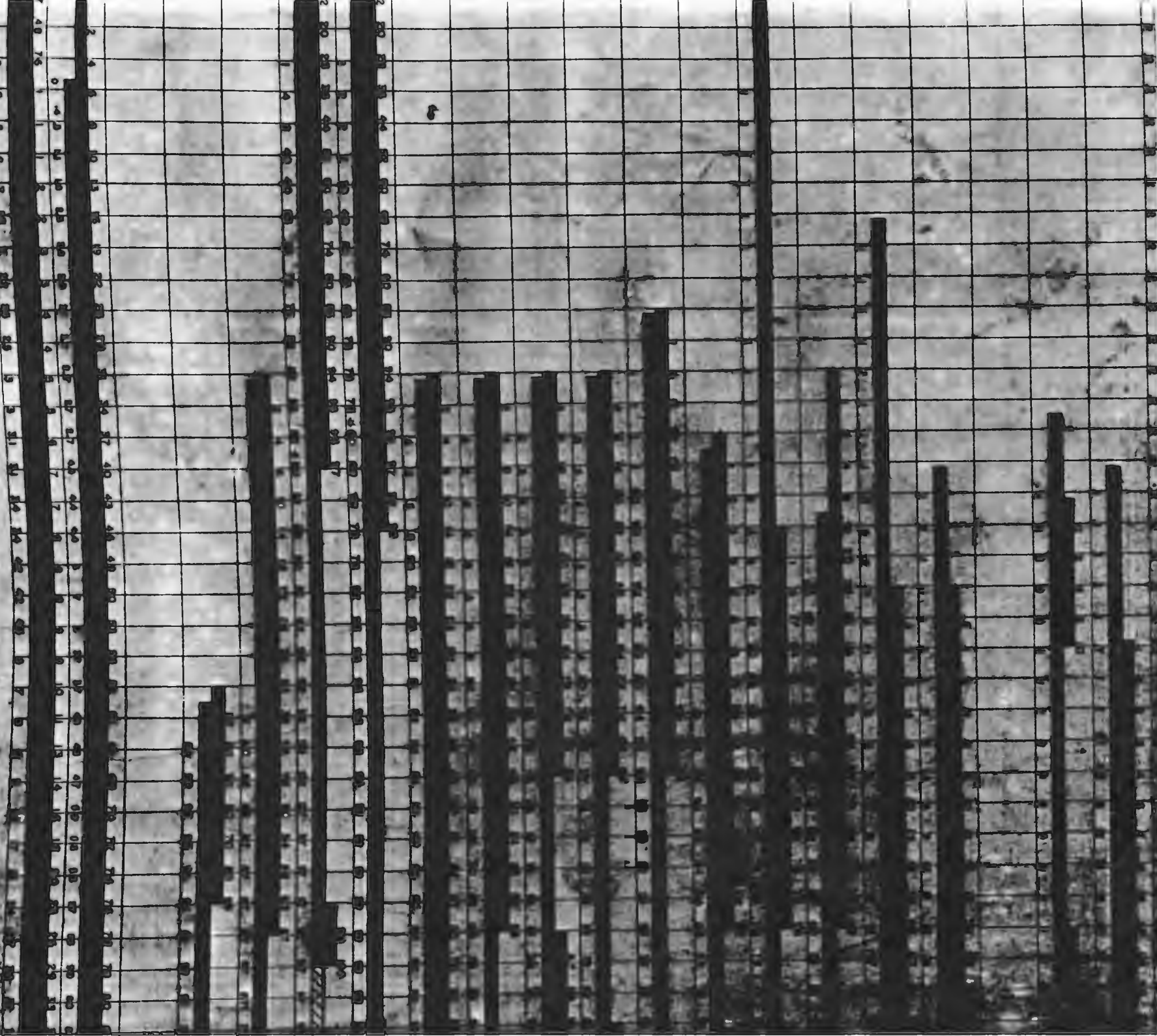
# GROSS

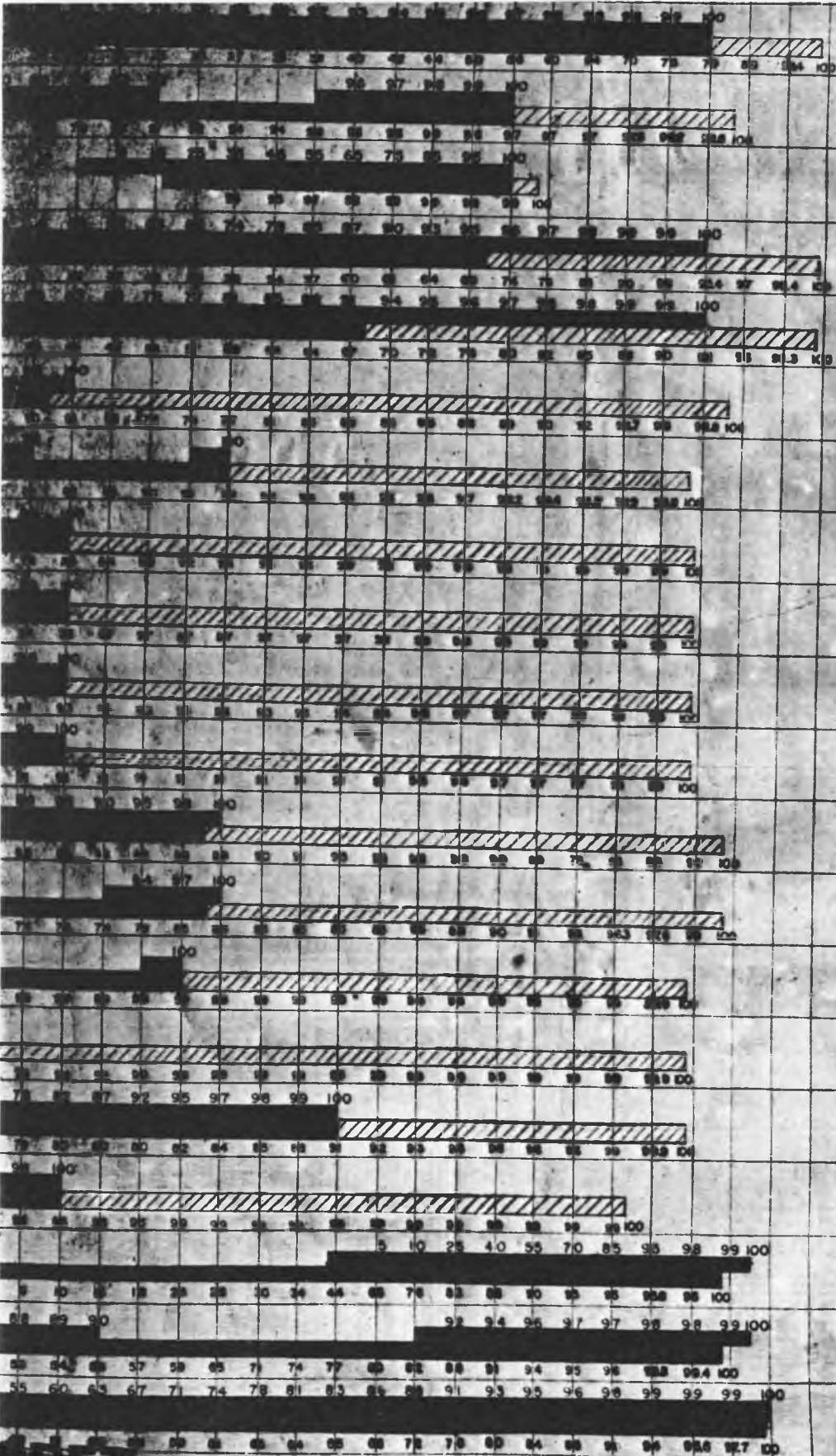
PERCENT. COMPLETE





4 ADDITIONAL MEASUREMENTS





← ADDITIONAL WORK



**LEGEND**

BLACK BARS INDICATE ESTIMATED CONSTR. SCHEDULE  
 RED BARS INDICATE ACTUAL CONSTR. SCHEDULE

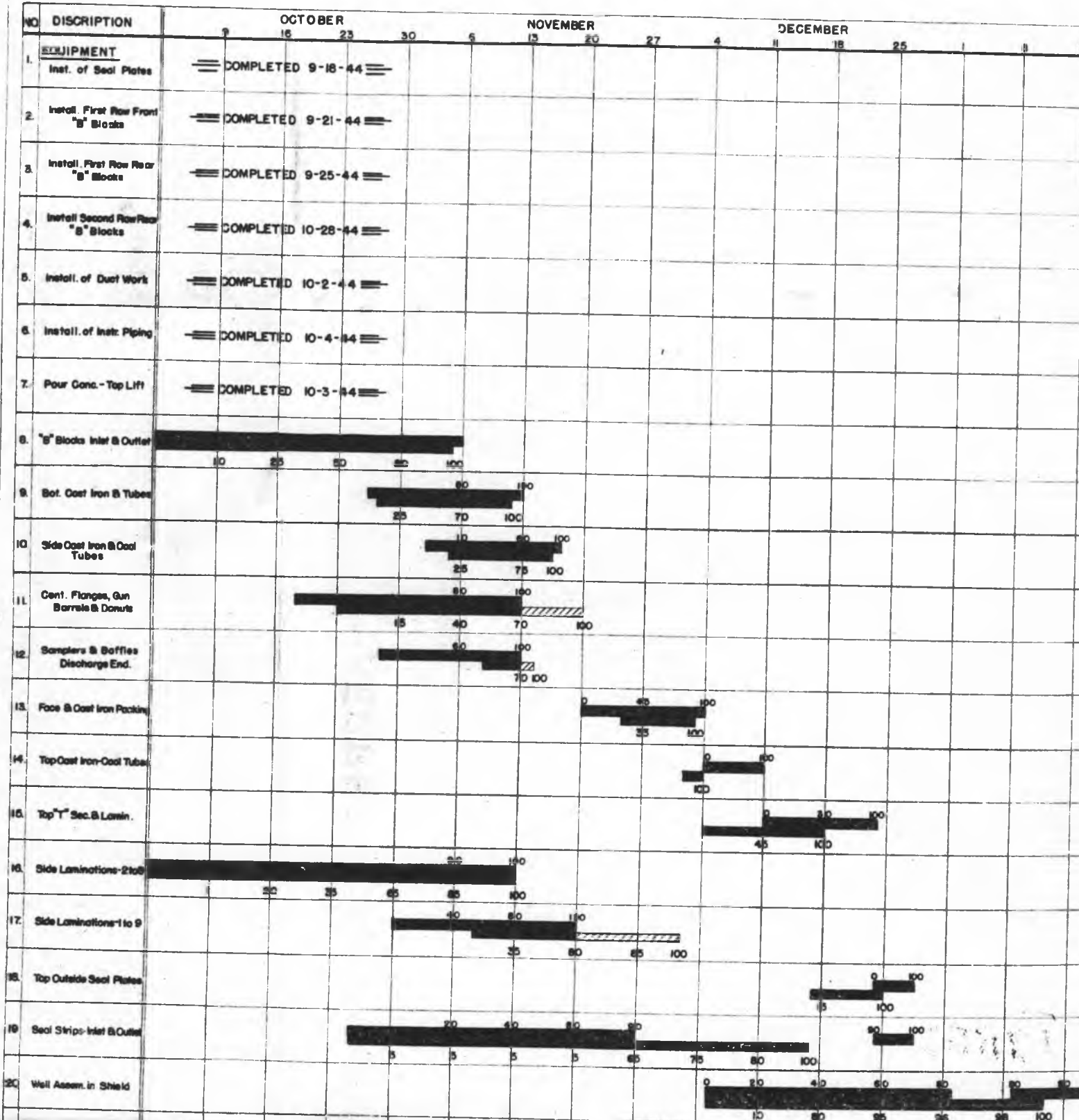
BLACK NUMBERS BELOW BAR INDICATES THAT ACTUAL PERCENT IS EQUAL TO OR AHEAD OF SCHEDULED PERCENT.

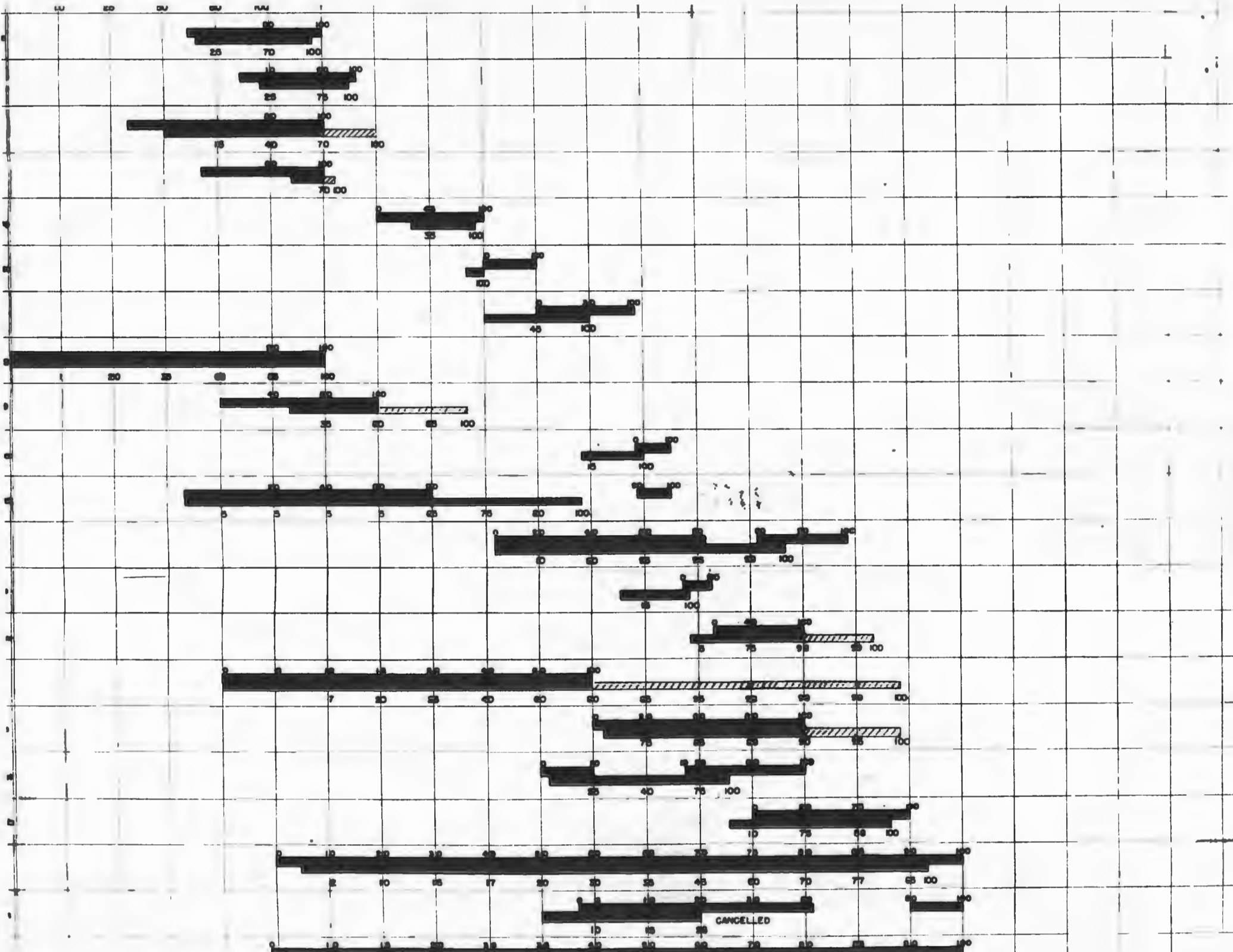
RED NUMBERS BELOW BAR INDICATES THAT ACTUAL PERCENT IS BEHIND SCHEDULE.

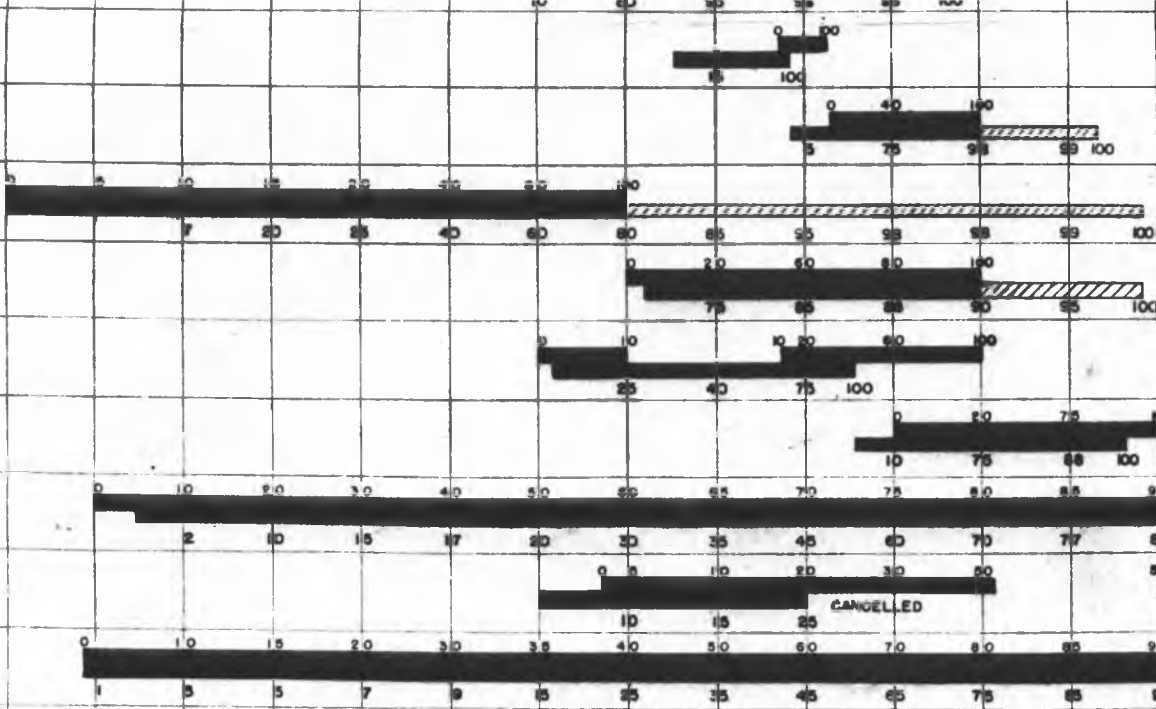
INDICATES NUMBER OF WEEKS PROGRESS IS BEHIND SCHEDULE.

HANFORD ENGINEER WORKS  
 PROJECT - 9536

**CONSTRUCTION PROGRESS**  
**EQUIPMENT INSTALLATION-105-F BLDG.**  
 ESTIMATED AND ACTUAL PERCENT COMPL.







**CANCELLED**



**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
100-B AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
	Total 100-B Area		7/21/43													8/8/44		
100-1	Fresh Metal Storage	12/16/43	3/10/44	3/19/44	3/12/44	6/9/44	-----	-----	4/16/44	6/9/44	-----	-----	-----	-----	-----	8/1/44	8/29/44	8/23/44
100-2	Retention Basin	9/8/43	8/27/43	9/20/43	9/8/43	3/26/44	-----	-----	1/8/44	6/12/44	2/18/44	4/18/44	7/12/44	7/14/44	8/6/44	8/1/44	9/19/44	8/13/44
100-3	Chemical Pump House	1/25/44	4/1/44	4/8/44	4/7/44	8/10/44	4/17/44	5/2/44	4/28/44	5/19/44	5/8/44	8/14/44	8/6/44	8/14/44	8/12/44	8/16/44	8/28/44	9/21/44
110-5	Sea Storage Tanks	12/10/43	2/8/44	2/13/44	2/18/44	6/18/44	-----	-----	4/14/44	7/14/44	3/5/44	8/19/44	8/12/44	8/16/44	8/6/44	8/1/44	9/19/44	9/13/44
110-6	Test Building	6/17/44	6/26/44	6/30/44	6/30/44	7/20/44	-----	-----	7/6/44	7/30/44	7/6/44	8/12/44	8/1/44	8/12/44	8/14/44	8/12/44	8/29/44	8/23/44
110-7	Purification Building	12/13/43	1/6/44	2/2/44	1/10/44	4/18/44	3/5/44	3/13/44	8/14/44	7/30/44	4/12/44	8/18/44	7/28/44	8/15/44	8/16/44	8/16/44	9/23/44	9/13/44
110-8	Primary Substation	12/6/43	1/7/44	1/25/44	1/10/44	5/12/44	3/12/44	3/15/44	3/5/44	6/6/44	6/1/44	6/6/44	6/29/44	6/1/44	6/1/44	8/1/44	12/14/44	11/24/44
110-9	10 Secondary Substations	12/16/43	3/27/44	5/19/44	4/12/44	6/12/44	-----	-----	5/6/44	7/1/44	-----	-----	8/6/44	7/1/44	7/1/44	8/1/44	12/14/44	11/24/44
110-10	Distribution Substation	4/1/44	6/13/44	5/14/44	5/13/44	5/19/44	-----	-----	5/16/44	6/16/44	6/12/44	8/18/44	6/10/44	7/1/44	7/1/44	7/1/44	12/14/44	11/24/44
110-11	Cover Pump House	9/13/43	9/6/43	3/6/44	9/11/43	4/23/44	12/19/43	12/28/43	12/29/43	4/18/44	2/25/44	4/18/44	8/1/44	6/18/44	6/1/44	8/1/44	9/28/44	9/21/44
110-12	Reservoir and Pump House	8/17/43	6/31/43	9/10/43	9/4/43	4/16/44	1/24/44	7/20/44	2/1/44	6/23/44	4/20/44	6/16/44	6/19/44	7/20/44	6/20/44	8/1/44	9/28/44	9/21/44
110-13	Filter Plant	8/31/43	8/31/43	9/20/43	9/6/43	4/9/44	12/19/43	4/8/44	12/29/43	6/18/44	2/13/44	6/8/44	6/26/44	7/4/44	7/6/44	8/1/44	9/28/44	9/21/44
110-14	Tower House	6/20/43	10/6/43	10/12/43	10/16/43	12/10/43	12/11/43	1/20/44	12/20/43	6/6/44	11/28/43	6/8/44	6/22/44	6/20/44	7/16/44	8/1/44	9/28/44	9/21/44
110-15	Generating Plant	11/15/43	11/26/43	12/4/43	12/6/43	2/1/44	2/10/44	4/6/44	2/20/44	6/6/44	2/18/44	7/28/44	7/26/44	8/1/44	8/6/44	8/2/44	9/28/44	9/21/44
110-16	12 Elevated Process Water Tanks	1/6/44	1/26/44	2/3/44	2/4/44	3/20/44	3/24/44	4/8/44	-----	-----	3/24/44	7/26/44	7/26/44	7/26/44	7/26/44	8/1/44	8/29/44	8/23/44
110-17	Sanitary Basin	9/30/43	2/9/44	2/13/44	2/13/44	5/19/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	5/24/44	8/29/44	8/23/44
110-18	Main Pump House	11/4/43	11/26/43	12/16/43	12/6/43	3/26/44	2/10/44	4/10/44	2/20/44	7/6/44	2/18/44	7/26/44	7/26/44	8/6/44	8/6/44	9/1/44	9/28/44	9/1/44
110-19	Sense and Road Lighting	12/1/43	10/1/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5/8/44	12/14/44	12/1/44
110-20	Outside Electric Lines	7/12/43	12/20/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9/8/44	12/14/44	12/1/44
110-21	Fire Alarm System	12/14/43	6/1/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8/15/44	12/14/44	12/1/44
110-22	Telephones and Telephone Cable	12/14/43	1/18/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6/16/44	See 506	Building
110-23	Standard Gauge Railroad Track	7/9/43	7/21/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8/16/44	8/29/44	6/7/44
110-24	Stairs and Walkways	7/9/43	7/21/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8/16/44	8/29/44	6/7/44
110-25	Stairs, Incl. (11) Guard Towers	9/22/43	11/1/43	1/25/44	1/9/44	5/19/44	-----	-----	1/8/44	7/26/44	-----	-----	-----	-----	-----	6/1/44	6/29/44	7/4/44
110-26	7 Underground Septic Tanks	10/11/43	1/1/44	1/19/44	2/10/44	5/19/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	6/1/44	6/18/44	6/7/44
110-27	Open Traincar Stitches (Steds)	7/9/43	7/21/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8/16/44	6/29/44	6/7/44
1614-A	Auto and Bus Parking Area	7/1/43	6/1/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9/18/44	6/29/44	6/7/44
1614-B	General Engineering Stations	1/20/44	6/7/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6/30/44	6/26/44	6/13/44
1701	Emergency Gas Elec. Gen. Equip.	6/20/44	6/6/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6/16/44	6/16/44	6/16/44
1701-A	Gate House and Clock Alley	7/27/43	11/8/43	11/12/43	11/20/43	5/6/44	-----	-----	3/16/44	6/23/44	6/16/44	6/18/44	-----	-----	-----	7/1/44	11/3/44	10/31/44
1701-B	Supervisory Office Laboratory	9/10/43	11/10/43	11/16/43	11/20/43	6/9/44	-----	-----	12/11/43	12/13/43	4/12/44	4/16/44	-----	-----	-----	7/1/44	6/1/44	6/13/44
1701-C	Change Houses	7/9/43	11/10/43	5/2/44	11/20/43	5/23/44	-----	-----	12/11/43	5/11/44	6/8/44	6/19/44	-----	-----	-----	7/1/44	11/3/44	10/31/44
1701-D	Fire Headquarters	1/15/44	2/1/44	2/3/44	2/4/44	3/16/44	-----	-----	2/10/44	2/12/44	4/12/44	4/26/44	-----	-----	-----	7/1/44	11/3/44	10/31/44

SHEET 8 OF 25 SHEETS

**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
100-B AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
1713-B	Warehouse	8/25/43	11/22/43	11/28/43	11/26/43	4/28/44	---	---	3/10/44	3/14/44	---	---	---	---	---	7/1/44	10/2/44	9/13/44
*1713-BA	Storehouse - Essential Materials	3/15/43	10/10/43	---	---	---	---	---	---	---	---	---	---	---	---	1/21/44	10/26/44	10/23/44
*1713-BB	Storehouse - Misc., Storage	5/15/43	9/15/43	---	---	---	---	---	---	---	---	---	---	---	---	12/10/43	10/26/44	10/23/44
1714-B	Oil and Paint Storage	8/25/43	11/10/43	11/12/43	11/14/43	11/20/43	---	---	12/6/43	12/10/43	---	---	---	---	---	7/1/44	11/5/44	10/31/44
1716-B	Automotive Repair Shop	10/13/43	3/29/44	4/2/44	4/2/44	6/2/44	---	---	4/22/44	4/16/44	---	---	---	---	---	7/1/44	9/25/44	9/13/44
1717-B	Combined Shop	10/6/43	12/6/43	12/12/43	12/11/43	12/18/43	4/8/44	4/10/44	3/5/44	4/6/44	4/12/44	6/6/44	---	---	7/20/44	8/5/44	11/3/44	10/31/44
1719-B	First Aid Building	7/6/43	9/1/43	9/5/43	9/4/43	10/2/43	---	---	9/26/43	11/20/43	10/2/43	7/22/44	---	---	---	6/1/44	7/28/44	7/13/44
1720-B	Patrol Headquarters	8/23/43	10/6/43	10/18/43	10/18/43	10/23/43	---	---	10/18/43	10/22/43	7/6/44	7/10/44	---	---	---	6/1/44	11/3/44	10/31/44
1722-B	Area Shop	6/25/43	11/10/43	11/13/43	11/20/43	5/8/44	---	---	12/25/43	11/23/43	6/6/44	5/10/44	---	---	---	6/1/44	11/3/44	10/31/44
*1722-BA	Shop Electrical	4/23/43	11/11/43	---	---	---	---	---	---	---	---	---	---	---	---	12/15/44	10/26/44	10/23/44
*1723-B	Extra Machinery Storage	8/20/43	10/23/43	---	---	---	---	---	---	---	---	---	---	---	---	12/15/44	10/26/44	10/23/44
1754-B	Gas Cylinder Storage	6/23/43	11/10/43	11/20/43	12/20/43	12/11/43	---	---	11/20/43	5/6/44	---	---	---	---	---	5/1/44	10/2/44	7/13/44
1801-B	Pipe Supports	10/30/43	1/22/44	7/18/44	---	---	7/18/44	7/22/44	---	---	---	---	---	---	---	8/1/44	6/18/44	8/16/44
1802-B	Steam Lines	3/6/44	3/29/44	7/16/44	---	---	---	---	---	---	---	---	7/16/44	7/22/44	7/18/44	8/1/44	8/29/44	8/23/44
1803-B	Air Lines	3/6/44	7/18/44	---	---	---	---	---	---	---	---	---	---	---	---	7/16/44	8/29/44	8/23/44
1803-B	Process Lines	11/6/43	7/5/44	7/20/44	---	---	---	---	---	---	---	---	7/25/44	7/28/44	8/1/44	6/5/44	8/29/44	8/23/44
1901-B	Outside Water Lines	11/16/43	3/29/44	5/20/44	---	---	---	---	---	---	---	---	6/1/44	7/30/44	8/1/44	8/1/44	6/29/44	8/23/44
1902-B	Fire Lines	10/18/43	1/1/44	7/18/44	---	---	---	---	---	---	---	---	6/1/44	7/30/44	8/1/44	8/1/44	6/29/44	8/23/44
1903-B	Sanitary Sewers	12/14/43	1/1/44	6/6/44	---	---	---	---	---	---	---	---	6/1/44	6/18/44	8/1/44	8/1/44	6/18/44	8/16/44
1904-B	Process Sewers	12/14/43	12/26/43	3/18/44	---	---	---	---	---	---	---	---	6/1/44	6/2/44	6/1/44	8/1/44	9/26/44	7/13/44

SHEET 14 OF 14 SHEETS

\*Denotes Temporary Construction Taken Over By Operations for Permanent Use.  
 NOTE: The dates shown on this sheet reflect the time at which the various interim stages of construction were essentially complete. In some cases these dates will vary slightly from the final dates carried in the Weekly Progress Report.

~~SECRET~~  
**PROGRESS OF CONSTRUCTION**  
**BUILDINGS & FACILITIES**  
**100-D AREA**  
**PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
	Total 100-D Area		11/1/43													12/4/44		
103-D	Fresh Metal Storage	6/11/43	10/1/44	10/8/44	10/8/44	11/8/44	---	---	11/1/44	11/12/44	---	---	---	---	11/28/44	11/24/44	11/30/44	11/21/44
107-E	Retention Basin	7/27/43	11/17/43	2/21/44	4/27/44	6/21/44	---	---	8/31/44	10/13/44	10/1/44	11/10/44	11/6/44	11/16/44	12/17/44	10/24/44	11/30/44	11/21/44
108-D	Chemical Pump House	3/22/44	5/30/44	6/24/44	6/26/44	6/31/44	8/31/44	9/8/44	7/8/44	11/5/44	7/7/44	11/21/44	11/24/44	11/21/44	11/29/44	11/1/44	1/2/45	11/29/44
110-D	Gas Storage Tanks	7/3/43	5/27/44	---	---	---	---	---	---	---	---	---	---	---	11/18/44	10/18/44	11/30/44	11/11/44
115-D	Purification Building	1/4/44	3/25/44	3/30/44	4/13/44	5/6/44	7/26/44	7/27/44	5/24/44	6/25/44	8/28/44	11/10/44	10/4/44	11/23/44	12/5/44	11/25/44	12/6/44	12/2/44
161-D	Primary Substation	12/18/43	2/4/44	4/8/44	2/14/44	5/15/44	6/28/44	6/30/44	---	---	3/7/44	11/1/44	---	---	8/24/44	11/15/44	1/4/45	12/14/44
162-D	(12) Secondary Substations	1/20/44	7/10/44	---	---	---	---	---	---	---	---	---	---	---	8/24/44	12/1/44	1/4/45	12/14/44
163-D	Distribution Substation	3/31/44	7/25/44	---	---	---	---	---	---	---	---	---	---	---	8/24/44	10/25/44	1/4/45	12/14/44
161-D	River Pump House	9/18/43	11/11/43	1/17/44	1/18/43	5/1/44	4/1/44	8/1/44	6/23/44	9/23/44	4/17/44	9/22/44	9/4/44	9/24/44	9/10/44	10/15/44	2/1/44	11/11/44
162-D	Reservoir & Pump House	12/6/43	11/9/43	4/11/44	4/12/44	6/19/44	---	---	4/25/44	10/19/44	8/21/44	10/11/44	8/15/44	10/15/44	9/11/44	10/20/44	11/30/44	11/21/44
163-D	Filter Plant	8/11/43	11/1/43	11/30/43	3/13/44	6/7/44	7/19/44	6/5/44	4/18/44	11/3/44	7/22/44	11/5/44	9/11/44	10/30/44	10/15/44	11/6/44	1/2/45	12/20/44
164-D	Power House	8/19/43	11/18/43	5/2/44	12/18/43	5/5/44	5/5/44	8/15/44	3/27/44	11/3/44	2/25/44	11/5/44	8/1/44	11/15/44	11/22/44	10/20/44	1/2/45	12/20/44
165-D	Desaerating Plant	11/22/43	2/18/44	4/18/44	4/9/44	5/1/44	4/25/44	7/5/44	4/9/44	9/18/44	5/29/44	11/24/44	11/6/44	11/27/44	11/29/44	11/30/44	1/2/45	11/30/44
166-D	Water Treatment Plant	10/11/43	12/13/43	4/12/44	4/9/44	6/1/44	6/14/44	7/26/44	5/5/44	11/13/44	6/25/44	12/1/44	11/6/44	12/1/44	Not started	12/4/44	1/2/45	12/18/44
167-C	(2) Elevated Process Water Tanks	1/13/44	6/22/44	5/10/44	5/15/44	6/23/44	6/6/44	9/1/44	---	---	4/1/44	10/20/44	10/20/44	11/10/44	11/15/44	10/15/44	12/1/44	11/27/44
168-D	Ash Disposal Basin	10/6/43	4/10/44	---	---	---	---	---	---	---	---	---	---	---	9/15/44	9/20/44	10/30/44	10/23/44
169-D	Refrigeration Building	11/22/43	2/18/44	3/18/44	3/18/44	6/28/44	5/18/44	7/6/44	6/16/44	8/26/44	7/26/44	11/28/44	10/6/44	11/28/44	11/30/44	11/30/44	1/24/45	12/1/44
190-D	Main Pump House	11/22/43	2/8/44	3/18/44	3/14/44	5/11/44	4/12/44	6/29/44	5/12/44	11/22/44	4/14/44	11/24/44	11/4/44	11/27/44	11/29/44	11/26/44	1/2/45	12/20/44
1601-E	Fence & Road Lighting	1/19/44	10/15/43	---	---	---	---	---	---	---	---	---	---	---	---	11/1/44	1/2/45	12/14/44
1603-C	Outside Electric Lines	7/18/43	1/4/44	---	---	---	---	---	---	---	---	---	---	---	---	11/1/44	1/2/45	12/14/44
1606-D	Fire Alarm System	1/13/44	10/31/44	---	---	---	---	---	---	---	---	---	---	---	---	12/1/44	1/2/45	12/14/44
1606-D	Telephones & Telephone Cable	1/13/44	8/16/43	---	---	---	---	---	---	---	---	---	---	---	---	11/25/44	1/2/45	12/14/44
1601-E	Standard Gauge Railroad Track	9/17/43	10/14/43	---	---	---	---	---	---	---	---	---	---	---	---	12/9/44	See 506 E	dg.
1603-E	Roads & Walks	9/17/43	9/21/43	---	---	---	---	---	---	---	---	---	---	---	---	11/7/44	11/28/44	11/17/44
1606-E	Fence Incl. (10) Guard Towers	10/13/43	12/20/43	---	---	---	---	---	---	---	---	---	---	---	---	11/10/44	12/6/44	12/1/44
1607-D	(5) Underground Septic Tanks	10/18/43	3/14/44	---	---	---	---	---	---	---	---	---	---	---	---	11/1/44	12/27/44	12/18/44
1608-E	Incess Waste Lift Station	12/30/43	1/20/44	---	---	---	---	---	---	---	---	---	---	---	---	9/15/44	12/27/44	10/23/44
1613-D	Auto and Bus Parking Area	4/17/44	8/9/44	---	---	---	---	---	---	---	---	---	---	---	---	11/1/44	11/28/44	11/17/44
1614-D	(3) General Monitoring Stations	1/20/44	6/1/44	---	---	---	---	---	---	---	---	---	---	---	---	9/22/44	12/4/44	11/11/44
1611-D	(3) Emergency Gas Elec. Gen. Bldgs.	5/20/44	6/3/44	---	---	---	---	---	---	---	---	---	---	---	---	10/18/44	11/12/44	11/1/44
1701-D	Gate House & Clock Alley	7/31/43	5/3/44	5/10/44	5/12/44	5/30/44	---	---	5/25/44	9/22/44	9/1/44	9/29/44	---	---	---	10/21/44	11/28/44	11/17/44
1704-C	Supervisors' Office	7/13/43	12/20/43	12/28/44	12/31/43	8/28/44	---	---	5/12/44	11/10/44	9/15/44	11/10/44	---	---	---	9/29/44	12/27/44	12/20/44
1707-C	(2) Change Houses	6/9/43	7/5/44	7/6/44	7/6/44	7/11/44	---	---	7/11/44	9/22/44	9/30/44	10/3/44	---	---	---	11/4/44	11/24/44	11/11/44
1709-E	Fire Headquarters	1/20/44	3/21/44	3/28/44	3/28/44	4/8/44	---	---	4/5/44	6/10/44	9/28/44	10/6/44	---	---	---	10/15/44	12/27/44	12/18/44

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## PROGRESS OF CONSTRUCTION BUILDINGS & FACILITIES 100-D AREA PROJECT 9536

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV T
1713-D	Storeroom	6/30/43	4/12/44	4/16/44	5/8/44	5/12/44	-----	-----	5/25/44	9/5/44	-----	-----	-----	-----	-----	1/29/44	11/23/44	11/23/44
*1713-DA	Storeroom, Essential Material	5/15/44	12/15/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4/7/44	10/3/44	1/25/44
1716-D	Oil and Paint Storage	6/30/43	7/17/44	7/17/44	7/19/44	7/19/44	-----	-----	7/19/44	9/5/44	-----	-----	-----	-----	-----	1/29/44	11/27/44	11/27/44
1716-D	Automotive Repair Shop	10/18/43	11/26/43	11/27/44	11/27/43	12/3/43	-----	-----	12/16/43	4/28/44	10/3/44	10/27/44	-----	-----	-----	11/23/44	11/4/44	11/24/44
1717-D	Combined Shops	10/9/43	5/30/44	6/2/44	6/1/44	7/1/44	-----	-----	6/20/44	10/27/44	7/25/44	11/11/44	-----	-----	-----	11/21/44	11/6/44	11/7/44
1719-D	First Aid Building	6/6/43	11/25/43	11/26/43	11/27/43	12/3/43	-----	-----	12/13/43	9/22/44	5/15/44	5/22/44	-----	-----	-----	11/18/44	11/7/44	11/27/44
1720-D	Patrol Headquarters	7/6/43	12/10/43	12/16/44	2/7/44	3/5/44	-----	-----	3/2/44	4/14/44	3/20/44	7/28/44	-----	-----	-----	11/18/44	11/27/44	11/27/44
1722-D	Area Shops	6/30/43	6/12/44	6/13/44	6/13/44	7/4/44	-----	-----	6/20/44	10/6/44	-----	-----	-----	-----	-----	8/1/44	11/7/44	11/21/44
*1722-DA	Electrical Shop	4/23/43	12/12/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/23/44	11/27/44	11/27/44
*1729-D	Extra Machinery Storage	4/23/43	12/21/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4/7/44	11/6/44	11/27/44
1734-D	Gas Cylinder Storage	5/31/43	7/17/44	7/17/44	7/17/44	7/20/44	-----	-----	7/20/44	5/1/44	-----	-----	-----	-----	-----	2/1/44	11/9/44	11/23/44
*1735-D	Training Headquarters	5/15/43	11/17/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/24/44	11/6/44	11/24/44
1801-D	Pipe Supports	7/19/44	5/8/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	10/12/44	11/1/44	11/9/44
1802-D	Steam Lines	1/5/44	8/21/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/21/44	11/2/44	11/27/44
1803-C	Air Lines	1/5/44	10/9/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/1/44	11/11/44	11/25/44
1805-D	Process Lines	1/5/44	8/28/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/24/44	11/1/44	11/27/44
1801-D	Outside Water Lines	9/29/43	12/1/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/21/44	11/4/44	11/27/44
1902-D	Fire Lines	10/2/43	12/14/43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/1/44	11/1/44	11/27/44
1903-D	Sanitary Sewers	12/13/43	3/14/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/1/44	11/2/44	11/27/44
1904-D	Process Sewers	12/30/43	1/20/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/11/44	11/20/44	11/27/44

\*I.C. Building Transferred to Operations and Assigned Permanent Building Numbers.

NOTE: The dates shown on this sheet reflect the time at which the various interim stages of construction were essentially complete. In some cases these dates will vary slightly from the final dates carried in the weekly Progress Report.

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**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
100-F AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
	TOTAL 100-F AREA		12/21/43															
100-F	Fresh Metal Storage	3/6/44	10/14/44	10/17/44	10/18/44	10/21/44	-----	-----	10/23/44	1/5/45	-----	-----	-----	-----	-----	2/10/45		
100-F	Retention Basin	12/5/43	2/10/44	5/10/44	8/7/44	10/18/44	-----	-----	10/8/44	10/11/44	11/1/44	1/18/45	1/20/45	1/27/45	1/20/45	1/27/45	2/6/45	2/1/45
100-F	Chemical Pump House	8/6/44	8/12/44	8/22/44	8/21/44	10/12/44	-----	-----	9/8/44	9/25/44	9/8/44	11/8/44	9/22/44	1/22/45	1/20/45	1/27/45	2/6/45	2/1/45
100-F	Gas Storage Tanks	4/3/44	7/14/44	7/17/44	7/17/44	7/22/44	-----	-----	9/10/44	9/18/44	7/26/44	1/13/45	1/18/45	2/10/45	1/20/45	2/10/45	2/11/45	2/7/45
100-F	Purification Building	4/6/44	4/26/44	6/3/44	7/19/44	10/20/44	-----	-----	9/4/44	2/6/45	9/18/44	2/1/45	1/16/45	2/10/45	1/22/45	2/10/45	2/11/45	2/7/45
100-F	Primary Substation	12/15/43	3/20/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11/10/44	1/27/45	2/15/45	2/12/45
100-F	Secondary Substations (11)	1/4/44	8/25/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/10/45	1/27/45	2/19/45	2/12/45
100-F	Distribution Substation	3/31/44	10/30/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/10/45	1/27/45	2/19/45	2/12/45
100-F	River Pump House	11/2/43	12/28/43	2/6/44	2/6/44	4/2/44	8/1/44	8/6/44	4/23/44	10/15/44	5/20/44	12/6/44	12/18/44	1/12/45	12/13/44	1/15/45	2/6/45	2/1/45
100-F	Reservoir and Pump House	12/5/43	1/21/44	2/15/44	5/7/44	10/20/44	7/18/44	8/1/44	6/20/44	12/28/44	9/11/44	1/10/45	1/6/45	1/27/45	1/6/45	1/27/45	2/6/45	2/1/45
100-F	Filter Plant	11/6/43	3/6/44	4/20/44	6/5/44	10/13/44	8/20/44	10/10/44	7/10/44	1/8/45	7/21/44	1/12/45	1/8/45	1/27/45	1/8/45	1/27/45	2/6/45	2/1/45
100-F	Power House	8/6/43	1/20/44	5/10/44	5/8/44	6/30/44	6/25/44	8/25/44	6/25/44	1/5/45	6/12/44	1/22/45	12/26/44	1/27/45	12/26/44	1/27/45	2/6/45	2/1/45
100-F	Generating Plant	11/19/43	4/24/44	5/2/44	5/28/44	9/15/44	7/20/44	9/20/44	7/20/44	1/18/45	9/8/44	1/23/45	1/20/45	2/10/45	1/20/45	2/10/45	2/12/45	2/12/45
100-F	Elevated Water (Process) Tanks (2)	12/2/43	4/6/44	4/17/44	4/17/44	5/12/44	8/6/44	11/5/44	8/6/44	11/5/44	8/15/44	1/31/45	1/12/45	1/18/45	1/12/45	1/18/45	2/6/45	2/1/45
100-F	Ash Disposal Basin	10/19/43	10/16/44	10/19/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
100-F	Stratification Building	11/2/43	4/24/44	5/4/44	6/12/44	8/21/44	8/1/44	9/16/44	8/1/44	1/8/45	9/1/44	1/26/45	1/23/45	2/10/45	1/26/45	2/10/45	2/12/45	2/12/45
100-F	Sanitary Pump House	11/21/43	4/21/44	5/4/44	6/24/44	10/6/44	7/6/44	9/18/44	7/6/44	1/5/45	7/21/44	2/2/45	2/1/45	2/10/45	2/1/45	2/10/45	2/12/45	2/12/45
100-F	Fence and Road Lighting	1/27/44	9/1/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/27/45	2/19/45	2/12/45
100-F	Outside Electric Lines	2/23/44	8/1/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/27/45	2/19/45	2/12/45
100-F	Fire Alarm System	2/15/44	9/1/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/10/45	1/27/45	2/19/45	2/12/45
100-F	Telephones and Telephone Cattle	6/20/44	5/1/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2/10/45	1/27/45	2/19/45	2/12/45
100-F	Standard Gauge Railroad Track	5/12/43	3/16/44	1/12/45	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2/10/45	-----	(See Building 9608)
100-F	Trucks and Buses	4/10/43	3/13/44	1/18/45	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2/6/45	2/1/45
100-F	Recess Inc. 15' Tower Towers	11/6/43	1/10/44	1/26/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2/1/45	2/6/45	2/1/45
100-F	Underground Waste Tanks (5)	11/4/43	3/18/44	3/27/44	6/1/44	2/11/45	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/18/45	2/12/45	2/12/45
100-F	Process Waste Lift Station	5/24/44	6/25/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	10/16/44	2/6/45	2/1/45
100-F	Sanitary Drainage Ditches	4/4/44	5/4/44	8/27/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/31/45	2/6/45	2/6/45
100-F	Sanitary and Bus Parking Area	7/1/44	9/15/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/16/45	2/6/45	2/1/45
100-F	Sanitary Water Retention Stations (3)	7/1/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/5/45	3/1/45	3/10/45
100-F	Emergency Water Retention Stations (2)	4/3/44	5/15/44	6/17/44	6/1/44	6/23/44	-----	-----	6/26/44	7/15/44	7/18/44	7/21/44	-----	-----	7/11/44	1/13/45	2/1/45	2/1/45
100-F	Water House and Clock Alley	1/2/44	4/3/44	4/2/44	5/15/44	5/21/44	-----	-----	5/22/44	1/5/45	10/6/44	1/12/45	-----	-----	-----	1/13/45	2/6/45	2/1/45
100-F	Sanitary Retention Station	11/23/43	11/2/44	1/5/44	4/3/44	5/29/44	-----	-----	5/11/44	1/20/45	7/22/44	1/8/45	-----	-----	-----	1/13/45	2/6/45	2/1/45
100-F	Sanitary Retention Station	1/2/44	4/3/44	4/20/44	5/12/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/13/45	2/6/45	2/1/45
100-F	Sanitary Retention Station	1/2/44	3/10/44	3/15/44	3/1/44	4/20/44	-----	-----	4/3/44	11/6/44	1/5/45	-----	-----	-----	-----	1/13/45	2/1/45	2/1/45

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## PROGRESS OF CONSTRUCTION BUILDINGS & FACILITIES 100-F AREA PROJECT 9536

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
1713-F	Storehouse	3/12/44	3/30/44	4/6/44	5/24/44	6/2/44	-----	-----	6/2/44	11/5/44	-----	-----	-----	-----	-----	1/25/45	2/5/45	2/1/45
*1713-FA	Storehouse Essential Material	-----	5/16/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/20/45	2/4/45	2/1/45
1716-F	Oil and Joint Storage	5/16/44	3/30/44	4/1/44	5/12/44	6/9/44	-----	-----	6/9/44	1/15/44	-----	-----	-----	-----	-----	1/20/45	2/4/45	2/1/45
1718-F	Bus Parking Station	5/18/44	3/30/44	4/6/44	5/19/44	6/26/44	-----	-----	-----	-----	-----	-----	-----	-----	-----	1/21/45	2/2/45	2/1/45
1717-F	Combined Shops	2/18/44	3/29/44	4/9/44	4/17/44	6/2/44	-----	-----	5/1/44	5/25/44	6/19/44	1/7/45	-----	-----	-----	1/21/45	2/2/45	2/1/45
1719-F	First Aid Building	9/5/43	12/28/43	12/21/43	12/29/43	1/6/44	-----	-----	2/1/44	3/8/44	3/16/44	1/13/45	-----	-----	-----	1/21/45	2/5/45	2/2/45
1720-F	Patrol headquarters	11/14/43	12/28/43	12/21/43	12/29/43	1/6/44	-----	-----	2/1/44	3/25/44	3/16/44	1/10/45	-----	-----	-----	1/21/45	2/5/45	2/2/45
1722-F	Area Shops	12/4/43	3/30/44	4/5/44	5/22/44	6/18/44	-----	-----	6/19/44	9/6/44	11/10/44	1/6/45	-----	-----	-----	1/13/45	2/5/45	2/2/45
1734-F	Gas Cylinder Storage	5/5/43	3/30/44	6/21/44	6/18/44	6/19/44	-----	-----	6/19/44	12/3/44	-----	-----	-----	-----	-----	1/21/45	2/4/45	2/1/45
1801-F	Pipe Supports	1/6/44	9/4/44	1/7/45	-----	-----	-----	-----	9/4/44	1/7/45	-----	-----	-----	-----	-----	1/8/45	2/6/45	2/1/45
1802-F	Steam Lines	1/6/44	-----	-----	-----	-----	-----	-----	-----	-----	9/20/44	1/2/45	-----	-----	-----	1/5/45	1/1/45	2/1/45
1803-F	Air Lines	1/23/44	11/27/44	12/28/44	-----	-----	-----	-----	12/4/44	12/30/44	12/8/44	1/2/45	-----	-----	1/2/45	1/16/45	2/5/45	2/1/45
1806-F	Process Lines	9/5/44	12/13/44	12/16/44	-----	-----	-----	-----	12/16/44	12/30/44	12/16/44	1/2/45	-----	-----	1/20/45	1/9/45	1/1/45	2/1/45
1801-F	Crossed Water Lines	1/21/44	1/22/44	1/3/45	1/24/44	1/10/45	-----	-----	4/6/44	7/26/44	-----	-----	-----	-----	1/16/45	1/3/45	1/1/45	2/1/45
1902-F	Fire Lines	1/21/44	1/22/44	1/6/45	1/24/44	1/12/45	-----	-----	4/10/44	7/26/44	-----	-----	-----	-----	12/23/44	1/10/45	2/6/45	2/2/45
1903-F	Sanitary Sewers	5/5/44	4/10/44	1/5/45	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	12/5/44	1/12/45	2/1/45	2/1/45
1904-F	Process Sewers	3/20/44	4/20/44	1/6/45	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6/10/44	1/15/45	2/5/45	2/1/45
															5/3/44	1/16/45	2/6/45	2/1/45

\* Denotes Temporary Construction Taken Over by Operations for Permanent Use  
 NOTE: The dates shown on this sheet reflects the time at which the various interim stages of construction were essentially completed.  
 In some cases these dates will vary slightly from the final dates carried in the weekly Progress Report.

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SHEET 13 OF 14 SHEETS

**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
105 AREAS  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
	TOTAL 105 AREAS		10/4/43													1/31/44		
105-1	File Building		(Building portion constructed by SIO Area Division Engineer)															
105-2	File Building	10/4/43	10/10/43	-----	10/29/43	3/31/44	1/31/44	7/19/44	1/2/44	7/21/44	2/4/44	8/10/44	7/25/44	8/18/44	8/12/44	8/29/44	9/14/44	4/26/44
105-3	File Building	10/4/43	11/29/43	-----	12/3/43	4/28/44	4/8/44	11/11/44	2/18/44	9/22/44	4/14/44	11/17/44	10/18/44	11/18/44	11/28/44	11/29/44	11/29/44	11/29/44
105-4	File Building	10/4/43	2/17/44	-----	2/16/44	10/20/44	6/26/44	12/16/44	8/27/44	12/22/44	8/26/44	1/26/45	1/1/45	1/28/45	1/31/45	1/31/45	2/9/45	2/9/45

SHEET 14 OF 14 SHEETS

SUBCONTRACTORS - 100 AREAS

<u>RRG</u>	<u>SUBCONTRACTOR</u>	<u>SCOPE OF WORK</u>	<u>100-B</u>	<u>100-D</u>	<u>100-F</u>
241½	Clinton Bridge Co.	Purchase and Steel Erection	*105,108,115 151,181,182 183,184,185 190,1717	*105,108,115,151 181,182,183,184 185,186,189,190 1717	*105,108,115 151,181,182 183,184,185 189,190,1717
307½	Combustion Eng. Co.	Boiler Erection	184	184	184
403	Guy F. Atkinson Co.	Railroad Construction	Area	Area	Area
407	Myers Bros. & N. M. Ball Sons	Road Construction	Area	Area	Area
407	Myers Bros. & N. M. Ball Sons	Excavation	105,107,151 182,183,184 190, 1601 1603, 1901 1904	107,151,182,183	151
408	Newberry, Chandler & Lord	Electrical Work	Area	Area	Area
410	Hanford Concrete Co.	Concrete	Area	Area	Area
411	Hanks, James, Zahniser & Warren	Pipe Work	Area	Area	Area
565½	W. E. Caldwell Co.	Elevated Wook Tanks	1901	1901	1901
566½	Rust Engineering Co.	Concrete Stacks	184	184	184

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SUBCONTRACTORS - 100 AREAS - Cont.

RFG	SUBCONTRACTOR	SCOPE OF WORK	100 AREAS - Cont.		
			100-B	100-D	100-F
867½	W. E. Caldwell Co.	Elevated Wood Tanks	1902	1902	1902
837½	Chicago Bridge & Iron Co.	Elevated Steel Tanks	187	187	187
859½	Link Belt Co.	Coal Handling Equipment	184	184	184
808½	Philadelphia Iron Works	Boiler Breechings	184	184	184
823½	Chicago Bridge & Iron Co.	Storage Tanks	190	190	190
1170½	Connery Construction Co.	Air Ducts	184	184	184
1246½	Haughton Elevator Co.	Electric Elevators	105	105	105
1473½	Asbestos Supply Co.	Insulation	Area	Area	Area
1588½	National Gunita Construction Co.	Concrete Storage Tanks	—	185	—
1862½	Alphons Custodia Co.	Stacks	116	116	116
4321	Curtis Gravel Co.	Sand	Area	Area	Area
4324	American Pipe and Construction Co.	Concrete Piping	1901,1904	1901,1904	1901,1904
4332	William Vail Co.	Roofing	103,106,107,151 161,181,182 183,184,185 190,1700 Bldgs.*	103,106,107,151 181,182,183,184 185,189,190,1700 Bldgs.*	103,106,107,151 181,182,183,184 185,189,190,1700 Bldgs.*

\* (1700 Bldgs. Groups -- all administrative and service buildings in each area known as 1700 group.)

SUBCONTRACTORS - 100 AREAS - Cont.

<u>RFG</u>	<u>SUBCONTRACTOR</u>	<u>SCOPE OF WORK</u>	<u>100-B</u>	<u>100-D</u>	<u>100-F</u>
4334	Guerin Bros.	Excavation	--	105,115,181,184 185,186,189,190 1601,1603,1901 1904	105,107,115,181 182,183,184,185 189,190,1601, 1603,1901,1904
4335	National Gunite Co.	Gunite Work	107,182,183	107,182,183,186	107,182,183
4336	G. R. Jesson & J. C. Wright Co.	Concrete Block & Cement Brick	Area	Area	Area
4337	Guy F. Atkinson Co.	Channel Excavation	--	181,1904	--
4339	Guy F. Atkinson Co.	Railroad Construction	Area	Area	Area
4341	Ball and Simpson	Aggregate Hauling	Area	Area	Area
4354	H.B. Parsons Tile Co.	Flooring	184,1719	184,1719	184,1719
29,312	Fryer-Knowles	Hot Mastic Flooring	105,184	105,184	105,184
29,328	U. S. Rubber Co.	Rubber Lining	Misc.	190-Misc.	Misc.

• Steel for 151, 181, 182 and 1717 Buildings erected by du Pont

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MATERIALS USED IN PILE

The following is a tabulation of the larger quantities of materials used in the Pile.

<u>Item</u>	<u>quantity</u>
Masonite, 1/8" thick	2,500,000 sq. ft.
Steel Plate	4,415 tons
Cast-iron	1,093 tons
Graphite	2,200 tons
Copper Tubing	221,000 ft.
Saran Tubing	176,700 ft.
Aluminum Tubing	86,000 ft.

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200 AREA

Process Buildings

<u>Building Number</u>	<u>200-E</u>	<u>200-W</u>	<u>200-M</u>	<u>Building Name</u>
211	1	2	0	Tank Farm
212	0	0	3	Lag Storage Building
213	0	0	2	Magazine Storage Building
214	1	0	0	Process Waste Disposal Trench
221	1	2	0	Cell Building
222	1	2	0	Sample Preparation Lab.
224	1	2	0	Bulk Reduction Building
231	0	1	0	Concentration Building
241	2	2	0	Process Waste Disposal System
271	1	2	0	Chemical Preparation & Service Building
291	1	2	0	Exhauster Building & Stack
292	1	2	0	Exhaust Gas Lab.
	<hr/>	<hr/>	<hr/>	
	10	17	5	

Power, Water Treatment & Storage Buildings

282	1	1	0	Reservoir & Pump House Building
283	1	1	0	Filter Plant Building
284	1	1	0	Power House
286	1	1	0	Ash Disposal Pit
	<hr/>	<hr/>	<hr/>	
	4	4	0	

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2500 - Outside Electrical Facilities

<u>Building Number</u>	<u>200-E</u>	<u>200-W</u>	<u>200-N</u>	<u>Building Name</u>
251	-	-	1	Primary Substation (230 KV/13.8 KV)
252	1	1	1	Secondary Substation (13.8 KV/2300 V)
253	13	21	4	Distribution Substation (2300 V/440-220-110 V)
2501	x	x	x	Fence & Road Lighting
2503	x	x	x	Outside Transmission Lines (including poles and hardware)
2505	x	x	-	Fire Alarm System
2506	x	x	x	Telephones & Telephone Cable

2600 - General Facilities

2601	x	x	x	Standard Gauge Railroad Track
2603	x	x	x	Roads and Walks
2605	x(18)	x(16)	x(3)	Fences (including Guard Towers)
2607	4	7	3	Septic Tanks
2612	x	x	x	Open Drainage Ditches
2613	x	x	-	Permanent Parking Lot
2614	4	6	1	General Monitoring Stations
2621	3	3	-	Emergency Generator Shelters

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2700 - Service Buildings

<u>Building Number</u>	<u>200-E</u>	<u>200-W</u>	<u>200-S</u>	<u>Building Name</u>
272	1	1	-	Area Shop
273	1	-	-	Heat Treating Furnace
274	1	1	-	Machinery Storehouse
275	1	1	-	Chemical Storehouse
2701	1	1	-	Gate House
2701-A	1	3	-	Gate House
2704	1	1	-	Supervisors' Office Bldg.
2707	1	1	-	Change House (Service Area)
2707-A	1	1	-	Change House (Power Area)
2709	1	1	-	Fire Headquarters
2713	1	1	-	Storeroom
2713-A	1	1	-	Essential Material Storehouse
2713-B	1	1	-	Miscellaneous Storehouse
2715	1	1	-	Oil & Paint Storage Building
2716	1	1	-	Automotive Repair Garage
2719	1	1	-	First Aid Building
2720	1	1	-	Patrol Headquarters
2722	1	1	-	Area Shop
2725	-	1	-	Laundry
2729	-	1	-	Extra Machinery Storehouse
2730	-	1	-	Slab Yard
2731	-	1	-	Burning Pit
2734	1	1	-	Gas Cylinder Storage
2743	-	-	4	Gate House & Guard Tower Bldg.
	<hr/>	<hr/>	<hr/>	
	19	24	4	

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2800 - Outside Overhead Pipe Lines

<u>Building Number</u>	<u>200-E</u>	<u>200-W</u>	<u>200-N</u>	<u>Building Name</u>
2801	x	x	-	Pipe Supports
2802	x	x	-	Steam Lines
2803	x	x	-	Air Lines
2806	x	x	-	Process Lines

2900 - Outside Underground Lines

2901	x	x	x	Water Lines (including Elevated Storage Tanks)
2902	x	x	-	Fire Lines (including Elevated Storage Tanks)
2903	x	x	x	Sanitary Sewer Lines
2904	x	x	x	Process Sewer Lines
2905	-	-	x(2)	Wells & Pumps

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**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
200-E AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
211-B	Tank Farm Waste Disposal Trench	9-2-43 1-16-46	10-8-44 2-1-45	10-16-44 2-6-45	10-11-44	12-30-44	----	----	----	----	10-20-44	2-7-45	----	----	----	2-10-45	2-13-45	2-13-45
216-E	Process Sewers	----	----	----	----	----	----	----	----	----	----	----	----	----	----	2-10-45	2-5-45	2-2-45
221-C	Cell Building	7-12-43	8-2-43	8-19-43	4-17-44	6-23-44	----	----	----	6-18-43	12-24-44	8-1-44	2-7-45	----	----	2-10-45	2-5-45	2-2-45
221-E	Sample Preparation Laboratory	7-22-43	7-1-44	7-14-44	7-14-44	8-25-44	----	----	7-23-44	1-7-45	8-11-44	1-14-45	----	----	----	2-10-45	2-13-45	2-13-45
224-E	Sulf Reduction building	1-3-44	7-1-44	7-21-44	7-20-44	8-11-44	----	----	8-8-44	1-7-45	8-21-44	2-10-45	----	----	----	1-20-45	2-13-45	2-13-45
241-D	Process Waste Disposal System	10-22-43	11-24-43	12-13-43	2-16-44	12-10-44	----	----	----	----	8-27-44	1-14-45	----	----	----	2-10-45	2-13-45	2-13-45
241-C	Process Waste Disposal System	10-22-43	12-18-43	12-30-43	2-20-44	1-15-45	----	----	----	----	7-9-44	1-26-45	----	----	----	1-19-45	2-13-45	2-13-45
252-E	Secondary Sub-Station	1-13-44	8-1-44	----	----	----	----	----	----	----	----	----	----	----	----	1-26-45	2-13-45	2-13-45
253-E	Distribution Sub-Station	12-12-43	10-23-43	----	----	----	----	----	----	----	----	----	----	----	----	1-26-45	2-16-45	2-12-45
271-E	Chemical Preparation & Service Bldg.	8-26-43	9-6-44	10-12-44	10-13-44	11-17-44	----	----	11-1-44	1-26-45	10-27-44	2-10-45	----	----	8-31-44	1-26-45	2-16-45	2-12-45
272-E	Area Shop	7-20-43	11-16-43	12-17-43	12-16-43	1-14-44	1-29-44	2-23-44	1-24-44	5-8-44	3-1-44	2-10-45	----	----	8-31-44	2-10-45	2-13-45	2-13-45
273-E	Heat Treating Furnace	8-26-43	9-16-43	11-26-43	10-17-43	12-17-43	11-16-43	1-25-44	11-16-43	3-17-43	10-28-43	6-21-44	1-29-44	2-4-44	5-3-44	8-31-44	2-20-45	2-17-45
274-E	Machinery Store House	6-10-43	12-29-43	1-7-44	1-5-44	1-14-44	----	----	8-13-44	4-14-44	----	----	----	----	----	2-20-45	2-17-45	2-17-45
276-E	Chemical Store House	6-10-43	12-28-43	1-14-44	1-12-44	1-25-44	----	----	5-13-44	4-14-44	----	----	----	----	----	4-14-44	2-9-45	2-7-45
282-E	Reservoir & Pump House	1-6-44	2-29-44	5-28-44	7-3-44	9-10-44	9-14-44	9-15-44	7-23-44	12-1-44	8-20-44	12-7-44	----	----	----	4-14-44	2-9-45	2-7-45
283-E	Filter Plant	9-1-43	6-22-44	7-28-44	7-26-44	9-15-44	9-18-44	9-28-44	7-28-44	12-1-44	8-20-44	12-7-44	----	----	11-16-44	12-9-44	12-20-44	12-20-44
284-E	Lower House	8-17-43	12-23-43	3-21-44	3-16-44	5-26-44	4-26-44	7-4-44	4-28-44	12-16-44	7-21-44	12-27-44	6-13-44	7-1-44	11-4-44	12-29-44	1-20-45	1-26-45
291-E	Exhaust Gas Building & Stack	7-12-43	2-28-44	3-17-44	8-24-43	11-4-44	----	----	8-18-44	12-9-44	2-27-44	12-30-44	----	----	11-4-44	11-22-44	1-24-45	1-26-45
292-E	Exhaust Gas Laboratory	6-27-44	8-14-44	8-16-44	8-16-44	8-18-44	----	----	8-20-44	11-17-44	10-1-44	1-16-44	----	----	----	2-10-45	2-9-45	2-7-45
2901-E	Fence & Road Lighting	12-12-43	10-1-44	----	----	----	----	----	----	----	----	----	----	----	----	1-19-45	2-9-45	2-7-45
2903-E	Electric Lines	10-12-43	10-15-43	----	----	----	----	----	----	----	----	----	----	----	11-16-44	2-10-45	2-16-45	2-12-45
2904-E	Fire Alarm System	12-15-43	1-16-44	----	----	----	----	----	----	----	----	----	----	----	8-31-44	2-10-45	2-16-45	2-12-45
2906-E	Telephone Cable & Inst.	12-7-43	----	----	----	----	----	----	----	----	----	----	----	----	----	2-2-45	2-26-45	2-12-45
2901-E	Stand. Gauge R.F. Trucks	7-6-43	----	----	----	----	----	----	----	----	----	----	----	----	1-27-44	2-10-45	----	----
2902-E	Roads & Walks	7-6-43	----	----	----	----	----	----	----	----	----	----	----	----	----	2-10-45	2-13-45	2-13-45
2905-E	Fences (incl. Guard Towers)	10-12-43	1-1-44	----	----	----	----	----	----	----	----	----	----	----	----	2-10-45	2-9-45	2-10-45
2906	Settling Basin	1-24-44	3-6-44	----	----	----	----	----	----	----	----	----	----	----	----	2-2-45	2-9-45	2-8-45
2907-E	Septic Tanks	1-24-44	2-13-44	----	----	----	----	----	----	----	----	----	----	----	----	4-15-44	2-6-45	2-2-45
2912-E	Open Drainage Ditches	1-24-44	8-29-44	----	----	----	----	----	----	----	----	----	----	----	----	1-8-45	2-5-45	2-2-45
2913-E	Permanent Parking Lot	1-14-44	1-16-45	----	----	----	----	----	----	----	----	----	----	----	----	1-8-45	2-6-45	2-2-45
2914-E	General Monitoring Station	2-12-44	7-17-44	----	----	----	----	----	----	----	----	----	----	----	----	2-17-45	2-9-45	2-7-45
2911-E	Emergency Gas Generator Shelters	5-22-44	----	----	----	----	----	----	----	----	----	----	----	----	----	1-8-45	1-24-45	1-26-45
2915-E	Cate House & Clock Alley	6-27-43	4-10-44	4-16-44	4-17-44	5-6-44	----	----	5-1-44	9-7-44	8-26-44	10-18-44	----	----	----	9-1-44	2-13-45	2-13-45

SHEET 1 OF 8 SHEETS

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**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
200-E AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
2704-E	Supervisor's Office Building	8-16-43	12-10-43	12-16-43	12-18-43	1-14-44	----	----	1-11-44	9-1-44	8-5-44	8-28-44	----	----	----	10-18-44	12-8-44	12-8-44
2707-E	Change House	6-30-43	3-17-44	4-7-44	3-23-44	4-26-44	----	----	5-3-44	7-27-44	7-16-44	9-29-44	----	----	----	12-4-44	12-8-44	12-8-44
2707-EA	Change House (Power Area)	12-16-43	4-10-44	4-14-44	4-16-44	4-28-44	----	----	4-20-44	12-3-44	7-16-44	11-17-44	----	----	----	12-4-44	12-8-44	12-8-44
2709-E	Fire Headquarters	1-21-44	4-1-44	4-7-44	4-5-44	4-27-44	----	----	4-18-44	8-9-44	7-8-44	7-29-44	----	----	----	12-5-44	12-8-44	12-8-44
2715-E	Storeroom	8-21-43	4-8-44	4-12-44	4-14-44	4-21-44	----	----	6-11-44	8-23-44	----	----	----	----	----	7-31-44	12-21-44	12-13-44
2715-EA	Essential Material Storeroom	6-15-43	11-20-43	----	----	----	----	----	----	----	----	----	----	----	----	10-16-44	12-8-44	12-8-44
2716-E	Oil & Paint Storage Building	7-26-43	6-8-44	6-1-44	6-2-44	6-9-44	----	----	6-9-44	9-1-44	----	----	----	----	----	6-3-44	2-9-45	2-7-45
2716-E	Automotive Repair Garage	7-26-43	12-22-43	----	----	----	----	----	----	----	----	----	----	----	----	10-18-44	12-8-44	12-8-44
2717-E	First Aid Building	7-30-43	12-10-43	12-16-43	12-20-43	1-14-44	----	----	1-9-44	5-17-44	4-10-44	11-17-44	----	----	----	8-27-44	2-8-45	2-7-45
2720-E	Patrol Headquarters	7-6-43	4-1-44	4-7-44	4-5-44	4-28-44	----	----	4-12-44	8-12-44	8-1-44	12-3-44	----	----	----	1-15-45	2-9-45	2-8-45
2722-E	Paint & Rigging Shop	6-30-43	5-8-44	5-27-44	5-28-44	6-3-44	----	----	6-7-44	8-2-44	----	----	----	----	----	12-6-44	12-8-44	12-8-44
2734-E	Cylinder Storage Building	6-12-43	5-10-44	5-27-44	5-28-44	6-3-44	----	----	6-7-44	8-7-44	----	----	----	----	----	10-18-44	12-8-44	12-8-44
2401-E	Pipe Supports	2-18-44	6-2-44	----	----	----	----	----	6-7-44	8-7-44	----	----	----	----	----	8-9-44	12-8-44	12-8-44
2402-E	Steam Lines	2-18-44	6-26-44	----	----	----	----	----	----	----	----	----	----	----	----	1-17-45	2-8-45	2-2-45
2403-E	Air Lines	2-18-44	9-25-44	----	----	----	----	----	----	----	----	----	----	----	----	2-10-45	2-13-45	2-13-45
2405-E	Process Lines	3-17-44	10-15-44	----	----	----	----	----	----	----	----	----	----	----	----	8-18-44	2-8-45	8-2-45
2701-E	Motor Lines & Elev. Tanks	9-29-43	12-27-43	----	----	----	----	----	----	----	----	----	----	----	----	1-16-45	2-13-45	2-13-45
2702-E	Fire Lines & Elev. Tanks	9-29-43	1-31-44	----	----	----	----	----	----	----	----	----	----	----	----	1-8-45	2-5-45	2-2-45
2703-E	Sanitary Sewers	1-24-44	2-8-44	----	----	----	----	----	----	----	----	----	----	----	----	1-8-45	2-13-45	2-13-45
2704-E	Process Sewers	1-24-44	3-6-44	----	----	----	----	----	----	----	----	----	----	----	----	1-31-45	2-8-45	2-2-45
2713-E	Pipe Warehouse	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1-31-45	2-8-45	2-2-45

\* T. C. Building transferred to Operations and assigned permanent building numbers.  
 \* Installation started on Preliminary Drawings.

# INSTRUCTION PROGRAM

AREA F, TIMATE AND M. 1A WREN COMPLETE

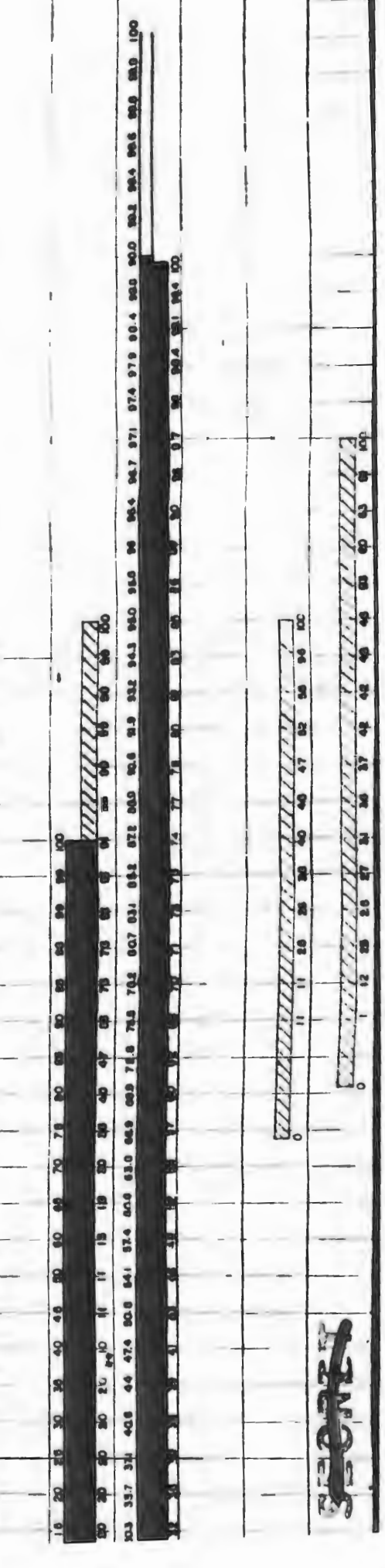
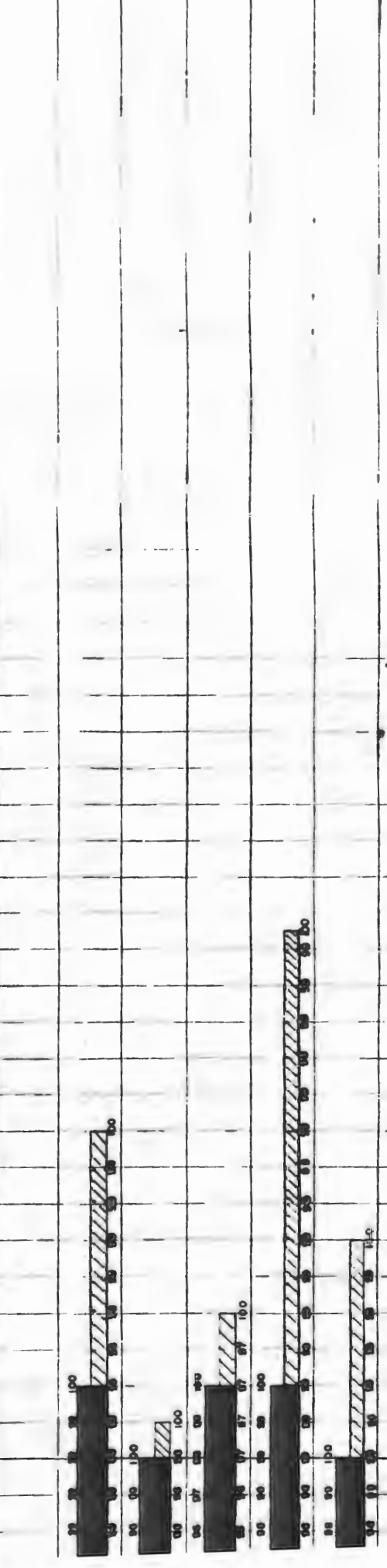
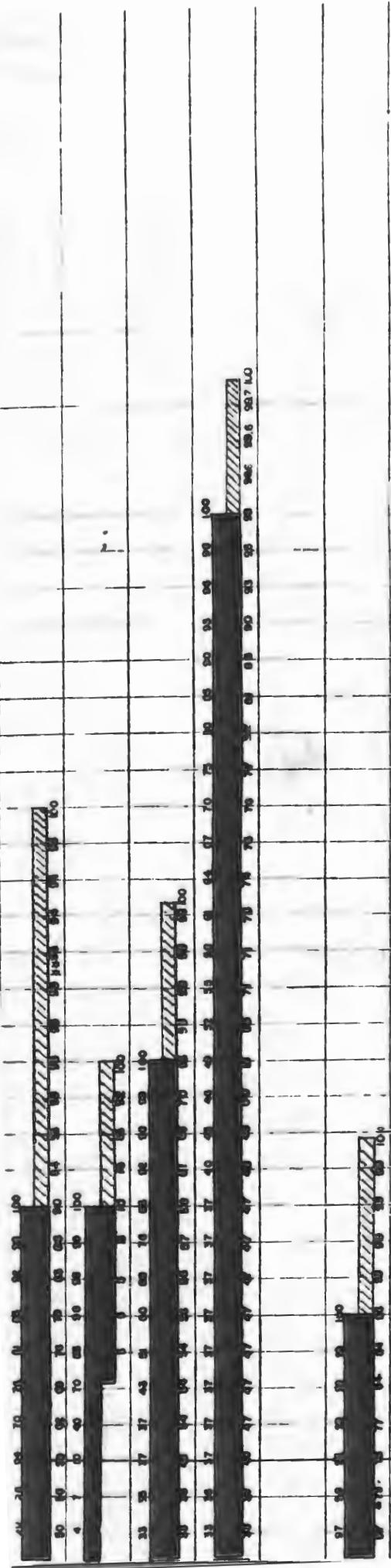
200-E AREA

REVISIONS  
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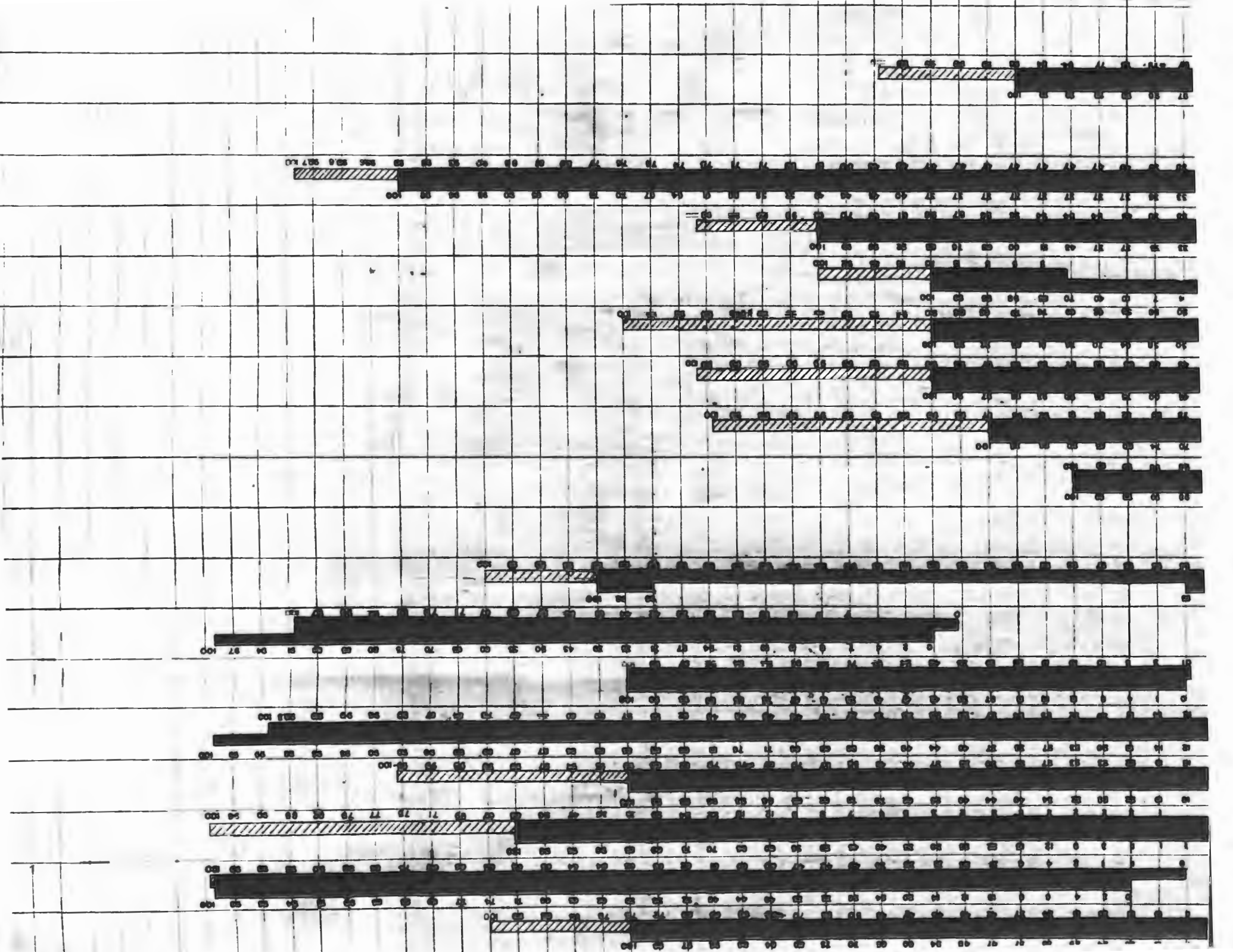
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**LEGEND**

PERCENTAGE FIGURE INDICATE ESTIMATED  
CONSTRUCTION SCHEDULE.

