

UNCLASSIFIED

~~RESTRICTED~~

CLASSIFICATION CANCELLED
OR CHANGED TO
BY AUTHORITY OF DOE/DPC
JOHN K. HARRISON
REVIEWED BY *[Signature]* 9/19/79
R.D. 10-25-2005
O.D. 50-10.23

~~RESTRICTED~~ RD

APPENDIX A

MAPS, DRAWINGS, PHOTOGRAPHS, AND DESCRIPTIONS

~~**RESTRICTED DATA**~~
This document contains restricted data as defined in the Atomic Energy Act of 1946.

CLASSIFICATION CANCELLED
OR CHANGED TO *Conf. R.O.*
BY AUTHORITY *[Signature]* 3-4-77
BY *[Signature]* 3-10-79

~~RESTRICTED~~ RD

~~RESTRICTED~~

1725-16-8-1

PJ236

MANHATTAN DISTRICT HISTORY

BOOK IV - PILE PROJECT

VOLUME 5 - CONSTRUCTION

APPENDIX A

MAPS, DRAWINGS, PHOTOGRAPHS, AND DESCRIPTIONS

<u>No.</u>	<u>Description</u>
1	Map - Vicinity Map
2	Map - Site Map
3	Map - Regional Activities (Recruitment)
4	Map - Hanford Camp Layout
5	Map - Auxiliary Construction Camp (3000 Area) Layout
6	Map - Central Shops Layout
7	Map - Road Map - Hanford Engineer Works
8	Map - White Bluffs and Vicinity
9	Map - Benton County, Washington
10	Map - Layout of Temporary Construction Facilities - Pile (100-B) Area
11	Map - Layout of Temporary Construction Facilities - Pile (100-D) Area
12	Map - Layout of Temporary Construction Facilities - Pile (100-F) Area
13	Map - Layout of Temporary Construction Facilities - Separation (200-E) Area
14	Map - Layout of Temporary Construction Facilities - Separation (200-W) Area
15	Map - Layout of Temporary Construction Facilities - Metal Fabrication and Testing (300) Area
16	Map - Real Estate - Hanford Engineer Works
17	Map - Metal Fabrication and Testing (300) Area Layout
18	Map - Coordinate Systems - Hanford Engineer Works
19	Map - Pile (100-B) Area Layout
20	Map - Pile (100-D) Area Layout
21	Map - Pile (100-F) Area Layout
22	Map - Separation (200-E) Area Layout
23	Map - Separation (200-W) Area Layout
24	Map - Separation (200-N) Area Layout
25	Map - Layout of Service Lines
26	Map - Richland Village Layout
27	Map - Administration (700) Area
28	Map - Proposed Railroad Connection
29	Diagram - Pile Shielding
30	Diagram - Sectional View of Pile from Top
31	Diagram - Sectional View of Pile from Control Rod Side

~~SECRET~~

12.1

Description

<u>No.</u>	<u>Description</u>
32	Diagram - Inlet and Outlet Water Fittings
33	Diagram - Sectional View of Pile from Discharge End
34	Photo - Aerial View of Hanford Camp
35	Photo - Aerial View of Men's and Women's Barracks
36	Photo - Aerial View of Hutments
37	Photo - Aerial View of Hanford Trailer Camp
38	Photo - Typical Trailer Canopy
39	Photo - Typical Trailer Camp Bathhouse
40	Photo - Typical Trailer Camp Playground
41	Photo - Typical Mess Hall
42	Photo - Laundry, Pressing, Garment Alterations, and Ladies Ready-to-Wear Shop
43	Photo - Western Union Office
44	Photo - Men's Clothing Store
45	Photo - Optometrist Shop
46	Photo - Jewelry Shop
47	Photo - Sears Roebuck Store
48	Photo - Shoe Repair Shop
49	Photo - Hanford Garage
50	Photo - Combined Stores Building (Group No. 2)
51	Photo - Service Stations
52	Photo - Hanford Bank
53	Photo - Hanford Theatre
54	Photo - Valley Theatre
55	Photo - Commissary Building (No. 4)
56	Photo - Auditorium and Gymnasium
57	Photo - Hanford Grade School
58	Photo - Hanford Day Nursery
59	Photo - Hanford Administration Building and Hospital
60	Photo - Public Health and Infirmary Building
61	Photo - United Protestant Church
62	Photo - Catholic Church Tent
63	Photo - Fire Station
64	Photo - Patrol Headquarters
65	Photo - Hanford Library
66	Photo - Aerial View of 3000 Area
67	Photo - Central Shops
68	Photo - Graphite Shop
69	Photo - White Bluffs Concrete Pipe Shop
70	Photo - White Bluffs Fabrication Shop
71	Photo - Concrete Plant
72	Photo - Aggregate Plant (Haven)
73	Photo - Hanford Bituminous Walk
74	Photo - Riverland Yards
75	Photo - Little Pasce Camp
76	Photo - Family Type (Tract) House
77	Photo - Bachelor Quarters (Tract House)
78	Photo - Hanford Airport

<u>No.</u>	<u>Description</u>
79	Photo - Metal Fabrication and Testing (300) Area
80	Photo - Pile Building (305)
81	Photo - Metal Fabrication Building (313)
82	Photo - Press Building (314)
83	Photo - Separation Building (321)
84	Photo - Laboratory (3708)
85	Photo - Aerial View of Pile (100-D) Area
86	Photo - River Pump House (181)
87	Photo - Reservoir and Pump House (182)
88	Photo - Filter Plant (183-D)
89	Photo - Demineralisation Plant (186-D)
90	Photo - Deaeration (185), Refrigeration (189), Process Pump (190) Buildings
91	Photo - Helium Purification Building (115-F)
92	Photo - Retention Basin
93	Photo - Power House (184-D)
94	Photo - Aerial View of Pile (100-D) Area (8/20/44)
95	Photo - Aerial View of Pile (100-F) Area (9/27/44)
96	Photo - Aerial View of Pile (100-B) Area (8/20/44)
97	Photo - Aerial View of Pile (100-B) Area (9/25/44)
98	Photo - Construction of River Pump House (181-D) Building (3/9/44)
99	Photo - Construction of Pile (105-F) Building (8/20/44)
100	Photo - Construction of Pile (105-D) Building (3/10/44)
101	Photo - Construction of Pile (105-D) Building (4/21/44)
102	Photo - Completed Pile (105-D) Building (11/24/44)
103	Photo - Graphite Laying in Pile (105) Building
104	Photo - Pile (105) Building Air-Loek
105	Photo - Aerial View of Separation (200-B) Area (9/28/44)
106	Photo - Lag Storage Building (212)
107	Photo - Concentration Building (224)
108	Photo - Exhauster Building and Stack (291)
109	Photo - Isolation Building (231-W)
110	Photo - Magazine Storage Buildings (213 J & K)
111	Photo - Construction of Separation (221-B) Building (8/24/44)
112	Photo - Construction of Separation (221-B) Building (7/17/44)
113	Photo - Construction of Separation (221-T) Building (3/21/44)
114	Photo - Construction of Separation (221-U) Building (8/17/44)
115	Photo - Construction of Separation (221-T) Building (5/3/44)
116	Photo - Construction of Separation (221-B) Building (12/22/44)
117	Photo - Completed Separation Building (221-T) (9/27/44)
118	Photo - Foundations for Waste Process Disposal Tanks (241-T) (3/21/44)
119	Photo - Construction of Waste Process Disposal Tanks (241-C) (8/1/44)
120	Photo - Construction of Waste Process Disposal Tanks (241-B) (7/7/44)
121	Photo - Construction of Waste Process Disposal Tanks (241-B) (9/25/44)

~~SECRET~~

<u>No.</u>	<u>Description</u>
122	Photo - Construction of Waste Process Disposal Tanks (241-C) (11/20/44)
123	Photo - Construction of Waste Process Disposal Tanks (241-C) (12/7/44)
124	Photo - Completed Waste Process Disposal Tanks (241-F) (11/9/44)
125	Photo - Midway Substation
126	Photo - Primary Substation
127	Photo - Typical Distribution Substation
128	Photo - 115 kv Transmission Line
129	Photo - 13.8 kv Transmission Line
130	Photo - White Bluffs-Cold Creek Road
131	Photo - Aerial View of Richland Village
132	Photo - Aerial View of Administration (700) Area

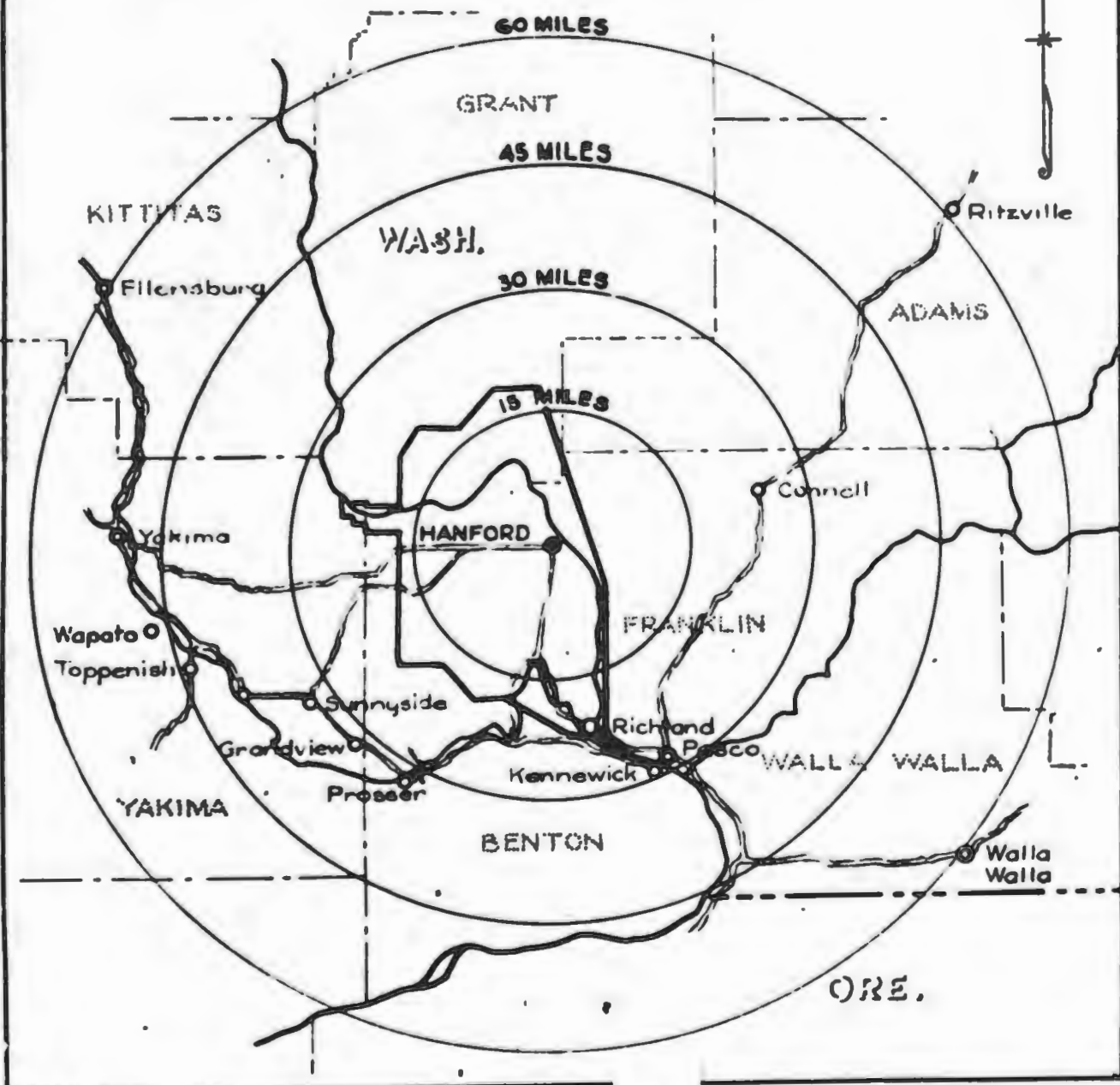
~~SECRET~~

~~SECRET~~

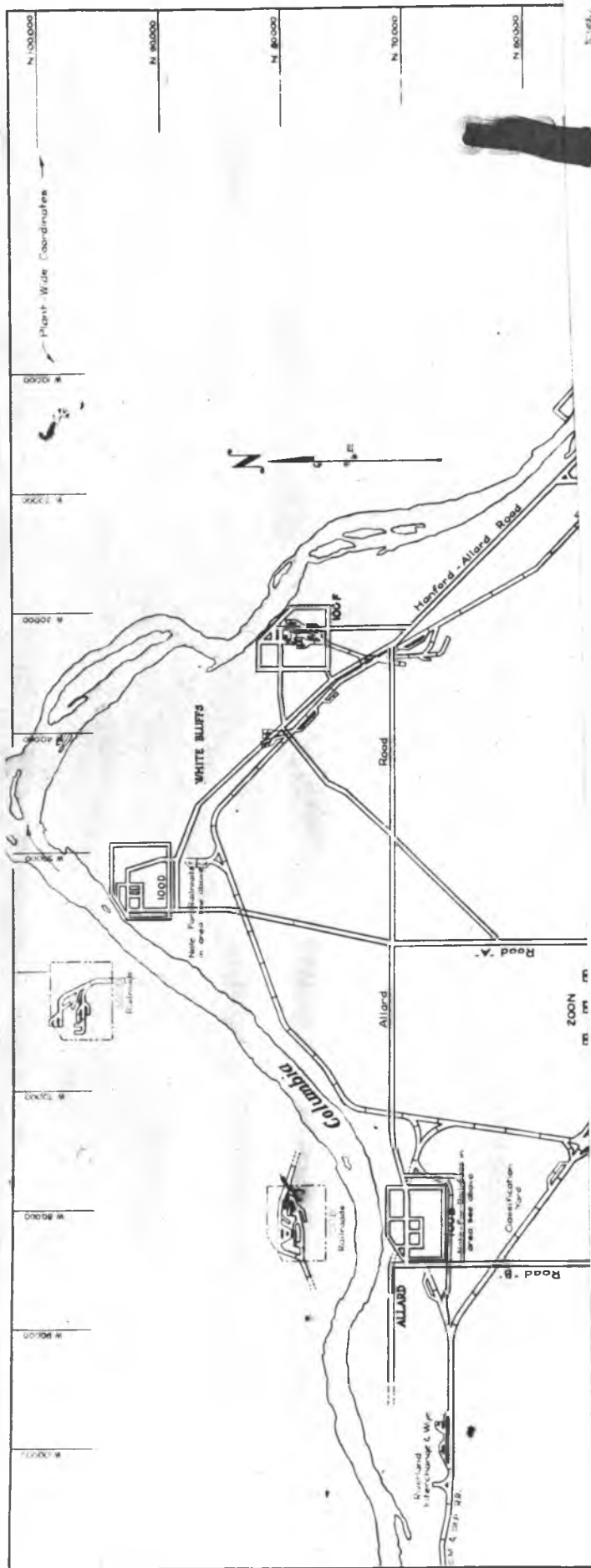
VICINITY MAP

HANFORD ENGINEER WORKS

PROJECT 9536



~~SECRET~~



REGIONAL ACTIVITIES

• RECRUITMENT •



KEY TO MAP :

- (X) WMC REGIONS
- REGIONAL OFFICES
- STATE OFFICES

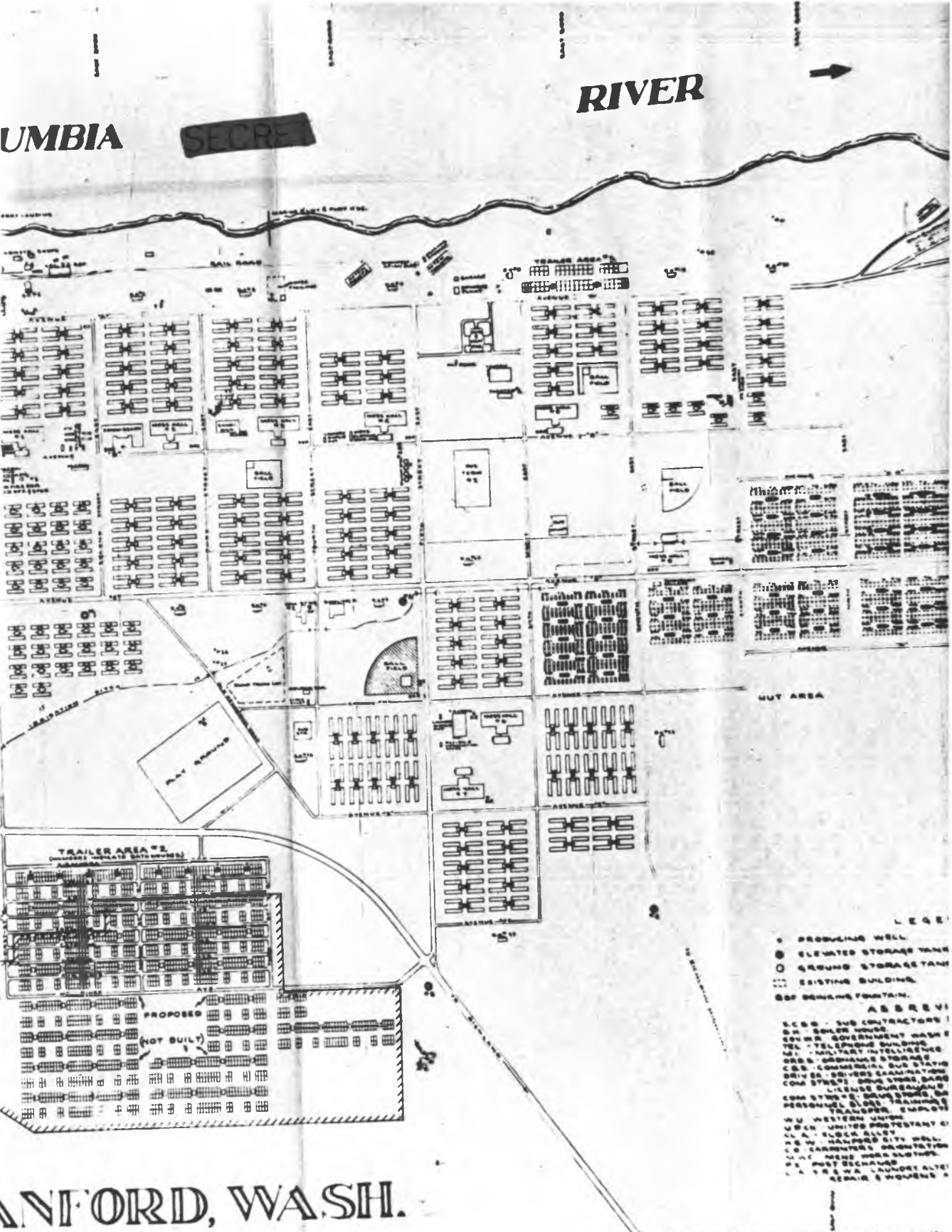
■ REGIONAL RECRUITMENT
 ■ STATE RECRUITMENT

MAIN MAPS - THE STATES
 MAPS AT THE BOTTOM

MAPS AT THE BOTTOM
 MAPS AT THE BOTTOM

RIVER

UMBIA



HANFORD, WASH.

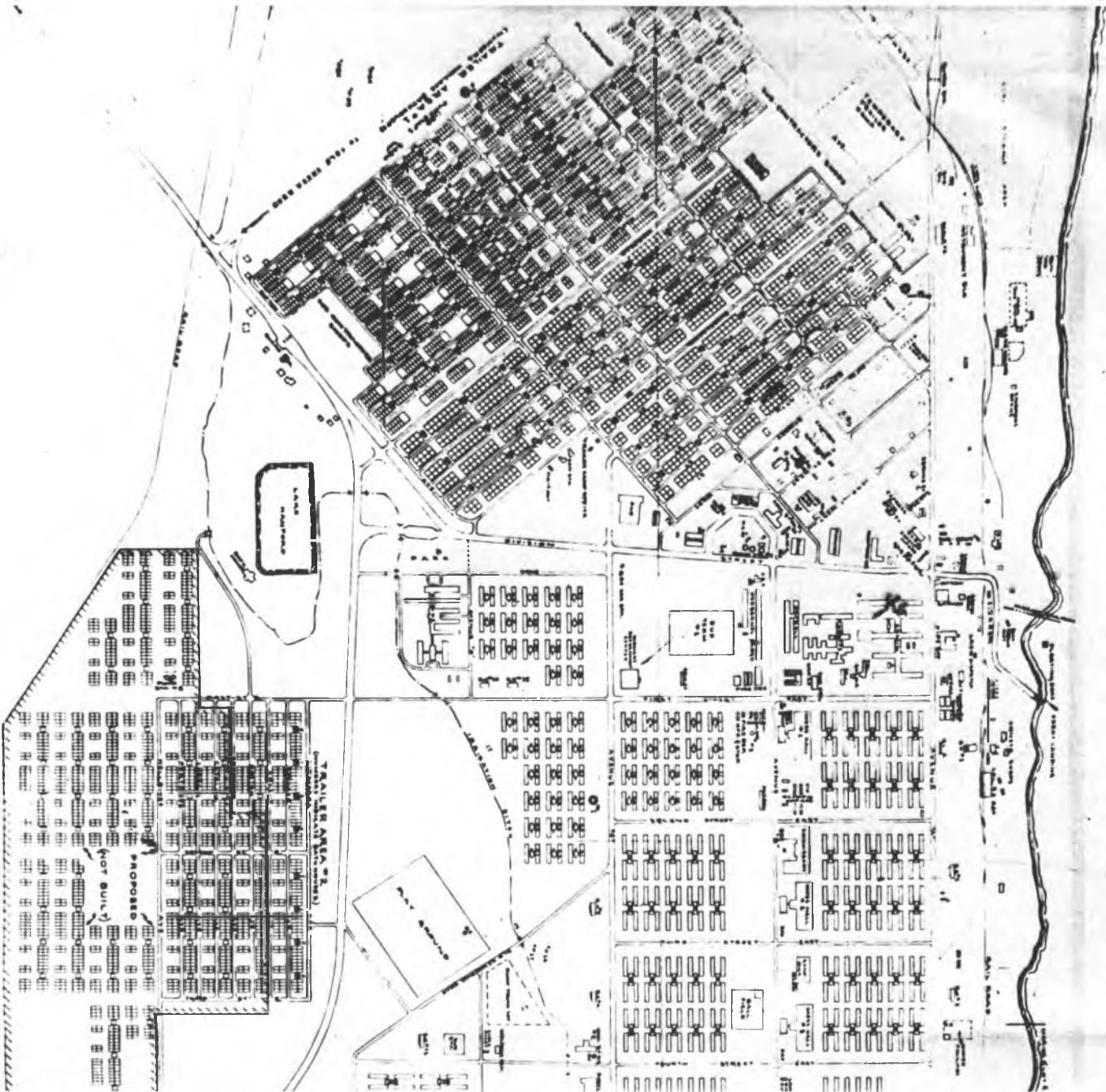
REVISIONS

NO.	DATE	BY	APPROVED BY
1	10-1-54

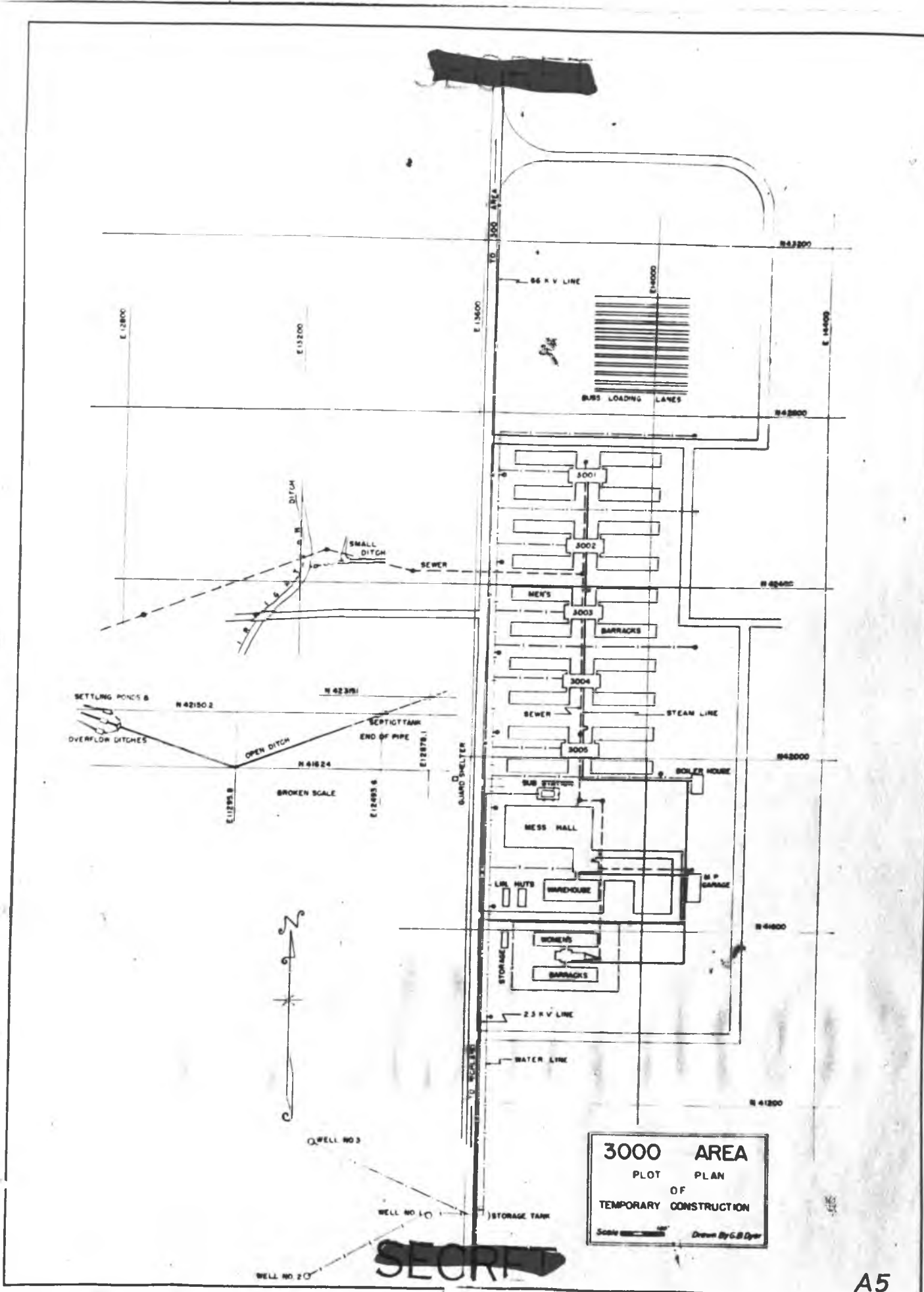
CONS

46

COLUMBIA



HANNORD, WAS.



W-422
W-423
W-424

W-67065
N-87423

EXCESS CABLE
STORAGE YARD

W-67214
W-67511
W-67365

W-67511
W-67365

N-48940

W-67059
N-48895
IRON CUTTING
TABLE

MATERIAL

YARD

N-49200

N-48800

M-48800

N-48641.7

N-48380

N-48328

W67029

16' GATE

W 67208

W 67500

N 48600

N 48700

W 68000

WEST

ITCH

SEE INSERT FOR BULK FUEL STORAGE AREA LAYOUT

N49200

GENERAL NOTES:

ALL BUILDINGS SHALL BE PLACED AT LEAST 10 FEET FROM ANY ADJACENT BLDG EXCEPT METAL PREFABRICATED BLDGS WHICH MAY HAVE A MIN SPACING OF 6 FEET.