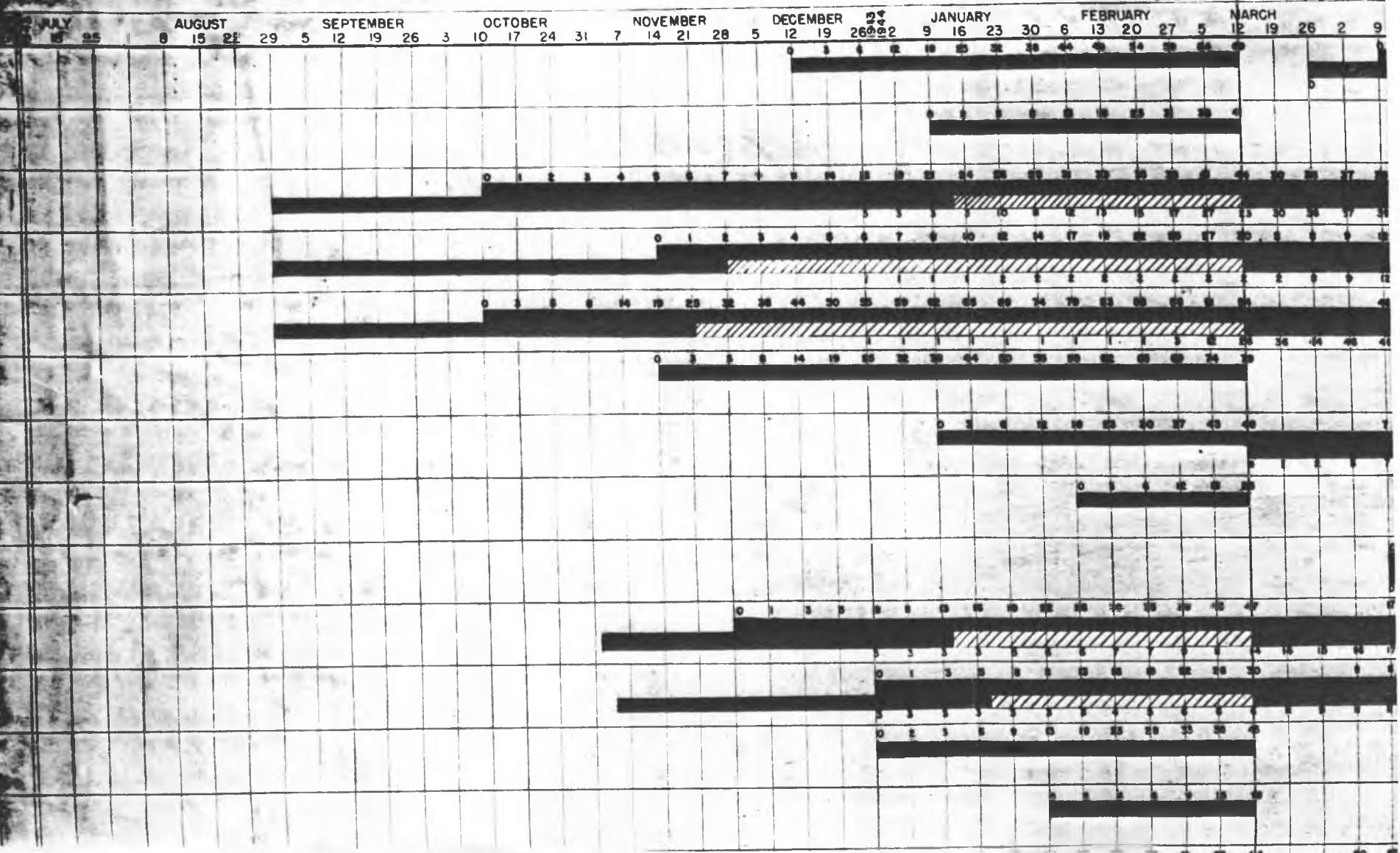
PERCENTAGE FIGURE INDICATE ACTUAL  
CONSTRUCTION SCHEDULE.

INDICATED NUMBER OF WEEKS ACTUAL PROGRESS  
BEHIND SCHEDULED PROGRESS.

BUILDING AND  
CONSTRUCTION  
PROGRESS

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REVISED AS OF 3-12-4

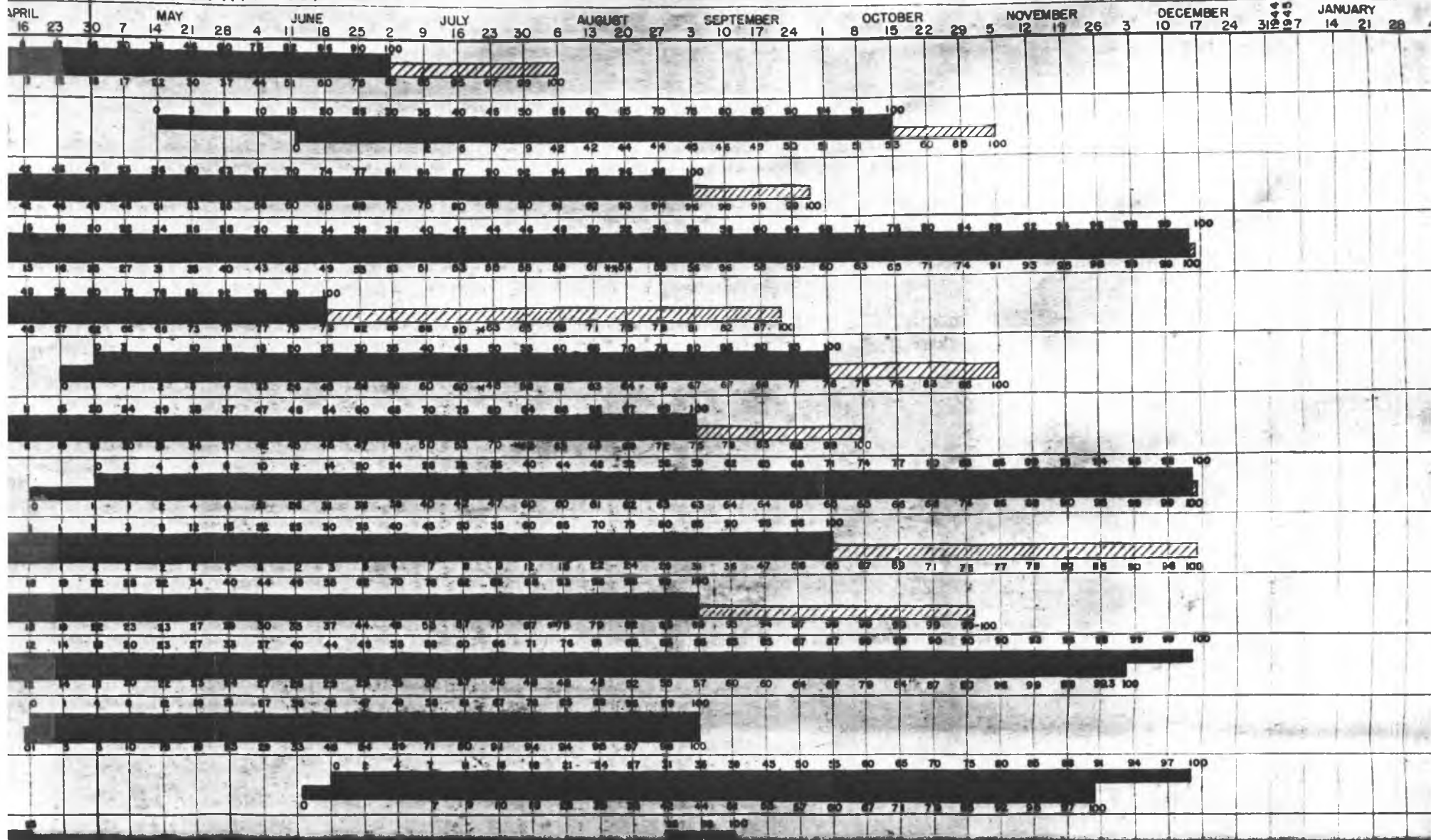


SEA ESTIMATED AND ACTUAL PERCENT COMPLETE

ION 200 - W

**SECRET**

REVISED AS OF 5-4-44 (NORTH ONLY)



~~SECRET~~  
**PROGRESS OF CONSTRUCTION**  
**BUILDINGS & FACILITIES**  
**200-W AREA**  
**PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY		
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.	
211-F	TANK FARM	9-9-43	2-27-44	4-9-44	5-29-44	7-21-44	---	---	5-7-44	7-29-44	4-21-44	7-29-44	7-29-44	9-1-44	12-3-44	9-9-44	9-9-44	9-9-44	
211-G	TANK FARM	9-9-43	9-10-44	9-23-44	9-29-44	9-4-44	---	---	7-17-44	11-9-44	7-4-44	11-9-44	---	---	12-9-44	12-9-44	12-30-44	12-15-44	
211-T	GAS BUILDING	7-12-43	9-22-43	7-17-43	12-30-43	1-23-44	---	---	1-17-44	9-9-44	4-22-44	9-16-44	---	---	12-9-44	9-27-44	10-15-44	10-9-44	
222-B	GAS BUILDING	7-22-43	9-7-43	9-1-43	1-11-44	9-29-44	---	---	9-22-44	11-9-44	6-12-44	12-1-44	---	---	12-9-44	12-16-44	12-20-44	12-16-44	
222-C	SAMPLE PREPARATION LABORATORY	5-25-43	9-21-43	2-9-44	9-1-44	9-1-44	---	---	5-22-44	9-22-44	4-19-44	9-22-44	---	---	---	9-23-44	10-12-44	10-9-44	
222-D	SAMPLE PREPARATION LABORATORY	9-29-43	4-24-44	4-29-44	4-30-44	10-9-44	---	---	5-12-44	11-9-44	7-17-44	11-9-44	---	---	---	12-29-44	11-15-44	11-15-44	
224-U	MILK REDUCTION BUILDING	1-8-44	2-21-44	2-22-44	2-7-44	7-21-44	---	---	2-16-44	9-22-44	9-22-44	10-9-44	---	---	12-9-44	10-9-44	12-18-44	12-18-44	
224-V	MILK REDUCTION BUILDING	1-8-44	6-17-44	4-23-44	6-30-44	2-11-44	---	---	9-22-44	9-11-44	7-25-44	12-1-44	---	---	12-9-44	12-9-44	12-18-44	12-18-44	
221-W	CONCENTRATION BUILDING	9-25-43	9-2-44	4-24-44	9-19-44	7-21-44	---	---	7-19-44	12-9-44	9-22-44	12-1-44	---	---	12-16-44	12-16-44	12-20-44	12-16-44	
241-Y	PROCESS WASTE DISPOSAL SYSTEM	10-22-43	11-9-43	12-1-43	12-9-43	7-29-44	---	---	---	---	9-22-44	9-22-44	---	---	12-16-44	12-16-44	12-20-44	12-16-44	
241-Z	PROCESS WASTE DISPOSAL SYSTEM	10-22-43	11-19-43	2-9-44	12-12-43	10-12-44	---	---	---	---	9-22-44	9-22-44	---	---	12-9-44	10-20-44	12-9-44	10-9-44	
252-N	SECONDARY SUB-STATION	1-19-44	2-1-44	2-9-44	2-20-44	4-30-44	---	---	2-22-44	9-19-44	4-22-44	9-19-44	---	---	---	12-1-44	12-20-44	12-15-44	
253-N	DISTRIBUTION SUB-STATION	11-20-43	2-1-44	---	---	---	---	---	---	---	---	---	---	---	9-27-44	10-15-44	12-26-44	12-16-44	
271-T	CHEMICAL PREPARATION & SERVICE BLDG.	9-25-43	4-1-44	4-9-44	4-10-44	5-31-44	---	---	4-22-44	9-11-44	9-10-44	9-1-44	---	---	9-26-44	12-9-44	12-26-44	12-16-44	
271-W	CHEMICAL PREPARATION & SERVICE BLDG.	9-25-43	6-12-44	9-12-44	9-25-44	10-9-44	---	---	7-1-44	11-10-44	2-27-44	11-24-44	---	---	12-9-44	9-3-44	10-12-44	10-9-44	
272-N	AREA SHOP	7-20-43	9-2-43	12-15-43	12-14-43	2-12-44	2-10-44	2-2-44	2-3-44	9-20-44	1-21-44	9-22-44	---	---	---	12-1-44	12-20-44	12-15-44	
274-N	MACHINERY STORE HOUSE	9-29-43	9-24-43	12-23-43	12-30-43	9-27-44	---	---	2-12-44	9-22-44	---	---	---	---	---	9-26-44	10-7-44	11-9-44	
282-N	RESERVOIR & PUMP HOUSE	2-9-44	12-20-43	1-20-44	1-22-44	4-9-44	---	---	2-1-44	7-22-44	2-27-44	9-16-44	7-10-44	7-11-44	7-29-44	9-12-44	6-1-44	6-1-44	
286-B	FILTER PLANT	9-1-43	12-30-43	1-21-44	1-22-44	4-22-44	4-29-44	4-22-44	2-3-44	7-22-44	2-27-44	9-16-44	7-10-44	7-11-44	7-12-44	9-12-44	10-11-44	10-11-44	
286-C	PUMPER HOUSE	9-27-43	9-27-43	12-16-44	10-12-44	2-12-44	2-17-44	2-29-44	2-12-44	7-16-44	9-9-44	9-1-44	6-22-44	7-22-44	7-12-44	9-2-44	12-2-44	12-7-44	
286-D	ASH DISPOSAL BARRI	10-9-43	2-12-44	---	---	---	---	---	---	---	---	---	---	---	---	7-12-44	7-16-44	12-7-44	12-7-44
291-T	EXHAUST GAS BLDG. & STACK	7-12-43	9-24-43	5-12-44	9-29-44	7-16-44	---	---	4-11-44	9-10-44	9-22-44	9-12-44	---	---	12-9-44	9-12-44	10-13-44	10-9-44	
291-U	EXHAUST GAS BLDG. & STACK	7-12-43	9-22-43	7-21-44	9-7-44	10-9-44	---	---	9-22-44	10-9-44	9-22-44	10-27-44	---	---	---	11-24-44	12-20-44	12-12-44	
292-T	EXHAUST GAS LABORATORY	9-27-44	7-1-44	7-3-44	7-4-44	7-21-44	---	---	7-27-44	9-12-44	9-12-44	9-29-44	---	---	12-9-44	10-1-44	9-30-44	9-30-44	
292-U	EXHAUST GAS LABORATORY	9-27-44	7-10-44	7-12-44	7-12-44	2-22-44	---	---	7-20-44	11-9-44	9-22-44	11-10-44	---	---	---	11-12-44	12-20-44	12-12-44	
2901-N	FENCE & ROAD LIGHTING	11-20-43	9-22-43	---	---	---	---	---	---	---	---	---	---	---	---	10-12-44	12-22-44	12-14-44	12-14-44
2902-N	ELECTRIC LINES	11-20-43	9-1-43	---	---	---	---	---	---	---	---	---	---	---	---	2-20-44	10-9-44	12-26-44	12-14-44
2903-N	FIRE ALARM SYSTEM	12-12-43	1-12-44	---	---	---	---	---	---	---	---	---	---	---	---	---	12-2-44	12-26-44	12-14-44
2904-N	TELEPHONE CABLE & INST.	12-1-43	12-5-43	---	---	---	---	---	---	---	---	---	---	---	---	---	12-2-44	12-26-44	12-14-44
2901-N	STANDARD GAUGE R.R. TRACS	7-5-43	7-20-43	---	---	---	---	---	---	---	---	---	---	---	12-12-43	12-9-44	---	---	
2902-N	ROADS & RAILS	7-5-43	7-20-43	---	---	---	---	---	---	---	---	---	---	---	9-12-43	12-9-44	12-11-44	12-9-44	
2905-N	FENCES (INCL. GUARD TOWERS)	10-12-43	12-9-43	---	---	---	---	---	---	---	---	---	---	---	---	12-9-44	12-20-44	12-16-44	12-16-44
2907-N	SEPTIC TANKS	1-6-44	2-14-44	---	---	---	---	---	---	---	---	---	---	---	---	12-1-44	10-12-44	10-16-44	10-16-44
2912-N	OPEN DRAINAGE DITCHES	1-14-44	6-12-44	---	---	---	---	---	---	---	---	---	---	---	---	9-12-44	12-20-44	12-16-44	12-16-44
2913-N	PERMANENT PARKING LOT	7-5-43	9-5-44	---	---	---	---	---	---	---	---	---	---	---	---	11-29-44	12-20-44	12-20-44	12-20-44
2914-N	GENERAL MONITORING STATION	2-12-44	12-9-44	---	---	---	---	---	---	---	---	---	---	---	---	12-12-44	9-22-44	9-22-44	9-22-44

SHEET 5 OF 7 SHEETS

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**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
200-W AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
1701-W	EMERGENCY GAS COMPRESSOR BUILDING	6-22-44	6-4-44	---	---	---	---	---	---	---	---	---	---	---	---	9-1-44	10-6-44	10-7-44
1702-W	GAS HOUSE & CLOCK ALLEY	7-27-43	8-27-43	12-12-43	12-19-44	1-8-44	---	---	1-8-44	2-8-44	2-12-44	2-28-44	---	---	---	2-28-44	7-8-44	10-11-44
1702-WA	GAS HOUSE & CLOCK ALLEY	6-12-44	7-1-44	---	---	---	---	---	---	---	---	---	---	---	---	12-9-44	12-20-44	12-16-44
1703-W	SUPERVISOR'S OFFICE BUILDING	6-16-43	6-21-43	9-19-43	10-8-43	11-29-43	---	---	10-24-43	2-27-44	2-28-44	2-28-44	---	---	---	2-28-44	10-13-44	10-16-44
1703-W	CHANGE HOUSE	6-30-43	6-30-43	10-2-43	10-5-43	11-29-43	---	---	10-27-43	2-20-44	2-8-44	2-28-44	---	---	---	7-14-44	7-8-44	6-20-44
1707-WA	CHANGE HOUSE (POWER AREA)	12-16-43	2-1-44	2-2-44	2-8-44	2-27-44	---	---	2-8-44	2-18-44	2-8-44	2-12-44	---	---	---	7-28-44	9-21-44	8-18-44
1803-W	FIRE HEADQUARTERS	2-21-44	2-3-44	2-12-44	2-12-44	2-26-44	---	---	2-28-44	2-12-44	4-12-44	7-21-44	---	---	---	7-28-44	9-27-44	10-7-44
1712-W	STOREHOUSE	6-21-43	6-24-43	10-10-43	10-11-44	2-8-44	---	---	11-6-43	2-12-44	2-7-44	6-20-44	---	---	---	7-10-44	2-28-44	6-21-44
1712-WA	INDUSTRIAL MATERIAL STOREHOUSE	6-16-43	7-1-43	---	---	---	---	---	---	---	---	---	---	---	---	11-26-44	12-20-44	12-18-44
1712-WB	INDUSTRIAL MATERIAL STOREHOUSE	---	6-16-43	---	---	---	---	---	---	---	---	---	---	---	---	9-1-44	12-20-44	12-18-44
1713-W	OIL & PAINT STORAGE BLDG.	7-22-43	6-22-43	10-2-43	10-4-43	12-19-43	---	---	11-4-43	2-12-44	2-27-44	5-12-44	---	---	---	5-8-44	7-1-44	6-20-44
1716-W	APPROXIMATE REPAIR GARAGE	---	7-1-43	---	---	---	---	---	---	---	---	---	---	---	---	12-29-43	12-20-44	12-18-44
1716-W	FIRST AID BUILDING	7-20-43	6-22-43	6-22-43	6-20-43	9-19-43	---	---	10-5-43	2-27-44	1-22-44	5-20-44	---	---	---	6-1-44	12-20-44	12-1-44
1720-W	FABRIC HEADQUARTERS	7-6-43	6-27-43	10-8-43	10-7-43	12-19-43	---	---	11-8-43	5-12-44	2-22-44	4-28-44	---	---	---	6-10-44	10-13-44	10-16-44
1722-W	PAINT & RIGGING SHOP	6-30-43	6-30-43	10-2-43	10-5-43	12-19-43	---	---	11-6-43	5-12-44	2-16-44	6-9-44	---	---	---	10-7-44	10-13-44	10-16-44
1723-W	LAUNDRY	2-22-44	2-4-44	2-10-44	2-9-44	2-25-44	---	---	6-12-44	7-22-44	6-30-44	9-8-44	---	---	---	1-29-44	11-20-44	12-19-44
1729-W	EXTRA MACHINERY STOREHOUSE	10-20-43	11-1-43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1730-W	BLAB YARD	2-29-44	4-1-44	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1731-W	BURNING PIT	---	2-1-43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1736-W	CYLINDER STORAGE BLDG.	6-12-43	2-22-43	10-2-43	10-6-43	12-20-43	---	---	1-22-44	2-26-44	---	---	---	---	---	2-28-44	7-1-44	6-20-44
1801-W	PIPE SUPPORTS	11-22-43	2-2-44	---	---	---	---	---	---	---	---	---	---	---	7-22-44	10-13-44	12-20-44	12-18-44
1802-W	STEAM LINES	11-22-43	2-2-44	---	---	---	---	---	---	---	---	---	---	---	7-22-44	12-8-44	12-20-44	12-18-44
1803-W	AIR LINES	11-22-43	2-2-44	---	---	---	---	---	---	---	---	---	---	---	7-21-44	7-21-44	12-20-44	12-18-44
1804-W	PROCESS LINES	2-17-44	7-12-44	---	---	---	---	---	---	---	---	---	---	---	---	11-1-44	12-20-44	12-18-44
1801-W	WATER LINES & H.E.V. TANK	9-29-43	10-18-43	10-22-43	---	---	---	---	---	---	---	---	---	---	7-22-44	11-1-44	12-20-44	12-18-44
1802-W	FIRE LINES & H.E.V. TANK	12-20-43	12-21-43	12-22-44	---	---	---	---	---	---	---	---	---	---	7-24-44	11-1-44	12-20-44	12-18-44
1803-W	SANITARY SYSTEM	12-18-43	1-8-44	---	---	---	---	---	---	---	---	---	---	---	---	11-1-44	12-20-44	12-18-44
1804-W	PROCESS SYSTEM	1-14-44	2-7-44	---	---	---	---	---	---	---	---	---	---	---	---	11-1-44	12-20-44	12-18-44

SHEETS OF 2 SHEETS

\*T.C. Building Transferred to Operations and Assigned Permanent Building No.  
 \*\*Excavation Started on Preliminary Drawings.

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**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
200-N AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
212-F	Lag Storage Bldg.	10-29-43	12-18-43	1-1-44	2-21-44	7-14-44	8-19-44	8-31-44	8-8-44	8-11-44	8-16-44	8-28-44	9-12-44	9-29-44	12-4-44	9-10-44	9-28-44	10-11-44
212-P	Lag Storage Bldg.	10-29-43	12-8-43	12-17-43	1-6-44	7-28-44	7-10-44	7-29-44	8-28-44	9-29-44	7-8-44	9-29-44	10-8-44	10-6-44	1-3-48	9-29-44	12-20-44	12-20-44
212-R	Lag Storage Bldg.	10-29-43	11-17-43	12-8-43	1-6-44	8-11-44	8-8-44	8-23-44	7-21-44	10-18-44	8-27-44	10-20-44	10-27-44	10-29-44	1-3-48	11-3-44	12-30-44	12-20-44
213-BK	Magazine Bldg.	4-1-44	4-11-44	5-18-44	8-17-44	8-16-44	-----	---	8-8-44	8-30-44	7-21-44	9-29-44	-----	---	-----	8-29-44	9-29-44	10-11-44
251	Primary Substation	1-8-44	1-17-44	1-30-44	1-23-44	8-12-44	4-29-44	4-30-44	2-6-44	8-10-44	2-6-44	8-21-44	-----	---	8-17-44	10-18-44	1-17-48	12-14-44
262-N	Secondary Substation	1-31-44	4-29-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8-27-44	9-1-44	*11-2-44	*10-28-44
263-N	Distribution Substation	2-1-44	8-1-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8-27-44	11-3-44	*11-2-44	*10-28-44
2601-N	Fence & Road Lighting	2-1-44	8-1-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11-20-44	9-29-44	*11-2-44	*10-28-44
2608-N	Electric Lines	2-1-44	8-1-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8-27-44	11-3-44	*11-2-44	*10-28-44
2608-B	Telephone Cable & Instruments	1-28-44	8-18-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11-20-44	11-20-44	-----	-----
2604-N	Standard Gauge Track	9-17-43	9-20-43	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9-12-44	9-29-44	12-30-44	12-20-44
2603-N	Roads & Walks	9-17-43	6-16-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9-15-44	12-30-44	12-20-44
2606-N	Fence (Incl. Guard Tower)	10-18-43	8-28-44	8-24-44	8-27-44	8-16-44	-----	-----	8-16-44	7-28-44	7-16-44	8-11-44	-----	-----	9-27-44	8-28-44	9-26-44	10-11-44
2606-P	Fence (Incl. Guard Tower)	10-18-43	8-28-44	8-29-44	8-30-44	7-7-44	-----	-----	7-8-44	8-11-44	7-24-44	8-11-44	-----	-----	-----	8-18-44	12-20-44	10-1-44
2606-R	Fence (Incl. Guard Tower)	10-18-43	7-20-44	7-20-44	7-21-44	7-28-44	-----	-----	7-24-44	9-29-44	7-28-44	9-29-44	-----	-----	-----	9-29-44	12-28-44	12-20-44
2606-BK	Fence (Incl. Guard Tower)	4-1-44	5-18-44	5-19-44	5-20-44	8-8-44	-----	-----	8-22-44	7-7-44	8-20-44	9-29-44	-----	-----	-----	9-22-44	12-4-44	12-6-44
2607-N	Septic Tank	1-29-44	5-14-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7-28-44	10-6-44	10-18-44
2607-P	Septic Tank	1-29-44	5-14-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7-28-44	10-6-44	10-18-44
2607-R	Septic Tank	1-29-44	5-14-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7-28-44	12-20-44	12-16-44
2612-N	Open Drainage Ditches	2-8-44	7-1-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7-28-44	12-30-44	12-20-44
2614-N	General Monitoring Station	7-8-44	8-15-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9-1-44	9-24-44	9-8-44
2743-N	Gate House & Guard Tower	1-19-44	5-25-44	5-27-44	5-29-44	5-28-44	-----	-----	8-19-44	7-28-44	7-18-44	8-11-44	-----	-----	-----	8-23-44	9-28-44	10-11-44
2743-P	Gate House & Guard Tower	1-19-44	6-26-44	6-28-44	5-29-44	7-7-44	-----	-----	7-8-44	9-18-44	7-16-44	9-22-44	-----	-----	-----	9-23-44	12-30-44	12-20-44
2743-R	Gate House & Guard Tower	1-19-44	7-20-44	7-22-44	7-23-44	7-28-44	-----	-----	7-30-44	8-29-44	8-20-44	9-28-44	-----	-----	-----	9-23-44	12-20-44	12-20-44
2743-J	Gate House & Guard Tower	1-19-44	5-23-44	5-23-44	5-23-44	5-30-44	-----	-----	8-30-44	7-24-44	8-20-44	9-18-44	-----	-----	-----	9-29-44	12-4-44	12-6-44
2901-N	Water Lines	2-8-44	4-22-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9-12-44	9-29-44	12-20-44	12-16-44
2908-N	Sanitary Sewers	2-8-44	6-14-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7-28-44	12-30-44	12-20-44
2904-N	Process Sewers	2-8-44	6-14-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9-11-44	12-30-44	12-20-44
2906-P&J	Wells & Pumps	5-2-44	6-1-44	6-1-44	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9-22-44	12-30-44	12-14-44

SHEET 1 OF 3 SHEETS

NOTE: The dates shown on this sheet reflect the time at which the various interim stages of construction were essentially complete.  
 In some cases, these dates will vary slightly from the final dates carried in the weekly Progress Reports.  
 \* Initial Acceptance.

SHEET 8 OF 8 SHEETS

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HANFORD ENGINEER WORKS

# CONSTRUCTION PROGRESS

BUILDING AND AREA ESTIMATED AND ACTUAL PERCENT COMPLETE

200-N

ORIGINAL

REVISED AS OF 3-12-44

REVISED AS OF 5-1-44

FEBRUARY

MARCH

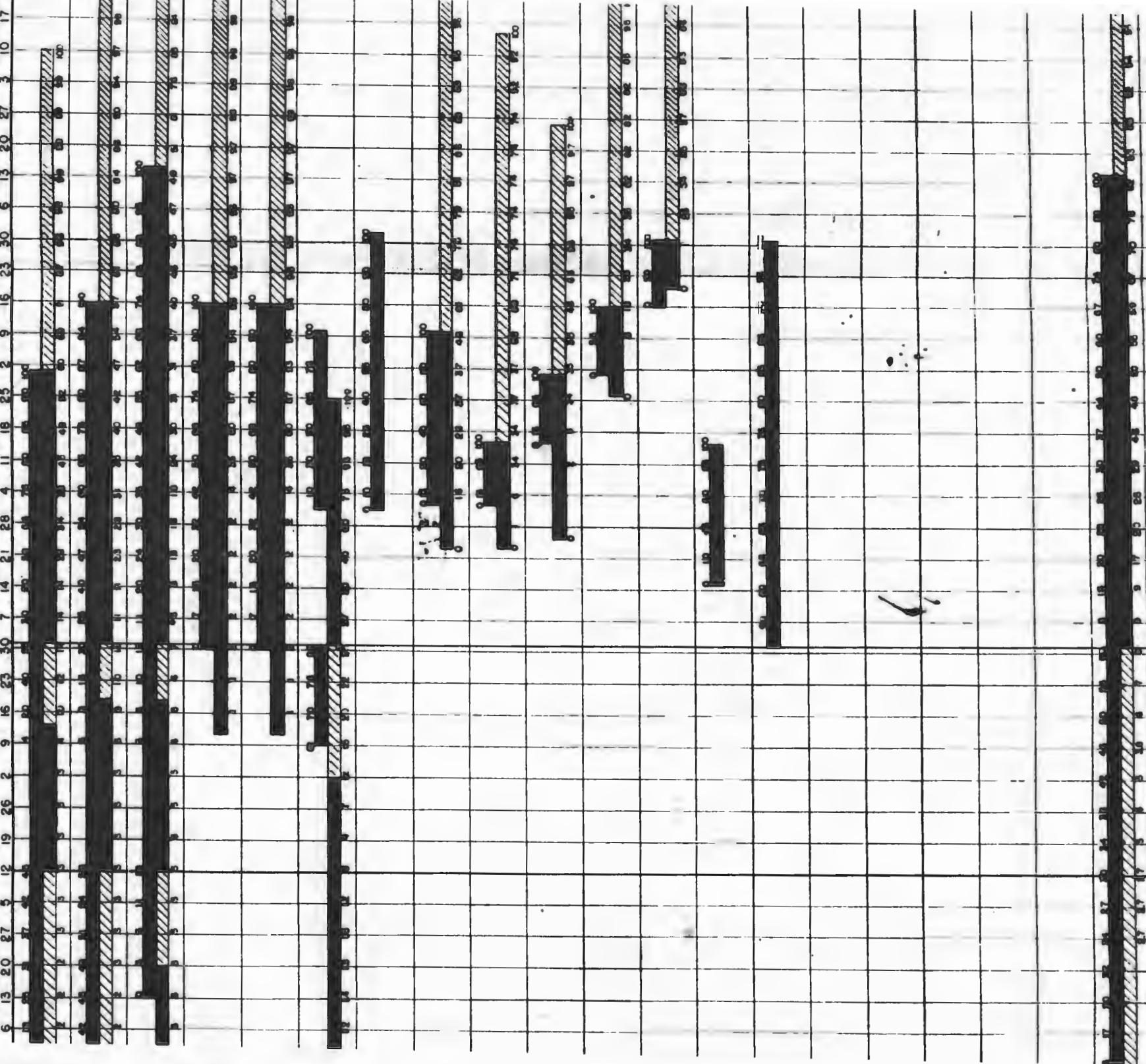
APRIL

JUNE

JULY

AUGUST

SEPTEMBER



NOTE:  
• Chisp Dips to Record and Weights.



JULY 29 30 31 AUGUST 6 15 22 29 5 12 19 26 3 10 17 24 31 7 14 21 28 5 12 19 26 22 29 JANUARY 9 16 23

212 P

212 R

213 J

213 K

251 N

2803N

2806  
R/R/J

2743J

2743N

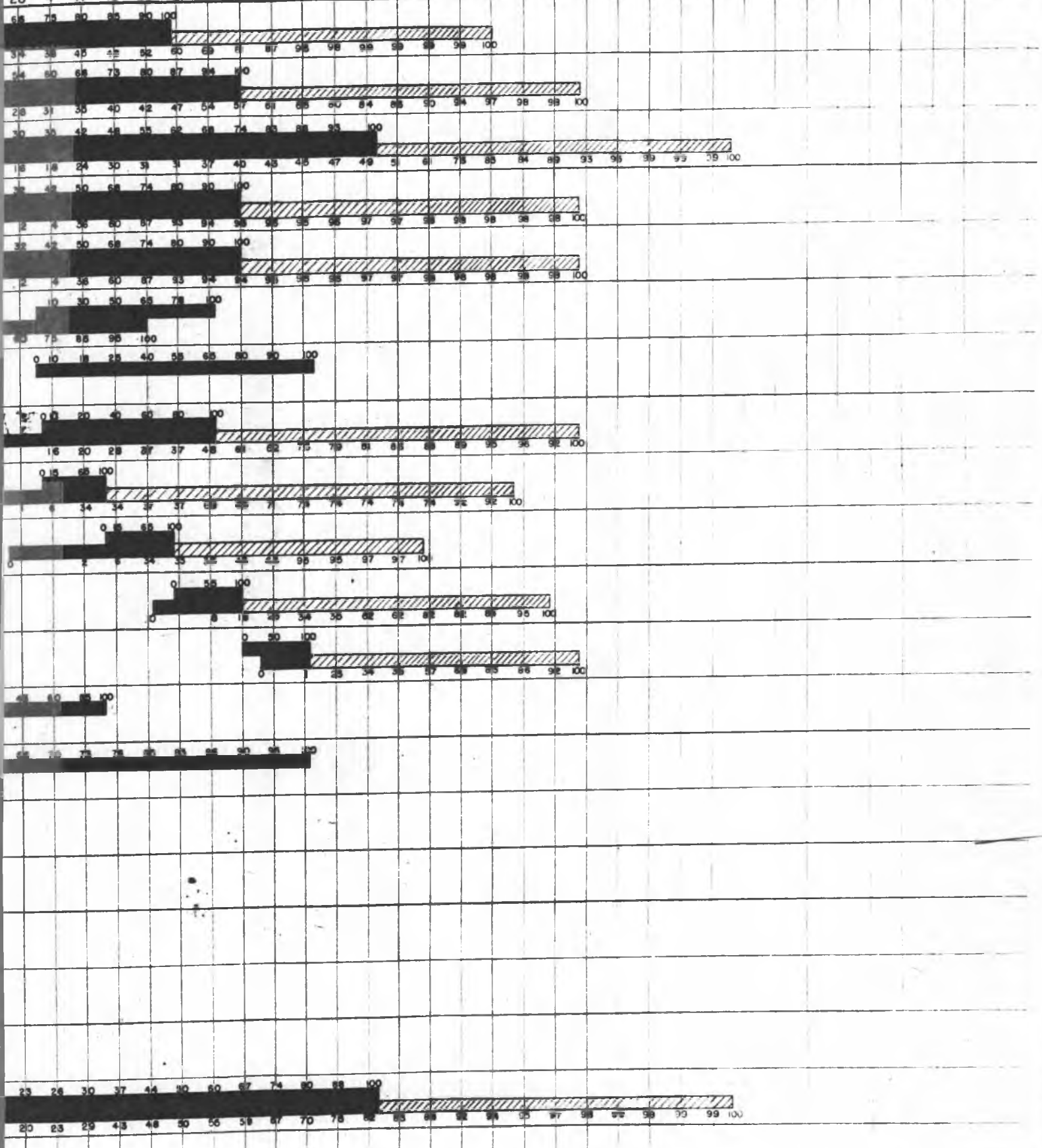
2.

2748R

2801N

2806N

PERCENTAGES NOT REPORTED



NOTE:  
 • Drop Due To Reassigned Weights.

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SHIFT WORK SCHEDULES (200 AREAS)

Shift Work 200-West Area Buildings

<u>Building</u>	<u>Time Requested</u>	<u>Shift</u>	<u>Reason</u>
211-T & U	3-15-44 *5-1-44	2	To meet schedule
211-T & U	12-30-43 *5-15-44	2	Amount of concrete
222-T & U	3-15-44 *5-1-44	2	To meet schedule
224-T & U	12-30-43 *5-1-44	2	Amount of concrete
231-W	7-7-44	2	To meet schedule
241-T & U	6-3-44	2	Tie in with Subcontractor
271-T & U	3-15-44 *5-1-44	2	To meet schedule
291-T & U	3-15-44 5-1-44	2	To meet schedule

Note: On September 9, 1944, additional approval was requested to install cell piping and equipment on two-9-hour shift basis.

\* Dates for U Buildings.

Shift Work 200-East Area Buildings

<u>Building</u>	<u>Time Requested</u>	<u>Shift</u>	<u>Reason</u>
221-B	11-24-44	2	Install Cell Floor Templates
224-B	12-20-44	*3	Spray Painting
"B" Group	1-11-45	2	Flushing & Testing Lines

Note: On January 10, 1945, additional approval was requested to install cell piping and equipment on two 9-hour shift basis.

\* Third Shift Only.

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LIST OF SUBCONTRACTORS  
200-West, East & North Areas

<u>RPG NO.</u>	<u>SUBCONTRACTOR</u>	<u>SCOPE OF WORK</u>	<u>BUILDING</u>
54 $\frac{1}{2}$ & 1678 $\frac{1}{2}$	Haughton Elevator Company	Elevators	224-T, U, B, & 271-T, U, B
170 $\frac{1}{2}$	Tate-Jones & Company	Heat Treating Furnaces	273-E
173 $\frac{1}{2}$ & 587 $\frac{1}{2}$	Rust Engineering Company	Concrete Chimney	291-T, U, B, & C & 284-E & W
241 $\frac{1}{2}$	Clinton Bridge Works	Structural Steel	272-E & W, 283 E & W 284-E & W, 212-N, P, & R
305 $\frac{1}{2}$	Erie City Iron Works	Boiler Erection	284-E & W
416	A. A. Durand & Son	Wells, Dry Wells	212-R, 241-T, U, B, & C
403 & 4339	Guy F. Atkinson Company	Railroads	All Areas
407	Myers Bros., & N.M. Ball Sons	Excavation & Road Construction	221-T, U, B, & C 241-T, U, B, & C
408	Hewberry-Chandler-Lord	C.P.F.F. - Electrical Work	All Areas
410	Hanford Concrete Contractors	Furnishing Ready-Mix Concrete	All Areas
411	Hankoe-James-Zehner-Warren	C.P.F.F. - Piping Work	All Areas
567 $\frac{1}{2}$ & 1938 $\frac{1}{2}$	W. E. Caldwell Company	Elevated Water Storage Tanks	2901-E & W, 2902-E & W
658 $\frac{1}{2}$	Link Belt Company	Coal Handling Systems	284-E & W
808 $\frac{1}{2}$	Philadelphia Iron Works	Boiler Breenchings	284-E & W
1180 $\frac{1}{2}$	Connery Construction Company	Forced Draft Ducts	284-E & W

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LIST OF SUBCONTRACTORS - Cont'd.  
200-West, East & North Areas

<u>RPG NO.</u>	<u>SUBCONTRACTOR</u>	<u>SCOPE OF WORK</u>	<u>BUILDING</u>
1451 $\frac{1}{2}$	Morrison-Bechtel-McCone	Composite Storage Tanks	241-T, U, B, & C
1473 $\frac{1}{2}$	Asbestos Supply Company	Thermal Insulation	200-E, W, & N Areas
2115 $\frac{1}{2}$	Triplett Barton Company, Inc.	X-Ray Inspection	241-T, B, & C
3564 $\frac{1}{2}$	National Gunito Construction Company	Catch Basin & Settling Tanks	241-T, U, B, & C
3778 $\frac{1}{2}$	E. F. Hauserman Company	S/S Enclosures	224-T, U, & B
3509 $\frac{1}{2}$	Graver Tank Company	Furnishing & Installing Condensers	241-T, B, & C
4332	William Veil	Built-up Roofing Subcontractor No. 2	200-E, W, & N Areas
4335	National Gunito Construction Company	Gunito Reservoirs	232-E & W
4354	H. R. Parsons Tile Company	Asphalt Tile & Linoleum	222-T, U, & B; 271-T, U, & B 292-T, U, & B; 2704-E & W 2719-E & W

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VENDORS RECEIVING PREMIUM PAYMENTS (200 AREA)

Listed below are the principal vendors which were allowed premium payments for Sunday and overtime work:

<u>Vendor</u>	<u>Material</u>
Waldrip Engineering Co.	Cell Fabrication & Piping
Associated Piping Engineering Co.	Cell Fabrication & Piping
Pittsburgh Piping Company	Cell Piping
Pennsylvania Furnace & Iron Co.	Cell Piping
S. Blickson Company	Centrifuges
Bird Machine Company	Centrifuges
Alloy Fabricators	Tanks
Joyce Machine Company	Connectors

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TELEPHONE COMPANIES

The Site of the Hanford Engineer Works involves territory previously served by and contiguous to the following telephone companies:

Columbia River Telephone Company

Kamnewick-Valley Telephone Company

Eltopia Telephone Company

Oregon-Washington Telephone Company

Mesa Telephone Company

Pacific Telephone and Telegraph Company ✓

The first five mentioned companies maintained a franchise for telephone service on the site. ✓ After thorough study it was decided that none of the five companies had sufficient experience, background, technical ability, available equipment, or general experience in dealing with a problem of this scope to meet the plant requirements. ✓

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PERMANENT ROAD CONSTRUCTION

A. New Construction

1. Black-top

12' width	9.33 miles
14' width	19.64 miles
16' width	0.12 mile
20' width	106.62 miles
22' width	9.65 miles
30' width	52.65 miles

Subtotal 198.01 miles ✓

2. Gravel

18' width	2.80 miles
30' width	0.58 mile

Subtotal 3.38 miles

B. Existing Roads, Improved and Maintained

1. Black-top

12' width	8.30 miles
16' width	3.50 miles

Subtotal 11.80 miles

2. Gravel

16' width	0.70 miles
18' width	3.50 miles

Subtotal 4.20 miles

C. Existing Roads, maintained only

1. Black-top

16' width	9.50 miles
17' width	14.50 miles

Subtotal 24.00 miles

✓ B-49

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2. Gravel

18' width 3.75 miles

Subtotal 3.75 miles

D. Patrol Trails, Improved and Maintained

12' width 25.00 miles

16' width 20.90 miles

Subtotal 45.90 miles

Grand Total 4  
291.03 miles

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BUILDING LIST - TEMPORARY CONSTRUCTION

700 & 1100 AREAS - RICHMOND

Sheet 1

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VALUE CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
25 37	ENGINEERS' OFFICE	1	230 x 75 x 12	15750	189000	Wood Frame, Horizontal Siding	Lighting, Heating, Telephone, Water	S.E. Corner of 11th & 11th St.
	CONSTRUCTORS WAREHOUSE	1	115 x 75 x 18	8625	69000	Same	Lighting	S.E. Corner of 11th & 11th St.
	TRAINING & RELATIONS HUTS	3	45 x 21 x 12	2829	34050	Steel Huts	Lighting, Heating, Telephone	Opp. Washington between Swift & Bostwick
	TELEPHONE EXCHANGE	1	30 x 30 x 12	600	7200	Wood Frame, Stucco Siding, Existing Structure	Lighting, Heating, Telephone, Water	On Side of 11th Street
	BATCH OFFICE	1	18 x 15 x 12	270	3240	Wood Frame, Horizontal Siding	Lighting, Heating, Telephone	Same
	SIGNAL CORPS OFFICE	1	41 x 26 x 12	1066	12780	Existing Wood Frame Residence	Lighting, Heating, Telephone, Water	N.E. Cor. between 11th & 11th St.
	L.S. & SIGNAL CORPS WAREHOUSE	1	105 x 69 x 21	7240	152200	Existing Wood Frame, Horizontal Siding Structure	Lighting, Heating, Telephone	Near 11th & 11th St.
	SIGNAL CORPS STORAGE HUT	1	45 x 21 x 12	945	11320	Sheet Metal Hut	Lighting, Heating	N.E. Cor. between 11th & 11th St.
	NO CONTACTED PATRIARCHS LIVING HUTS	1	102 x 18 x 12	Overall 1836	18360	Pacific wood Huts - Gypsum Board Structure Between	Lighting, Heating, Water	Near 11th & 11th St.
	WATER OFFICE	1	40 x 30 x 12	1200	14400	Wood Frame, Brown Stucco Siding, Existing Residence	Lighting, Heating, Telephone, Water	On East Side between 11th & 11th St.
	STORAGE HUT	1	45 x 21 x 12	945	11330	Metal Hut		Near 11th & 11th St.
	PIPE SHOP	1	60 x 40 x 12	2400	28800	Wood Frame, Vertical Wood Siding	Lighting, Heating, Telephone, Water	On 700 Area between 11th & 11th St.
	STORAGE HUT	1	36 x 18 x 10	648	6480	Pacific Wood Hut		Near 11th & 11th St.
	LABOR OFFICE	1	15 x 30 x 10	300	3600	(Existing Wood Frame, Horizontal Siding Building)	Lighting, Heating, Telephone, Water	On East Side between 11th & 11th St.
	SPECIAL CONSTRUCTION OFFICE	1	45 x 30 x 10	1350	13500	Existing Wood Frame Residence	Lighting, Heating, Telephone, Water	Near 11th & 11th St.
	SPECIAL CONSTRUCTION HUTS	6	48 x 21 x 10	4320	43200	Steel Huts	Lighting, Heating, Telephone	Same
	SHIPPING STORAGE SHED	1	75 x 20 x 10	1500	15000	Wood Frame, Open Sides		Same
	SPECIAL CONSTRUCTION HUTS	3	48 x 21 x 10	3240	32400	Metal Hut	Lighting, Heating, Telephone, Water	Same
	WATER OFFICE & SHOP	1	66 x 60 x 13	3960	51480	Existing Wood Frame Residence Plus Tar Paper Covered Addition	Water	N.E. of Cor. Washington & 11th St.
	WATER WAREHOUSE	1	50 x 30 x 15	1500	22500	Existing Wood Frame Building		Near 11th St.
	PIPE WORK ROOM	1	51 x 24 x 15	1224	14350	Existing Wood Bldg., Simulated Brick Shingle	Lighting, Heating, Telephone, Water	On North Side between 11th & 11th St.
	PIPE WORKING & P.A. HOUSE	1	36 x 15 x 14	540	7560	Wood Frame Building	Lighting, Heating, Water	Same
	WATER'S HUT	1	48 x 21 x 10	1080	10800	Metal Hut	Lighting, Heating, Water	Same
	WATER'S HUTS	2	40 x 16 x 10	1280	12800	Pacific Wood Huts	Lighting, Heating, Water	Same
	WATER LOFT	1	25 x 50 x 15	1250	18750	Existing Wood Frame, Horizontal Siding	Same	On North Side between 11th & 11th St.
	STORAGE BUILDING	1	31 x 138 x 15	42700	854000	Same	Lighting, Heating, Telephone	Same
	STORAGE OFFICE & STORAGE	1	40 x 36 x 20	1440	28800	Wood Frame Existing Church	Lighting, Heating	On South Side between 11th & 11th St.
	WATER METAL SHOP	1	45 x 24 x 20	1080	21600	Same	Lighting, Heating	On 11th St. between 11th & 11th St.
	WATERWAYEN GARAGE	1	25 x 50 x 15	1250	18730	Wood Frame, Horizontal Wood Siding, Posttension Section	Lighting, Heating, Telephone, Water	On East Side between 11th & 11th St.
	WATER HUTS	3	150 x 40 x 20	18000	300000	Sheet Metal Huts	Lighting, Heating	N. of 11th Siding near 11th & 11th St.
	WATER STORAGE HUT	1	150 x 40 x 20	6000	120000	Same	Same	On East Side between 11th & 11th St.
	WATER WAREHOUSES	2	186 x 96 x 15	35712	335680	Wood Frame, Gypsum Board Siding	Lighting, Heating	N. of 11th Siding near 11th & 11th St.
	WATER GAS STATION GARAGE	1	72 x 39 x 20	4810	56200	Wood Frame, Gypsum Board Siding	Light, Heat, Water, Telephone, Air	N. of 11th Siding near 11th & 11th St.
	WATER ALLEY	2	20 x 15 x 12	300	3600	Wood Frame, Horizontal Siding	Light, Heat, Telephone	On East Side between 11th & 11th St.
	WATER HUT	1	45 x 21 x 12	945	11350	Metal Hut	Light, Heat, Telephone	On East Side between 11th & 11th St.
	WATER WAREHOUSE	1	80 x 40 x 20	3200	64000	Existing Wood Frame Horizontal Siding Structure		On East Side between 11th & 11th St.

B 50

BUILDING LIST - EMERGENCY CONSTRUCTION

700 & 1100 AREAS - RICHLAND

Sheet 2

CODE	NAME OF BUILDING	NO. OF BUILDINGS	SIZE	FLOOR AREA SQ. FT.	VOLUME CU. FT.	TYPE OF CONSTRUCTION	FACILITIES INSTALLED	LOCATION
TC 37	LABOR OFFICE & CARPENTER SHOP	1	60 x 90 x 15	5400	81000	Wood Frame, horizontal siding	Light, Heat, Telephones	On Swift between Gillmore & Guthrie
	SHINY METAL & RIDGE HTS	1	45 x 63 x 21	4835	99400	2 Metal Sides Side by Side, Wood Frame Gypsum Board Building between	Light, Heat, Telephones	NW Corner of Swift & Gillmore
	LABOR OFFICE	1	15 x 80 x 15	1200	18000	Wood Frame, Gypsum Board Siding	Light, Heat, Telephones	E. of Gillmore Near 1224-1148
	FORMERLY FIRST AID	1	15 x 80 x 15	1200	18000	Same	Light, Heat, Telephones, water	SE Corner of Lockwood & Guthrie
	OUTSIDE ELECTRIC LINES HT	1	15 x 40 x 10	600	6000	Metal Hut	Light, Heat, Telephones	E. of Gillmore Near 1224-1152
	PIPE OFFICE	1	39 x 48 x 14	1870	26200	Wood Frame, horizontal siding	Same	Near 220-1148
	PIPE SHOP	1	80 x 40 x 15	7200	108000	Same	Same	Same
	BUS GARAGE	1	110 x 150 x 25	16500	412500	Wood Frame, Gypsum Board Siding	Light, Heat, Telephones, water	Near 1280-1128
TC 5	BUS DEPOT LOT	1	165 x 295	48700	---	Staked loading & Unloading Lane	---	Near 1270-1132
TC 7	GROUND WATER STORAGE	1	30 FT. DIA X 20	707	11370	Steel bound 10,000 Gal. Steel Tank	Electric Pump 1-1000 Gal. 1-500 GPM	Near 1224-1138
	BOILER PULP HOUSE	1	25 x 15 x 8	375	5000	Wood Frame, horizontal siding	Gasoline Pump 1-500 Gal	Same
	CHLORINATOR HOUSE	1	12 x 12 x 20	144	1440	Same	Power, Telephone, Light, Heat, water	Same
	WELL NO. 2	1	50 G.P.M.					Same
	WELL NO. 13	1	845 G.P.M.					Near 1184-1128
	WATER LINES		(1000 - 3" ø ( 450 - 6" ø ( 1700 - 8" ø			Welded Steel Pipe, Screws & Coupled Pipe Sch. #40		
TC 9	ELECTRIC LINES					Used Existing Lines & Transformers of I.P. & Light Co. & E.E.A. Systems	Some New Installations	Area side
	TRANSFORMER BANK	1	30 x 30	900	---	Open Frame, Enclosed by wire fence	1 - 300 KVA Trans. 1 - 600/0/0/0/0 S	NW Corner of Guthrie & Lee
TC 11	WASTE DISPOSAL NO. 1							
	BOUFFY TANK	1	14 x 52	728	---	Wood Frame and Rafted	None	Same
	CHLORINATOR HOUSE	1	12 x 12 x 10	144	1440	Wood Frame Gable Roof Building	Lighting, Heating	Same
	MIX HOUSE	1	10 x 10 x 10	100	1000	Same	None	Same
	SETTLING TANK	1	40 x 80	3200	---	Wood Frame and Rafted	None	E. of Lee, east of Lee
	WASTE DISPOSAL NO. 2							
	BOUFFY TANK	1	9 x 14	728	---	Wood Frame and Rafted	None	Same
	CHLORINATOR MIX HOUSE	1	10 x 10 x 10	100	1000	Wood Frame, horizontal siding	Lighting, Heating	Same
	CHLORINATOR CONTACT CHAMBER	1	40 x 10	400	---	Wood Frame and Rafted	None	Same
	SETTLING TANK	1	80 x 40	3200	---	Wood Frame and Rafted	None	Same
	SEWER LINES		1" ø 10" ø			Concrete Pipe		

SECRET

A This can not be a list of temporary construction items. See page 8.2 of text, clarify.

B Number of units not understood. This code covers 140 existing tract houses in App. B-56.

~~C~~  
Out App. B-56 provides for 643 units — one less than the total shown here (assume this included the Public Health Center—shown under B-56 code 1153 which checks ok.)

D App B-56 does not have a code 1107. All units are shown under 1108. (Code 1107 referred to by code 1153—App B-56)

E App. B-56 covers 1800 units

F Assume this is library. See App B-56.



~~SECRET~~

RICHLAND VILLAGE

<u>Code Number</u>	<u>Name</u>	<u>New</u>	<u>Existing</u>	<u>Total</u>
1106	Site Residences		140*	140*
1109	Housing Units			
	Type A Houses	816		816
	Type B Houses	1,040		1,040
1108	Supervisors' Houses			
	Type F Houses	250		250
	Type H Houses	250		250
1107	Staff Residences			
	Type D Houses	8		8
	Type E Houses	84		84
	Type G Houses	8		8
	Type L Houses	44**		44**
1129	Prefabricated Houses			
	Type A Houses	402***		402***
	Type B Houses	802***		802***
	Type C Houses	600		600
	<b>Total Housing Units</b>	<b>4,304</b>	<b>140</b>	<b>4,444</b>
1110	Dormitories	25		25
1111	Stores			
	Food Stores	5		5
	Drug Stores	3		3
	General Merchandise Store	1		1
	Variety Store	1		1
	Shoe Repair Shop	1		1
	Women's and Childrens' Apparel	1		1
	Barber and Beauty Shop	1		1
	Milk Depot	1		1
	Electrical Shop		1	1
	Optical Shop		1	1
	Hardware Store		1	1
	Men's Apparel and Shoe Store		1	1
	Automotive Garage & Service Station	1		1
	Service Stations	3		3
	Western Union Office		1	1
	Unoccupied Store		1	1
1112	Churches			
	Protestant	1	1	2
	Catholic	1		1

B-50  
~~SECRET~~

**SECRET**

RICHLAND VILLAGE (Continued)

<u>Code Number</u>	<u>Name</u>	<u>New</u>	<u>Existing</u>	<u>Total</u>
1113	Schools			
	Grade Schools	3	1	4
	High School	1		1
	Nursery (existing house modified)	1		1
1114	Theatres	2		2
1115	Bank	1		1
1116	Municipal Buildings	1		1
	Patrol Headquarters (Village)		1	1
1117	Transient Quarters (Hotel)	1		1
1118	Hospital	1		1
1119	Post Office	1		1
1120	Laundry	1		1
1121	Cafeteria	1		1
1122	Propane Gas Storage	1		1
1123	Recreation Building	1		1
1124	Sewage Disposal Plant & Lift Stn	1		1
1125	Warehouses	8	1	9
1130	Bus Depot (Commercial)	1		1
1131	Bus Transfer Station & Main. Garage (Plant)	1		1
1132	Ambulance Garage	1		1
1133	Village Maintenance Bldgs. Gp.	1		1
1134	Red Cross Building		1	1
1136	Professional Building	1		1
1138	Dog Pound		1	1
1139	Transportation Garage (Govt.)	1		1
1140	Railway Express	1		1

**SECRET**

RIGHLAND VILLAGE (Continued)

<u>Code Number</u>	<u>Name</u>	<u>New</u>	<u>Existing</u>	<u>Total</u>
1142	Fire Stations	1	1	2
1148	Ration Office		1	1
1182	Reservoirs	2		2
	Reservoir Pump Houses	2		2
1188	Well Pump Houses	8		8
1186	Irrigation Pump Houses	5	1	6

<u>Code Number</u>	<u>Facilities and Services</u>
1102	Roads and Walks
1106	Water And Fire Protection System
1104	Sewer System
1115	Electrical Service
1128	Coal Storage Yard
1127	Swimming Pool and Comfort Station
1128	Enclosure Fence for Irrigation Canal
1138	Miscellaneous Recreation Facilities
1187	Salvage Yard
1189	Burning Ground
1141	License Office
1148	Trailer Storage Lot
1181	Substations (2)
1158	Fire Alarm System
1156	Telephone System
1168	Airport
1165	Wells
1186	Irrigation System

**SECRET**



~~SECRET~~

RICHLAND VILLAGE (Continued)

Code Number

Facilities and Services

1187

Steam Distribution System

\* Approximate - on basis of information as of 1 March 1945. Some of the above buildings were originally provided for temporary purposes. Only 25 were later converted and incorporated into the Village as permanent structures.

\*\* 1 L Type house in use as Public Health Center.

\*\*\* 4 (2 each type A and B) provided for sample and experimental houses-- later shipped to Bonneville Power Administration.

~~SECRET~~

SHEET 1 OF 9 SHEETS

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700 AREA

Buildings

<u>Building Number</u>	<u>Building Name</u>
701	Gate House
702	Telephone Building
703	Administration Building
704	Supervisors' Office
705	Employment Building
706	Laboratory
707	Change House
712-A, 712-B	Permanent Record Storage Hutments (2)
713	Central Receiving Storeroom
713-A	Laboratory Storeroom
714	Material Shed
715	Oil and Paint Storage
716	Automotive Repair Shop
717, 717-A	Fabrication Shop (2)
720	Patrol Headquarters
721	Military Intelligence Building
722-A	Area Shop (2)
722-C	Carpenter Shop
722-D	Paint Shop
722-E	Paint Shop
722-F	Pipe Shop No. 1
722-G	Pipe Shop No. 2
722-K	Furniture Distribution Office

~~SECRET~~

~~SECRET~~

Building Number

Building Name

722-L	Multilith Office
722-M	Area General Foreman
722-N	Electrical Shop
722-P	Orientation Unit
722-R	Transportation Parts and Storage
723	Laundry
724	Printing Plant Building
729	Spare Machinery Storage Building
734	Cylinder Storage Building
744	Brick Storage Building
751	Primary Substation
784	Boiler House
784-A	Emergency Generator and Water Softening Building
7601	Standard Gauge Track
7603	Roads and Walks
7605	Fences
7613	Permanent Parking Area
7614	General Monitoring Station
7621	Two Emergency Generator Shelters
7801	Pipe Supports
7802	Steam Lines
7803	Air Lines
7801	Water Lines
7903	Fire Lines
7905	Sanitary Sewer Lines

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A clearer print should be provided

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Building Number

Building Name

7801 ✓

Water Lines ✓

7802 ✓

Fire Protection Lines ✓

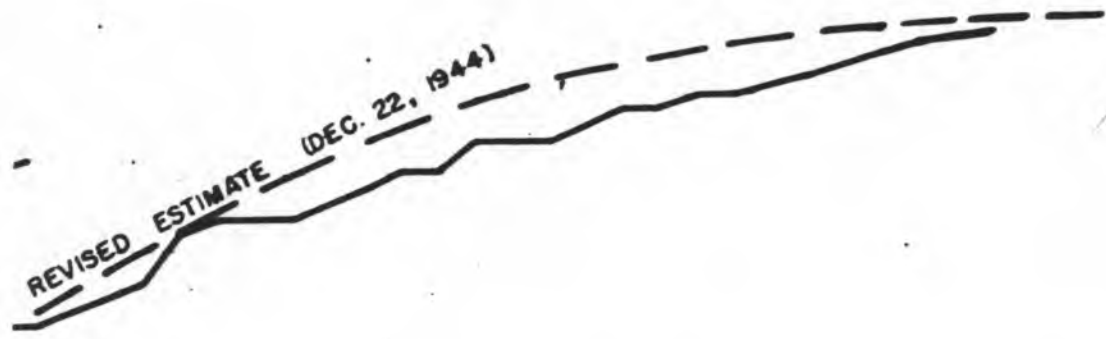
7803 ✓

Sewers ✓

~~SECRET~~

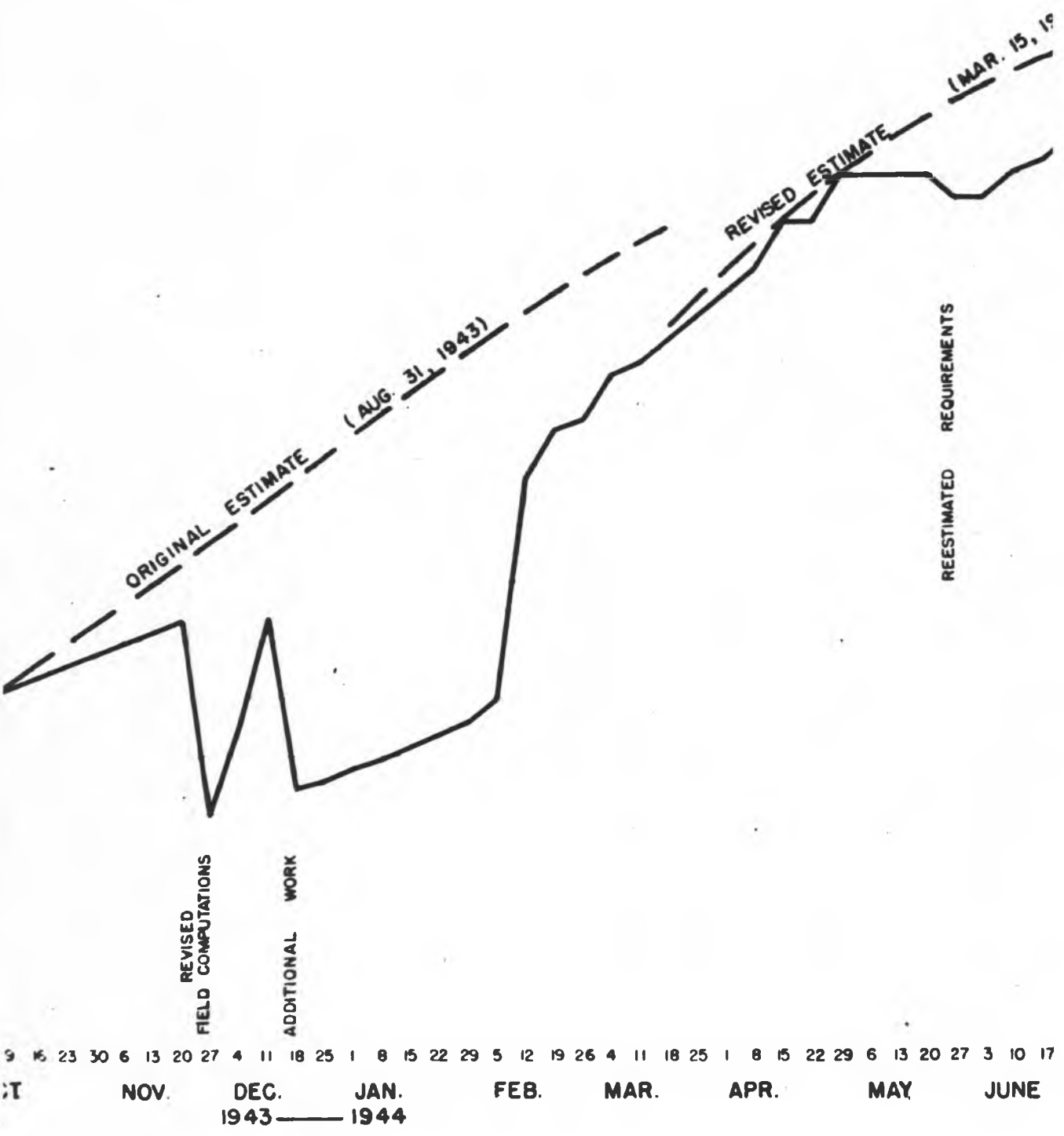
A Portions of sheet 1 are now ~~unreadable~~ readable

REVISED ESTIMATE (DEC. 22, 1944)

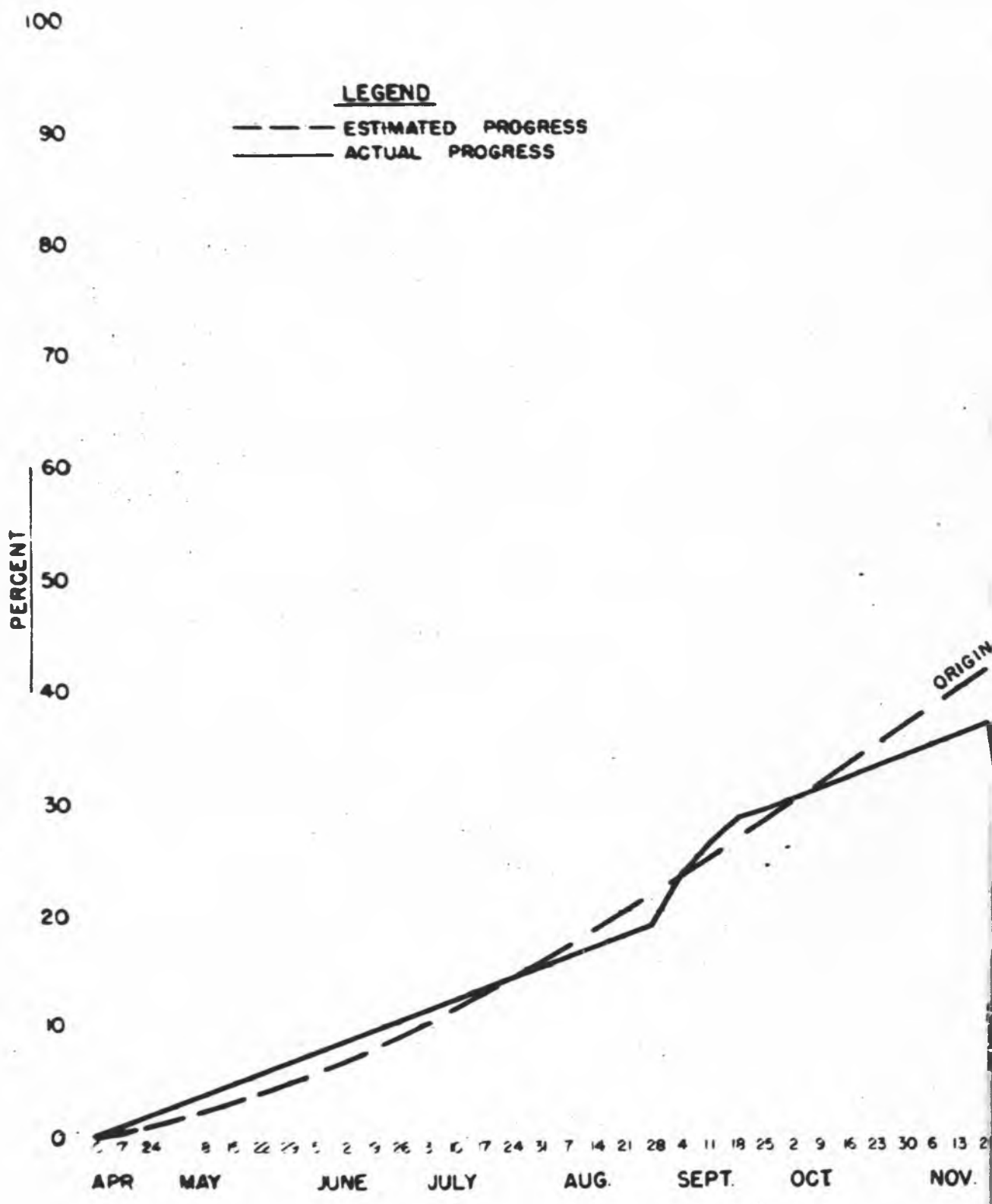


1 12 19 26 2 9 16 23 30 7 14 21 28 4 11 8 25 2 9 6 23 30 6 3 30 27 3 10 17 24 3 10 17 24 31  
AUG. SEPT OCT NOV DEC JAN FEB MAR  
1944 ——— 1945

# RICHLAND VILLAGE PROGRESS ( 1100 AREA ) H. E. W. 9536







**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
700 AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY		
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.	
	Entire 700 Area		3-16-43													4-20-44	4-24-44	4-21-44	
701	Gate House and Clock Alloys	5-10-43	1-24-44	3-15-44	1-25-44	11-22-44			2-8-44	2-10-44						6-1-44	6-7-44	6-6-44	
702	Telephone Exchange	2-21-44	2-18-43	11-29-43	2-18-43	11-10-43			10-1-43	6-1-44						11-4-44	2-28-45	2-20-45	
703	Administration Building	4-23-43	11-2-43	5-2-44	11-4-43	2-12-44			11-12-43	2-12-44						2-10-44	6-7-44	4-6-44	
704	Supervisors' Office (See 722-B)	2-19-43	10-18-43	11-18-43	10-29-43	11-9-43			11-2-43	11-23-43						2-11-44	2-8-44	2-4-44	
705	Employment Building	2-16-43	2-2-44	2-10-44	2-8-44	2-10-44			2-12-44	2-8-44						2-11-44	2-18-45	2-13-45	
706	Laboratory	2-7-43	2-15-44	4-22-44	2-15-44	4-8-44			2-8-44	4-22-44						2-1-44	7-31-44	7-4-44	
707	Change House	5-10-43	1-10-44	2-4-44	1-22-44	2-5-44			1-22-44	1-31-44						2-17-45	2-20-45	2-9-45	
712	(2) Permanent Record Storage Bnts		12-13-44													2-10-44	2-28-44	2-8-44	
713	Central Receiving Storeroom	2-10-43	11-2-43	1-17-44	11-20-43	11-26-43			11-27-43	1-22-44						11-7-44	2-29-45	2-2-45	
713-A	Laboratory Storeroom		2-20-44													12-12-44	2-20-45	2-20-45	
713-B	(2) Storerooms		10-1-44																
714	Material Shed	2-7-44	4-8-44	2-13-44	2-12-44	4-16-44			4-17-44	2-28-45						2-28-44	10-31-44	10-16-44	
715	Oil and Paint Storage	2-7-44	2-20-44													10-2-44	2-28-45	2-2-45	
716	Automotive Repair Shop	7-22-43	2-2-44	4-1-44	2-11-44	4-1-44			2-8-44	4-22-44						2-11-44	10-31-44	10-10-44	
717	Central Receiving Storeroom	2-20-43	1-2-44	1-31-44	1-7-44	1-17-44			1-11-44	1-24-44	2-27-44	4-18-44				7-8-44	7-31-44	7-4-44	
717-A	Fabrication Shop	2-20-43	2-21-44	2-25-44	2-25-44	7-14-44			7-8-44	7-30-44						2-31-44	2-19-45	2-9-45	
720	Patrol Headquarters (See FC Const. Office)	7-17-43	2-18-43	2-28-43	2-20-43	2-28-43			2-21-43	2-5-43						2-10-44	7-31-44	7-2-44	
721	Military Intelligence Building	2-16-44	2-18-44	2-10-44	2-22-44	2-12-44			2-25-44	2-10-44						12-12-44	2-20-45	2-20-45	
722-A	Area Shop	2-24-44	11-2-43	2-2-44	11-2-43	2-20-44			11-23-43	2-1-44	1-18-44	2-1-44				2-10-44	4-7-44	4-2-44	
722-B	Paint Shop		11-2-43																
722-C	Supervisors' Office	2-7-44	2-29-44	2-20-44	2-25-44	7-20-44			7-31-44	2-8-44						11-16-44	2-28-45	2-24-45	
722-D	Paint Storage	2-24-43	10-21-44													12-23-44	1-29-45	1-30-45	
722-E	Paint Shop																1-29-45	1-30-45	
722-F	Pipe Shop #2																1-30-45	2-2-45	
722-G	Pipe Shop #1																		
722-I	Furniture Distribution																1-29-45	1-27-45	
722-J	Multigraph																1-28-45	1-27-45	
722-K	General Foreman																1-26-45	1-27-45	
722-N	Electrical Storage																1-21-45	1-24-45	
722-P	Orientation																1-31-45	1-31-45	
722-R	Transportation Parts Storage																1-31-45	1-31-45	
723	Laundry	2-12-43	2-21-44	2-10-44	2-23-44	2-1-44			2-2-44	2-28-44	2-1-44	2-28-44				7-20-44	2-7-45	10-10-44	
724	Printing Plant (1 Bnts)																		
725	Spare Machinery Storage	2-2-44	2-20-44														11-11-44	2-28-45	2-2-45
726	Central Cylinder Storage		2-25-44														11-11-44	2-28-45	2-2-45

SHEET 1 OF 2 SHEETS

B 52

**PROGRESS OF CONSTRUCTION  
BUILDINGS & FACILITIES  
700 AREA  
PROJECT 9536**

BUILDING NUMBER	NAME	DESIGN RELEASED	EXCAVATION		FOUNDATIONS		STRUCTURAL STEEL		SUPERSTRUCTURE		EQUIPMENT INSTALLATION		TEST RUNS MAJOR EQUIPMENT		START-UP DATE	COMPLETION DATE	DATE ACCEPTED BY	
			STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE	STARTED	COMPLETE			OPERATION	GOV'T.
744	Brick Storage	---	3-13-44	3-19-44	3-20-44	4-16-44	---	---	4- 7-44	5-23-44	---	---	---	---	---	6-23-44	7- 6-44	7- 1-44
781	Primary Substation	6-16-43	6-16-43	---	---	---	---	---	---	---	---	---	---	---	---	6-26-43	12-11-44	10-31-44
784	Heating Plant	6-13-43	6-13-43	1-17-44	9-20-43	12-13-43	10- 6-43	1-17-44	10- 6-43	1-31-44	10-15-43	1-31-44	---	---	---	3- 8-44	9-16-44	9-16-44
784-A	Emergency Generator & Water Softening Bldg.	6-13-44	6-24-44	---	---	---	---	---	---	---	---	---	---	---	---	3-10-48	3-28-46	3-23-46
7801	Fence & Road Lighting	6-10-43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1- 3-46	1- 5-46
7803	Electric Lines	---	4-23-43	---	---	---	---	---	---	---	---	---	---	---	---	---	1- 3-46	1- 5-46
7806	Fire Alarm System	---	4-16-43	---	---	---	---	---	---	---	---	---	---	---	---	---	3-24-46	3-28-46
7806	Telephone Cable & Instruments	---	---	---	---	---	---	---	---	---	---	---	---	---	7-12-43	---	---	---
7801	Railroad Track	---	7-9-43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7802	Roads & Walks	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1-26-46	1-27-46
7806	Fence	---	4-19-43	---	---	---	---	---	---	---	---	---	---	---	---	---	3-28-46	3-28-46
7812	Parking Areas	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3-29-46	3-30-46
7814	General Monitoring Station	---	1-20-44	---	---	---	---	---	---	---	---	---	---	---	---	---	9-16-46	9-14-44
7821A-B	Emergency Electric Generator (Gas) Stations	---	6-20-44	---	---	---	---	---	---	---	---	---	---	---	---	---	9- 5-44	9- 4-44
7801	Pipe Supports	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3-23-46	3-23-46
7802	Outside Overhead Steam Lines	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2- 5-46	2-17-46
7803	Outside Overhead Air Lines	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3-23-46	3-23-46
7901	Water Lines	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1-26-46	2- 1-46
7902	Fire Protection Lines	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3-23-46	3-23-46
7903	Sanitary Sewers	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1-26-46	2- 1-46
7904	Process Sewers	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3-23-46	3-23-46

\* Converted T.C. of Existing Buildings

SHEET 2 OF 2 SHEETS

# HANFORD ENGINEER WORKS PROJECT 9536 INTER-AREA BUS SCHEDULE

Effective December 18, 1944.