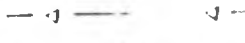
N43800

WG4500

WG4400

N48600

TELEPHONE LINE
HYDRANT & WATER MAIN
FOR SOUTH LINE & LATERAL



SCALE 1"=100'-0"

7.27

C-117

HANFORD ENGINEER

PLOT PLAN OF CENTRAL SHOD AREA

5-0-43

- First Issue
- Rev. to Date 7/1/43
- Rev. to Date 7/1/43
- REV. TO DATE 7/20/43
- REV. TO DATE 8/19/43

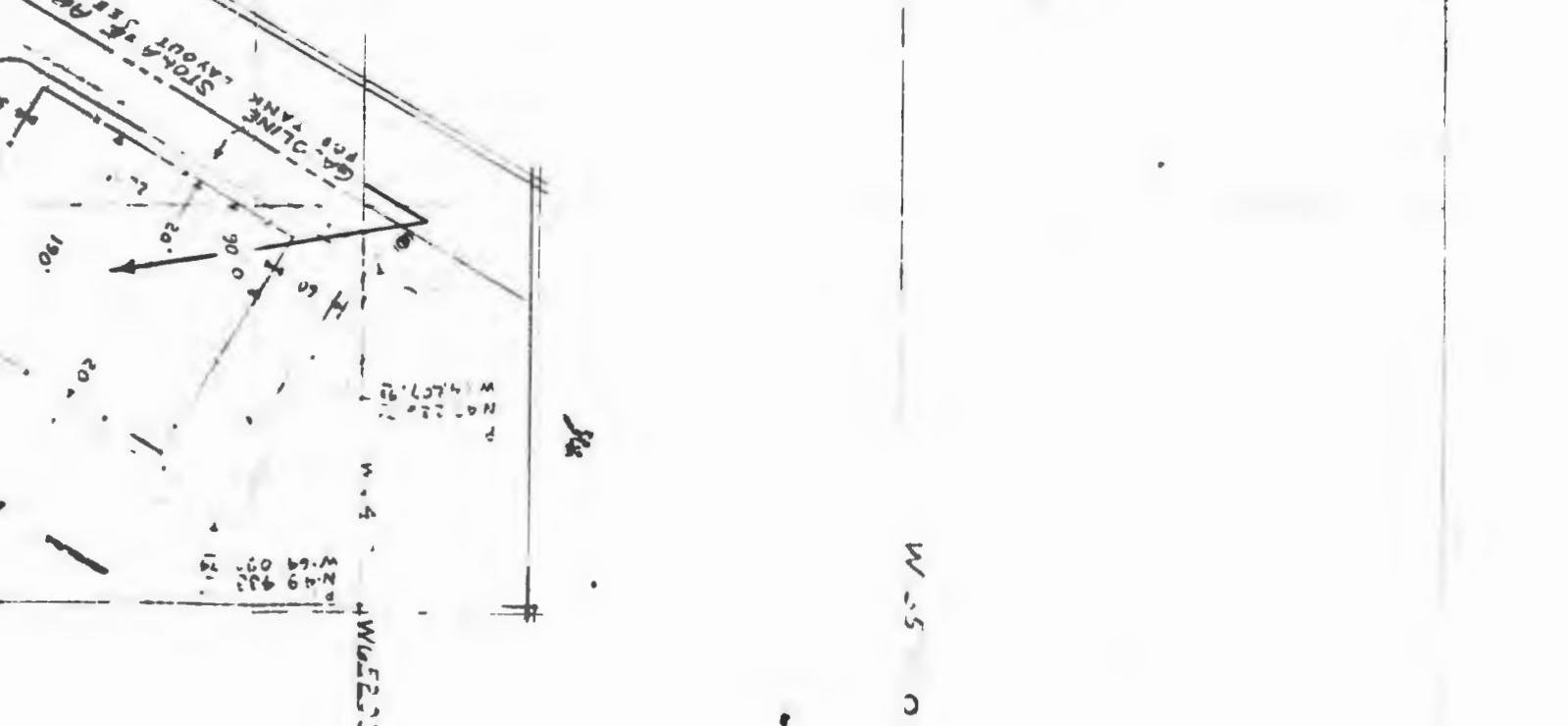
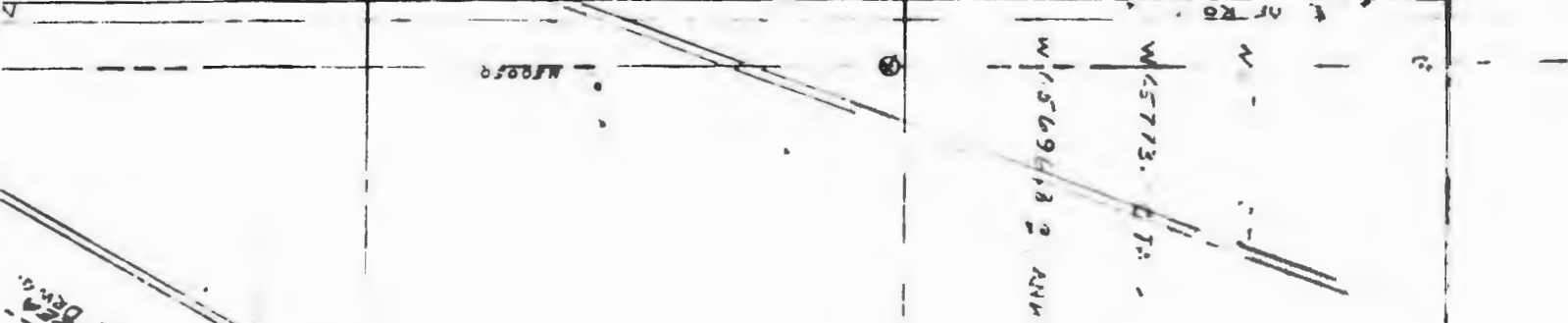
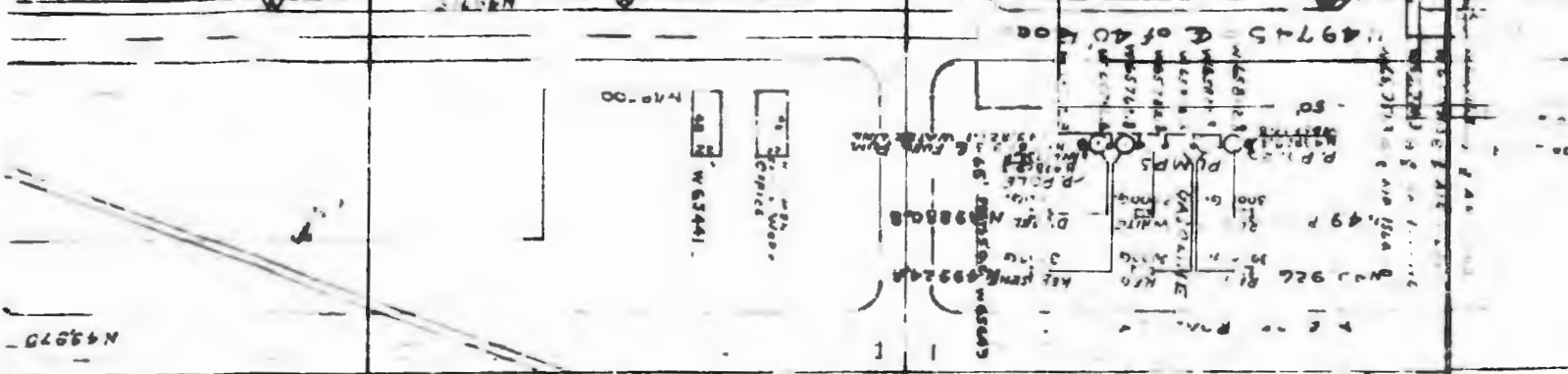
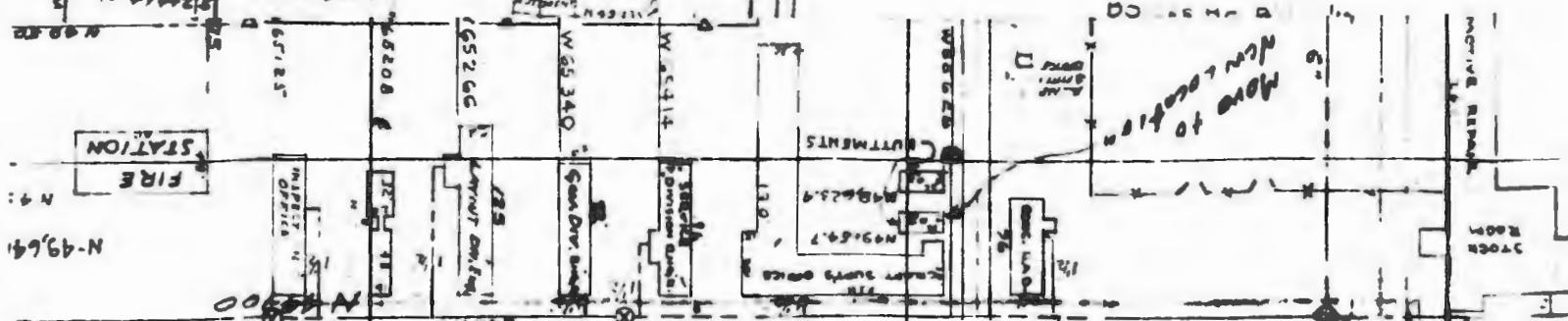
- 8/15 5-0-43
- 8/17 7/1/43
- 8/17 7/1/43
- 8/17 7/1/43
- 8/17 7/1/43
- 8/17 7/1/43
- 8/17 7/1/43
- 8/17 7/1/43
- 8/17 7/1/43
- 8/17 7/1/43

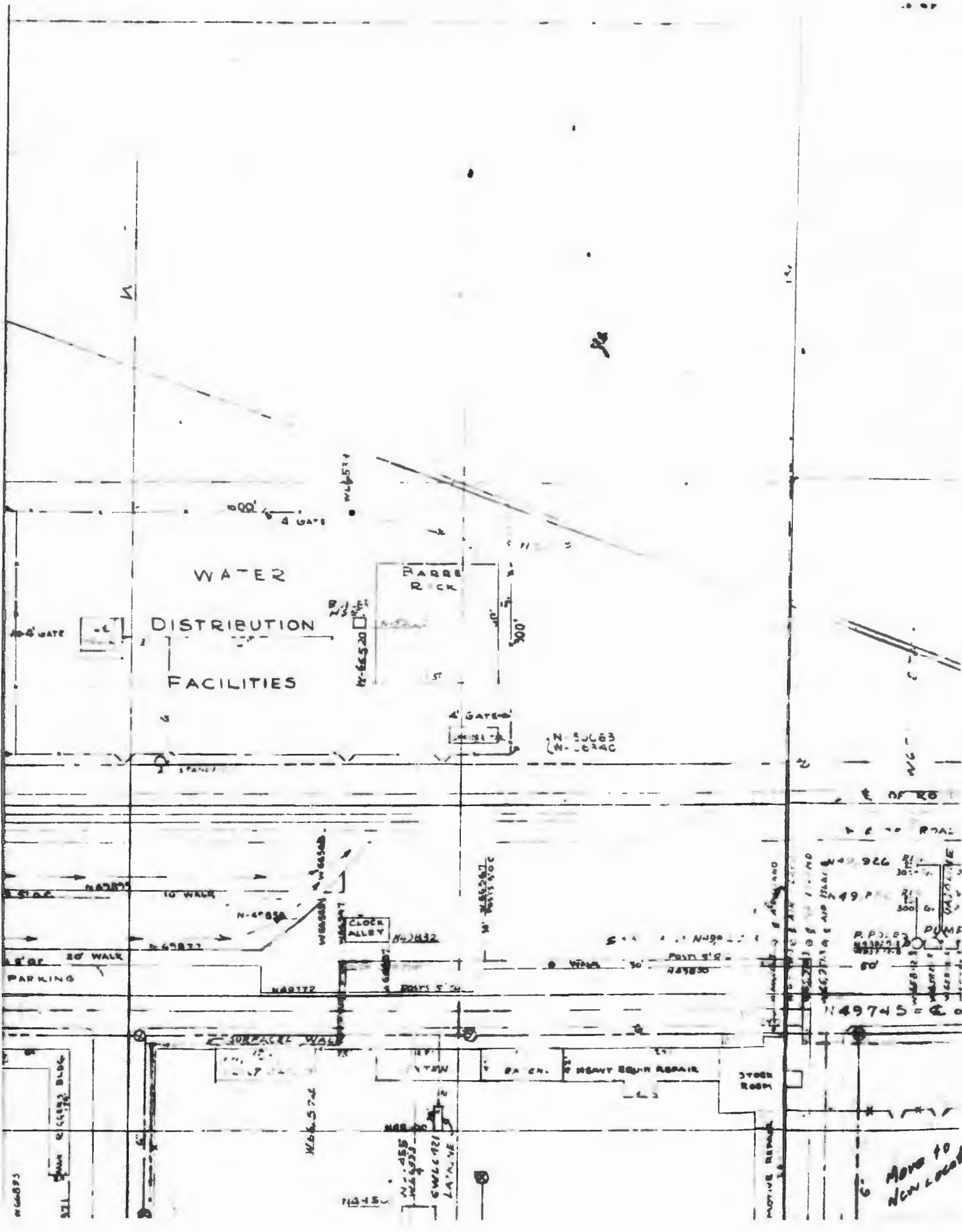
Ch T-6-44

J. N. Waldick
9-18-44

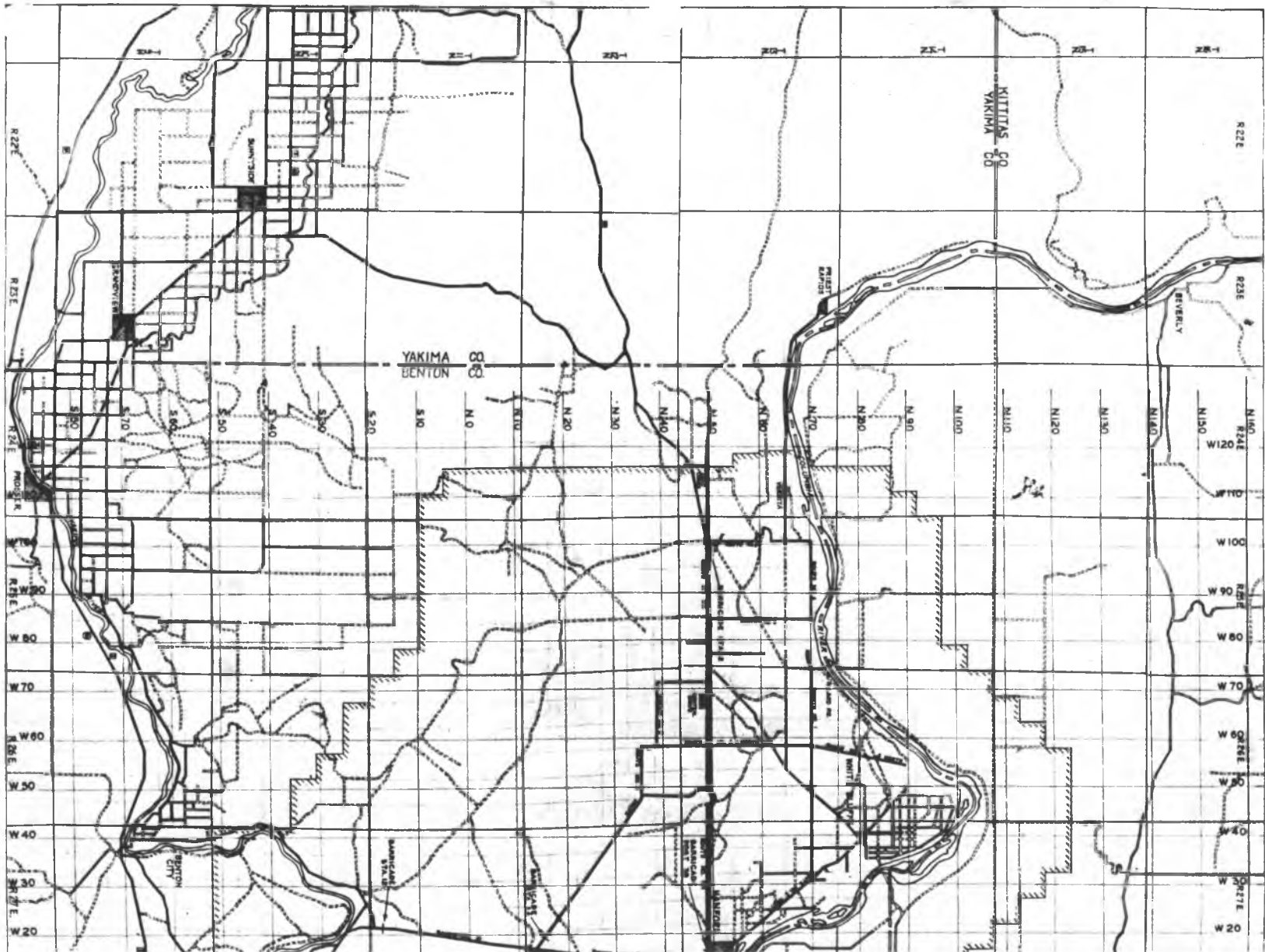
A6

9536





Move to New Location



SECRET





BUILDING DESCRIPTION

- 1 SPECIAL FABRICATION SHOP & YARD.
- 2 BOILER HOUSE
- 3 WAREHOUSE
- 4 RE WAREHOUSE - 100' AREA
- 5 SPECIAL WARE. #1 - 105' AREA
- 6 SPECIAL WARE. #2 - 105' AREA
- 7 CENTRAL WAREHOUSE
- 8 INSULATING CONTRACTOR WARE.
- 9 STOCK MATERIAL WARE.
- 10 STOCK MATERIAL OFFICE
- 11 AMERICAN PIPE CO.
- 12 MECHANICAL EQUIPMENT WARE.
- 13 EQUIPMENT STORAGE PLATFORM
- 14 RETURNABLE CONTAINER YARD
- 15 PUNIGATION BUILDING
- 16 HALL & SMALL TOOL WARE.
- 17 RECEIVING WARE. PLATFORM
- 18 RECEIVING WARE.
- 19 CANADA RECEIVING OFFICE
- 20 RE-3 WAREHOUSE
- 21 PIPE TRYING SHOP
- 22 MAIN PIPE FABRICATION SHOP
- 23 JOB-STATION
- 24 YARD
- 25 PRINT SHOP OR OLD STORAGE BLDG.
- 26 PUMP HOUSE
- 27 LINE MATERIAL STORAGE BLDG.
- 28 LINE YARD OFFICE
- 29 PIPE STORAGE BLDG.
- 30 PIPE STORAGE PLATFORM
- 31 ELECTRICAL STORAGE & PIPE YARD
- 32 INSULATING WAREHOUSE
- 33 OFFICE EQUIPMENT WARE.
- 34 ELEVATED WATER STORAGE TANK
- 35 A.R. FREIGHT STATION
- 36 AIR & WELDING TOOL WARE. BLDG.
- 37 FIRE STATION
- 38 SERVICE DIVISION ENG. OFFICE
- 39 MGMT. CHECKER & BATCH OFFICE
- 40 ROOSTER STATION
- 41 IRON STORAGE TANK
- 42 STEEL SHED STORAGE WARE.
- 43 FIRE INSPECTION OFFICE

- 44 RE-21 WAREHOUSE
- 45 CRANE OPERATOR OFFICE
- 46 RIDING LOFT
- 47 TRUCK DISPATCHING OFFICE

- 48 CONC. STORAGE BLDG.
- 49 SALVAGE CHECK-IN OFFICE
- 50 SALVAGE PLATFORM
- 51 SALVAGE PAPER WARE.
- 52 SALVAGE PAPER OFFICE

LEGEND

-  EXISTING BUILDINGS
-  EXISTING BUILDING USED
-  BUILDINGS CONSTRUCTED BY DUPONT
-  BUILDINGS CONSTRUCTED BY SUB CONTRA
-  PERMANENT RAILROADS
-  TC RAILROADS
-  TC WATER LINES
-  TC FENCIBLES
-  EXISTING WATER LINES

REVISIONS	APPROVED FOR				E I DUPONT DE HAWFORD EN
	DATE	DATE	U.S. AREA ENGR'S NAME	DATE	

PICT.
WHITE SLUFFS
SHOWING TEMPS
SCALE

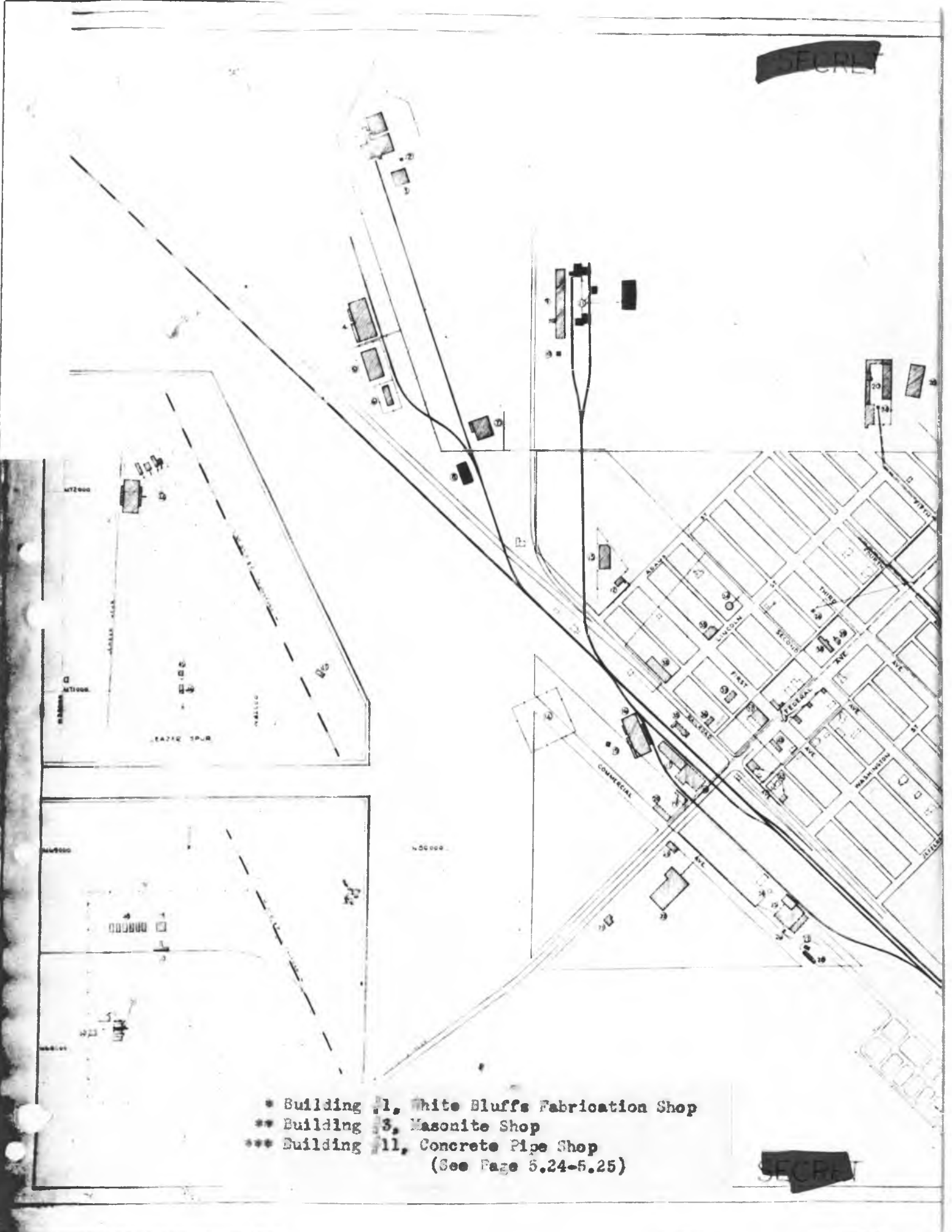
shop

SECRET

~~SECRET~~

- * Building 1, White Bluffs Fabrication Shop
 - ** Building 3, Masonite Shop
 - *** Building 11, Concrete Pipe Shop
- (See Page 5.24-5.25)

~~SECRET~~





LEGEND

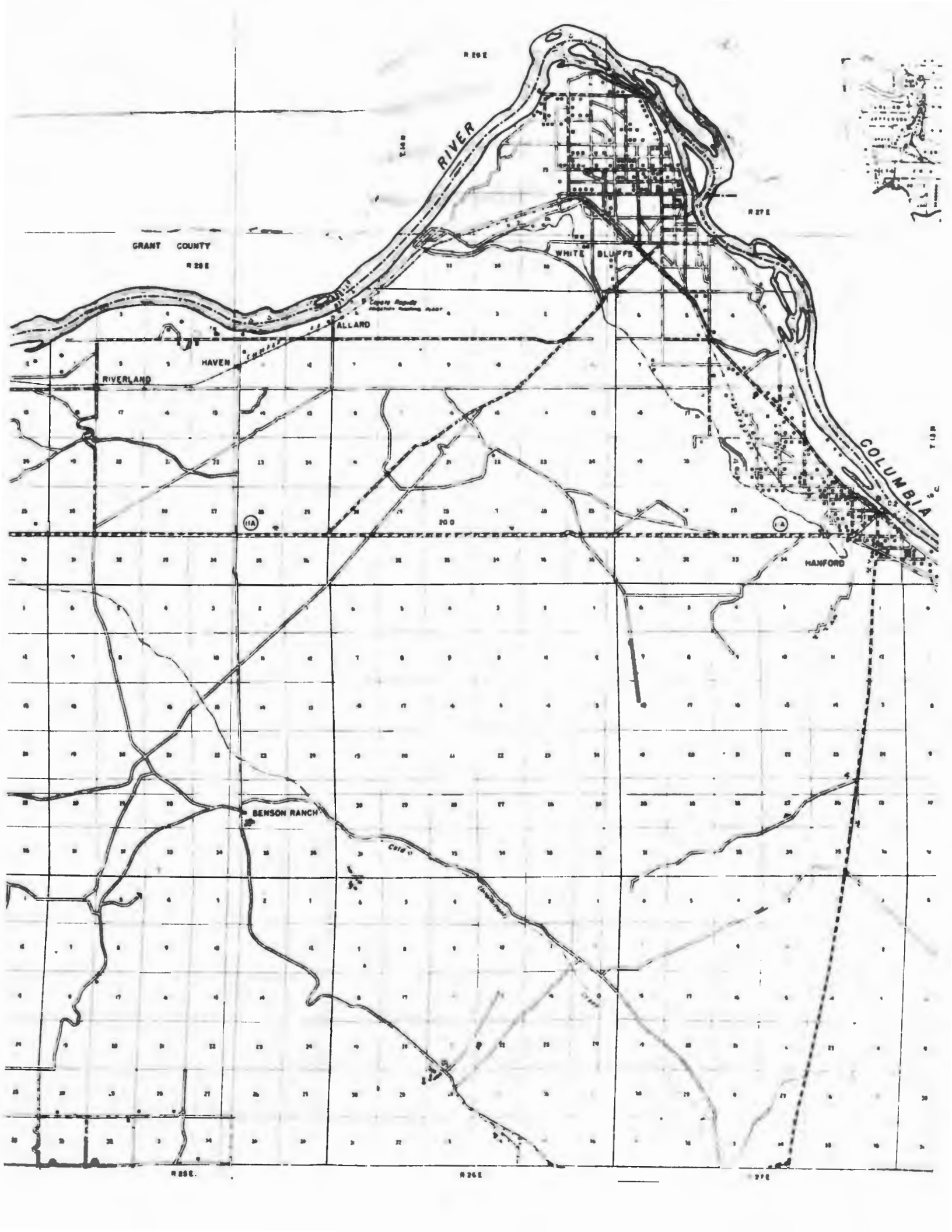
- RAILROAD (SINGLE TRACK)
- RAILROAD (TWO OR MORE OPERATORS)
- RAILROAD (STANDARD GAUGE (PRIVATE))
- RAILROAD (NARROW GAUGE (PRIVATE))
- RAILROAD ELECTRIC
- RAILROAD STATION
- RAILROAD GRADE CROSSING
- RAILROAD CROSSING ABOVE
- RAILROAD CROSSING BELOW
- RAILROAD TUNNEL
- NAVIGABLE NATURAL STREAM
- DOCK, PIER OR LANDING
- FERRY (FREE (IF TOLL))
- WATER DITCH
- IRRIGATION DITCH
- GENERAL BRIDGE
- CHAIN BRIDGE
- SUSPENSION BRIDGE
- ARCH BRIDGE
- TRUSS (WOOD STEEL & GIRDERS)
- RAILROAD WITH ROAD
- HIGHWAY TUNNEL
- LEVEE WITH ROAD
- FORD
- WOLF COURSE
- ATHLETIC FIELD
- PARK (STATE, LOCALITY OR CITY)
- AIR (GROUND) WALK TRACK SPEEDWAY
- CEMETERY
- STATE OR NATIONAL CAPITAL
- COUNTY SEAT