*Service*  
Monday through Saturday

## HANFORD - 100 AREA "F" - WHITE BLUFFS

LV HANFORD TERMINAL NO. 1	8:15 AM	9:45 AM	11:15 AM	12:45 PM	2:15 PM	3:45 PM
HANFORD ADM. BLDG.	8:20 AM	9:50 AM	11:20 AM	12:50 PM	2:20 PM	3:50 PM
100 AREA F FIRST AID	8:40 AM	10:10 AM	11:40 AM	1:10 PM	2:40 PM	4:10 PM
100 AREA F DIV. ENG. OFFICE	8:45 AM	10:15 AM	11:45 AM	1:15 PM	2:45 PM	4:15 PM
100 AREA F CARPENTER SHOP	8:50 AM	10:20 AM	11:50 AM	1:20 PM	2:50 PM	4:20 PM
WHITE BLUFFS	9:00 AM	10:30 AM	12:00 NOON	1:30 PM	3:00 PM	4:30 PM
PIERCE'S SPUR	9:10 AM	10:40 AM	12:10 PM	1:40 PM	3:10 PM	4:40 PM
HANFORD ADM. BLDG.	9:25 AM	10:55 AM	12:25 PM	1:55 PM	3:25 PM	4:55 PM
AR HANFORD TERMINAL NO. 1	9:30 AM	11:00 AM	12:30 PM	2:00 PM	3:30 PM	5:00 PM

## HANFORD - 200 AREA EAST - CENTRAL SHOPS

LV HANFORD TERMINAL NO. 1	8:15 AM	9:45 AM	11:15 AM	12:45 PM	2:15 PM	3:45 PM
HANFORD ADM. BLDG.	8:20 AM	9:50 AM	11:20 AM	12:50 PM	2:20 PM	3:50 PM
200 AREA EAST FIRST AID	8:45 AM	10:15 AM	11:45 AM	1:15 PM	2:45 PM	4:15 PM
200 AREA EAST DIV. ENG. OFFICE	8:50 AM	10:20 AM	11:50 AM	1:20 PM	2:50 PM	4:20 PM
200 AREA EAST BUS LOT	8:54 AM	10:24 AM	11:54 AM	1:24 PM	2:54 PM	4:24 PM
CENTRAL SHOPS FIRST AID	9:06 AM	10:36 AM	12:06 PM	1:36 PM	3:06 PM	4:36 PM
CENTRAL SHOPS CRAFT SUPT. OFFICE	9:10 AM	10:40 AM	12:10 PM	1:40 PM	3:10 PM	4:40 PM
HANFORD ADM. BLDG.	9:35 AM	11:05 AM	12:35 PM	2:05 PM	3:35 PM	5:05 PM
AR HANFORD TERMINAL NO. 1	9:40 AM	11:10 AM	12:40 PM	2:10 PM	3:40 PM	5:10 PM

BUSES WILL STOP ON CALL AT ALL MARKED BUS STOPS

BUS STOP SIGNS WILL READ "INTER-AREA BUS STOP"

FOR THE AREA ENGINEER  
J. S. BARRISH, CAPT., C. E.  
TRANSPORTATION OFFICER

BY: B. H. STALKER

DISTRIBUTION

GROUPS: A B C D E AND F

Effective January 15, 1945

Monday through Saturday

- HANFORD - PASCO

LV HANFORD ADM. BLDG.	8:30 AM	9:45 AM	11:15 AM	12:45 PM	2:15 PM	3:45 PM
RICHLAND OPERATIONS ADM. BLDG.	9:25 AM	10:40 AM	12:10 PM	1:40 PM	3:10 PM	4:40 PM
CONSTRUCTION ADM. BLDG.	9:35 AM	10:50 AM	12:20 PM	1:50 PM	3:20 PM	4:50 PM
AR PASCO - GRAY BLDG.	10:05 AM	11:20 AM	12:50 PM	2:20 PM	3:50 PM	5:20 PM

PASCO - HANFORD

LV PASCO - GRAY BLDG.	9:00 AM	10:30 AM	12:00 NOON	1:30 PM	3:00 PM	4:30 PM
RICHLAND CONSTRUCTION ADM. BLDG.	9:35 AM	11:05 AM	12:35 PM	2:05 PM	3:35 PM	5:05 PM
OPERATIONS ADM. BLDG.	9:45 AM	11:15 AM	12:45 PM	2:15 PM	3:45 PM	5:15 PM
AR HANFORD ADM. BLDG.	10:35 AM	12:05 PM	1:35 PM	3:05 PM	4:35 PM	6:05 PM

FOR THE AREA ENGINEER

J. L. DICKSON, CAPT., C. E.

TRANSPORTATION OFFICER

BY: B. H. STALKER

CONSTRUCTION TRANSPORTATION DEPT.

DISTRIBUTION

GROUPS: A, B, C, D, E AND F

# HANFORD ENGINEER WORKS PROJECT 9536 INTER-CITY SHUTTLE BUS SCHEDULE

EFFECTIVE FEBRUARY 16, 1945

SERVICE  
MONDAY THROUGH SATURDAY

## RICHLAND - HANFORD

LV RICHLAND CONSTRUCTION TRANSPORTATION GARAGE	8:00 A. M.	1:00 P. M.
LV RICHLAND CONSTRUCTION ADMINISTRATION BUILDING	8:10 A. M.	1:10 P. M.
LV RICHLAND OPERATIONS ADMINISTRATION BUILDING	8:20 A. M.	1:20 P. M.
LV HANFORD BUS GARAGE	9:15 A. M.	2:15 P. M.
LV HANFORD TIME OFFICE	9:20 A. M.	2:20 P. M.
Ar HANFORD ADMINISTRATION BUILDING	9:25 A. M.	2:25 P. M.

## HANFORD - RICHLAND

LV HANFORD ADMINISTRATION BUILDING	10:30 A. M.	3:30 P. M.
LV HANFORD TIME OFFICE	10:35 A. M.	3:35 P. M.
LV HANFORD BUS GARAGE	10:45 A. M.	3:45 P. M.
LV RICHLAND OPERATIONS ADMINISTRATION BUILDING	11:40 A. M.	4:40 P. M.
LV RICHLAND CONSTRUCTION ADMINISTRATION BUILDING	11:50 A. M.	4:50 P. M.
Ar RICHLAND CONSTRUCTION TRANSPORTATION GARAGE	11:55 A. M.	4:55 P. M.

G. P. CHURCH  
FIELD PROJECT MANAGER

PER W. E. Redmon

W. E. REDMON  
FIELD SUPERINTENDENT

DISTRIBUTION  
(GROUPS A, B, C, D, E AND F)

**SERVICE**

# BUS WORKS BUS SCHEDULE

PAGE 1 OF 2

TO AND FROM AREAS.  
AND AREAS.  
ICE.

Line	Stop	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
1	7.30	7.50	8.10	8.30	8.35	8.10	8.10	8.30	8.35						
	7.50	7.50													
	7.50	7.50													
	7.50	7.50													
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	7.50	7.50													
	7.50	7.50													
	7.50	7.50													
2	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50

\*STOPS AT RICHMOND BUS TERMINAL ON CALL

# HANFORD ENGINEER WORKS CONSTRUCTION EMPLOYEES' BUS SCHEDULE

DIRECT SERVICE...OFF PLANT...TO AND FROM AREAS.  
SERVICE BETWEEN HANFORD AND AREAS.  
INTER-CITY SERVICE.

Area	A.A.	E	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
		7.20		7.50																								
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CONSTRUCT

DIRECT SERVICE

EFFECTIVE FEB. 19, 1945 TO FEB. 23, 1945.

	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
CENTRAL SHOPS						7.20		7.50
WHITE BLUFFS						^		^
PIERCE'S SPUR								
RAIL YARD NO. 2								
						6.55		7.25
HANFORD TERMINAL								
	5	9	0	0	3	P	B	
	1.20	2.10	2.35	5.20	6.50	6.55	7.10	7.
HANFORD AVE. BLDG.		^				^	^	
RICHLAND BUS TERMINAL	2.10		5.25		7.40			
RICHLAND CLOCK ALLEY		1.10		7.20	7.50			
RICHLAND CAFETERIA								
RICHLAND						5.55		
PASCO-HAN-FROSSER JCT.	2.23		3.41			5.47	6.02	
KENNEWICK-WHITE KITCHEN	2.10		4.35			5.35	5.50	
KENNEWICK-PAULSONS	2.40		3.37			5.33	5.48	
GOV'T. TRAILER CAMP	2.45		4.30			5.30	5.45	
PASCO	2.50		4.35			5.25	5.40	
BENTON CITY								5.30
PROSSER								5.20
GRANDVIEW								5.45
SUNNYSIDE								5.25

A - SERVICE DAILY EXCEPT SATURDAY AND SUNDAY  
 B - SERVICE DAILY EXCEPT SUNDAY  
 P - DAILY

M.	P.M.	S P.M.	R P.M.	P P.M.	R P.M.	P P.M.	P P.M.	P P.M.	P P.M.	P P.M.	P P.M.	P P.M.	P P.M.	P P.M.	P P.M.
								5.40	5.40						
								5.40	5.40						
		5.40													
		5.50	5.55		6.00			6.05							
0	5.40							6.05		6.00	6.10	6.40	7.30	10.50	11.50
									6.05						
								5.40						11.50	
0			6.50	6.50				6.50	7.00	7.10	7.40	8.30		10.50	
1			6.58	6.58				6.58	7.08	7.18	7.48	8.38		10.42	
2			7.10	7.10				7.10	7.20	7.30	8.00	8.50		10.30	
3			7.12	7.12				7.12	7.22	7.32	8.02	8.52		10.28	
4			7.15	7.15				7.15	7.25	7.35	8.05	8.55		10.25	
5			7.20	7.20				7.20	7.30	7.40	8.10	9.00		10.20	
	6.35							7.10							
	7.05							7.30							
	7.20							7.45							
	7.40							8.05							

HARFORD 0499

FOR THE AREA ENGINEER  
 J. L. DICKSON, CAPT., C. E.  
 TRANSPORTATION OFFICER

BY: A. M. SCHERFFIUS  
 CONSTRUCTION TRANSPORTATION DEPT.  
 PHONE - HARFORD 8561



5/1

	9 P.M.	8 P.M.	7 P.M.	6 P.M.	5 P.M.	4 P.M.	3 P.M.	2 P.M.	1 P.M.
CENTRAL SHOPS	4.50					5.10	5.10		
WHITE BLUFFS	↑				5.10				
PIERCE'S SPUR									
RAIL YARD NO. 2				5.10					
	4.25			5.20	5.30	5.35			

HANFORD TERMINAL

	3 4.50	6 5.10	8 5.10	8 6.10		10 6.40	11 6.40	12 6.40
HANFORD ADM. BLDG.	↑			↑				
RICHLAND BUS TERMINAL	↑			↑				
RICHLAND CLOCK ALLEY			5.10	5.10		5.40	5.45	5.4
RICHLAND CAFETERIA								
RICHLAND	3.50	3.10				3.20		
PASCO-HAM-FROSSER JCT.	3.42	5.13	5.23			5.25	5.33	
KENNEWICK-WHITE KITCHEN	3.30	5.30	5.35			5.40	5.45	
KENNEWICK-PAULSONS	3.23	5.32	5.37			5.42	5.47	
GOV'T. TRAILER CAMP	3.25	5.35	5.40			5.45	5.50	
PASCO	3.20	5.40	5.45			5.50	5.55	
BENTON CITY								6.20
FROSSER								6.50
GRANDVIEW								7.15
SUNNYSIDE								7.30

FOR ADDITION

DISTRIBUTION

GROUPS: A, B, C, D, E AND F

~~SECRET~~

**SAFETY MEETINGS**

Among the safety meetings scheduled were:

1. Orientation meetings, for all new employees, including those of the subcontractors, which were conducted by a safety engineer who delivered carefully-prepared orientation talks to the workers on their first day of employment.
2. Bi-weekly foremen's meetings attended by gang foremen and supervisors.
3. Area Division Engineers' weekly planning meetings held in each area.
4. Weekly safety <sup>2</sup>school meetings held for all of the contractors' Safety Department Personnel.
5. Monday Tool Box Meetings attended by gang <sup>f</sup>foremen's crews on the work site.
6. Area mass meetings when called.
7. Special purpose meetings when called.

~~SECRET~~

A. A more up to date chart should be included.

~~SECRET~~

SAFETY PROGRAM RESULTS

<u>Year</u>	<u>Man-Hours</u>	<u>Frequency</u>	<u>Severity</u>
1943	22,949,335	4.92	1.99
1944	97,289,789	6.57	1.21
Thru July 1945	<u>6,037,544</u>	<u>0.33</u>	<u>0.06</u>
TOTAL	126,276,668	5.97	1.30

<u>Year</u>	<u>No. Accidents All Types</u>	<u>Fatalities</u>	<u>No. Days Lost</u>
1943	113	7	45,732
1944	639	13	117,577
1945	<u>2</u>	<u>0</u>	<u>346</u>
TOTAL	754	20	163,673

~~SECRET~~

**SECRET**

PROJECT COST SUMMARY - MILITARY FUNDS  
FINAL DETAIL COST STATEMENT

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
MONTH ENDING 31 DECEMBER 1946

INDEX AND RECAPITULATION

<u>PAGES</u>	<u>DESCRIPTION</u>	<u>AMOUNTS</u>
1	INDEX AND RECAPITULATION	
2-44	<u>MAIN PLANT</u>	
2-11	<u>OUTSIDE FACILITIES</u>	
2-3	500 Area	5,941,283
3-8	600 Area	25,299,867
8-9	800 Area	2,152,495
9-11	900 Area	13,803,131
11	SW	1,561,011
11	GR	588,055
11	TOTAL OUTSIDE FACILITIES	49,345,842
12-38	<u>PLANT BUILDINGS</u>	
12-17	100 Area	118,661,222
17-20	1700	2,290,835
21-28	200 Area	68,843,690
28-32	2700	1,171,306
33-35	300 Area	7,086,309
35-38	3700	2,178,423
38	TOTAL PLANT BUILDINGS	200,231,785
39-44	<u>GENERAL ADMIN. &amp; MAINTENANCE</u>	
39-44	700 Area	3,939,564
44	TOTAL GENERAL ADMIN. & MAINTENANCE	3,939,564
44	TOTAL MAIN PLANT	253,517,191
45-55	<u>TOWNSITE</u>	
45-55	1100 Area	43,674,392
55	TOTAL TOWNSITE	43,674,392
56-64	<u>SPECIAL CONSTRUCTION FEATURES</u>	
56-60	HANFORD CAMP (FE-27, HC, GC, TC-4)	37,589,302
60-62	TEMPORARY CONSTRUCTION	10,828,155
63	HANFORD AIRPORT	70,533
63	CENTRAL SHOPS	1,070,050
63	3000 AREA	495,305
64	MAINTENANCE OF FARM LANDS	856,312
64	TOTAL SPECIAL CONSTRUCTION FEATURES	50,909,657
		50,909,657
64	<u>GRAND TOTAL</u>	<u>348,101,240</u>
65-66	MEMORANDUM OF METHODS USED	

101 Bldg. p. 62

x

**SECRET**  
SHEET 1 OF 66 SHEETS

B56



# PROJECT COST SUMMARY -- MILITARY FUNDS -- FINAL DETAIL COST STATEMENT --

REPORTING OFFICE SANFORD ENGINEERS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1944

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																									
			ACTUAL		ACTUAL		ACTUAL																									
	<b>MAIN PLANT:</b>																															
	<b>GENERAL OUTSIDE FACILITIES:</b>																															
	<b>OUTSIDE ELECTRICAL LINES, INCLUDING TELEPHONES, ALARM SYSTEMS, ETC.:</b>																															
501	<p><b>Fence and Road Lighting</b>                      Series Road and Fence Lighting is provided for the main roads in the 100, 200, 300 and 700 Areas, and for the respective area boundary fences. Additional lighting is provided for secondary fences around 108, 702, and 703 buildings.</p> <p>Vapor-proof lighting fixtures are used for both fence and road lights. 35' class 3 poles spaced 125' in the 100 and 200 Areas and 250' in 300 and 700 Areas support the fence lights, but road lights are supported on power poles where possible. Circuits are equipped with constant current regulators and automatic time switches. The fence circuits also supply electric power to Guard Towers and Monitoring Stations. Telephone lines are carried on the same poles.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Lighting Circuits</th> <th colspan="2">Lights</th> </tr> <tr> <th>Area</th> <th>Length in Feet</th> <th>Road</th> <th>Fence</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>53,550'</td> <td>125</td> <td>598</td> </tr> <tr> <td>200</td> <td>70,580'</td> <td>198</td> <td>721</td> </tr> <tr> <td>300</td> <td>10,850'</td> <td>20</td> <td>50</td> </tr> <tr> <td>700</td> <td>5,000'</td> <td>7</td> <td>87</td> </tr> </tbody> </table>	Lighting Circuits		Lights		Area	Length in Feet	Road	Fence	100	53,550'	125	598	200	70,580'	198	721	300	10,850'	20	50	700	5,000'	7	87	LS	1		426,292		426,292	
Lighting Circuits		Lights																														
Area	Length in Feet	Road	Fence																													
100	53,550'	125	598																													
200	70,580'	198	721																													
300	10,850'	20	50																													
700	5,000'	7	87																													
505	<p><b>Electrical Distribution Lines</b>                      Electrical Distribution Lines between and within the areas are provided and are carried under this building code except 1100 Richland Village Distribution Lines (see 1108). 230,000V, 66,000V, 13,800V and 2,300V 3-phase transmission lines are used for the inter-area distribution of electrical power and 13,800V, 2,300V, 440/220V, and 220/110V single pole, 5-wire lines are used for the intra-area distribution of electrical power in the 100, 200, 300, 600 and 700 Areas. The main supply loop approximately 8 1/2 miles, consists of a 3 aluminum cables on bell type insulators suspended from 50 foot wood cross arms supported on 2 wood poles, 70' to 85' in length. Distribution lines are of 3-wire, cross arm, single pole construction. Class 2, 35' to 60' fir and cedar poles, and 3, 5 and 8 pin wood cross arms were used for line construction.</p> <p>Listed below are approximate quantities of materials used in the construction of the outside electrical lines of 100, 200, 300, 600, 600 and 700 areas. Totals are for permanent work only and do not include temporary construction or portions of those lines taken over by the Operating Department.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Material</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Total Length of Power Conductor</td> <td>1,458 miles</td> </tr> <tr> <td>Total Number of Power and Light Poles</td> <td>7,695</td> </tr> <tr> <td>Concrete</td> <td>772 cu.yds.</td> </tr> </tbody> </table>	Material	Quantity	Total Length of Power Conductor	1,458 miles	Total Number of Power and Light Poles	7,695	Concrete	772 cu.yds.	LS	1		3,764,621		3,764,621																	
Material	Quantity																															
Total Length of Power Conductor	1,458 miles																															
Total Number of Power and Light Poles	7,695																															
Concrete	772 cu.yds.																															
506	<p><b>Fire Alarm System</b>                      Individual Fire Alarm Systems are provided in the 100-B, D, F; 200-E, W; and 300 Areas. These systems have electro-mechanical gongs mounted in Area Fire Stations, Pump Houses, etc.. Outside sirens and fire alarm boxes are mounted on existing power poles wherever possible. All circuits are .109 and #10 galvanized iron wire carried in most cases on same poles as telephone lines.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Area</th> <th>Length of Circuits</th> <th>No. of Boxes</th> </tr> </thead> <tbody> <tr> <td>100-B</td> <td>14,800 feet</td> <td>10</td> </tr> <tr> <td>100-D</td> <td>19,280 feet</td> <td>11</td> </tr> <tr> <td>100-F</td> <td>11,900 feet</td> <td>11</td> </tr> <tr> <td>200-E</td> <td>16,000 feet</td> <td>8</td> </tr> <tr> <td>200-W</td> <td>14,700 feet</td> <td>10</td> </tr> <tr> <td>300</td> <td>5,270 feet</td> <td>5</td> </tr> </tbody> </table>	Area	Length of Circuits	No. of Boxes	100-B	14,800 feet	10	100-D	19,280 feet	11	100-F	11,900 feet	11	200-E	16,000 feet	8	200-W	14,700 feet	10	300	5,270 feet	5	Each	5		95,077		15,846				
Area	Length of Circuits	No. of Boxes																														
100-B	14,800 feet	10																														
100-D	19,280 feet	11																														
100-F	11,900 feet	11																														
200-E	16,000 feet	8																														
200-W	14,700 feet	10																														
300	5,270 feet	5																														
508	<p><b>Telephone Cable &amp; Instruments</b>                      The permanent plant-wide Telephone Communication System is made up of five general types of systems: An inter-area system running from the 702 building to a switchboard in each area; an area system emanating from each switchboard, and a separate patrol system in each area; a number of inter-communication systems in certain buildings; a power dispatching system; and a railroad dispatching system.</p> <p>Approximate overall length in feet and number of telephones (not including 2 dispatcher systems) is as follows:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Area</th> <th>All Lines</th> <th>Cable Lines</th> <th>Other Lines</th> <th>Phones</th> </tr> </thead> <tbody> <tr> <td>100 B, D, F.</td> <td>118,238</td> <td>20,048</td> <td>98,190</td> <td>174</td> </tr> <tr> <td>200 B, W, E.</td> <td>128,810</td> <td>29,790</td> <td>99,020</td> <td>249</td> </tr> <tr> <td>300</td> <td>17,090</td> <td>4,150</td> <td>12,940</td> <td>62</td> </tr> <tr> <td>600</td> <td>5,980</td> <td></td> <td>5,980</td> <td>5</td> </tr> </tbody> </table>	Area	All Lines	Cable Lines	Other Lines	Phones	100 B, D, F.	118,238	20,048	98,190	174	200 B, W, E.	128,810	29,790	99,020	249	300	17,090	4,150	12,940	62	600	5,980		5,980	5	LS	1		1,655,293		1,655,293
Area	All Lines	Cable Lines	Other Lines	Phones																												
100 B, D, F.	118,238	20,048	98,190	174																												
200 B, W, E.	128,810	29,790	99,020	249																												
300	17,090	4,150	12,940	62																												
600	5,980		5,980	5																												

# PROJECT COST SUMMARY -- MILITARY FUNDS

## -- FINAL DETAIL COST STATEMENT --

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																											
			ACTUAL		ACTUAL		ACTUAL																																											
506	Telephone Cable & Instruments (Continued)																																																	
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GENERAL FACILITIES AND SERVICE:																																																		
601	Standard Gauge Railroad Track	Miles	123.3			9,142,874		74,151																																										
	The permanent plant Railroad System, serving all Areas of the Hanford Engineer Works, consists of approximately 123.3 miles of standard gauge single track. This total includes 20 miles of reconditioned track of the old Milwaukee line, 5.4 miles of temporary railroad track which were left in place, and a 7 track, 225 car capacity classification yard. The railroads were divided into two types: Process tracks which are those over which the product may move; and Service tracks, which are all those other than Process Tracks. Process Tracks are both new and used rail weighting not less than 80¢ per yard. Approximately 16.2 miles of new 85¢ rail was installed. Service tracks were laid with used 65¢ rail.																																																	
	One Mailroad Track scale of 120 ton capacity and one Scale House is provided at the Riverland Classification Yards. Scale pit and a weight beam pit are of reinforced concrete, and the one-story scale house is wood frame.																																																	
601-M	Railroad Maintenance	Miles	123.3			1,465,808		11,888																																										
	Maintenance of railroad track commenced immediately upon acquisition of the existing 25 miles of track and increased until the end of construction when 123 miles were under maintenance. Work included ballasting, lifting, aligning, replacing ties, rails, and blank crossings, and removing blown sand.																																																	
602	Standard Gauge Rolling Stock	LS	1			772,038		772,038																																										
	This Account covers Standard Gauge Railroad Rolling Stock.																																																	
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603	Roads and Walks	LS	1			6,453,024		6,453,024																																										
	The permanent Road System serving the entire plant has an overall length of approximately 291 miles, including Area and Inter-area, but not roads and streets of the 1100 Richland Village Area. Plant roads are a combination of new road construction, existing roads improved and maintained, existing roads maintained only, and existing trails improved and maintained. A double lane, separated highway extends from the South boundary of 'A' Area North to the side of Hanford Camp and then West to a point beyond the process areas. All others are single lane. The widths vary from 12' to 30'.																																																	
	A tabulation of types and lengths in miles follows:																																																	
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	Most walks consist of a 2" layer of rolled bituminous surfacing varying from 3' to 4' wide.																																																	
603-M	Permanent Road Maintenance	Miles	1			684,913		684,913																																										
	Road Maintenance commenced with the acquisition of the existing roads within the area and continued until the end of construction when 237 miles were under maintenance. The large amount of heavy traffic and high safety requirements on the existing light																																																	

# PROJECT COST SUMMARY --- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																																												
			ACTUAL		ACTUAL		ACTUAL																																																												
603-M	Permanent Road Maintenance (Continued) Traffic design existing roads necessitated a large amount of maintenance work. The amount of maintenance work on the newly constructed roads was appreciably less.																																																																		
604	<b>Autos, Tractors, and Trailers</b> This account covers Autos, Tractors, Trailers and similar equipment.	LS	1		4,021,069		4,021,069																																																												
	<table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">191 Sedans</td> <td style="width: 25%;">27 Trucks, Fire Fighting</td> </tr> <tr> <td>17 Station Wagons</td> <td>19 Trailers, Various sizes</td> </tr> <tr> <td>19 Carryalls</td> <td>21 Cranes, Tragliries &amp; Glasshells</td> </tr> <tr> <td>106 Buses</td> <td>13 Tractors, Various sizes</td> </tr> <tr> <td>10 Ambulances</td> <td>42 Graders, Road Rollers, Spreaders</td> </tr> <tr> <td>157 Pickups 1/4 ton</td> <td>Concrete Mixers, etc.</td> </tr> <tr> <td>67 Trucks, 1 1/2 ton, Flatbeds</td> <td>20 Bicycles</td> </tr> <tr> <td>40 Trucks, Dump</td> <td>50 Motorcycles</td> </tr> <tr> <td>72 Trucks, Various types</td> <td>20 Welders</td> </tr> <tr> <td>32 Trucks, w/Special Equipment</td> <td>33 Light Plants</td> </tr> <tr> <td>25 Pieces of Ground Equipment</td> <td>144 Pieces of Miscellaneous Equipment</td> </tr> <tr> <td colspan="2" style="text-align: center;">Total 1,275</td> </tr> </table>	191 Sedans	27 Trucks, Fire Fighting	17 Station Wagons	19 Trailers, Various sizes	19 Carryalls	21 Cranes, Tragliries & Glasshells	106 Buses	13 Tractors, Various sizes	10 Ambulances	42 Graders, Road Rollers, Spreaders	157 Pickups 1/4 ton	Concrete Mixers, etc.	67 Trucks, 1 1/2 ton, Flatbeds	20 Bicycles	40 Trucks, Dump	50 Motorcycles	72 Trucks, Various types	20 Welders	32 Trucks, w/Special Equipment	33 Light Plants	25 Pieces of Ground Equipment	144 Pieces of Miscellaneous Equipment	Total 1,275																																											
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Total 1,275																																																																			
605	<b>Fences (Including Guard Towers and Traffic Checking Station)</b> Three types of fence are provided on this project. Type No. 1 Fence, used around process area and individual buildings, consists of an 8' extent of woven wire fabric and 3 strands of barbed wire making total height 9'-6". Posts are 12'-0" long on 10' centers and carry a 2'-6" overhanging bracket to support the barbed wire. Type No. 2 Fence, used as boundary line, consists of 4 strands of 1/2-point barbed wire on 4'-0" posts, 4'-0" high. Third type is chain link fence and was used to inclose Building 213. Seventy-two Guard Towers are provided and are elevated, one-room, wood frame, flat roof structures.	LS	1		947,182		947,182																																																												
	<table style="width: 100%; border: none;"> <tr> <td colspan="2" style="text-align: center;"><u>Dimensions of Guard Towers</u></td> <td style="text-align: center;"><u>Volume</u></td> <td style="text-align: center;"><u>Area</u></td> </tr> <tr> <td>12' x 12' x 12'</td> <td></td> <td style="text-align: center;">2,700 cu.ft.</td> <td style="text-align: center;">182 sq.ft.</td> </tr> <tr> <td colspan="4" style="text-align: center;"><u>Linear Feet of Fence and Number of Guard Towers</u></td> </tr> <tr> <td style="text-align: center;"><u>Area</u></td> <td style="text-align: center;"><u>Type No. 1</u></td> <td style="text-align: center;"><u>Type No. 2</u></td> <td style="text-align: center;"><u>Chain Link</u></td> </tr> <tr> <td>100 P.D.F.</td> <td style="text-align: center;">67,235 ft.</td> <td></td> <td style="text-align: center;">72</td> </tr> <tr> <td>200 E.S.F.</td> <td style="text-align: center;">108,020</td> <td></td> <td style="text-align: center;">17</td> </tr> <tr> <td>700</td> <td style="text-align: center;">11,000</td> <td></td> <td style="text-align: center;">4</td> </tr> <tr> <td>600</td> <td style="text-align: center;">1,000</td> <td style="text-align: center;">211,200 ft. (approx.)</td> <td></td> </tr> <tr> <td>700</td> <td style="text-align: center;">4,000</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td style="text-align: center;">181,255 ft.</td> <td style="text-align: center;">211,200 ft.</td> <td style="text-align: center;">93</td> </tr> </table> <p>Three Traffic Checking Stations are provided on the access roads to Area "A", and are comprised of a multiple lane, partially open wood frame shed and a frame one-story office building.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%; text-align: center;"><u>Overall Dimensions</u></td> <td style="width: 25%; text-align: center;"><u>Volume</u></td> <td style="width: 25%; text-align: center;"><u>Area</u></td> </tr> <tr> <td>Richland Hanford</td> <td style="text-align: center;">12' x 10' x 12'</td> <td style="text-align: center;">18,720 cu.ft.</td> <td style="text-align: center;">1,200 sq.ft.</td> </tr> <tr> <td>Gold Creek</td> <td style="text-align: center;">14' x 12' x 12'</td> <td style="text-align: center;">20,168 cu.ft.</td> <td style="text-align: center;">848 sq.ft.</td> </tr> <tr> <td>Prosser</td> <td style="text-align: center;">14' x 10' x 12'</td> <td style="text-align: center;">16,800 cu.ft.</td> <td style="text-align: center;">420 sq.ft.</td> </tr> </table>	<u>Dimensions of Guard Towers</u>		<u>Volume</u>	<u>Area</u>	12' x 12' x 12'		2,700 cu.ft.	182 sq.ft.	<u>Linear Feet of Fence and Number of Guard Towers</u>				<u>Area</u>	<u>Type No. 1</u>	<u>Type No. 2</u>	<u>Chain Link</u>	100 P.D.F.	67,235 ft.		72	200 E.S.F.	108,020		17	700	11,000		4	600	1,000	211,200 ft. (approx.)		700	4,000			Total	181,255 ft.	211,200 ft.	93		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	Richland Hanford	12' x 10' x 12'	18,720 cu.ft.	1,200 sq.ft.	Gold Creek	14' x 12' x 12'	20,168 cu.ft.	848 sq.ft.	Prosser	14' x 10' x 12'	16,800 cu.ft.	420 sq.ft.										
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606-B	Process Waste Pumping Station	Each	2		67,458		33,729																																																												
606-E	Process Waste Pumping Station Equipment	Each	2		15,215		7,607																																																												
	<p>A Process Waste Pumping Station is provided in both the 100-D and 100-F Areas due to the topography. The 100-D building is a rectangular shaped, two story, reinforced concrete structure having a flat, tar and gravel roof. The 100-F building is a T-shaped, three-story, reinforced concrete structure having a flat tar and gravel roof.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%; text-align: center;"><u>Overall Dimensions</u></td> <td style="width: 25%; text-align: center;"><u>Volume</u></td> <td style="width: 25%; text-align: center;"><u>Area</u></td> </tr> <tr> <td>100-D</td> <td style="text-align: center;">37' x 27' x 15'</td> <td style="text-align: center;">16,407 cu.ft.</td> <td style="text-align: center;">1,000 sq.ft.</td> </tr> <tr> <td>100-F</td> <td style="text-align: center;">76' x 24' x 15'</td> <td style="text-align: center;">55,850 cu.ft.</td> <td style="text-align: center;">1,741 sq.ft.</td> </tr> </table> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%; text-align: center;"><u>Material</u></td> <td style="width: 25%; text-align: center;"><u>Quantity</u></td> <td style="width: 25%;"></td> </tr> <tr> <td></td> <td style="text-align: center;">Concrete</td> <td style="text-align: center;">1608-D 75 cu.yds.</td> <td style="text-align: center;">1608-F 60 cu.yds.</td> </tr> <tr> <td></td> <td style="text-align: center;">Roofing</td> <td style="text-align: center;">4 squares</td> <td style="text-align: center;">12 squares</td> </tr> </table>		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	100-D	37' x 27' x 15'	16,407 cu.ft.	1,000 sq.ft.	100-F	76' x 24' x 15'	55,850 cu.ft.	1,741 sq.ft.		<u>Material</u>	<u>Quantity</u>			Concrete	1608-D 75 cu.yds.	1608-F 60 cu.yds.		Roofing	4 squares	12 squares																																										
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612	<b>Open Drainage Ditches</b> Open Drainage Ditches, other than for roadside drainage, are provided in the 100, 200, 300, and 400 Areas. Ditch sections vary from 24" to 36" bottoms, with grade 1% to 5%, having 2' on 1 side slopes. Vitrified clay pipe, concrete pipe, and concrete and timber headwalls are used for road and railroad crossings and ditch junctions.	LS	1		67,598		67,598																																																												
	<table style="width: 100%; border: none;"> <tr> <td colspan="7" style="text-align: center;"><u>Total Length of Open Ditches</u></td> </tr> <tr> <td style="text-align: center;"><u>Area</u></td> <td style="text-align: center;"><u>24" wide</u></td> <td style="text-align: center;"><u>36" wide</u></td> <td style="text-align: center;"><u>48" wide</u></td> <td style="text-align: center;"><u>72" wide</u></td> <td style="text-align: center;"><u>36" wide</u></td> <td style="text-align: center;"><u>Total</u></td> </tr> <tr> <td>100 P.D.F.</td> <td></td> <td style="text-align: center;">4,000 ft.</td> <td></td> <td></td> <td></td> <td style="text-align: center;">4,000 ft.</td> </tr> <tr> <td>200 E.S.F.</td> <td style="text-align: center;">11,300 ft.</td> <td style="text-align: center;">7,500</td> <td style="text-align: center;">4,200</td> <td style="text-align: center;">720 ft.</td> <td style="text-align: center;">1,550 ft.</td> <td style="text-align: center;">21,470 ft.</td> </tr> <tr> <td>300</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">500</td> <td style="text-align: center;">500</td> </tr> <tr> <td>400</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">300</td> <td style="text-align: center;">300</td> </tr> </table> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%; text-align: center;"><u>Material</u></td> <td style="width: 25%; text-align: center;"><u>Quantity</u></td> <td style="width: 25%;"></td> </tr> <tr> <td></td> <td style="text-align: center;">Lumber</td> <td style="text-align: center;">7,710 P.F.M.</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Concrete</td> <td style="text-align: center;">595 cu.yds.</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">V.C. Pipe</td> <td style="text-align: center;">2,440 lin. ft. various sizes</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Concrete Pipe</td> <td style="text-align: center;">1,360 lin. ft. various sizes</td> <td></td> </tr> </table>	<u>Total Length of Open Ditches</u>							<u>Area</u>	<u>24" wide</u>	<u>36" wide</u>	<u>48" wide</u>	<u>72" wide</u>	<u>36" wide</u>	<u>Total</u>	100 P.D.F.		4,000 ft.				4,000 ft.	200 E.S.F.	11,300 ft.	7,500	4,200	720 ft.	1,550 ft.	21,470 ft.	300					500	500	400					300	300		<u>Material</u>	<u>Quantity</u>			Lumber	7,710 P.F.M.			Concrete	595 cu.yds.			V.C. Pipe	2,440 lin. ft. various sizes			Concrete Pipe	1,360 lin. ft. various sizes					
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**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--- FINAL DETAIL COST STATEMENT ---**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COST		UNIT COSTS																																																											
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b22	Meteorological Tower & Buildings (Continued)																																																																	
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b21-B	Radio Transmitter Station	Each	1		4,507		4,507																																																											
b23-B	Radio Transmitter Station Equipment	Each	1		5,168		5,168																																																											
	<p>One Radio Transmitter Station is provided, being a Fire Observation Station also. This former TC building is a two-story, wood-frame structure having wood floors, gypsum board exterior and celotex interior walls, and roof covered with roll roofing. Concrete is used for stair foundations and building anchors. Second floor has windows on four sides.</p> <table border="0"> <tr> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> </tr> <tr> <td>91' x 121' x 22'</td> <td>2,376 cu. ft.</td> <td>108 sq. ft.</td> </tr> </table> <table border="0"> <tr> <td><u>Material</u></td> <td><u>Quantity</u></td> </tr> <tr> <td>Framing</td> <td>750 f.b.m.</td> </tr> <tr> <td>Sheathing</td> <td>250 f.b.m.</td> </tr> <tr> <td>Flooring</td> <td>150 f.b.m.</td> </tr> <tr> <td>Concrete</td> <td>1.5 cu. yds.</td> </tr> <tr> <td>Gypsum Board</td> <td>425 sq. ft.</td> </tr> <tr> <td>Celotex</td> <td>850 sq. ft.</td> </tr> <tr> <td>Roofing</td> <td>1.3 squares</td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	91' x 121' x 22'	2,376 cu. ft.	108 sq. ft.	<u>Material</u>	<u>Quantity</u>	Framing	750 f.b.m.	Sheathing	250 f.b.m.	Flooring	150 f.b.m.	Concrete	1.5 cu. yds.	Gypsum Board	425 sq. ft.	Celotex	850 sq. ft.	Roofing	1.3 squares																																											
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b2	Secondary Substation	Each	1		7,050		7,050																																																											
	<p>One Secondary Substation is provided at the Classification Yards. It is a 4 pole, open wood frame structure with concrete equipment pads and a wood picket fence.</p> <table border="0"> <tr> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> </tr> <tr> <td>20' x 28' x 34'</td> <td></td> <td>500 sq. ft.</td> </tr> </table> <table border="0"> <tr> <td><u>Material</u></td> <td><u>Quantity</u></td> </tr> <tr> <td>Lumber (Fence)</td> <td>600 f.b.m.</td> </tr> <tr> <td>Concrete</td> <td>12.70 cu. yds.</td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	20' x 28' x 34'		500 sq. ft.	<u>Material</u>	<u>Quantity</u>	Lumber (Fence)	600 f.b.m.	Concrete	12.70 cu. yds.																																																					
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b5j	Distribution Substations	Each	2		2,809		1,404																																																											
	<p>One Distribution Substation is provided at Riverland Yards and one near the Meteorological Tower. These Substations are open frame construction using wood pole structures surrounded by picket fences. Equipment is placed on concrete foundations and on elevated wood platforms suspended between poles.</p>																																																																	
b61	Rifle and Pistol Range	Each	1		122,469		122,469																																																											
	<p>One Rifle and Pistol Range is provided, being a former T.O. structure. The one-story, frame Range House has post and girder foundations set on wood mats, wood floor gypsum board exterior and interior walls and ceilings, roll roofing, and three brick chimneys. The Wall House has reinforced concrete pit wall and floor, gypsum board siding, and roll roofing. Sanitary sewer system and parking area are provided. Four ranges are constructed: Army Type "M" Pistol Range, Thompson Sub-Machine Gun Range, Walk and Draw Pistol Range, and FBI Killer Course Range. The area is fenced on three sides and a mountain forms the fourth side.</p> <table border="0"> <tr> <td><u>Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> </tr> <tr> <td>Overall</td> <td>1,250' x 14' 0"</td> <td></td> </tr> <tr> <td>Range House</td> <td>10' x 7' x 11'-6"</td> <td>8,090 cu. ft.</td> </tr> <tr> <td>Pistol Range</td> <td>255' x 250'</td> <td>63,750</td> </tr> <tr> <td>Sub-Machine Gun Range</td> <td>255' x 500'</td> <td>127,500</td> </tr> <tr> <td>Walk &amp; Draw Pistol Range</td> <td>255' x 520'</td> <td>132,600</td> </tr> <tr> <td>Special Range</td> <td>170' x 240'</td> <td>40,800</td> </tr> <tr> <td>Post House</td> <td>7' x 9' x 15'-6"</td> <td>976</td> </tr> <tr> <td>Septic Tank</td> <td>4' x 7' x 3'</td> <td>84</td> </tr> <tr> <td>Parking Area</td> <td>170' Radius</td> <td>11,417</td> </tr> </table>	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>	Overall	1,250' x 14' 0"		Range House	10' x 7' x 11'-6"	8,090 cu. ft.	Pistol Range	255' x 250'	63,750	Sub-Machine Gun Range	255' x 500'	127,500	Walk & Draw Pistol Range	255' x 520'	132,600	Special Range	170' x 240'	40,800	Post House	7' x 9' x 15'-6"	976	Septic Tank	4' x 7' x 3'	84	Parking Area	170' Radius	11,417																																			
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PROJECT COST SUMMARY - MILITARY FUNDS  
- FINAL DETAIL COST STATEMENT -

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLU. NIEM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNI. COSTS																																
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699	Miscellaneous Tools and Equipment This account covers the cost of all small tools and miscellaneous shop equipment not allocated for use in any specific building or facility.	LS	1		546.936		546.936																																
6150-B	Water Treatment Building	Each	1		8,013		8,013																																
6150-B	Water Treatment Building Equipment One Water Treatment Building is provided at the Riverland Yards. It is a one-story building with concrete foundations, reinforced concrete floor and roof, concrete block walls, and built-up felt gravel surfaced roofing. A 25,000 gallon soft water, wooden storage tank elevated on 25' tower and a railroad standline with concrete valve pit are also provided.	Each	1		28,300		28,300																																
	<table border="0"> <tr> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> </tr> <tr> <td>111'-0" x 20' x 11'-8"</td> <td>27,341 cu.ft.</td> <td>390 sq.ft.</td> </tr> <tr> <td><u>Material</u></td> <td><u>Quantity</u></td> <td></td> </tr> <tr> <td>Reinforcing Steel</td> <td>1.25 tons</td> <td></td> </tr> <tr> <td>Reinforcing Mesh</td> <td>290 sq.ft.</td> <td></td> </tr> <tr> <td>Concrete</td> <td>69.5 cu.yds.</td> <td></td> </tr> <tr> <td>Concrete Blocks</td> <td>715 blocks</td> <td></td> </tr> <tr> <td>Roofing</td> <td>1.25 squares</td> <td></td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	111'-0" x 20' x 11'-8"	27,341 cu.ft.	390 sq.ft.	<u>Material</u>	<u>Quantity</u>		Reinforcing Steel	1.25 tons		Reinforcing Mesh	290 sq.ft.		Concrete	69.5 cu.yds.		Concrete Blocks	715 blocks		Roofing	1.25 squares															
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6707-B	Change House	Each	1		30,712		30,712																																
6707-B	Change House Equipment One Change House Building is provided at Riverland Yards. It is a rectangular, one-story, wood frame structure with concrete and concrete block foundations, concrete floor, except cinders in heating room lean-to, drop-siding over sheathing walls and built-up, gravel surfaced roof.	Each	1		1,948		1,948																																
	<table border="0"> <tr> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> </tr> <tr> <td>36'-8" x 72' x 10'</td> <td>34,715 cu.ft.</td> <td>2,095 sq.ft.</td> </tr> <tr> <td><u>Material</u></td> <td><u>Quantity</u></td> <td></td> </tr> <tr> <td>Framing</td> <td>7,600 f.b.m.</td> <td></td> </tr> <tr> <td>Siding</td> <td>4,000 f.b.m.</td> <td></td> </tr> <tr> <td>Sheathing</td> <td>5,800 f.b.m.</td> <td></td> </tr> <tr> <td>Concrete</td> <td>44.3 cu.yds.</td> <td></td> </tr> <tr> <td>Concrete Block</td> <td>720 blocks</td> <td></td> </tr> <tr> <td>Freeboard</td> <td>2,100 sq.ft.</td> <td></td> </tr> <tr> <td>Asbestos Board</td> <td>100 sq.ft.</td> <td></td> </tr> <tr> <td>Roofing</td> <td>27.04 squares</td> <td></td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	36'-8" x 72' x 10'	34,715 cu.ft.	2,095 sq.ft.	<u>Material</u>	<u>Quantity</u>		Framing	7,600 f.b.m.		Siding	4,000 f.b.m.		Sheathing	5,800 f.b.m.		Concrete	44.3 cu.yds.		Concrete Block	720 blocks		Freeboard	2,100 sq.ft.		Asbestos Board	100 sq.ft.		Roofing	27.04 squares						
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6718-B	Locomotive House	Each	1		98,771		98,771																																
6718-B	Locomotive House Equipment 6718 - One Locomotive House is provided in the Riverland Yards. This building has reinforced concrete foundations, floors, and pits under the tracks, drop-siding over sheathing walls, and built-up felt, gravel surfaced roofing. The center, higher portion is of post and girder construction for clearance and has 2" roof decking. Partitions and ceilings in office and carts room are breadwood. Two overhead track doors are installed at each end.	Each	1		23,769		23,769																																

**PROJECT COST SUMMARY -- MILITARY FUNDS**  
**--FINAL DETAIL COST STATEMENT--**

REPORTING OFFICE FAIRFORD ENGINEERS, INC. PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT

MONTH ENDING 31 DECEMBER 1946

CCDR NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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6718	<p>Locomotive House (continued)</p> <p>6718-A - A reinforced concrete cinder pit is provided near the Locomotive House.</p> <table border="0"> <tr> <td></td> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6718</td> <td>41'-8" x 107'-1" x 2'-0"</td> <td>120,158 cu.ft.</td> <td>4,380 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6718-A</td> <td>17' x 18'-11" x 14'-6"</td> <td>4,683 cu.ft.</td> <td>323 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p><u>Material</u></p> <table border="0"> <tr> <td></td> <td></td> <td><u>Quantity</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>6718</td> <td></td> <td>6718-A</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Framing</td> <td>24,500</td> <td>f.b.m.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sheathing</td> <td>14,000</td> <td>f.b.m.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Siding</td> <td>5,000</td> <td>f.b.m.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Reinforcing Steel</td> <td>5</td> <td>tons</td> <td>3.5</td> <td>tons</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Reinforcing Mesh</td> <td>3,600</td> <td>sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete</td> <td>214.5</td> <td>cu.yds.</td> <td></td> <td></td> <td>51</td> <td>cu.yds.</td> <td></td> <td></td> </tr> <tr> <td>Roofing</td> <td>46.16</td> <td>squares</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Prison Camp  A Camp was provided for the housing of inmates and employees of the Federal Prison Industries engaged in maintaining Farm Lands. Included in this code are all charges against the buildings, materials, building equipment, tools and construction equipment. The following tabulation gives building information.</p> <table border="0"> <tr> <td></td> <td><u>Dimensions</u></td> <td><u>Area</u></td> <td><u>Volume</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>sq.ft.</td> <td>cu.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Administrative Building</td> <td>Wood frame, drop siding, sectional construction, wood floor</td> <td>30'x120'x10'</td> <td>3,600</td> <td>36,000</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Infirmary</td> <td>Same</td> <td>30'x120'x10'</td> <td>3,600</td> <td>36,000</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Recreation Building</td> <td>Same</td> <td>30'x120'x13'</td> <td>3,600</td> <td>46,800</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Barracks (5)</td> <td>Same</td> <td>20'x120'x10'</td> <td>2,400</td> <td>24,000</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Barracks Huts (4)</td> <td>Pacific Huts</td> <td>16'x120'x9'</td> <td>1,920</td> <td>172,800</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Text Barracks (5)</td> <td>Canvas, wood floors &amp; walls</td> <td>20'x20'</td> <td>400</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Mass Hall &amp; Supply Room</td> <td>Wood frame, drop siding, sectional construction, H shaped (Overall) 3- 20x120 units, concrete floor in kitchen</td> <td>180'x120'x10'</td> <td>7,200</td> <td>72,000</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Boiler House</td> <td>Wood frame</td> <td>10'x16'x10'</td> <td>160</td> <td>1,600</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pump House</td> <td>Wood frame</td> <td>10'x20'x9'</td> <td>200</td> <td>1,800</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Elevated Storage Tanks(2)</td> <td>Wood Stave on Wood Towers</td> <td>1-8000 gals. &amp; 1-1000 gals.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Garage &amp; Storage Shed</td> <td>Wood frame, drop siding, sectional, dirt floor</td> <td>20'x12'x13'</td> <td>2,400</td> <td>31,200</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Carpenter &amp; Work Shop</td> <td>Same, but wood floor</td> <td>20'x0'x10'</td> <td>1,800</td> <td>18,000</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supervisor's Residences(12)</td> <td>Sheet metal Butler Huts</td> <td>22' x 48'</td> <td>1,056</td> <td>9,120</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supervisor's Residences(10)</td> <td>Prefabricated Houses 3-section, 2-bedroom, plywood throughout, wood foundations.</td> <td>27'x24'x8 1/2'</td> <td>609</td> <td>5,177</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Recreation Bldg. for Res. Pacific Hut</td> <td></td> <td>18'x40'</td> <td>640</td> <td>6,760</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p align="right">Sub-Total <span style="float:right">26,299,867</span></p> <p>OVERHEAD LINES:</p> <tr> <td>601</td> <td> <p>Pipe Supports</p> <p>Pipe Supports are provided in the process areas to carry the overhead steam, air, and process lines. Type 1 Support is a single pole, having a wooden crossarm consisting of two pieces 3"x8"x6' and strap steel knee braces. Rod hangers threaded for adjustment are suspended from the crossarms. Type 2 Support is a double pole, having a wooden crossarm 3"x8"x8'-10" long. All poles were set in concrete 4' to 6' deep.</p> <table border="0"> <tr> <td></td> <td><u>Pipe Supports</u></td> <td><u>Length</u></td> <td><u>Total</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>in Area</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Area</td> <td>18'</td> <td>20'</td> <td>25'</td> <td>30'</td> <td>38'</td> <td>40'</td> <td>46'</td> <td>50'</td> <td>58'</td> <td>60'</td> <td></td> </tr> <tr> <td>100-B</td> <td>1</td> <td>27</td> <td>93</td> <td>182</td> <td>49</td> <td>48</td> <td>18</td> <td>9</td> <td>2</td> <td>2</td> <td>431</td> </tr> <tr> <td>100-D</td> <td>3</td> <td>17</td> <td>89</td> <td>188</td> <td>78</td> <td>46</td> <td>16</td> <td>9</td> <td>4</td> <td>3</td> <td>420</td> </tr> <tr> <td>100-F</td> <td></td> <td>9</td> <td>203</td> <td>200</td> <td>93</td> <td>64</td> <td>26</td> <td>8</td> <td>3</td> <td></td> <td>603</td> </tr> <tr> <td>200-E</td> <td>239</td> <td>63</td> <td>98</td> <td>204</td> <td>38</td> <td>43</td> <td>50</td> <td>5</td> <td>8</td> <td>4</td> <td>747</td> </tr> <tr> <td>200-H</td> <td>168</td> <td>272</td> <td>111</td> <td>264</td> <td>59</td> <td>78</td> <td>44</td> <td>3</td> <td></td> <td></td> <td>987</td> </tr> <tr> <td>300</td> <td></td> <td></td> <td>62</td> <td>140</td> <td>18</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>210</td> </tr> <tr> <td>700</td> <td></td> <td></td> <td></td> <td>275</td> <td>66</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td>350</td> </tr> <tr> <td>Total</td> <td>399</td> <td>388</td> <td>644</td> <td>1,421</td> <td>388</td> <td>347</td> <td>159</td> <td>32</td> <td>14</td> <td>9</td> <td>3,748</td> </tr> </table> <p align="center">Concrete 500 cu.yds.</p> </td> <td>LS</td> <td>1</td> <td></td> <td>634,901</td> <td></td> <td>634,901</td> <td></td> </tr> <tr> <td>602</td> <td> <p>Steam lines</p> <p>Outside overhead insulated Steam Lines are provided for distribution of steam to buildings and facilities. Steam Lines are of welded construction throughout with welded neck flanges for valves. Schedule 40 seamless steel pipe was used for pressures up to and including 160# lines. Schedule 80 for the 225# lines. Standard thickness 85% magnesia insulation and an asphalt felt jacket for weather proofing was provided. Pipe diameters 1 1/2" to 16" were used.</p> <table border="0"> <tr> <td></td> <td><u>LENGTH OF STEAM LINES</u></td> <td><u>Total</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Area</td> <td>18"</td> <td>14"</td> <td>12"</td> <td>10"</td> <td>8"</td> <td>6"</td> <td>4"</td> <td>3 1/2"</td> <td>3"</td> <td>2"</td> <td>1 1/2"</td> <td></td> </tr> <tr> <td>100-B</td> <td>2,087</td> <td>1,844</td> <td></td> <td>2,078</td> <td>1,369</td> <td>2,884</td> <td>213</td> <td></td> <td>1,737</td> <td></td> <td></td> <td>12,508</td> </tr> <tr> <td>100-D</td> <td>1,688</td> <td>1,777</td> <td>568</td> <td>1,381</td> <td>3,572</td> <td>603</td> <td>298</td> <td></td> <td>1,678</td> <td></td> <td></td> <td>11,588</td> </tr> <tr> <td>100-F</td> <td>2,377</td> <td>1,800</td> <td>1,018</td> <td>1,215</td> <td>1,608</td> <td>372</td> <td>834</td> <td></td> <td>1,610</td> <td>108</td> <td></td> <td>11,638</td> </tr> <tr> <td>200-E</td> <td></td> <td></td> <td>4,063</td> <td>1,680</td> <td>3,890</td> <td>180</td> <td>4,490</td> <td></td> <td>1,631</td> <td>278</td> <td>278</td> <td>16,364</td> </tr> <tr> <td>200-H</td> <td></td> <td></td> <td>1,248</td> <td>6,948</td> <td>2,745</td> <td>7,857</td> <td>2,610</td> <td></td> <td>7,480</td> <td>208</td> <td>500</td> <td>29,477</td> </tr> <tr> <td>300</td> <td></td> <td></td> <td></td> <td></td> <td>160</td> <td>580</td> <td>1,940</td> <td></td> <td>1,050</td> <td>800</td> <td></td> <td>4,500</td> </tr> <tr> <td>700</td> <td></td> <td></td> <td></td> <td></td> <td>28</td> <td>1,650</td> <td>2,150</td> <td>1,610</td> <td>880</td> <td>1,625</td> <td></td> <td>8,640</td> </tr> <tr> <td>Total</td> <td>6,117</td> <td>6,221</td> <td>8,920</td> <td>13,162</td> <td>18,848</td> <td>16,448</td> <td>11,698</td> <td>250</td> <td>18,914</td> <td>3,214</td> <td>778</td> <td>94,775</td> </tr> </table> </td> <td>LS</td> <td>1</td> <td></td> <td>1,293,225</td> <td></td> <td>1,293,225</td> <td></td> </tr>		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>						6718	41'-8" x 107'-1" x 2'-0"	120,158 cu.ft.	4,380 sq.ft.						6718-A	17' x 18'-11" x 14'-6"	4,683 cu.ft.	323 sq.ft.								<u>Quantity</u>								6718		6718-A						Framing	24,500	f.b.m.							Sheathing	14,000	f.b.m.							Siding	5,000	f.b.m.							Reinforcing Steel	5	tons	3.5	tons					Reinforcing Mesh	3,600	sq.ft.							Concrete	214.5	cu.yds.			51	cu.yds.			Roofing	46.16	squares								<u>Dimensions</u>	<u>Area</u>	<u>Volume</u>								sq.ft.	cu.ft.						Administrative Building	Wood frame, drop siding, sectional construction, wood floor	30'x120'x10'	3,600	36,000					Infirmary	Same	30'x120'x10'	3,600	36,000					Recreation Building	Same	30'x120'x13'	3,600	46,800					Barracks (5)	Same	20'x120'x10'	2,400	24,000					Barracks Huts (4)	Pacific Huts	16'x120'x9'	1,920	172,800					Text Barracks (5)	Canvas, wood floors & walls	20'x20'	400						Mass Hall & Supply Room	Wood frame, drop siding, sectional construction, H shaped (Overall) 3- 20x120 units, concrete floor in kitchen	180'x120'x10'	7,200	72,000					Boiler House	Wood frame	10'x16'x10'	160	1,600					Pump House	Wood frame	10'x20'x9'	200	1,800					Elevated Storage Tanks(2)	Wood Stave on Wood Towers	1-8000 gals. & 1-1000 gals.							Garage & Storage Shed	Wood frame, drop siding, sectional, dirt floor	20'x12'x13'	2,400	31,200					Carpenter & Work Shop	Same, but wood floor	20'x0'x10'	1,800	18,000					Supervisor's Residences(12)	Sheet metal Butler Huts	22' x 48'	1,056	9,120					Supervisor's Residences(10)	Prefabricated Houses 3-section, 2-bedroom, plywood throughout, wood foundations.	27'x24'x8 1/2'	609	5,177					Recreation Bldg. for Res. Pacific Hut		18'x40'	640	6,760					601	<p>Pipe Supports</p> <p>Pipe Supports are provided in the process areas to carry the overhead steam, air, and process lines. Type 1 Support is a single pole, having a wooden crossarm consisting of two pieces 3"x8"x6' and strap steel knee braces. Rod hangers threaded for adjustment are suspended from the crossarms. Type 2 Support is a double pole, having a wooden crossarm 3"x8"x8'-10" long. All poles were set in concrete 4' to 6' deep.</p> <table border="0"> <tr> <td></td> <td><u>Pipe Supports</u></td> <td><u>Length</u></td> <td><u>Total</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>in Area</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Area</td> <td>18'</td> <td>20'</td> <td>25'</td> <td>30'</td> <td>38'</td> <td>40'</td> <td>46'</td> <td>50'</td> <td>58'</td> <td>60'</td> <td></td> </tr> <tr> <td>100-B</td> <td>1</td> <td>27</td> <td>93</td> <td>182</td> <td>49</td> <td>48</td> <td>18</td> <td>9</td> <td>2</td> <td>2</td> <td>431</td> </tr> <tr> <td>100-D</td> <td>3</td> <td>17</td> <td>89</td> <td>188</td> <td>78</td> <td>46</td> <td>16</td> <td>9</td> <td>4</td> <td>3</td> <td>420</td> </tr> <tr> <td>100-F</td> <td></td> <td>9</td> <td>203</td> <td>200</td> <td>93</td> <td>64</td> <td>26</td> <td>8</td> <td>3</td> <td></td> <td>603</td> </tr> <tr> <td>200-E</td> <td>239</td> <td>63</td> <td>98</td> <td>204</td> <td>38</td> <td>43</td> <td>50</td> <td>5</td> <td>8</td> <td>4</td> <td>747</td> </tr> <tr> <td>200-H</td> <td>168</td> <td>272</td> <td>111</td> <td>264</td> <td>59</td> <td>78</td> <td>44</td> <td>3</td> <td></td> <td></td> <td>987</td> </tr> <tr> <td>300</td> <td></td> <td></td> <td>62</td> <td>140</td> <td>18</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>210</td> </tr> <tr> <td>700</td> <td></td> <td></td> <td></td> <td>275</td> <td>66</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td>350</td> </tr> <tr> <td>Total</td> <td>399</td> <td>388</td> <td>644</td> <td>1,421</td> <td>388</td> <td>347</td> <td>159</td> <td>32</td> <td>14</td> <td>9</td> <td>3,748</td> </tr> </table> <p align="center">Concrete 500 cu.yds.</p>		<u>Pipe Supports</u>	<u>Length</u>	<u>Total</u>									in Area						Area	18'	20'	25'	30'	38'	40'	46'	50'	58'	60'		100-B	1	27	93	182	49	48	18	9	2	2	431	100-D	3	17	89	188	78	46	16	9	4	3	420	100-F		9	203	200	93	64	26	8	3		603	200-E	239	63	98	204	38	43	50	5	8	4	747	200-H	168	272	111	264	59	78	44	3			987	300			62	140	18						210	700				275	66	7					350	Total	399	388	644	1,421	388	347	159	32	14	9	3,748	LS	1		634,901		634,901		602	<p>Steam lines</p> <p>Outside overhead insulated Steam Lines are provided for distribution of steam to buildings and facilities. Steam Lines are of welded construction throughout with welded neck flanges for valves. Schedule 40 seamless steel pipe was used for pressures up to and including 160# lines. Schedule 80 for the 225# lines. Standard thickness 85% magnesia insulation and an asphalt felt jacket for weather proofing was provided. Pipe diameters 1 1/2" to 16" were used.</p> <table border="0"> <tr> <td></td> <td><u>LENGTH OF STEAM LINES</u></td> <td><u>Total</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Area</td> <td>18"</td> <td>14"</td> <td>12"</td> <td>10"</td> <td>8"</td> <td>6"</td> <td>4"</td> <td>3 1/2"</td> <td>3"</td> <td>2"</td> <td>1 1/2"</td> <td></td> </tr> <tr> <td>100-B</td> <td>2,087</td> <td>1,844</td> <td></td> <td>2,078</td> <td>1,369</td> <td>2,884</td> <td>213</td> <td></td> <td>1,737</td> <td></td> <td></td> <td>12,508</td> </tr> <tr> <td>100-D</td> <td>1,688</td> <td>1,777</td> <td>568</td> <td>1,381</td> <td>3,572</td> <td>603</td> <td>298</td> <td></td> <td>1,678</td> <td></td> <td></td> <td>11,588</td> </tr> <tr> <td>100-F</td> <td>2,377</td> <td>1,800</td> <td>1,018</td> <td>1,215</td> <td>1,608</td> <td>372</td> <td>834</td> <td></td> <td>1,610</td> <td>108</td> <td></td> <td>11,638</td> </tr> <tr> <td>200-E</td> <td></td> <td></td> <td>4,063</td> <td>1,680</td> <td>3,890</td> <td>180</td> <td>4,490</td> <td></td> <td>1,631</td> <td>278</td> <td>278</td> <td>16,364</td> </tr> <tr> <td>200-H</td> <td></td> <td></td> <td>1,248</td> <td>6,948</td> <td>2,745</td> <td>7,857</td> <td>2,610</td> <td></td> <td>7,480</td> <td>208</td> <td>500</td> <td>29,477</td> </tr> <tr> <td>300</td> <td></td> <td></td> <td></td> <td></td> <td>160</td> <td>580</td> <td>1,940</td> <td></td> <td>1,050</td> <td>800</td> <td></td> <td>4,500</td> </tr> <tr> <td>700</td> <td></td> <td></td> <td></td> <td></td> <td>28</td> <td>1,650</td> <td>2,150</td> <td>1,610</td> <td>880</td> <td>1,625</td> <td></td> <td>8,640</td> </tr> <tr> <td>Total</td> <td>6,117</td> <td>6,221</td> <td>8,920</td> <td>13,162</td> <td>18,848</td> <td>16,448</td> <td>11,698</td> <td>250</td> <td>18,914</td> <td>3,214</td> <td>778</td> <td>94,775</td> </tr> </table>		<u>LENGTH OF STEAM LINES</u>	<u>Total</u>																Area	18"	14"	12"	10"	8"	6"	4"	3 1/2"	3"	2"	1 1/2"		100-B	2,087	1,844		2,078	1,369	2,884	213		1,737			12,508	100-D	1,688	1,777	568	1,381	3,572	603	298		1,678			11,588	100-F	2,377	1,800	1,018	1,215	1,608	372	834		1,610	108		11,638	200-E			4,063	1,680	3,890	180	4,490		1,631	278	278	16,364	200-H			1,248	6,948	2,745	7,857	2,610		7,480	208	500	29,477	300					160	580	1,940		1,050	800		4,500	700					28	1,650	2,150	1,610	880	1,625		8,640	Total	6,117	6,221	8,920	13,162	18,848	16,448	11,698	250	18,914	3,214	778	94,775	LS	1		1,293,225		1,293,225	
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
6718	41'-8" x 107'-1" x 2'-0"	120,158 cu.ft.	4,380 sq.ft.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
6718-A	17' x 18'-11" x 14'-6"	4,683 cu.ft.	323 sq.ft.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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Administrative Building	Wood frame, drop siding, sectional construction, wood floor	30'x120'x10'	3,600	36,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Barracks (5)	Same	20'x120'x10'	2,400	24,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Barracks Huts (4)	Pacific Huts	16'x120'x9'	1,920	172,800																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Text Barracks (5)	Canvas, wood floors & walls	20'x20'	400																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Mass Hall & Supply Room	Wood frame, drop siding, sectional construction, H shaped (Overall) 3- 20x120 units, concrete floor in kitchen	180'x120'x10'	7,200	72,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Boiler House	Wood frame	10'x16'x10'	160	1,600																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Pump House	Wood frame	10'x20'x9'	200	1,800																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Elevated Storage Tanks(2)	Wood Stave on Wood Towers	1-8000 gals. & 1-1000 gals.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Garage & Storage Shed	Wood frame, drop siding, sectional, dirt floor	20'x12'x13'	2,400	31,200																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Carpenter & Work Shop	Same, but wood floor	20'x0'x10'	1,800	18,000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Supervisor's Residences(12)	Sheet metal Butler Huts	22' x 48'	1,056	9,120																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Supervisor's Residences(10)	Prefabricated Houses 3-section, 2-bedroom, plywood throughout, wood foundations.	27'x24'x8 1/2'	609	5,177																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Recreation Bldg. for Res. Pacific Hut		18'x40'	640	6,760																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
601	<p>Pipe Supports</p> <p>Pipe Supports are provided in the process areas to carry the overhead steam, air, and process lines. Type 1 Support is a single pole, having a wooden crossarm consisting of two pieces 3"x8"x6' and strap steel knee braces. Rod hangers threaded for adjustment are suspended from the crossarms. Type 2 Support is a double pole, having a wooden crossarm 3"x8"x8'-10" long. All poles were set in concrete 4' to 6' deep.</p> <table border="0"> <tr> <td></td> <td><u>Pipe Supports</u></td> <td><u>Length</u></td> <td><u>Total</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>in Area</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Area</td> <td>18'</td> <td>20'</td> <td>25'</td> <td>30'</td> <td>38'</td> <td>40'</td> <td>46'</td> <td>50'</td> <td>58'</td> <td>60'</td> <td></td> </tr> <tr> <td>100-B</td> <td>1</td> <td>27</td> <td>93</td> <td>182</td> <td>49</td> <td>48</td> <td>18</td> <td>9</td> <td>2</td> <td>2</td> <td>431</td> </tr> <tr> <td>100-D</td> <td>3</td> <td>17</td> <td>89</td> <td>188</td> <td>78</td> <td>46</td> <td>16</td> <td>9</td> <td>4</td> <td>3</td> <td>420</td> </tr> <tr> <td>100-F</td> <td></td> <td>9</td> <td>203</td> <td>200</td> <td>93</td> <td>64</td> <td>26</td> <td>8</td> <td>3</td> <td></td> <td>603</td> </tr> <tr> <td>200-E</td> <td>239</td> <td>63</td> <td>98</td> <td>204</td> <td>38</td> <td>43</td> <td>50</td> <td>5</td> <td>8</td> <td>4</td> <td>747</td> </tr> <tr> <td>200-H</td> <td>168</td> <td>272</td> <td>111</td> <td>264</td> <td>59</td> <td>78</td> <td>44</td> <td>3</td> <td></td> <td></td> <td>987</td> </tr> <tr> <td>300</td> <td></td> <td></td> <td>62</td> <td>140</td> <td>18</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>210</td> </tr> <tr> <td>700</td> <td></td> <td></td> <td></td> <td>275</td> <td>66</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td>350</td> </tr> <tr> <td>Total</td> <td>399</td> <td>388</td> <td>644</td> <td>1,421</td> <td>388</td> <td>347</td> <td>159</td> <td>32</td> <td>14</td> <td>9</td> <td>3,748</td> </tr> </table> <p align="center">Concrete 500 cu.yds.</p>		<u>Pipe Supports</u>	<u>Length</u>	<u>Total</u>									in Area						Area	18'	20'	25'	30'	38'	40'	46'	50'	58'	60'		100-B	1	27	93	182	49	48	18	9	2	2	431	100-D	3	17	89	188	78	46	16	9	4	3	420	100-F		9	203	200	93	64	26	8	3		603	200-E	239	63	98	204	38	43	50	5	8	4	747	200-H	168	272	111	264	59	78	44	3			987	300			62	140	18						210	700				275	66	7					350	Total	399	388	644	1,421	388	347	159	32	14	9	3,748	LS	1		634,901		634,901																																																																																																																																																																																																																																																																																																																																																																																																																								
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602	<p>Steam lines</p> <p>Outside overhead insulated Steam Lines are provided for distribution of steam to buildings and facilities. Steam Lines are of welded construction throughout with welded neck flanges for valves. Schedule 40 seamless steel pipe was used for pressures up to and including 160# lines. Schedule 80 for the 225# lines. Standard thickness 85% magnesia insulation and an asphalt felt jacket for weather proofing was provided. Pipe diameters 1 1/2" to 16" were used.</p> <table border="0"> <tr> <td></td> <td><u>LENGTH OF STEAM LINES</u></td> <td><u>Total</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Area</td> <td>18"</td> <td>14"</td> <td>12"</td> <td>10"</td> <td>8"</td> <td>6"</td> <td>4"</td> <td>3 1/2"</td> <td>3"</td> <td>2"</td> <td>1 1/2"</td> <td></td> </tr> <tr> <td>100-B</td> <td>2,087</td> <td>1,844</td> <td></td> <td>2,078</td> <td>1,369</td> <td>2,884</td> <td>213</td> <td></td> <td>1,737</td> <td></td> <td></td> <td>12,508</td> </tr> <tr> <td>100-D</td> <td>1,688</td> <td>1,777</td> <td>568</td> <td>1,381</td> <td>3,572</td> <td>603</td> <td>298</td> <td></td> <td>1,678</td> <td></td> <td></td> <td>11,588</td> </tr> <tr> <td>100-F</td> <td>2,377</td> <td>1,800</td> <td>1,018</td> <td>1,215</td> <td>1,608</td> <td>372</td> <td>834</td> <td></td> <td>1,610</td> <td>108</td> <td></td> <td>11,638</td> </tr> <tr> <td>200-E</td> <td></td> <td></td> <td>4,063</td> <td>1,680</td> <td>3,890</td> <td>180</td> <td>4,490</td> <td></td> <td>1,631</td> <td>278</td> <td>278</td> <td>16,364</td> </tr> <tr> <td>200-H</td> <td></td> <td></td> <td>1,248</td> <td>6,948</td> <td>2,745</td> <td>7,857</td> <td>2,610</td> <td></td> <td>7,480</td> <td>208</td> <td>500</td> <td>29,477</td> </tr> <tr> <td>300</td> <td></td> <td></td> <td></td> <td></td> <td>160</td> <td>580</td> <td>1,940</td> <td></td> <td>1,050</td> <td>800</td> <td></td> <td>4,500</td> </tr> <tr> <td>700</td> <td></td> <td></td> <td></td> <td></td> <td>28</td> <td>1,650</td> <td>2,150</td> <td>1,610</td> <td>880</td> <td>1,625</td> <td></td> <td>8,640</td> </tr> <tr> <td>Total</td> <td>6,117</td> <td>6,221</td> <td>8,920</td> <td>13,162</td> <td>18,848</td> <td>16,448</td> <td>11,698</td> <td>250</td> <td>18,914</td> <td>3,214</td> <td>778</td> <td>94,775</td> </tr> </table>		<u>LENGTH OF STEAM LINES</u>	<u>Total</u>																Area	18"	14"	12"	10"	8"	6"	4"	3 1/2"	3"	2"	1 1/2"		100-B	2,087	1,844		2,078	1,369	2,884	213		1,737			12,508	100-D	1,688	1,777	568	1,381	3,572	603	298		1,678			11,588	100-F	2,377	1,800	1,018	1,215	1,608	372	834		1,610	108		11,638	200-E			4,063	1,680	3,890	180	4,490		1,631	278	278	16,364	200-H			1,248	6,948	2,745	7,857	2,610		7,480	208	500	29,477	300					160	580	1,940		1,050	800		4,500	700					28	1,650	2,150	1,610	880	1,625		8,640	Total	6,117	6,221	8,920	13,162	18,848	16,448	11,698	250	18,914	3,214	778	94,775	LS	1		1,293,225		1,293,225																																																																																																																																																																																																																																																																																																																																																																																																															
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# PROJECT COST SUMMARY -- MILITARY FUNDS

## -- FINAL DETAIL COST STATEMENT --

REPORTING OFFICE MANFACD ENGINEER CORPS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																																						
			ACTUAL		ACTUAL		ACTUAL																																																						
803	<p><b>Air Lines</b> Overhead non-insulated Air Lines are provided in the 100-E, 100-D, 100-F, 200-E, 200-W, 300 and 700 Areas for distribution of compressed air at 125 pounds per square inch. Air Lines are welded throughout, using schedule 40 steel pipe varying from 1 1/2" to 3" in diameter and are carried on suspended rod pipe hangers.</p> <table border="1"> <thead> <tr> <th rowspan="2">Area</th> <th colspan="3">Length of Air Lines in Feet</th> <th rowspan="2">Total in Area</th> </tr> <tr> <th>3"</th> <th>2"</th> <th>1 1/2"</th> </tr> </thead> <tbody> <tr> <td>100-E</td> <td></td> <td>370</td> <td></td> <td>370</td> </tr> <tr> <td>100-D</td> <td></td> <td>390</td> <td></td> <td>390</td> </tr> <tr> <td>100-F</td> <td></td> <td>276</td> <td></td> <td>276</td> </tr> <tr> <td>200-E</td> <td>180</td> <td>100</td> <td>1,728</td> <td>2,008</td> </tr> <tr> <td>200-W</td> <td>1,060</td> <td>429</td> <td>1,716</td> <td>3,205</td> </tr> <tr> <td>300</td> <td>3,000</td> <td>910</td> <td>180</td> <td>4,090</td> </tr> <tr> <td>700</td> <td>1,027</td> <td>286</td> <td></td> <td>1,313</td> </tr> <tr> <td>Totals</td> <td>5,307</td> <td>2,715</td> <td>3,506</td> <td>11,607</td> </tr> </tbody> </table>	Area	Length of Air Lines in Feet			Total in Area	3"	2"	1 1/2"	100-E		370		370	100-D		390		390	100-F		276		276	200-E	180	100	1,728	2,008	200-W	1,060	429	1,716	3,205	300	3,000	910	180	4,090	700	1,027	286		1,313	Totals	5,307	2,715	3,506	11,607	LS	1		36,628		36,628						
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806	<p><b>Process Lines</b> Process Lines are provided in the 100-E, 100-D, 100-F, 200-E, and 200-W Areas. The Process Lines are welded construction throughout and are carried on Type 2 pipe supports. Pipe in the 200 Areas is stainless steel.</p> <table border="1"> <thead> <tr> <th rowspan="2">Area</th> <th colspan="5">Lengths of Process Lines in Feet</th> <th rowspan="2">Total in Area</th> </tr> <tr> <th>4"</th> <th>3"</th> <th>2"</th> <th>1 1/2"</th> <th>1"</th> </tr> </thead> <tbody> <tr> <td>100-E</td> <td></td> <td>3,488</td> <td>170</td> <td>260</td> <td>30</td> <td>3,948</td> </tr> <tr> <td>100-D</td> <td>72</td> <td>3,680</td> <td>235</td> <td>286</td> <td>30</td> <td>4,302</td> </tr> <tr> <td>100-F</td> <td></td> <td>2,528</td> <td>366</td> <td>622</td> <td>28</td> <td>3,444</td> </tr> <tr> <td>200-E</td> <td>228</td> <td>562</td> <td>900</td> <td></td> <td></td> <td>1,578</td> </tr> <tr> <td>200-W</td> <td>812</td> <td>1,104</td> <td>1,600</td> <td></td> <td>314</td> <td>4,180</td> </tr> <tr> <td>Totals</td> <td>830</td> <td>11,328</td> <td>3,171</td> <td>1,367</td> <td>1,342</td> <td>17,420</td> </tr> </tbody> </table> <p align="right">Sub-Total</p>	Area	Lengths of Process Lines in Feet					Total in Area	4"	3"	2"	1 1/2"	1"	100-E		3,488	170	260	30	3,948	100-D	72	3,680	235	286	30	4,302	100-F		2,528	366	622	28	3,444	200-E	228	562	900			1,578	200-W	812	1,104	1,600		314	4,180	Totals	830	11,328	3,171	1,367	1,342	17,420	LS	1		187,944		187,944
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						2,162,458																																																							
801	<p><b>UNDERGROUND LINES:</b></p> <p><b>Water Lines</b> Sanitary and Process Water Lines are provided in each 100, 200, 300, 600 and 700 Areas and the inter-area connecting lines for the 100 and 200 Areas. Three phases of work are included: (1) Elevated Water Storage Tanks, (2) Headers, Mains, and Distribution Systems within areas, (3) Inter-area supply or "Export Water Lines."                      (1) Adjacent to each Power House is a Soft Water Storage Tank of wood stave construction supported on a four-legged steel tower. Foundation piers and valve pit are concrete. Capacities are 75,000 gals. in 100 areas, 80,000 gals. in 200 areas, and 25,000 gals. in 300 and 700 areas.                      (2) In the 100 areas the water emanates from the river pump house in 32" and 42" steel pipes, passes into the reservoir, then through the filter plant and then to all buildings providing process, sanitary and fire protection water. 100-D and 100-F have a special 42", 260# line direct from the river pump house to refrigeration building. The Reservoir Building in the 200 Areas receives the water from the "Export Lines," then it passes to the filter building and then to all other buildings. Fire and sanitary water are in same lines. Raw water is delivered direct to some buildings in the areas. The 200 W Area buildings receive water from two wells in the R section, although a 6" tap off the export line is provided for emergency use. The 300 Area supply comes from two drilled wells within the area. All water regardless of final need is purified, and distribution is in form of an interconnected double loop system supplying all buildings. Both a sanitary and a soft water system are provided at the 600 Area Classification Yards, supplied from a drilled well. The 700 Area receives its water from the 1100 Area Village System.</p> <table border="1"> <thead> <tr> <th colspan="2">Area Distribution Line</th> </tr> <tr> <th>Area</th> <th>Length</th> </tr> </thead> <tbody> <tr> <td>100-E</td> <td>41,240 lin. ft.</td> </tr> <tr> <td>100-D</td> <td>41,826</td> </tr> <tr> <td>100-F</td> <td>41,838</td> </tr> <tr> <td>200-E</td> <td>29,240</td> </tr> <tr> <td>200-W</td> <td>39,745</td> </tr> <tr> <td>200-W</td> <td>12,606</td> </tr> <tr> <td>300</td> <td>10,064</td> </tr> <tr> <td>600</td> <td>1,220</td> </tr> <tr> <td>700</td> <td>16,583</td> </tr> <tr> <td>Total</td> <td>233,747 lin. ft.</td> </tr> </tbody> </table> <p>(3) The "Export Water System" is provided for supplying water to the 200 E and W Areas from the river pump houses in the three 100 Areas. The pipe is 24", 30", and 42" dia. reinforced concrete with a plate steel center, and the thirty foot lengths are coupled with rubber ring gaskets and poured cement grout. Manholes were installed every 1,500 feet; relief valves at high points; and blow offs, using 8" gate valves, at low points. Encasement was used under road crossings, and kicker blocks and pipe anchors installed at points of deflection.                      The valve houses are provided, one at each "Y" intersection. Floors, foundations, and roofs are reinforced concrete, and walls are concrete block. The wood frame, one-story, insulated valve houses are also provided. Foundations are concrete.</p>	Area Distribution Line		Area	Length	100-E	41,240 lin. ft.	100-D	41,826	100-F	41,838	200-E	29,240	200-W	39,745	200-W	12,606	300	10,064	600	1,220	700	16,583	Total	233,747 lin. ft.	LS	1		7,730,132		7,730,132																														
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# PROJECT COST SUMMARY --- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE WATER DIVISION PROJECT DESCRIPTION PLANT BUILDING & REPAIRS  
 MONTH ENDING 31 DECEMBER 1945

CODE NO	ACCOUNT DESCRIPTION	UNIT CP	QUANTITIES		TOTAL COSTS		UNIT COSTS																																													
			ACTUAL		ACTUAL		ACTUAL																																													
901	Water Lines (continued)																																																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Section</th> <th>Length</th> <th>Size</th> <th>Pressure</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>22,480'</td> <td>42" dia.</td> <td>250#</td> </tr> <tr> <td>B</td> <td>16,380'</td> <td>30"</td> <td>200#</td> </tr> <tr> <td>C</td> <td>13,058'</td> <td>24"</td> <td>150#</td> </tr> <tr> <td>D</td> <td>29,638'</td> <td>42"</td> <td>250#</td> </tr> <tr> <td>E</td> <td>12,320'</td> <td>24"</td> <td>150#</td> </tr> <tr> <td>F</td> <td>26,138'</td> <td>30"</td> <td>250#</td> </tr> <tr> <td colspan="4" style="text-align: center;">Total 119,878' or 22.7 miles</td> </tr> </tbody> </table>	Section	Length	Size	Pressure	A	22,480'	42" dia.	250#	B	16,380'	30"	200#	C	13,058'	24"	150#	D	29,638'	42"	250#	E	12,320'	24"	150#	F	26,138'	30"	250#	Total 119,878' or 22.7 miles																						
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902	Fire Lines	LS	1		418,044		418,044																																													
	<p>The Fire Protection System provided in the area is part of the Sanitary System and, therefore, only overhead tanks for fire protection reserve and hydrants and connections are included in this account. Wood stave tanks are supported on steel legs and concrete foundation piers.</p> <p>Tanks were installed as follows:</p>																																																			
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	2	50,000 gals.	Wood																																																	
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903	Sanitary Sewer Lines	LS	1		736,244		736,244																																													
	<p>Sanitary Sewer Systems are provided in all areas for the disposal of toilet waste. In all areas these systems are connected to septic tanks, except the 700 Area which is connected to the Village System. These lines are both concrete and vitrified clay pipe with ball and spigot joints sealed with concrete mortar. brick manholes are constructed, and encasement used where necessary.</p>																																																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Area</th> <th colspan="4">Material Quantities in Feet</th> <th rowspan="2">Total</th> </tr> <tr> <th>18"</th> <th>8"</th> <th>6"</th> <th>4"</th> </tr> </thead> <tbody> <tr> <td>100-B, D, F</td> <td></td> <td>16,250</td> <td>5,23</td> <td>20</td> <td>21,380</td> </tr> <tr> <td>200-E, W, H</td> <td></td> <td>13,840</td> <td>3,380</td> <td></td> <td>17,220</td> </tr> <tr> <td>300</td> <td></td> <td>4,165</td> <td>1,040</td> <td></td> <td>5,205</td> </tr> <tr> <td>600</td> <td></td> <td>350</td> <td>230</td> <td></td> <td>580</td> </tr> <tr> <td>700</td> <td>1,245</td> <td>2,000</td> <td>1,245</td> <td></td> <td>5,300</td> </tr> <tr> <td>Total</td> <td>1,245</td> <td>37,815</td> <td>14,785</td> <td>200</td> <td>53,745</td> </tr> </tbody> </table>	Area	Material Quantities in Feet				Total	18"	8"	6"	4"	100-B, D, F		16,250	5,23	20	21,380	200-E, W, H		13,840	3,380		17,220	300		4,165	1,040		5,205	600		350	230		580	700	1,245	2,000	1,245		5,300	Total	1,245	37,815	14,785	200	53,745					
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<p>Concrete 3,049 cu.yds.</p> <p>33 Septic Tanks and Tile Fields were constructed in the 100, 200, 300, and 600 Areas for disposal of sanitary sewage. Two types of tank were installed. The standard type is rectangular shaped box having reinforced concrete walls and floor and removable 2" cranked wooden tops and baffles. The special type is larger having reinforced concrete floor walls, and top and wood baffles. Both types have 4" vitrified clay or concrete drain tile fields and both types are fenced.</p>																																																				
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904	Process Sewer Lines	LS	1		4,778,461		4,778,461																																													
	<p>One or more Sewer Systems are provided in the 100, 200, 300 and 600 Areas to carry process wastes, process waste water, process cooling water, steam condensate, and building floor drainage. Lines are divided into two general classifications:</p> <p><b>Non-acid Proof:</b> Vitrified clay and concrete pipe with plain concrete joints are principally used. Concrete box type for larger lines and welded steel for steam condensate lines also are used.</p> <p><b>Acid Proof:</b> Vitrified clay pipe with acid proof joints is principally used. Earthenware, cast-iron, wrought-iron, 18-8 stainless steel, reinforced concrete pressure and steel discharge pipe are also used.</p>																																																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Material</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Reinforced Concrete Box</td> <td>4,360 Ft.</td> </tr> <tr> <td>Chemical Ware &amp; V.C. Pipe</td> <td>37,411</td> </tr> <tr> <td>Reinforced Concrete Pipe "18"</td> <td>38,310</td> </tr> <tr> <td>S/Steel Pipe</td> <td>94,450</td> </tr> <tr> <td>Sched. 40 Steel Pipe</td> <td>14,370</td> </tr> <tr> <td>Cast Iron</td> <td>6,270</td> </tr> <tr> <td>Wrought Iron Pipe</td> <td>450</td> </tr> <tr> <td>Concrete</td> <td>32,360 cu.yds.</td> </tr> </tbody> </table>	Material	Quantity	Reinforced Concrete Box	4,360 Ft.	Chemical Ware & V.C. Pipe	37,411	Reinforced Concrete Pipe "18"	38,310	S/Steel Pipe	94,450	Sched. 40 Steel Pipe	14,370	Cast Iron	6,270	Wrought Iron Pipe	450	Concrete	32,360 cu.yds.																																	
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# PROJECT COST SUMMARY --- MILITARY FUNDS --FINAL DETAIL COST STATEMENT---

REPORTING OFFICE RANDOLPH ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																																									
			ACTUAL		ACTUAL		ACTUAL																																																									
906	<p><b>Wells and Pumps</b></p> <p>Five Wells are provided where no other supply is practically available. Pumps and Pump Houses are also provided. To get five producing wells, it was necessary to make nine drillings. Concrete and concrete block houses with reinforced concrete floor, floor trusses, and roof are erected atop the two wells in 200-W Area Wells, while other wells are housed in adjacent buildings.</p> <p>A tabulation of the wells is as follows:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Location</th> <th>No.</th> <th>Depth</th> <th>Production</th> </tr> </thead> <tbody> <tr> <td>Riverland</td> <td>1</td> <td>111'</td> <td>Dry</td> </tr> <tr> <td></td> <td>2</td> <td>128.5</td> <td>540 G.F.W.</td> </tr> <tr> <td>200-W Area</td> <td>1</td> <td>283'</td> <td>565 G.F.W.</td> </tr> <tr> <td></td> <td>2</td> <td>136'</td> <td>Crooked hole-abandoned</td> </tr> <tr> <td></td> <td>3</td> <td>146'</td> <td>Basalt-abandoned</td> </tr> <tr> <td></td> <td>4</td> <td>198'</td> <td>Basalt-abandoned</td> </tr> <tr> <td></td> <td>5</td> <td>288'</td> <td>1280 G.F.W.</td> </tr> <tr> <td>300 Area</td> <td>1</td> <td>88'</td> <td>250 G.F.W.</td> </tr> <tr> <td></td> <td>2</td> <td>88'</td> <td>540 G.F.W.</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Overall Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>Pump House 12'-6" x 18' x 11'</td> <td>3,178 cu.ft.</td> <td>187 sq.ft.</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Material in Pump House</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Reinforcing Steel</td> <td>1.3 tons</td> </tr> <tr> <td>Concrete</td> <td>17 cu.yds.</td> </tr> <tr> <td>Concrete Block</td> <td>700 blocks</td> </tr> <tr> <td>Roofing</td> <td>2.18 squares</td> </tr> </tbody> </table> <p style="text-align: right; margin-right: 20px;">Sub-Total</p>	Location	No.	Depth	Production	Riverland	1	111'	Dry		2	128.5	540 G.F.W.	200-W Area	1	283'	565 G.F.W.		2	136'	Crooked hole-abandoned		3	146'	Basalt-abandoned		4	198'	Basalt-abandoned		5	288'	1280 G.F.W.	300 Area	1	88'	250 G.F.W.		2	88'	540 G.F.W.	Overall Dimensions	Volume	Area	Pump House 12'-6" x 18' x 11'	3,178 cu.ft.	187 sq.ft.	Material in Pump House	Quantity	Reinforcing Steel	1.3 tons	Concrete	17 cu.yds.	Concrete Block	700 blocks	Roofing	2.18 squares	LS	1		120,280		120,280	
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					13,808,181																																																											
	<b>SITE WORK:</b>																																																															
5W	<p><b>Site Work</b></p> <p>The Site Work accomplished included clearing sage brush, rocks, and other obstruction prior to construction in all 100, 200, 300, 600, 700 and 1100 Areas; blading of fire protection lanes throughout the entire area; and drilling test holes for soil and water data.</p>	LS	1		1,681,011		1,681,011																																																									
	<b>GRADING:</b>																																																															
0R	<p><b>Grading</b></p> <p>Grading work performed in all 100, 200, 300, 600 and 700 Areas is included in this account. Very little heavy grading was required but entire working areas were stabilized at the start of construction because of the light and sandy topsoil. Materials were obtained principally from building excavations and the balance from borrow pits. After construction work was completed the areas were "dressed up".</p>	LS	1		588,056		588,056																																																									
	<b>TOTAL GENERAL OUTSIDE FACILITIES</b>				49,346,842																																																											

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**PROJECT COST SUMMARY... MILITARY FUNDS**  
**-FINAL DETAIL COST STATEMENT-**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1948

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS														
			ACTUAL		ACTUAL		ACTUAL														
	<b>MAIN PLANT (continued):</b>																				
	<b>PLANT BUILDINGS AND EQUIPMENT:</b>																				
	<b>100 AREA BUILDINGS AND EQUIPMENT:</b>																				
	<b>100 AREA MANUFACTURING BUILDING AND EQUIPMENT:</b>																				
103-B	<p><b>Fresh Metal Storage</b>                      A Fresh Metal Storage building is provided in each of the three 100 Areas. The buildings are identical one-story structures. Construction of footings, foundation walls, floor, roof and loading platform is reinforced concrete. Walls are concrete block and roof surface is tar and gravel. Building is windowless and doors are metal covered.</p> <p align="center"><i>Area</i>                      Overall Dimensions                      18' x 27' x 19'</p> <p align="center"><i>Volume</i>                      Volume                      1,666 cu.ft.                      Area                      28,622 sq.ft.</p> <p><b>Material</b></p> <table border="0"> <tr><td>Framing</td><td>377 P.S.M.</td></tr> <tr><td>6" Concrete Flooring</td><td>1,290 sq.ft.</td></tr> <tr><td>Reinforcing Steel Bars</td><td>9 tons</td></tr> <tr><td>Reinforcing Steel Mesh</td><td>2,128 sq.ft.</td></tr> <tr><td>Concrete</td><td>107 cu.yds.</td></tr> <tr><td>Roofing Squares</td><td>14.4 squares</td></tr> <tr><td>Concrete Block</td><td>912 blocks</td></tr> </table>	Framing	377 P.S.M.	6" Concrete Flooring	1,290 sq.ft.	Reinforcing Steel Bars	9 tons	Reinforcing Steel Mesh	2,128 sq.ft.	Concrete	107 cu.yds.	Roofing Squares	14.4 squares	Concrete Block	912 blocks	Each	3		55,554		18,518
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104-B	<p><b>Pile Building</b>                      There is one Pile Building provided in each of the three 100 Areas. It is a concrete and concrete block structure with a portion of it being steel frame. Two interior walls are massive concrete, being 2' and 3' thick. The main portion of the building houses the Process Unit or Pile and provides a working area in front of the Pile. The building also contains a Storage Pit and Transfer Area, a Fan House and a number of Instrument and Control Rooms.</p> <p>The Pile is a cauldron-like structure approximately 41'x46' x 38' high consisting of an interior cube of graphite approximately 36' x 36' x 28' surrounded on top and sides by laminated walls of steel and masonry, the entire structure being supported on concrete approximately 28' thick. Between the graphite and concrete foundation and between the graphite and laminated walls of the Pile is a cast-iron thermal shield 10" thick on bottom, top, front, and back, and 8" thick on right and left sides. A steel membrane was placed in the foundation and tied to the laminated steel walls to make the entire pile gas tight. Through the Pile is a large number of holes containing aluminum tubes. Also there are installed water headers, gas headers, instrument tubing and control rods.</p> <p>There are many reasons for the tremendous number of manhours required in the construction of this building. Because of the new and classified nature of the process, techniques were developed at the site. The graphite blocks were machined to very close tolerances and were placed with care and precision. The laminated steel and masonry portions were received both as prefabricated blocks and individual sheets to be fabricated at the site. This fabrication and assembly were also accomplished with considerable care. The welding of the joints to gas tight specifications required welders of the highest grade, and to obtain them it was necessary to establish a training school and pay premium wage rates. Access to the building was restricted to authorized employees throughout most of the construction period.</p> <p align="center"><b>Approx. Dimensions</b>                      120' x 180' x 120'</p> <p align="center"><b>Volume</b>                      1,600,000 cu.ft.</p> <p align="center"><b>Area</b>                      24,600 sq.ft.</p> <p><b>Material</b></p> <table border="0"> <tr><td>Structural Steel</td><td>390 tons</td></tr> <tr><td>Reinforced Concrete</td><td>17,400 cu.yds.</td></tr> <tr><td>Concrete Blocks</td><td>80,000 blocks</td></tr> <tr><td>Concrete Bricks</td><td>71,000 bricks</td></tr> <tr><td>Roofing</td><td>260 squares</td></tr> </table>	Structural Steel	390 tons	Reinforced Concrete	17,400 cu.yds.	Concrete Blocks	80,000 blocks	Concrete Bricks	71,000 bricks	Roofing	260 squares	Each	3		8,315,675		2,771,892				
Structural Steel	390 tons																				
Reinforced Concrete	17,400 cu.yds.																				
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106-B	<p><b>Pile Building Equipment</b>                      There is one Pile Building provided in each of the three 100 Areas. It is a concrete and concrete block structure with a portion of it being steel frame. Two interior walls are massive concrete, being 2' and 3' thick. The main portion of the building houses the Process Unit or Pile and provides a working area in front of the Pile. The building also contains a Storage Pit and Transfer Area, a Fan House and a number of Instrument and Control Rooms.</p> <p>The Pile is a cauldron-like structure approximately 41'x46' x 38' high consisting of an interior cube of graphite approximately 36' x 36' x 28' surrounded on top and sides by laminated walls of steel and masonry, the entire structure being supported on concrete approximately 28' thick. Between the graphite and concrete foundation and between the graphite and laminated walls of the Pile is a cast-iron thermal shield 10" thick on bottom, top, front, and back, and 8" thick on right and left sides. A steel membrane was placed in the foundation and tied to the laminated steel walls to make the entire pile gas tight. Through the Pile is a large number of holes containing aluminum tubes. Also there are installed water headers, gas headers, instrument tubing and control rods.</p> <p>There are many reasons for the tremendous number of manhours required in the construction of this building. Because of the new and classified nature of the process, techniques were developed at the site. The graphite blocks were machined to very close tolerances and were placed with care and precision. The laminated steel and masonry portions were received both as prefabricated blocks and individual sheets to be fabricated at the site. This fabrication and assembly were also accomplished with considerable care. The welding of the joints to gas tight specifications required welders of the highest grade, and to obtain them it was necessary to establish a training school and pay premium wage rates. Access to the building was restricted to authorized employees throughout most of the construction period.</p> <p align="center"><b>Approx. Dimensions</b>                      120' x 180' x 120'</p> <p align="center"><b>Volume</b>                      1,600,000 cu.ft.</p> <p align="center"><b>Area</b>                      24,600 sq.ft.</p> <p><b>Material</b></p> <table border="0"> <tr><td>Structural Steel</td><td>390 tons</td></tr> <tr><td>Reinforced Concrete</td><td>17,400 cu.yds.</td></tr> <tr><td>Concrete Blocks</td><td>80,000 blocks</td></tr> <tr><td>Concrete Bricks</td><td>71,000 bricks</td></tr> <tr><td>Roofing</td><td>260 squares</td></tr> </table>	Structural Steel	390 tons	Reinforced Concrete	17,400 cu.yds.	Concrete Blocks	80,000 blocks	Concrete Bricks	71,000 bricks	Roofing	260 squares	Each	3		37,465,040		12,488,347				
Structural Steel	390 tons																				
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107-B	<p><b>Retention Basin</b>                      A Retention Basin for waste water is provided in each of the three 100-Areas. Identical in size, shape and design, these buildings have reinforced concrete retaining walls, increasing in thickness from 1.0 foot at top to 8.0 feet at bottom, and 6" thick floor. Interior sides are lined with 4" thick gunite. A reinforced concrete overflow flume runs along the center line of basin, and concrete blockwall parallel to intake wall forms the intake channel. At discharge end of basin are located a pump house of frame construction on concrete floor and a laboratory of frame construction. Basin is divided by 4 spruce baffle fences.</p> <p align="center"><b>Overall Dimensions</b>                      198' x 240' x 20'</p> <p align="center"><b>Volume</b>                      1,183,600 cu.ft.</p> <p align="center"><b>Area</b>                      116,100 sq.ft.</p>	Each	3		1,397,179		466,724														
107-B	<p><b>Retention Basin Equipment</b>                      A Retention Basin for waste water is provided in each of the three 100-Areas. Identical in size, shape and design, these buildings have reinforced concrete retaining walls, increasing in thickness from 1.0 foot at top to 8.0 feet at bottom, and 6" thick floor. Interior sides are lined with 4" thick gunite. A reinforced concrete overflow flume runs along the center line of basin, and concrete blockwall parallel to intake wall forms the intake channel. At discharge end of basin are located a pump house of frame construction on concrete floor and a laboratory of frame construction. Basin is divided by 4 spruce baffle fences.</p> <p align="center"><b>Overall Dimensions</b>                      198' x 240' x 20'</p> <p align="center"><b>Volume</b>                      1,183,600 cu.ft.</p> <p align="center"><b>Area</b>                      116,100 sq.ft.</p>	Each	3		110,586		36,852														

# PROJECT COST SUMMARY... MILITARY FUNDS

## -FINAL DETAIL COST STATEMENT -

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																							
			ACTUAL		ACTUAL		ACTUAL																							
107	Retention Basin (continued)																													
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Concrete Blocks	18,000 blocks																													
108-B	Chemical Pump House	Each	3		743,648		247,848																							
108-E	Chemical Pump House Equipment	Each	3		921,228		307,076																							
	<p>A Chemical Pump House is provided in each of the three 100-Areas. These 3-story buildings are identical and are constructed with reinforced concrete and structural steel frame work with reinforced concrete floors, foundations and footings. Roof is precast concrete roof tile surfaced with tar and gravel. Wall and room partitions are concrete block. A covered car spot, and two horizontal and two vertical tanks are located without the building.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><u>Overall Dimensions</u></td> <td style="width: 30%;"><u>Volume</u></td> <td style="width: 40%;"><u>Area</u></td> </tr> <tr> <td>Building</td> <td>150' x 32' x 88'</td> <td>232,400 cu.ft. 4,816 sq.ft.</td> </tr> <tr> <td>Loading Platform and Car Spot</td> <td>37' x 31 1/2' x 30'</td> <td>34,980 cu.ft. 1,168 sq.ft.</td> </tr> </table> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><u>Material</u></td> <td style="width: 50%;"><u>Quantity</u></td> </tr> <tr> <td>Structural Steel</td> <td>47 tons</td> </tr> <tr> <td>Reinforcing Steel Bars</td> <td>69 tons</td> </tr> <tr> <td>Reinforcing Steel Mesh</td> <td>6,000 sq.ft.</td> </tr> <tr> <td>Concrete</td> <td>337 cu.yds.</td> </tr> <tr> <td>Concrete Blocks</td> <td>16,138 blocks</td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	Building	150' x 32' x 88'	232,400 cu.ft. 4,816 sq.ft.	Loading Platform and Car Spot	37' x 31 1/2' x 30'	34,980 cu.ft. 1,168 sq.ft.	<u>Material</u>	<u>Quantity</u>	Structural Steel	47 tons	Reinforcing Steel Bars	69 tons	Reinforcing Steel Mesh	6,000 sq.ft.	Concrete	337 cu.yds.	Concrete Blocks	16,138 blocks								
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110	Gas Storage Tanks	Each	3		216,186		71,728																							
	<p>Gas Storage Tanks are provided in each of the three 100-Areas. Similar in design, the two low pressure and 33 nested high pressure tanks are supported on concrete foundation piers. A wooden walkway and a wooden unloading platform are supported on small concrete piers.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><u>Material</u></td> <td style="width: 50%;"><u>Quantity</u></td> </tr> <tr> <td>Concrete</td> <td>54.4 cu.yds.</td> </tr> </table>	<u>Material</u>	<u>Quantity</u>	Concrete	54.4 cu.yds.																									
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111-B	Test Building	Each	1		21,074		21,074																							
111-E	Test Building Equipment	Each	1		42,982		42,982																							
	<p>The Test Building is located in the 100-B Area only. It is a wood frame structure in the shape of a lower case "h" resting on concrete wall foundations. In the upper portion of "h" the floor is cinders; the balance is concrete.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><u>Overall Dimensions</u></td> <td style="width: 30%;"><u>Volume</u></td> <td style="width: 40%;"><u>Area</u></td> </tr> <tr> <td>80' x 81' x 14 1/2'</td> <td>36,178 cu.ft.</td> <td>2,081 sq.ft.</td> </tr> </table> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><u>Material</u></td> <td style="width: 50%;"><u>Quantity</u></td> </tr> <tr> <td>Framing</td> <td>6,782 f.b.m.</td> </tr> <tr> <td>Siding</td> <td>3,848 sq.ft.</td> </tr> <tr> <td>4" Concrete Flooring</td> <td>800 sq.ft.</td> </tr> <tr> <td>Sheathing</td> <td>6,929 sq.ft.</td> </tr> <tr> <td>Reinforcing Steel Bars</td> <td>0.2 tons</td> </tr> <tr> <td>Reinforcing Steel Mesh</td> <td>800 sq.ft.</td> </tr> <tr> <td>Concrete</td> <td>72 cu.yds.</td> </tr> <tr> <td>Roofing (Built-up)</td> <td>21 squares</td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	80' x 81' x 14 1/2'	36,178 cu.ft.	2,081 sq.ft.	<u>Material</u>	<u>Quantity</u>	Framing	6,782 f.b.m.	Siding	3,848 sq.ft.	4" Concrete Flooring	800 sq.ft.	Sheathing	6,929 sq.ft.	Reinforcing Steel Bars	0.2 tons	Reinforcing Steel Mesh	800 sq.ft.	Concrete	72 cu.yds.	Roofing (Built-up)	21 squares					
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116-B	Purification Building	Each	3		1,459,760		489,927																							
116-E	Purification Building Equipment	Each	3		2,466,068		822,023																							
	<p>A Purification Building is provided in each of the three 100-Areas. These one-story buildings are constructed of reinforced concrete and concrete block walls supported on reinforced concrete piers and footings. The roof is reinforced concrete over one portion and precast reinforced concrete tiles over the balance. Both portions are surfaced with tar and gravel. Floor and interior walls are massive reinforced concrete. An underground pipe room and underground pipe tunnel connecting to an adjacent building are both of reinforced concrete. Outside instrument cubicles have heavy steel doors with trolley beams and hoists.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><u>Overall Dimensions</u></td> <td style="width: 30%;"><u>Volume</u></td> <td style="width: 40%;"><u>Area</u></td> </tr> <tr> <td>168' x 98' x 33 1/2'</td> <td>487,850 cu.ft.</td> <td>16,410 sq.ft.</td> </tr> </table> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"><u>Material</u></td> <td style="width: 50%;"><u>Quantity</u></td> </tr> <tr> <td>Structural Steel</td> <td>20.8 tons</td> </tr> <tr> <td>Reinforcing Steel Bars</td> <td>250 tons</td> </tr> <tr> <td>Reinforcing Steel Mesh</td> <td>11,000 sq.ft.</td> </tr> <tr> <td>Concrete</td> <td>8,008 cu.yds.</td> </tr> <tr> <td>Roofing (Built-up)</td> <td>144.1 squares</td> </tr> <tr> <td>Concrete Blocks</td> <td>31,000 blocks</td> </tr> <tr> <td>Blanket Insulation</td> <td>2,081 sq.ft.</td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	168' x 98' x 33 1/2'	487,850 cu.ft.	16,410 sq.ft.	<u>Material</u>	<u>Quantity</u>	Structural Steel	20.8 tons	Reinforcing Steel Bars	250 tons	Reinforcing Steel Mesh	11,000 sq.ft.	Concrete	8,008 cu.yds.	Roofing (Built-up)	144.1 squares	Concrete Blocks	31,000 blocks	Blanket Insulation	2,081 sq.ft.							
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~~SECRET~~  
**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--- FINAL DETAIL COST STATEMENT ---**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
116	<p><b>Stack</b>                      One Ventilation Exhaust Stack is located in each of the three 100-Areas. Each Stack is of reinforced concrete set on a reinforced concrete rectangular base. The outside diameter of Stack varies from 16'-7" at the bottom to 9'-6" at the top. The Stack is 200' high and the foundation extends 17'-6" below the bottom of the Stack.</p> <p style="text-align: center;"><u>Material</u>                      <u>Quantity</u>                      Concrete                              598 cu.yds.</p>	Each	3		66,712		21,904	
146-B	Water Treatment Building	Each	1		126,819		126,819	
146-E	Water Treatment Building Equipment	Each	1		387,179		387,179	
146-CP	<p><b>Water Treatment Building</b>                      One Water Treatment Building was constructed in the 100 Area. It is rectangular-shaped, wooden-frame structure, having deep concrete foundations, concrete floor, barn siding, and roll roofing. Interior is open studding except pressed-wood lined in office and laboratory rooms.</p> <p style="text-align: center;"><u>Overall Dimensions</u>      <u>Volume</u>              <u>Area</u>                      Water Treatment Bldg.      140' x 48' x 17'      116,000 cu.ft.      6,720 sq.ft.                      Water Softening Bldg., Tank                      Tower Embl. &amp; Lab. Bkt.                      35,000 cu.ft.</p>	Each	1		879,871		879,871	
161-B	Primary Substation	Each	3		216,352		71,777	
161-E	<p><b>Primary Substation Equipment</b>                      One Primary Substation is provided in each of the three 100 Areas. This station is composed of a wood fenced, gravel surfaced, area, 450' x 303' containing two wooden frame bus structures, two main transformers, and a switch house. The Switch House is a one-story reinforced concrete and concrete block structure having a sub-level cablepit. Roof is tar and gravel surfaced concrete tile supported on structural steel framing which rests on concrete brick pillars. A railroad spur directly serves the building. Outside equipment is supported on reinforced concrete foundations.</p> <p style="text-align: center;"><u>Overall Dimensions</u>      <u>Volume</u>              <u>Area</u>                      Switch House              83' x 30 1/2' x 28 1/2'      84,600 cu.ft.      2,532 sq.ft.</p> <p style="text-align: center;"><u>Material</u>                      <u>Quantity</u>                      Fence Lumber              17,000 l.b.m.                      Structural Steel              6.8 tons                      Reinforcing Steel Bars      23 tons                      Reinforcing Steel Mesh      1,690 sq.ft.                      Roofing                      244.9 squares                      Concrete Blocks              2,848 blocks                      Concrete                      1,336 cu.yds.</p>	Each	3		2,922,914		974,303	
162	<p><b>Secondary Substation</b>                      A total of 33 Secondary Substations have been provided in the three 100 Areas - 10 in 100-B, 12 in 100-D, and 11 in 100-F. These Substations are very similar in design and construction, differing in the number and size of the transformers in each. The 162 Substations all have a primary voltage of 13.8 KV and a secondary voltage ranging from 110 V to 2300 V.</p> <p>These Substations are open wooden pole structures surrounded by a picket fence. The transformers are located at, or near, ground level and are set on individual concrete pads.</p> <p>The KVA capacity of the 63 transformers making up the 33 Substations vary from 3 to 4,000 per transformer.</p>	Each	33		682,818		20,691	
163	<p><b>Distribution Substations</b>                      A total of 20 Distribution Substations have been provided in the three 100 Areas - 8 in 100-B, 6 in 100-D and 6 in 100-F. These Substations are very similar in design and construction, differing in the number and size of transformers in each. The No. 163 Substations all have a primary voltage of 2.4 KV and a secondary voltage ranging from 110 V to 480 V.</p> <p>The Substations are with one exception, open wooden pole structures surrounded by picket fences. The transformers are located at, or near, ground level and are set on concrete pads. In the one exception transformers are placed on an elevated wood platform between two poles.</p>	Each	20		47,005		2,350	
161-B	River Pump House	Each	3		3,328,591		1,109,530	
161-E	<p><b>River Pump House Equipment</b>                      One River Pump House is provided in each of the three 100 Areas. These buildings are similar in design but those in D and F are larger and house a greater number of pumping units. Construction is reinforced concrete with some concrete block. Roof is tar and gravel surfaced. Structural steel is used for support of equipment and platforms. There are two pump wells in the B and three wells in the D and F buildings. In the entrance flume of each well is installed a bar steel rack and a traveling fish screen. Vertical type pumps located near the bottom of the wells are operated by electric motors and steam turbines located on the operating floor. Hoists are provided on the roof to provide for removal through the roof of pump shafts and screens. Pump capacity as follows has been installed or space is provided.</p> <p style="text-align: center;">161-B                      161-D                      161-F                      Electric Driven Installed      70,000 G.P.M.      130,000 G.P.M.      170,000 G.P.M.                      Steam Driven Installed      22,500                      22,500                      22,500                      Provisional                      17,500                      7,500                      27,500</p>	Each	3		1,743,948		581,316	

# PROJECT COST SUMMARY -- MILITARY FUNDS

## -- FINAL DETAIL COST STATEMENT --

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1948

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																															
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182-B	Reservoir and Pump House	Each	3		3,561,392		1,183,77																															
182-E	Reservoir and Pump House Equipment	Each	3		2,228,619		742,873																															
	The Reservoir and Pump House Building is provided in each of the three 100 Areas. Buildings are similar but differ in details. Each consists of a reinforced concrete and concrete block pump house located along one side of a reinforced concrete reservoir. The reservoir, divided into two sections, has walls and floor of reinforced concrete and sloping sides of reinforced granite.																																					
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183-B	Filter Building	Each	3		4,636,419		2,878,473																															
183-E	Filter Building Equipment	Each	3		4,066,657		1,366,186																															
	A Filter building is provided in each of the three 100 Areas. These buildings are similar but not identical. This building consists of four structures: The Head House and Chemical Building, the Flocculation and Subsidence Basins, the Filter Building Proper, and the Clear Water Reservoir and Pump House.																																					
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184-B	Power House	Each	3		2,236,207		746,402																															
184-E	Power House Equipment	Each	3		6,863,734		1,961,246																															
	A Power House is provided in each of the three 100 Areas, identical throughout. The main Power House is a three-story, steel frame, windowless building with reinforced concrete foundation, concrete block superstructure, and precast concrete roof surfaced with felt, tar and gravel. The two stacks, three hundred feet high, 23 feet in diameter at base tapering to 12 feet at top, are of reinforced concrete. The Coal Storage Area is enclosed by an earth dike and reinforced concrete wall. The Crusher House is three-stories, with reinforced concrete base, structural steel frame, transite walls and roof. Conveyor system housing and two transfer houses have transite walls and roof on steel frame supported on steel piers and concrete foundations. Track hoppers are reinforced concrete.																																					
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~~SECRET~~  
**PROJECT COST SUMMARY... MILITARY FUNDS**  
**FINAL DETAIL COST STATEMENT...**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1948

CODE NC	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS															
			ACTUAL		ACTUAL		ACTUAL															
186	Power House (continued)																					
	Coal Conveyor System																					
	Coal Storage Pit																					
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186-B	Deaeration Plant	Each	3		1,331,831		510,610															
186-E	Deaeration Plant Equipment	Each	3		4,691,227		1,563,742															
	A Deaeration Plant is provided in each of the three 100 Areas. Buildings are identical in size and very similar in design except for rubber lined pipe in D and a refrigeration plant in both D & F. The building consists of reinforced concrete foundation, pipe tunnel, and acid trench, structural steel frame, concrete block walls and precast concrete block roof with built up surfacing. One wall is common to the 100 building in all areas. The other wall is common to the 189 building in the D and F Areas. Ten Deaeration Units are accounted on steel frames rising above the roof.																					
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186-E	Demineralsing Plant	Each	1		1,776,666		1,776,666															
186-E	Demineralsing Plant Equipment	Each	1		4,982,785		4,982,786															
	A Demineralsing Plant is located in the 100-D Area only. One portion of this building is a two-story structure having reinforced concrete foundations and floor slab, steel framing, concrete block superstructure, and built up roofing on precast concrete blocks. The second portion, clearwell reservoir, mostly below ground level, consists of reinforced concrete floor, walls, and arched roof covered with tar and gravel. Lesser portions of this building are six horizontal steel tanks, two gunite concrete tanks, one gunite silo, two precast concrete silos, one acid-proof brick reservoir.																					
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187	Elevated Process Water Storage Tanks	Each	6		410,463		88,411															
	Two Elevated Process Water Storage Tanks are provided in each 100 Area. The tanks, 120 feet above ground level, are ellipsoidal, 5/8" to 3/8" steel plate, supported on steel columns resting on reinforced concrete foundations. The steel plate stand pipe stands on a reinforced concrete valve pit.																					
	<table border="0"> <tr> <td><u>Dimensions</u></td> <td><u>Capacity</u></td> </tr> <tr> <td>41' dia. x 39' high</td> <td>300,000 gals.</td> </tr> </table>	<u>Dimensions</u>	<u>Capacity</u>	41' dia. x 39' high	300,000 gals.																	
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188	Ash Disposal Basins	Each	3		62,761		20,920															
	An Ash Disposal Basin is provided in each 100-Area. Basins are excavated pits and earth dikes. No other material used.																					
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	(Irregular)-(Construction Borrow Pit)																					
189-B	Refrigeration Building	Each	2		558,858		279,279															
189-E	Refrigeration Building Equipment	Each	2		2,224,473		1,112,236															
	A Refrigeration Building is provided in the D and F Areas only. The buildings are similar except the D Area building is approximately 50 percent larger. The construction consists of reinforced concrete foundations, steel framing, concrete block walls, and a precast concrete slab roof covered with a built-up roof of tar and gravel. Beneath this building are two concrete pipe trenches and one reinforced concrete tank pit. One side wall is common to the 188 building.																					

**SECRET**  
**PROJECT COST SUMMARY - MILITARY FUNDS**  
**- FINAL DETAIL COST STATEMENT -**

REPORTING OFFICE RAIFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT

MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
188	Refrigeration Building (continued)							
	188-D Bldg. (Overall)	Volume						
	188-F Bldg. (Overall)	Area						
		Dimensions						
		Volume						
		Area						
		Material						
		Quantity						
		Structural Steel						
		Reinforcing Steel Bars						
		Reinforcing Steel Mesh						
		Concrete						
		Concrete Blocks						
		Roofing						
130-B	Process Pump House	Each	3		4,253,511		1,417,857	
190-E	Process Pump House Equipment	Each	3		8,164,698		2,721,833	
	A Process Pump House is provided in each of the three 130-Areas. One side is common with the 188 building. The building consists of a large tank room, a process pump room, a re-use pump room, a number of small rooms, two pipe tunnels, and a re-use water reservoir. The structure is one-story and has a reinforced concrete foundation, steel frame, concrete block superstructure, and a concrete precast roof with built-up roofing.							
		Dimensions						
		Volume						
		Area						
		Material						
		Quantity						
		Structural Steel						
		Reinforcing Steel Bars						
		Reinforcing Steel Mesh						
		Concrete						
		Concrete Blocks						
		Roofing						
	Process Pump House (O'all)	Volume			4,273,760 sq.ft.		130,610 sq.ft.	
	Pipe Tunnels (2)	Area			75,200 cu.ft.		7,320 sq.ft.	
	Re-use Water Reservoir	Volume			23,970 cu.ft.		1,600 sq.ft.	
		Material						
		Quantity						
		Structural Steel			647 tons			
		Reinforcing Steel Bars			33 tons			
		Reinforcing Steel Mesh			3,360 sq.ft.			
		Concrete			7,756 cu.yds.			
		Concrete Blocks			127,000 blocks			
	Sub-Total				118,661,222			
	100 AREA ADMINISTRATIVE BUILDINGS AND EQUIPMENT:							
1701-B	Gate House	Each	3		86,078		21,692	
1701-E	Gate House Equipment	Each	3		23,331		7,777	
	One Gate House is provided in each of the three 100 Areas. The buildings are identical two-story frame structures resting on concrete foundations and reinforced concrete first floor. Second floor, walls and partitions are lined and ceiling is insulated. Exterior walls are drop-siding and roof is tar and gravel surfaced.							
		Overall Dimensions						
		Volume			15,300 cu.ft.		254 sq.ft.	
		Area						
1704-B	Supervisors' Office and Laboratory Equipment	Each	3		267,384		88,998	
1704-E	Supervisors' Office and Laboratory Equipment	Each	3		76,371		25,124	
	One Supervisors' Office and Laboratory building is provided in each of the three 100 Areas. This frame, one-story, T-shaped building has concrete and concrete block foundation and wood floor, walls, partitions and roof covered with built-up asphalt felt. In one front corner is located a laboratory with reinforced concrete floor and concrete walls and ceiling 2' thick.							
		Overall Dimensions						
		Volume			218,850 cu.ft.		8,120 sq.ft.	
		Area						
		Material						
		Quantity						
		Framing			14,384 f.b.w.			
		Siding			7,440 sq.ft.			
		Sheathing			16,740 sq.ft.			
		Flooring			7,700 sq.ft.			
		Concrete			176 cu.yds.			
		Concrete Block			2,400 blocks			
		Roofing			94 squares			
		Blanket Insulation			380 sq.ft.			
		Freshwood			8,330 sq.ft.			
		Asbestos Board			7,370 sq.ft.			
		Gypsum Board			7,670 sq.ft.			
1706-B	Test Laboratory	Each	1		17,277		17,277	
1706-E	Test Laboratory Equipment	Each	1		11,061		11,061	
	One Test Laboratory is provided, located in the 100-F Area. It consists of two Pacific Hutments joined together at the ends, and mounted on a concrete floor. A small frame overhead tank tower and a small frame pump house complete the unit.							
		Dimensions						
		Volume			15,800 cu.ft.		1,600 sq.ft.	
		Area						
1707-B	Change House	Each	6		177,462		29,577	
1707-E	Change House Equipment	Each	6		16,118		2,686	
	Two Change Houses are located in each of the 100 Areas. These rectangular, one-story, frame buildings are supported on concrete and concrete block foundations and have a reinforced concrete floor. Walls and partitions are lined, but no ceilings are provided.							



# PROJECT COST SUMMARY --- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE RAAFORD ENGINEERS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
1707	Change House (continued)							
	<p>Overall Dimensions 66' x 30' x 18'</p> <p>Volume 31,920 cu.ft.</p> <p>Area 1,998 sq.ft.</p> <p>Material Quantity (one Change House)</p> <p>Framing 1,734 f.b.m.</p> <p>Siding 1,880 sq.ft.</p> <p>Sheathing 8,000 sq.ft.</p> <p>Concrete 37 cu.yds.</p> <p>Concrete Blocks 643 blocks</p> <p>Roofing 22 squares</p> <p>Preswood 2,877 sq.ft.</p> <p>Gypsum Board 278 sq.ft.</p> <p>Asbestos Board 4,578 sq.ft.</p> <p>Concrete floor (4") 2,000 sq.ft.</p>							
1709-B	Fire Headquarters	Each	3			103,916		34,639
1709-E	Fire Headquarters Equipment	Each	3			10,318		3,439
	<p>One Fire Headquarters building is provided in each of the three 100 Areas. The buildings consist of a permanently constructed Truck Storage building and an addition of temporary design to furnish living quarters for the firemen. Buildings are identical.</p> <p>The Truck Storage building is a one-story, frame structure, with a 30' hose drying tower, supported on a concrete foundation and reinforced concrete floor.</p> <p>Living Quarters building is a rectangular, one-story, frame structure with gypsum board exterior and celotex interior walls and ceiling, and roll roofing on a wood roof. A wood floor is supported on timber posts.</p>							
	<p>Truck Storage Overall Dimensions 47' x 38' x 34'</p> <p>Volume 28,308 cu.ft.</p> <p>Area 1,810 sq.ft.</p> <p>Living Quarters Overall Dimensions 70' x 25' x 18'</p> <p>Volume 23,800 cu.ft.</p> <p>Area 1,780 sq.ft.</p> <p>Material Quantity</p> <p>Framing 14,670 f.b.m.</p> <p>Siding 3,655 sq.ft.</p> <p>Sheathing 8,777 sq.ft.</p> <p>Wood Flooring 2,310 sq.ft.</p> <p>Concrete Flooring 1,830 sq.ft.</p> <p>Reinforcing Steel Mesh 2,040 sq.ft.</p> <p>Concrete 47.3 cu.yds.</p> <p>Roofing 42.8 squares</p> <p>Blanket Insulation 4,380 sq.ft.</p> <p>Gypsum Board 1,830 sq.ft.</p> <p>Asbestos Board 3,833 sq.ft.</p> <p>Celotex 2,768 sq.ft.</p> <p>Linoleum 288 sq.ft.</p>							
1713-B	Store Rooms	Each	7			374,943		63,562
1713-E	Store Rooms Equipment	Each	7			13,660		1,984
	<p>1713 - One Storeroom building is provided in each of the three 100 Areas. These rectangular, one-story, frame buildings are identical, having concrete and concrete block foundations, reinforced concrete floors, drop-siding walls, and tar and gravel roof surfacing. Interior is unfinished except office and wash rooms.</p> <p>1713-A - One Essential Material Storeroom is provided in each of the three 100 Areas. These former TC buildings are one-story post and girder structures having wood posts on wood mats, wood floors, gypsum board walls, and rolled roofing.</p> <p>1713-B - This building in the 100-B Area is similar in construction to 1713-A buildings.</p>							
	<p>1713 Overall Dimensions 77' x 64' x 18'</p> <p>Volume 88,800 cu.ft.</p> <p>Area 4,168 sq.ft.</p> <p>1713 BA 130' x 176' x 12'</p> <p>Volume 211,200 cu.ft.</p> <p>Area 17,600 sq.ft.</p> <p>1713 DA 80' x 208' x 13'</p> <p>Volume 218,320 cu.ft.</p> <p>Area 18,540 sq.ft.</p> <p>1713 FA 104' x 80' x 14'</p> <p>Volume 118,480 cu.ft.</p> <p>Area 8,320 sq.ft.</p> <p>1713 BB 104' x 36' x 10'</p> <p>Volume 37,440 cu.ft.</p> <p>Area 3,744 sq.ft.</p> <p>Material Quantity</p> <p>Framing 10,728 f.b.m.</p> <p>Siding 3,144 sq.ft.</p> <p>Sheathing 7,344 sq.ft.</p> <p>Concrete Flooring (4") 4,160 sq.ft.</p> <p>Concrete 81.6 cu.yds.</p> <p>Concrete Blocks 873 blocks</p> <p>Roofing 42 squares</p> <p>Celotex Insulation 168 sq.ft.</p> <p>Preswood Board 1,744 sq.ft.</p>							
1716-B	Oil and Paint Storage Building	Each	3			18,146		6,382
1716-E	Oil and Paint Storage Building Equipment	Each	3			3,318		1,106
	<p>One Oil and Paint Storage Building is provided in each of the three 100 Areas. Buildings are identical, one-story, two-room, frame structures. Foundations and partitions are concrete block; floor is reinforced concrete; walls are drop siding on sheathing; and roof is built up tar and gravel on wood.</p>							
	<p>Overall Dimension 41' x 14' x 18'</p> <p>Volume 10,884 cu.ft.</p> <p>Area 888 sq.ft.</p> <p>Material Quantity</p> <p>Framing 1,028 f.b.m.</p> <p>Siding 1,320 sq.ft.</p> <p>Sheathing 1,810 sq.ft.</p>							



**SECRET**  
**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--- FINAL DETAIL COST STATEMENT ---**

REPORTING OFFICE WAR DEPARTMENT, WASH. PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
1716	Cil and Paint Storage Building (continued)							
	Material			Quantity				
	Concrete Flooring			870 sq.ft.				
	Concrete			4.4 cu.yds.				
	Concrete Blocks			647 blocks				
	Roofing			6.7 squares				
1716-B	Automotive Repair Shop	Each	3		30,546		10,182	
1716-E	Automotive Repair Shop Equipment	Each	3		8,161		2,717	
	One Automotive Repair Shop is provided in each of the three 100 Areas. Buildings are one-story frame structures, "L" shaped in B & D Areas, but an addition in F Area makes it "T" shaped. Foundations are concrete block and concrete piers; floors are cinder in B and D Areas and reinforced concrete in F. Area walls are drop siding on sheathing; roofs built-up surfacing on wood.							
	Overall Dimensions	Volume	Area					
1716 B & D	83' x 40' x 18'	30,400 cu.ft.	1,782 sq.ft.					
1716 F	53' x 48' x 18'	31,440 cu.ft.	1,842 sq.ft.					
	Materials	Quantity (one building)						
		1716 B & D	1716 F					
	Framing	5,376 f.b.m.	5,500 f.b.m.					
	Siding	3,036 sq.ft.	3,836 sq.ft.					
	Sheeting	4,800 sq.ft.	5,600 sq.ft.					
	Cinder Flooring	1,762 sq.ft.						
	Concrete Flooring		1,842 sq.ft.					
	Concrete	6.8 cu.yds.	2.8 cu.yds.					
	Concrete Blocks	860 blocks	660 blocks					
	Roofing	18 squares	18.8 squares					
1717-B	Combined Shops	Each	3		306,064		102,688	
1717-E	Combined Shops Equipment	Each	3		317,974		106,591	
	One Combined Shops building is provided in each of the three 100 Areas. These identical one-story, frame buildings contain a machine shop, carpenter shop, pipe shop, electric shop, forge shop, tool room, 6 offices, and a toilet. 1717-B houses considerably more equipment. Foundations are concrete and concrete block; floor is reinforced concrete; walls are drop-siding on sheathing but not lined; partitions are lined one side only. Two monorail cranes are installed in this building.							
	Overall Dimensions	Volume	Area					
	180' x 80' x 28'	127,360 cu.ft.	12,800 sq.ft.					
	Material	Quantity						
	Framing	36,500 f.b.m.						
	Siding	20 sq.ft.						
	Sheeting	33,000 sq.ft.						
	Concrete Flooring	12,000 sq.ft.						
	Concrete	193 cu.yds.						
	Roofing	120 squares						
	Preswood	6,384 sq.ft.						
	Asbestos Board	3,220 sq.ft.						
	Structural Steel	1.2 tons						
	Reinforcing Steel Mesh	12,000 sq.ft.						
1718-B	First Aid Building	Each	3		60,435		20,145	
1719-E	First Aid Building Equipment	Each	3		8,374		1,791	
	One First Aid Building has been provided in each of the three 100 Areas. This rectangular shaped, one-story, frame building has concrete and concrete block foundations, reinforced concrete floor with asphalt tile surface, drop-siding on sheathing walls and felt covered roof. Partitions are lined on one side with preswood and the ceiling with gypsum board. A waiting room has been added. This rectangular shaped, frame building has wood floor and is supported on timber skids.							
	Overall Dimensions	Volume	Area					
First Aid Building	32' x 28 1/2' x 12'	11,270 cu.ft.	616 sq.ft.					
Waiting Room	24' x 16' x 12'	4,416 cu.ft.	384 sq.ft.					
	Material	Quantity						
		First Aid Bldg.	Waiting Room					
	Framing	4,117 f.b.m.	1,370 f.b.m.					
	Siding	1,160 sq.ft.	640 sq.ft.					
	Sheeting	2,340 sq.ft.	1,024 sq.ft.					
	Flooring - Concrete	826 sq.ft.						
	Flooring - Wood T & G		384 sq.ft.					
	Concrete	14 cu.yds.						
	Concrete Block	30 blocks						
	Roofing	10 squares	3.9 squares					
	Preswood Board	2,387 sq.ft.						
	Gypsum Board	701 sq.ft.	1,024 sq.ft.					
	Asphalt Tile	88 sq.yds.						
1720-E	Patrol Headquarters	Each	3		115,045		38,348	
1720-E	Patrol Headquarters Equipment	Each	3		16,028		5,343	
	One Patrol Headquarters building is provided in each of the three 100 Areas. These rectangular shaped, one-story, frame buildings are identical. Foundation is concrete and concrete block; floor is reinforced concrete, walls are drop-siding on sheathing, roof is built-up tar and gravel on wood; walls are unlined and partitions lined one side only with preswood and asbestos board.							

**SECRET**  
**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--- FINAL DETAIL COST STATEMENT ---**

REPORTING OFFICE HAMFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
1720	Patrol Headquarters (continued)							
	Overall Dimensions 79' x 33' x 18'							
	Volume 37,920 cu.ft.							
	Area 2,528 sq.ft.							
	Material							
	Quantity							
	Framing							
	4,718 f.b.m.							
	Siding							
	3,092 sq.ft.							
	Sheathing							
	6,704 sq.ft.							
	Concrete Flooring							
	2,528 sq.ft.							
	Concrete							
	61.3 cu.yds.							
	Concrete Blocks							
	830 blocks							
	Roofing							
	26.1 squares							
	Preswood Board							
	4,818 sq.ft.							
	Asbestos Board							
	1,100 sq.ft.							
1722-B	Area Shops	Each	4			54,833		13,868
1722-E	Area Shops Equipment	Each	4			2,927		732
	1722 - One Area Shops building is provided in each of the three 100 Areas. These identical, rectangular shaped, one-story, frame structures are divided by a concrete block wall into a Riggers Loft and a Paint Storage Room. Foundations are concrete and concrete block; floor is reinforced concrete; walls are drop-siding over sheathing; and flat roof is wood with built-up tar and gravel surface.							
	1722-A - This former construction building located in the 100-B Area is of wood frame post and girder construction with gypsum board exterior walls and roll roofing. Office and shop and has wood floor and open storage and has dirt floor.							
	Overall Dimensions							
	40' x 30' x 15'							
	Volume							
	18,000 cu.ft.							
	Area							
	1,200 sq.ft.							
	1722-A							
	Overall Dimensions							
	80' x 170' x 10'							
	Volume							
	76,800 cu.ft.							
	Area							
	7,560 sq.ft.							
	Material							
	Quantity							
	1722							
	Framing							
	3,331 f.b.m.							
	Siding							
	1,540 sq.ft.							
	Sheathing							
	2,740 sq.ft.							
	Concrete Flooring							
	1,200 sq.ft.							
	Concrete Blocks							
	866 blocks							
	Roofing							
	12 squares							
	Preswood Board							
	1,540 sq.ft.							
1729	Extra Machinery Storehouses	Each	2			166,831		83,415
	One Extra Machinery Storehouse is provided in the 100-B and 100-D Areas. These similar former construction buildings are wood post and girder construction with wood mat foundations, wood floors, gypsum board exterior walls, celotex interior linings, and roll roofing over wood sheathing. Wood loading platforms run the full length on both sides.							
	Overall Dimensions							
	100' x 178' x 17'							
	Volume							
	174,200 cu.ft.							
	Floor Area							
	16,352 sq.ft.							
	Material							
	Quantity							
	43,800 f.b.m.							
	Framing							
	31,000 f.b.m.							
	Flooring							
	12,000 f.b.m.							
	Sheathing							
	6,000 sq.ft.							
	Gypsum Board							
	118 squares							
	Roofing							
	4,860 sq.ft.							
1734	Gas Cylinder Storage	Each	3			7,652		2,551
	One Gas Cylinder Storage building is provided in each of the three 100 Areas. These identical, one-story, frame structures with over hanger roof have four storage spaces. The foundations is concrete; the floor, reinforced concrete; the walls are sheathing, open top and bottom, and the roof is wood with tar and gravel surface.							
	Overall Dimensions							
	24' x 10' x 12'							
	Volume							
	2,880 cu.ft.							
	Area							
	240 sq.ft.							
	Material							
	Quantity							
	936 f.b.m.							
	Framing							
	936 sq.ft.							
	Sheathing							
	240 sq.ft.							
	Concrete Flooring							
	10 cu.yds.							
	Concrete							
	240 sq.ft.							
	Reinforcing Steel Mesh							
	3.5 squares							
1736	Training Building	Each	1			14,186		14,186
	One Training Building is provided in the 100-D Area only. This former construction building is wood frame with wood foundations and floor, gypsum board exterior walls, and rolled roofing.							
	Overall Dimensions							
	96' x 24' x 10'							
	Volume							
	23,040 cu.ft.							
	Area							
	2,304 sq.ft.							
	Sub-Total					2,290,831		
	TOTAL 100 AREA BUILDINGS AND EQUIPMENT					120,962,067		

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**PROJECT COST SUMMARY... MILITARY FUNDS**  
**-FINAL DETAIL COST STATEMENT...**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

COMB NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
	<b>200 AREA BUILDINGS AND EQUIPMENT:</b>							
	<b>200 AREA MANUFACTURING BUILDINGS AND EQUIPMENT:</b>							
211	<p><b>Tank Farms</b></p> <p>Tank Farms were constructed for each 200 Process Group, F, U, &amp; B, for the handling and storage of liquid chemicals and are located at the rear of the 221 buildings. The Tank Farm is divided into two parts: vertical storage tanks and horizontal storage tanks.</p> <p><b>Vertical Storage Tanks:</b> Nine 18-8-3-0b vertical storage tanks 10' diameter by 14' high are arranged in two rows on concrete octagon-shaped foundations with wood frame access stairways and platforms.</p> <p><b>Horizontal Storage Tanks:</b> Six horizontal storage tanks adjoin the vertical storage tanks on reinforced concrete cradles and are provided with wood frame access stairways and platforms. Pumps are used for necessary transfer of chemicals.</p> <p style="text-align: center;"><u>Overall Dimensions</u>      <u>Volume</u>      <u>Floor Area</u>                      120' x 164' x 14'      274,026 cu. ft.      19,472 sq. ft.</p> <p style="text-align: center;"><u>Material</u>      <u>Quantity</u>                      Lumber (framing)      17,000 f.b.m.                      Reinforcing Steel      1.0 tons                      Concrete      210 cu. yds.</p> <p><b>EQUIPMENT INCLUDED:</b> 14 Storage Tanks, 13 Transfer Pumps, 1 Circulating Pump and 1 - 60 ton Tank Scale.</p>	Each	3		600,343		222,128	
212-B	<p><b>Lag Storage Building</b></p> <p>Three Lag Storage Buildings are provided in the 200-B Area for storage of partially processed material. These identical buildings are essentially one-story steel frame with concrete brick and concrete block walls on reinforced concrete foundations and precast tile roof covered with built-up felt, gravelled surface roofing. Each building is divided into three parts: Transfer Room, Storage Room, and Fan Room.</p> <p>The Transfer Room accommodates a railroad car and is fitted with a steel roller door and an overhead crane.</p> <p>The Storage Room is fitted with a monorail system and houses a 20'-9" deep water filled basin. Floor, tapered walls, and piers supporting wood operating floor are reinforced concrete construction.</p> <p>The Fan Room houses heating and ventilating equipment.</p> <p style="text-align: center;"><u>Overall Dimensions</u>      <u>Volume</u>      <u>Area</u>                      76' x 43'-8" x 17'-6"      104,090 cu. ft.      6,140 sq. ft.</p> <p style="text-align: center;"><u>Material</u>      <u>Quantity</u>                      Wood Flooring      4,000 f.b.m.                      Concrete      2,336 cu. yds.                      Concrete Block      6,000 blocks                      Concrete Brick      20,000 bricks                      Structural Steel      87.32 tons                      Reinforcing Steel      84 tons                      Roofing      -1.5 squares</p>	Each	3		184,167		261,349	
212-B	<p><b>Lag Storage Building Equipment</b></p> <p>Three Lag Storage Buildings are provided in the 200-B Area for storage of partially processed material. These identical buildings are essentially one-story steel frame with concrete brick and concrete block walls on reinforced concrete foundations and precast tile roof covered with built-up felt, gravelled surface roofing. Each building is divided into three parts: Transfer Room, Storage Room, and Fan Room.</p> <p>The Transfer Room accommodates a railroad car and is fitted with a steel roller door and an overhead crane.</p> <p>The Storage Room is fitted with a monorail system and houses a 20'-9" deep water filled basin. Floor, tapered walls, and piers supporting wood operating floor are reinforced concrete construction.</p> <p>The Fan Room houses heating and ventilating equipment.</p> <p style="text-align: center;"><u>Overall Dimensions</u>      <u>Volume</u>      <u>Area</u>                      76' x 43'-8" x 17'-6"      104,090 cu. ft.      6,140 sq. ft.</p> <p style="text-align: center;"><u>Material</u>      <u>Quantity</u>                      Wood Flooring      4,000 f.b.m.                      Concrete      2,336 cu. yds.                      Concrete Block      6,000 blocks                      Concrete Brick      20,000 bricks                      Structural Steel      87.32 tons                      Reinforcing Steel      84 tons                      Roofing      -1.5 squares</p>	Each	3		573,799		191,266	
213-B	<p><b>Mazarsine Storage Building</b></p> <p>One Mazarsine Storage Building is provided in the 200-B Area. This building containing two identical, barrel-vaults is a reinforced concrete, earth covered structure with the entrance end of each vault forming a continuous wire shaped retaining wall with attached loading platforms. Each section contains three rooms, namely: Mazarsine, V-antibule, and Instrument. The latter two rooms have six-hour fire resistant, double combination lock, steel doors installed in the retaining wall. Roofs have membrane waterproofing, 2 ply, with 1" galches protective covering and exterior surface of rear and side walls is treated with "Carbo-site" waterproofing. Ventilation is provided by four 12" diameter A.C.M. ventilators in each unit. Reinforced concrete shelving with concrete brick partitions line each side of Mazarsine Section.</p> <p style="text-align: center;"><u>Overall Dimensions</u>      <u>Volume</u>      <u>Area</u>                      47' x 147' x 21'      14,877 cu. ft.      1,155 sq. ft.</p> <p style="text-align: center;"><u>Material</u>      <u>Quantity</u>                      Reinforcing Steel      145 tons                      Concrete      403 cu. yds.                      Concrete Brick      1,500 bricks                      Waterproofing      6.5 squares                      Palleting (Carbo-site)      1,750 sq. ft.</p>	Each	2		70,572		35,286	
213-B	<p><b>Mazarsine Storage Building Equipment</b></p> <p>One Mazarsine Storage Building is provided in the 200-B Area. This building containing two identical, barrel-vaults is a reinforced concrete, earth covered structure with the entrance end of each vault forming a continuous wire shaped retaining wall with attached loading platforms. Each section contains three rooms, namely: Mazarsine, V-antibule, and Instrument. The latter two rooms have six-hour fire resistant, double combination lock, steel doors installed in the retaining wall. Roofs have membrane waterproofing, 2 ply, with 1" galches protective covering and exterior surface of rear and side walls is treated with "Carbo-site" waterproofing. Ventilation is provided by four 12" diameter A.C.M. ventilators in each unit. Reinforced concrete shelving with concrete brick partitions line each side of Mazarsine Section.</p> <p style="text-align: center;"><u>Overall Dimensions</u>      <u>Volume</u>      <u>Area</u>                      47' x 147' x 21'      14,877 cu. ft.      1,155 sq. ft.</p> <p style="text-align: center;"><u>Material</u>      <u>Quantity</u>                      Reinforcing Steel      145 tons                      Concrete      403 cu. yds.                      Concrete Brick      1,500 bricks                      Waterproofing      6.5 squares                      Palleting (Carbo-site)      1,750 sq. ft.</p>	Each	2		4,355		2,177	
214	<p><b>Process Waste Disposal Trench</b></p> <p>One Process Waste Disposal Trench is provided in the 200 East Area. This facility consists of a V shaped ditch, service road and fence.</p> <p style="text-align: center;"><u>Dimensions</u>      <u>Volume</u>      <u>Area</u>                      15' x 250'      12,500 cu. ft.      37,500 sq. ft.                      Overall Trench      200' x 16' x 8'      12,800 cu. ft.      3,200 sq. ft.</p>	Each	1		1,671		1,671	

**SECRET**

# PROJECT COST SUMMARY --- MILITARY FUNDS --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE ASTOR ENGINEERS PROJECT DESCRIPTION PLASTONUM PRODUCTION PLANT

MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																				
			ACTUAL		ACTUAL		ACTUAL																																				
214	Process Waste Disposal Trench (Continued)																																										
	<u>Material</u> Lumber 2,000 f.b.s. Woven Wire -b' 1,000 ft. Barb Wire 2,400 ft. Excavation 475 cu.yds.																																										
221-B	Cell Building	Each	3		19,376,531		6,458,844																																				
221-B	Cell Building Equipment	Each	3		14,907,672		5,635,891																																				
	<p>One Cell Building is provided in each of the T, U, &amp; B process groups of the 200 Area. The buildings are identical in construction and shape except that 221-T is 65' longer, having a Head End Addition. The buildings are rectangular in shape with approximately one-quarter below grade, and construction is massive reinforced concrete, the foundation being 6' to 8' thick, walls 1', 5' &amp; 7' and roof 1' to 4' thick. Stair towers are constructed on both back and front sides and a reinforced concrete railroad tunnel extends 150' from front side to provide rail service to the building. The building is separated into two main portions: Galleries and Canyon. Control Boards are located in three galleries, one above the other, along the front side of building. The Canyon contains the cells which have removable reinforced concrete covers, and an exhaust duct and a fire trench running the length of the building.</p> <p><u>Overall Dimensions</u>      <u>Volume</u>      <u>Area</u></p> 221-T      85'-2" x 875'-6" x 102'      5,885,220 cu.ft.      66,419 sq.ft. 221-U & B      85'-2" x 810'-6" x 102'      5,118,444 cu.ft.      61,442 sq.ft. <p><u>Material</u>      <u>Quantity</u></p> <table border="1"> <tr> <td></td> <td><u>Unit</u></td> <td><u>221-T</u></td> <td><u>221-U</u></td> <td><u>221-B</u></td> </tr> <tr> <td>Reinforcing Steel</td> <td>tons</td> <td>1,840</td> <td>1,678</td> <td>1,678</td> </tr> <tr> <td>Reinforcing Mesh</td> <td>sq.ft.</td> <td>27,000</td> <td>23,000</td> <td>23,000</td> </tr> <tr> <td>Concrete</td> <td>cu.yds</td> <td>90,473</td> <td>81,003</td> <td>79,469</td> </tr> <tr> <td>Concrete Blocks</td> <td>blocks</td> <td>500</td> <td>500</td> <td>500</td> </tr> <tr> <td>Roofing</td> <td>squares</td> <td>408</td> <td>446</td> <td>446</td> </tr> <tr> <td>*Structural Steel</td> <td>tons</td> <td>140,488</td> <td>140,688</td> <td>140,688</td> </tr> </table> <p>* Roof trusses for temporary construction use only.</p>		<u>Unit</u>	<u>221-T</u>	<u>221-U</u>	<u>221-B</u>	Reinforcing Steel	tons	1,840	1,678	1,678	Reinforcing Mesh	sq.ft.	27,000	23,000	23,000	Concrete	cu.yds	90,473	81,003	79,469	Concrete Blocks	blocks	500	500	500	Roofing	squares	408	446	446	*Structural Steel	tons	140,488	140,688	140,688							
	<u>Unit</u>	<u>221-T</u>	<u>221-U</u>	<u>221-B</u>																																							
Reinforcing Steel	tons	1,840	1,678	1,678																																							
Reinforcing Mesh	sq.ft.	27,000	23,000	23,000																																							
Concrete	cu.yds	90,473	81,003	79,469																																							
Concrete Blocks	blocks	500	500	500																																							
Roofing	squares	408	446	446																																							
*Structural Steel	tons	140,488	140,688	140,688																																							
222-B	Sample Preparation Laboratories	Each	3		502,039		167,446																																				
222-B	Sample Preparation Laboratories Equipment	Each	3		42,160		144,531																																				
	<p>One Sample Preparation Laboratory building is provided in each of the 200 Process Groups - T, U &amp; B. The buildings are identical, one-story, 22 rooms, reinforced concrete frame and concrete block wall structures. Roofs are reinforced concrete with 1" insulation board built-up, gravel surfacing. Floors are reinforced concrete and partitions are 4" concrete block. Two rooms are of explosion proof construction: 2" thick reinforced concrete walls and ceiling, and a floor built up of a 2" layer of cork between two 4" layers of concrete. The building is windowless. A Sheetmetal lean-to and Sheetmetal box is located adjacent to each building for solvent storage.</p> <p><u>Overall Dimensions</u>      <u>Volume</u>      <u>Area</u></p> 64' x 100'-6" x 15'-2"      111,862 cu.ft.      1,136 sq.ft. <p><u>Material</u>      <u>Quantity</u></p> Lumber (trim) 1,000 f.b.s. Structural Steel 0.25 tons Reinforcing Steel 17.5 tons Reinforcing Mesh 7,000 sq.ft. Concrete 659 cu.yds. Roofing (Built-up) 16.71 squares (Sheetmetal) 0.40 squares Concrete Block 8" x 8" x 16" 4,470 blocks Concrete Block 4" x 8" x 16" 4,000 blocks Plaster (3/8" thick) 359 sq.yds. Linoleum (1/8" thick) 455 sq.ft. Asphalt Tile Floor Covering 2,760 sq.ft. (1/16" thick) Cork Floor Insulation (2" thick) 786 sq.ft. Roof Insulation (1" thick) 47.41 squares Fibrocoustic Board (1" thick) 1,250 sq.ft.							301,399																																			
224-B	Bulk Reduction Buildings	Each	3		1,919,012		646,337																																				
224-B	Bulk Reduction Buildings Equipment	Each	3		4,618,470		1,539,123																																				
	<p>Three 3-story reinforced concrete frame structures with concrete and concrete block exterior and interior walls were constructed, one for each of the 200 Process Groups, T, U, &amp; B. Each building contains a total of 31 rooms not including two stair towers, one closet, one janitor's closet, and an elevator penthouse. The back side of the main structure has 1" thick concrete walls with a balcony running around three sides. The front side of the main structure is reinforced concrete frame with 8" concrete block panels and 8" and 4" concrete block partitions. The first floor contains two offices, Chemical Storage Room, a Central Ventilation Room, which provides filtered and tempered air with humidification, Lunch Room, Wash Room, Shower Room, two Toilet Rooms and two Locker Rooms. The second floor is principally a Pipe Loft containing five concrete ventilators opposite each centrifuge platform. The third floor is the Operating Gallery containing gauge boards and weigh tanks, etc. Building foundations are comprised of reinforced concrete walls with spread footings, reinforced concrete piers and beams, and concrete pads. Floor slabs are reinforced concrete 4" to 12" thick. Roofs are flat reinforced concrete 5" to 12" thick.</p>							1,852,460																																			

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PROJECT COST SUMMARY --- MILITARY FUNDS  
--FINAL DETAIL COST STATEMENT--

REPORTING OFFICE HANFORD ENGINEERS WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
271	Chemical Preparation & Service Buildings (Continued) Discharge Building Overall 117'-0" x 87'-10"	Volume 486,700 cu.ft.	Area 9,300 sq.ft.					
	<b>Material</b>	<b>Quantity</b>						
	Lumber (iris, platform, & finish)	1,000 f.b.m.						
	Reinforcing Steel	111 tons						
	Reinforcing Mesh #9	4,400 sq.ft.						
	Concrete	1,410 cu.yds.						
	Concrete Blocks	12,000						
	Concrete Bricks 1 1/2" x 3 1/2"	5,000						
	Roofing (built-up)	81.34 sqs.						
	Flooring (Asphalt Tile)	1,076 sq.ft.						
272-B	Area Shops	Each	2		54,379		269.069	
272-E	Area Shops Equipment	Each	2		11,944		209.472	
	One Area Shops Building is provided the two 200 Areas - East and West. The buildings are similar except the East building has ten bays four stories high and the west has only six. The building has a steel frame, with drop siding over sheathing walls, and built-up felt roof on sheathing. Foundations are reinforced concrete piers and curtain walls. A one story lean-to section with timber frame adjoins one side. Interior walls and linings are terrazzo, gypsum and pressed board.						535661	
	<b>Overall Dimensions</b>	<b>Volume</b>	<b>Area</b>					
272-E	201'-0" x 201'-0" x 10'-0"	307,500 cu.ft.	16,111 sq.ft.					
272-E	65'-5" x 201'-0" x 10'-0"	718,370 cu.ft.	13,761 sq.ft.					
	<b>Material</b>	<b>Quantity</b>						
	Lumber (Framing)	68,000 f.b.m.			60,000 f.b.m.			
	(Sheathing & Decking)	71,700 f.b.m.			62,000 f.b.m.			
	(Siding)	24,000 f.b.m.			20,000 f.b.m.			
	(Pipe lining)	4,000 f.b.m.			4,000 f.b.m.			
	Structural Steel	120 tons			10 tons			
	Reinforcing Steel Bars	4.1 tons			4.1 tons			
	Reinforcing Steel Mesh	20,708 sq.ft.			20,708 sq.ft.			
	Concrete	11 cu.yds.			30 cu.yds.			
	Roofing	238.54 squares			24.04 squares			
	Transite Boards	770 sq.ft.			770 sq.ft.			
	Gypsum Board 1/2"	1,100 sq.ft.			2,050 sq.ft.			
	Presswood 1/2"	1,200 sq.ft.			1,700 sq.ft.			
273-B	Heat Treating Furnace	Each	1		17,326		17,326	
273-E	Heat Treating Furnace Equipment	Each	1		216,024		216,024	
	One Heat Treating Furnace is provided in the 200-E Area. This building consists of a rectangular structural steel frame building set on reinforced concrete foundations having corrugated asbestos siding and roofing. The building houses a heat treating furnace having approximately 15' x 20' inside dimensions and will handle a 12' x 24' wide gauge car. Other facilities are a transfer, loading, and unloading area; a chemical and oil storage farm; and a pickling tank consisting of a reinforced concrete tank with carbon and acid proof brick lining approximately 18' x 24' x 12' and a water spray quenching station with equipment supported on a steel frame.				294819			
	<b>Overall Dimensions</b>	<b>Volume</b>	<b>Area</b>					
	162'-0" x 225'-0" x 11'-0"	368,334 cu.ft.	17,615 sq.ft.					
	<b>Material</b>	<b>Quantity</b>						
	Lumber	2,500 f.b.m.						
	Structural Steel	71.16 tons						
	Reinforcing Steel	15 tons						
	Reinforcing Mesh	1,604 sq.ft.						
	Concrete	451 cu.yds.						
	Corrugated Asbestos	9,000 sq.ft.						
	Carbon Brick (2 1/2" x 4" x 8")	10,000						
	Acid Proof Brick (2 1/2" x 4" x 8")	8,500						
	*Does not include structural steel furnished by Sub-Contractor for use in direct furnace construction.							
274	Machinery Storehouse	Each	2		58,825		29,412	
	One Machinery Storehouse is provided in each of the two 200 Areas, E & W. Building foundations are 8" reinforced concrete curtain walls with tapered concrete piers supporting the center columns. Floor slabs are reinforced concrete 6" thick and built up above grade. From the floor up the buildings are of wood frame, post and girder construction, with 1" F. & G. sheathing and decking throughout. Side walls are covered with 1" drop siding with building paper insulation between siding and sheathing. Roofs are sloped two ways and are covered with built-up felt, gravel surfaced.							
	<b>Dimensions</b>	<b>Volume</b>	<b>Area</b>					
	79'-5" x 86' x 20'-7"	78,111 cu.ft.	7,792 sq.ft.					
	<b>Material</b>	<b>Quantity</b>						
	Lumber (Framing)	7,000 f.b.m.						