SURFACE TYPE

- UNIMPROVED ROAD
- GRADED & DRAINED
- SOIL SURFACED HDI
- METAL SURFACED R
- BITUMINOUS SURFACED
- PIVED ROAD
- AIR ROUTES



BENTON
 WASHI
 PREPARE
 DEPARTMENT
 IN COOPERAT
 U.S. DEPARTMENT



39° 00'

GRANT COUNTY
R. 20 E

R. 20 E

COLUMBIA

RIVERLAND

HAVEN

VERNITA

COLD CREEK

11A

T. 18 N

YAKIMA COUNTY
T. 18 N

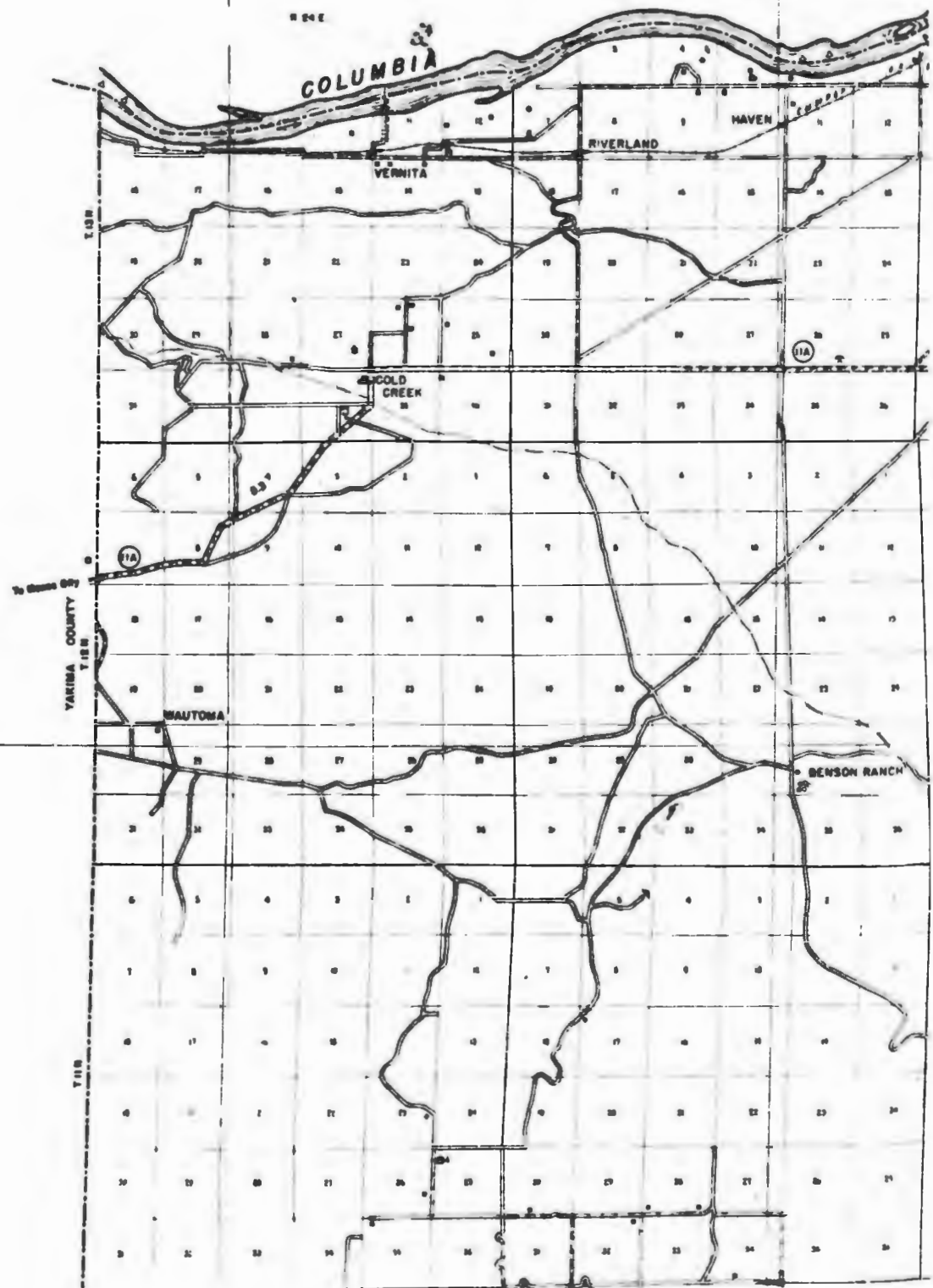
11A

MAUTOMA

BENSON RANCH

T. 18 N

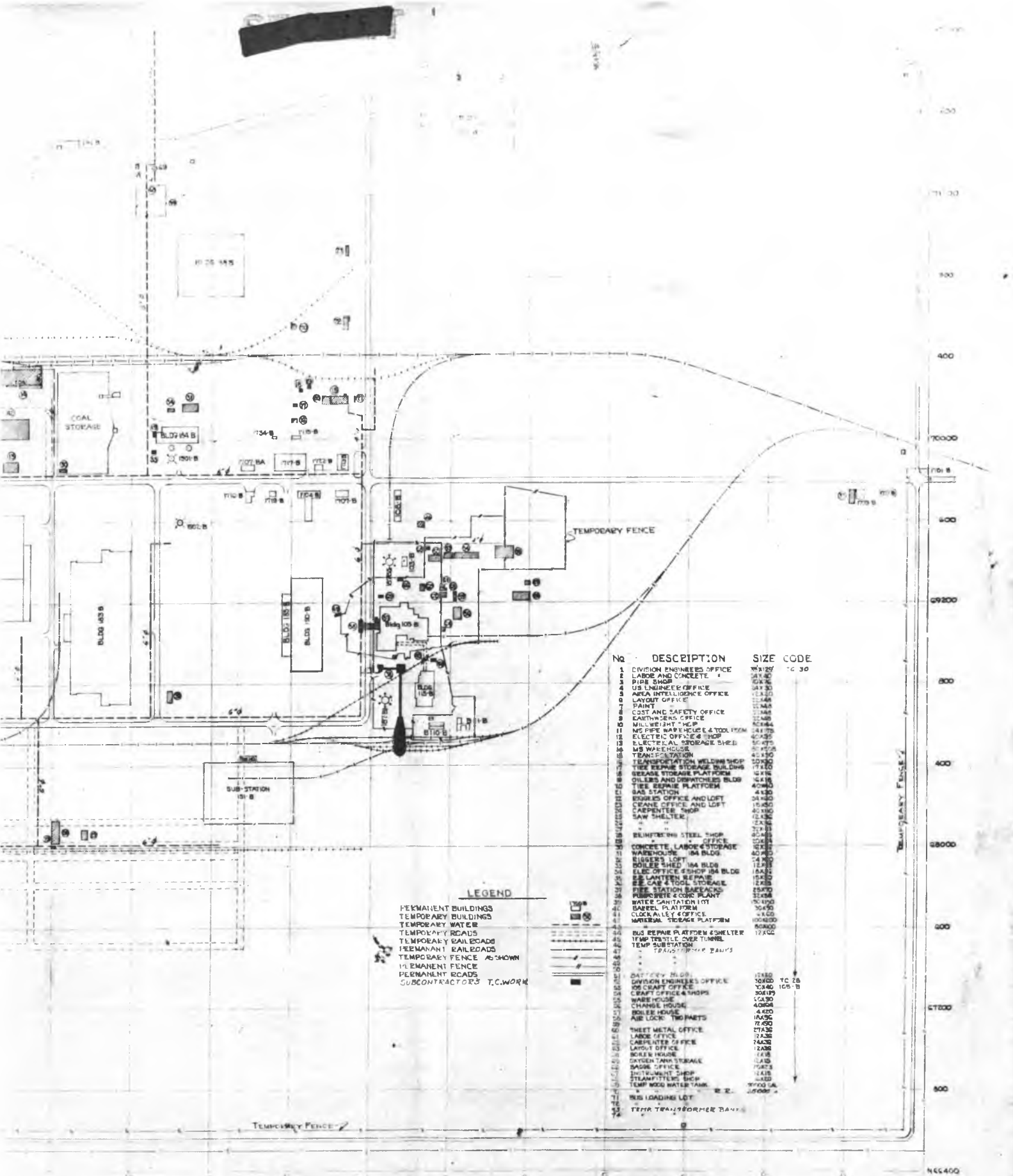
39° 00'



~~SECRET~~

Original or prints of Plate #11 cannot be located in our files.

~~SECRET~~



No	DESCRIPTION	SIZE CODE
1	DIVISION ENGINEER'S OFFICE	30x120 TC 30
2	LABOR AND CONCRETE	30x120
3	PIPE SHOP	20x30
4	US ENGINEER'S OFFICE	20x30
5	AREA INTELLIGENCE OFFICE	12x30
6	LAYOUT OFFICE	12x30
7	PAINT	12x30
8	COST AND SAFETY OFFICE	12x30
9	CARPENTERS OFFICE	12x30
10	MILL RIGHT SHOP	12x30
11	MC PIPE WAREHOUSE & TOOL ROOM	24x75
12	ELECTRIC OFFICE & SHOP	40x35
13	ELECTRICAL STORAGE SHED	50x75
14	MS WAREHOUSE	50x75
15	TRANSFORMATION	40x30
16	WELDING SHOP	20x30
17	TIRE REPAIR STORAGE BUILDING	12x10
18	DEBRIS STORAGE PLATFORM	6x15
19	OILERS AND DISPATCHES BLDG	6x15
20	TIRE REPAIR PLATFORM	40x30
21	GAS STATION	40x30
22	EDGE'S OFFICE AND LOFT	24x30
23	CRANE OFFICE AND LOFT	15x30
24	CARPENTER SHOP	40x30
25	SAW SHELTER	24x30
26	BLINDING STEEL SHOP	24x30
27	CONCRETE LABOR STORAGE	24x30
28	WAREHOUSE - 104 BLDG	40x30
29	WIGGERS LOFT	24x30
30	BOILER SHED - 104 BLDG	12x30
31	ELEC OFFICE & SHOP - 104 BLDG	12x30
32	100 LANTERN REPAIR	12x30
33	SEE CAB & TOOL STORAGE	12x30
34	FIRE STATION BARRACKS	25x30
35	KITCHEN & COOK PLANT	24x30
36	WATER SANITATION LOT	30x30
37	GARAGE PLATFORM	30x30
38	CLOCK ALLEY OFFICE	12x30
39	MATERIAL STORAGE PLATFORM	100x300
40	BUS REPAIR PLATFORM SHELTER	12x30
41	TEMP TENTILE OVER TUNNEL	
42	TEMP SUBSTATION	
43	TRANSFORMER BANKS	
44	BATTERY BLDG	10x30
45	DIVISION ENGINEER'S OFFICE	30x30 TC 25
46	ICE CRAFT OFFICE	12x30 TC 25
47	CRAPT OFFICE & SHOPS	30x120
48	WAREHOUSE	12x30
49	CHANGE HOUSE	40x30
50	BOILER HOUSE	40x30
51	AIR LOCK - TWO PARTS	40x30
52	SHEET METAL OFFICE	12x30
53	LARGE OFFICE	12x30
54	CARPENTER OFFICE	12x30
55	LAYOUT OFFICE	12x30
56	BOILER HOUSE	12x30
57	DYEDEN TANK STORAGE	12x30
58	SARGE OFFICE	12x30
59	INSTRUMENT SHOP	12x30
60	TEAM/TITLE SHOP	12x30
61	TEMP WOOD WATER TANK	20x30
62	BUS LOADING LOT	
63	TEMP TRANSFORMER BANK	

LEGEND

PERMANENT BUILDINGS
 TEMPORARY BUILDINGS
 TEMPORARY WATER
 TEMPORARY ROADS
 TEMPORARY RAILROADS
 PERMANENT RAILROADS
 TEMPORARY FENCE AS SHOWN
 PERMANENT FENCE
 PERMANENT ROADS
 SUBCONTRACTORS T.C. WORK