**SECRET**  
**PROJECT COST SUMMARY -- MILITARY FUNDS**  
**--FINAL DETAIL COST STATEMENT--**

REPORTING OFFICE HANFORD ENGINEERS WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
274	Machinery Storehouse (Continued) Material (Siding) (Decking) Reinforcing Steel Reinforcing Mesh #9 & #11 Concrete Roofing (built-up) Quantity 1,025 f.b.m. 1,825 f.b.m. 2.0 tons 4,400 sq.ft. 228 cu.yds. 39.48 sqs.							
275	Chemical Storehouse One Chemical Storehouse is provided in each of the two 200 Areas, E & W. Building foundations are 8" reinforced concrete curtain walls with tapered concrete viers supporting the center column. Floor slabs are reinforced concrete 6" thick and built 4' above grade. From the floor up the buildings are of wood frame, post and girder construction, with 1" T. & G. sheathing and decking throughout. Side walls are covered with 1" drop siding with building paper insulation between siding and sheathing. Roofs are sloped two ways and are covered with built-up felt, gravel surfaced.  Building Overall Dimensions 181'-0" x 20'-7" Volume 74,111 cu.ft. Area 3,762 sq.ft.  Material Lumber (Framing) (Siding) (Decking) Reinforcing Steel Reinforcing Mesh #9 & #11 Concrete Roofing (built-up) Quantity 7,000 f.b.m. 1,025 f.b.m. 1,825 f.b.m. 2.0 tons 4,400 sq.ft. 228 cu.yds. 39.48 sqs.	Each	2		47,400		23,745	
282-B	Reservoir & Pump House Building	Each	2		547,441		171,470	
282-E	Reservoir & Pump House Building Equipment One Reservoir and Pump House Building is provided in each of the two 200 Areas - East & West. This structure consists of an Inlet House; Reservoir; Pump House; and Chlorine Storage Structure. The construction of the Inlet House is as follows: one-story concrete block building one-half below grade, 9" reinforced concrete foundation wall spread footings, flat concrete tile roof covered with built-up felt gravel surfaced roofing supported by a rural steel frame. The Reservoir is of concrete construction with inside dimensions of 172' x 172' with a maximum storage depth of 1'-10" and a capacity 3,000,000 gals.. The Pump House Building is a two-story structure having the basement or pump section built entirely below grade, and is a concrete block structure with a concrete tile roof covered with built-up gravel surfaced roofing supported by structural steel roof framing. The Chlorine Storage structure is concrete block construction and concrete floor slab.  Overall Dimensions 174' x 205' x 15'-2" Volume 266,381 cu.ft. Area 12,100 sq.ft.  Material Lumber (Framing) Structural Steel Reinforcing Steel Reinforcing Mesh Concrete Concrete Blocks (8"x8"x16") Roofing (built up) Concrete Roof Tile Quantity 1,000 f.b.m. 5.6 tons 47 tons 15,800 sq.ft. 1,715 cu.yds. 1,450 14 68 squares 644 sq.ft.	Each	2		144,285		72,142	
283-B	Filter Plant Building	Each	2		567,036		283,518	
283-E	Filter Plant Building Equipment One Filter Plant Building is provided in both the 200E and the 200 W Areas. Each plant consists of Sedimentation Basins, Head House, Clearwell Reservoir, and Pump Room, identical throughout. On the front side of the Head House are the two open, reinforced concrete Sedimentation Basins each 17'x41'x12'. The Head House is an L-shaped, 2 & 3-story structure of both reinforced concrete and structural steel frame with concrete block walls and partitions on reinforced concrete foundations. Roof is concrete tile with built-up felt and gravel surfacing. The sub-level, covered Clearwell and Pump Room located on back side of Head House has reinforced concrete footings, walls, floor and roof. Roof surfacing is built-up felt and gravel.  Overall Dimensions 71'-7" x 118' x 55' Volume 205,492 cu.ft. Area 8,670 sq.ft.  Material Lumber Structural Steel Reinforcing Steel Reinforcing Mesh Concrete Concrete Blocks Concrete Bricks Concrete Tile Roofing Quantity 2,000 f.b.m. 7.5 tons 103 tons 3,170 sq.ft. 1,917 cu.yds. 4,150 3,000 bricks 2,470 sq.ft. 66.44 squares	Each	2		319,816		159,908	



# PROJECT COST SUMMARY --- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE RAAFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT

MONTH ENDING 31 DECEMBER 1945

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
271	Exhauster Buildings and Stacks (Continued)							
	Material			Quantity				
	Concrete			497 cu. yds.				
	Roofing (built-up)			1.7 sqs.				
	Concrete Block (8"x8"x16")			735				
272-B	Exhaust Gas Laboratories	Each	1			4,052		4.17
272-E	Exhaust Gas Laboratories Equipment	Each	1			17,740		17,740
	One Exhaust Gas Laboratory is provided in each of the three 200 Areas, T, U, & B. This structure consists of a one-story reinforced concrete and concrete block building with 9" reinforced concrete curtain wall foundation; 4" reinforced concrete floor; 8" concrete block walls; and 4" reinforced flat roof slab, supported with concrete beams, and covered with built-up felt gravel surfaced roofing.							
	Dimensions			Volume				
	Building (Overall)			15' x 21' x 19'-7"			6,291 cu. ft.	116 sq. ft.
	Material			Quantity				
	Lumber (Flooring & finish)			400 f.b.m.				
	Reinforcing Steel			.40 tons				
	Concrete			21 cu. yds.				
	Roofing (built-up)			3.74 sqs.				
	Concrete Block (8"x8"x16")			1,150				
	Sub-Total					67,417,690		
	200 AREA ADMINISTRATIVE BUILDINGS AND EQUIPMENT:							
271-B	Gate House	Each	6			59,261		9,877
271-E	Gate House Equipment	Each	6			9,818		1,637
	E & W - One Main Gate House is provided in each of the two 200 Areas - E & W. The buildings are identical, two-story frame structures resting on concrete foundation and reinforced concrete first floor. Exterior walls are drop-siding and roof is tar and gravel surfaced. Second floor walls and partitions are lined and ceiling is insulated.							
	EA & WA - Four one-story frame Gate Houses are provided in the 200 Area at individual buildings, three in W and one in E. Walls are drop-siding exterior and asbestos board interior; floor is concrete, and roof is built up felt on sheathing.							
	Overall Dimensions			Volume				
	E & W			15,700 cu. ft.				277 sq. ft.
	WA			101 cu. ft.				97 sq. ft.
	Material			Quantity				
	Framing			250 f.b.m.				
	Siding			250 f.b.m.				
	Sheathing			100 f.b.m.				
	Reinforcing Steel Mesh			100 sq. ft.				
	Concrete			2.8 cu. yds.				
	Roofing			1.15 squares				
	Asbestos Board			30 sq. ft.				
270-B	Supervisors' Office Buildings	Each	2			108,224		54,112
270-E	Supervisors' Office Buildings Equipment	Each	2			2,664		1,332
	One Supervisors' Office Building is provided in each of the two 200 Areas, E & W. This structure consists of a one-story, I-shaped, wood frame, gable roof, office building containing 27 rooms. On side building foundation wall a 4" concrete block laid on plain concrete over footings and intermediate supports are reinforced with spread footings covering the center girders and columns. Outside building walls are covered with 1" T & G sheathing and drop sided with building insulation in between. Building ceiled throughout with 1/8" Gypsum board. Roofs are gabled and ripped with a 6 on 12 pitch and are covered with built-up felt roofing over 1" T & G sheathing.							
	Dimensions			Volume				
	Overall			165,880 cu. ft.				2,518 sq. ft.
	Material			Quantity				
	Lumber (Framing)			17,500 f.b.m.				
	(Flooring)			6,600 f.b.m.				
	(Siding)			8,400 f.b.m.				
	(Sheathing & Decking)			11,600 f.b.m.				
	Reinforcing Steel			.1 tons				
	Concrete			10 cu. yds.				
	Concrete Blocks 8" x 8" x 16"			1,400				
	Roofing (built-up)			85.12 sqs.				
	Asbestos Board 1/8"			11,650 sq. ft.				
	Gypsum Board 1/8"			6,600 sq. ft.				
	Pine 1/2"			940 sq. ft.				
	Celotex 5/8"			30 sq. ft.				
277-B	Change Houses	Each	4			21,092		5,273
277-E	Change Houses Equipment	Each	4			10,119		2,530
	2707 - One Change House of this type is provided in both the 200 E and 200 W Areas. Buildings are identical wood frame, one-story structures with concrete footings, concrete block foundations, concrete floors, drop siding over sheathing walls, and built-							



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**PROJECT COST SUMMARY - MILITARY FUNDS**  
**- FINAL DETAIL COST STATEMENT -**

REPORTING OFFICE RAFORD ENGINEER WORKS PROJECT DESCRIPTION MUNITION PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
200 AREA ADMINISTRATIVE BUILDINGS AND EQUIPMENT (Continued):								
2715-B 2715-B	Oil & Paint Storage Building Oil & Paint Storage Building Equipment One Oil and Paint Storage Building is provided in each of the two 200 Areas. Buildings are identical, one-story, frame structures. Foundation and partition are concrete block; floor is reinforced concrete; walls are drop-siding on sheathing, and roof is built up tar and gravel on wood.	Each Each	2 2		12,617 1,798		6,308 849	
	<p>Overall Dimensions: 12' x 14' x 18'</p> <p>Volume: 10,584 cu.ft.</p> <p>Area: 588 sq.ft.</p> <p>Material Quantity</p> <p>Framing: 1,728 f.b.m.</p> <p>Siding: 1,420 sq.ft.</p> <p>Sheathing: 1,400 sq.ft.</p> <p>Concrete Flooring: 570 sq.ft.</p> <p>Concrete: 4.4 cu.yds.</p> <p>Concrete Blocks: 687 blocks</p> <p>Roofing: 5.7 squares</p>							
2716-B 2716-B	Automotive Repair Garage Automotive Repair Garage Equipment One Automotive Repair Garage is provided in both the 200 E and 200 W Areas. Both buildings were built for construction purposes, but were retained for permanent building. Construction is one-story, wood frame with gypsum board exterior and rolled roofing. Floor is plain concrete on 6" door aprons and grease pit.	Each Each	2 2		15,952 717		17,676 368	
	<p>Overall Dimensions: 15' x 40' x 24'-6"</p> <p>Volume: 72,400 cu.ft.</p> <p>Area: 1,400 sq.ft.</p> <p>Material Quantity</p> <p>Lumber: 16,500 f.b.m.</p> <p>Concrete: 110 cu.yds.</p> <p>Gypsum Board: 4,600 sq.ft.</p> <p>Roofing: 12.13 squares</p>							
2719-B 2719-B	First Aid Building First Aid Building Equipment One First Aid Building has been provided in each of the two 200 Areas. This rectangular shaped, one-story, frame building has concrete and concrete block foundations, reinforced concrete floor with asphalt tile surface, drop-siding on sheathing walls and felt covered roof. Partitions are lined on one side with prewood and the ceiling with gypsum board. A waiting room has been added. This rectangular shaped, frame building has wood floor and is supported on timber skids.	Each Each	2 2		17,608 1,146		18,804 1,693	
	<p>Overall Dimensions: 12' x 24' x 18'</p> <p>Volume: 11,760 cu.ft.</p> <p>Area: 516 sq.ft.</p> <p>Material Quantity</p> <p>Framing: 4,117 f.b.m.</p> <p>Siding: 1,160 sq.ft.</p> <p>Sheathing: 2,440 sq.ft.</p> <p>Flooring - Concrete: 226 sq.ft.</p> <p>Flooring - Wood F A G: 148 sq.ft.</p> <p>Concrete: 18 cu.yds.</p> <p>Concrete Block: 190 blocks</p> <p>Roofing: 10 squares</p> <p>Prewood Board: 2,187 sq.ft.</p> <p>Gypsum Board: 701 sq.ft.</p> <p>Asphalt Tile: 88 sq.yds.</p>							
2720-B 2720-B	Patrol Headquarters Patrol Headquarters Equipment One Patrol Headquarters building is provided in each of the two 200 Areas. These rectangular shaped, one-story, frame buildings are identical. Foundation is concrete and concrete block; floor is reinforced concrete; walls are drop-siding on sheathing and roof is built-up tar and gravel on wood. Walls are unlined and partitions lined one side only with prewood and asbestos board.	Each Each	2 2		15,260 4,440		32,630 2,315	
	<p>Overall Dimensions: 75' x 32' x 18'</p> <p>Volume: 37,440 cu.ft.</p> <p>Area: 252 sq.ft.</p> <p>Material Quantity</p> <p>Framing: 4,000 f.b.m.</p> <p>Siding: 2,804 sq.ft.</p> <p>Sheathing: 5,012 sq.ft.</p> <p>Concrete Flooring: 2,144 sq.ft.</p> <p>Concrete: 45.3 cu.yds.</p> <p>Concrete Block: 740 blocks</p> <p>Roofing: 22.1 squares</p> <p>Prewood Board: 3,600 sq.ft.</p> <p>Asbestos Board: 1,100 sq.ft.</p>							

**SECRET**  
**PROJECT COST SUMMARY -- MILITARY FUNDS**  
**--FINAL DETAIL COST STATEMENT--**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
2722-B 2722-B	200 AREA ADMINISTRATIVE BUILDINGS AND EQUIPMENT (Continued):  Area Shops Area Shop Equipment One Area Shop building is provided in each of the two 200-Areas - E & W. These identical, rectangular shaped, one-story, frame structures are divided by a concrete block wall into a Rigor's Loft and a meter storage Room. Foundations are concrete and concrete block; floor is reinforced concrete; walls are iron-siding over sheathing; and flat roof is wood with built-up tar and gravel surface.  Overall Dimensions 12' x 12' x 12' Volume 14,400 cu.ft. Area 1,400 sq.ft.  Material Quantity Framing 1,411 f.b.s. Siding 1,400 sq.ft. Sheathing 1,400 sq.ft. Concrete Flooring 1,400 sq.ft. Concrete Blocks 288 blocks Roofing 12 squares Pseudo-wood Board 1,400 sq.ft.	Each Each	2 2		10,119 1,402		0,000 1,401	
2723-B 2723-B	Laundry Laundry Equipment One Laundry Building is provided in the 200 W Area only. This building consists of a one-story wood frame construction and contains laundry and shoe repair facilities. The building contains a total of 12 rooms, including: wash Room, Pressing Room, Laundry Storage, Receiving Room, Recording Room, Store Room, Shower and Locker Room, etc.. Foundation is a 8" plain concrete and concrete slabs with spread footing for immediate column support. Walls are of 1" T. & G. sheathing and drop siding with building over insulation between. Inside walls are lined and sealed with 1/2" asbestos board.  Overall Dimensions 10' x 11' x 11' Volume 12,100 cu.ft. Area 1,210 sq.ft.  Material Quantity Lumber (Framing) 10,400 f.b.s. (Siding) 1,200 f.b.s. (Sheathing & Decking) 2,600 f.b.s. Concrete 79 cu.yds. Roofing (built-up) 19.68 sqs. Asbestos board 1/2" 2,400 sq.ft.	Each Each	1 1		41,782 41,406		41,782 41,406	
2729	Extra Machinery Storehouse This building consists of a one-story wood frame, shed roof, warehouse and tool room originally built for construction purposes but taken over by Operation as an extra Machinery Storehouse. Type of construction is as follows: Post and girder construction with column post set on wood mats; 2" plank floor laid on 4" x 6" sleepers 4' on center; outside building walls and roof are covered with rolled roofing over 1" T. & G. sheathing; celotex interior lining. A wood platform runs along the long side.  Overall Dimensions 100' x 17'-4" x 17' Volume 172,400 cu.ft. Area 29,392 sq.ft.  Material Quantity (770-1) Lumber (Framing) 7,400 f.b.s. (Flooring) 11,000 f.b.s. (Sheathing & Decking) 14,000 f.b.s. Roll Roofing 177.44 sqs. Celotex 1/2" 1,400 sq.ft.	Each	1		80,172		80,172	
2730-B	Slab Yard One Slab Yard is provided in the 200 W Area. This building consists of large concrete slabs, open end gable roof buildings and outside pits. This Slab Yard was used by Construction for the fabrication of concrete cell block covers and taken over by Operation to be used for the storage of salvage material and equipment in the 200-W Area. Construction consists of 8" thick, 20' wide and varying in length from 440 ft. to 445 ft. concrete road aprons (6 aprons). The concrete poured in 14' sections with manila joints between sections and each strip separated by three parallel standard gauge railroad tracks serving tracks serving this area. The two large buildings are of open end type with wood frame gable roof. The outside pits are reinforced concrete throughout with structural steel framework supporting the rail over the pit section.  Dimensions Volume Area Overall 100' x 1200' 360,000 sq.ft. Slabs (6) 2 - 20' x 440' x 8" 21,500 sq.ft. 2 - 20' x 400' x 8" 24,000 sq.ft. 2 - 20' x 445' x 8" 25,800 sq.ft. Paint Bldg. 2 - 22' x 1-1' x 18' 38,712 cu.ft. 1,000 sq.ft. Pits 2 - 42' x 12' x 4' 7,472 cu.ft. 1,000 sq.ft.  Material Quantity Lumber (Framing) 10,000 f.b.s.	Each	1		100,813		100,813	

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**PROJECT COST SUMMARY -- MILITARY FUNDS**  
**--FINAL DETAIL COST STATEMENT--**

REPORTING OFFICE SAFFORD ENGINEER W RES PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
2730	Slab Yard (Continued)							
	Material (Sheathing & Decking) Concrete Reinforcing Steel Reinforcing Mesh Roofing Roll Siding Tar Paper Concrete Block (4" x 8" x 16")		Quantity					
2731	Burning Pit	Each	1		1,400		1,400	
	An Open Pit approximately 20 x 20 x 10 ft. deep having 1 on 1 side slopes and a 1-foot wide ramped access road was formerly dug and used by construction for burning scrap lumber and waste materials. This Pit is located at the NW corner of the intersection of Third and E Street in the 200-W Area. It was originally constructed on Cost Code 1C-15, and was taken over by Operation at the close of Construction for similar usage. Therefore, it has been assigned permanent building number 2731.							
	Overall Dimensions		Volume		Area			
	20' x 20' x 10'		20,000 cu.ft.		4,000 sq.ft.			
	Material		Quantity					
	Excavation		3,000 cu.yds. (Approx.)					
2734	Gas Cylinder Storage	Each	2		7,099		3,549	
	One Gas Cylinder Storage building is provided in each of the two 200 Areas E & W. These identical, one-story, frame structures with over hanging roof have four storage spaces. The foundation is concrete; the floor, reinforced concrete; the walls are sheathing, open top and bottom, and the roof is wood with tar and gravel surface.							
	Overall Dimensions		Volume		Area			
	20' x 10' x 12'		2,400 cu.ft.		240 sq.ft.			
	Material		Quantity					
	Framing		336 f.b.s.					
	Sheathing		239 sq.ft.					
	Concrete Flooring		240 sq.ft.					
	Concrete		10 cu.yds.					
	Reinforcing Steel Mesh		40 sq.ft.					
	Roofing		1.5 squares					
2741-E	Gate House & Guard Tower Building	Each	4		19,475		4,869	
2741-E	Gate House & Guard Tower Building Equipment	Each	4		1,925		481	
	Four Gate House and Guard Tower Buildings are provided: one each at the N.P.R and J & E Plants of the 200 North Area. This building is two story, wood frame, cant house type with concrete foundation and first floor, and wood second floor. Exterior walls are drop-siding over sheathing; interior linings and ceiling are asbestos board; and roofing is built-up type.							
	Overall Dimensions		Volume		Area			
	17'0" x 10'0" x 12'0"		2,170 cu.ft.		240 sq.ft.			
	Material		Quantity					
	Framing		1,200 f.b.s.					
	Siding		400 f.b.s.					
	Floor		40 f.b.s.					
	Sheathing and Decking		100 f.b.s.					
	Concrete		2.0 cu.yds.					
	Roofing		2.4 squares					
	Asbestos Board		40 sq.ft.					
	Sub-Total				1,171,306			
	TOTAL 200 AREA BUILDINGS AND EQUIPMENT				70,014,996			

# PROJECT COST SUMMARY --- MILITARY FUNDS --- FINAL DETAIL COST STATEMENT ---

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
MONTH ENDING 31 DECEMBER 1946

CCDR NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
	300 AREA BUILDINGS AND EQUIPMENT: 300 AREA MANUFACTURING BUILDINGS AND EQUIPMENT:							
301	Storage and fabrication Building One Storage and fabrication Building is provided in the 300 Area. This one-story, one-room, frame building has a reinforced concrete foundation and floor. Walls are drop-siding and roof is sheathing covered with built-up roofing with tar and gravel surface.  Overall Dimensions      Volume      Area 40' x 30' x 12' 21,600 cu.ft.      1,236 sq.ft.  Material      quantity Framing      1,340 lbs. Siding      1,340 lbs. Sheathing      1,236 sq.ft. Concrete      27.8 cu.yds. Concrete Flooring      1,236 sq.ft. Reinforcing Steel Mesh      1,440 sq.ft. Roofing      12.4 squares	Each	1		12,487		12,487	
303-B	Fresh Metal Storage	Each	9		127,668		14,174	
303-E	Fresh Metal Storage Equipment Nine Fresh Metal Storage buildings in two types are provided in the 300 Area. 303 A, B, C, D, E, F, G, and H - Eight of the buildings are identical in size, shape and design. These one-story, one-room, rectangular shaped buildings consist of reinforced concrete foundations, floors and roofs and concrete block walls. The roof is tar and gravel surfaced and the doors are metal covered. 303-J - Only one of the frame type of building is provided. This one-story, one-room, building consists of reinforced concrete foundation and floor, drop-siding walls, and built-up felt roofing on sheathing.  A, B, C, D, E, F, G, H, J Overall Dimensions      Volume      Area 48' x 27' x 11' 64' x 41' x 27' 18,500 cu.ft.      1,336 sq.ft. 61,276 cu.ft.      2,666 sq.ft.  Material      quantity A      B      C      D      E      F      G      H      J Framing      377 lbs.      5,400 lbs. Siding           3,000 lbs. Sheathing           6,162 lbs. Concrete      79 cu.yds.      41.7 cu.yds. Concrete Flooring      1,200 sq.ft.      2,540 sq.ft. Reinforcing Steel Mesh           2,500 sq.ft. Concrete Blocks      12 blocks Roofing      13.6 squares      31 squares	Each	9		1,674		186	
304	Chemical Storage Building One Chemical Storage building was provided and later demolished. Construction was concrete block foundations and walls and reinforced concrete floor and roof.  Overall Dimensions      Volume      Area 8' x 6' x 8' 384 cu.ft.      34 sq.ft.	Each	1		1,050		1,050	
306-B	Pile building	Each	1		200,675		200,675	
306-E	Pile building Equipment One Pile Building is provided in the 300 Area. The building is steel framed throughout; walls and partitions are concrete blocks; roof is pre-cast tile with built up felt surface; floor is reinforced concrete set on concrete foundations. Within the building is a concrete inclosed graphite pile 2'-3" x 2'-2" x 24'-6". The graphite section is approximately an 1'- cube.  Overall Dimensions      Volume      Area 163' x 87' x 51' 24,000 cu.ft.      7,000 sq.ft.  Material      quantity Structural Steel      110 tons Concrete      1,042 cu.yds. Concrete Blocks      14,200 blocks Roofing      102 squares	Each	1		824,437		824,437	
313-B	Metal fabrication Building	Each	1		374,220		374,220	
313-E	Metal fabrication Building Equipment One Metal fabrication Building is provided in the 300 Area. This one-story, thickset, T-shaped structure consists of a reinforced concrete foundation and floor, structural steel frame, concrete block wall, and a pre-cast concrete slab roof with tar and gravel surface. Interior partitions are concrete block and concrete brick.  Overall Dimensions      Volume      Area 106' x 186' x 20' 209,700 cu.ft.      33,020 sq.ft.  Material      quantity Structural Steel      66 tons Reinforcing Steel Bars      14 tons Reinforcing Steel Mesh      22,000 sq.ft. Concrete      1,087 cu.yds. Concrete Blocks      21,050 blocks Concrete Bricks      20,000 bricks	Each	1		1,018,544		1,018,544	



**SECRET**  
**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**---FINAL DETAIL COST STATEMENT---**

REPORTING OFFICE HARFORD ENGINEERS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1956

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
300 AREA MANUFACTURING BUILDING AND EQUIPMENT (continued):								
314-B	Press Building	Each	1		154,855		154,855	
314-E	Press Building Equipment	Each	1		1,747,367		1,747,367	
	One Press Building is provided in the 300 Area. This one-story, gable roof building consists of reinforced concrete foundation and floor, structural steel framework, concrete block walls, and corrugated asbestos roof. A 36" continuous roof ventilator extends nearly the full length along the gable. Control Room walls are of asbestos board.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	198' x 203' x 40'	475,250 cu.ft.	14,842 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Structural Steel	123.2 tons						
	Reinforcing Steel Bars	3.5 tons						
	Reinforcing Steel Mesh	21,000 sq.ft.						
	Concrete Flooring	15,000 sq.ft.						
	Concrete	400 cu.yds.						
	Concrete Blocks	24,400 blocks						
	Framing	176 f.b.m.						
	Transite Roofing	180 squares						
	3/16" asbestos board	300 sq.ft.						
318	Process Waste Disposal Trench	Each	1		1,328		1,328	
	One Process Waste Disposal Trench is provided in the 300 Area. This facility consists of V shaped ditch, service road, and fence.							
	<u>Overall Trench</u>	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>				
		150' x 750'	12,600 cu.ft.	37,500 sq.ft.				
	<u>Material</u>	<u>Quantity</u>						
	Lumber	2,000 f.l.m.						
	Acetylene - 6"	1,600 ft.						
	Barb Wire	1,400 lbs.						
	Excavation	475 cu.yds.						
321-E	Separation Building	Each	1		410,568		410,568	
321-E	Separation Building Equipment	Each	1		836,366		836,366	
	One Separation Building is provided in the 300 Area. It is a two-story, partially below grade, reinforced concrete frame, windowless structure, with concrete and concrete block exterior and interior walls. Foundations and floors are reinforced concrete, and also the roof which has a tar and gravel surface. Four large underground steel tanks encased with two-ply membrane waterproofing and completely enclosed in poured concrete are located 120 feet from the building.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	122' x 225' x 33'	323,310 cu.ft.	17,271 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Reinforcing Steel Bars	104 tons						
	Concrete	2,780 cu.yds.						
	Concrete Blocks	11,300 blocks						
	Acid-proof bricks	7,500 bricks						
	Roofing (Built-up)	106.7 squares						
351-E	Primary Substation	Each	1		5,491		5,491	
351-E	Primary Substation Equipment	Each	2		6,762		29,361	
	The Primary Substations are provided in the 300 Area. 351-A - This open frame substation consists of a wooden fenced, gravel surfaced area containing wooden frame bus structures and concrete pads for the transformers. No switch house is provided. 351-B - This substation is similar to 351-A and in addition contains a one-story, one-room switch house. This structure has reinforced concrete foundation and floor, concrete block walls, and concrete slab roof with tar and gravel surface.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	351-A Area	67' x 102'	2,528 sq.ft.					
	351-B Area	65' x 68'	3,614 sq.ft.					
	351-B Switchhouse	23 1/2' x 11' x 17'	4,386 sq.ft.	288 sq.ft.				
	<u>Material</u>	<u>Quantity</u>						
	Reinforcing Steel Bars	351-A	351-B					
	Concrete Flooring	522 tons	126 sq.ft.					
	Concrete	1.6	42 cu.yds.					
	Concrete blocks		45 blocks					
	Roofing		1.3 squares					
363	Transfer Platform	Each	1		878		878	
	One Transfer Platform is provided in the 300 Area. This structure consists of a reinforced concrete wall with wing walls, and removable wood safety rail.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	23' x 8' x 6'	24 cu.ft.	74 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Concrete	47 cu.yds.						

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**PROJECT COST SUMMARY -- MILITARY FUNDS**  
**--FINAL DETAIL COST STATEMENT--**

REPORTING OFFICE HANFORD DISTRICT AREA PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
300 AREA MANUFACTURING BUILDING AND EQUIPMENT (continued):								
382-B	Reservoir and Pump House	Each	1		21,748		21,748	
382-E	Reservoir and Pump House Equipment	Each	1		48,403		48,403	
	One Reservoir and Pump House is provided in the 300 Area. The Reservoir consists of a pre-stressed concrete circular tank, with a pre-stressed concrete roof having a curvature with a radius of 82'. The Pump House is a one-story two-room structure with reinforced concrete foundation, floor, and roof, and concrete block walls. Roofing surface is tar and gravel.							
	Reservoir	Overall Dimensions	Volume	Area				
	Pump House	452' Dia. x 22'	38,000 cu.ft.	1,320 sq.ft.				
		81' x 13 1/2' x 14'	9,660 cu.ft.	688 sq.ft.				
		Material	Quantity					
		Concrete Flooring	663 sq.ft.					
		Concrete Blocks	1,400 blocks					
		Concrete	4.2 cu.yds.					
		Pre-stressed Concrete	93 cu.yds.					
		Reinforcing Steel Bars	0.9 tons					
384-B	Heating Plant	Each	1		4,287		4,287	
384-E	Heating Plant Equipment	Each	1		242,113		242,113	
	One Heating Plant is provided in the 300 Area. This rectangular-shaped building has reinforced concrete foundation, floor, and frame. Walls are concrete block and roof is pre-cast concrete supported on structural steel framing and covered with tar and gravel surfacing. A brick stack, 160' high, with 7' dia. top and 18' dia. bottom is supported on a reinforced concrete base. Steel breeching runs from the two boilers to the stack.							
		Overall Dimensions	Volume	Area				
		104 1/2' x 41 1/2' x 32 1/2'	118,120 cu.ft.	3,706 sq.ft.				
		Material	Quantity					
		Structural Steel	30.7 tons					
		Concrete	317 cu.yds.					
		Concrete Blocks	7,062 blocks					
		Roofing	38 squares					
		Common Bricks	7,800 bricks					
	Sub-total				7,086,309			
300 AREA ADMINISTRATIVE BUILDING AND EQUIPMENT:								
3701-B	Gate House	Each	1		24,719		24,719	
3701-E	Gate House Equipment	Each	1		23,167		23,167	
	One Gate House is provided in the 300 Area. The building, identical with 1701 and 2701, is a two-story frame structure resting on concrete foundations and reinforced concrete floor. First floor walls are unlined, but second floor walls and partitions are lined and ceiling is insulated.							
		Overall Dimensions	Volume	Area				
		41' x 23' x 23'	18,300 cu.ft.	874 sq.ft.				
3704-B	Supervisor's Office	Each	1		26,524		26,524	
3704-E	Supervisor's Office Equipment	Each	1		1,421		1,421	
	One Supervisor's Office Building is provided in the 300 Area. This former construction office building is a one-story, wood frame structure with gypsum board exterior and interior walls, wood floors, and roll roofing.							
		Overall Dimensions	Volume	Area				
		58' x 24' x 15'	27,870 cu.ft.	2,304 sq.ft.				
3706-B	Laboratory & 3706-A - Air Conditioning Equipment Building	Each	1		460,883		460,883	
3706-E	Laboratory & 3706-A - Air Conditioning Equipment Building Equipment	Each	1		807,600		807,600	
	One Laboratory and its adjacent Air Conditioning Equipment Building is provided in the 300 Area. The Laboratory is a large, one-story building roughly rectangular in shape and having a center court at one end and an open court at the other. It has a concrete foundation, a concrete floor with mastic tile covering, and frame walls with drop-siding exterior and asbestos board lining. Roof is built up asphalt felt on sheathing supported on wood rafters. Partitions are asbestos board lined both sides. Along one side of this structure is a laboratory with concrete floor, walls, and roof. The Air Conditioning Equipment Building has a concrete foundation and floor, concrete block walls and partition, and a tar and gravel roof on sheathing supported on wood rafters.							
		Overall Dimensions	Volume	Area				
	Laboratory	377 1/2' x 145' x 21'	611,760 cu.ft.	30,100 sq.ft.				
	Air Conditioning Bldg.	76 1/2' x 24 1/2' x 22'	27,000 cu.ft.	1,800 sq.ft.				
		Material	Quantity					
		Concrete	3706	3706-A				
		Concrete	1,150 cu.yds.	40.8 cu.yds.				
		Concrete Blocks	7,260 blocks	3,660 blocks				
		Reinforcing Steel Bars	4 tons					
		Sheathing	43,760 sq.ft.					
		Gypsum Board	28,280 sq.ft.					
		Asbestos Board	60,400 sq.ft.					
		Mastic Tile Flooring	22,900 sq.ft.					

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**PROJECT COST SUMMARY - MILITARY FUNDS**  
**- FINAL DETAIL COST STATEMENT -**

REPORTING OFFICE JUNIOR ENGINEERS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 JANUARY 1946

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																																																																																													
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3707-B	Change House	Each	2		42,160		31,275																																																																																																													
3707-B	Change House Equipment	Each	2		4,911		2,345																																																																																																													
	<p>3707-A - This building is a combined Change House and Patrol Headquarters. It is a rectangular, one-story, wood-frame building having a concrete floor supported on concrete and concrete block foundations. Exterior of walls are drop-siding and interior has various linings. Roof is tar and gravel on sheathing.</p> <p>3707-B - This building is of same construction.</p> <table border="0"> <tr> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3707-A</td> <td>121' x 38' x 12'</td> <td>57,377 cu.ft.</td> <td></td> <td></td> <td>3,750 sq.ft.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3707-B</td> <td>44' x 16' x 12'</td> <td>6,448 cu.ft.</td> <td></td> <td></td> <td>734 sq.ft.</td> <td></td> <td></td> <td></td> </tr> </table> <table border="0"> <tr> <td><u>Material</u></td> <td><u>Quantity</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Framing</td> <td>3,777 ft.w.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Siding</td> <td>4,760 ft.w.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sheathing</td> <td>7,740 ft.w.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete Flooring</td> <td>3,630 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete</td> <td>61 cu.yds.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete Blocks</td> <td>1,034 blocks</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Roofing</td> <td>30 squares</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Preswood, etc.</td> <td>4,320 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>							3707-A	121' x 38' x 12'	57,377 cu.ft.			3,750 sq.ft.				3707-B	44' x 16' x 12'	6,448 cu.ft.			734 sq.ft.				<u>Material</u>	<u>Quantity</u>								Framing	3,777 ft.w.								Siding	4,760 ft.w.								Sheathing	7,740 ft.w.								Concrete Flooring	3,630 sq.ft.								Concrete	61 cu.yds.								Concrete Blocks	1,034 blocks								Roofing	30 squares								Preswood, etc.	4,320 sq.ft.														
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3708-B	Fire Headquarters	Each	1		20,069		20,069																																																																																																													
3708-B	Fire Headquarters Equipment	Each	1		724		724																																																																																																													
	<p>One Fire Headquarters building is provided in the 300 Area. The building is similar to 3708 and 3709 except Trunk Storage unit only is provided. This one-story structure with 30' hose drying tower attached has concrete foundations and floors, drop-siding walls and roof with roll roofing.</p> <table border="0"> <tr> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3708-B</td> <td>30' x 24' x 14'</td> <td>12,768 cu.ft.</td> <td></td> <td></td> <td>1,710 sq.ft.</td> <td></td> <td></td> <td></td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>							3708-B	30' x 24' x 14'	12,768 cu.ft.			1,710 sq.ft.																																																																																																				
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3713-B	Receiving Storeroom	Each	1		22,547		22,547																																																																																																													
3713-B	Receiving Storeroom Equipment	Each	1		4,155		4,155																																																																																																													
	<p>One Receiving Storeroom building is provided in the 300 Area. This one-story, rectangular-shaped, frame building has concrete and concrete block foundations, concrete floor, drop-siding walls, built-up tar and gravel roof, preswood lined partitions, and wood beams and posts.</p> <table border="0"> <tr> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3713-B</td> <td>30' x 40' x 14'</td> <td>16,800 cu.ft.</td> <td></td> <td></td> <td>4,700 sq.ft.</td> <td></td> <td></td> <td></td> </tr> </table> <table border="0"> <tr> <td><u>Material</u></td> <td><u>Quantity</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete</td> <td>72 cu.yds.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete Siding</td> <td>4,800 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete Block</td> <td>710 blocks</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sheathing</td> <td>7,800 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Roofing</td> <td>40 squares</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Preswood</td> <td>1,200 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>							3713-B	30' x 40' x 14'	16,800 cu.ft.			4,700 sq.ft.				<u>Material</u>	<u>Quantity</u>								Concrete	72 cu.yds.								Concrete Siding	4,800 sq.ft.								Concrete Block	710 blocks								Sheathing	7,800 sq.ft.								Roofing	40 squares								Preswood	1,200 sq.ft.																																									
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3716	Fuel Pumps	Each	1		2,252		2,252																																																																																																													
	Two Gasline Pumps on a concrete island and 20' underground tanks are provided. These were installed originally for Construction use.																																																																																																																			
3717-B	Instrument Shop	Each	1		60,303		60,303																																																																																																													
3717-B	Instrument Shop Equipment	Each	1		121,765		121,765																																																																																																													
	<p>One Instrument Shop is provided in the 300 Area. This one-story, frame building is constructed with concrete foundations, concrete floor, drop-siding over sheathing walls, and built-up felt on sheathing roof. Partitions are lined on one side with preswood and rooms are ceiled with gypsum board.</p> <table border="0"> <tr> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3717-B</td> <td>108' x 413' x 2'</td> <td>136,704 cu.ft.</td> <td></td> <td></td> <td>4,300 sq.ft.</td> <td></td> <td></td> <td></td> </tr> </table> <table border="0"> <tr> <td><u>Material</u></td> <td><u>Quantity</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete</td> <td>70 cu.yds.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Concrete Flooring</td> <td>4,300 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sheathing</td> <td>5,170 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Preswood</td> <td>3,600 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Gypsum Board</td> <td>2,400 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Roofing</td> <td>50.4 squares</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>							3717-B	108' x 413' x 2'	136,704 cu.ft.			4,300 sq.ft.				<u>Material</u>	<u>Quantity</u>								Concrete	70 cu.yds.								Concrete Flooring	4,300 sq.ft.								Sheathing	5,170 sq.ft.								Preswood	3,600 sq.ft.								Gypsum Board	2,400 sq.ft.								Roofing	50.4 squares																																									
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3718-B	First A14 Building	Each	1		15,810		15,810																																																																																																													
3718-B	First A14 Building Equipment	Each	1		2,855		2,855																																																																																																													
	<p>One First A14 Building has been provided in the 300 Area. This rectangular-shaped, one-story, frame building has concrete and concrete block foundations, reinforced concrete floor with asphalt tile surface, drop-siding on sheathing walls and felt covered roof. Partitions are lined on one side with preswood and the ceiling with gypsum board.</p>																																																																																																																			



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**PROJECT COST SUMMARY - MILITARY FUNDS**  
**- FINAL DETAIL COST STATEMENT -**

REPORTING OFFICE NAVFAC ENGINEERS PROJECT DESCRIPTION REPAIR AND RECONSTRUCTION  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
3719	First Aid Building (continued)							
	First Aid Bldg.							
	Overall Dimensions	Volume	Area					
	32' x 200' x 19 1/2'	13,266 cu.ft.	816 sq.ft.					
	Material	Quantity						
	Framing	5,117 f.b.m.						
	Siding	1,180 sq.ft.						
	Sheathing	2,380 sq.ft.						
	Flooring - Concrete	820 sq.ft.						
	Concrete	14 cu.yds.						
	Concrete Blocks	300 blocks						
	Roofing	10 squares						
	Preswood Board	2,307 sq.ft.						
	Gypsum Board	701 sq.ft.						
	Asphalt Tile	80 sq.yds.						
3722-B	Area Shops	Each	2		180,894		90,447	
3722-E	Area Shops Equipment	Each	2		201,411		100,705	
	The Area Shops are provided in the 300 Area.							
	3722 - This one-story, frame structure has concrete foundations and floor, drop-siding over sheathing walls, and built up felt roof on wooden trusses. The interior partitions and ceiling are lined with both preswood and asbestos boards.							
	3722-A - This building is of temporary construction design. Acid frame on wood mud sills, plank flooring, gypsum board exterior walls, and roll roofing over sheathing.							
	Overall Dimensions	Volume	Area					
	120' x 412' x 20'	117,000 cu.ft.	4,780 sq.ft.					
	3722-A	80' x 160' x 12'	153,600 cu.ft.	12,800 sq.ft.				
	Material	Quantity						
	Concrete	124 cu.yds.						
	Reinforcing Steel Mesh	4,500 sq.ft.						
	Reinforcing Steel Bars	0.3 tons						
	Concrete Flooring	4,500 sq.ft.						
	Siding	3,500 f.b.m.						
	Sheathing	6,660 sq.ft.						
	Preswood	2,500 sq.ft.						
	Asbestos Board	800 sq.ft.						
	Roofing	87.6 squares						
3726-B	Propane Storage Building	Each	1		1,482		1,482	
3726-E	Propane Storage Building Equipment	Each	1		4,241		4,241	
	The Propane Storage Building is provided in the 300 Area. This is a wood frame open side gable roof structure supported by six wooden posts on concrete piers. A 2,000 gallon capacity metal tank is supported on concrete piers.							
	Overall Dimensions	Volume	Area					
	30' x 13 1/2' x 14 1/2'	5,240 cu.ft.	436 sq.ft.					
	Material	Quantity						
	Framing	1,075 f.b.m.						
	Siding	100 sq.ft.						
	Sheathing	400 sq.ft.						
	Concrete	5 cu.yds.						
	Roofing	4.8 squares						
3734	Cylinder Storage Building	Each	2		12,267		6,133	
	The Cylinder Storage Buildings are provided in the 300 Area.							
	3734 is a one-story, frame structure divided into four storage bays. The foundation is concrete, the floor reinforced concrete walls are sheathing, open top and bottom, and the overhanging roof is wood with tar and gravel surface.							
	3734-A is a one room, one-story frame structure with concrete foundations; reinforced concrete floor and loading platform 3'-4" above grade; T and G siding walls, open top and bottom and built-up felt on sheathing overhanging roof.							
	Overall Dimensions	Volume	Area					
	23' x 10' x 12'	2,760 cu.ft.	245 sq.ft.					
	3734-A	30' x 26' x 14'	10,700 cu.ft.	780 sq.ft.				
	Material	Quantity						
	Framing	336 f.b.m.						
	Sheathing	93 sq.ft.						
	Siding	636 f.b.m.						
	Concrete Flooring	140 sq.ft.						
	Concrete	10 cu.yds.						
	Reinforcing Steel Bars	0.5 tons						
	Reinforcing Steel Mesh	240 sq.ft.						
	Roofing	3.5 squares						
3741	Box Storage Building	Each	1		8,278		8,278	
	The Box Storage Building is provided in the 300 Area. This building is one-story, one-room, flat roofed and wood frame. The floor is reinforced concrete on concrete foundations. Exterior walls are drop-siding over sheathing and the roof is tar and gravel on sheathing supported on wood frames.							

# PROJECT COST SUMMARY - MILITARY FUNDS - FINAL DETAIL COST STATEMENT -

REPORTING OFFICE NAFEE BUSE & SONS PROJECT DESCRIPTION PLANT MILM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL
3741	Box Storage Building (continued)							
	Overall Dimensions 30' x 14' x 12 1/2'	Volume 7,018 cu.ft.	Area 138 sq.ft.					
	Material	Quantity						
	Concrete	7 cu.yds.						
	Concrete Flooring	420 sq.ft.						
	Reinforcing Steel Bars	420 sq.ft.						
	Sheathing	1,400 f.b.m.						
	Roofing	4.2 squares						
3746-E	Standards Building	Each	1		61,171		61,171	
3746-E	Standards Building Equipment	Each	1		30,077		30,077	
	One Standards Building is provided in the 300 Area. This two-story, wooden frame, multiple gable roof structure is roughly rectangular. The foundation is concrete; the first floor is reinforced concrete. The North end of the building has walls and roof of Hobertson's insulated "C" panel board. The South portion has drop-siding over sheathing walls and built-up felt over sheathing roof. Interior partitions are asbestos except those around the laboratories are reinforced concrete. Attached to the South end is a vault of reinforced concrete construction throughout.							
	Overall Dimensions 37' x 38' x 40'	Volume 58,400 cu.ft.	Area 3,370 sq.ft.					
	Material	Quantity						
	Siding	3,700 f.b.m.						
	Sheathing	7,400 f.b.m.						
	Roof Boards	210 sq.ft.						
	Hobertson's Insulated "C" Panel Board	4,210 sq.ft.						
	Asbestos Board	1,370 sq.ft.						
	Roofing (Built-up)	37 squares						
	Concrete Flooring	3,370 sq.ft.						
	Concrete	230 cu.yds.						
	Reinforcing Steel Bars	5 tons						
3746-E	Control Building	Each	1		35,735		35,735	
3746-E	Control Building Equipment	Each	1		13,117		13,117	
	One Control Building is provided in the 300 Area. This one-story, wood frame building has reinforced concrete foundation and floor, the latter being covered with mastic tile. The walls are drop-siding over sheathing and the roof is built-up felt on sheathing. Partitions are lined with asbestos board and ceilings with gypsum board.							
	Overall Dimensions 72 1/2' x 30 1/2' x 21 1/2'	Volume 37,530 cu.ft.	Area 2,211 sq.ft.					
	Material	Quantity						
	Framing	2,800 f.b.m.						
	Siding	1,530 sq.ft.						
	Sheathing							
	Concrete	47.5 cu.yds.						
	Concrete Flooring	2,200 sq.ft.						
	Reinforcing Steel Bars	0.6 tons						
	Asbestos Board	5,320 sq.ft.						
	Gypsum Board	2,200 sq.ft.						
	Mastic Tile	2,200 sq.ft.						
	Roofing (Built-up)	24.6 squares						
	Sub-Total				2,174,403			
	TOTAL 300 AREA BUILDING AND EQUIPMENT				2,264,732			
	TOTAL PLANT BUILDING AND EQUIPMENT				2,023,796			

# PROJECT COST SUMMARY --- MILITARY FUNDS

## --- FINAL DETAIL COST STATEMENT ---

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE No	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
<b>GENERAL ADMINISTRATIVE AND MAINTENANCE FACILITIES BUILDINGS AND EQUIPMENT:</b>								
<b>700 AREA BUILDINGS AND EQUIPMENT:</b>								
701-B	Date House	Each	1			4,479		4,479
701-E	Date House Equipment	Each	1			76,399		76,399
	One Date House is provided in the 700 Area. It is a one-story wood frame, shed roof structure with concrete foundation walls and floor. Walls are drop-siding over sheathing and roof is built-up felt over sheathing. Walls are lined with gypsum board and ceilings with masonite.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	17' x 41' x 14'	9,260 cu.ft.	603 sq. ft.					
	<u>Material</u>	<u>Quantity</u>						
	Lumber	3,187 f.b.m.						
	Siding	1,160 sq.ft.						
	Concrete	13 cu.ft.						
	Concrete Flooring	560 sq.ft.						
	Masonite	14,400 sq.ft.						
	Gypsum Board	6,066 sq.ft.						
	Roofing	7 squares						
702-B	Telephone Building	Each	1			74,569		74,569
702-E	Telephone Building Equipment	Each	1			16,776		16,776
	One Telephone Building is provided in the 700 Area. This building is a one-story, "L" shaped structure having a reinforced concrete foundation and floor. The precast reinforced concrete slab roof is covered with 1" insulation board and built-up roofing. Walls and partitions are concrete block. In the Switchboard Room the floor is linoleum covered and ceiling is fibrocoustic lined.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	85' x 62' x 18'	74,600 cu.ft.	4,145 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Concrete	150 cu.yds.						
	Reinforcing Steel Bars	19.5 tons						
	Reinforcing Steel Mesh	4,145 sq.ft.						
	Concrete	6,600 blocks						
	Concrete Flooring	4,145 sq.ft.						
	Insulation Board	3,780 sq.ft.						
	Linoleum	193 sq.yds.						
	Fibrocoustic Lining	1,740 sq.ft.						
	Roofing	41.5 squares						
703-B	Administration Building	Each	1			289,573		289,573
703-E	Administration Building Equipment	Each	1			25,623		25,623
	One Administration Building is provided in the 700 Area. This building is a large two-story, wooden frame, gable roof structure with six bays, and a central corridor. One two-story concrete and concrete block vault is located on either side of the building. The foundations are concrete and concrete block. Outside walls are drop-siding over sheathing, and roof is built-up asphalt felt over sheathing. Floors are wood with linoleum covering in toilets only. Wall linings are of prewood and ceilings are of gypsum board. Two brick firewalls separate the building. The two vaults have reinforced concrete foundations, floor, and roof and concrete brick walls. Two enclosed passageways to each vault are provided.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	359' x 205' x 37'	1,190,000 cu.ft.	36,600 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Concrete	230 cu.yds.						
	Concrete Block	6,200 blocks						
	Cement Bricks	50,500 bricks						
	Lumber	207,700 f.b.m.						
	Siding	32,100 f.b.m.						
	Sheathing	143,600 sq.ft.						
	Linoleum	340 sq.yds.						
	Prewood	62,500 sq.ft.						
	Wood Flooring	72,000 sq.ft.						
	Gypsum Board	72,000 sq.ft.						
	Roofing	373 squares						
704	Supervisors' Office	Each	1			9,890		9,890
	One Supervisors' Office building is provided in the 700 Area. This is a one-story frame building with drop-siding on exterior of walls and asbestos board and gypsum board on interior. The roof is built up asphalt felt over sheathing. Foundation and floor are concrete.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	34'-6" x 61'-5" x 16'-6"	35,013 cu.ft.	2,122 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Lumber	700 f.b.m.						
	Drop Siding	2,040 sq.ft.						
	Concrete	60 cu.yds.						
	Asbestos Board	5,475 sq.ft.						
	Gypsum Board	1,868 sq.ft.						
	Roofing	13 squares						

1 floor only (?)

~~SECRET~~  
**PROJECT COST SUMMARY -- MILITARY FUNDS**  
**--FINAL DETAIL COST STATEMENT--**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO.	ACCOUNT DESCRIPTION	UNIT	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			PLANNED	ACTUAL	ACTUAL	ACTUAL		
700 AREA BUILDINGS AND EQUIPMENT (CONTINUED):								
705-E	Employment Building	Each		1		45,776		45,776
705-E	Employment Building Equipment	Each		1		16,039		16,039
	<p>One Employment Building is provided in the 700 Area. This is an "L" shaped, one-story, wood frame, gable roof structure. Foundations are concrete and concrete block. Floors are wood, with linoleum covering in toilets only. Outside walls are drop-siding over sheathing, and interior lining and ceilings are sheet rock and plaster. The roof is built-up felt on sheathing.</p> <p><u>Overall Dimensions</u>                      <u>Volume</u>                      <u>Area</u>                      134' x 131' x 26'                      198,400 cu.ft.                      7,300 sq.ft.</p> <p><u>Material</u>    <u>Quantity</u></p> <p>Lumber    48,100 f.b.m.                      Drop Siding                                      6,500 sq.ft.                      Concrete    24 cu.yds.                      Concrete Blocks                                  1,800 blocks                      Sheet Rock Wallboard                          11,831 sq.ft.                      Plaster    2,775 sq.ft.                      Linoleum    160 sq.yds.                      Roofing    82 squares</p>							
706-B	Laboratory	Each		1		25,309		25,309
706-B	Laboratory Equipment	Each		1		35,529		35,529
	<p>One Laboratory building is provided in the 700 Area. This one-story, wood frame building has a reinforced concrete foundation and floor, drop-siding over sheathing walls, and built-up felt on sheathing roof. The interior linings are of masonite and ceilings are of gypsum board.</p> <p><u>Overall Dimensions</u>                      <u>Volume</u>                      <u>Area</u>                      48' x 28' x 25'                      44,360 cu.ft.                      2,158 sq.ft.</p> <p><u>Material</u>    <u>Quantity</u></p> <p>Framing    4,120 f.b.m.                      Siding    2,040 f.b.m.                      Sheathing    4,560 f.b.m.                      Concrete Flooring                                  2,150 sq.ft.                      Reinforcing Steel Mesh                          2,210 sq.ft.                      Concrete    48 cu.yds.                      Blanket Insulation                                  2,210 sq.ft.                      Masonite Board                                  3,650 sq.ft.                      Gypsum Board                                  2,040 sq.ft.                      Asphalt Tile                                      227 sq.yds.                      Roofing    26 squares</p>							
707-B	Change House	Each		1		21,497		21,497
707-B	Change House Equipment	Each		1		1,807		1,807
	<p>One Change House is provided in the 700 Area. This building is a wooden frame one-story structure with concrete foundation and floor, drop siding over sheathing walls, and built-up gravel surfaced roofing over sheathing. Wall and partition linings are masonite and asbestos board.</p> <p><u>Overall Dimensions</u>                      <u>Volume</u>                      <u>Area</u>                      30' x 79' x 20'                      48,600 cu.ft.                      2,486 sq.ft.</p> <p><u>Material</u>    <u>Quantity</u></p> <p>Lumber    6,092 f.b.m.                      Siding    2,825 sq.ft.                      Concrete    79 cu.yds.                      Masonite    2,640 sq.ft.                      Asbestos Board                                  2,376 sq.ft.                      Roofing    25 squares</p>							
712-B	Permanent Record Storage Building	Each		2		44,563		22,271
712-B	Permanent Record Storage Building Equipment	Each		2		6,376		3,187
	<p>Two Permanent Record Storage Buildings are provided in the 700 Area adjacent to the Administration Building. Each building is a long metal hutment supported on a concrete floor with thickened edges.</p> <p><u>Overall Dimensions</u>                      <u>Volume</u>                      <u>Area</u>                      277' x 21'-9" x 12'-3"                      52,400 cu.ft.                      6,000 sq.ft.</p> <p><u>Material</u>    <u>Quantity (One-bldg.)</u></p> <p>Concrete Flooring                                  6,000 sq.ft.                      Hutment    1 (276' long)</p>							
713-B	Store Rooms	Each		2		99,000		49,500
713-B	Store Rooms Equipment	Each		2		32,592		16,296
	<p>Two Store Rooms are provided in the 700 Area: 713 - Central Receiving Storeroom, and 713-A - Laboratory Storeroom.</p> <p>713 - This building is a one-story, wood frame structure with concrete foundation and floor. Exterior walls are drop-siding over sheathing, and roof is built-up on sheathing. Interior walls and partitions are lined with masonite except asbestos board is installed in toilet rooms. Gypsum board is installed on ceilings of two private offices and women's rest room.</p> <p>713-A - This one-story building is of similar construction. In one corner is a solvent storage room with concrete roof and concrete block walls. Concrete loading platforms are attached to both buildings.</p>							

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**PROJECT COST SUMMARY - MILITARY FUNDS**  
**-FINAL DETAIL COST STATEMENT-**

REPORTING OFFICE HAMFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

C. DE M.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
713	Store Rooms (Continued)							
	713 Overall Dimensions							
	713-A 43' x 220' x 25'							
	43' x 104' x 30'							
	<u>Material</u>		<u>Quantity</u>					
	Lumber	713	713-A					
	Drop Siding	48,314 f.b.m.	15,424 f.b.m.					
	Concrete	9,600 sq.ft.	3,264 sq.ft.					
	Concrete Blocks	330 cu.yds.	125 cu.yds.					
	Asbestos Board	7,160 sq.ft.	3,810 sq.ft.					
	Gypsum Board	590 sq.ft.	3,960 sq.ft.					
	Masonite	10,480 sq.ft.	3,960 sq.ft.					
	Blanket Insulation		40 squares					
	Roofing	176 squares						
714	Material Shed	Each	1		19,577		19,577	
	One Material Shed is provided in the 700 Area. The building is a wood-frame, post and girder structure on concrete foundation walls, footings, and frost walls. Roof is sheathing covered with built up roofing. (ffice has drop siding exterior and asbestos board interior walls and a concrete floor. The two ends are closed with drop siding, one side with barn boards and one side open. A storage loft at one end has 2" plank floor.							
	Overall Dimensions							
	25' x 101'-6" x 22'							
	Volume	93,697 cu.ft.	Area	5,037 sq.ft.				
	<u>Material</u>		<u>Quantity</u>					
	Lumber	10,885 f.b.m.						
	Drop Siding	925 sq.ft.						
	Concrete	36.3 cu.yds.						
	Asbestos Board	764 sq.ft.						
	Roofing	70.5 squares						
715-B	Oil and Paint Storage	Each	1		7,070		7,070	
715-E	Oil and Paint Storage Equipment	Each	1		1,270		1,270	
	One Oil and Paint Storage is provided in the 700 Area. It consists of the building proper, an unloading platform, and an open concrete paved storage area. The building is a one-story, frame structure with concrete floor resting on a concrete foundation. Walls are sheathing and drop-siding and roof is sheathing covered with built-up roofing. A wood frame structure extending from the unloading platform to storage area supports a monorail.							
	Building	Overall Dimensions	Volume	Area				
	Storage Area	25' x 30' x 20'	12,562 cu.ft.	750 sq.ft.				
	Platform	25' x 60'		1,900 sq.ft.				
		10' x 10'		100 sq.ft.				
	<u>Material</u>		<u>Quantity</u>					
	Lumber	3,470 f.b.m.						
	Drop Siding	1,100 sq.ft.						
	Concrete	50 cu.yds.						
	Roofing	8.8 squares						
716-B	Automotive Repair Shop	Each	1		58,877		58,877	
716-E	Automotive Repair Shop Equipment	Each	1		17,493		17,493	
	One Automotive Repair Shop is provided in the 700 Area. This one-story frame, rectangular-shaped building has concrete foundations and floors, drop-siding over sheathing walls with masonite, asbestos, and gypsum board linings. The roof above the Garage and Repair Shop area is built-up felt supported on wood trusses. Roofs over either end are built-up tar and gravel on decking and rafters.							
	Overall Dimensions	Volume	Area					
	158' x 65 1/2' x 30'	158,650	10,340 sq.ft.					
	<u>Material</u>		<u>Quantity</u>					
	Framing	37,480 f.b.m.						
	Siding	4,370 f.b.m.						
	Sheathing	25,070 f.b.m.						
	Concrete	173 cu.yds.						
	Reinforcing Steel Bars	3 tons						
	Reinforcing Steel Mesh	10,340 sq.ft.						
	Blanket Insulation	58 sq.ft.						
	Masonite	5,600 sq.ft.						
	Asbestos Board	1,460 sq.ft.						
	Gypsum Board	1,260 sq.ft.						
	Roofing	104 squares						
717-B	Fabrication Shops	Each	2		112,726		56,363	
717-E	Fabrication Shops Equipment	Each	2		188,748		94,374	
	Two Fabrication Shops are provided in the 700 Area - 717 and 717-A. These buildings are quite similar in construction and design, except 717-A has shed roof addition. Both are one-story, frame, rectangular-shaped structures having concrete foundations and reinforced concrete floors, drop-siding over sheathing walls, and built-up felt roofing on sheathing supported on wood trusses. In 717 interior partitions are lined with pressedwood and the rooms with the exception of Fabrication Shop are celled with gypsum board. In 717-A wall and partition linings and ceilings are asbestos board, and insulation is provided in the ceiling. In 717-A floors are covered with linoleum.							



# PROJECT COST SUMMARY --- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT---

REPORTING OFFICE HAMFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE	ACCOUNT	DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
				ACTUAL		ACTUAL		ACTUAL	
717	Fabrication Shops (Continued)								
		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
717		90' x 41 1/2' x 32'	101,000 cu.ft.	3,740 sq.ft.					
717-A		90' x 59 1/2' x 32'	117,600 cu.ft.	4,610 sq.ft.					
		<u>Material</u>	<u>Quantity</u>						
		Framing	11,600 f.b.m.	24,700 f.b.m.					
		Sheathing	7,400 f.b.m.	8,220 f.b.m.					
		Siding	3,850 f.b.m.	4,270 f.b.m.					
		Concrete	129 cu.yds.	84.3 cu.yds.					
		Concrete Flooring	3,740 sq.ft.	4,610 sq.ft.					
		Reinforcing Steel Bars	1.3 tons	2.2 tons					
		Reinforcing Steel Mesh		4,600 sq.ft.					
		Preadwood	3,100 sq.ft.						
		Gypsum Board	2,000 sq.ft.						
		Roofing	43.2 squares	52.4 squares					
		Asbestos Board		14,600 sq.ft.					
		2" Balsam Insulation		6,260 sq.ft.					
		Linoleum		415 sq.yds.					
720-B	Patrol Headquarters			Each	1		60,769		60,769
720-E	Patrol Headquarters Equipment			Each	1		5,231		5,231
	One Patrol Headquarters building with Jail attached is provided for the 700 Area, but is located outside the fence. This former construction office building is an "T" shaped wood-frame structure having wood foundations and floors, drop-siding exterior walls on wood sheathing and framing, gypsum board interior linings, and roll roofing. Jail is of concrete throughout, with gravel slab type roofing.								
		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
		25 1/2' x 84'-8" x 15'	192,630 cu.ft.	10,250 sq.ft.					
721-B	Military Intelligence Building			Each	1		33,862		33,862
721-E	Military Intelligence Building Equipment			Each	1		3,564		3,564
	One Military Intelligence Building is provided in the 700 Area. This is a one-story, "T" shaped, frame structure containing 17 rooms. The wood floor is supported by concrete block foundation walls. Walls are drop-siding on sheathing and roof is built-up felt on sheathing. Wall and partition linings are preadwood, gypsum board, and asbestos board. Some insulation and acoustic tile is installed.								
		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
		105' x 70' x 24 1/2'	90,140 cu.ft.	4,340 sq.ft.					
		<u>Material</u>	<u>Quantity</u>						
		Framing	15,580 f.b.m.						
		Siding	3,500 f.b.m.						
		Flooring	8,450 f.b.m.						
		Concrete	4,340 f.b.m.						
		Concrete Blocks	13 cu.yds.						
		Masonite	2,100 blocks						
		Gypsum Board	5,900 sq.ft.						
		Asbestos Board	2,820 sq.ft.						
		Roofing	960 sq.ft.						
		Acoustic Tile	50 squares						
			33.5 sq.yds.						
722-B	Area Shops			Each	12		150,098		12,508
722-E	Area Shops Equipment			Each	12		108,694		9,058
	Twelve Area Shop buildings are provided in the 700 Area.								
	722-A - This one-story, wood frame, "T" shaped building has reinforced concrete foundation walls and floor, drop-siding over sheathing walls, and built-up felt on sheathing roof. Interior linings are concrete block and asbestos board. At one corner a cement brick wall separates the structure from gas storage sheds.								
	722-C - This rectangular-shaped, building, used as a carpenter's shop, is similar in construction to the 722-A building. There are reinforced concrete platforms at either end of the building and a small dust collector building at one end.								
	722-D, E, F, G, H, I, J, K, L, M, N, P, R - These ten buildings are similar butments supported on reinforced concrete floors and three foot high sidewalls.								
		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
722-A		90' x 84 1/2' x 30'	126,800 cu.ft.	5,770 sq.ft.					
722-C		90' x 41 1/2' x 32'	100,800 cu.ft.	3,735 sq.ft.					
722-B, etc.		48' x 22' x 14'	12,570 cu.ft.	1,956 sq.ft.					
		<u>Material</u>	<u>Unit</u>	<u>Quantity</u>	<u>(one-building)</u>				
		Lumber	f.b.m.	8,200					
		Siding	sq.ft.	5,100	3,760				
		Sheathing	sq.ft.	10,380	7,600				
		Concrete Flooring	sq.ft.	5,070	3,735	1,008			
		Reinforcing Steel Mesh	sq.ft.	5,070	3,735	1,008			
		Reinforcing Steel Bars	tons	0.7	0.8				
		Concrete	cu.yds.	160	110	26.3			
		Concrete Blocks	blks.	1,090					
		Concrete Bricks	brks.	5,600					
		Asbestos Board	sq.ft.	2,500					
		Gypsum Board	sq.ft.		465				
		Preadwood	sq.ft.		240				
		Roofing	sq.s.	64	42.3				
		Metal Butment	ea.		1				

~~SECRET~~  
**PROJECT COST SUMMARY - MILITARY FUNDS**  
**- FINAL DETAIL COST STATEMENT -**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
700 AREA BUILDINGS AND EQUIPMENT (CONTINUED):								
723-B	Laundry	Each	1		46,120		46,120	
723-E	Laundry Equipment	Each	1		54,515		54,515	
	One Laundry Building is provided in the 700 Area. This one-story, wood frame, rectangular building contains a large laundry area and a number of smaller rooms. The building has a reinforced concrete foundation and floor, drop-siding over sheathing walls, and sheathing with built-up tar and gravel surface roof. Central portion of roof is raised above rest of roof. Interior wall linings are preadwood and asbestos board.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	90' x 75' x 21 1/2'	143,900 cu.ft.	6,750 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Framing	14,900 f.b.m.						
	Siding	6,200 f.b.m.						
	Sheathing	14,000 f.b.m.						
	Concrete	71 cu.yds.						
	Concrete Flooring	6,750 sq.ft.						
	Reinforcing Steel Mesh	6,820 sq.ft.						
	Reinforcing Steel Bars	1.7 tons						
	Preadwood	5,530 sq.ft.						
	Asbestos Board	600 sq.ft.						
	Roofing	71 squares						
724-B	Printing Plant Building	Each	2		15,864		7,932	
724-E	Printing Plant Building Equipment	Each	2		7,298		3,649	
	Two Printing Plant Buildings are provided in the 700 Area. Each building is a metal hutment supported on concrete floors and three foot high concrete side walls to increase headroom.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	One Hutment	12,570 cu.ft.	1,008 sq.ft.					
	<u>Material</u>	<u>Quantity (One-building)</u>						
	Concrete Flooring	1,008 sq.ft.						
	Reinforcing Steel Mesh	1,008 sq.ft.						
	Reinforcing Steel Bars	0.8 ton						
	Concrete	26.3 cu.yds.						
	Metal Hutment	1 ea.						
729-B	Spare Machinery Storage Building	Each	1		22,404		22,404	
729-E	Spare Machinery Storage Building Equipment	Each	1		3,151		3,151	
	One Spare Machinery Storage Building is provided in the 700 Area. This one-story, wood frame, shed roof structure has concrete foundation walls and floor, drop siding walls, and built-up felt, gravel surfaced roofing over sheathing roof. The office ceiling and wall lining is asbestos board. One concrete loading platform is provided.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	126' x 48' x 18'	13,203 cu.ft.	6,068 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Lumber	24,000 f.b.m.						
	Siding	3,538 sq.ft.						
	Concrete	150 cu.yds.						
	Asbestos Board	416 sq.ft.						
	Roofing	60 squares						
734	Cylinder Storage Building	Each	1		7,241		7,241	
	One Cylinder Storage Building is provided in the 700 Area. This one-story, wood frame, rectangular building is constructed with reinforced concrete foundation, floor, and leading platform. The walls, open top and bottom, are of drop-siding and the flat roof has built-up tar and gravel surface over sheathing. A concrete block wall separates the inflammable gas storage area from the empty cylinder area.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	55' x 34' x 17'	31,800 cu.ft.	1,870 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Siding	970 sq.ft.						
	Sheathing	1,870 sq.ft.						
	Concrete	59 cu.yds.						
	Concrete Flooring	1,870 sq.ft.						
	Reinforcing Steel Mesh	1,870 sq.ft.						
	Concrete Blocks	340 blocks						
	Roofing	19.1 squares						
744	Brick Storage Building	Each	1		13,302		13,302	
	One Brick Storage Building is provided in the 700 Area. It is a one-story, wood frame structure with earth floor. Foundation walls and piers are concrete, walls are drop-siding, and roof is built-up felt, gravel surfaced, over sheathing.							
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>					
	126' x 48' x 18'	13,203 cu.ft.	6,068 sq.ft.					
	<u>Material</u>	<u>Quantity</u>						
	Lumber	17,000 f.b.m.						
	Siding	4,176 sq.ft.						
	Concrete	30 cu.yds.						
	Roofing	60.5 squares						

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# PROJECT COST SUMMARY --- MILITARY FUNDS

## --- FINAL DETAIL COST STATEMENT ---

REPORTING OFFICE JAMES R. ENGINEER BUREAU PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CLASS NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
751	<b>700 AREA BUILDINGS AND EQUIPMENT (CONTINUED):</b>  Primary Substation One Primary Substation is provided for the 700 Area. This station is composed of a wooden fenced, gravel surfaced area in which equipment is supported on poles or concrete pads.  <div style="display: flex; justify-content: space-between;"> <div> <u>Overall Dimensions</u> 100' x 125'                             </div> <div> <u>Area</u> 12,500 sq.ft.                             </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <u>Material</u> Concrete Lumber Poles                             </div> <div> <u>Quantity</u> 18 cu.yds. 4,500 f.b.m. 1,010 lineal feet                             </div> </div>	Each	1		52,157		52,157	
784-B	Boiler House	Each	1		275,098		275,098	
784-E	Boiler House Equipment  784 - One Boiler House is provided in the 700 Area. This three-story, structural steel frame, concrete block, rectangular-shaped structure is supported on concrete foundation walls and has a reinforced concrete floor. The roof is precast cement tile covered with built-up asphalt felt. A 20' tall, reinforced concrete stack, 14 1/2' bottom dia. and 9 1/2' top dia. is supported on a reinforced concrete base. Steel breeching runs from the boilers to the stack. A reinforced concrete coal crusher, and 8" ash pipe line, a live ash storage silo, a deserator, and a flash tank are provided.  784-A - One Emergency Generator and Water Softening Building is provided in the 700 Area. This is a one-story, structural steel frame, concrete block structure with reinforced concrete foundation and floor. One portion of roof is precast concrete slab and the other is reinforced concrete, both surfaced with tar and gravel. A reinforced concrete clearwell is beneath the floor.  <div style="display: flex; justify-content: space-between;"> <div> <u>Overall Dimensions</u> 137' x 45' x 57' 48' x 24' x 25'                             </div> <div> <u>Volume</u> 216,000 cu.ft. 24,400 cu.ft.                             </div> <div> <u>Area</u> 4,815 sq.ft. 1,128 sq.ft.                             </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <u>Material</u> Concrete Reinforcing Steel Bars Structural Steel Concrete Blocks Concrete Bricks Roofing Reinforcing Steel Mesh                             </div> <div> <u>Quantity</u> 784 805 cu.yds. 45.4 tons 178 tons 15,500 blocks 12,000 bricks 48.2 squares                             </div> <div> <u>784-A</u> 95 cu.yds. 6 tons 2,630 blocks 11.3 squares 1,440 sq.ft.                             </div> </div>	Each	1		623,987		623,987	
790	Fire Equipment This account covers the cost of special non-expendable Fire Equipment not allocated for use in a specific building or facility including but not limited to:  Fire Extinguisher Axe Special Nozzles Hand Pumps Barrels Pump Cans Masks Etc.	LS	1		181,058		181,058	
797	Hospital and First Aid Equipment This account covers the cost of that non-expendable Hospital and First Aid Equipment such as:  Refrigerators Dispensers Cots Mattresses Inhalators Short Wave Machine Fracture Table Surgical Equipment Etc.	LS	1		142,975		142,975	
798	Police Equipment This account covers the cost of that non-expendable Police Equipment not allocated for use in any specific building or facility including but not limited to:  Revolvers Binoculars Cartridge Carriers Holsters Gas Units Radio Equipment Hand Cuffs Etc.	LS	1		58,409		58,409	
799	Office Equipment This account covers the cost of all non-expendable Office Equipment.	LS	1		744,277		744,277	
<b>TOTAL GENERAL ADMINISTRATIVE AND MAINTENANCE FACILITIES BUILDINGS AND EQUIPMENT</b>							3,339,554	
<b>TOTAL MAIN PLANT</b>							253,517,191	

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**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--- FINAL DETAIL COST STATEMENT ---**

REPORTING OFFICE BARFORD, FINE, NEW, HOUSE PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1948

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																																																																																		
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<u>1100 AREA:</u>																																																																																																									
1102	Roads and Grading This account covers roads, grading, walks, curbs, gutters and parking areas within the Village limits. Most of the roads in Highland are new construction and have bituminous surfacing. The shot and cover type is used on all except the more heavily traveled which have 2" road mix. A few small bridges and culverts are included. Curbs and gutters are of concrete in the business district and along certain key roads and all others are a bituminous road mix. Walks in business area are concrete and in residential areas are bituminous. Parking areas are surfaced with shot and cover method. Logs and posts are provided except in those used for residential parking.	LS	1		4,407,514		4,407,514																																																																																																		
	<table border="0"> <tr> <td>Item</td> <td>Quantity</td> </tr> <tr> <td>Roads - (New)</td> <td>4 1/2 miles</td> </tr> <tr> <td>(Existing)</td> <td>4 miles</td> </tr> <tr> <td>Curbs &amp; Gutters (All Types)</td> <td>5.2 miles</td> </tr> <tr> <td>Walks (All Types)</td> <td>100 miles</td> </tr> <tr> <td>Parking Areas</td> <td>237,100 sq.yds.</td> </tr> </table>	Item	Quantity	Roads - (New)	4 1/2 miles	(Existing)	4 miles	Curbs & Gutters (All Types)	5.2 miles	Walks (All Types)	100 miles	Parking Areas	237,100 sq.yds.																																																																																												
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1103	Water and Fire Protection The Drinking Water and Fire Protection Water Lines are one and the same system in the Village of Highland. There are approximately 107 total miles of Water Lines and 450 Fire Hydrants within the village. Water is obtained from deep wells (Code 1188), passes through collection headers to two large 1,000,000 gals. underground water storage reservoirs (Code 1182), through three 100,000 gals. steel overhead storage tanks and thence to all parts of the village. The system operates automatically at 60% P.S.I. and can be stepped up to 80% P.S.I. in case of emergency. All lines are either iron or steel, ranging in size from 1" to 14", and are laid at a minimum depth of 4' below the surface.	LS	1		1,436,917		1,436,917																																																																																																		
1104	Sewer Lines Sewer Lines are provided in the village for the removal of sanitary sewage and a small amount of storm water. There is approximately 211,000 lineal feet of lines ranging in size from 4" to 14". Pipe is both vitrified clay and concrete and man-holes are brick. In collecting and carrying the sewage to the Sewage Disposal Plant (Code 1124) only one lift station is required. This station consists of pumps having total capacity of 2,000 G.P.M., and a concrete reservoir having a frame and concrete enclosed operating floor.	LS	1		1,553,417		1,553,417																																																																																																		
1105	Electrical Distribution Lines Electrical Distribution Lines are provided within the 1100 Area. This system is comprised of 2,300V, 440/220V, and 220/110V lines. Distribution lines are of 3-wire, cross arm, single pole construction. There are approximately 470,000 lineal feet of wire (single wire calculation) and 2,300 wood poles. Street lighting for the village is also included in this order.	LS	1		661,019		661,019																																																																																																		
	<table border="0"> <tr> <td>Material</td> <td>Quantity</td> </tr> <tr> <td>Total length of conductor</td> <td>186 miles</td> </tr> <tr> <td>Single wire calc.</td> <td></td> </tr> <tr> <td>Total number of Power and Light poles</td> <td>2300</td> </tr> <tr> <td>Total number of street lights</td> <td>410</td> </tr> </table>	Material	Quantity	Total length of conductor	186 miles	Single wire calc.		Total number of Power and Light poles	2300	Total number of street lights	410																																																																																														
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1106	Rehabilitation of Present Residences This work covered 140 existing tract houses and consisted of miscellaneous electrical work, replacing window glass, installing window screens, painting interior, replacing flooring, installing bathrooms and sanitary piping in houses in village area, removing unsafe out buildings, and other miscellaneous items.	Each	140		215,545		1,542																																																																																																		
1106	Staff Residences - Single Family Units Construction Costs (Less Items below)	Each	643		3,317,740		5,159																																																																																																		
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	643 Single Family Residences are provided in Highland Village. These houses, all single family dwellings, are of six conventional types, differing in size and layout but are similar in structural details. Foundations are concrete and concrete block and approximately half the cellar is paved with concrete. Super-structures are frame having siding or wood shakes exterior and gypsum board interior walls; natural stained hard wood floors over subflooring; and wood or composition shingle roofs.	Each	643		4,280,387		6,656																																																																																																		
	<table border="1"> <thead> <tr> <th>Description of Material</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>Number of Units</td> <td>8</td> <td>64</td> <td>260</td> <td>8</td> <td>260</td> <td>43</td> </tr> <tr> <td>Number of Bedrooms</td> <td>4</td> <td>3</td> <td>3</td> <td>4</td> <td>3</td> <td>4</td> </tr> <tr> <td>Number of Stories</td> <td>1 1/2</td> <td>1</td> <td>2</td> <td>2</td> <td>1</td> <td>2</td> </tr> <tr> <td>Overall Dimensions</td> <td>30x35x32</td> <td>41x39x22 1/2</td> <td>24x26x27</td> <td>27x35x30</td> <td>36x37x22 1/2</td> <td>32x24x30 1/2</td> </tr> <tr> <td>Volume (Cubic Feet)</td> <td>29,000</td> <td>33,740</td> <td>18,600</td> <td>22,500</td> <td>21,400</td> <td>21,100</td> </tr> <tr> <td>Floor Area (sq.ft.)</td> <td>1,280</td> <td>1,420</td> <td>1,140</td> <td>1,820</td> <td>958</td> <td>1,636</td> </tr> <tr> <td>Cellar Floor Area (Sq.ft.)</td> <td>40</td> <td>50</td> <td>314</td> <td>480</td> <td>307</td> <td>304</td> </tr> <tr> <td>Concrete (cu.yds.)</td> <td>26</td> <td>34</td> <td>24.8</td> <td>31</td> <td>36</td> <td>8</td> </tr> <tr> <td>Chimney Brick</td> <td>889</td> <td>74</td> <td>962</td> <td>1,018</td> <td>707</td> <td>1,029</td> </tr> <tr> <td>Framing (f.b.m.)</td> <td>8,854</td> <td>8,067</td> <td>7,257</td> <td>8,200</td> <td>6,894</td> <td>6,601</td> </tr> <tr> <td>Flooring (sq.ft.)</td> <td>1,280</td> <td>1,420</td> <td>1,140</td> <td>1,820</td> <td>1,100</td> <td>1,676</td> </tr> <tr> <td>Sheathing (f.b.m.)</td> <td>3,024</td> <td>3,260</td> <td>3,182</td> <td>3,600</td> <td>3,580</td> <td>3,600</td> </tr> <tr> <td>Roofing (squares)</td> <td>11</td> <td>16</td> <td>7.8</td> <td>12.6</td> <td>13.6</td> <td>9.3</td> </tr> </tbody> </table>	Description of Material	D	E	F	G	H	L	Number of Units	8	64	260	8	260	43	Number of Bedrooms	4	3	3	4	3	4	Number of Stories	1 1/2	1	2	2	1	2	Overall Dimensions	30x35x32	41x39x22 1/2	24x26x27	27x35x30	36x37x22 1/2	32x24x30 1/2	Volume (Cubic Feet)	29,000	33,740	18,600	22,500	21,400	21,100	Floor Area (sq.ft.)	1,280	1,420	1,140	1,820	958	1,636	Cellar Floor Area (Sq.ft.)	40	50	314	480	307	304	Concrete (cu.yds.)	26	34	24.8	31	36	8	Chimney Brick	889	74	962	1,018	707	1,029	Framing (f.b.m.)	8,854	8,067	7,257	8,200	6,894	6,601	Flooring (sq.ft.)	1,280	1,420	1,140	1,820	1,100	1,676	Sheathing (f.b.m.)	3,024	3,260	3,182	3,600	3,580	3,600	Roofing (squares)	11	16	7.8	12.6	13.6	9.3						
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**SECRET**  
**PROJECT COST SUMMARY - MILITARY FUNDS**  
**- FINAL DETAIL COST STATEMENT -**

REPORTING OFFICE HARFORD ENGINEER WAFS PROJECT DESCRIPTION HEAT TREAT PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIF OF MEASUREMENT	QUANTITIES		TOTAL COSTS		UNITS COSTS		
			ACTUAL		ACTUAL		ACTUAL		
1108	Staff Residences - Single Family Units (continued)								
	Description of Material								
	Siding & Shakes (squares)		2	14	12.8	17.5	18.6	11.8	19.8
	Wallboard (sq.ft.)		3,070	3,260	8,260	8,100	3,300	4,400	4,400
	Insulation (sq.ft.)		2,000	3,020	3,132	4,400	1,480	2,640	2,640
	Linoleum (sq.yds.)		3.4	12	10.5	16	13	16.6	16.6
1109	Staff Residences - Duplex Units								
	Construction Costs (less items below)		Each	1866		7,306,314		3,936	
	Water Heater			49		40,944			
	Linoleum and Screens			34		64,322			
	Fayrcil, Installation of Above			6"		14,380			
	Indirect Costs (Distributive)			1,019		1,388,553			
	Grand Total		Each	1866		2,177,247		1,173	
			Each	1866		1,473,567		5,130	
	328 Duplex Dwelling Units are provided in Richland Village. These homes, two families in a unit, are of two conventional types similar in structural details, but differing in size and layout. The "A" type has two stories, with three bedrooms and bath on second floor. The "B" type has one story with two bedrooms in addition to the living room, dinette kitchen, and bath. Foundations are concrete and concrete block, the half sealer is paved with concrete, superstructure is wood frame with shakes and siding exterior and gypsum board interior, floors are soft wood without subflooring, and roofs have composition shingles.								
	Quantities and Dimensions are for half unit (one family)								
	Description of Material	Type A	Type B						
	Number of Family Units	16	1,440						
	Number of Bedrooms	3	2						
	Number of Stories	2	1						
	Overall Dimensions	26'x33'x32'	24'x36'x25'						
	Volume (cu.ft.)	16,836	17,540						
	Floor Area (sq.ft.)	1,340	480						
	Cellar Floor Area (sq.ft.)	231	480						
	Concrete	9.8	17.8						
	Concrete Blocks	340	1,400						
	Chimney Bricks	1,025	745						
	Framing (f.b.e.)	4,900	3,878						
	Flooring (sq.ft.)	1,080	480						
	Sheathing (f.b.w.)	3,740	3,200						
	Roofing (squares)	14.8	7						
	Siding & Shakes (squares)	11.45	11						
	Wallboard (sq.ft.)	7,460	3,300						
	Insulation (sq.ft.)	1,700	1,480						
	Linoleum (sq.yds.)	11	9						
1110	Dormitories		Each	25		1,720,316		41,172	
	Twenty-five Dormitory Buildings are provided in the 1100 Area, eight for men and seventeen for women. The two types are nearly identical, being two-story, wooden-frame, gable roof, rectangular shaped structures, and containing a vestibule, lounge room, storage room, wash room, toilet, shower, and fourteen bedrooms on ground floor and storage room, wash room, toilet, shower and seventeen bedrooms on second floor. The building is supported on concrete piers and concrete block foundation walls on concrete footings. Exterior walls are a combination of vertical siding and horizontal siding. The asphalt shingle roof is supported by wooden trusses, rafters and sheathing. Floors are wood except concrete in shower room. Interior wall linings are wallboard.								
	Overall Dimensions	Volume	Area						
	1108' x 33' x 30'	100,800 cu.ft.	3,340 sq.ft.						
	Material	Quantity							
	Framing	41,300 f.b.e.							
	Siding	52 squares							
	Sheathing	17,200 f.b.e.							
	Flooring (wood)	7,600 sq.ft.							
	Wallboard	20,700 sq.ft.							
	Insulation	3,480 sq.ft.							
	Linoleum	50 sq.yds.							
	Concrete	12.8 cu.yds.							
	Concrete Blocks	1,008 blocks							
	Reinforcing Steel Bars	0.1 tons							
1111	Stores		Each	24		1,181,077		49,211	
	Two general types of Stores are provided in Richland Village: Newly constructed and remodeled existing buildings. Eighteen new Stores were constructed, quite similar in construction but differing in size. All are one-story, wooden-frame, flat-roof structures. Foundations are principally concrete, but some concrete block is used, floors are concrete with linoleum covering in many buildings. Exterior walls are shakes over sheathing, except for some siding is used. Interior walls and ceilings are lined with wallboard. Roofs are built-up asphalt felt over sheathing and insulation is provided in walls and ceilings. Concrete walled heating rooms are constructed in several outlying stores.								
	Description	Food	Service	Autocm.	General	Variety	Shoe		
	Material	Store	Station	Garage	March	Store	Shop		
	No. of Units	8	8	1	1	1	1		
	Overall Dimensions	138x80x24	28x24x17	134x108x28	150x150x24	160x80x27	60x30x16		
	Volume (cu.ft.)	164,800	10,480	189,000	562,000	188,000	21,700		

~~SECRET~~  
**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--FINAL DETAIL COST STATEMENT--**

REPORTING OFFICE MANAGED ENGINEER WORKS PROJECT DESCRIPTION PLUTCHIK PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE PC	ACCOUNT							UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS		
	DESCRIPTION								ACTUAL		ACTUAL		ACTUAL		
1111	Stores (continued)														
	Description	Food Store	Service Station	Autom. Garage	General Merch.	Variety Store	Shoe Repair Shop								
	Area (sq.ft.)	8,100	618	9,400	22,000	9,800	1,800								
	Lumber (f.b.m.)	28,800	siding		51,800										
	Shakes (sq.ft.)	6,000	920	5,000	11,000	5,320	2,060								
	Sheathing (sq.ft.)	18,100	2,290	14,800	46,300	14,320	3,260								
	Concrete (cu.yds.)	147	22	140	360	130	46								
	Con. Floor (sq.ft.)	6,200	215	9,400	22,500	2,000	1,800								
	Wallboard (sq.ft.)	12,320	1,100	2,400	24,600	16,000	5,320								
	Roofing (squares)	81	8.7	98	228	90	18								
	Description	Women's Apparel	Barber & Beauty Shop	Milk Dept	Drug Stores A&B	Drug Store C									
	No. of Units	1	1	1	2	1									
	Overall Dimensions	110x60x16	96x60x17	66x66x19	137x66x23	112x60x23									
	Volume (cu.ft.)	108,900	61,640	51,000	78,000	69,300									
	Area (sq.ft.)	8,600	3,620	3,100	4,460	5,270									
	Lumber (f.b.m.)	28,300			28,000	28,000									
	Shakes (sq.ft.)	5,850	2,600	2,540	2,000	2,170									
	Sheathing (sq.ft.)	12,100	6,220	8,330	8,700	10,160									
	Concrete	125	78	58	108	108									
	Con. Floor (sq.ft.)	6,800	3,420	2,800	4,460	5,270									
	Wallboard (sq.ft.)	14,400	4,500	1,060	7,000	9,000									
	Roofing (squares)	66	36.2	30	44.5	52.7									
	Six existing buildings have been remodeled into Stores. Former construction, new construction, and new dimensions are given in the following table.														
	<u>REMODELED EXISTING BUILDING</u>														
	Name of Bldg.	Description			Dimensions	Volume	Area								
	Men's Apparel & Shoe Store	Formerly-2-story, concrete block walls, concrete and wood floors, partial basement with concrete walls, composition on frame roof. New Construction-1-story concrete block wood floor, asphalt felt on frame roof, concrete walls in part basement.			75x75x27	121,000	5,620								
	Western Union	Formerly-1-story, stucco on frame, with wood floor, composition roof, on wood. New Construction - Same.			82x20x16	15,760	1,050								
	Optical Shop	Formerly-1-story, concrete block walls, and concrete block cellar walls, concrete basement and wood lat floor, composition roof on wood. New Construction - Same.			36x26x30	28,200	900								
	Library	Formerly-1-story, concrete block, wood floor, composition roof on wood frame.													
	Electrical Shop	Formerly-2-story, stucco on frame walls asphalt shingles on sheathing roof, full concrete basement. New Construction - Same.			45x24x28	28,000	1,080								
	Hardware	Formerly-1-story, tile and brick composition roof on wood frame, concrete floor. New Construction - Same, but addition on side is shakes on frame.			100x74x19	110,000	7,450								
1112	Churches	Three new Churches and one rehabilitated Church are provided in the 1100 Area. These structures, identical except for the addition of a steeple on one, are one-story, wooden-frame, gable roof, rectangular shaped buildings with half basements. Basement floor and walls and foundation walls and piers are concrete. Main floor is wood, walls are shakes over sheathing exterior, and wood wainscot and insulation board interior. Main floor partitions and ceilings are insulation board and basement partitions and ceilings are gypsum board. The wood shingled roof is supported on wood trusses and rafting. One existing church building requiring very little rehabilitation work is included in this code.							Each	3	124,184	41,368			
	<u>Overall Dimensions</u>		<u>Volume</u>		<u>Area</u>										
	100'x74'x19'		177,300 cu.ft.		5,720 sq.ft.										
	<u>Material</u>		<u>Quantity</u>												
	Shakes		5,360 sq.ft.												
	Sheathing		12,000 sq.ft.												
	Wood floor		5,920 sq.ft.												
	Concrete		92 cu.yds.												
	Concrete floor		2,260 sq.ft.												
	Reinforcing steel mesh		2,260 sq.ft.												
	Wood Wainscot		1,200 sq.ft.												
	Insulation Board		5,800 sq.ft.												
	Gypsum board		3,180 sq.ft.												
	Roofing (Shingle)		67 squares												
1113	Schools	Four Grade Schools, one High School and Nursery are provided in the 1100 Area. One Grade School is the existing School to which were added two wings; two are identical 16 room buildings; and the fourth is an 8 room building. The new wings of the existing school are similar in construction to the old portion. Foundation walls and piers are concrete; floor is wood except some rooms have concrete; walls are brick veneer on sheathing exterior and plaster interior. Roof is asbestos shingle over							Each	6	1,640,436	286,739			

**SECRET**  
**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--- FINAL DETAIL COST STATEMENT ---**

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT

MONTH ENDING 31 DECEMBER 1946

CODE NC	ACCOUNT DESCRIPTION	UNIT (CF)	QUANTITIES		TOTAL COSTS		UNIT COSTS																																																																														
			MEASURE	ACTUAL	ACTUAL	ACTUAL																																																																															
1113	Schools (continued)																																																																																				
	<p>sheathing except over the gymnasium where it is asphalt felt supported by trusses, rafters, and sheathing. Ceilings are plaster. The new Schools are all one-story, wooden frame, and similar in construction. Foundation walls and piers are concrete; floors are wood except concrete in several rooms; exterior walls are shakes over sheathing; roofs are composition shingle on sheathing except curved roofs over assembly rooms have asphalt felt surfacing. Interior partitions are plastered but some acoustic tile ceiling and wooden siding is installed. Boiler room walls and firewalls are of brick.</p> <p>The High School is "E" shaped and constructed similar to new Grade Schools and has a large concrete floored auditorium.</p> <p>The Nursery is a remodeled existing house to which have been added two metal hutments with connecting hallways. The building has concrete and stone foundation, siding and shakes on exterior and plaster and wallboard on interior walls, linoleum over wood floors, and composition shingles on roof. The standard 40' x 22' semi-circular metal hutments have been painted on the outside and partially dressed with exterior shakes and siding.</p>																																																																																				
	<table border="0"> <tr> <td><u>School</u></td> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> </tr> <tr> <td>Existing</td> <td>285' x 185' x 36'</td> <td>780,000 cu.ft.</td> <td>32,500 sq.ft.</td> </tr> <tr> <td>#1</td> <td>408' x 230' x 41'</td> <td>872,800 cu.ft.</td> <td>35,200 sq.ft.</td> </tr> <tr> <td>#2</td> <td>264' x 78 1/2' x 37 1/2'</td> <td>432,000 cu.ft.</td> <td>16,400 sq.ft.</td> </tr> <tr> <td>#3</td> <td>408' x 230' x 41'</td> <td>872,800 cu.ft.</td> <td>35,200 sq.ft.</td> </tr> <tr> <td>High School</td> <td>457' x 248' x 42'</td> <td>1,841,000 cu.ft.</td> <td>63,000 sq.ft.</td> </tr> <tr> <td>Nursery</td> <td>80' x 76' x 25'</td> <td>48,000 cu.ft.</td> <td>3,200 sq.ft.</td> </tr> </table>	<u>School</u>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	Existing	285' x 185' x 36'	780,000 cu.ft.	32,500 sq.ft.	#1	408' x 230' x 41'	872,800 cu.ft.	35,200 sq.ft.	#2	264' x 78 1/2' x 37 1/2'	432,000 cu.ft.	16,400 sq.ft.	#3	408' x 230' x 41'	872,800 cu.ft.	35,200 sq.ft.	High School	457' x 248' x 42'	1,841,000 cu.ft.	63,000 sq.ft.	Nursery	80' x 76' x 25'	48,000 cu.ft.	3,200 sq.ft.																																																								
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1114	Theater	Each	2		140,503		70,251																																																																														
	<p>Two theaters are provided in the 1100 Area. The buildings are identical and consist of the main auditorium seating 526 people, all on one floor, a small stage and a foyer with an apartment and projection room above. The building is of frame construction, having concrete foundations and floor, shingle and siding exterior walls and tile board interior walls and ceiling. Roof is built-up asphalt felt over sheathing on bow string trusses.</p>																																																																																				
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1115	Bank Building	Each	1		87,572		87,572																																																																														
	<p>One bank building is provided in the 1100 Area. This one-story, wooden frame, rectangular-shaped building contains the main banking area, several offices and rest rooms, a two story reinforced concrete vault and two rooms in the basement. The reinforced concrete floor is supported on reinforced concrete foundation walls. Exterior walls are shakes over sheathing, except entrance has siding, and interior linings and ceilings are wallboard. Roof is surfaced composition asphalt felt.</p>																																																																																				
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1116	Municipal Building	Each	1		49,972		49,972																																																																														
	<p>One Municipal Building is provided in the 1100 Area. This one-story, wooden frame</p>																																																																																				





# PROJECT COST SUMMARY --- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE RANDOLPH ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITY		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
<b>1100 AREA (continued)</b>								
1120	<p><b>Laundry</b></p> <p>One Laundry Building is provided in the 1100 Area. This one-story, wooden frame, rectangular-shaped structure contains a brick enclosed dry cleaning unit in one corner. The reinforced concrete floor is supported on reinforced concrete foundation and an earth fill. The exterior walls are shakes over sheathing, and the roof is composition asphalt felt over sheathing, raised over the center part of the building. Interior wall linings are wood wainscot with wallboard above in work areas, and gypsum board in office and lunch room.</p> <p style="text-align: center;">Overall Dimensions      Volume      Area                      196' x 51' x 23'      284,700 cu.ft.      18,030 sq.ft.</p> <p style="text-align: center;">Material      Quantity</p> <p>Concrete      270 cu.yds.                      Concrete Flooring      16,080 sq.ft.                      Reinforcing Steel Mesh      18,080 sq.ft.                      Sheathing      18,700 sq.ft.                      Brickwalls, 1' thick      2,300 sq.ft.                      Shakes      3,000 sq.ft.                      Wainscot      1,400 sq.ft.                      Wallboard      2,000 sq.ft.                      Plaster      72 sq.ft.                      Roofing      180 sq.ft.</p>	Each	1		209,593		209,593	
1121	<p><b>Cafeteria</b></p> <p>One Cafeteria is provided in the 1100 Area. This wooden frame, one-story building has arched-shaped roof over main part and flat roof over kitchen and storage portions. The building has reinforced concrete foundation walls and piers and floor. Exterior walls are shakes over sheathing, and interior and ceilings are wallboard, gypsum board and plaster. Roof is rolled felt over both sections. Roof trusses are wood.</p> <p style="text-align: center;">Overall Dimensions      Volume      Area                      417' x 122' x 28'      332,850 cu.ft.      18,740 sq.ft.</p> <p style="text-align: center;">Material      Quantity</p> <p>Framing      6,250 lbs.                      Shakes      9,000 sq.ft.                      Sheathing      22,600 lbs.                      Concrete      280 cu.yds.                      Concrete Flooring      16,380 sq.ft.                      Reinforcing Steel Mesh      18,480 sq.ft.                      Insulation      20,000 sq.ft.                      Wallboard      11,000 sq.ft.                      Gypsum Board      15,000 sq.ft.                      Plaster      12,000 sq.ft.                      Roofing      1.3 squares</p>	Each	1		157,369		157,369	
1122	<p><b>Propane Storage</b></p> <p>One Propane Gas Storage Shelter is provided in the 1100 Area. This building is open frame on concrete piers with wood floor and roll roofing, and is located within a stabilized, fenced area.</p> <p style="text-align: center;">Overall Dimensions      Volume      Area                      Area Fenced Building      200' x 180'      10' x 30' x 10'      3,600 cu.ft.      37,000 sq.ft.      300 sq.ft.</p>	Each	1		2,337		2,337	
1123	<p><b>Recreation Building</b></p> <p>One Recreation Building is provided in the 1100 Area. The building consists of main lounge, two card rooms, dining room, pool room, bowling room containing 12 alleys, tap room, lunch counter, and entrance foyer. This one-story wood frame building is supported on reinforced concrete and concrete block foundation walls and piers. Flooring is concrete in kitchen area, toilets, and porches, and the remainder of wood covered with asphalt tile except in main lounge and bowling alleys. The exterior walls are shakes over sheathing except some siding. Roof is both composition shingle and asphalt felt over sheathing. Interior linings are wallboard and some plaster.</p> <p style="text-align: center;">Overall Dimensions      Volume      Area                      380' x 160' x 38'      480,000 cu.ft.      37,900 sq.ft.</p> <p style="text-align: center;">Material      Quantity</p> <p>Concrete      270 cu.yds.                      Concrete Flooring      8,600 sq.ft.                      Reinforcing Steel Mesh      24,800 sq.ft.                      Concrete Block      7,000 blocks                      Wood Flooring      34,500 sq.ft.                      Asphalt Tile      22,500 sq.ft.                      Framing      76,600 lbs.                      Sheathing      14,000 sq.ft.                      Siding      800 sq.ft.                      Shakes      14,000 sq.ft.                      Wallboard      62,000 sq.ft.                      Plaster      2,100 sq.ft.                      Roofing      400 sq.ft.</p>	Each	1		358,095		358,095	

# PROJECT COST SUMMARY... MILITARY FUNDS

## -FINAL DETAIL COST STATEMENT-

REPORTING OFFICE HARFORD ENGINEERS, INC. PROJECT DESCRIPTION JUST NIEM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																													
			ACTUAL		ACTUAL		ACTUAL																																													
<b>1100 AREA (continued)</b>																																																				
1124	<p><b>Sewage Disposal Plant</b>                      One Sewage Disposal Plant is provided in the 1100 Area. The plant consists of the following buildings:                      Pump House - Three-story, reinforced concrete.                      Scales and Chlorinator House - Reinforced concrete, concrete block, and corrugated transite.                      Diversion Weir and Chlorine Contact Chamber - Reinforced concrete with wood baffles.                      Biofilter - Reinforced concrete and concrete block with 3" layer of gravel.                      2 Primary and 2 Secondary Clarifiers - Reinforced concrete.                      Digester - Completely enclosed granite tank with dome-shaped roof and reinforced concrete base.                      Sludge Drying Beds - Acodon baffles.                      The various units are interconnected with cast-iron, welded steel, and vitrified clay pipes.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Building</th> <th>Overall Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>Pump House</td> <td>28' x 22' x 38'</td> <td>17,300 cu.ft.</td> <td>465 sq.ft.</td> </tr> <tr> <td>Scales &amp; Chlorinator House</td> <td>24' x 11 1/2' x 26'</td> <td>6,072 cu.ft.</td> <td>278 sq.ft.</td> </tr> <tr> <td>Chlorine Tank Stor.</td> <td>10' x 10' x 11'</td> <td>1,100 cu.ft.</td> <td>111 sq.ft.</td> </tr> <tr> <td>Biofilter</td> <td>100' Dia. x 6'</td> <td>47,100 cu.ft.</td> <td>7,850 sq.ft.</td> </tr> <tr> <td>(2) Primary Clarifiers</td> <td>55' Dia. x 9'</td> <td>42,800 cu.ft.</td> <td>4,760 sq.ft.</td> </tr> <tr> <td>(2) Secondary Clarifiers</td> <td>55' Dia. x 9'</td> <td>42,800 cu.ft.</td> <td>4,760 sq.ft.</td> </tr> <tr> <td>Digester</td> <td>45' Dia. x 33'</td> <td>41,500 cu.ft.</td> <td>1,510 sq.ft.</td> </tr> <tr> <td>Sludge bed</td> <td>160' x 27' x 3'</td> <td>46,560 cu.ft.</td> <td>16,520 sq.ft.</td> </tr> <tr> <td>Chlorine Contact Chamber</td> <td>30' x 30' x 5'</td> <td>4,500 cu.ft.</td> <td>.00 sq.ft.</td> </tr> </tbody> </table>	Building	Overall Dimensions	Volume	Area	Pump House	28' x 22' x 38'	17,300 cu.ft.	465 sq.ft.	Scales & Chlorinator House	24' x 11 1/2' x 26'	6,072 cu.ft.	278 sq.ft.	Chlorine Tank Stor.	10' x 10' x 11'	1,100 cu.ft.	111 sq.ft.	Biofilter	100' Dia. x 6'	47,100 cu.ft.	7,850 sq.ft.	(2) Primary Clarifiers	55' Dia. x 9'	42,800 cu.ft.	4,760 sq.ft.	(2) Secondary Clarifiers	55' Dia. x 9'	42,800 cu.ft.	4,760 sq.ft.	Digester	45' Dia. x 33'	41,500 cu.ft.	1,510 sq.ft.	Sludge bed	160' x 27' x 3'	46,560 cu.ft.	16,520 sq.ft.	Chlorine Contact Chamber	30' x 30' x 5'	4,500 cu.ft.	.00 sq.ft.	Each	1		31,613		31,613					
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1125	<p><b>Warehouse</b>                      One Warehouse, not of temporary construction, is provided in the 1100 Area. This one-story, wooden frame, rectangular-shaped building has wooden flooring supported by wooden piers on mud sills. The walls are siding and the flat roof is composition asphalt felt. The walls are unlined except in office and toilet. Four Igloo Warehouses are provided, which are corrugated metal arch type with wood plank floors on steel stringers. Three frame buildings also are provided. Construction is temporary wood frame on wood mud sills, wood plank floor, gypsum board siding and roll roofing. Two Pacific Huts with intervening bath house and one small frame shed complete the group.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Overall Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>Permanent Constr.</td> <td>150' x 50' x 20'</td> <td>150,000 cu.ft.</td> <td>7,500 sq.ft.</td> </tr> <tr> <td>Igloo Type</td> <td>150' x 40' x 20'</td> <td>100,000 cu.ft.</td> <td>6,000 sq.ft.</td> </tr> <tr> <td>Temporary Constr.</td> <td>200' x 100' x 12'</td> <td>240,000 cu.ft.</td> <td>20,000 sq.ft.</td> </tr> <tr> <td>Double Pacific Hut</td> <td>98' x 20' x 10'</td> <td>17,300 cu.ft.</td> <td>1,020 sq.ft.</td> </tr> <tr> <td>Shed</td> <td>20' x 18' x 10'</td> <td>3,600 cu.ft.</td> <td>360 sq.ft.</td> </tr> <tr> <td>Temporary Constr.</td> <td>72' x 39' x 20'</td> <td>56,200 cu.ft.</td> <td>2,608 sq.ft.</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Material</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="text-align: center;">(Permanent Construction)</td> </tr> <tr> <td>Framing</td> <td>28,000 f.b.m.</td> </tr> <tr> <td>Sheathing</td> <td>7,500 f.b.m.</td> </tr> <tr> <td>Siding</td> <td>10,000 sq.ft.</td> </tr> <tr> <td>Wood Flooring</td> <td>7,600 f.b.m.</td> </tr> <tr> <td>Wallboard</td> <td>570 sq.ft.</td> </tr> <tr> <td>Roofing</td> <td>56 squares</td> </tr> </tbody> </table>		Overall Dimensions	Volume	Area	Permanent Constr.	150' x 50' x 20'	150,000 cu.ft.	7,500 sq.ft.	Igloo Type	150' x 40' x 20'	100,000 cu.ft.	6,000 sq.ft.	Temporary Constr.	200' x 100' x 12'	240,000 cu.ft.	20,000 sq.ft.	Double Pacific Hut	98' x 20' x 10'	17,300 cu.ft.	1,020 sq.ft.	Shed	20' x 18' x 10'	3,600 cu.ft.	360 sq.ft.	Temporary Constr.	72' x 39' x 20'	56,200 cu.ft.	2,608 sq.ft.	Material	Quantity	(Permanent Construction)		Framing	28,000 f.b.m.	Sheathing	7,500 f.b.m.	Siding	10,000 sq.ft.	Wood Flooring	7,600 f.b.m.	Wallboard	570 sq.ft.	Roofing	56 squares	Each	9		284,221		32,025	
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1126	<p><b>Domestic Coal Yard</b>                      One Coal Yard is provided for handling domestic use coal in Richland Village. This facility consists of an unloading trestle of heavy timbers on concrete piers; structural steel coal bin complete with dump hopper, shaker screen, lump bin, fine bin, and truck loading device; portable 55' conveyor; crane; earth crane ramp, and a frame yard office, 12' x 14' x 10'.</p>	Each	1		18,765		18,765																																													
1127	<p><b>Swimming Pool and Comfort Station</b>                      One Swimming Pool with bathhouse and comfort station is provided in the village park. The pool is a renovated existing concrete structure, but the bathhouse and comfort station are new frame construction. Construction is concrete floors, drop-siding walls, and roll roofing. A wood fence surrounds the pool and a small frame shed houses chlorinating equipment.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Overall Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>Bathhouse &amp; Comfort Station</td> <td>64' x 28' x 8'</td> <td>13,300 cu.ft.</td> <td>1,664 sq.ft.</td> </tr> <tr> <td>Pool</td> <td>108' x 41' x 6'</td> <td></td> <td>4,428 sq.ft.</td> </tr> </tbody> </table>		Overall Dimensions	Volume	Area	Bathhouse & Comfort Station	64' x 28' x 8'	13,300 cu.ft.	1,664 sq.ft.	Pool	108' x 41' x 6'		4,428 sq.ft.	Each	1		22,588		22,588																																	
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1128	<p><b>Irrigation Ditch Fence</b>                      A fence including the Irrigation Canal running through the prefabricated housing area is provided. The fence is chain-link type with steel posts set in concrete. Gates are provided.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Material</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Chain Link Fence</td> <td>12,000 feet.</td> </tr> </tbody> </table>	Material	Quantity	Chain Link Fence	12,000 feet.	Lin. Ft.	12,000		37,672		3																																									
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1129	<p><b>Prefabricated Houses</b>                      These Prefabricated Houses designed by T.V.A. are constructed of plywood throughout. Exterior and interior walls, floors, underside of floor beams, ceilings, and roof. Roofs are covered with waterproofed canvas and floors are covered with linoleum. Houses are set on platforms of wood post and plank.</p>	Each	1800		7,943,247		4,44																																													

~~SECRET~~  
**PROJECT COST SUMMARY - MILITARY FUNDS**  
**- FINAL DETAIL COST STATEMENT -**

REPORTING OFFICE HANFORD ENGINEER CORPS PROJECT DESCRIPTION PLUTONIUM REDUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE No.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	ACTIVITIES		TOTAL COSTS		UNIT COSTS																																												
			ACTUAL		ACTUAL		ACTUAL																																												
1129	<b>Prefabricated Houses (continued)</b>																																																		
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1130	<p><b>Commercial Bus Depot</b>                      One Commercial Bus Depot is provided in the 110 area. This one-story, wooden frame, rectangular-shaped building has a reinforced concrete floor and foundation walls, shakes and siding exterior walls, and wallboard interior walls and ceilings. The flat roof is surfaced with composition asphalt felt. The walking surface floor is covered with "astipave".</p> <table border="1"> <thead> <tr> <th>Overall Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>100' x 42' x 12'</td> <td>47,040 cu.ft.</td> <td>4,200 sq.ft.</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Material</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Concrete</td> <td>3,000 cu.yds.</td> </tr> <tr> <td>Concrete Flooring</td> <td>3,000 sq.ft.</td> </tr> <tr> <td>Reinforcing Steel Mesh</td> <td>7,400 sq.ft.</td> </tr> <tr> <td>Sheathing</td> <td>480 sq.ft.</td> </tr> <tr> <td>Siding</td> <td>2,200 sq.ft.</td> </tr> <tr> <td>Shakes</td> <td>10 sq.ft.</td> </tr> <tr> <td>Wallboard</td> <td>6,400 sq.ft.</td> </tr> <tr> <td>Rolling</td> <td>47,7 sq.yds.</td> </tr> </tbody> </table>	Overall Dimensions	Volume	Area	100' x 42' x 12'	47,040 cu.ft.	4,200 sq.ft.	Material	Quantity	Concrete	3,000 cu.yds.	Concrete Flooring	3,000 sq.ft.	Reinforcing Steel Mesh	7,400 sq.ft.	Sheathing	480 sq.ft.	Siding	2,200 sq.ft.	Shakes	10 sq.ft.	Wallboard	6,400 sq.ft.	Rolling	47,7 sq.yds.	Sq. Ft.	1		67,417		67,417																				
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1131	<p><b>Bus Terminal</b>                      One Bus Terminal is provided in the 110 area for loading and unloading passengers enroute to and from the process areas and for the maintenance of the buses. This was a construction facility, consisting of a gravel surfaced, paved area 120' x 1240' containing the following structures:</p> <table border="1"> <thead> <tr> <th>Structure</th> <th>Dimensions</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Bus Loading Lanes</td> <td>3 Lanes, approx. 140' sq.</td> <td>Heavy wood posts and rails</td> </tr> <tr> <td>Waiting Room</td> <td>40' x 24' x 11'</td> <td>Wood frame, wood stud walls, wood floors, aluminum siding exterior and interior walls, and roll roofing.</td> </tr> <tr> <td>Bus Maintenance Shop</td> <td>100' x 112' x 12'</td> <td>Same construction as</td> </tr> <tr> <td>Washer House</td> <td>32' x 22' x 16'</td> <td>Same construction, containing 2 rollers, and wash water tank.</td> </tr> <tr> <td>Two Ticket Offices</td> <td>15' x 20' x 11'</td> <td>Wood frame &amp; siding, single-siding walls, wood stud interior, roll roofing.</td> </tr> <tr> <td>Fuel Oil Storage Facility</td> <td>136 sq. ft.</td> <td>3 tanks, above ground.</td> </tr> </tbody> </table>	Structure	Dimensions	Description	Bus Loading Lanes	3 Lanes, approx. 140' sq.	Heavy wood posts and rails	Waiting Room	40' x 24' x 11'	Wood frame, wood stud walls, wood floors, aluminum siding exterior and interior walls, and roll roofing.	Bus Maintenance Shop	100' x 112' x 12'	Same construction as	Washer House	32' x 22' x 16'	Same construction, containing 2 rollers, and wash water tank.	Two Ticket Offices	15' x 20' x 11'	Wood frame & siding, single-siding walls, wood stud interior, roll roofing.	Fuel Oil Storage Facility	136 sq. ft.	3 tanks, above ground.	Sq. Ft.	1		17,400		17,400																							
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1132	<p><b>Ambulance Garage</b>                      One Ambulance Garage is provided adjacent to the hospital in the 110 area for the storage of the vehicles. The structure has concrete foundation, concrete floor, wood frame with shakes over sheathing walls and composition asphalt roof.</p> <table border="1"> <thead> <tr> <th>Overall Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>24' x 24' x 13'</td> <td>7,800 cu.ft.</td> <td>576 sq.ft.</td> </tr> </tbody> </table>	Overall Dimensions	Volume	Area	24' x 24' x 13'	7,800 cu.ft.	576 sq.ft.	Sq. Ft.	1		3,770		3,770																																						
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24' x 24' x 13'	7,800 cu.ft.	576 sq.ft.																																																	
1133	<p><b>Millers Maintenance Group</b>                      The Millers Maintenance Group of buildings consists of eleven one-story buildings of temporary construction and design situated within a fenced area 100' x 400'. Several of these buildings are prefabricated drop siding wooden structures, others are metal hutments; and in two instances the hutments are joined with a wooden frame construction section. These buildings were originally used by construction forces.</p> <table border="1"> <thead> <tr> <th>Building</th> <th>Overall Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>Parts &amp; Tire Storage</td> <td>160' x 22' x 11'</td> <td>38,720 cu.ft.</td> <td>3,520 sq.ft.</td> </tr> <tr> <td>Irrig. Supplies</td> <td>48' x 48' x 11'</td> <td>41,808 cu.ft.</td> <td>3,000 sq.ft.</td> </tr> <tr> <td>Maintenance Office</td> <td>60' x 11' x 11'</td> <td>7,260 cu.ft.</td> <td>770 sq.ft.</td> </tr> <tr> <td>Garden Tools Storage, Baggage Room &amp; Seed Distrib. Office</td> <td>60' x 41' x 11'</td> <td>29,340 cu.ft.</td> <td>2,700 sq.ft.</td> </tr> <tr> <td>Safety Office</td> <td>75' x 20' x 11'</td> <td>16,500 cu.ft.</td> <td>1,500 sq.ft.</td> </tr> <tr> <td>Lean Tower Shop</td> <td>48' x 20' x 11'</td> <td>9,792 cu.ft.</td> <td>900 sq.ft.</td> </tr> <tr> <td>Storage Hutment</td> <td>24' x 12' x 11'</td> <td>3,168 cu.ft.</td> <td>300 sq.ft.</td> </tr> <tr> <td>Transp. Office Hutment</td> <td>48' x 22' x 11'</td> <td>11,616 cu.ft.</td> <td>1,100 sq.ft.</td> </tr> <tr> <td>Labor Office Hutment</td> <td>48' x 11' x 11'</td> <td>5,808 cu.ft.</td> <td>500 sq.ft.</td> </tr> <tr> <td>Comfort Station</td> <td>14' x 16' x 11'</td> <td>2,772 cu.ft.</td> <td>270 sq.ft.</td> </tr> </tbody> </table>	Building	Overall Dimensions	Volume	Area	Parts & Tire Storage	160' x 22' x 11'	38,720 cu.ft.	3,520 sq.ft.	Irrig. Supplies	48' x 48' x 11'	41,808 cu.ft.	3,000 sq.ft.	Maintenance Office	60' x 11' x 11'	7,260 cu.ft.	770 sq.ft.	Garden Tools Storage, Baggage Room & Seed Distrib. Office	60' x 41' x 11'	29,340 cu.ft.	2,700 sq.ft.	Safety Office	75' x 20' x 11'	16,500 cu.ft.	1,500 sq.ft.	Lean Tower Shop	48' x 20' x 11'	9,792 cu.ft.	900 sq.ft.	Storage Hutment	24' x 12' x 11'	3,168 cu.ft.	300 sq.ft.	Transp. Office Hutment	48' x 22' x 11'	11,616 cu.ft.	1,100 sq.ft.	Labor Office Hutment	48' x 11' x 11'	5,808 cu.ft.	500 sq.ft.	Comfort Station	14' x 16' x 11'	2,772 cu.ft.	270 sq.ft.	Sq. Ft.	11		44,670		44,670
Building	Overall Dimensions	Volume	Area																																																
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1134	<p><b>Red Cross Building</b>                      One Red Cross Building is provided in the 110 area. This is a one-story, concrete block, rectangular-shaped building with a small reinforced concrete basement. This building is a remodeled existing two-story structure which a small addition at one corner and a frame fence in the rear yard has been added. Floors are linoleum.</p>	Sq. Ft.	1		31,031		31,031																																												

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**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**---FINAL DETAIL COST STATEMENT---**

REPORTING OFFICE WASH. FIELD OFFICE PROJECT DESCRIPTION RECONSTRUCTION OF RICHLAND VILLAGE  
 MONTH ENDING 31 OCTOBER 1945

LINE NO.	DESCRIPTION	UNIT MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																								
			EST.	ACTUAL	EST.	ACTUAL	EST.	ACTUAL																							
1134	Red brick exterior of front porch covered and the porch, interior walls are plastered and floor is asphalt tile. Roof is asphalt felt over sheathing.																														
	<table border="0"> <tr> <td>Overall Dimensions</td> <td>Volume</td> <td>Area</td> </tr> <tr> <td>20' x 10' x 8'</td> <td>1,600 cu.ft.</td> <td>200 sq.ft.</td> </tr> </table>	Overall Dimensions	Volume	Area	20' x 10' x 8'	1,600 cu.ft.	200 sq.ft.																								
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20' x 10' x 8'	1,600 cu.ft.	200 sq.ft.																													
1135	<p>Recreational facilities</p> <p>The recreation facilities provided in Richland consist of the following:</p> <ul style="list-style-type: none"> <li>1. 300' x 100' athletic stadium</li> <li>2. Open bleachers opposite the stadium</li> <li>3. Open bleachers for basketball tennis</li> <li>4. Base ball diamond including backstop</li> <li>5. Football field and 1 mile rubber track</li> <li>6. 10 Soft ball diamonds including backstop</li> <li>7. 15 Tennis courts including backstop, - 10 asphalt - 5 concrete</li> <li>8. 1 outside basketball court including standard equipment</li> </ul> <p>The stadium, constructed on structural piers, consists of unroofed bleachers and a closed house along the upper side. The stadium has a main entrance, ticket office, and press box. Construction is wood frame with concrete foundations. Temporary wood construction of stands and bleachers is finished in sections and re-assembled in concrete footings.</p> <table border="0"> <tr> <td>Structure</td> <td>Cap. Dimensions</td> <td>Volume</td> <td>Area</td> </tr> <tr> <td>Stadium</td> <td>104' x 200'</td> <td>2,080 cu.ft.</td> <td>20,400 sq.ft.</td> </tr> <tr> <td>Stadium House</td> <td>1-4' x 11' x 17'</td> <td>1,012 cu.ft.</td> <td>1,012 sq.ft.</td> </tr> <tr> <td>Stadium Bleachers</td> <td>2220' x 45'</td> <td>10,000 cu.ft.</td> <td>10,000 sq.ft.</td> </tr> </table>	Structure	Cap. Dimensions	Volume	Area	Stadium	104' x 200'	2,080 cu.ft.	20,400 sq.ft.	Stadium House	1-4' x 11' x 17'	1,012 cu.ft.	1,012 sq.ft.	Stadium Bleachers	2220' x 45'	10,000 cu.ft.	10,000 sq.ft.	IS		154,270	154,270										
Structure	Cap. Dimensions	Volume	Area																												
Stadium	104' x 200'	2,080 cu.ft.	20,400 sq.ft.																												
Stadium House	1-4' x 11' x 17'	1,012 cu.ft.	1,012 sq.ft.																												
Stadium Bleachers	2220' x 45'	10,000 cu.ft.	10,000 sq.ft.																												
1136	<p>Professional building</p> <p>The Professional Building is provided in the village. It is a two-story, wood frame, cross-gabled building containing four offices. The building is constructed on concrete and concrete block foundations, and has linoleum covered wood floors. Walls have sheathing over sheathing on the exterior and plaster on the interior. Roofing is sheathing on shingles.</p> <table border="0"> <tr> <td>Overall Dimensions</td> <td>Volume</td> <td>Area</td> </tr> <tr> <td>175' x 120' x 12'</td> <td>25,200 cu.ft.</td> <td>21,000 sq.ft.</td> </tr> </table> <table border="0"> <tr> <td>Material</td> <td>Quantity</td> </tr> <tr> <td>Concrete</td> <td>75 cu.yds.</td> </tr> <tr> <td>Concrete blocks</td> <td>2,400 blocks</td> </tr> <tr> <td>Acoustic flooring</td> <td>2,100 sq.ft.</td> </tr> <tr> <td>Linoleum</td> <td>11,000 sq.yds.</td> </tr> <tr> <td>Plaster</td> <td>11,000 sq.ft.</td> </tr> <tr> <td>Sheathing</td> <td>14,500 sq.ft.</td> </tr> <tr> <td>Shingles</td> <td>1,100 sq.ft.</td> </tr> <tr> <td>Roofing</td> <td>110 sq.yards</td> </tr> </table>	Overall Dimensions	Volume	Area	175' x 120' x 12'	25,200 cu.ft.	21,000 sq.ft.	Material	Quantity	Concrete	75 cu.yds.	Concrete blocks	2,400 blocks	Acoustic flooring	2,100 sq.ft.	Linoleum	11,000 sq.yds.	Plaster	11,000 sq.ft.	Sheathing	14,500 sq.ft.	Shingles	1,100 sq.ft.	Roofing	110 sq.yards	Each	1	137,121	137,121		
Overall Dimensions	Volume	Area																													
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1137	<p>Salvage Yard</p> <p>A general Salvage Yard for storage of miscellaneous usable plant excess is provided in Richland Village near the warehouse area. The area is completely stabilized and enclosed in a chain link fence and contains one hutment.</p> <table border="0"> <tr> <td>Overall Dimensions</td> <td>Volume</td> <td>Area</td> </tr> <tr> <td>16' x 40' x 2'</td> <td>1,280 cu.ft.</td> <td>240 sq.ft.</td> </tr> <tr> <td>Fenced Area</td> <td>360' x 160'</td> <td>57,600 sq.ft.</td> </tr> </table>	Overall Dimensions	Volume	Area	16' x 40' x 2'	1,280 cu.ft.	240 sq.ft.	Fenced Area	360' x 160'	57,600 sq.ft.	Each	1	2,626	2,626																	
Overall Dimensions	Volume	Area																													
16' x 40' x 2'	1,280 cu.ft.	240 sq.ft.																													
Fenced Area	360' x 160'	57,600 sq.ft.																													
1138	<p>Dog Pound</p> <p>One Dog Pound is provided for the 1100 area, in the small existing building on a tract on the north edge of the Village. Buildings are frame with drop-siding and roll roofing. Newly constructed concrete floors and wire cage pens from Sanford Dog Pound were installed.</p> <table border="0"> <tr> <td>Cap.</td> <td>Dimensions</td> <td>Volume</td> <td>Area</td> </tr> <tr> <td>Larger 15 dogs</td> <td>18' x 20' x 11'</td> <td>3,960 cu.ft.</td> <td>396 sq.ft.</td> </tr> <tr> <td>Smaller 5 dogs</td> <td>12' x 16' x 8'</td> <td>1,536 cu.ft.</td> <td>152 sq.ft.</td> </tr> </table>	Cap.	Dimensions	Volume	Area	Larger 15 dogs	18' x 20' x 11'	3,960 cu.ft.	396 sq.ft.	Smaller 5 dogs	12' x 16' x 8'	1,536 cu.ft.	152 sq.ft.	Each	1	4,075	4,075														
Cap.	Dimensions	Volume	Area																												
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Smaller 5 dogs	12' x 16' x 8'	1,536 cu.ft.	152 sq.ft.																												
1139	<p>Burning Ground</p> <p>One Burning Ground is provided well away from the Village. This consists of one fenced area with a series of 12' deep trenches for burning needs and another fenced area for paper salvage. 8' high hog wire fencing is used.</p> <table border="0"> <tr> <td>Dimensions</td> <td>Area</td> </tr> <tr> <td>Burning Area</td> <td>350' x 500'</td> </tr> <tr> <td>Paper Salvage Area</td> <td>300' x 200'</td> </tr> </table>	Dimensions	Area	Burning Area	350' x 500'	Paper Salvage Area	300' x 200'	Each	1	3,121	3,121																				
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Burning Area	350' x 500'																														
Paper Salvage Area	300' x 200'																														
1140	<p>Railway Express Agency</p> <p>This building, less than half of which is occupied by the Railway Express Agency, was built for an area warehouse. Its construction is heavy wood frame with wood mud sills, drop-siding over sheathing walls, wood floor, and roll roofing.</p> <table border="0"> <tr> <td>Overall Dimensions</td> <td>Volume</td> <td>Area</td> </tr> <tr> <td>112' x 60' x 12'</td> <td>157,800 cu.ft.</td> <td>6,720 sq.ft.</td> </tr> </table>	Overall Dimensions	Volume	Area	112' x 60' x 12'	157,800 cu.ft.	6,720 sq.ft.	Each	1	14,458	14,458																				
Overall Dimensions	Volume	Area																													
112' x 60' x 12'	157,800 cu.ft.	6,720 sq.ft.																													



# PROJECT COST SUMMARY --- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE WARRIOR ENGINEERS PROJECT DESCRIPTION FLUORINE PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
1141	<p>License Office</p> <p>One building in which licenses, permits, fees, etc. may be obtained is provided in the 1100 area. This is a rehabilitated one-story existing building of wood frame construction with drop-siding exterior walls, asbestos roof, and plaster interior walls.</p> <p style="text-align: center;"> <u>Dimensions</u>                      <u>Volume</u>                      <u>Area</u>                      32' x 32' x 11'                      11,500 cu.ft.                      1,026 sq.ft.                 </p>	Each	1		1,026		1,026	
1142	<p>Fire Station</p> <p>Two Fire Stations are provided in the 1100 area supplementing the main station in the Municipal Building. One is a new wood frame building with concrete floor and apron, stairs and siding exterior, gypsum board interior, and built-up gravel surfaced roof. A small heater room protrudes on back side. The second is a renovated existing church building of wood frame and composition siding and roofing. A concrete floor was installed and an extension with asbestos siding on one side. Nearby is a metal hutment for living quarters.</p> <p style="text-align: center;"> <u>Capacity</u>                      <u>Overall Dimensions</u>                      <u>Volume</u>                      <u>Area</u>                      New                      2 trucks                      40' x 40' x 12'                      19,200 cu.ft.                      1,700 sq.ft.                      Existing                      3 trucks                      28' x 27' x 10'                      14,280 cu.ft.                      1,400 sq.ft.                      Hutment                                           22' x 40' x 11'                      10,580 cu.ft.                      1,100 sq.ft.                 </p>	Each	2		32,893		16,446	
1143	<p>Trailer Storage Area</p> <p>One Trailer Storage Area is provided for the 1100 Area. Located on the south edge of the village, this area consists of a stabilized area completely enclosed with chain link fence and lighted with eight flood lights.</p> <p style="text-align: center;"> <u>Capacity</u>                      <u>Overall Dimensions</u>                      <u>Area</u>                      20 trailers                      60' x 40'                      2,400 sq.ft.                 </p>	Each	1		2,464		2,464	
1144	<p>Ration Office</p> <p>A Ration Office was provided in an existing one-story concrete block building. The partitions were moved, a long counter installed, plumbing facilities cleaned, and interior painted.</p> <p style="text-align: center;"> <u>Overall Dimensions</u>                      <u>Volume</u>                      <u>Area</u>                      38' x 32' x 10'                      13,280 cu.ft.                      1,216 sq.ft.                 </p>	Each	1		414		414	
1145	<p>Substations</p> <p>Two open wood frame Substations are provided in the 1100 Area. 1145-A has 86,000 13,800 V., 5,000 K.V.A., and 1145-B 40,000/13,800 V., 10,000 K.V.A. capacity. Each Substation is erected in a gravel stabilized area surrounded with a wood fence.</p>	Each	2		107,700		53,850	
1146	<p>Public Health Center</p> <p>A Public Health Center is provided for the village in one of the "L" type dwelling units described in code 1107. This building with three rooms and wash on downstairs and four rooms and bathroom upstairs required miscellaneous carpentry and electrical work.</p> <p style="text-align: center;"> <u>Overall Dimensions</u>                      <u>Volume</u>                      <u>Area</u>                      24' x 32' x 10'                      7,680 cu.ft.                      768 sq.ft.                 </p>	LS	1		9,446		9,446	
1147	<p>Fire Alarm Systems</p> <p>Individual Fire Alarm Systems are provided in the 700 and 1100 Areas. These systems have electro-mechanical rings mounted in Fire Stations, Lum. Houses, etc., and the central recorder station located at Fire Headquarters in the Municipal Building. Outside sirens and fire alarm boxes are mounted on existing power poles wherever possible. All circuits are #10 or #8 galvanized iron wire carried in rust cases on the same poles as telephone lines.</p> <p style="text-align: center;"> <u>Area</u>                      <u>Length of Circuits</u>                      <u>No. of Lines</u>                      700                      5,250 feet                      3                      1100                      145,700 feet                      20                 </p>	LS	1		58,763		58,763	
1148	<p>Telephone Cable and Instruments</p> <p>The 700 and 1100 Areas are serviced by a single telephone system emanating from the 702 - Central Telephone Exchange Building. The main telephone trunk lines are underground within the 1100 Commercial Area only and aerial elsewhere. Aerial and underground cable vary from .04 pair, 22 gauge to 11 pair, 24 gauge. Twisted pair wire drops are used from terminal boxes to main lines. Power poles are used for support where possible.</p> <p>Approximate quantities are as follows:</p> <p style="text-align: center;"> <u>Area</u>                      <u>All Lines</u>                      <u>Cable Lines</u>                      <u>Other Lines</u>                      <u>Phones</u>                      700                      2,860 ft.                      4,440 ft.                      4,420 ft.                      302                      1100                      485,370 ft.                      176,570 ft.                      312,600 ft.                      1,804                 </p>	LS	1		9,021		9,021	
1149	<p>Airport</p> <p>One Airport is provided in 1100 area. The runways have a bituminous oil surface 75' wide and are graded to 200' wide. They are lighted with obstacle, guidance, and range lights. There is one metal hangar, 3 metal hutments, one wood hutment, and a wood-frame control tower which has windows on all four sides.</p>	LS	1		159,731		159,731	

# PROJECT COST SUMMARY --- MILITARY FUNDS

## --- FINAL DETAIL COST STATEMENT ---

REPORTING OFFICE NAME OF ENGINEER AGENC PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT

MONTH ENDING 31 DECEMBER 1946

CODE NO.	DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL	ESTIMATED	ACTUAL	ESTIMATED	ACTUAL	ESTIMATED
1166	<p><b>Airport (continued)</b></p> <p>Structure Dimensions Volume Area</p> <p>Control Tower 11' x 11' x 48' 5,487 cu.ft. 121 sq.ft.</p> <p>Hangar 40' x 40' x 19' 28,600 cu.ft. 1,600 sq.ft.</p> <p>Hutments (4) 40' x 2' x 12' 36,000 cu.ft. 3,520 sq.ft.</p> <p>Runways (2) 1500' x 75' 180,000 sq.ft.</p> <p>Taxi Strip 400' x 12' 6,000 sq.ft.</p>							
1162	<p><b>Ground Storage Reservoir and Pump House</b></p> <p>The Ground Storage Reservoir, one Consumers Pump House, and one Fire Pump House are provided in the 1100 Area. The two reservoirs are rectangular-shaped, mostly below ground, basins having reinforced concrete floors and walls and oxidation asphalt felt surfaced wood roofs. The two Pump Houses have reinforced concrete foundations, floors, and walls. Walls and partitions are of concrete blocks.</p> <p><b>Reservoir #1</b> Reservoir #2</p> <p>Overall Dimensions 200' x 200' x 17' 150' x 150' x 17'</p> <p>Cross-sectional Area 14,000 sq.ft. 11,250 sq.ft.</p> <p>Displacement 228,000 cu.ft. 150,000 cu.ft.</p> <p>Capacity 1,200,000 gals. 750,000 gals.</p> <p><b>Consumers Pump House</b> <b>Fire Pump House</b></p> <p>Overall Dimensions 20' x 20' x 14' 12' x 12' x 14'</p> <p>Cross-sectional Area 1296 sq.ft. 1,740 sq.ft.</p> <p>Displacement Volume 2,160 cu.ft. 27,324 cu.ft.</p> <p><b>Material</b> Reservoir #1 Reservoir #2 Consumers Pump House Fire Pump House</p> <p>Concrete (cuyds.) 200 360 90 80</p> <p>Concrete Floorings (sq.ft.) 20,160 14,400 1,740 1,740</p> <p>Reinf. Steel Washes (sq.ft.) 20,160 14,400 1,740 1,740</p> <p>Concrete Blocks 100 100 100 100</p> <p>Asph. Felt squares 100 100 100 100</p>	Each	2		238,563		116,661	
1168	<p><b>Wells and Pumps</b></p> <p>Eight wells to supply water to the site and pumphouse are provided. Four of these were drilled but found unsatisfactory. All wells were equipped with steel pumps and three have auxiliary gas line engines. At present well is a reinforced concrete house except one has a frame house. All houses of frame houses are drilled and filled area at each well. The well pumps deliver into a header that supplies water to the main reservoir.</p>	Each	8		71,567		54,320	
1166	<p><b>Irrigation System</b></p> <p>An Irrigation System entirely separate from the domestic water system is provided for all parts of the village except in 1100 Area. Low pressure water piping, hose connections are connected to the domestic supply. This system consists of hoses, materials, and miscellaneous fittings as well as six pumps and 1000 feet of pipe. Water is obtained from the Columbia River and the existing irrigation canal from the farm in the 1100 Area. Pump buildings are 10' x 10' x 10', constructed with below ground with concrete floors and walls below grade and a 1/2" frame with siding walls and roll roofing above grade. 1000 feet of pipe are a 1/2" diameter in 10' x 10' x 10' and are of various sizes, having been originally built for domestic pump uses at other locations. Each station is enclosed in a light proof frame. The frame is a 2" x 4" welded steel to 1" gal. steel.</p> <p><b>Building</b> <b>Equip.</b> <b>Over-Dimensions</b> <b>Volume</b> <b>Area</b></p> <p>3 Pump Buildings 3 pumps 10' x 10' x 10' 1,000 cu.ft. 100 sq.ft.</p> <p>3 Pump Buildings 2 pumps 10' x 10' x 10' 1,000 cu.ft. 100 sq.ft.</p> <p>Length of Pipe 20,000 feet</p> <p>Number of Hose Boxes 1,000</p>	Lin. ft.	10,000		17,194		17,194	
1167	<p><b>Steam Lines</b></p> <p>Steam Lines are provided in the 1100 Area to convey steam for heating to Commercial Buildings and Dormitories. Schedule 40 low alloy steel pipe is used, flanges ranging from 1 1/2" to 8". The underground lines have "Rock-Wall" protective covering, and the overhead have 95% magnesia insulation and a water-proof jacket. The lines are mostly underground.</p> <p><b>Area</b> <b>8"</b> <b>6"</b> <b>5"</b> <b>4"</b> <b>3 1/2"</b> <b>3"</b> <b>2 1/2"</b> <b>2"</b> <b>1 1/2"</b> <b>1"</b> <b>Total</b></p> <p>1100 1000 1,000 1,000 4,000 1000 1,000 1,000 3,000 1000 10,000</p>	Lin. ft.	10,000		1,436,137		1,436,137	
1169	<p><b>Finished Grading</b></p> <p>This account covers finished grading work performed throughout the plant. A layer of top soil was applied over the sand through out much of the village, and gravel soil was placed only around commercial and public buildings.</p>	Lin. ft.	1		2,733,411		2,733,411	
1169A	<p><b>Furniture and Fixtures</b></p> <p>This account covers the initial handling, and moving costs of the Government Furniture for the dwellings in Highland Village. Approximately 30 of the dwellings were furnished for Contractor and Government employees during the construction period. In addition refrigerators and electric ranges were furnished in many other dwellings and in the rehabilitated dwellings. Some furniture was placed in existing houses adjacent to the village.</p>	Lin. ft.	1		45,874,300		45,874,300	
TOTAL ESTIMATED COSTS (including 10% Contingency, 5% Overhead, and 5% Profit)						45,874,300		
TOTAL ACTUAL COSTS						45,874,300		

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**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--- FINAL DETAIL COST STATEMENT ---**

REPORTING OFFICE HANFORD ENGINEER OFFICE PROJECT DESCRIPTION PLANT PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		DOLLARS		PERCENTS																																																																							
			ACTUAL		ACTUAL		ACTUAL																																																																							
	<b>SPECIAL CONSTRUCTION FEATURES:</b> Hanford Camp and Commercial Facilities, Temporary Construction, Maintenance of Farm Lands during Construction, Central Equipment Repair Shops, and Similar Features of Construction Work not normally applicable to a Construction Contract.																																																																													
	<b>HANFORD CAMP AND COMMERCIAL FACILITIES:</b>																																																																													
FE-27	Operating Income and Expense (Camp and Village) This account covers the expense less revenue of operating the Hanford Construction Camp and the operation of Highland Village prior to being taken over by general maintenance. Items covered by this account include Olympic Commissary Expense; Fire Protection; Police Protection; Maintenance Labor and Material; Supervision; Administrative Expenses; and Miscellaneous General Operating Expenses. All revenues were credited to this account.	LS	1			17,621,230		18,621,230																																																																						
HC-1	Bank House Buildings Bank house buildings were provided on Hanford Camp in several types. Men were housed in an "H" shaped structure consisting of four wings of sleeping rooms and a washroom placed to form the bar of the "H" and in lockup huts. The frame bathhouse was provided for each 20 hutments. Women were housed in an "H" shaped structure consisting of two wings and a wash room. Both men's and women's barracks and the bathhouses were wood-frame, rable-roofed structures with gypsum board exterior and interior walls, and roll roofing. Floors were wood except in wash rooms and bath houses where concrete was used. Pacific huts are plywood with insulation lining and plywood floors. Each men's barracks housed 1-1 men. Each women's barracks housed 70 women, and each hutment housed 11 men in each 40' section.	LS	1			7,751,246		7,751,246																																																																						
	<table border="1"> <thead> <tr> <th>Name of Building</th> <th>No. of Bldgs.</th> <th>Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>4-Wing Type Barracks</td> <td>151</td> <td>111'x33'x11'</td> <td>137,640 cu.ft.</td> <td>17,400 sq.ft.</td> </tr> <tr> <td>4-Wings "</td> <td></td> <td>30'x12'x11'</td> <td>22,140 cu.ft.</td> <td>17,400 sq.ft.</td> </tr> <tr> <td>Utility Room</td> <td></td> <td>30'x30'x11'</td> <td>34,500 cu.ft.</td> <td>4,400 sq.ft.</td> </tr> <tr> <td>4 Halls</td> <td></td> <td>5'x10'x9'</td> <td>1,350 cu.ft.</td> <td>2,000 sq.ft.</td> </tr> <tr> <td>2-Wing Type Barracks</td> <td>74</td> <td>111'x14'x11'</td> <td>18,410 cu.ft.</td> <td>10,110 sq.ft.</td> </tr> <tr> <td>2-Wings "</td> <td></td> <td>30'x14'x11'</td> <td>11,640 cu.ft.</td> <td>7,200 sq.ft.</td> </tr> <tr> <td>Wash Room</td> <td></td> <td>24'x30'x11'</td> <td></td> <td></td> </tr> <tr> <td>Laundry Room</td> <td></td> <td>15'x20'x11'</td> <td></td> <td></td> </tr> <tr> <td>Utility Room</td> <td></td> <td>10'x11'x9'</td> <td></td> <td></td> </tr> <tr> <td>2-Halls "</td> <td></td> <td>5'x10'x9'</td> <td></td> <td></td> </tr> <tr> <td>Hutments</td> <td>330</td> <td>14'x40'x9'</td> <td>11,220 cu.ft.</td> <td>1,200 sq.ft.</td> </tr> <tr> <td></td> <td>252</td> <td>16'x40'x9'</td> <td>6,760 cu.ft.</td> <td>640 sq.ft.</td> </tr> <tr> <td>Hutment Bath Houses</td> <td>44</td> <td>30'x30'x11'</td> <td>14,320 cu.ft.</td> <td>2,400 sq.ft.</td> </tr> </tbody> </table>	Name of Building	No. of Bldgs.	Dimensions	Volume	Area	4-Wing Type Barracks	151	111'x33'x11'	137,640 cu.ft.	17,400 sq.ft.	4-Wings "		30'x12'x11'	22,140 cu.ft.	17,400 sq.ft.	Utility Room		30'x30'x11'	34,500 cu.ft.	4,400 sq.ft.	4 Halls		5'x10'x9'	1,350 cu.ft.	2,000 sq.ft.	2-Wing Type Barracks	74	111'x14'x11'	18,410 cu.ft.	10,110 sq.ft.	2-Wings "		30'x14'x11'	11,640 cu.ft.	7,200 sq.ft.	Wash Room		24'x30'x11'			Laundry Room		15'x20'x11'			Utility Room		10'x11'x9'			2-Halls "		5'x10'x9'			Hutments	330	14'x40'x9'	11,220 cu.ft.	1,200 sq.ft.		252	16'x40'x9'	6,760 cu.ft.	640 sq.ft.	Hutment Bath Houses	44	30'x30'x11'	14,320 cu.ft.	2,400 sq.ft.							
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HC-2	Trailer Service Buildings and facilities A total of seven Trailer Cans was constructed, providing accommodation for 1,000 privately owned trailer houses. Five are adjacent to each other in the east portion of Hanford, No. 6 is on the South side, and No. 7 is adjacent to the military barracks. To serve the occupants of the Camp's bathhouses, clothes drying lots, playgrounds and a Trailer Office were provided. The ice houses, coal storage buildings, garages, and Dog Pound are charged to TC-10. Facilities such as water lines, electric lines, and telephone and such are charged to TC-4. Running water was supplied to each lot as was a sewer drain. Bathhouses were provided for each twenty-six families approximately, and contains men's and women's showers and toilet rooms, laundry room, utility room and closet. Construction is frame with gypsum board exterior and interior walls, roll roofing, and concrete floors. Clothes drying lots were located at each bathhouse. Thirty-nine playgrounds were set aside, containing swings, sand boxes, and teeter-totter boards. The Trailer Office was a one-story wood frame existing house with a Pacific Hut erected nearby. A Canopy was constructed over each trailer house. Construction was wood frame and steel-raft paper roofing.	LS	1			1,341,000		1,341,000																																																																						
	<table border="1"> <thead> <tr> <th>Buildings</th> <th>No. of Flays.</th> <th>Dimensions</th> <th>Volume</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>Trailer Lots</td> <td>118</td> <td>40' x 40'</td> <td></td> <td>17,280</td> </tr> <tr> <td>Trailer Lots</td> <td>2450</td> <td>24' x 40'</td> <td></td> <td>1,000</td> </tr> <tr> <td>Trailer Canopies</td> <td>3639</td> <td>16' x 20' x 12' A, 447</td> <td></td> <td>320</td> </tr> <tr> <td>Bathhouses</td> <td>15</td> <td>30' x 34' x 11'</td> <td>11,220</td> <td>1,350</td> </tr> <tr> <td>Clothes Drying Lots</td> <td>13</td> <td>52' x 80'</td> <td></td> <td>4,160</td> </tr> <tr> <td>Office (Rehab.Res.)</td> <td>1</td> <td>33' x 37' x 10'</td> <td>11,415</td> <td>1,421</td> </tr> <tr> <td>Janitress Office</td> <td>1</td> <td>16' x 40' x 9'</td> <td>11,620</td> <td>1,200</td> </tr> <tr> <td>Playgrounds</td> <td>20</td> <td>75' x 60'</td> <td></td> <td>6,000</td> </tr> <tr> <td>Playgrounds</td> <td>19</td> <td>80' x 160'</td> <td></td> <td>12,000</td> </tr> </tbody> </table>	Buildings	No. of Flays.	Dimensions	Volume	Area	Trailer Lots	118	40' x 40'		17,280	Trailer Lots	2450	24' x 40'		1,000	Trailer Canopies	3639	16' x 20' x 12' A, 447		320	Bathhouses	15	30' x 34' x 11'	11,220	1,350	Clothes Drying Lots	13	52' x 80'		4,160	Office (Rehab.Res.)	1	33' x 37' x 10'	11,415	1,421	Janitress Office	1	16' x 40' x 9'	11,620	1,200	Playgrounds	20	75' x 60'		6,000	Playgrounds	19	80' x 160'		12,000																											
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HC-3	Mess Halls Eight Mess Halls were constructed at Central locations for the purpose of feeding personnel housed in the Hanford Camp Area. Other service buildings necessary for the operation of the Mess Halls were also provided, such as: Eight warehouses, a Sandwich Shop, and Evisceration Building, and a Fat Rendering Building. Miscellaneous small buildings were constructed under TC-10. Five Mess Halls were erected along "F" Avenue and the other three South of town. The buildings were one-story, gypsum board exterior walls, roll roofing, wood floors in dining sections, and concrete floors in kitchen sections. The dining areas are at either ends with a kitchen between. A Warehouse of similar construction was attached by a hallway to the kitchen section of each Mess Hall. In the Sandwich and Bake Shop were prepared the hot lunches for the field workers. The Evisceration building was necessary due to inability to buy eviscerated poultry. A Fat Rendering Building was provided in which some 2,000 lbs. of fat were rendered daily during the peak months. These buildings were of the same general construction as the Mess Halls. A large number of Cold Storage Rooms were constructed in these buildings and warehouses.	LS	1			1,537,000		1,537,000																																																																						

# PROJECT COST SUMMARY --- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO.	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
HC-3	Mess Halls (continued)							
	No. of Bldgs.							
	Dimensions							
	Volume cu.ft.							
	Area sq.ft.							
	Mess Hall #1	1			781,164		84,120	
	Mess Halls 2-8	7			718,966		48,926	
	Dining Room (2)				537,600		36,430	
	Kitchen				106,600		4,800	
	Mess Hall Warehouses	8			101,092		7,560	
	Sandwich & Bake Shop	1			272,896		21,592	
	Evisceration Building	1			250,320		20,862	
	Hat Rendering Building	1			3,711		361	
HC-4	Commercial Store Buildings							
	All buildings for housing Commercial Contracts and Facilities in the Hanford Camp Area, except for a few minor exceptions were provided by the project. A total of 17 buildings were provided, four of which were rehabilitated existing store buildings, four were new one-story wood-frame, gypsum board siding structures, and the others were hutments.							
	Building	No. of Bldgs.	Dimensions	Volume cu.ft.	Area sq.ft.	Construction		
	Grecery Stores #1 & 2	2	74'x12'x12'	166,868	13,824	Wood frame 2 floor, gypsum board exterior & interior walls, roll roofing, same as grocery stores		
	Sears-Roebuck	1	12'x36'x12'	147,468	12,288	Same as grocery stores		
	Western Union Building	1	28'x60'x10'	16,800	1,600	Same		
	Shoe Sales Store	1	84'x0'x12'	38,400	3,140	Rehabilitated, wood frame		
	Show Repair Shop	1	16'x40'x9'	5,760	640	Pacific Hutment		
	Ladies Ready to Wear	1	30'x0'x12'	21,600	1,500	Rehabilitated concrete blocks		
	Sarment Alteration Shop	1	20'x40'x12'	9,600	800	Part of above bldg.		
	Shoe Repair Shop	1	12'x27'x9'	2,916	324	Wood frame		
	Ty Store	1	16'x40'x9'	11,520	1,200	Pacific Hutment		
	Auto Repair Hut	1	16'x40'x9'	5,760	640	Same		
	Tire Store	1	16'x40'x9'	5,760	640	Same		
	Clothing Store #1	1	16'x40'x9'	5,760	1,280	Same		
	Clothing Store Warehouse	1	16'x40'x9'	5,760	640	Same		
	Clothing Store #2	1	16'x40'x9'	11,520	1,280	Same		
	Optometrist Shop	1	20'x40'x12'	9,600	800	Rehabilitated frame stores		
	Jewelry Shop	1	16'x40'x9'	11,520	1,280	2 Pacific Hutments		
	Flat Shop	1	16'x40'x9'	5,760	640	Pacific Hutments		
HC-5	Theatres							
	The Motion Picture Theatres were constructed at Hanford, one in the shopping center seating 1,400 and one adjacent to the Col. Brad recreation hall seating 500. Prior to completion of these theatres, outdoor theatres were established as well as a circus tent. Construction of both buildings was two-story, wood frame, with gypsum board exterior, roll roofing, celotex lining, and concrete floor and foundation. Large theatre has lean-to addition for stage and foyer.							
	Theatre Cap.	Dimensions	Volume cu.ft.	Area sq.ft.				
	Hanford 1,400	78'x143'x4'x12'	420,144	13,664				
	Main Section	78'x143'x4'x12'	31,300	11,180				
	Stage	78'x16'x4'x12'	62,000	2,080				
	Foyer	78'x16'x12'	16,464	1,404				
	Galley 500	40'x124'x12'	18,720	4,460				
HC-7	Commissary buildings							
	Four large, wood frame, flat roof, buildings were erected at central locations in the Hanford Area to provide the workers with recreational facilities. Construction is wood post and girder, wood and concrete floors, gypsum board interior and exterior walls, and roll roofing. A canteen was operated in the basement of an existing concrete block building and a snack bar was operated in a Pacific hutment. The barracks buildings were also used for recreational purposes, as one part of Mess Hall #6.							
	Commissary Bldg. No. & Name	Dimensions	Volume cu.ft.	Area sq.ft.	Capacity of tavern, terrace			
	1 - White Men's Recreation Hall	102'x262'x11'	726,784	6,120	440			
	2 - Colored Recreation Hall	112'x182'x11'	236,544	21,604	608			
	3 - Women's Refreshment Center	102'x144'x11'	207,240	18,640	288			
	4 - White Tavern	112'x182'x11'	236,544	21,604	630			
	Frame Hall Canteen	40'x70'x20'	56,000	2,800				
	Snack Bar	16'x40'x9'	5,760	640				
HC-8	Garage Repair Shop							
	Four separate Garage and Service Stations serviced private cars in Hanford Camp. Two were privately owned and will not be described. Service Station #1 consisted of two sheet metal, pre-fabricated buildings and canopy furnished by the Midfield Oil Corporation. Buildings contained sales room, toilets, equipment for minor repairs and tire service plus dispensing of gas, oil and grease. Floors and foundations were concrete. Station #2 consisted of a rehabilitated one-story frame residence to which was added a new frame shed, and a rehabilitated frame barn to which was added a frame service shed. A propane gas tank was set on concrete piers close by.							
	Service Station #1	Dimensions	Volume	Area				
	2 bldgs.	22'x33'x13' & 18'x28'x6'x10'	13,500 cu.ft.	1,380 sq.ft.				
	Service Station #2	22'x14'x12' & 16'x30'x10' & 16'x18'x10' & 30'x16'x14'	15,776 cu.ft.	1,228 sq.ft.				