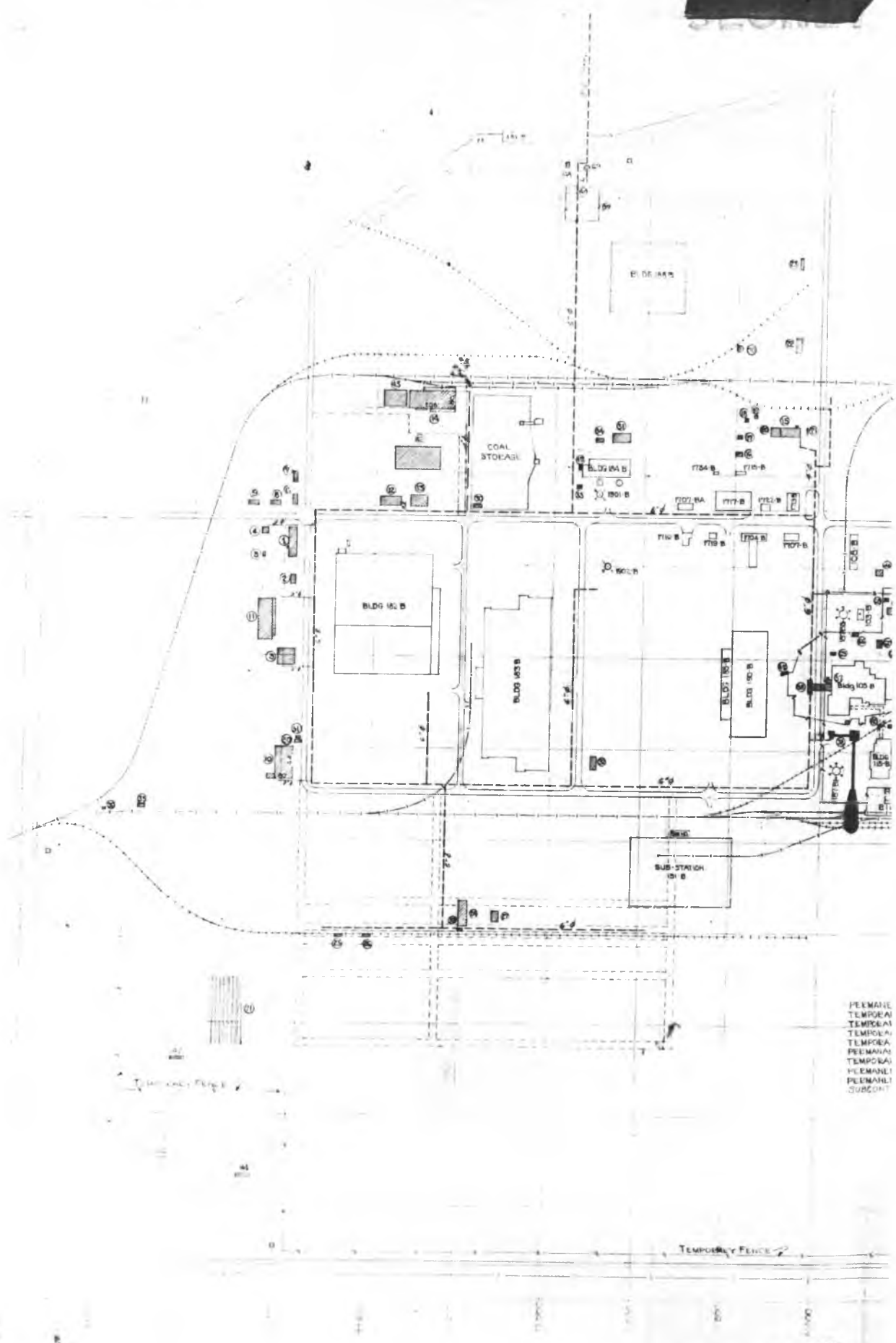
PLOT PLAN 100-B AREA
 SHOWING TEMPORARY FACILITIES

DRAWN BY: [Name] JULY 5, 1944

REVISED TO: [Number]

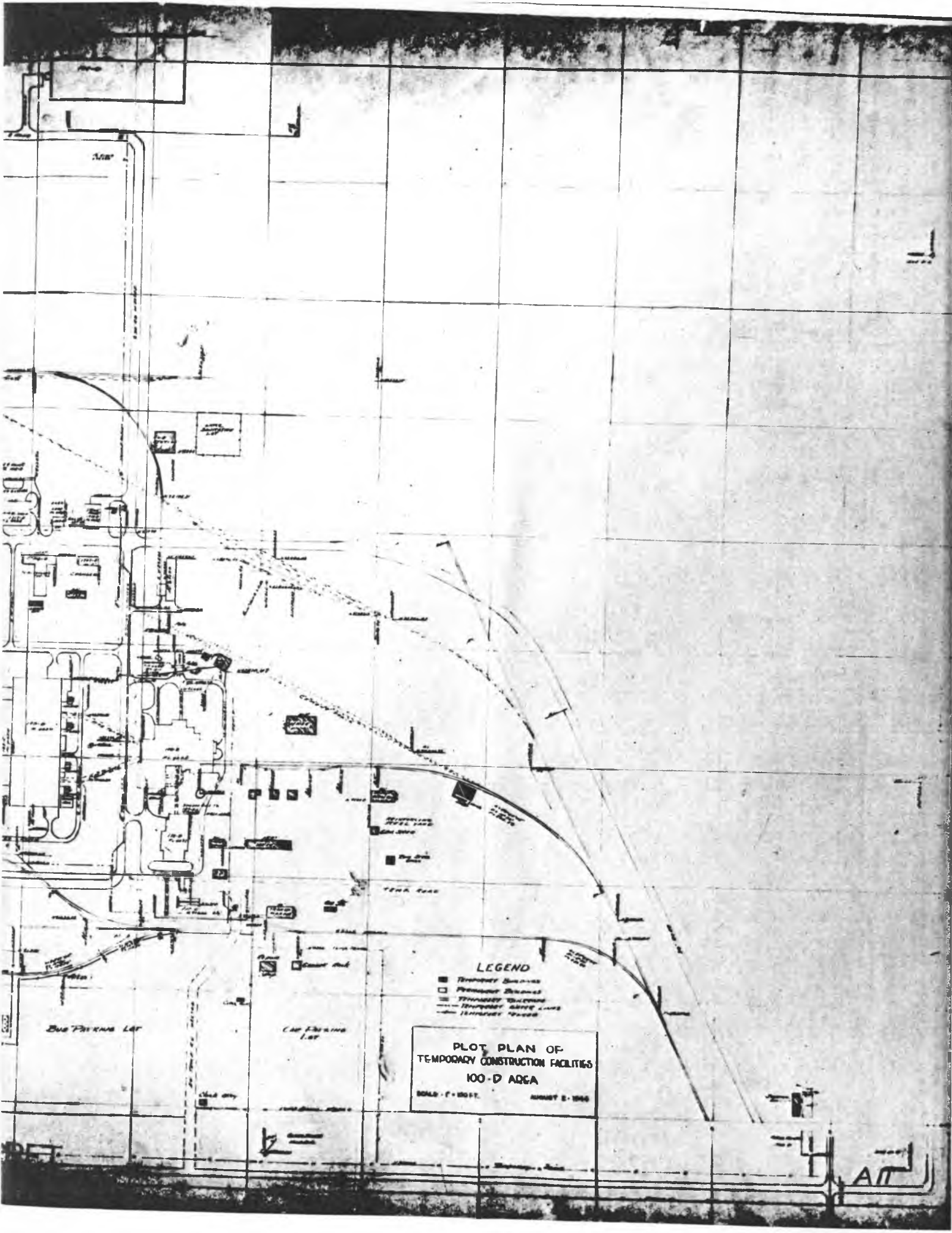
J. H. Wildsch
 9-18-47

A 10



PERMANENT
TEMPORARY
TEMPORARY
TEMPORARY
TEMPORARY
TEMPORARY
TEMPORARY
TEMPORARY
TEMPORARY
TEMPORARY





LEGEND

- Temporary Buildings
- Primary Buildings
- ▨ Temporary Enclosure
- Temporary Access Road
- - - Temporary Roads