**PROJECT COST SUMMARY -- MILITARY FUNDS  
-- FINAL DETAIL COST STATEMENT --**

REPORTING OFFICE HANFORD ENGINEER STATION PROJECT DESCRIPTION PLATOON RECONSTRUCTION PLANT  
MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																					
			ACTUAL		ACTUAL		ACTUAL																																					
<b>SPECIAL CONSTRUCTION FEATURES (Continued):</b>																																												
HC-9	<p><b>Combined Stores Buildings</b></p> <p>Two one-story, wood frame, "T"-shaped shed-type buildings were erected in the camp area for the purpose of housing jointly more than one commercial facility. Each contained a Drug Store, Barber Shop, Beauty Parlor, Storage Room, and #1 also contained a Rotary Public Office and mail apartment. Construction was gypsum board exterior and interior surfaced walls, wood floors and roll roofing.</p> <table border="0"> <tr> <td></td> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Store #1</td> <td>11' x 15' x 12'</td> <td>11,250 cu.ft.</td> <td>7,200 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Store #2</td> <td>10' x 15' x 12'</td> <td>12,000 cu.ft.</td> <td>7,200 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>						Store #1	11' x 15' x 12'	11,250 cu.ft.	7,200 sq.ft.						Store #2	10' x 15' x 12'	12,000 cu.ft.	7,200 sq.ft.						Each	2		77,595		38,798										
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HC-10	<p><b>Laundry</b></p> <p>During the course of construction five buildings were used for collecting, storing and dispensing of public laundry and dry cleaning. No laundry or dry cleaning work was performed on the project by the operators, although a pressing service was maintained.</p> <table border="0"> <tr> <td></td> <td><u>No. of Bldgs.</u></td> <td><u>Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td><u>Construction</u></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Laundry Building</td> <td>1</td> <td>30' x 24' x 12'</td> <td>21,600</td> <td>1,200</td> <td>Rehabilitated existing frame bldg.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dry Cleaning &amp; Pressing Building</td> <td>1</td> <td>30' x 24' x 12'</td> <td>21,600</td> <td>1,200</td> <td>Rehabilitated existing concrete block</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dispensing Huts</td> <td>3</td> <td>10' x 12' x 12'</td> <td>3,750</td> <td>360</td> <td>Tactical Hut</td> <td></td> <td></td> <td></td> </tr> </table>		<u>No. of Bldgs.</u>	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>	<u>Construction</u>				Laundry Building	1	30' x 24' x 12'	21,600	1,200	Rehabilitated existing frame bldg.				Dry Cleaning & Pressing Building	1	30' x 24' x 12'	21,600	1,200	Rehabilitated existing concrete block				Dispensing Huts	3	10' x 12' x 12'	3,750	360	Tactical Hut				Ls	1		6,195		6,195	
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HC-11	<p><b>Bank</b></p> <p>One Bank Building, of one-story, wood frame construction, containing two reinforced concrete vaults, was constructed in the Hanford Central Shopping Center, to provide banking facilities for the construction employees, camp commercial facilities and construction administration purposes. Shortly after the building was opened, it was doubled in size, and then later a lean-to section and second vault was added to handle the increasing volume of business. Teller booths and cashier windows lined both sides of the building lengthwise. The accounting, banking, and office sections occupied the lean-to addition along one entire side. The line of teller windows on one side were used chiefly on the weekly payday evening.</p> <table border="0"> <tr> <td></td> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>30' x 120' x 14'</td> <td>137,000 cu.ft.</td> <td>9,800 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>							30' x 120' x 14'	137,000 cu.ft.	9,800 sq.ft.						Each	1		42,495		42,495																			
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	30' x 120' x 14'	137,000 cu.ft.	9,800 sq.ft.																																									
HC-12	<p><b>Post Office</b></p> <p>One Post Office Building was provided at Hanford Camp. This building had a large lobby, twelve general delivery windows, mail sorting room, C.O.D. room, outgoing mail room with 4 windows, and incoming mail room. The construction was one-story, wood-frame, wood floors, gypsum board siding and interior linings, and rolled roofing.</p> <table border="0"> <tr> <td></td> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>30' x 120' x 12'</td> <td>136,800 cu.ft.</td> <td>11,520 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>							30' x 120' x 12'	136,800 cu.ft.	11,520 sq.ft.						Each	1		29,218		29,218																			
	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>																																									
	30' x 120' x 12'	136,800 cu.ft.	11,520 sq.ft.																																									
HC-14	<p><b>Bowling Alley</b></p> <p>A one-story, wood frame, rectangular-shaped building was provided for bowling alleys at Hanford Camp. Twelve alleys were leased and installed. A soda fountain and a mail apartment are located at the entrance end. Construction is exterior gypsum board, gypsum board lining, wood floors except concrete in toilet, and roll roofing. Ventilation equipment was housed in a frame lean-to-addition.</p> <table border="0"> <tr> <td></td> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>91' x 128' x 16'</td> <td>166,368 cu.ft.</td> <td>11,040 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>							91' x 128' x 16'	166,368 cu.ft.	11,040 sq.ft.						Each	1		44,760		44,760																			
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	91' x 128' x 16'	166,368 cu.ft.	11,040 sq.ft.																																									
HC-15	<p><b>Churches</b></p> <p>The existing frame Church was first used, and then a large frame annex, called Community Service and Welfare Building, seating 524 persons, was added. Class rooms, vestry, choir room, library, Pastor's room, reception room, office, kitchen, and toilets were included. Construction was gypsum board exterior and interior, wood floors, and roll roofing. Catholic Church services were held in a large canvas tent in which steam heat and wood floor were provided. Later the auditorium was used. One wing of Barracks 201 was used for the Colored Church. The existing Grange Hall and Masonic Buildings were also used.</p> <table border="0"> <tr> <td></td> <td><u>Overall Dimensions</u></td> <td><u>Volume</u></td> <td><u>Area</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Existing Church</td> <td>50' x 70' x 18'</td> <td>71,000 cu.ft.</td> <td>3,500 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Community Service &amp; Welfare Bldg.</td> <td>50' x 166' x 18'</td> <td>138,020 cu.ft.</td> <td>7,700 sq.ft.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>						Existing Church	50' x 70' x 18'	71,000 cu.ft.	3,500 sq.ft.						Community Service & Welfare Bldg.	50' x 166' x 18'	138,020 cu.ft.	7,700 sq.ft.						Each	1		37,965		37,965										
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# PROJECT COST SUMMARY--- MILITARY FUNDS

## --FINAL DETAIL COST STATEMENT--

REPORTING OFFICE HANFORD ENGINEER STATION PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1945

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																																					
			ACTUAL		ACTUAL		ACTUAL																																																					
HC-15	Churches (Continued)  Catholic Church <u>Overall Dimensions</u> 100' x 200' (tent) <u>Volume</u> <u>Area</u> 20,000 sq.ft.	Each	1		219,377		219,377																																																					
HC-16	Auditorium  This Auditorium was provided for large group recreational activities and administrative functions. Construction was two-story, wood-frame with column and truss supported roof main section and lean-to sheds on all four sides. Floors were wood except concrete in wash rooms; walls were gypsum board exterior and gypsum board and celotex interior lining; and roof was roll roofing. A Pacific Hut was used for chair storage.  <u>Dimensions</u> Overall 100' x 206'-8" x 36' Main Section 140' x 100' x 24' Hutment 16' x 40' x 3' <u>Volume</u> 1,039,736 cu.ft. 761,000 cu.ft. 5,760 cu.ft. <u>Area</u> 35,416 sq.ft. 22,160 sq.ft. 616 sq.ft.	Each	1																																																									
HC-17	Commercial Bus Depot  A Depot for Commercial Bus Lines was provided adjacent to the employment office. It was a one-story, "L"-shaped, wood-frame building containing a waiting room, ticket office, and four wash rooms. Construction was gypsum board exterior and interior walls, roll roofing, and wood floors.  <u>Overall Dimensions</u> 12' x 50' x 14' <u>Volume</u> 21,064 cu.ft. <u>Area</u> 1,776 sq.ft.	Each	1		10,951		10,951																																																					
TC-4	Temporary Camp Area (Hanford)  Included under this account are the utilities and many facilities for the Hanford Camp Area. Other facilities are listed under Plant Wide Temporary Construction Account. Water pipe over 4" dia. was wood stave, 40% and steel pipe, 10%. All other was steel pipe. Sewer pipes were vitrified clay and concrete. Construction of buildings was chiefly wood frame with gypsum board exterior walls, wood floors, and roll roofing. Many existing buildings were used with varying amounts of remodeling, as well as many hutments, both metal and plywood, and sectional prefabricated buildings. Water tanks were both wood and steel.  <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Code No.</th> <th rowspan="2">Services</th> <th rowspan="2">Length</th> <th colspan="2">Buildings</th> </tr> <tr> <th>New</th> <th>Existing</th> </tr> </thead> <tbody> <tr> <td>4.5</td> <td>Water Lines</td> <td>317,075'</td> <td>36</td> <td>1</td> </tr> <tr> <td>4.6</td> <td>Electric Lines</td> <td>321,300'</td> <td></td> <td></td> </tr> <tr> <td>4.7</td> <td>General Grading</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4.8</td> <td>Sewers and Septic Tanks</td> <td>214,250'</td> <td>9</td> <td></td> </tr> <tr> <td>4.9</td> <td>Misc. Temp. Constr.</td> <td></td> <td>53</td> <td>12</td> </tr> <tr> <td>4.10</td> <td>Fire Stations</td> <td></td> <td>5</td> <td></td> </tr> <tr> <td>4.11</td> <td>School Bldgs.</td> <td></td> <td>6</td> <td>2</td> </tr> <tr> <td>4.12</td> <td>Locomotive &amp; Boiler Repair Shop</td> <td></td> <td>1</td> <td></td> </tr> <tr> <td>4.13</td> <td>Public Address System</td> <td></td> <td>33</td> <td>Installations</td> </tr> </tbody> </table>	Code No.	Services	Length	Buildings		New	Existing	4.5	Water Lines	317,075'	36	1	4.6	Electric Lines	321,300'			4.7	General Grading				4.8	Sewers and Septic Tanks	214,250'	9		4.9	Misc. Temp. Constr.		53	12	4.10	Fire Stations		5		4.11	School Bldgs.		6	2	4.12	Locomotive & Boiler Repair Shop		1		4.13	Public Address System		33	Installations	LS	1		4,775,115		4,775,115	
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GC-40	Ice Plant and Cold Storage Building  The existing Cold Storage and Ice Plant at White Bluffs was repaired and improved to provide such facilities on the area. Additional space was leased in privately owned plants outside the area, (see tabulation). The White Bluffs plant consisted of a 2-story reinforced-concrete structure with wood frame office and loading platform at the West end. A two-story tile warehouse with roll roofing on wood frame is located at East end and a small frame pump house just South of the main building. New construction was a 2-story wood-frame addition containing a freight elevator and connected trucking corridors.  <u>Overall Dimensions</u> Cold Storage Building 110' x 136' x 24' New Addition 25' x 50' x 40' Warehouse 30' x 110' x 20' <u>Volume</u> 311,776 cu.ft. 1,400 0,000 <u>Area</u> 17,072 sq.ft. 460 3,300 <u>Leased Storage</u> A.H. Avery, Pasco, Wa. 8 rooms 3,000 460 Pasco Growers, Pasco, Wa. 2 rooms 19,000 1,400 Western Cold Storage, Moses Lake, Wash. 4 rooms 162,460 16,296	LS	1		108,464		108,464																																																					
GC-41	Hotels, Dormitories & Rooming House Buildings  Living quarters for many persons were provided throughout the construction period at off-plant locations. At Prosser, white women were housed in a hotel until Hanford barracks were constructed. At Pasco, bus drivers were housed, and baggage handled. All other housing was to provide overnight accommodations for incoming workers until they could be assigned to barracks in Hanford. The store and hotel buildings were leased; the Little Pasco buildings loaned from a Government agency and the hutments were Project owned. Toilet facilities were installed in several leased buildings	LS	1		212,092		212,092																																																					

# PROJECT COST SUMMARY -- MILITARY FUNDS

## -- FINAL DETAIL COST STATEMENT --

REPORTING OFFICE HANFORD ENGINEERS GROUP PROJECT DESCRIPTION FLUORINATION PLANT  
 MONTH ENDING 11.30.1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS		
			ACTUAL		ACTUAL		ACTUAL		
GC-11	Hotels, Dormitories & Rooming House Buildings (Continued) and removed at termination of lease.								
	<b>PASCO</b>								
	Building	No.	Dimension	Volume cu.ft.	Area sq.ft.	Description			
	Gray Building	1	20'x8'x10'	16,000	1,600	2-story brick store			
	Baggage Room	1	5'x10'x10'	5,000	1,000	1-story brick store			
	Dock Fin Inn	1	10'x20'x10'	20,000	2,000	1-story brick and concrete store			
	Reception and Information Bldg.	1	50'x20'x10'	10,000	1,000	2 Pacific huts joined in "U" shape with gypsum board siding at corners.			
	<b>LYTTE PASCO</b>								
	Barracks	4	20'x100'x11'	88,000	8,800	Wood frame, wood floor, tarpaper over sheathing walls and roof.			
	Bath Houses	2	2'x10'x11'	4,400	800	Same except concrete floor			
	Fire Station	1	20'x100'x11'	22,000	2,200	Same, wood floor			
	Mess Hall	1	20'x100'x11'	22,000	2,200	Same			
	Overflow Barracks	1	10'x10'x11'	11,000	1,100	Pacific Hut			
	<b>FRASER</b>								
	Hotel for Women	1				2-story, brick hotel			
	Sub-Total HANFORD CAMP AND DOMESTIC FACILITIES						47,200,532		
	<b>TEMPORARY CONSTRUCTION:</b>								
TC-1	Construction Administration and Service Area						2,277,000	2,277,000	
	<p>The Construction Administration and Service Group was comprised of a total of 16 buildings, 24 new construction and 2 existing buildings. All were located within a large block or faced the block's boundary streets except the Bus Maintenance Garage and Convallescent Hospital. Facilities serving these buildings were charged to other accounts. Most of the buildings were the typical temporary construction - wood-frame, wood-frame, with gypsum board exterior, gypsum board and celotex interior linings, roll roofing, and wood floors. Vaults and fire walls were constructed of concrete and brick, and Ordnance Building was reinforced concrete.</p>								
	<b>Code</b>	<b>Building</b>	<b>Dimensions</b>	<b>Volume cu.ft.</b>	<b>Area sq.ft.</b>	<b>Remarks</b>			
TC 1.1		Main Construction Office Building-Five-wings with main corridor passing thru approx. midpoint of each	10'x20'x12'	24,000	2,400	Two brick vaults			
TC 1.2		Training & Relations, Investigation, Termination & Transfer Bldg.	10'x20'x12'	24,000	2,400				
TC 1.2		Employment Building	10'x20'x12'	24,000	2,400				
TC 1.2		Hospital-First Aid & Clinic "U" shaped with many wings	65'x37'x10'	24,325	27,420				
TC 1.3		Guard Headquarters "L" Shaped	110'x126'x10'	13,860	11,140	Brick Jail			
		Patrol Tr. Bldg.	16'x100'x10'	16,000	1,600				
		Patrol Supply Hut	20'x10'x10'	2,000	1,000	Metal Hut			
		Radio Repair Hut	20'x10'x10'	2,000	1,000	Metal Hut			
TC 1.4		Service Bldg.-(Hanford Housing) "L" Shaped	20'x10'x12'	24,000	2,400				
TC 1.5		Telephone Bldg. "L" Shaped	10'x20'x11'	22,000	2,200				
TC 1.6		Auto Wash Rack	21'x32'x12'	8,064	768	Concrete Floor			
		Drivers' Examination Building	21'x100'x11'	23,100	2,310				
		Fundation Chamber	28'x20'x11'	6,160	598	Re-modeled Existing Frame House			
		Bedding Storage Hut	16'x10'x10'	1,600	610	Pacific Hut			
		Lunch Hut (2)	16'x10'x10'	1,600	610	Pacific Huts			
		Cone Cells Hut	16'x10'x10'	1,600	610	Pacific Hut			
		Original Orientation Building	20'x60'x12'	14,400	1,200	Re-modeled Existing Frame Store Bldg.			
		Ordnance Building	16'x16'x10'	2,560	256	Reinforced concrete 12" thick			
		Guard Post Building	6'x6'x8'	288	36				
		Patrol Storage Bldg.	16'x20'x10'	3,200	320				
TC 1.7		Time Office & Payroll Bldg. "H" Shaped	100'x30'x12'	36,000	3,200				
TC 1.8		Piping Subcontractor's "Y" Shaped	15'x120'x12'	27,000	12,240	One Brick Vault			
TC 1.9		Bus Maintenance Building "L" Shaped	160'x160'x16'	409,600	24,090				

**PROJECT COST SUMMARY -- MILITARY FUNDS**  
**--FINAL DETAIL COST STATEMENT--**

REPORTING OFFICE HANFORD SWITZER WORKS PROJECT DESCRIPTION PATTON MILITARY CAMP  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																															
			ACTUAL		ACTUAL		ACTUAL																															
TC-1	Construction Administration and Service Area (Continued)																																					
	Code Overall Volume Area Remarks																																					
	No. Building Dimensions cu.ft. sq.ft.																																					
TC 1.10	Military Intelligence Building																																					
TC 1.11	Subcontractor's Badge Office																																					
TC 1.12	Convalescent & Isolation Hospital & Public Health Bldg. & wings and main corridor																																					
TC-5	Roads and Walks	LS	1		1,204,504		1,204,504																															
	Temporary Roads, Parking Areas, and Walks were provided in Hanford Camp and a small number of other locations. Except for Hanford Camp many of the roads were built on the lines of the permanent roads and served as a base for the permanent roads. Bituminous surfacing was used on walks and roads in Hanford Camp Area only. Only a few parking areas were all treated for dust prevention.																																					
	<table border="0"> <tr> <td></td> <td align="center" colspan="3">Length in Miles</td> </tr> <tr> <td></td> <td align="center">Bituminous Surface</td> <td align="center">Gravel Surface</td> <td align="center">Total</td> </tr> <tr> <td>Hanford Camp Roads</td> <td align="right">11.24</td> <td align="right">29.71</td> <td align="right">40.95</td> </tr> <tr> <td>Misc. Roads</td> <td align="center">-</td> <td align="right">4.07</td> <td align="right">4.07</td> </tr> <tr> <td>Walks</td> <td align="right">22.10</td> <td align="center">-</td> <td align="right">22.10</td> </tr> <tr> <td></td> <td align="center" colspan="3">Area in Square Feet</td> </tr> <tr> <td></td> <td align="center">Oil Treated</td> <td align="center">Gravel</td> <td align="center">Total</td> </tr> <tr> <td>Parking Lots</td> <td align="right">(3) 75,000 sq.ft.</td> <td align="right">(10) 1,700,000</td> <td align="right">2,175,000</td> </tr> </table>		Length in Miles				Bituminous Surface	Gravel Surface	Total	Hanford Camp Roads	11.24	29.71	40.95	Misc. Roads	-	4.07	4.07	Walks	22.10	-	22.10		Area in Square Feet				Oil Treated	Gravel	Total	Parking Lots	(3) 75,000 sq.ft.	(10) 1,700,000	2,175,000					
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TC-6	Railroads	Miles	51.00		48,492		29,679																															
	Temporary Railroad track for construction purposes only was provided as listed below. All track was standard gauge and all rail was 110 to 120 per yard, used.																																					
	<table border="0"> <tr> <td>White Bluffs</td> <td align="right">10,000</td> <td align="right">ft.</td> </tr> <tr> <td>Hanford to White Bluffs</td> <td align="right">51,587.29</td> <td></td> </tr> <tr> <td>100 - R, D, F</td> <td align="right">47,677.77</td> <td></td> </tr> <tr> <td>200 - R &amp; W</td> <td align="right">51,044.64</td> <td></td> </tr> <tr> <td>Richland</td> <td align="right">2,041.18</td> <td></td> </tr> <tr> <td>Haven Pit</td> <td align="right">1,300.76</td> <td></td> </tr> <tr> <td>RE Arg. Pit</td> <td align="right">1,200</td> <td></td> </tr> <tr> <td>Miscellaneous</td> <td align="right">1,200,000</td> <td></td> </tr> <tr> <td>Total</td> <td align="right">100,976.27</td> <td align="right">ft. or 51.00 miles</td> </tr> </table>	White Bluffs	10,000	ft.	Hanford to White Bluffs	51,587.29		100 - R, D, F	47,677.77		200 - R & W	51,044.64		Richland	2,041.18		Haven Pit	1,300.76		RE Arg. Pit	1,200		Miscellaneous	1,200,000		Total	100,976.27	ft. or 51.00 miles										
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TC-7	Wells and Water Lines	LS	1		1,500,770		1,500,770																															
	Water was supplied to the various construction areas from river pumping stations, both temporary and existing, and wells, both drilled and existing. Each 100-Area was supplied by a river pumping station; all 300-Areas and Central Shops were supplied from the McGee-Allard Lines; White Bluffs from existing wells; and the 4000 Area and Little Fasco from driven wells. The McGee-Allard System consisted of the existing McGee artesian well and the existing Coyote Pumping Station. The wells from these two supplies were approximately 10 miles and 5 miles long, of both wood and steel pipe of 12" diameter. Distribution lines totaled about 6 miles. Chlorinating units were installed at all pumps and booster stations.																																					
	A tabulation of approximate quantities follows:																																					
	<table border="0"> <tr> <td></td> <td align="center">Quantity</td> <td align="center">Total Capacity</td> </tr> <tr> <td>Wells</td> <td align="center">8 driven, 1 artesian</td> <td></td> </tr> <tr> <td>Marine Pumping Stations</td> <td align="center">3 temporary, 1 permanent</td> <td></td> </tr> <tr> <td>Booster Stations</td> <td align="center">7 (with frame houses)</td> <td></td> </tr> <tr> <td>Ground Storage Tanks</td> <td align="center">10 (wood)</td> <td align="right">265,000 gals.</td> </tr> <tr> <td>Elevated Storage Tanks</td> <td align="center">4</td> <td align="right">110,000 gals.</td> </tr> <tr> <td>Chlorinator Houses</td> <td align="center">6</td> <td></td> </tr> <tr> <td>Railroad Water Stations</td> <td align="center">3</td> <td align="right">75,000 gals.</td> </tr> <tr> <td>Steel Pipe</td> <td align="right">178,855 ft.</td> <td></td> </tr> <tr> <td>Wood Pipe</td> <td align="right">80,685 ft.</td> <td></td> </tr> </table>		Quantity	Total Capacity	Wells	8 driven, 1 artesian		Marine Pumping Stations	3 temporary, 1 permanent		Booster Stations	7 (with frame houses)		Ground Storage Tanks	10 (wood)	265,000 gals.	Elevated Storage Tanks	4	110,000 gals.	Chlorinator Houses	6		Railroad Water Stations	3	75,000 gals.	Steel Pipe	178,855 ft.		Wood Pipe	80,685 ft.								
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TC-8	Electric Lines	LS	1		740,436		740,436																															
	Electric Power for construction was furnished through the existing facilities. Sources of supply were Pacific Power and Light Company substations at Hanford, White Bluffs, Allard, and Richland; the Bonneville Power Administration line between Midway and Walla Walla; and the Priest Rapids Hydro-electric Generating Plant. Taps were made from these substations and lines and connected to temporary primary substations as follows:																																					
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# PROJECT COST SUMMARY -- MILITARY FUNDS

## -- FINAL DETAIL COST STATEMENT --

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS																																								
			ACTUAL		ACTUAL		ACTUAL																																								
TC-8	<p>Electric Lines (Continued)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><u>Substation</u></td> <td style="width: 30%;"><u>Capacity</u></td> <td style="width: 40%;"></td> </tr> <tr> <td>100-F</td> <td>4000 KVA</td> <td></td> </tr> <tr> <td>200-E</td> <td>5000 KVA</td> <td></td> </tr> <tr> <td>200-W</td> <td>5000 KVA</td> <td></td> </tr> <tr> <td>Hanford Adu.</td> <td>5000 KVA</td> <td></td> </tr> <tr> <td>Hanford Barracks</td> <td>5000 KVA</td> <td></td> </tr> </table> <p>Approximately 19 miles of 66 KV lines were constructed into the construction areas, also 19 miles of 6.9 KV was constructed to shops, wells, and subcontractor installation.</p>	<u>Substation</u>	<u>Capacity</u>		100-F	4000 KVA		200-E	5000 KVA		200-W	5000 KVA		Hanford Adu.	5000 KVA		Hanford Barracks	5000 KVA																													
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TC-11	<p>Sewers and Septic Tanks</p> <p>Temporary Sewers and Septic Tanks constructed outside of Hanford Camp were constructed under this code. These facilities were for a limited number of office buildings only. Septic tanks were of wood construction and Sewer lines and Tile Fields were vitrified clay pipe, except concrete pipe was used in the 1100 Area. The two temporary units for the 700 and 1100 Areas used Inhoff tanks and Chlorinating units prior to completion of permanent Sewage Plant. A tabulation of facilities follows:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 20%;"></td> <td style="width: 20%;"><u>Septic Tanks</u></td> <td style="width: 20%;"><u>Settling Basins</u></td> <td style="width: 40%;"><u>Sewers - V.S.P.</u></td> </tr> <tr> <td>White Bluffs</td> <td>1</td> <td></td> <td>300'</td> </tr> <tr> <td>3000 Area</td> <td>1</td> <td></td> <td>310'</td> </tr> <tr> <td>Central Shops Area</td> <td>1 - 30'x60' Wood</td> <td>3 - 30'x60' Earth Dike</td> <td>600'</td> </tr> <tr> <td>100-B</td> <td>2 - 4'x6' Wood</td> <td></td> <td>700'</td> </tr> <tr> <td>100-D</td> <td>2 - 4'x6' Wood</td> <td></td> <td>600'</td> </tr> <tr> <td>100-F</td> <td>2 - 8'x15'x6' Wood</td> <td></td> <td>1500'</td> </tr> <tr> <td>200-E</td> <td>1 - 6'x12'x6' Wood</td> <td></td> <td>400'</td> </tr> <tr> <td>200-W</td> <td>Used Permanent Tank</td> <td></td> <td>700'</td> </tr> <tr> <td>700 - 1100</td> <td colspan="3">Two Sewage Disposal Units, each with 14'x2' Wood Inhoff Tank &amp; 800' Concrete pipe</td> </tr> </table>		<u>Septic Tanks</u>	<u>Settling Basins</u>	<u>Sewers - V.S.P.</u>	White Bluffs	1		300'	3000 Area	1		310'	Central Shops Area	1 - 30'x60' Wood	3 - 30'x60' Earth Dike	600'	100-B	2 - 4'x6' Wood		700'	100-D	2 - 4'x6' Wood		600'	100-F	2 - 8'x15'x6' Wood		1500'	200-E	1 - 6'x12'x6' Wood		400'	200-W	Used Permanent Tank		700'	700 - 1100	Two Sewage Disposal Units, each with 14'x2' Wood Inhoff Tank & 800' Concrete pipe			LS	1		36,304		36,304
	<u>Septic Tanks</u>	<u>Settling Basins</u>	<u>Sewers - V.S.P.</u>																																												
White Bluffs	1		300'																																												
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200-W	Used Permanent Tank		700'																																												
700 - 1100	Two Sewage Disposal Units, each with 14'x2' Wood Inhoff Tank & 800' Concrete pipe																																														
TC-15	<p>Steam Lines and Boiler Houses</p> <p>Steam was required in Hanford Camp, Central Shop Area, 3000 Area Camp and some special buildings for heating, in some areas for concrete curing, for cleaning refuse containers, and for temporary steam-generating plants.</p> <p>A total of 23 semi-permanent boiler houses were erected: 18 in Hanford Camp, 4 in Central Shops, 1 in 3000 Area. Buildings were one-story, wood-frame, post and girder construction, with gypsum board siding and roll roofing. Soft water storage tanks were wood staves. Majority of houses had 100 H.P., hand fired, horizontal boilers, in batteries of up to eight boilers. Other boilers ranged from 40 to 300 H.P. Five railroad locomotives were connected in parallel to service the 115 building with 1500 H.P. and portable boilers varying from 12 to 100 H.P. were used as work demanded throughout the area. The 23 boiler houses contained 115 boilers with total rating of 2628 H.P..</p> <p>Approximately 30.5 miles of temporary plant-wide steam lines, varying in size from 1" to 12", were required. More than 50% of these were in Hanford Camp. Lines were overhead - steel pipes, 25% magnaesia insulated, and weather-proof paper covered. Supports were wood poles.</p>	LS	1		4,702,040		4,702,040																																								
TC-16	<p>Temporary Telephone Lines</p> <p>Temporary Telephone Lines as well as the permanent lines were provided under the direction of the Signal Corps. The existing lines of five companies were utilized until temporary and permanent lines could be constructed, and wherever possible only permanent lines were constructed. Temporary switchboards were installed in Pasco in the Gray Bldg., 20 lines; in Richland, 10 lines; in Hanford, 75 lines, and in Central Shops Area, 75 lines. Approximately 4,000 telephones were put in service.</p>	LS	1		10,210		10,210																																								
TC-17	<p>Telephone Repeater Station</p> <p>One Telephone Repeater Station in a small concrete and concrete block building was constructed on the main trunk line just north of the 400 Area to improve temporary telephone transmission.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><u>Overall Dimensions</u></td> <td style="width: 30%;"><u>Volume</u></td> <td style="width: 40%;"><u>Area</u></td> </tr> <tr> <td>8' x 8' x 8'</td> <td>512 cu.ft.</td> <td>64 sq.ft.</td> </tr> </table>	<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>	8' x 8' x 8'	512 cu.ft.	64 sq.ft.	LS	1		5,124		5,124																																		
<u>Overall Dimensions</u>	<u>Volume</u>	<u>Area</u>																																													
8' x 8' x 8'	512 cu.ft.	64 sq.ft.																																													
TC-101	<p>Special Fabrication Area</p> <p>One Special Fabrication Building was provided for the preparation of the granite blocks used in the 105 and 305 buildings, and also a large warehouse and an office building. Construction of fabrication building was concrete foundations and floors; wood frame and roof with built-up roofing; drop-siding walls; and cement block fire walls. Warehouse and office were wood frame, with gypsum board exteriors and roll roofing.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><u>Overall Dimensions</u></td> <td style="width: 40%;"><u>Area</u></td> </tr> <tr> <td>Special Fabrication Building</td> <td>172' x 391' x 25'</td> </tr> <tr> <td></td> <td>64,392 sq.ft.</td> </tr> </table>	<u>Overall Dimensions</u>	<u>Area</u>	Special Fabrication Building	172' x 391' x 25'		64,392 sq.ft.	LS	1		1,251,024		1,251,024																																		
<u>Overall Dimensions</u>	<u>Area</u>																																														
Special Fabrication Building	172' x 391' x 25'																																														
	64,392 sq.ft.																																														
<b>Sub-Total</b>							10,023,155																																								



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**PROJECT COST SUMMARY --- MILITARY FUNDS**  
**--- FINAL DETAIL COST STATEMENT ---**

REPORTING OFFICE MANFORD MILITARY CAMP PROJECT DESCRIPTION PLUTONIUM PRODUCTION PLANT  
 MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS	
			ACTUAL		ACTUAL		ACTUAL	
<b>MANFORD AIRPORT:</b>								
TC-14	Manford Airport An Airport was provided near the Manford Camp for air express deliveries. The Airport consisted of two landing strips with bituminous pavement 300 feet wide. M-S strip was 1000 feet long and E-N 2140 feet long. Two wood frame open type hangars and a 15'x10' Pacific hutment were provided, also pumps and underground gasoline storage tanks. A three-strand barbed wire fence enclosed the area. A single lane, 50' wide, black top landing strip 2000 feet long was originally constructed nearer Manford, but was abandoned.	Each	1		70,535		70,535	
	Sub-Total				70,535			
<b>CENTRAL EQUIPMENT STORE HOUSE:</b>								
TC-23	Central Shops Area A Shops Area for repairing equipment, and furnishing other construction services was provided at a site centrally located with respect to the 100 and 300 Areas. Here were established such buildings as Craft Administration Offices, Layout Office, Inspection Office, Transportation Garage and Offices, Machine, Sheet Metal, Electrical and Paint Shops, Crane Repair and Rigger's Loft, Fuel Storage, and Drinking Water Distribution Facilities. Altogether sixty-seven (67) buildings were constructed, of which 37 are frame, 2 are metal hutments, 2 prefabricated frame, and the balance are platforms and fenced tank areas.	LS	1		1,070,050		1,070,050	
	Sub-Total				1,070,050			
<b>3000 AREA BARRACKS:</b>								
XC-51B	Bunk House Buildings	Each	6		250,146		11,589	
XC-51E	Bunk House Buildings Equipment Five men's and one women's Bunk House Buildings are provided in the 3000 Area. Construction and design are same as in Manford Camp: Wood frame, wood floors, gypsum board exterior and interior walls, and roll roofing; and living and wash room in men's and 2 wings and wash room in women's. Hutments are Pacific, having plywood floors and exteriors and insulation board interiors.	Each	6		24,644		3,447	
	Overall Dimensions							
	Men's Barracks (5)	110' x 43 1/2' x 13'		257,540 cu.ft.		13,480 sq.ft.		
	Women's Barracks (1)	111 1/2' x 14 1/2' x 13'		129,410		10,110		
	Storage Hutments (4)	15' x 10' x 1'		5,700		540		
XC-52-A	Cafeteria Building	Each	1		103,480		103,480	
XC-52-B	Cafeteria Building Equipment One Mess Hall is provided in the 3000 Area. Construction is wood frame, wood floor in dining room, concrete floors in kitchen and warehouse, gypsum board siding and roll roofing. Building is one-story and "L" shaped, having one dining room, a kitchen and the warehouse connected off the kitchen and office section.	Each	1		30,152		30,152	
	Overall Dimensions							
	Mess	208' x 219' x 19'		124,440 cu.ft.		31,528 sq.ft.		
	Kitchen & Offices	10' x 128' x 13'		112,480		5,720		
	Dining Room	36' x 160' x 13'		192,680		15,740		
	Warehouse	20' x 126' x 15'		115,120		7,560		
XC-54-B	Garage	Each	1		15,038		15,038	
XC-54-E	Garage Equipment One Garage is provided in the 3000 Area for repair of Military Police vehicles. Construction is wood frame, gypsum board siding, roll roofing and concrete floor and apron.	Each	1		1,528		1,528	
	Overall Dimensions							
		32' x 67' x 11'		3,015 cu.ft.		2,110 sq.ft.		
XC-54-B	Infirmary Building	Each	1		10,140		10,140	
XC-54-E	Infirmary Building Equipment An Infirmary Building is provided for the Military Police by the remodeling of a portion of one wing of a L-wing barracks. Interior walls are sheetrock above a 4-foot wood wainscot. Wood floors are covered with "Masti-pave."	Each	1		2,847		2,847	
	Infirmary - 6 rooms - 63' x 12' (Overall)							
	Sub-Total				495,305			



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PROJECT COST SUMMARY --- MILITARY FUNDS  
--- FINAL DETAIL COST STATEMENT ---

REPORTING OFFICE HANFORD ENGINEER WORKS PROJECT DESCRIPTION PLANT #1000 PRODUCTION PLANT  
MONTH ENDING 31 DECEMBER 1946

CODE NO	ACCOUNT DESCRIPTION	UNIT OF MEASURE	QUANTITIES		TOTAL COSTS		UNIT COSTS		
			ACTUAL		ACTUAL		ACTUAL		
	<u>SPECIAL CONSTRUCTION FEATURES: (Continued)</u>								
	<u>MAINTENANCE OF FARM LANDS DURING CONSTRUCTION:</u>								
	Maintenance of Farm Lands This account covers the expense of both CPFF Prime Contractor and the Government in maintaining orchards and farm lands within the project. The farm lands, together with the existing main irrigation system and several existing individual systems, were maintained by the contractor until such time as an agreement was reached whereby cultivating, harvesting and marketing were handled by the Federal Prison Industries. Costs included in this account cover the maintenance of irrigation systems, cultivation of orchards and other crops, operating equipment, pruning, spraying and miscellaneous farm maintenance.	Ls	1			856.312		856.312	
	Sub-Total					856.312			
	TOTAL SPECIAL CONSTRUCTION FEATURES					40,909.657			
	GRAND TOTAL CONSTRUCTION COSTS -- HANFORD ENGINEER WORKS						248,171,240		

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MEMORANDUM OF METHODS USED TO ACCUMULATE COST FOR  
HANFORD ENGINEER WORKS, RICHLAND, WASHINGTON

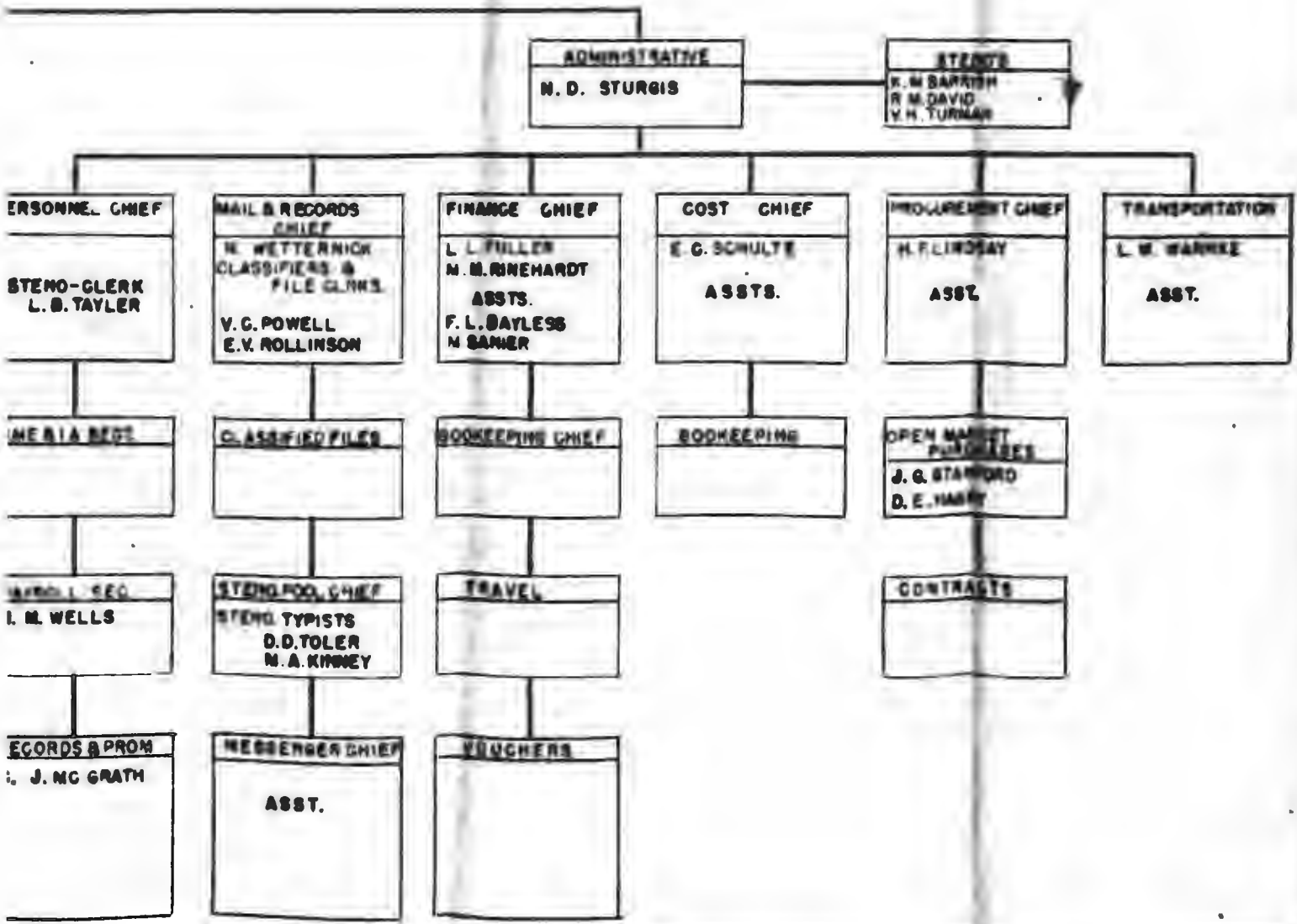
1. Detail costs were maintained by the CPFF Prime Contractor in accordance with their regular method of cost keeping on construction projects with certain modifications to comply with general accounting methods of the Corps of Engineers as laid down in Chapter II, Cost Accounting Manual. A modified form of procedures as shown in Chapter II, Cost Accounting Manual was used by Government forces in maintaining a Control Account of CPFF Prime Contract Cost and detail records of Government Overhead and Maintenance Accounts.
2. Cost of materials, equipment and supplies furnished by the Government on both a free issue and procurement basis were supplied the Contractor and incorporated in the features of work by direct allocation and/or stores distribution.
3. Labor charges were allocated direct to features of work by the Contractor on the basis of individual time cards. Main Sub-Contract labor charges were also distributed on a time card basis.
4. Materials and equipment were allocated direct to features of work where purchased specifically for a feature and on the basis of store tickets on items of a general nature, such as; lumber, nails, etc.. Distribution of Main Sub-Contractor's material and equipment costs were also made on this basis.
5. In addition to the above mentioned Main Sub-Contracts, several Sub-Contracts were let covering specific codes and charges covering labor, material and equipment were, therefore, allocated direct to the specific code involved on the basis of reimbursements to the Sub-Contractor.
6. Major construction equipment maintenance, shop equipment maintenance, small tool maintenance, and miscellaneous clearing costs were distributed periodically on the basis of total labor charges to construction features during the period involved.
7. Overhead and deferred accounts were distributed at the close of construction on the following basis:
  - a. Engineering Design: Village design to the 1100 Area.  
Plant design to the various plant features on the basis of total labor and material cost.
  - b. Engineering Supervision, Home Office Expense, Field Supervision, Field Expense, Transfer Out Expense, Government Overhead, and Similar Accounts were distributed to all features on the basis of total labor and material cost.

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- c. Temporary Construction Charges were distributed to the Feature of Work for whose benefit the particular T. C. Work was incurred.
- d. Major Equipment, Rented Equipment, and Small Tool Charges were distributed to all Features of Work except the 700 and 1100 Areas. No distribution was made to these accounts since all work was done by Sub-Contract and CPFF costs were not applicable.
- e. Equipment charges incurred at the Hanford Camp and under General Commercial Facilities at Hanford were distributed to all Features of Work except the 700 and 1100 Areas. No distributions were made to these two areas since Sub-Contractor's employees were quartered in the Sub-Contractor's camp and did not receive any benefit from the Hanford Camp or Hanford Commercial Facilities.
- f. Government Overhead and Clearing accounts were distributed to all accounts on the basis of total labor and material.





# OFFICE

~~CONFIDENTIAL~~

RELATIONS

CHIEF PROJ. AUDITOR  
W. J. DANIELSON

STENO.

ASST. TO CH. AUDITOR

STENO - CLERK  
L. B. TAYLER

TIME CH'KS & PAYROLL  
AUDIT SEC.

CHKRS

PAYROLL AUDIT  
D. E. GRANGE

RS & CLERKS

AUDITORS & CLERKS.  
R. STEVENS  
M. B. RUTHERFORD

EQUIP. & MAT'L'S AUDIT

ASST. EQUIP. AUDIT

CHECKERS

ASST. MAT'L'S AUDIT

CHECKERS  
A. M. PARKER  
P. M. SWELTON

INSURANCE AUDIT  
W. A. LUBECK

STENO.

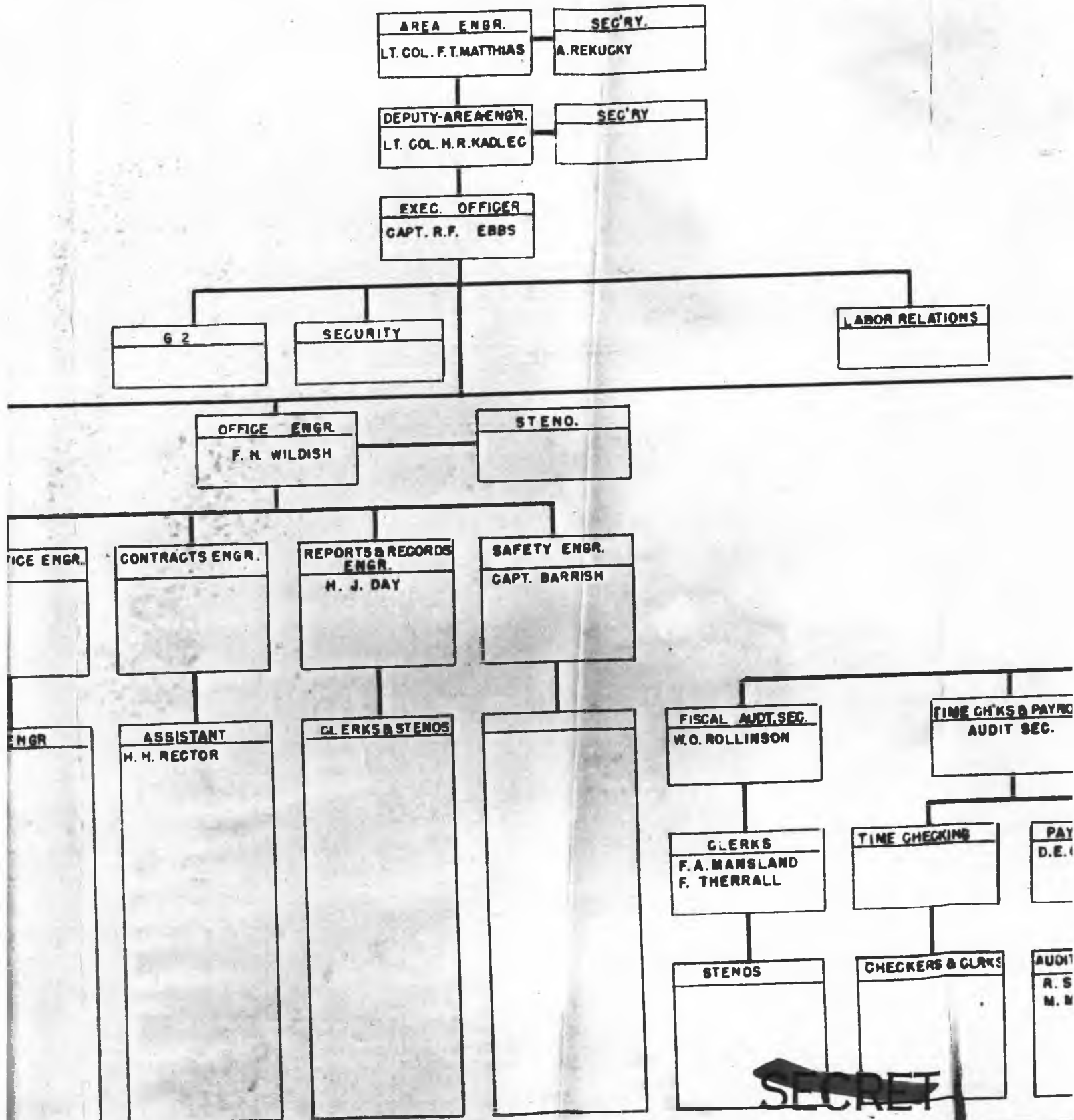
TRANS. AUDIT SEC.

ASST. PROJ. AUDITOR  
WILMINGTON OFF.

COMMISSARY AU  
A. N. HORDSTROM

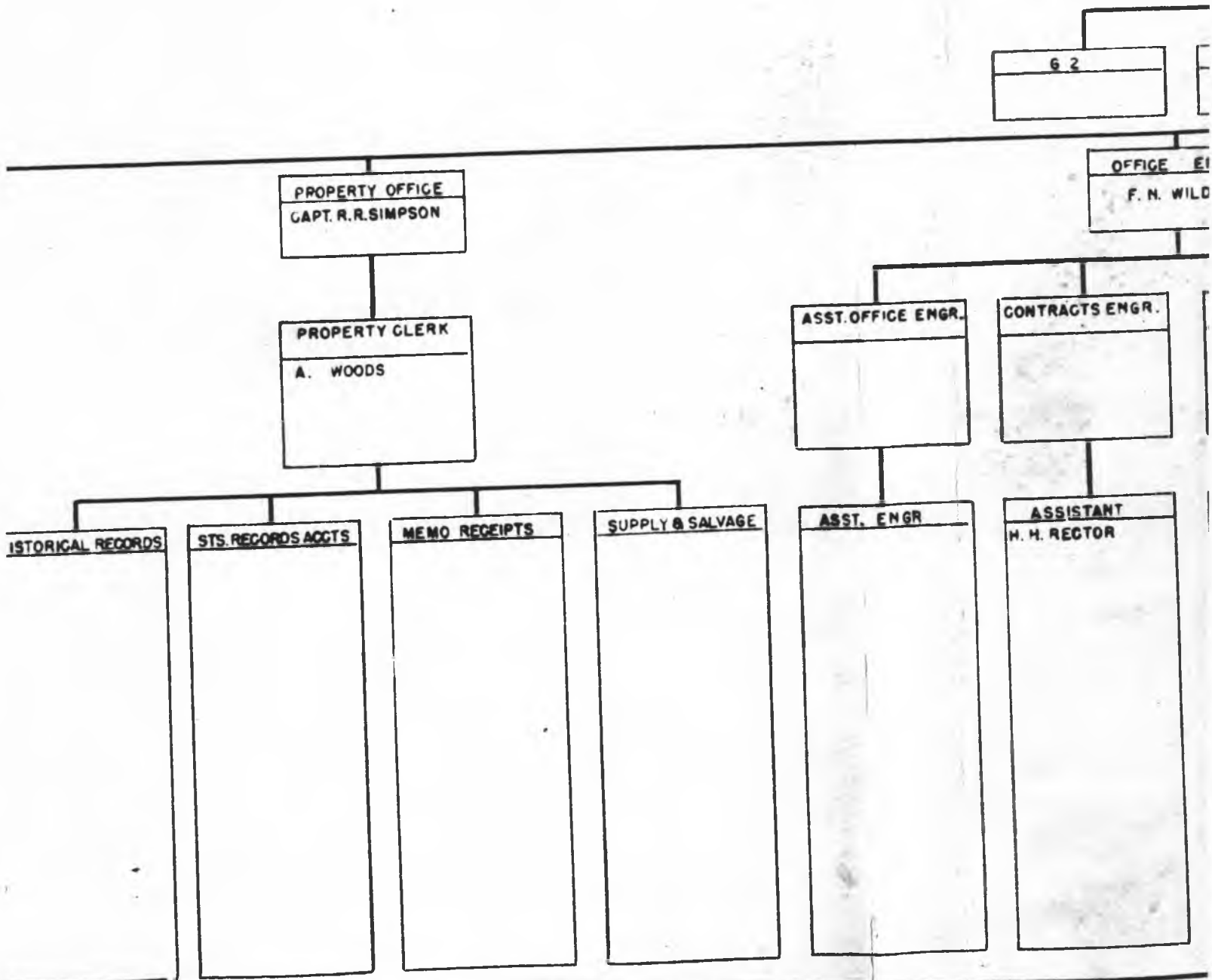
# ORGANIZATION CHART— AREA ENGINEERS OFFICE HANFORD ENGINEER WORKS

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# ORGANIZATION



**CHIEF OF OPERATIONS**  
MAJ. E. G. WERMENTIN

**CONTROL EXPED. & PRIORITIES**  
P. A. WELLS  
E. D. SHOCK  
A. I. BERGMAN

**FIELD SUPT. AREA 100**

**FIELD SUPT. AREA 200**

**AREA SUPT. VILLAGE**  
R. J. WOODWARD

**EQUIPMENT SEC.**  
G. J. WAGNER  
EQUIPMENT ENG.  
F. W. BERING  
SECY.  
M. A. WOODS  
CHIEF INSP.  
J. E. WILBUR  
E. R. CLARK  
N. P. TAYLOR

**ACT. AREA SUPT.**  
A. Z. LASSILA  
A. J. SADLER

**ACT. AREA SUPT.**  
F. N. WOODARD

**AREA SUPT CAMP**

**ACT. AREA SUPT.**  
C. W. YALE  
S. W. WEEKS

**ACT. AREA SUPT.**  
CAPT. J. S. BARRISH

**MECHANICAL**

**ACT. AREA SUPT.**  
P. H. NINNEMAN

**ACT. AREA SUPT.**

**ELECT. & COMM.**  
G. H. SHEPHERD  
T. B. HUFF

H. P. MC GOY  
H. P. MITCHEL  
J. T. SHEPHERD  
E. L. PHILLIPS

**SEWERS & WATER**  
CAPT. J. S. BARRISH

TOTAL PERSONNEL	
OFFICERS	28 (1 WAC)
ENLISTED	27 (WAC)
ENLISTED WAC	169
CIVILIANS	338

AREA ENGINEER  
 LT. COL. F. T. MATTHIAS  
 1 Cpl. (WAC)

STENOGR. & CLASSIFIED FILES  
 1 Clerk-Typist CAP-3  
 1 T/S (WAC)  
 1 T/A (WAC)  
 1 Cpl. (WAC)  
 1 Pvt. (WAC)

EMPLOYEES RELATIONS OFFICE  
 Sgt. S. C. Tellander (WAC)  
 VACANCY  
 1 Clerk-Typist CAP-3

EXECUTIVE OFFICER  
 MAJOR R. F. BENS

LEGAL OFFICE  
 CHIEF ATTORNEY G. F. MEIER P-6  
 1 T/S (SED)  
 1 T/A (WAC)

MILITARY AFFAIRS  
 MILITARY AFFAIRS C. R. F. BENS  
 MED. SUPP. C. CAPT. R. A. SIMPSON  
 HONOR. COURT C. 1ST LT. J. E. HULL  
 REC. & ATH. C. 1ST LT. G. J. MUSTIS  
 WAC COMDR. 1ST LT. M. L. GORDER  
 SP. ENGR. DET. ADJ. 1ST LT. B. ROBERTS  
 T/SGT. T. L. EMORY

LABOR RELATIONS OFFICE  
 LAB. REL. OFF. - MAJOR R. I. NEWCOMB  
 Respons. for all labor rel. activities, including admin. of labor laws and liaison work with labor organizations and the contractor. Establishment and maintenance of wage and salary ranges. Supervise employee relations activities.

INTELLIGENCE OFFICE  
 INTEL. OFF. - MAJOR F. M. GILLETTE  
 Supervises all activities of Military Intelligence.  
 1ST. LT. J. N. HULL  
 1ST. LT. C. V. WHITE  
 1ST. LT. H. I. MACLENNAN  
 1ST. LT. T. A. STERLING

SURVEY OFFICE  
 SURVEY OFFICER - MAJOR R.F. GORNALL  
 Conduct surveys and process reports of surveys of equipment.

PROVISIONAL MILITARY POLICE  
 CO. # 2  
 CAPTAIN W. Y. BUCK  
 5 1st. Lt. 4 T/A  
 1 2nd. Lt. 10 Cpls.  
 1 1st. Sgt. 10 T/A  
 4 Staff Sgt. 46 pfc.  
 13 Sgt. 63 Pvt.

1 Prin. Asst. to Ch. of L. R. CAP-10  
 1 Clerk CAP-4  
 1 Clerk CAP-3  
 1 Clerk-Typist CAP-3  
 1 Clerk-Typist CAP-2

2 Guards CPC-7  
 1 T/S (WAC)  
 2 T/A (WAC)  
 3 T/B (WAC)  
 1 Sgt. (WAC)  
 3 Pfc. (WAC)  
 1 Pvt. (WAC)

1 Adm. Asst. CAP-6  
 1 Insp. (Equip.) SP-6  
 1 Clerk-Typist CAP-3

CHIEF OF CONSTRUCTION  
 LT. COL. B. T. ROGERS  
 Supervises and coordinates the work of all Section and Division Teams engaged in the supervision and inspection of construction work.

CHIEF OF PRODUCTION  
 MAJOR J. F. SALLY  
 Supervision of matters pertaining to plant operations, including plant maintenance.

CHIEF OF SERVICES  
 MAJOR H. D. RILEY  
 Supervision and administration of all Area Office Services.

FUNCTIONAL AND POSITION CHART  
 HANFORD ENGINEER WORKS  
 1 AUGUST 1944  
 APPROVED: *Matthias*  
 F. T. MATTHIAS,  
 LT. COLONEL,  
 AREA ENGINEER.

SHEET 2 OF 8 SHEETS





LT. COL. ROBERT T. WOOD  
 ASSISTANT CHIEF OF CONSTRUCTION  
 MAJOR C. L. BROWN

SPECIAL ACCOUNTANT  
 C. S. JOHNSON 1-3

1ST DISTRICT W.A. 3RD DISTRICT  
 OFFICER IN CHARGE-MAJOR J.T. GIBBETT  
 Supervises, directs and coordinates work of subordinate engineers engaged in supervision and inspection of construction.  
 1 Clerk (CAF-3)

ASST. T. CH. OF CONSTRUCTION  
 J. B. SCHNEIDER 1-1  
 1 Engineer (Civil) 1-3  
 1 Clerk-Steno. CAF-3

2ND DISTRICT  
 ENGINEER IN CHARGE - J. P. HENRY 1-4  
 Responsible for supervising and coordinating the work of technical engineers engaged in the actual supervision and inspection of construction work.

1 Engr. (Civil) 1-4  
 1 Engr. (Struct.) 1-4

3RD DISTRICT  
 ENGINEER IN CHARGE - D. S. RAYSON 1-4  
 Responsible for supervising and coordinating the work of technical engineers engaged in the actual supervision and inspection of construction work.

1 Engr. (Structural) 1-4

100 DISTRICT  
 OFFICER IN CHARGE-MAJOR V. J. BRIDGES  
 Supervises, directs and plans work of subordinate engineers engaged in supervision of construction.  
 1 Capt. (MAC)

100 B  
 ENGINEER IN CHARGE - J. T. BARRIS 1-4  
 Responsible for supervising and coordinating the work of technical engineers engaged in the actual supervision and inspection of construction work.

1 Engr. (Civil) 1-4  
 1 Engr. (Civil) 1-3  
 1 Engr. (Struct.) 1-3

100 D & F  
 ENGINEER IN CHARGE - A. J. GIBBETT 1-4  
 Responsible for supervising and coordinating the work of technical engineers engaged in the actual supervision and inspection of construction work.

1 Engr. 1-4

100 1000  
 ENGINEER IN CHARGE - C. A. MILLER 1-4  
 Responsible for supervising and coordinating the work of technical engineers engaged in the actual supervision and inspection of construction work.

1 Engr. 1-4

10000 DISTRICT  
 ENGINEER IN CHARGE - J. A. WOOD 1-4  
 Supervises and coordinates all activities connected with the installation of equipment and power equipment throughout the area. This includes issuance of instructions.

1 Engr. (Struct.) 1-4  
 1 Admin. Asst. 1-3  
 1 Tech. Clerk 1-3  
 1 Asst. Clerk (Steno.) 1-3  
 1 Clerk (Steno.) 1-3

100000 DISTRICT  
 ENGINEER IN CHARGE - J. S. BROWN 1-4  
 Supervises and coordinates all activities connected with the operation of construction equipment for construction, and the maintenance of necessary equipment records and inspection after construction.

1 Capt. (Civil) 1-4  
 1 Engr. (Struct./Genl.) 1-4  
 1 Engr. (Struct.) 1-4  
 1 Engr. (Genl.) 1-4  
 1 Asst. Engr. (Civil) 1-3  
 1 Clerk 1-3  
 1 Clerk 1-3  
 1 Tech. Clerk 1-3

SHEET 3 OF 8 SHEETS



**SECRET**  
 LT. COL. EMMA F. ROGERS  
 ASSISTANT CHIEF OF CONSTRUCTION  
 MAJOR C. L. BUCKRUM

**SPECIAL ASSISTANT**  
 C. H. SHEPHERD P-5

**ASST. TO CH. OF CONSTRUCTION**  
 J. E. SCHMIEDL P-5

**RICHLAND DIVISION**  
 OFF. IN CHARGE-MAJ. E. G. WERNERTIN  
 Supervises, directs and plans work of subordinate engineers engaged in supervision of construction.  
 1 Cpl. (WAC)

**ELECTRICAL DIVISION**  
 ENGR. IN CHARGE-D. F. HENDERSON P-4  
 Supervises and coordinates the work of technical assistants engaged in the inspection and supervision of contractor's work.  
 1 Clerk CAF-4

**700 & 1100 AREAS**  
 ENGR. IN CHARGE - R. J. WOODWARD P-4  
 Responsible for supervising and coordinating the work of technical engineers engaged in the actual supervision and inspection of construction work.

**PRE-FABRICATED HOUSING**  
 ENGR. IN CHARGE - H. M. RIGLER P-4  
 Responsible for supervising and coordinating the work of technical engineers engaged in the actual supervision and inspection of construction work.

3 Supts. (Electrical) P-3  
 1 Prin. Insp. (Elet.) SP-8  
 2 Insp. (Elect.) SP-8

1 Engr. (Constr.) P-3  
 1 Assoc. Engr. (Constr.) P-3  
 1 Assoc. Engr. (Civil) P-3  
 1 Assoc. Supt. (Constr.) P-3  
 3 Supt. (Constr.) P-3  
 1 Asst. Engr. (Civil) P-2  
 1 Engr. (Civil) P-2  
 1 Insp. (Gen'l.) SP-7  
 1 Clerk Typist CAF-2

1 Engr. (Civil) P-3  
 1 Insp. (Equip.) SP-8

SHEET 4 OF 8 SHEETS

**CONCRETE SECTION**  
 ENGR. IN CHARGE - L. C. LINTNER P-3  
 Supervises the inspection of concrete work performed by contractor. Analyzes all types materials used to ascertain whether proper specifications are met.

**ROADS & RAILROAD SECTION**  
 ENGR. IN CHARGE - J. T. FLANAGAN P-3  
 Supervises and coordinates the inspection of road and railroad construction to determine that all Engineer Department specifications are complied with.

**UTILITIES SECTION**  
 ENGR. IN CHARGE - A. H. BOBERG P-3  
 Supervises the inspection of utility construction work performed by contractor to determine whether recommended Engr. Dept. plans and specifications are complied with.

**HANFORD HOUSING**  
 ENGR. IN CHARGE - H. C. SETTLERBERG P-3  
 Supervises the inspection of all construction work related to the construction of buildings.

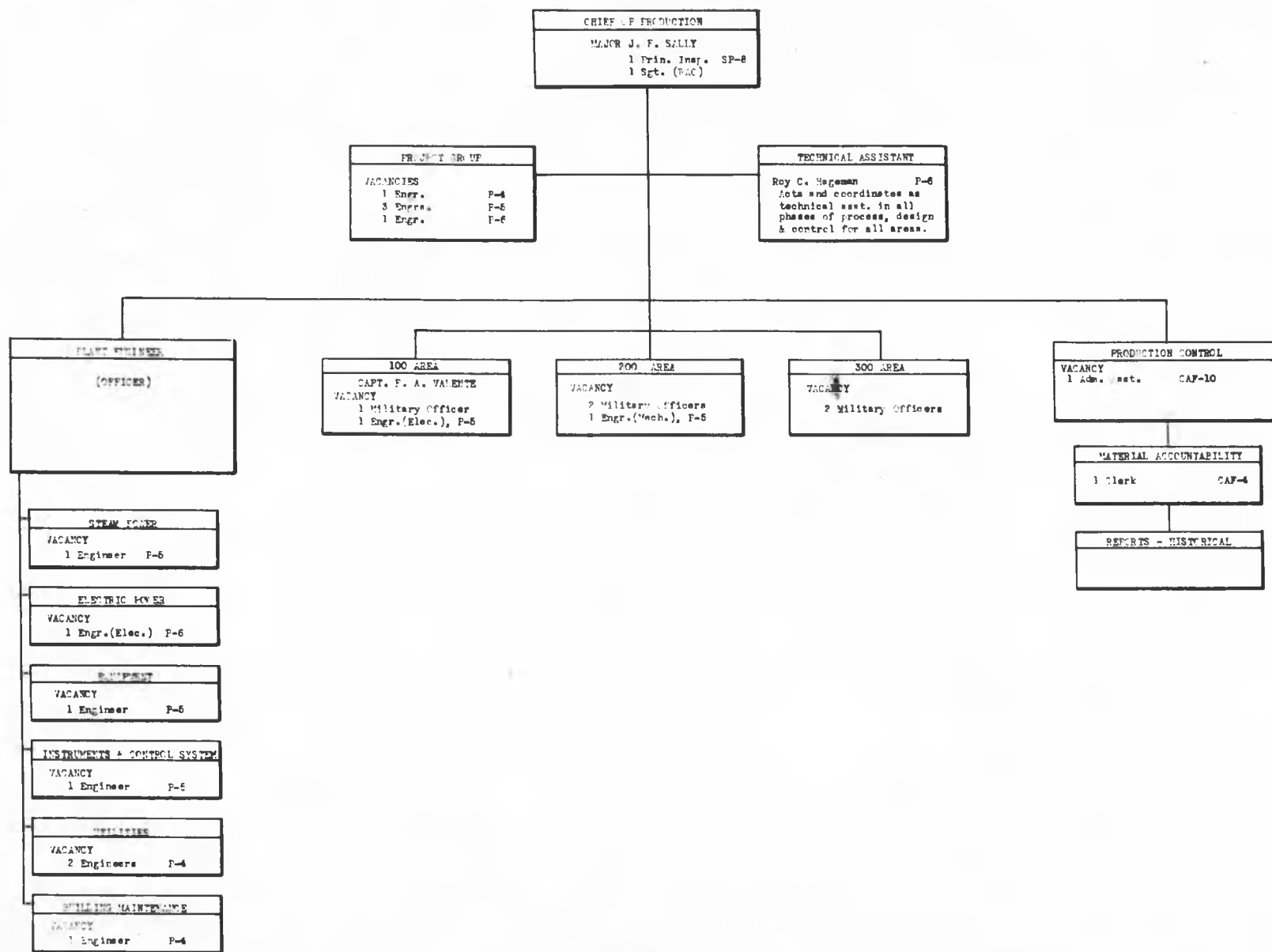
1 Supt. (Constr.) P-3

1 Engr. (Civil) P-3

NONE

NONE

**SECRET**



**SECRET**

SHEET 4 OF 8 SHEETS

**CHIEF OF DIVISION**  
**MAJOR E. RILEY**  
 1 Clerk CAP-4

**METEOROLOGY**  
 H. G. C. AINSOR P-4  
 1 Meteorologist P-2  
 2 Weather Observers SP-7

**SERIAL ASSISTANT**  
 CAPTAIN J. S. BARRISH

**COMMUNICATIONS OFFICE**  
**CHIEF OF COMM.-A. PARLETT, JR., P-4**  
 Supervises the maintenance and installation of communication lines and equipment. Also supervises operation of cryptograph and teletype section, operated by WACs.

1 Storekeeper CAP-7  
 1 Tele.Type.Opr. CAP-4  
 1 Clerk CAP-3  
 1 Clerk-Typist CAP-2  
 1 Gen. Foreman \$1.80 p/h  
 8 Foremen 1.70 p/h  
 16 Linemen 1.65 p/h  
 1 Lineman Helper 1.10 p/h  
 2 T/S (WAC)  
 1 T/S (WAC)  
 2 Pfc.(WAC)  
 1 Pvt.(WAC)  
 VACANCY  
 1 Groundman 1.10 p/h

**ENGINEERING DIVISION**  
**CHIEF OF ENGINEERING-C. C. HEWING, P-6**  
 Responsible for the planning, directing and laying out of work for all sections in the Engr.Div. Coordinates policies and plans of Engr. Dept. with the Architect-Engineer.

1 Engineer (Civil) P-4  
 1 Clerk-Stenog. CAP-3

**OFFICE ENGINEER**  
**F. M. WILDISH P-4**  
 Reviews contracts and purchase orders; assembles data for progress reports. Supervises filling of plans and specifications and maintains Engineering Div. correspond. files. Recommends approval of disapproval of contracts and change orders.

1 Asst. Engr. (Civil) P-2  
 1 Asst. Clerk CAP-4

**ARCH. & SITE PLAN. SECTION**  
**ARCH. & SITE PLAN.ENGR.-E. M. GROLL, P-6**  
 Coordinates structural and site planning work with the Arch-Engr. and Designer. Reviews plans and specifications, making necessary recommendations and modifications. Acts as architectural consultant.

1 Engr. (Civil) P-3

**ELECTRICAL SECTION**  
**ELECT. ENGINEER - O. S. CLARK P-6**  
 Coordinates electrical design with the power companies and the Architect-Engineer. Reviews and acts as consultant on all electrical design.

1 Sr.Engr./Elect. P-5  
 1 Asst.Clk.Stenog. CAP-3

**MECHANICAL SECTION**  
**MECH. ENGINEER-J. M. WISSER P-6**  
 Reviews mechanical plans and specifications making necessary recommendations and acts as mechanical consultant.

**CIVIL ENGINEERING SECTION**  
**CIVIL ENGINEER-F. L. ADAMSON P-5**  
 Reviews and makes recommendations on all structural, road and railroad design and acts in consulting capacity.

**TRANSPORTATION OFFICE**  
**TRANSP. OFFICER-1st LT. B. ROBEKDE**  
 Supervises all functions connected with land, sea and air transportation by Government-owned facilities. Issuance of transportation requests and Government Bills of Lading. Supervises the maintenance of all necessary records.

3 Airplane Pilots P-5  
 1 Proj. Auditor CAP-6  
 1 Adm. Asst. CAP-5  
 2 Clerks CAP-4  
 2 Clerk-Typists CAP-2  
 1 Clerk-Typist CAP-1  
 1 Transp. Foreman \$1.25 p/h  
 3 Truck Drivers 1.00 p/h  
 7 Truck Drivers .85 p/h  
 1 T/Sgt. (SED)  
 VACANCY  
 1 Clerk-Stenog. CAP-3

**SAFETY OFFICE**  
**SAFETY DIRECTOR-G. M. HOSTETTER P-4**  
 Supervises and administers all safety activities in accord with policies, proced. and regu. promulgated by Eng.Dept. Responsible for accident prevention program and supervises field safety inspection.

1 Assoc. Engr. (Const.) P-3  
 3 Engineers (Safety) P-3  
 3 Engineers (Safety) P-2  
 1 Clerk-Stenog. CAP-3  
 1 T/S (SED)  
 1 T/S (SED)  
 VACANCIES  
 1 Engr. (Saf.) P-3  
 1 Engr. (Saf.) P-2  
 1 Engr. (Saf.) CAP-3

**SELECTIVE SERVICE OFFICE**  
**CHIEF - SERGEANT I. ROSENBAUM**  
 Supervises the processing of selective service cases for Hanford Engr.Wks. employees. Advisor on certifications under the West Coast Plan.

1 Clerk-Stenog. CAP-2

**CONTRACTS & CLAIMS SECTION**  
**C. E. ROOP P-4**  
 Supervises the preparation and/or review of contracts and claims.

1 Sr. Clerk CAP-6  
 1 Clerk-Typist CAP-2

**HOUSING MAINTENANCE SECTION**  
**G. F. WIEBER P-6**  
 Supervise real estate and housing activities.

1 T/S (SED)  
 1 Asst. Engr. (Civil) P-2  
 1 Adm. Asst. CAP-6  
 1 Sr. Adm. Asst. CAP-7  
 1 Clerk CAP-6  
 1 Clerk-Stenog. CAP-3  
 1 Foreman \$1.50 p/h  
 3 Power Equip. Operator-Pump \$1.375 p/h

SHEET 6 OF 8 SHEETS



**CHIEF OF BUREAU**  
**WALTER H. D. WILEY**

**SERIAL ASSISTANT**  
**CAPTAIN J. S. BARRISH**

**ADMINISTRATIVE DIVISION**  
**CHIEF OF ADM.-W. D. STRONG CAP-13**  
 Supervises and responsible for the proper distribution and performance of office business, the processing of personal actions within prescribed regulations, fund acctg., procure. of supplies & equip.; preservation of records.  
 1 Clk.-Steno. CAP-4

**ASST. CH. OF ADMIN.**  
**E. C. SCHULTE CAP-11**  
 1 Adm. Asst. CAP-10

**PROPERTY AND SALVAGE DIVISION**  
**PROP. & SALV. OFF.-CAPT. J. A. SIMPSON**  
 Supervises and directs the receipt, recording, inventory, storage, salvage of property & equipment, and the maintenance of all necessary property accounts.  
 1 Clk.-Steno. CAP-4

**ASST. PROP. & SALV. HEAD**  
**A. T. CUNNINGHAM CAP-9**  
 1 Jr. Adm. Asst. CAP-7

**FINANCE SECTION**  
**CHIEF OF FINANCE-A. LINARES CAP-9**  
 Supervises all activities connected with finance accounting and expenditure of funds, and reviews prepared finance reports.

- 1 Accountant CAP-8
- 1 Accountant CAP-7
- 1 Clerk CAP-6
- 1 Prin. Acctg. Clerk CAP-6
- 1 Clerk CAP-6
- 4 Clerks CAP-4
- 1 Clerk-Typist CAP-3
- 1 Clerk-Typist CAP-2
- VACANCY
- 1 Clerk CAP-3

**PROCUREMENT SECTION**  
**CH. OF PROCUREMENT-S. O. ARNDT, CAP-9**  
 Supervises all activities of Purchasing Sec., including interpretation of laws and requisitions, preparation of all necessary documents to effect open market, and purchases from Gov't schedule.

- 2 Inspectors CAP-7
- 3 Prin. Clerks CAP-6
- 1 Clerk CAP-4
- 1 Clerk CAP-3
- 1 Clerk-Steno. CAP-3
- 1 Clerk-Typist CAP-3
- 1 Clerk-Typist CAP-2
- VACANCIES
- 1 Clerk CAP-6
- 1 Clerk CAP-4
- 1 Clerk-Typist CAP-3

**MAIL & RECORDS SECTION**  
**CH. OF MAIL & REC.-W. L. ROEHR, CAP-6**  
 Supervises employees engaged in receiving, classifying, indexing, dispatching and filing large volumes of correspondence and reports; also, supervises messenger force.

- 1 Clerk CAP-4
- 3 Clerks CAP-3
- 1 Clerk-Typist CAP-2
- 1 Clerk CAP-2
- 3 Messengers CPC-2
- VACANCIES
- 1 Clerk-Typist CAP-2
- 1 Messenger CPC-2

**ACCOUNTS & RECORDS SECTION**  
**SECTION HEAD - L. T. YANCY CAP-6**  
 Supervises the maintenance of all property accounts and records. Records and files all receiving reports and shipping tickets. Checks contractor's records.

- 3 Clerks CAP-4
- 3 Clerks CAP-3
- 1 Storekeeper CAP-4
- 1 Clerk-Steno. CAP-4
- 1 Asst. Clerk CAP-3
- 3 Clerk-Typists CAP-3
- 1 Clerk CAP-2
- 2 Clerk-Typists CAP-2
- 4 Clerk-Typists CAP-1
- VACANCY
- 1 Clerk CAP-6

**SUPPLY & SALVAGE SECTION**  
**SECTION HEAD-T. K. UEMILLE CAP-7**  
 Supervises the operation by contractor employees of salv. yard. Supervises and prepares reports of survey. Supervises receiving and issuance of Signal Corps and Communications material and equipment.

- 1 Storekeeper CAP-6
- 1 Sr. Clerk CAP-6
- 2 Clerks CAP-6
- 1 Clerk CAP-4
- 1 Storekeeper CAP-3
- 1 Inspector SP-7

**PERSONNEL SECTION**  
**CH. OF PERSONNEL-J. W. DEMILLE CAP-8**  
 Supervises and directs the activities of payroll, records and reports, and the status classification subsections. Acts as adviser on all personnel problems. Interviews applicants for enlist. and makes recom. as to their suitability.

- 1 Clerk CAP-6
- 1 Sr. Clerk CAP-6
- 2 Clerks CAP-6
- 1 Clerk CAP-3
- 2 Clerk-Typists CAP-2

**COST SECTION**  
**CHIEF OF COST-M. M. BORN CAP-9**  
 Supervises all cost accounting functions, which include proper maintenance of accounting records, analysis of cost data, and the preparation of reports.

- 1 Accountant CAP-8
- 1 Prin. Clerk CAP-6
- 1 Clerk CAP-6
- 2 Clerks CAP-4
- 1 Clerk CAP-3
- 1 Clerk-Typist CAP-3
- VACANCY
- 1 Clerk-Typist CAP-3

**HISTORICAL RECORDS SECTION**  
**SECTION HEAD - A. J. JERVIS CAP-6**  
 Supervises maintenance and preparation of all necessary data required in the preparation of historical records.

**NONE**

**SECRET**

SHEET 8 OF 8 SHEETS

**CHIEF OF PRODUCTION**  
 Major J. F. Sally  
 1 Prin. Insp. (P-8)  
 1 Sgt. (P-4)

**PROJECT GROUP**  
 1 (v) Engr., P-6  
 3 (v) Engr., P-5  
 1 (v) Engr., P-4

**TECHNICAL ASSISTANT**  
 Roy C. Hageman, P-5

**100 AREA**  
 Capt. F. A. Valente  
 1 (v) Mil. Officer  
 1 (v) Engr. (Elect.), P-5

**200 AREA**  
 2 (v) Mil. Officer  
 1 (v) Engr. (Mech.), P-5

**300 AREA**  
 2 (v) Mil. Officer

**PLANT ENGINEER**  
 1 (v) Mil. Officer

**STEAM POWER**  
 1 (v) Engr., P-5

**ELECTRIC POWER**  
 1 (v) Engr. (Elect.), P-5

**EQUIPMENT**  
 1 (v) Engr., P-5

**INSTRUMENT CONTROL SYSTEM**  
 1 (v) Engr., P-5

**UTILITIES**  
 2 (v) Engr., P-4

**BUILDING MAINTENANCE**  
 1 (v) Engr., P-4

**PRODUCTION CONTROL**  
 1 (v) Adm. Asst., CAP-10

**MATERIAL ACCOUNTABILITY**  
 1 Clerk, CAP-4

**REPORTS - HISTORICAL**

**PT.**  
 by

**EL & TRAVEL SEC.**  
 1 Auditor - CAP-8  
 1 Asst. CAP-7  
 1 Asst. (Typing) CAP-7  
 1 CAP-4  
 1 CAP-4  
 1 CAP-4  
 1 CAP-4  
 1 Typist, CAP-4  
 1 Clerk, CAP-4  
 1 Clerk, CAP-4

**TECHNICAL OPERATIONS SECTION**  
 1 CAP-4  
 1 Mech. Oper., CAP-4  
 1 CAP-4  
 1 Clk. Room, CAP-4





**HEADQUARTERS**  
 [Illegible text]

**HEADQUARTERS**  
 [Illegible text]

**HEADQUARTERS**  
 [Illegible text]

**HEADQUARTERS**  
 Military Affairs Off. -  
 Major E. F. [Illegible]  
 Medical Supply Off. -  
 Capt. A. [Illegible]  
 Supply Court Officer -  
 1st Lt. J. H. Hill  
 [Illegible] -  
 1st Lt. J. J. [Illegible]  
 [Illegible] -  
 1st Lt. H. L. [Illegible]  
 [Illegible] -  
 1st Lt. E. [Illegible]  
 2/Lt. J. [Illegible]

**HEADQUARTERS**  
 [Illegible text]

**HEADQUARTERS**  
 [Illegible text]

**PROPERTY & SALVAGE DIV.**  
 Property & Salvage  
 Officer -  
 Capt. E.A. Simpson  
 1 Clk., Steno., CAF-4

**ASST. PROPERTY AND SALVAGE HEAD**  
 A.W. Cunningham, CAF-7  
 1 Sr. Adm. Asst., CAF-7

**INVENTORY & RECORDS SEC.**  
 Section Head -  
 L.T. Young, CAF-6  
 3 Clerks, CAF-6  
 3 Clerks, CAF-6  
 3 Clerks, CAF-6  
 1 Storekeeper, CAF-4  
 1 Clk., Steno., CAF-6  
 1 Asst. Clerk, CAF-6  
 2 Clk.-Typists, CAF-3  
 1 Clerk, CAF-3  
 2 Clk.-Typists, CAF-2  
 4 Clk.-Typists, CAF-1  
 1 (v) Clerk, CAF-6

**SUPPLY & SALVAGE SEC.**  
 Section Head -  
 T.K. Donille, CAF-7  
 1 Storekeeper, CAF-6  
 1 Sr. Clerk, CAF-6  
 2 Clerks, CAF-6  
 1 Clerk, CAF-4  
 1 Storekeeper, CAF-3  
 1 Inspector, GFC-7

**HISTORICAL RECORDS SEC.**  
 Section Head -  
 A. J. Jarvis, CAF-6

**ADM. DIVISION**  
 Chief of Adm. -  
 E. D. Bourgie, CAF-8  
 1 Clerk-Steno., CAF-4

**ASST. CHIEF OF ADM.**  
 E. C. Schultz, CAF-11  
 1 Adm. Asst., CAF-10

**FINANCE SECTION**  
 Chief of Finance -  
 A. Linnace, CAF-6  
 1 Accountant, CAF-6  
 2 Accountant, CAF-7  
 1 Clerk, CAF-6  
 1 Prin. Acctg. Clk., CAF-6  
 1 Clerk, CAF-6  
 4 Clerks, CAF-4  
 1 Clerk-Typist, CAF-3  
 1 Clerk-Typist, GFC-2  
 1 (v) Clerk, CAF-3

**MAIL & RECORD SECTION**  
 Chief of Mail & Record,  
 W. L. Roehr, CAF-6  
 1 Clerk, CAF-4  
 3 Clerks, CAF-3  
 1 Clk.-Typist, CAF-2  
 1 Clerk, CAF-2  
 3 Messengers, GFC-2  
 1 (v) Clk.-Typist, CAF-2  
 1 (v) Messenger, GFC-2

**COST SECTION**  
 Chief of Cost -  
 S.M. Brown, CAF-6  
 1 Accountant, CAF-6  
 1 Clerk, CAF-6  
 2 Clerks, CAF-4  
 1 Clerk, CAF-3  
 1 Clerk-Typist, CAF-3  
 1 (v) Clk.-Typist, CAF-3

**PROCUREMENT SECTION**  
 Chief of Procurement -  
 E.O. Arnold, CAF-6  
 1 Expediter, CAF-7  
 2 Prin. Clerks, CAF-6  
 3 Clerks, CAF-6  
 1 Clerk, CAF-4  
 1 Clerk, CAF-3  
 2 Clerk-Steno., CAF-3  
 1 Clk.-Typist, CAF-3  
 1 Clk.-Typist, CAF-2  
 1 (v) Clerk, CAF-3  
 1 (v) Clerk, CAF-4  
 1 (v) Clk.-Typist, CAF-3

**PERSONNEL SECTION**  
 Chief of Personnel -  
 J.M. Donille, CAF-7  
 1 Clerk, CAF-6  
 1 Sr. Clerk, CAF-6  
 2 Clerks, CAF-4  
 1 Clerk, CAF-3  
 2 Clk.-Typists, CAF-3

**COMMUNICATIONS OFFICE**  
 Chief of Communications  
 1. Perlett, P-4  
 2 Storekeeper, CAF-7  
 1 Teletype Op., CAF-4  
 1 Clerk, CAF-3  
 1 Clerk-Typist, CAF-2  
 1 Gen'l. Foreman 1.00 p/h  
 3 Foreman 1.75 p/h  
 14 Linemen 1.00 p/h  
 1 Lineman Helper 1.10 p/h  
 2 T/S (WAC)  
 1 T/S (WAC)  
 2 Pts. (WAC)  
 1 Pvt. (WAC)  
 1 (v) Foreman 1.30 p/h

**SAFETY OFFICE**  
 Safety Director -  
 G.M. Burdette, P-4  
 1 Assoc. Engr. (Const) P-3  
 2 Engrs. (Safety), P-3  
 2 Engrs. (Safety), P-2  
 1 Clerk-Steno., CAF-3  
 1 T/4 (WAC)  
 1 T/5 (WAC)  
 1 (v) Engr. (Safety) P-3  
 2 (v) Engr. (Safety) P-2  
 1 (v) Clk.-Typist, CAF-3

**RESERVE SERVICE OFFICE**  
 Chief - Sgt. I. Macdonald  
 1 Clerk Steno., CAF-3

CHIEF OF CONSTRUCTION  
Lt. Colonel E. Y. Rogers  
Asst. Ch. of Constr.  
Major G. L. Nathan

OFFICIAL MESSAGE  
C. H. Shepherd, S-6

ASST. TO CHIEF OF CONST.  
J. E. Schmidt, S-4  
Supt. (Civil) S-4  
Clay-Owens, S-4

CONTROL SECTION	
Supt. in Chg. -	
P. A. Walls,	P-4
1 Supt. (Constr.),	P-3
1 Adm. Asst.,	CAP-3
1 Sr. Clerk,	CAP-3
1 Asst. Clk-Steno,	CAP-3
1 Clerk-Typist,	CAP-3

EQUIPMENT SECTION	
Supt. in Chg. -	
G. J. Wagner,	P-4
1 Supt. (Equip.),	P-3
1 Prin. Insp. (Equip.)	SP-3
1 Insp. (Equip.),	SP-3
1 Insp. (Equip.),	SP-7
1 Supt. Auditor	
(Tools & Equip.)	CAP-3
1 Clerk,	CAP-3
1 Clerk,	CAP-3
1 Clerk-Steno,	CAP-3
1 Clerk-Typist,	CAP-1

RICHMOND DIVISION	
OIC - Major W. F. Smith	
1 Cpl.	(WAC)

700 & 1100 AREAS	
Supt. in Chg. -	
R. J. Woodward,	P-4
1 Supt. (Constr.)	P-3
1 Asso. Supt. (Const.)	P-3
1 Asso. Supt. (Civil)	P-3
1 Asso. Supt. (Const.)	P-3
1 Supt. (Const.),	P-3
1 Asst. Supt. (Civil)	P-3
1 Supt. (Civil),	P-3
1 Insp. (Gen'l.),	SP-7
1 Clerk-Typist,	CAP-2

PREFABRICATED HOUSING	
Supt. in Chg. -	
H. M. Rigler,	P-4
1 Supt. (Civil),	P-3
1 Insp. (Equip.),	SP-3

ELECTRICAL DIV.	
Supt. in Chg. -	
D. F. Henderson,	P-4
1 Clerk,	CAP-4
1 Supt. (Elect.),	P-3
1 Prin. Insp. (Elect.)	SP-3
1 Insp. (Elect.)	SP-3

HARFORD HOUSING	
Supt. in Chg. -	
H. C. Sotherberg,	P-3

UTILITIES SECTION	
Supt. in Chg. -	
A. H. Soberg,	P-3

CONCRETE SECTION	
Supt. in Chg. -	
L. C. Lister,	P-3
1 Supt. (Const.),	P-3

ROADS & RAILROADS SEC.	
Supt. in Chg. -	
L. E. Johnson,	P-3
1 Supt. (Civil),	P-3

800 Div. - 800 AREA	
OIC - Major J. J. Corbett	
1 Clerk,	CAP-3

800 EAST	
Supt. in Chg. -	
G. W. Ralph,	P-4
1 Supt. (Elect.),	P-3

800 WEST	
Supt. in Chg. -	
J. F. Moran,	P-4
1 Supt. (Civil),	P-3
1 Supt. (Const.),	P-3

800 AREA	
Supt. in Chg. -	
G. W. Ralph,	P-4

900 DIVISION	
OIC - Major F. F. Brisson	
1 Cpl.	(WAC)

900 S	
Supt. in Chg. -	
H. G. Harris,	P-4
1 Supt. (Civil),	P-3
1 Supt. (Civil),	P-3
1 Supt. (Const.),	P-3

900 D & P.	
Supt. in Chg. -	
A. E. Jossila,	P-4

DESIGN PROJECT MGR  
M T DANIELS

TRAFFIC  
C S SIMPSON

DESIGN PROJ MGR  
200 AREA  
P. GENE REAUX

ASST DESIGN PROJ MGR  
100 AREAS  
JA BURNS

DESIGN FIELD REP 100 AREA

PROCESS ENGR  
A L FRITZE

PROCESS ENGR  
W R MCKENNA

RD HOUSING Supt  
M TAYLOR

HANFORD HSING. Supt,  
& RICHLAND HSING.  
M HAYWARD

ASST HANFORD HSING Supt  
FACILITIES  
T G ENRIGHT

UTILITIES DIV ENGINEER  
J. BRUCKERT  
ASST R K CHALFANT

AL ASSIGNMENT  
BLAIR

FACILITIES OFFICE SUPV  
G N HEDREEN

FEEDING FACILITIES  
J E ZACHARY

BARRACKS RECEPTION &  
PUTMENT Supt  
H. M. HULLS

COMMISS & BOWLING ALLEYS  
SUPV  
J. D SHAW  
FACILITIES CONTROL SUPV  
F J OGLE JR.