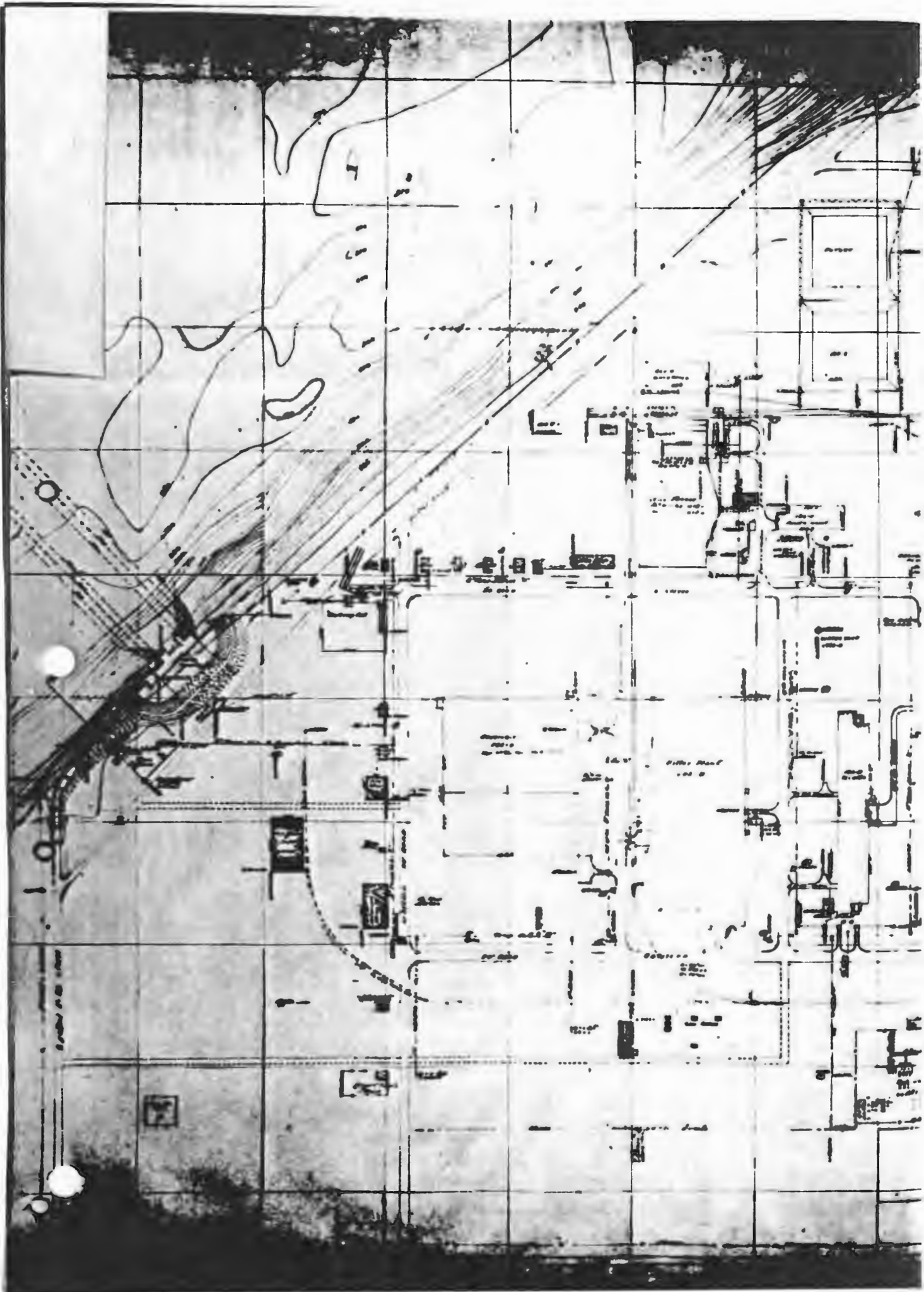
**PLOT PLAN OF
TEMPORARY CONSTRUCTION FACILITIES
100-D AREA**

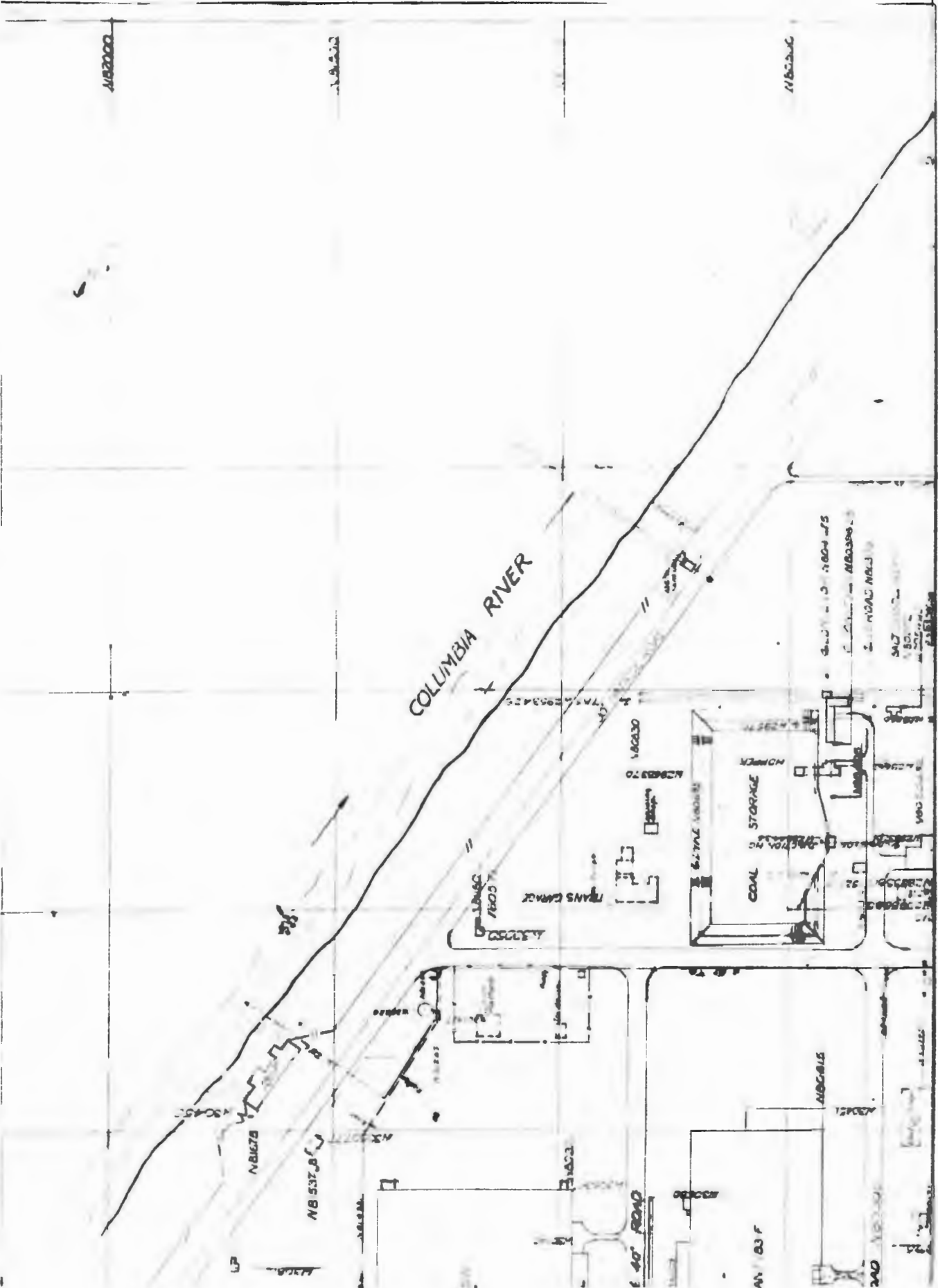
SCALE - 1" = 50 FT. AUGUST 2, 1966

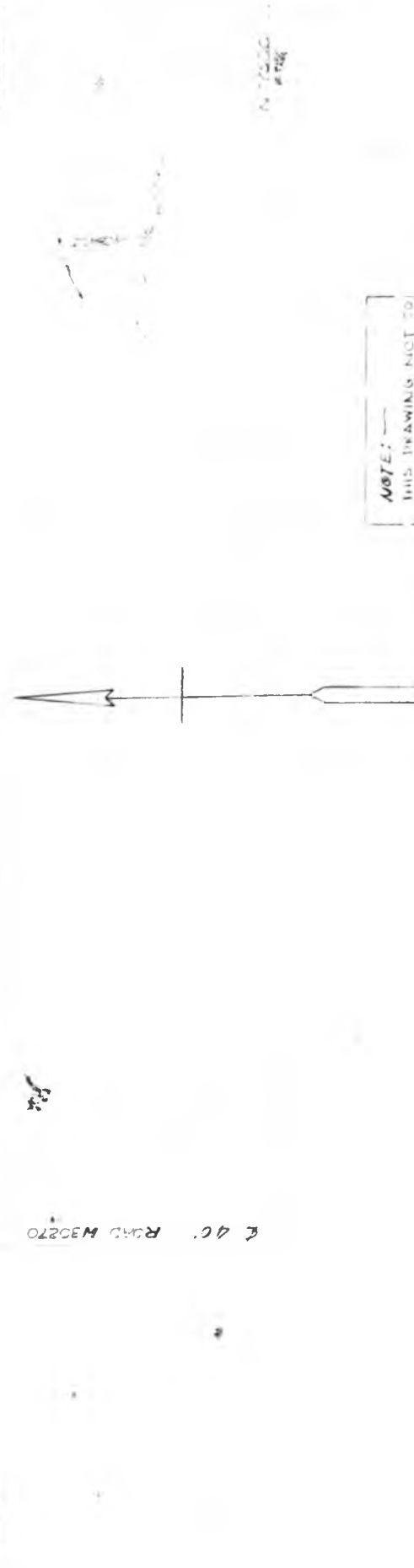
Bus Parking Lot

Car Parking Lot

AT







NOTE: —
THIS DRAWING NOT TO
BE USED FOR LAYOUT

DATE	10/1/15
BY	W. J. [unclear]
CHECKED	[unclear]
DATE	10/1/15
BY	[unclear]
CHECKED	[unclear]

W30270
W30270
W30270

HAITONG ENGINEER WORKS
PLOT PLAN 100-F AREA
 DRAWN BY: [unclear] DATE: 10/1/15
 CHECKED BY: [unclear] DATE: 10/1/15
 DWG NO.: 15-11

W29500



W30270



475500

475000

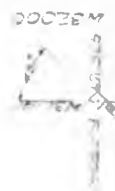
475000

475000

A 12

475000

100-18
1.1.15/50



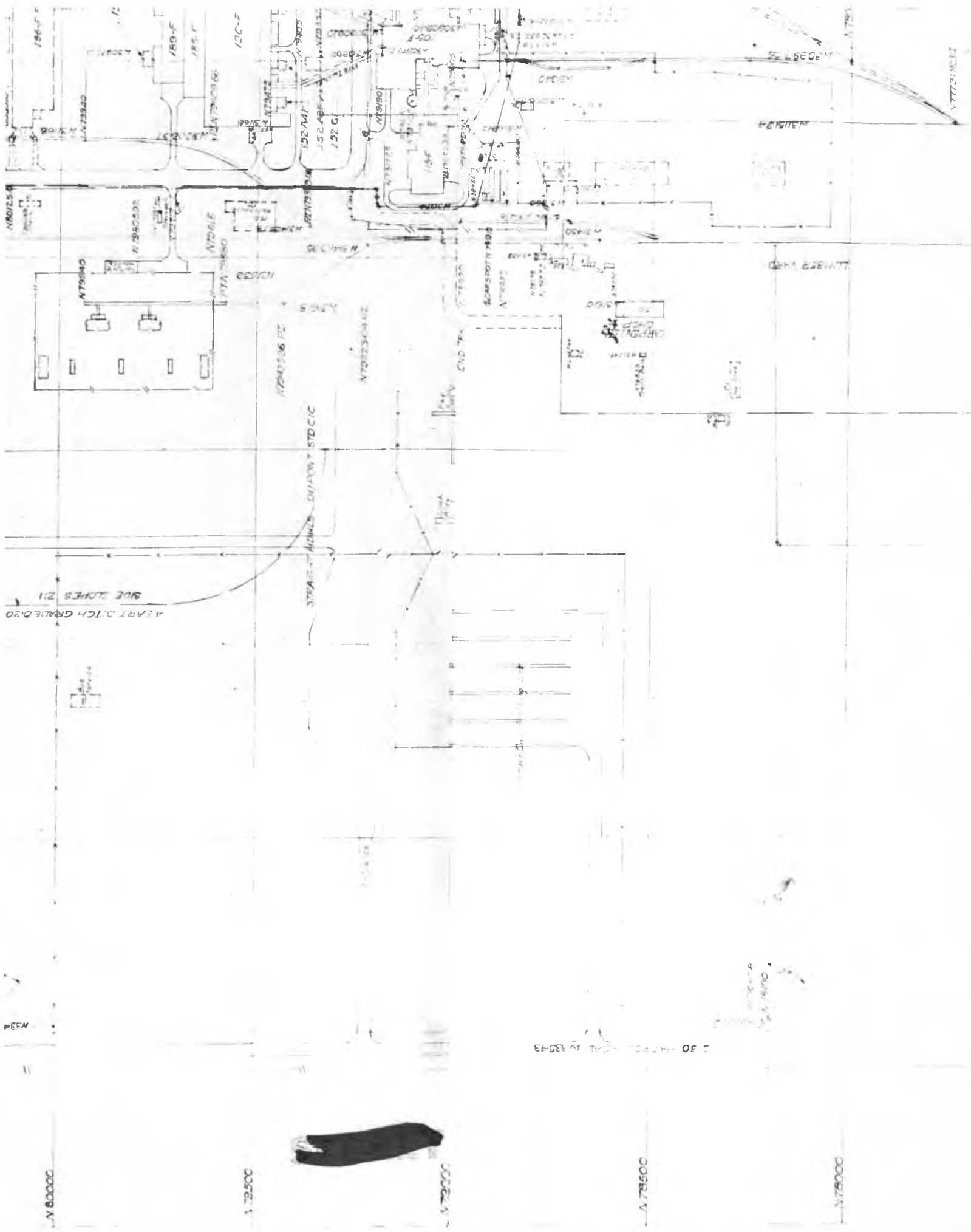
4350

4350

4350

4350

4350



A78000

A79500

A79000

A79500

A79000

1. 20 PARTIAL PLAN A79549

DATE: 12/15/50



N. 34000

N. 31000

N. 22000

N. 13000

N. 4000

N. 80500

3000

500

00000

31500

00000

TO RIVER



I.V. 3830
N. 82143.0
I.V. 383.28
3.36 ACRES X 3' MIN. HDAL
CURRENT STD. C/D

GRAVEL CATCH DRAIN 180' x 30'

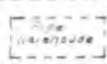
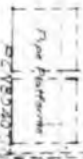
I.V. 3830
I.V. 383.28
1605.0' x 1605.0' SUPP. IN GRIP