COST-PLUS-FIXED FEE  
SUB-CONTRACTORS

COMMISSARY  
PROJECT MANAGER  
R E BURTON  
ASST PROJECT MGR  
L J HARRIS  
A BEHLING

B 58 J

WILMINGTON OFFICE

CHIEF ACCOUNTING OFFICER  
T. W. BROWN

PLANT AUDITOR  
J. B. HALDEMAN

ASSISTANT  
CHIEF ACCOUNTING OFFICER  
S. D. EWING

ASSISTANT  
CHIEF ACCOUNTING OFFICER  
E. E. RIGGIN

ASST. DESIGN PROJ. MGR.  
200 AREA  
R. P. GENEVAUX

PLANT AUDITOR  
W. F. HAMILTON

ASSISTANT  
CHIEF ACCOUNTING OFFICER  
E. E. MURPHY

ASSISTANT  
CHIEF ACCOUNTING OFFICER  
J. W. SIMMONS

PROCESS ENGR  
H. A. FRITZE

HANFORD HOUSING SUPT.  
B. M. TAYLOR

ASST. HANFORD HSING. SUPT.  
CONTRACTS  
H. A. ANDREWS

ASST. HANFORD HSING. SUPT.  
HOUSING  
G. J. SCHAEFER

ASST. HANFORD HSING. SUPT.  
ACTIVITIES  
T. E. WEISSINGER

ASST. HANFORD HSING. SUPT.  
ENGR. & RICHLAND HSING.  
P. M. HAYWARD

7

TRAILER CAMP MGR.  
G. E. GILSON  
  
HOUSING SUPERVISOR  
J. A. LAMPERT

CONSULTANT, COUNSELOR  
NURSERY SCHOOL  
B. M. MARIS  
  
ATHLETICS SUPV.  
J. E. CARTER  
  
GENERAL RECREATION  
SUPV.  
P. E. TOOMBS  
  
ACTIVITIES SUPV.  
W. E. MCCORMICK  
  
COMMUNITY FACILITIES  
RATIONING SUPV.  
G. T. EVERSON

SPECIAL ASSIGNMENT  
J. S. BLAIR

ASST. FIELD PROJECT MGR  
G E HILLMAN

CONTROL SPT.  
H. VILLA

SUPT OF RAILROADS  
G J. SNAPP JR.

ASST CONTROL SPT.  
G. T. COOPER

ASST. SUPT OF RAILROADS  
R. R. PIERCE

SUPT. OF MOTIVE POWER  
W. G. CHRISTIANSEN (ACT'G)

SPECIAL ASS. GNMENT  
W. G. CHRISTIANSEN

PURCHASING AGENT  
J. W. HAMMETT  
ASSTS.  
E. A. DANZ  
J. O. BOWCOCK  
N. A. BEARDENSEATTLE  
PRIORITIES SUPV.  
R. L. MCGAHEE  
EXPEDITING SUPV.  
G. P. LAWSON  
ASST. R. G. KRAMER  
PAYROLLS & PAYMASTER  
SUPV. L. C. BRITTON  
ASST. F. W. NUNNALLY  
DEDUCTION & IN-  
CENTIVE PLAN SUPV.  
F. C. STILWELL

F. F. SUB-CONT. PAYROLLS  
SUPV. N. E. WHITE  
ASST. E. T. CURLEE

DUPONT PAYROLLS  
SUPV. E. W. SLUSHER  
DUPONT RECORDS SUPV.  
N. W. MCMILLAN  
CHIEF PAYMASTER  
H. R. CRAIG JR.  
ASST.  
T. E. SPARKS

DIVISION SPT  
E. S. DIXON  
TRAINMASTER  
F. A. LYNN  
SUPT TRACK MAINT.  
C. H. WATKINS  
AREA SPT. TRACK  
MAINT.  
F. TURMAN

AREA SPT R R ENGRS  
N. D. EDSON  
AREA SPT LOCO SHOPS  
A. E. KELLUM  
AREA SPT CAP SHOPS  
J. D. O'NEILL

7

**CONSTRUCTION DIVISION  
HANFORD ENGINEER WORKS  
FUNCTIONAL ORGANIZATION CHART**

FIELD PROJECT MGR  
G. P. CHURCH

ASST FIELD PROJECT MGR  
T. L. PIERCE

SECURITY AGENT  
M. F. HIGHSMITH  
ASST. H. F. JOHNSTONE

SPECIAL ASSIGNMENT  
E. M. ELLIOTT

ASST FIELD PROJECT MGR  
F. H. MC DONALD

SERVICE SUPERINTENDENT  
E. L. PLENINGER

SAFETY SUPERINTENDENT  
H. F. NUNN

ASST. SERVICE SUPT.  
J. W. MERCKE

ASST. SAFETY SUPT.  
G. L. SAUNDERS  
J. E. LINDEMAN

ASST. SERVICE SUPT.  
P. H. GARDNER

ASST. SERVICE SUPT.  
H. M. MILLER

MEDICAL SUPT.  
J. M. WETHERHOLD  
ASST. J. P. GRIFFIN

PERSONNEL SUPV.  
T. E. EWING  
EMPLOYMENT SUPV.  
W. J. PFISTER  
ASST. G. L. DORSCH  
TERM. & TRANS SUPV.  
F. B. VON JNWERTH  
ASST. C. R. OBERLIN  
TRAINING & EMPLOYEE  
RELATIONS SUPV.  
J. F. SEMBOWER  
ASST. J. C. FULLING  
SUB-CONTR. BADGE  
OFFICE  
A. P. HUDSPETH  
INVESTIGATION SUPV.  
W. A. MONIHON  
FATPOL. & FIRE SUPV.  
R. E. BUBENZER  
PATROL CHIEF  
M. V. ARMSTRONG  
ASST.  
T. O. BREWER  
CIVILIAN DEFENSE  
CAPT. G. W. MARIS  
FIRE CHIEF  
R. H. HARE  
ASST. CHIEFS  
W. D. SHARPBACK  
C. P. STARR  
FIRE MARSHALL  
F. B. JAKLEW

ASST. DIVISION SUPT.  
H. D. REESE  
RECRUITMENT SERV. SUPV.  
R. J. SHINE JR.  
ASST.  
R. F. GISH  
RECEPTION AND  
RECRUITMENT RELATIONS  
SUPV. J. R. CARTER  
COST & STATISTICS  
SUPV. A. A. THOMAS  
ASST. C. M. YOUNG  
SUPV. EMPLOYMENT  
AGENTS  
J. C. MERTZ  
R. S. FISHER

INDUSTRIAL MEDICINE  
G. Y. SWICKARD  
HOSPITAL & CLINICS  
J. P. GRIFFIN  
MEDICAL STAFF  
CHIEF SURGEON  
T. J. BULGER  
NURSING SUPV.  
M. M. SHAW  
BUSINESS MANAGER  
C. B. NEIGHBORS  
PUBLIC HEALTH  
R. R. SACHS

CONTRACTORS SUPV.  
D. I. NICHOLSON  
100 B & 105 B SUPV.  
O. H. BYNUM  
100 D B & 105 D SUPV.  
R. BRADFORD  
100 F & 105 F SUPV.  
W. J. MURPHY  
200 W SUPV.  
T. EDMUNDS  
200 E SUPV.  
J. H. STRICKER (ACTING)  
HANFORD SUPV.  
D. J. BEATTY  
SERVICES 200 N & WHT  
BLUFFS SUPV.  
A. R. STEVENS  
272 SUPV.  
B. A. KING  
RICHLAND SUPV.  
H. F. METCALF



ASST. FIELD PROJECT MGR.  
G. E. DUBB

STAFF ENGINEERS  
ELECTRICAL  
E. W. KYGER  
MECHANICAL  
H. B. SMITH

FIELD SUPERINTENDENT  
R. K. MASON

ASST. FIELD SUPT.  
W. T. TYLER

ASST. FIELD SUPT. | SUPERVISING  
J. O. SALISBURY | CRAFTS

SPECIAL CONSTRUCTION  
SUPT.  
E. H. TREVENEN

CRAFT	CRAFT SUPERINTENDENTS	
	SUPT.	ASST.
INTER	R. W. HERRMANN	W. E. LEE
	D. A. MCGINNIS	R. G. WITT
	W. E. LEAZER	W. W. WOOD
	G. F. HAAB	C. L. SCOTT
	H. A. ANDERSON	T. E. HALL
	H. E. FISHER	J. S. PARKE
		G. B. PETTITT
	C. F. MAXEY	W. B. DURRETTE
	L. E. SPENCE	A. W. ROGERS
	A. M. SCHEIRFFIUS	E. P. H. WILLETT
	J. THOMPSON	S. P. CARPENTER
	H. B. COLEMAN	C. W. FUNK
	J. H. RUFFNER	G. H. TAYLOR
	L. W. WALLING	W. G. CRUMBLISH
		R. A. MITCHELL
		G. P. MC LAUGHLIN
		C. W. HASTY

DIVISION AREA	ENGINEER
300	S. W. WILLIAMSON
700	W. E. DOUGLASS
1100	A. C. REPSIS
DUPONT CRAFTS	

AREA GENERAL AREA SUPT.

DIS AREAS  
J. L. FLETCHER  
M. G. JOHN  
F. M. KIRKPATRICK  
T. G. GANCIENNE

ST-PLUS-FIXED-FEE SUB-CONTRACTORS

CAL  
C. W. BETTS  
A. L. WRIGHT  
J. A. GREGAS  
J. D. OWELL  
L. S. BORDON

ASST FIELD PROJECT MGR  
G. E. BUDD

STAFF ENGINEERS  
ELECTRICAL  
E. W. KYGER  
MECHANICAL  
H. B. SMITH

FIELD SUPERINTENDENT  
R. K. MASON

ASST. FIELD SUPT.  
W. T. TYLER

SPECIAL CONSTRUCTION  
SUPT.  
E. H. TREVENEN

SPECIAL ASSIGNMENT  
F. W. BURKE

SUPT. SUPERVISING  
RY CRAFTS

SUPERINTENDENTS SUPT.	ASST.
HERRMANN	W. E. LEE
MCGINNIS	R. B. WITT
LEAZER	W. W. WOOD
MAAB	C. L. SCOTT
ANDERSON	T. E. HALL
FISHER	J. S. PARKE
	G. B. PETTITT
	W. B. DURRETTE
	A. W. ROGERS
	E. P. H. WILLETT
MAXEY	S. P. CARPENTER
SPENCE	C. W. FUNK
SCHERFFIUS	G. H. TAYLOR
OMPSON	W. G. CRUMISH
COLEMAN	R. A. MITCHELL
RUFFNER	G. P. MC LAUGHLIN
WALLING	C. W. HASTY

GENERAL AREA SUPT.

J. L. FLETCHER  
M. G. JOHN

F. M. KIRKPATRICK  
T. G. GANCENNE

EE	SUB-CONTRACTORS
BETTS	J. A. GREGGAS
	J. D. OWELL
WRIGHT	C. L. GORDON
	E. T. BROWN

DIVISION AREA	ENGINEER	ENGINEERS ASST.
300	S. W. WILLIAMSON	S. F. SCHURE
700	W. E. JOUGLASS	C. P. GRITCHER
1100	A. C. REPSIS	E. C. HAWLEY
DUPONT CRAFTS		

ASST. FIELD PROJ  
SPECIAL ASSIGNM  
& 200 AREA  
C. H. TRAPNEL

3'R OFFICE SUPT.  
A. D. DAY

ENGR OFFICE SUPT.  
(RICHLAND)  
J. E. SAGE

ASST. ENG'R OFFICE SUPT.  
J. P. HOLT

ASST. FIELD SUPT.	SL
L. G. AHRENS	100
R. A. COERVER	200
H. F. MAGOON	600

ENGINEERS  
TRACTS  
J. COLLINS

ENGINEERS  
CONTRACT  
W. W. CAMPBELL  
ASSTS.  
C. J. LAWRENCE

CONSTRUCTION EQUIPMENT  
E. T. NORTON  
INSPECTION  
R. R. MEYERS  
ASST.  
J. L. MCINNIS

AREA	DIVISION ENGINEER
100-B	N. D. LITCHFIE
100-B	J. A. CROWLEY
100-F	N. D. LITCHFIE
101 & 105 BLDGS.	R. C. STANTON
200-W	T. E. CRAIG
200-E	G. W. DUTCHER
500-	B. M. ABT
600	R. T. GARDNER
800 & 900	D. C. GLADNEY
CAMP LAYOUT	W. D. GUMERSON
	K. R. BROWN
272	L. T. OLSEN
INSTRUMENTATION	F. H. TRAPNEL

ASST FIELD PROJECT MGR  
W. V. KREWATCH

HISTORY SUPT.  
J. R. COLBATE

FIELD DESIGN ENGR.  
H. E. STRUCK

INDUSTRIAL ENGR SUPT  
W. S. CARPENTER III  
ASSTS.  
W. E. CONANT  
B. W. FOSTER  
J. MAWDSLEY

SPECIAL ASSIGNMENT  
G. S. CRANE

STAFF ENGINEERS  
COMMUNICATIONS  
B. M. ABT

CONCRETE  
K. H. TALBOT

CIVIL  
R. F. MASON  
W. P. STEVENSON

P. & S.  
T. G. LA FOLLETTE  
T. G. STEEN  
W. E. ECKEL JR.

SPECIAL ASSIGNMENT  
R. M. CARPENTER

ASST. ENGR OFFICE SUPT.  
J. A. PIERSOL

ENGINEERS  
REPORTS & RECORDS  
F. B. TWIGG  
ASST.  
R. U. OWINGS  
JOB IMPROVEMENT  
G. R. MOORE  
OFFICE  
P. G. BINTZ  
ASST.  
R. C. PARKER  
SIGN CO-ORDINATOR  
A. B. CASON  
COST  
J. J. ZACOVIC  
ASST.  
BL. GAGE  
COST ANALYSIS  
E. A. JOHNSON

ENG'

ASST. ENGR  
(1)

CONTR  
H. J. I

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MANHATTAN DISTRICT HISTORY

BOOK IV - FILE PROJECT

VOLUME 5 - CONSTRUCTION

APPENDIX C

REFERENCES

<u>No.</u>	<u>Description</u>	<u>Location</u>
1 ✓	Prime Contract W-7412 eng-1	District Office Files
2 ✓	Design Drawings Bearing Signatures of Approval.	District Office Files
3 ✓	Letters of Authorization from the District Engineer to Major W. L. Sapper, (2 DEC. 1942, A-43; 10 FEB. 1944, EIDMG-4-A; 1 JUL., 1944, EIDMG-4)	District Office Files
4 ✓	Letters of Authorization from the District Engineer to Colonel Matthias, (1 MAR. 1943, A-43; 14 JAN. 1944, EIDMG-4)	District Office Files
5 ✓	Reports on Soil Exploration from Seattle District Engineer.	Area Engineer H.E.W. Classified Files 671.1
6 ✓	Reports on Chemical Analyses of Columbia River water.	du Pont H.E.W. Central Files
7 ✓	Analyses of Exploration Borrow Pits	Area Engineer H.E.W. Classified Files OGI Topographical Maps
8 ✓	Reports on Studies of Electric Power Supply (B-6 Power Contract; P-5 Power Priority)	H.E.W. Permanent Record Files
9 ✓	Material and Equipment Lists	H.E.W. Procurement and Supply Section Files

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<u>No.</u>	<u>Description</u>	<u>Location</u>
10 ✓	Government Procurement Regulations	H.E.W. Procurement and Supply Section Files
11 ✓	Subcontracts for Specialty Work	Area Engineer H.E.W. Classified Files
12 ✓	Treasury Procurement Files	H.E.W. Procurement and Supply Section Files
13 ✓	Wage Rate Adjustment Orders and Wage Rates	H.E.W. Permanent Record Files. Cabinet 16
14 ✓	Employee Training and Relations - Selective Service	H.E.W. Permanent Record Files. Cabinet 54
15 ✓	West Coast Plan - Selective Service	H.E.W. Permanent Record Files. Cabinet 341
16 ✓	Control Charts for Terminations	H.E.W. Permanent Record Files. Cabinet 713
17 ✓	Daily Project Force Reports	H.E.W. Permanent Record Files. Cabinet 810
18 ✓	Lanham Act (Public, 849, 70th Congress, 54 Stat. 1126, USC Title 42, Sec. 1521)	U. S. Government Files Washington, D. C.
19 ✓	Investigations of Projects having Similar Climatic Conditions	H.E.W. Permanent Record Files
20 ✓	Report of Planning Meeting for 1 April 1943	Area Engineer H.E.W. Classified Files 337 Case "VV"
21 ✓	Housing and Traffic Analysis of Hanford Camp, 17 August 1943	H.E.W. Permanent Record Files
22 ✓	Lanham Fund	U. S. Government Files Washington, D. C.

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<u>No.</u>	<u>Description</u>	<u>Location</u>
23 ✓	Test Tables for 105 Buildings	H.E.W. Permanent Record Files
24 ✓	Specifications for Van Storing Flanges	Wilmington Engineering Dept. Wilmington, Del. Spec. No. 2032
25 ✓	Agreement between U. S. Government and the Bonneville Power Administration dated 26 February 1944	Area Engineer H.E.W. Classified Files 1G1

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MANHATTAN DISTRICT HISTORY

BOOK IV - PILE PROJECT

VOLUME 5 - CONSTRUCTION

APPENDIX D

DOCUMENTARY FORMS

Description

No.

- 1 Subcontract Procedure
- 2 Application for Higher than Routine Preference Rating
- 3 Direct Contract Procedure
- 4 Procedure for Rental of Equipment to Lump Sum Contractors
- 5 Letters for Clearance Request to WMC
- 6 Secret Letters Written by Secretary of War Patterson and  
Admiral King
- 7 Incentive Plan
- 8 Activities of the Training and Relations Division
- 9 D.S.S. Form 42A (Special)
- 10 D.S.S. Form 401-A
- 11 D.S.S. Form 42B
- 12 Extract from "Interim Report on Selective Service"
- 13 Alternate Site Plans for Hanford Camp
- 14 Safety Activities

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## SUBCONTRACT PROCEDURE

An outline of procedure followed by the Government and the Prime Contractor with regard to subcontracts follows:

1. A letter was drawn up by the Prime Contractor outlining phases of new work considered necessary. This letter contained the reasons for the work and the scope involved, together with a recommendation that the work be subcontracted, and was submitted to the Contracting Officer for approval.
2. Specifications and plans, together with the form of invitation and a list of bidders to whom invitations were to be sent plus all other pertinent pre-bid information, were submitted by the Prime Contractor to the Area Engineer's Office for review and approval.
3. Bids were received and opened by the Prime Contractor's Contract Engineer in the presence of a Government representative. A tabulation of bids was made and properly initialed by all present.
4. A letter recommending award to a particular bidder and stating reasons for the award together with the tabulation of bids was sent to the Contracting Officer.
5. When this letter, described in 4 above was approved by the Contracting Officer, it was returned to the Prime Contractor who then issued a letter of award or intent to the successful bidder; which letter normally indicated a time within which the subcontractor should

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commence work.

6. A record of purchase, together with a purchase requisition, retabulating the bids and showing the reasons for recommending one bidder over another, was forwarded to the Contracting Officer for his signature.
7. After approval of the record of purchase it was returned in toto to the Prime Contractor who then prepared, from the purchase requisition, a purchase order which was issued to the subcontractor as further evidence of the award. This purchase order usually recited not only the conditions of agreement but indicated that in due course of time a formal subcontract would be prepared for execution by the subcontractor and Prime Contractor and approval by the Contracting Officer.
8. A copy of the purchase order was forwarded to the Contracting Officer.
9. A subcontract form which had been previously approved by the Contracting Officer was forwarded to the subcontractor for execution. It was then executed by the proper Prime Contractor official, depending upon the amount involved; forwarded to the Contracting Officer for his approval; and returned, after approval, to the Prime Contractor.

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HM 352 (Rev.5/44)

Date: July 3, 1944

HANFORD ENGINEER WORKS  
REQUEST FOR APPROVAL OF  
AREA ENGINEER

APPLICATION FOR HIGHER THAN ROUTINE PREFERENCE RATING

1. Name and address of Applicant (Purchaser): Pur. Order No. Date of  
To whom Certificate should be issued: order  
E. I. du Pont de Nemours & Company RPO 18452 6-30-44  
P. O. Box 429  
Pasco, Washington

2. Name and address of manufacturer: (and supplier or dealer involved)  
For each item required:  
Seattle Hardware Company P. O. #73 T 613 D Blackhawk Manufact-  
Seattle, Washington Milwaukee, Wisconsin

3. Items to be covered by increased rating:

Quantity	Description	Value	Present Rating	Requested Rating
12	Blackhawk Hydraulic Pipe Benders #S-30-A complete with 1 1/2", 1 3/4" and 2" Standard Radius Bending Shoes	\$1,000.80	AA-1	AAA

4. Delivery Promises:

<u>Required</u>	<u>Present Promise</u>	<u>Promise with increased rating</u>
7-15-44		
Plant Site Date	8-15-44	7-7-44

5. Basic cause of need for higher rating - Explain urgency, with specific facts.

Pipe Benders on this Order urgently required for bending stainless steel process pipe in 200 West Area, 221-T & U and 271-T & U Buildings. Benders now on Job are being used to capacity and are not available for this work.

/s/ V. T. Matthias

V. T. Matthias, Lt. Col. C. E.  
DATE: 7/4/44

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## DIRECT CONTRACT PROCEDURE

The procedure with regard to Direct Contracts follows:

1. Plans and all other pertinent bid data were prepared by the Government. ✓
2. Invitations to bid were mailed to qualified prospective bidders. ✓
3. Bids were received, opened, and tabulated; the successful bidder was selected and notified of the award, usually by a letter of intent. ✓
4. The formal contract was executed by the Contractor and the Contracting Officer. ✓
5. Supervision of work was accomplished principally by arrangement with the Prime Contractor for inspectors to supplement the Government Inspectors assigned to the work. ✓
6. All changes in the amount or scope of work were requested by letter to the Contractor and usually preceded by verbal negotiation with the Contractor. This was followed by a formal modification, either a change order or a supplemental agreement which was executed in the same manner as the contract document. ✓

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PROCEDURE FOR RENTAL OF EQUIPMENT TO LUMP SUM SUBCONTRACTORS

It might be necessary from time to time, in order to prosecute the work in accordance with pre-determined schedules, to furnish the subcontractors with certain equipment. ✓ This practice is not to be encouraged since lump sum subcontractors are expected to furnish the necessary equipment to complete the work for which they have contracted. ✓ The subcontractor should, in all cases, be urged to procure equipment from an outside source, and only when all other methods have failed, should any offer of rental H. M. E. equipment be made. ✓

Before any agreement is entered into or any commitment, verbal or otherwise, is made to the subcontractor, the request for rental and the availability of the equipment shall be cleared by the Contract Engineer through L. S. Grogan, Field Superintendent, and J. O. Salisbury, Assistant Field Superintendent. ✓

Should it be necessary rent equipment to the subcontractor, a letter form of Rental Agreement (Exhibit "A") in six (6) copies will be prepared by the Contract Engineer. ✓ This agreement will set forth all information as to number, type, value and rental rate of equipment, as well as the terms and conditions under which the equipment will be rented. ✓ The six (6) copies of the agreement will be submitted to the subcontractor for signature and acceptance of the rate and terms of rental. ✓ The agreement will then be returned for approval of du Pont and the Contracting Officer after which the following distribution will be made:

Contracting Officer	3 copies
Subcontractor	1 copy
Contract Division	1 copy ✓

Before any equipment may be delivered to the subcontractor, it shall be inspected by both a du Pont and Government equipment inspector in the presence of a representative of the subcontractor, and the necessary report prepared. ✓ At the conclusion of the rental period and on return of the equipment by the subcontractor, the equipment will again be inspected by representatives of du Pont, and subcontractor, and the Government. The two reports shall be compared and any damages noted shall be charged to the subcontractor. ✓

Rental charges will be accumulated and at the end of each month, the accrued charges will be submitted to the subcontractor for acceptance. ✓ This acceptance will then become the basis for a deduction from partial payment due the subcontractor. ✓

All requests for rental of Government equipment to subcontractors shall be handled in accordance with the above outlined procedure. ✓

G. P. CHURCH  
FIELD PROJECT MANAGER

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HANFORD ENGINEER WORKS  
PROJECT 9536  
EQUIPMENT RENTAL

In order to prosecute the work under our subcontract in an expeditious manner and to comply with schedules previously established for the work, it is necessary that we procure additional equipment at an early date. Since all available equipment is now in use on our work and having exhausted every possibility of obtaining additional equipment from outside sources, we request that the equipment listed below be furnished us on a rental basis for use on the plant site:

<u>EQUIPMENT</u> <u>NO.</u>	<u>TYPE OF EQUIPMENT</u>	<u>VALUATION</u>	<u>RENTAL</u> <u>BASIS</u>
--------------------------------	--------------------------	------------------	-------------------------------

It is our understanding that the following general terms and conditions shall apply to the rental of this equipment and all such terms are acceptable to us.

- (1) Equipment shall be in a condition to render efficient, economical and continuous service when delivered to the subcontractor. The equipment shall be inspected by du Pont and Government inspectors, in the presence of a representative of the subcontractor, before being released to the subcontractor and again upon being returned at the completion of the rental period. The equipment shall be returned in the same condition in which it was received less normal wear and tear and any damages as determined by inspection by the du Pont Company and Government inspectors shall be chargeable to the subcontractor.
- (2) Rental rates shall be the applicable rates as listed in Office of Price Administration Maximum Price Regulation No. 134 as revised by Amendments Nos. 1, 2 & 3. Such rates shall be based on the daily, weekly, or monthly (whichever is most equitable to the subcontractor) rate as contained in and computed in accordance with this regulation.
- (3) The rental period shall begin upon delivery of the equipment to the subcontractor at its present location and shall terminate on the return of the equipment to the du Pont Company at the point of origin or an equivalent or equa-distant point.
- (4) The rental charges shall be accumulated over the rental period and monthly statements of the charges will be forwarded to the subcontractor for acceptance. These charges

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will then become the basis for a deduction from the payments due the subcontractor or partial payment estimates.

- (5) The rental fee shall not include the furnishing of operator, fuel, lubrication, maintenance, or any service for the equipment, or shall it include the cost of transporting the equipment to or from the site of the subcontractor's work.

If the du Pont Company is required to transport the rented equipment to or from the site of the subcontractor's operations, an additional charge shall be made. This charge will be accumulated on a "Work Order", and such charges will also be deducted from funds due the subcontractor. Equipment not having pneumatic tires shall in no case be moved under its own power, distance in excess of (1) one mile.

- (6) Upon acceptance of the equipment, the subcontractor shall assume full responsibility for any loss or damage to the equipment while it is in his possession. In the event of total destruction, the measure of damage shall be the valuation of the equipment as shown herein.

The equipment shall be lubricated, maintained and serviced in strict accordance with manufacturer's instructions and shall be subject to inspection at any time by representatives of du Pont or the Government, for the purpose of determining whether or not the equipment is being properly serviced. Failure on the part of the subcontractor to properly maintain and service equipment shall be sufficient cause for termination of the rental agreement, and the immediate return of the equipment to the du Pont Company.

- (7) Upon receipt of ten (10) days written notice from du Pont, the rental of any or all equipment covered by this agreement may be terminated, and the equipment shall be returned by the subcontractor to du Pont.

This letter, therefore, will constitute our formal request for the furnishing of the equipment as listed herein and our agreement to accept the terms, conditions, and Price Regulations as referred to herein. This will further serve as your authorization to deduct from payments due as the rental charges for the equipment furnished in compliance with this request.

\_\_\_\_\_  
(SUBCONTRACTOR)

APPROVED:

BY \_\_\_\_\_

\_\_\_\_\_  
E. I. du Pont de Nemours & Company

\_\_\_\_\_  
Contracting Officer

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COPY

WAR MANPOWER COMMISSION  
Washington

July 3, 1943

Paul V. McNutt  
Chairman

To: All Regional Manpower Directors

From: Lawrence A. Appley,  
Executive Director

Subject: Recruitment for the Hanford Engineering Works

Attached is a communication dated June 25, 1943, from Mr. James T. Mitchell, Director of the Industrial Personnel Division, Army Service Forces.

I fully concur with Mr. Mitchell's emphasis of the importance of the Hanford Engineering Works now being constructed at Pasco, Washington, under the supervision of the Corps of Engineers of the United States Army. Will you, therefore, assure that clearance orders for this project directed to your region against current and subsequently assigned quotas, receive absolute preference over that accorded clearance orders for any other Army contracts.

A member of the Region XII staff has been assigned to the Pasco project and has been authorized by the Regional Director to deal directly with applicant-holding regions to which orders have been directed on recruitment patterns issued by Washington headquarters.

Because of the importance of the facility under construction by the Hanford Engineering Works, I recommend that the information contained herein be transmitted to the State War Manpower Commission offices in your region, and that all local offices be apprised of the priority in service that should be given to recruitment for the Hanford Engineering Works.


For the Executive Director

Albert L. Nickerson, Director  
Bureau of Placement

Attachment

cc: Otto S. Johnson  
John Flaherty  
Robert E. Rose  
A. P. Hardy  
Central Clearance  
S. P. Colgate



  
Mr. Lawrence A. Appley  
Executive Director  
War Manpower Commission  
Washington, D. C.

Dear Mr. Appley:

There is being constructed at Pasco, Washington, under the supervision of the Corps of Engineers of the United States Army, a facility known as the Hanford Engineering Works. This facility is of the highest importance to the War Department and it is imperative that it be completed at the earliest possible date.

To that end, it is requested that the War Manpower Commission afford the labor requirements of the Hanford Works the highest possible priority. Between this facility on the one hand and other War Department facilities and private employers producing for the War Department on the other, there is no question that the Hanford Engineering Works should be given absolute preference. However, because of the general manpower shortage on the Pacific Coast, the importance of aircraft, ship-building and other war activity being carried on in the Pacific Coast region, because of the increasing availability of construction workers in other parts of the country and because transportation costs of workers moved to Pasco from other parts of the country can be paid, it is suggested that recruitment for the Hanford Engineering Works be restricted to areas other than the Pacific Coast. This will permit timely completion of the Hanford Engineering Works without aggravating the already serious manpower situation in Seattle, Portland, San Francisco, Los Angeles, and other coastal cities.


We will appreciate your transmitting to appropriate members of your headquarters staff, as well as to directors of the regions in which recruiting for this project is being carried on, information concerning the overriding priority which should be accorded the Hanford Engineering Works.

I am keenly aware of the problems in War Manpower Commission operations created by frequent statements by the several procurement agencies that a certain project or activity is of the highest importance and should be accorded top priority. Nevertheless, this letter is written because it is not possible to overestimate the importance of the Hanford Engineering Works. I regret that I cannot give you more detailed information as to the reasons for the extreme essentiality of this project.

Questions which your staff may have concerning this matter should be referred to the Industrial Personnel Division, Headquarters, Army Service Forces.

The cooperation and assistance of the War Manpower Commission in expediting the completion of the Hanford Engineering Works will be greatly appreciated.

Sincerely yours,

  
James T. Mitchell, Director  
Industrial Personnel Division  
Army Service Forces

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C O P Y

Draft of letter to Mr. McNutt over signature of Admiral King, USN

I understand that the War Department has asked the War Manpower Commission to accord absolute priority in recruitment of labor to two construction projects: the Hanford Engineer Works at Pasco, Washington, and the Clinton Engineer Works at Clinton, Tennessee.

These two projects are of first importance to the successful prosecution of the war and I am in full accord with the requested priority in labor recruitment.

I understand that in some instances operation of this plan may hamper local recruitment for work in which the Navy Department has an interest. However, because of the extreme importance of these projects, the requested priority is necessary.

D-6

~~SECRET~~

C O P Y

Mr. Paul V. McNutt, Chairman  
War Manpower Commission  
Room 5554, Social Security Building  
Washington, D. C.

Dear Mr. McNutt:

Two of the War Department's most vital construction projects, the Hanford Engineer Works at Pasco, Washington, and the Clinton Engineer Works at Clinton, Tennessee, are facing immediate and serious delays because of a critical shortage of common laborers.

This shortage is not a recent development. For a number of weeks, lack of an adequate number of laborers has seriously hampered the progress of work on both projects. Now, however, it has reached a point where completion dates will not be met unless effective action is taken within the next week.

Facilities in process of construction at these locations are of first importance to the National safety and must be built--completely and on schedule. If they are not, the successful prosecution of the war will be endangered.

Various measures intended to meet the labor shortage have been taken by the War Manpower Commission through the United States Employment Service. These measures have not proved successful and it appears, on the basis of experience to date, that they cannot be successful because they are inadequate.

It is my considered opinion that the manpower needs of these projects must now be given priority over all other activities, including the requirements of private contractors engaged in war production.

To implement this program, I believe the requirements of these projects must be given precedence over those of all other employers, both local and non-local. I believe that in each local United States Employment Service Office where recruitment is undertaken, workers must not be offered any other employment opportunities until after they have been rejected for employment on these projects or express an unwillingness to accept employment on these projects.

It should not be necessary to continue this arrangement over a long period of time. Compared with the total manpower needs of industry, the requirements of these projects are relatively moderate.

Information as to the exact requirements of this work is in the possession of Mr. James Bond and Mr. Stephen Wood of your organization, who have been working on the problem with representatives of the War Department.

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C O P Y


I cannot urge too strongly that arrangements for recruiting on a basis of absolute preference be made effective as soon as possible. They should be in operation by July 20.

Sincerely yours,

Lt. Col. Collins 74968  
J. P. Mitchell 7/16/48  
40-460, Pentagon

ROBERT P. PATTERSON  
Acting Secretary of War

~~SECRET~~



Incentive Plan. - On 28 October 1948, an "Incentive Plan" was inaugurated at the Hanford Engineer Works. Persons, other than those whose expenses were paid through transfer agreements, employed by the Prime Contractor and Cost-Plus-Fixed-Fee Contractors, were eligible for incentive payments on the basis of satisfactory attendance. The main purpose of the plan was to increase production and decrease absenteeism and employment turnover on the Project. Payments (in the form of a bonus) were based on railroad coach fare to and from recruitment points for recruited employees; for those employees interviewed and hired at Pasco, from last previous point of employment to Pasco.

Upon completion of four months of satisfactory attendance subsequent to 28 October 1948, or date of active employment if such is later, an employee was eligible to receive railroad coach fare from Pasco. If employed prior to 28 October 1948, the employee must have completed four months of satisfactory attendance after 28 October 1948, to become eligible, but at completion of this satisfactory attendance, the employee was immediately given credit for his service on the Project prior to 20 October 1948, in an amount not to exceed three months.

Satisfactory attendance for the purpose of the plan required that an employee must not have been absent more than two working days in any one month. Excuse for absence due to illness was granted only when properly authenticated by a physician's certificate. The only other excusable absence was that caused by a pre-induction physical examination for the Armed Services, and if more than the two allowable days per month, even this absence required certification by the draft board.

Employees terminated, due to reduction of force, in less than four

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months after 28 October 1943, or date of employment if later, were eligible for the allowances provided they had qualified by the accumulated satisfactory attendance during the full period of their employment.

Employees terminated due to discharge for cause, or who voluntarily quit, prior to accumulating the four months satisfactory attendance record forfeited the allowance to Pasco. If employees had received the allowance to Pasco, and were discharged for cause, or voluntarily quit, prior to accumulating the three months additional satisfactory attendance record, they forfeited the allowance from Pasco.

Employees terminated by their employers for reasons beyond their control were eligible for the allowances. One exception to this was that any person laid off for falsifying his application was not entitled to any incentive payments, unless he had successfully completed four months satisfactory attendance prior to his discharge. He then would receive his earned allowance.

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~~SECRET~~

AN ANALYSIS OF  
ACTIVITIES BEING CARRIED ON BY  
THE TRAINING AND RELATIONS DIVISION  
WHICH RELATE TO  
THE MOBILIZATION AND UTILIZATION OF MANPOWER

AT  
HANFORD ENGINEER WORKS  
HANFORD, WASHINGTON  
MAY 1944

~~SECRET~~



PREFACE

The Training and Relations Division, particularly its Training Section, always has viewed the attainment of the highest degree of manpower utilization as its major aim. This has made necessary the breaking down of complex operations into simple individual jobs that can be handled by inexperienced and quickly trained workers. The Division constantly strives to give thought to those activities which directly or indirectly contribute toward good morale, which in turn inevitably results in increased production, higher quality of workmanship, maximum man-hours on the job and low turnover of personnel.

We voice our appreciation to the Training Within Industry Division of the War Manpower Commission, the Division of Vocational Education of War Production Training, Apprentices and Training Service of the War Manpower Commission, Wilmington and local plant management for the invaluable help, so courteously and freely given, in assisting our division supervision in carrying out assignments and responsibilities.

JOHN C. FULLING  
ASS'T. SUPERVISOR

JOHN F. SEABOWER  
SUPERVISOR





C O N T E N T S

TRAINING DEPARTMENT

ORIENTATION

TRAINING WITHIN INDUSTRY PROGRAM

Job Instruction Training  
Job Instruction Follow-through Training  
Job Relations Training  
Job Methods Training

SUPPLEMENTARY WAR PRODUCTION TRAINING COURSES

APPRENTICE TRAINING

CLERICAL TRAINING

Filing, Shorthand and Typing  
Comptometer Operators  
"Business Girl"  
Field Clerks  
Office Methods

CRAFT TRAINING PROGRAMS

Boiler Firemen  
Craft Training Crews  
Craft Handbooks  
Supervisory Training  
Automobile Mechanic Training  
Welders Training  
Millwright Training  
Concrete Training

SPECIAL TRAINING COURSES

Passo Recruiting  
Sound-slide and Motion Pictures  
Pamphlet: Training Trends and Topics  
Adult Education  
Patrolmen Training  
Olympic Commissary Training  
Training in the Division

RELATIONS DEPARTMENT

PUBLICATIONS

"Dear Anne"  
"Highlights of Hanford"  
"You Fit Into This Picture," etc.  
"Here's Hanford"  
"Sage Sentinel"

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~~SECRET~~

RELATIONS DEPARTMENT (Continued)

PUBLICITY POSTERS AND BULLETIN BOARDS

Absenteeism

SPECIAL SERVICES

Income Tax

Notary

Newscast

H. E. W. Employees' Association

INFORMATION OFFICES

SELECTIVE SERVICE DEPARTMENT

~~SECRET~~

## TRAINING SECTION

### I. ORIENTATION -

Two Orientation sessions (Field and Office personnel) are held daily for all new employees on the day they first report to work. The purpose of these meetings is to pave the way for better job relations by presenting the procedures affecting employees which will make for a smooth running organization and a pleasant, agreeable place to work. Attempt is made to answer a number of very natural questions in the minds of the employees and bring about a better understanding while working in Hanford.

It is reasonable to assume that Orientation serves as a "Welcome" to the new employee, overcomes to some extent the confusion existing in the mind of the newcomer and materially decreases training time spent with new employees on the job. The need of being present on the job is stressed with an appeal made to the men's enlightened self-interest and to their patriotism in order to utilize all manpower assembled here. Safety is high-lighted, one of the aims being to emphasize the saving of man-hours through eliminating accidents and unsafe practices and thus increasing production. If it fulfills its purpose, Orientation as given here will boost the morale of the newcomer considerably. It is felt that much progress has been made in this phase of training as no effort has been spared in exercising a constant vigil over the contents of the program.

### II. TRAINING WITHIN INDUSTRY PROGRAM OF THE WAR MANPOWER COMMISSION

Appreciation sessions in all three JT Programs (Job Instruction Training, Job Relations Training, Job Methods Training) have been

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given by TWI representatives to all upper-bracket management supervision. A number of institutes have been held on the Project in order to qualify trainees as instructors. Top training supervision has participated in Program Development Training and is using this method in spotting training needs, analyzing them and developing specific job training programs.

As the nature of training in relation to Construction work differs somewhat from that of the usual industrial manufacturing Operations around which the various "J" courses are built, considerable pioneering has been done in revising the standard manuals offered by TWI. Actual construction jobs for this Project have been included, as examples in the outlined courses, and they are described with construction terminology.

A. Job Instruction Training

Nearly 3,000 members of supervision have received this training. Classes continue to be scheduled weekly.

B. Job Instruction Follow-through Training

No training program is worthwhile unless it gets results in terms of improved production or service. With this thought uppermost in mind, a simple, logical, extremely practical follow-through program has been arranged for this Project. Seven qualified men from the Field Crafts devote their full time to making contacts, giving instruction and assisting in the progress of the program. They might properly be referred to as "Follow-through Coaches," whose job it is to help supervisors in the application of instructional skill to everyday problems and situations.

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Evaluation data is collected by these men, assisted and counseled by our Training Department.

C. Job Relations Training

This ten-hour program designed for foremen and supervisors furnishes a practical method for applying leadership principles gained through previous training and experience. Relations training has been received by a little less than 500 supervisors and foremen to date. This number will increase greatly, as JIF is completed and more emphasis is given to JRT.

D. Job Methods Training

One institute has been given for this course, but actual scheduling of instruction has been held in abeyance until most employees have completed JIF and JRT. However, this third package in the TWI program is a part of the contemplated course material for H. E. W.

III. SUPPLEMENTARY WAR PRODUCTION TRAINING COURSES

Sponsored by the Training & Relations Division, these courses are made available to Hanford Engineer Works employees, without cost, by the Richland School District and the State Board for Vocational Education. Courses are not compulsory but are designed to help the worker do better the job to which he is assigned. Only men employed in a particular craft are permitted to enroll in classes which pertain to that craft. A record is kept in all personnel file folders of any and all supplementary classes attended and grades received. Due consideration can be given these records by supervision in determining the employee's merit for up-grading, utilization of his highest skill

[REDACTED]

on the job, etc. In general, the classes continue for a six-week period at which time new enrollments are accepted. They are scheduled twice weekly and each session lasts two hours. Qualified instructors are selected from the Crafts that they teach, and in most instances have a minimum of ten to twelve years practical experience in the work that makes up the course.

#### IV. APPRENTICE TRAINING OF WAR MANPOWER COMMISSION

Construction work is ordinarily of such a temporary nature that it does not readily fit into a long range program extending for a period of years, as does an apprentice training setup. However, Mr. Walter Lee, Ass't. Director of Apprentice and Training Service of the War Manpower Commission, has visited this Project a number of times and serves as a Consultant on the H. E. W. Central Guidance Committee which regulates the Supplementary War Production Training Program.

#### V. CLERICAL TRAINING

##### A. Filing, Shorthand and Typing

Refresher courses of varying length are held in these subjects as the need arises and requests are made to the Training Department for assistance.

##### B. Comptometer Operators

Many new employees with some but not full qualifications for this work have been given one full week of training and assigned to various Accounting and Control Departments. Follow-up training of one hour a day for a period of four weeks winds up the training.

##### C. "Business Girl"

[REDACTED]

A comprehensive guide of procedure for stenographers and typists, covering office decorum and recommended correspondence methods. A revision of this manual is now underway.

D. Field Clerks

A survey of the field is being made to develop an analysis of the field clerical job. When this survey has been completed, outstanding clerical personnel will be called in for a conference on field clerical job analysis in order to develop a training pattern. Following this training, courses will be set up to supply the field with clerical help that is sorely needed due to extensive induction into military forces.

E. Office Methods

The purpose of this course for secretaries, stenographers and typists is to train them in office decorum, telephone technique, courtesy, job relations, posture, etc.

VI. CRAFT TRAINING PROGRAMS

A. Boiler Firemen

It was recognized the early part of September that the firing of the boilers to be used on this Project was somewhat of a "lost art." The firemen arriving on the Project had not had sufficient experience with this type of boiler to fire them safely, efficiently and economically. At this time there were approximately 100 firemen on the Project, most of whom were only partially qualified. It was also recognized that during the cold winter months approximately 650 qualified firemen would be required. Therefore, Earthworks and Hanford Utilities requested

[REDACTED]

[REDACTED]

the assistance of the Training and Relations Department in setting up and putting into effect a training course that would aid in overcoming the foreseen situation.

This program has proven itself from the fact that since its inauguration last September, no boilers have been blown up nor has major damage to equipment resulted from the lack of trained boiler firemen. It enabled the Earthworks and Hanford Utilities to maintain a force of over 600 qualified firemen on the Project for several months. In all, approximately 940 boiler firemen have been trained by this program.

**B. Craft Training Crews**

Plans are now being worked out for organizing ten or twelve experienced foremen in each craft to act as training foremen. Assigned to them will be new men who will be transferred to other groups as openings occur. Novice crews in training will be kept on productive work, but a prime objective will be development of the man as well as the job. It is contemplated that our Training Department will work closely with these training foremen, supplying them with such techniques as they may require and serving them with information to assist in curtailing the turnover of new workers. Three crafts have appointed training crews to date.

**C. Craft Handbooks**

Standard procedure material has been collected, edited and compiled in handbooks in the following crafts: Concrete, Labor, Rigger, Mechanical, Reinforcing Steel, Transportation, Earthworks, Carpenter, Pipe and Electrical.

[REDACTED]



[REDACTED]

D. Supervisory Training

This training has been mostly in two crafts, Labor and Carpenter, but will be extended to cover the whole field as rapidly as possible. Material deals with specific problems confronting foremen daily with a clear outline of appropriate methods for treating them. Personal planning and scheduling is taken up by the conference method. The foreman is helped by getting a comprehensive picture of the many phases of his job. Such courses complement the TWI program.

E. Automobile Mechanic Training

Some of the auto mechanics hired on the Project were not familiar with the various types of automotive equipment which they were expected to repair. Several mechanics had been working in other fields for sometime and were not acquainted with the latest types of engines. It was also noted that there was a general weakness in the mechanics on the roll as to the knowledge of the functioning and repair of automotive ignition systems and carburetors. In brief, many of the mechanics did not have the necessary "know-how" to perform a satisfactory and efficient job. For this reason, it was believed that a general training course would improve the over-all job-knowledge and interest of the auto mechanics on the Project.

The general training program has increased the "know-how" of the auto mechanics who have taken the training. Various foremen have noted improved performance in the mechanics taking the course. General interest and morale have been increased. Through

[REDACTED]

April 29, 1944, forty-nine (49) mechanics had been trained and the scheduling of men continues.

F. Welder Training

Tests were given to welders the early part of November, 1943. However, it was found that a high percentage of the welders tested failed the test. It became apparent that a general period of instruction should be given all welders being tested in order to qualify them for the examination. Standardisation of welds could be stressed at this time.

This training and testing program has assured the Project that only qualified welders will be sent into the field. The program has also aided materially in standardising the methods and types of welds. Since January 15, 1944, 308 U-69 welders have been trained and tested and 208 have been qualified. This program continues to operate.

G. Millwright Training

On April 18, 1944, a program for training millwrights was initiated by the Mechanical Department at H. E. W. This was in demand, due to the fact that experienced millwrights could not be obtained in sufficient number, particularly those skilled in making inside installations.

Approximately thirty men are trained weekly. Sessions are held nine hours per day six days per week. The fundamentals of measurements are basic training proceeding from the 6" rule, steel tape, dividers, calipers and dial indicators. Practice in tool use covers twist drill, reamers, taps and dies. Classroom instruc-

tion is alternated with actual instruction on the job.

#### H. Concrete Training

Visual charts outlining operation procedure for Pumpcrete machines have been used to train men in the correct technique required. A booklet for the Concrete worker is now in preparation. It follows along the pattern of the JIT breakdown sheet. Labor jobs are broken down into steps, and key points peculiar to the job are stressed. Many points of Concrete Labor procedure are simplified and standardized into synchronized effort of operation.

### VII. SPECIAL TRAINING COURSES

#### A. Passo Recruiting

The Recruiting Division Office has been assisted in reprocessing their procedure as it applies to reception and pre-project orientation; i.e., establishing better Job Relations with the new employee before reaching the Project.

#### B. Sound-Slide and Motion Pictures

One man in the Training Department devotes his full time to the showing of training and morale building films (War and Navy Department releases). Requests for this service are growing weekly. A sound-slide film is being developed on the Project entitled "Good Housekeeping as Applied to the Carpenter Craft," and if successful, will be followed by several others now being considered.

#### C. Pamphlet: Training Trends and Topics

Issued weekly, this mimeographed sheet is meant to assist Supervision with training problems. Its aim is to be constructive

[REDACTED]

the Army in their school for bakers and cooks at the Presidio in San Francisco, California.

An opportunity will be provided for voluntary training of employees on their own time, under the auspices of the Supplementary War Production Training Department of the State Vocational Education Service.

G. Training in the Division

With the preparation and delivering of instructional material which is useful in training men to fill specific jobs as one of its major tasks, this Section has not neglected the development and upgrading of its own personnel. Daily sessions are held with the trainers for the purpose of improving the quality of their performance. As a direct result, upwards of a dozen men have been transferred out of the Section to recruiting service, other crafts and various special job assignments. Such moves have meant enlarged responsibilities for the men involved on tasks where their skills could be utilized to best advantage for the Project. In most instances this has meant increased monetary advantage to the men, their worth to the company having become greater than when originally hired.


[REDACTED]

  
RELATIONS SECTION

I. PUBLICATIONS

- A. "Dear Anne" was prepared by this division to be used throughout the country by recruiters. Its aim is to expedite recruiting by giving prospective female employees a true picture of living conditions in Hanford and the general type of job to be done here.
- B. "Highlights of Hanford" was prepared by this division to be used throughout the country by recruiters. Its aim is to expedite recruiting by giving prospective male employees a true picture of living conditions in Hanford and the general type of work carried on here.

A great variety of handbills and small pamphlets such as "You Fit Into This Picture" have also been prepared for the use of the Recruiting Division.

- C. "Here's Hanford" is a booklet containing a map of the facilities area in Hanford and an alphabetical list of facilities, with the services they render and the hours they are open. By giving information on services available in Hanford, this booklet is designed to eliminate trips away from the Project to secure service which workers can get here, and to enable them to plan to take advantage of the facilities available by keeping them informed on the hours they are open. The list of recreational facilities, churches, and all group meetings has special value in enabling the workers to enjoy their time off and thus make them better satisfied with the job.
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D. "The Sage Sentinel"

The Plant publication is issued weekly to inform, educate and propagandize all workers in the field and administration areas. There is strong emphasis on safety, absenteeism, war bonds, conservation (of gasoline, electricity, etc.), the Red Cross, salvage (paper and tin), fire prevention, job improvement, rationing, the danger of rumors, the importance of the job, etc. Material of this type is balanced with feature articles and pictures to develop community interest and pride; morale-building poetry and editorials; cartoons, information and news about stores, recreation and improvements that will benefit the employee. It has done much to foster a community spirit which is extremely helpful in building morale.

II. PUBLICITY: BILLBOARDS AND POSTERS

A 70-foot war bond billboard consistently using a patriotic appeal is located on B Avenue. A 30-foot board on the same street and a similar board at the entrance to the 100-B Area show craft standings in absenteeism. Additional billboards are in process of construction.

Numerous posters on absenteeism and other employee morale themes have been prepared and distributed and placed in the field, and many war bond posters have been placed throughout the Project.

III. INFORMATION OFFICES

This service has been authorized by management for three main purposes:

- A. To save man-hours in the field by taking from the shoulders of supervision the burden of answering innumerable employee requests
- ~~SECRET~~

[REDACTED]

for all kinds of information.

- B. To improve employee relations, thereby reducing turnover, by helping them to solve their personal problems that affect their work.
- C. To bolster morale by providing a place where employees may "let off steam" and register complaints which will receive the attention of management.

Many personal grievances are received, analyzed, and those which seem to have some substance and for which probable correction appears likely are reported to proper authorities for action. At the present time, readily accessible offices are located in Hanford, Richland, Areas 100-B, 100-D, 200-E, 200-W, 300 and Central Shops.

Many suggestions received from disgruntled employees by the Job Improvement Section are routed to the Relations Department for personal handling direct with the employee. As a direct result of this service, terminations have been prevented and needed manpower saved for the Project.

In connection with the Information Service offices, there has been established a free Income Tax Service for all Hanford employees. This department has had excellent cooperation from the Internal Revenue Service, and during the filing season deputies from that office are sent to Hanford to assist and advise taxpayers. Thousands of man-hours have been saved by the establishment of this service.

[REDACTED]

~~CONFIDENTIAL~~

SELECTIVE SERVICE SECTION

In order to avoid unnecessary absenteeism and consequent loss of manpower due to employees taking time off to confer with local boards in Pasco, Prosser, Yakima, our Selective Service Department with the approval of the State Division of Selective Service completed arrangement for the establishing of a Transfer Board on the Project. Thousands of man-hours have been saved to the Project by the functioning of this board.

Confusion exists in the minds of many employees as to the interpretation of Selective Service regulations. Many immediate terminations are forestalled by our interviewers who explain to employees who are under the impression that their induction is imminent, that it may be months before they will be called to the service, and, therefore, it is to their best interests to remain on the job rather than return home and be unemployed for a long interval. The draft status of each man is a very real and personal problem to him and appreciation has been expressed by many individuals for the information furnished them by the Selective Service Section.

The U. S. Army Engineers, United States Employment Service office, the State Director of Selective Service as well as the several local boards adjacent to the reservation always have rendered wholehearted cooperation and continue to be of great assistance in helping the Project to conserve manpower necessary to the war effort.

~~CONFIDENTIAL~~



SELECTIVE SERVICE SYSTEM

Bureau Budget No. 38-R058.2.  
Approval expires Oct. 31, 1945.

**AFFIDAVIT—OCCUPATIONAL CLASSIFICATION (Special—Revised)**

(Submit in triplicate, plus any additional copies specified by certifying agency)

Name of company \_\_\_\_\_  
(Corporation, partnership, individual—if self-employed, no state)

Address at which registrant is employed \_\_\_\_\_  
(Location of plant, office, or division where registrant works)

(City) \_\_\_\_\_ (State) \_\_\_\_\_

Description of the activities of this establishment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Social Security Industrial Code \_\_\_\_\_  
(If not known, call local U. S. E. S. office)

Name of registrant \_\_\_\_\_

Selective Service Order No. \_\_\_\_\_ Date of birth \_\_\_\_\_

Local Board \_\_\_\_\_  
(Number) \_\_\_\_\_ (County) \_\_\_\_\_ (City) \_\_\_\_\_ (State) \_\_\_\_\_

Title of present job \_\_\_\_\_

(State whether journeyman, apprentice, helper, certificated, licensed, professional engineer, etc.)

Describe duties actually performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Be specific—include name of machine or machine tool, process, materials, etc.)

Date employed \_\_\_\_\_ Date entered present job \_\_\_\_\_

Average weekly rate of pay \_\_\_\_\_ Average hours worked per week \_\_\_\_\_

Prior work experience \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Educational background \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Fill out if necessary to establish employee's qualifications for a particular job)

**CERTIFICATE OF EMPLOYER**

The undersigned hereby certifies that:

1. The deferment requested is necessary to maintain the operating schedule of the undersigned establishment.
2. The Job Title listed is accurate and the registrant is being utilized in the performance of the duties described to the fullest extent practicable.
3. The registrant cannot now be replaced and his removal would seriously impair the ability of this establishment to meet its operating schedule.
4. The attendance record of the registrant is satisfactory with respect to regularly scheduled work.
5. This establishment is taking steps necessary to achieve the effective utilization of its personnel.
6. This request will be submitted to only one certifying agency.

I, \_\_\_\_\_, certify that the foregoing statements  
(Name)  
are true to the best of my knowledge and belief.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Official position)

Please send Classification Advice and all related correspondence to:

Section 35A of the U. S. Criminal Code, 18 U. S. Code, Section 80, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Employer:* Leave this section blank. *Certifying Agency:* Complete this section only if request is certified.

**CERTIFICATE OF CERTIFYING AGENCY**

\_\_\_\_\_  
(Name of agency authorized to certify)

\_\_\_\_\_  
(Agency code No.)

certified on \_\_\_\_\_ for a period of \_\_\_\_\_  
(Date) (Not to exceed 6 months)

I, the undersigned representative of the above-named certifying agency, on behalf of such agency, hereby certify that:

1. The statements contained in the above certificate of the establishment are true to the best of my knowledge and belief;
2. The employment and production conditions affecting the above-named establishment are such that I concur in the need for occupational deferment of the above-named registrant, and,
3. I join with the establishment in its request for the deferment of the above-named registrant.

**AUTHORIZED CERTIFYING OFFICER**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Rank or title)

Authorized Government Request Stamp must be entered here for Federal Government Employees only

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Official position)

Employer: Leave this section blank. Certifying Agency: Complete this section only if request is certified.

### CERTIFYING AGENCY

\_\_\_\_\_  
(Name of agency authorized to certify)

\_\_\_\_\_  
(Agency code No.)

certified on \_\_\_\_\_

(Date)

for a period of \_\_\_\_\_

(Not to exceed 6 months)

Authorized Government Request Stamp must be entered  
here for Federal Government Employees only

### LOCAL BOARD REPORT TO STATE DIRECTOR

\_\_\_\_\_  
(LOCAL BOARD DATE STAMP WITH CODE)

This registrant has been classified in

Class \_\_\_\_\_

until \_\_\_\_\_

\_\_\_\_\_  
(Member or clerk of local board)

TRIPPLICATE

.....  
(Name)

.....  
(Date)

.....  
(Official position)

*Employer: Leave this section blank. Certifying Agency: Complete this section only if request is certified.*

**CERTIFYING AGENCY**

.....  
(Name of agency authorized to certify) (Agency code No.)

certified on ..... for a period of .....

(Date)

(Not to exceed 6 months)

Authorized Government Request Stamp must be entered here for Federal Government Employees only

.....  
(LOCAL BOARD DATE STAMP WITH CODE)

**LOCAL BOARD REPORT TO STATE DIRECTOR**

This registrant has been classified in

Class ..... until .....

.....  
(Member or clerk of local board)

TRIPPLICATE

.....  
(Name)

.....  
(Date)

.....  
(Official position)

*Employer:* Leave this section blank. *Certifying Agency:* Complete this section only if request is certified.

**CERTIFYING AGENCY**

.....  
(Name of agency authorized to certify) (Agency code No.)

certified on ..... for a period of .....  
(Date) (Not to exceed 6 months)

Authorized Government Request Stamp must be entered here for Federal Government Employees only

.....  
(LOCAL BOARD DATE STAMP WITH CODE)

**LOCAL BOARD REPORT TO STATE DIRECTOR**

This registrant has been classified in

Class ..... until .....

TRIPPLICATE

.....  
(Member or clerk of local board)  
# 16-38028-1 U. S. GOVERNMENT PRINTING O

**AFFIDAVIT—OCCUPATIONAL CLASSIFICATION (Industrial)**

Affidavit—Occupational Classification (General), Form 42, is provided for use in activities where the items on this form are not applicable

Name of registrant.....

Selective Service Order No..... Age.....

Local Board.....  
(Number) (County) (City) (State)

Title of present job..... Job Title Code:.....

State whether journeyman, apprentice, helper, certified, licensed, professional engineer, etc.:

Described duties actually performed..... Publication of the details of this job is prohibited by  
(Be specific—include name of machine or machine tool, process, materials, etc.)

the War Department. In case of question, the local board may request its  
State Headquarters to verify with State Headquarters for Selective Serv-  
ice for the State of Washington

Date employed..... Date entered present job.....

Average monthly rate of pay, \$..... Average hours worked per week..... 48

Prior work experience.....

Educational background.....  
(Fill out if necessary to establish employee's qualifications for a particular job)

How long will it take you to replace this employee?.....

What specific steps have you taken to secure or train a replacement for this registrant?..... We are utilizing the  
facilities of the U.S.E.S. to the fullest possible extent. In addition, we  
are endeavoring to secure personnel by transfer of employees from other  
plants of this Company and its affiliates. Despite these efforts, we are  
experiencing great difficulty in properly staffing the plant.

**AFFIDAVIT—OCCUPATIONAL CLASSIFICATION (Industrial)—Continued**

Name of company Hanford Engineer Works, E. I. du Pont de Nemours & Co., Inc.  
(Corporation, partnership, individual—if self-employed, so state)

Address of company P. O. Box 100, Richland, Washington  
(Location of plant, office, or division where registrant is employed)

Description of activities of this company The Hanford Engineer Works, E. I. du Pont de Nemours & Co., Inc., is engaged in urgent vital war work. The work is highly confidential in nature, and is being performed wholly under the jurisdiction of the War Department

State specifically what proportion of your products currently produced are:

(a) for use in the war effort 100%

(b) for civilian use None

Is expansion or further conversion contemplated in war production Yes

Number employees now..... Number additional needed in next 6 months..... Number additional needed in next year.....

Explain .....

Is a replacement training program in operation?..... Contemplated? .....

Explain .....

This form was completed at the plant or office of the company located at P. O. Box 100, Richland, Washington

and all correspondence relative to this affidavit should be so addressed.

I, W. T. Cloud, do solemnly swear (or affirm)

that I am Service Superintendent of the above-named company, and that the foregoing statements are true to the best of my knowledge and belief.

(Signature)

Subscribed and sworn to before me this..... day of ....., 19.....

(Signature of official administering oath)

(Official designation of official administering oath)

INSTRUCTIONS: This form is to be filled out by an employer or other person who has knowledge of the registrant's eligibility for Class II, deferment as a necessary man in his civilian occupation or activity. If the registrant is deferred, the employer must notify the Local Board promptly of any change in the registrant's job status, or if his employment is terminated.

INDIVIDUAL CERTIFICATION

Affidavit--Occupational Classification (Form 42A) dated .....  
( ) Attached or ( ) Previously filed.

Name of registrant.....

Selective Service Order No.....Age.....

Local Board.....  
(Number) (County) (City) (State)

Title of present job.....

The undersigned establishment hereby certifies that:

1. The deferment requested is necessary to maintain the operating schedule of the undersigned establishment for products, services, or activities under contract to the War Department or as a production subcontractor or production supplier thereunder.

2. This establishment manufactures products or provides services as stated on said Form 42A.

3. The Job Title listed above is accurate and the registrant is being utilized in the performance of the duties described in the said Form 42A to the fullest extent practicable.

4. The registrant cannot be replaced prior to the expiration of the period specified in said Form 42A and his earlier removal would seriously impair the ability of this establishment to meet its operating schedule referred to above.

5. This establishment is taking steps necessary to achieve the effective utilization of its personnel.

..... HANFORD, ENGINEER WORKS.....  
(Name of establishment)

at..... HANFORD, WASHINGTON.....  
(Location)

.....  
(Signature)

.....  
SUPERVISOR-TRAINING & RELATIONS  
(Title)

.....  
(Date)

I, the undersigned representative of the United States Engineer Office hereby certify that:

(a) the statements contained in the above certificate of the establishment are true to the best of my knowledge and belief:

(b) the employment and production conditions affecting the above-named establishment are such that I concur in the need for occupational deferment of the above-named registrant; and,

(c) I join with the establishment in its request for the deferment of the above-named registrant.

.....  
(Signature)

..... MAJOR, CORPS OF ENGINEERS.....  
(Rank)

..... EXECUTIVE OFFICER.....  
(Title)



SELECTIVE SERVICE SYSTEM  
OCCUPATIONAL CERTIFICATION

Name of employer \_\_\_\_\_

Address of employer \_\_\_\_\_

Brief description of activities of employer \_\_\_\_\_

Name of registrant \_\_\_\_\_ Order No. \_\_\_\_\_

Local board \_\_\_\_\_  
(Number) (County) (City) (State)

Title of present job \_\_\_\_\_

Brief description of duties \_\_\_\_\_

Is registrant employed full time? \_\_\_\_\_ Part time? \_\_\_\_\_

(If the registrant is self-employed, he may sign this certification himself)

I, \_\_\_\_\_, DO HEREBY CERTIFY that the foregoing statements are true to the best of my knowledge and belief.

\_\_\_\_\_  
(Name of employer)

\_\_\_\_\_  
(Signature of person certifying)

\_\_\_\_\_, 19\_\_\_\_\_  
(Date of mailing)

\_\_\_\_\_  
(Title) GPO 16-31525-8

If the local board at any time upon review determines that the registrant should be considered for classification into a class available for military service, it will notify the employer by mailing him the attached notice, and will give him an opportunity to file Affidavit—Occupational Classification (Form 42 or Form 42A) for such registrant before completing the classification.

NOTICE TO EMPLOYER OF REOPENING CLASSIFICATION

\_\_\_\_\_, 19\_\_\_\_\_  
(Date of mailing by local board)

Name of registrant \_\_\_\_\_ Order No. \_\_\_\_\_

Local board \_\_\_\_\_  
(Number) (County) (City) (State)

The classification of the above-named registrant has been reviewed, and will be reopened and considered anew 15 days after the above date. If you wish to file Affidavit—Occupational Classification (Form 42 or Form 42A) because of the occupational necessity of this registrant, such evidence must be forwarded to the local board within this 15-day period.

## SELECTIVE SERVICE SYSTEM SUPPLEMENT TO FEDERAL GOVERNMENT REQUEST FOR OCCUPATIONAL CLASSIFICATION

(This form shall be used only as a Supplement to DSS Form 42 in all Federal Government requests for occupational classification except for employees on replacement schedules. Use additional sheets if necessary to complete any answer.)

(OFFICIAL STAMP OF COMMITTEE)

1. Name of registrant ..... (First) (Middle Initial) (Last)
2. S. S. Order No. .... Date of birth ..... (Month) (Day) (Year) Age .....
3. Local board ..... (Number) (City) (County) (State)
4. Title of present job ..... in the { Legislative   
Executive   
Judicial  } branch of the Federal Government.
5. Department or agency ..... Bureau or Division .....
6. Description of work this registrant does .....
7. Date entered present job ..... Station ..... Present annual salary, \$.....
8. Employment record: Total experience ..... years ..... months. Related to present job ..... years ..... months.

Employer (List in inverse order)	Location	Dates Employed		Title of Position	Total Annual Compensation
		From—	To—		

9. Educational training related to present job: (College graduates omit training below college level.)

School, College, or University (Including technical)	Location	Year Attended	Graduated	Degree or Diploma	Major or Special Training

10. How long will it take to secure and train a replacement for this registrant? .....

11. History of Selective Service Classification:

Class	Date	By <sup>1</sup>	If II-A or II-B State Period	Class	Date	By <sup>1</sup>	If II-A or II-B State Period	Class	Date	By <sup>1</sup>	If II-A or II-B State Period

<sup>1</sup> L. B.—Local Board; B. A.—Board of Appeal; Pres.—Presidential Appeal.

12. Is the job of this registrant a key position approved by the Review Committee? ..... It was approved on ..... (Date)
13. Are there unusual or special circumstances which make deferment necessary even though the registrant's job is not an approved key position? ..... If so, what are such circumstances? .....
14. State specifically the definite qualifications of the registrant for this job .....
15. Explain specifically the relation of this job to the war effort or to necessary supporting activities .....
16. Explain specifically how loss of registrant's civilian services would impair such effort or activities .....
17. How many employees do the same or similar work as this registrant? Males: 18-37 .....; 38-44 .....; Over 44 .....; Females .....
18. Describe specific efforts to secure or train a replacement (stating difficulties, if any) .....
19. Is a replacement and training program in operation .....; contemplated ..... Explain: .....

**CERTIFICATE**

I, ..... , hereby certify (or affirm) that I am { Chairman  
 (Chairman or Secretary) Secretary

of the Committee whose stamp is affixed on page 1 of this form and that the foregoing statements are true to the best of my knowledge and belief.

.....  
 (Date)

.....  
 (Signature)

**PRIOR APPROVAL OF REVIEW COMMITTEE (If required under Part IV-1b of Executive Order 9309.)**

\*If answer to Item 13 is "yes," and the position is in the Executive Branch of the Federal Government, occupational deferment is not to be considered unless the Review Committee executes the following approval:

The Review Committee gives, herewith, the prior specific approval to this request required by Executive Order 9309 and by Public Law 23 (78th Congress).

.....  
 (Date)

.....  
 Chairman.

~~SECRET~~

Extract from letter - J. F. Sambower to G. P. Church

"Interim Report on Selective Service"

Dated 1 August 1944

Cost studies in the Selective Service Section indicate that it has cost \$4.08 to handle each Selective Service case. The Selective Service Transfer Board, operated under Selective Service authority by the Selective Service Section, has saved the Project \$28,280.00 in man-hours conserved through employees not having to travel a distance for their pre-induction physical examinations and execution of Selective Service papers. The Selective Service office has operated with an average staff of 14 people.

~~SECRET~~

ALTERNATE SITE PLANS FOR HANFORD CAMP

Plan I: The establishment of a combined construction and administration camp at Benton City, Washington, which had an estimated population of approximately 150, and was centrally located in Benton County, just outside the south reservation boundary line, and approximately twenty-four air miles from the center of the 100 and 200 Process Areas.

Plan II: The construction of three separate camps at sites "A," "B," and "C" with a general trend in consolidating all camps at site "A" upon start-up of the process areas. These camps were to be located as follows:

Camp "A" - Approximately two and one-half miles south of Hanford, Washington, on the west side of the Hanford-Richland Road, and approximately nine air miles from the center of the 100 and 200 Process Construction Areas.

Camp "B" - Approximately two miles north of Richland, Washington, on the east side of the old Hanford-Richland Road, on the west bank of the Columbia River, approximately twenty-two air miles from the center of the 100 and 200 Process Construction Areas, and two miles due south of the 300 Process Area.

Camp "C" - To be located at White Bluffs, Washington, in the northernmost portion of Benton County, on the west bank of the Columbia River approximately five air miles northeast from the center of the 100 and 200 Process Construction

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~~CONFIDENTIAL~~

Areas and twenty-two miles northwest of the 300 Process  
Area.

Plan III: The consolidation of all camps at site "A."

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~~CONFIDENTIAL~~

SAFETY ACTIVITIES

Safety activities initiated at Hanford were:

- a. Suggestion Contest. - In July 1943, a Safety Suggestion Contest which featured cash prizes for the winners was promoted. Money for the awards was obtained by personal donations from members of the staff.
- b. Citation Plan. - On 2 October 1944, a permanent Hanford Engineer Works Award Program was adopted. Under this plan, each employee who had been on the job six consecutive months without experiencing a major injury, and had worn safety shoes and goggles according to standards, was, with the recommendation of his foreman and the approval of the Craft Superintendent, Area Safety Engineer, and the Safety Superintendent, presented with an attractive wallet card citing him for meritorious performance. This card was signed by the Field Project Manager.
- c. "Spotlight" Program. - On 20 March 1944, a "Spotlight" program was used on the Project to promote safety. Putting the eyes of the Project on a single craft stimulated closer supervision and better safety performance in the craft. A similar program was developed for the groups in the offices.
- d. "Picture Puzzle" Contest. - To acquaint the workers with the many hazards of construction work, and to stimulate

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~~CONFIDENTIAL~~

a desire to correct those hazards, a "Picture Puzzle" contest was put into effect on 28 April 1944. The contest featured a series of ten puzzle pictures which were published in the Project newspaper. Approximately \$200.00 in prizes were presented to the employees finding the largest number of unsafe practices in the pictures.

- e. Job Improvement Week. - Because of the tie-in of job improvement with safety thinking, the Safety Department launched an extensive campaign to promote safety suggestions. This campaign featured a "Job Improvement Week" 29 May through 3 June 1944, which netted a huge increase of safety suggestions.
- f. "No Accident Week". - A "No Accident Week" Campaign was launched to promote safety during the week of 3 July 1944. The campaign featured a pledge to work safely during the week, which was repeated orally by all employees at Safety Rallies and Gang Meetings. Although the campaign did not achieve its goal, it resulted in one of the safest weeks in the history of the Project, and proved to be a turning point for better safety performance.
- g. Safety Exposition. - Under the auspices of the Safety Department, a Safety Exposition was held at the Hanford Auditorium during the entire week of 24 July 1944.

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~~CONFIDENTIAL~~

The object of this Exposition was three-fold. First, it was designed to step up the enthusiasm and increase the safety-consciousness of all workers on the Project. Second, it was planned to reach out and impress the message of safety on the minds of those people who lived on the Project but did not come directly in contact with the Safety Program. Third, it bolstered the general morale. That the objectives were attained was amply attested by the many expressions of approval voiced by the visitors, by the splendid attendance of 22,040 for the week, and by the enthusiastic support of all crafts and departments which actually provided most of the show through their own booths and displays. Stimulated by the safety records achieved following the Exposition, a highly concentrated and personalized campaign was launched to make the month of September accident free. The result of this campaign was indicated in the reduction of injuries from 68 in the six week period before "No Accident Week" to 22 major injuries in the following six week period.

- h. Area Competition. - Through Safety reminders, emphasis of area record, and publicity directed toward the most hazardous areas, a keen sense of area pride was stimulated which resulted in area competition. This activity united all areas in an effort to maintain safe construction at the Hanford Engineer Works.

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[REDACTED]

[REDACTED] CONFIDENTIAL

MANHATTAN DISTRICT HISTORY

BOOK IV - X10 PROJECT

VOLUME 5 - CONSTRUCTION

APPENDIX E

GLOSSARY

Bellows - A bellows is a gastight expansible fitting, joining the ends of the aluminum tubes to the steel gun barrels in the Pile, to compensate for longitudinal expansion of the aluminum tubes.

Evaporation Cooler - An evaporation cooler is a unit which consists of an electrically driven fan and an inlet water fitting and covered with a porous material. Water saturates the porous material and the fan draws air through this material with the result that the air is cooled due to the evaporation of the water.

Van Stone Flange - The Van Stone Flange is a flange formed on the ends of the aluminum tubes in the Pile by a precision reaming and spreading operation.

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MANHATTAN DISTRICT HISTORY

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MAY 26 1958

RECEIVED  
MAR 4 - 1959  
Plus Use Act 55  
United States  
Atomic Energy Comm.  
ORR

.....  
(Name)

.....  
(Date)

.....  
(Official position)

.....  
*Employer:* Leave this section blank. *Certifying Agency:* Complete this section only if request is certified.

### CERTIFYING AGENCY

.....  
(Name of agency authorized to certify)

.....  
(Agency code No.)

certified on .....

(Date)

for a period of .....

(Not to exceed 6 months)

Authorized Government Request Stamp must be entered  
here for Federal Government Employees only

### LOCAL BOARD REPORT TO STATE DIRECTOR

.....  
(LOCAL BOARD DATE STAMP WITH CODE)

This registrant has been classified in

Class .....

until .....

.....  
(Member or clerk of local board)

TRIPPLICATE

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Official position)

Employer: Leave this section blank. Certifying Agency: Complete this section only if request is certified.

**CERTIFYING AGENCY**

\_\_\_\_\_  
(Name of agency authorized to certify)

\_\_\_\_\_  
(Agency code No.)

certified on \_\_\_\_\_

(Date)

for a period of \_\_\_\_\_

(Not to exceed 6 months)

Authorized Government Request Stamp must be entered here for Federal Government Employees only

**LOCAL BOARD REPORT TO  
STATE DIRECTOR**

\_\_\_\_\_  
(LOCAL BOARD DATE STAMP WITH CODE)

This registrant has been classified in

Class \_\_\_\_\_

until \_\_\_\_\_

\_\_\_\_\_  
(Member or clerk of local board)

5  
TRIPPLICATE

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Official position)

*Employer: Leave this section blank. Certifying Agency: Complete this section only if request is certified.*

**CERTIFYING AGENCY**

\_\_\_\_\_  
(Name of agency authorized to certify)

\_\_\_\_\_  
(Agency code No.)

certified on \_\_\_\_\_

(Date)

for a period of \_\_\_\_\_

(Not to exceed 6 months)

Authorized Government Request Stamp must be entered  
here for Federal Government Employees only

**LOCAL BOARD REPORT TO  
STATE DIRECTOR**

\_\_\_\_\_  
(LOCAL BOARD DATE STAMP WITH CODE)

This registrant has been classified in

Class \_\_\_\_\_ until \_\_\_\_\_

\_\_\_\_\_  
(Member or clerk of local board)

**TRIPPLICATE**

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Official position)

Employer: Leave this section blank. Certifying Agency: Complete this section only if request is certified.

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\_\_\_\_\_  
(Agency code No.)

certified on \_\_\_\_\_ for a period of \_\_\_\_\_

(Date)

(Not to exceed 6 months)

Authorized Government Request Stamp must be entered  
here for Federal Government Employees only

### LOCAL BOARD REPORT TO STATE DIRECTOR

\_\_\_\_\_  
(LOCAL BOARD DATE STAMP WITH CODE)

This registrant has been classified in

Class \_\_\_\_\_ until \_\_\_\_\_

\_\_\_\_\_  
(Member or clerk of local board)

TRIPPLICATE

16-28000-1 U. S. GOVERNMENT PRINTING OFFICE



\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Official position)

Employer: Leave this section blank. Certifying Agency: Complete this section only if request is certified.

### CERTIFYING AGENCY

\_\_\_\_\_  
(Name of agency authorized to certify)

\_\_\_\_\_  
(Agency code No.)

certified on \_\_\_\_\_ for a period of \_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Not to exceed 6 months)

Authorized Government Request Stamp must be entered  
here for Federal Government Employees only

### LOCAL BOARD REPORT TO STATE DIRECTOR

\_\_\_\_\_  
(LOCAL BOARD DATE STAMP WITH CODE)

This registrant has been classified in

Class \_\_\_\_\_ until \_\_\_\_\_

\_\_\_\_\_  
(Member or clerk of local board)

TRIPPLICATE

16-50000-1 U. S. GOVERNMENT PRINTING OFFICE