SPRINKLER TOWNSHIP

36 ACRES X 3' MIN. HDAL
CURRENT STD. C/D

I.V. 3830

N. 80256.0
I.V. 3830
SLIPSTAY
CONC. ROAD SEC. DNG. 47315 B



E 40' ROAD

N. 31280.0

N. 42000

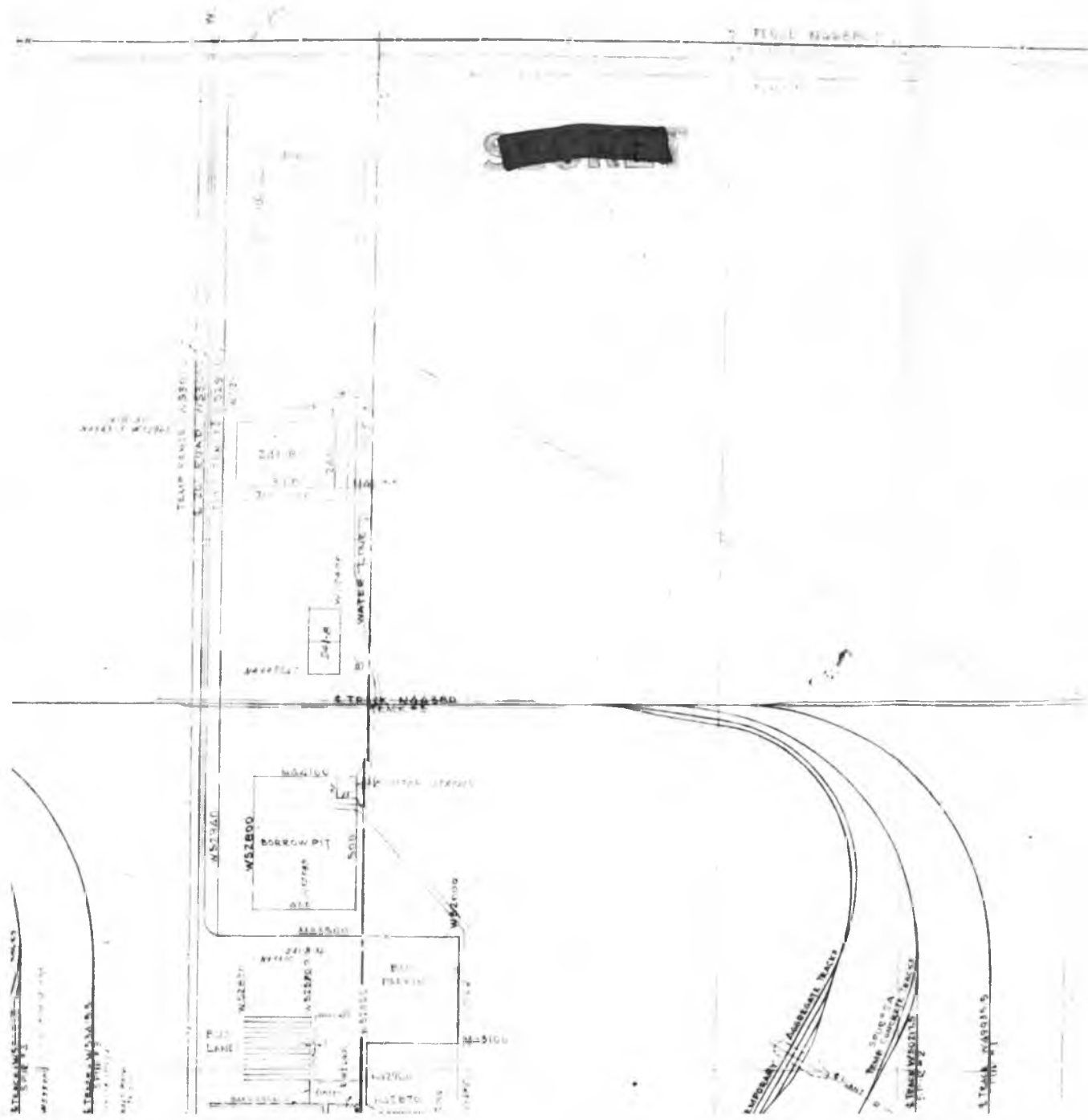
N. 8170
1606.5

RESERV
2.5 A

FILTER PI

E 40' R

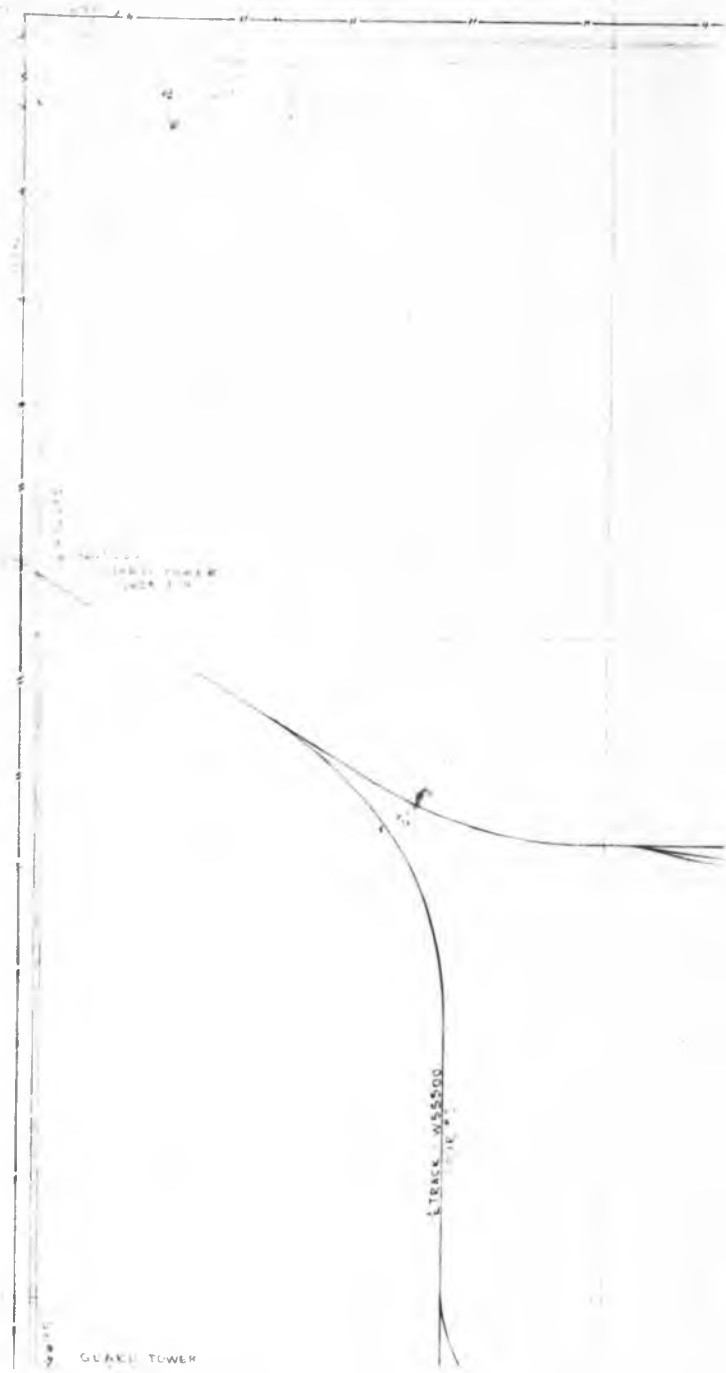
ROBERT
1605.0

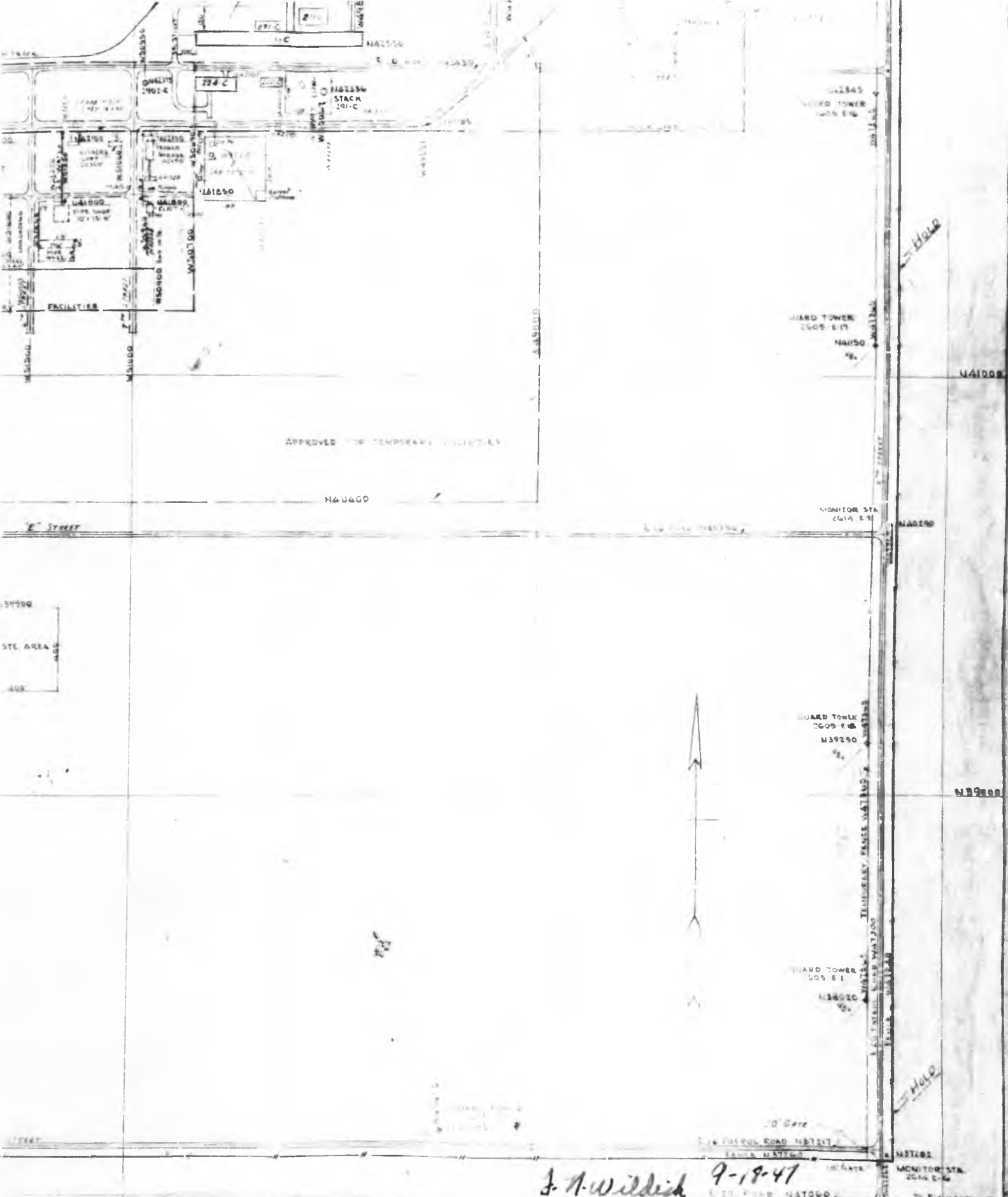


R4

GUARD TOWER

TRACK 055500





NOTES:
 1. ALL DIMENSIONS ARE IN FEET.
 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

J. A. Willard 9-18-47

LAYOUT TEMPORARY FACILITIES END 300 AREA		A 13
SCALE: 1" = 50'		

REVISIONS
 NO. 1
 DATE 10-1-47
 BY J. A. WILLARD
 CHECKED BY J. A. WILLARD



AP TON R
000 LT

AP TON R
000 LT

AP TON R
000 LT

AP TON R
000 LT

AP TON R
000 LT

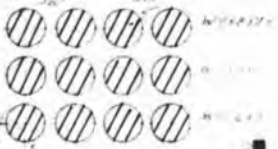
AP TON R
000 LT

AP TON R
000 LT

AP TON R
000 LT



18



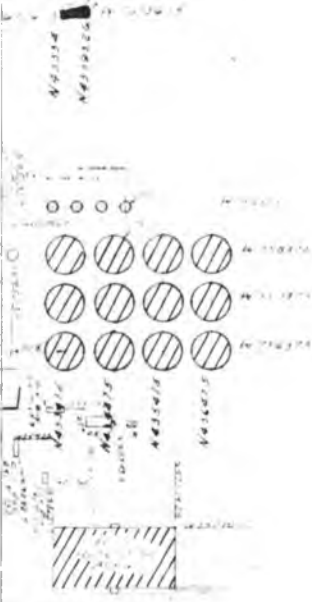
Vertical text label on the left side of the diagram.

Vertical text label on the right side of the diagram.

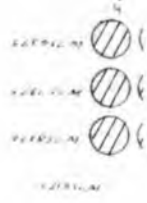




002200



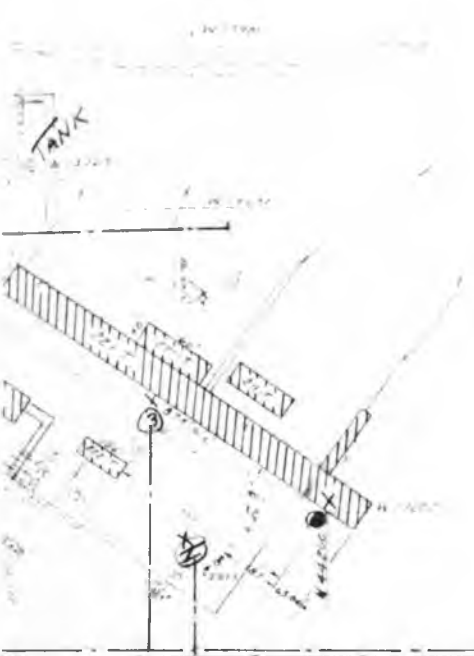
W 2500



0.

W 2500

Water



F.N.W. (ish 4-19-47)
(2 parts)

LEGEND

- DU PONT TEMPORARY CONSTR.
- TC NOT ERECTED BY DU PONT
- PERMANENT CONSTRUCTION
- TEMPORARY WATER LINES
- TEMPORARY RAILROADS

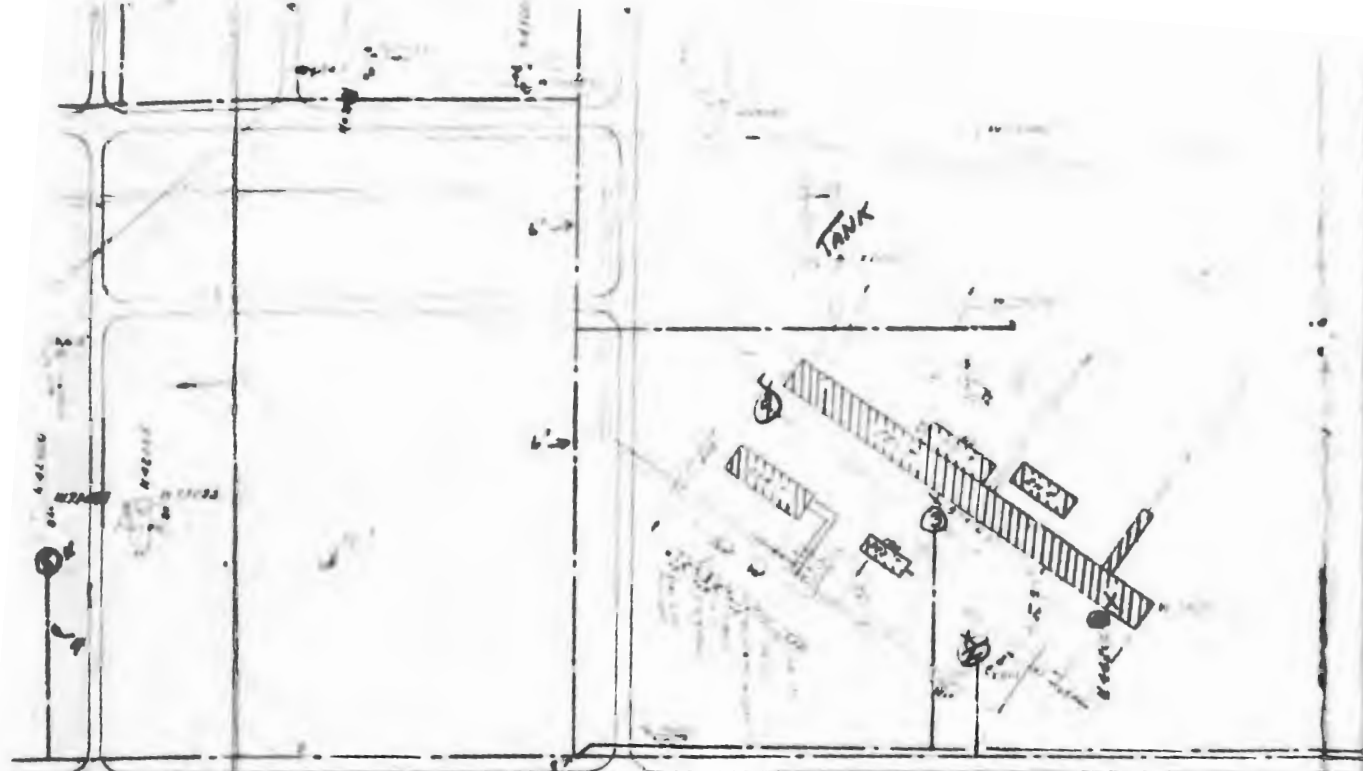
C 1212 W

Not to be used for Outside the Stamp Only

100557 N7

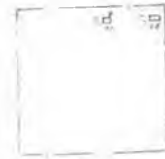
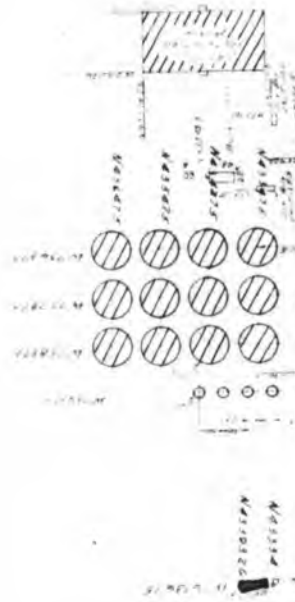
6

A14



14-00002

0



N42400

142200

142200

142200



142200



104





196000

23

196000

SOUTH

MS. 100

22

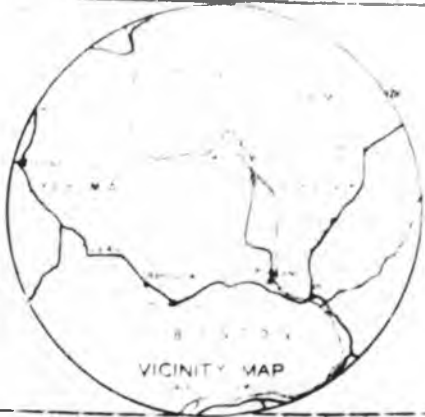
Pa

MS. 100

R 28 E

R 29 E
T 15 N

T 15 N



VICINITY MAP

R 30 E

R 31 E

T 14 N

T 13 N

T 12 N

T 11 N

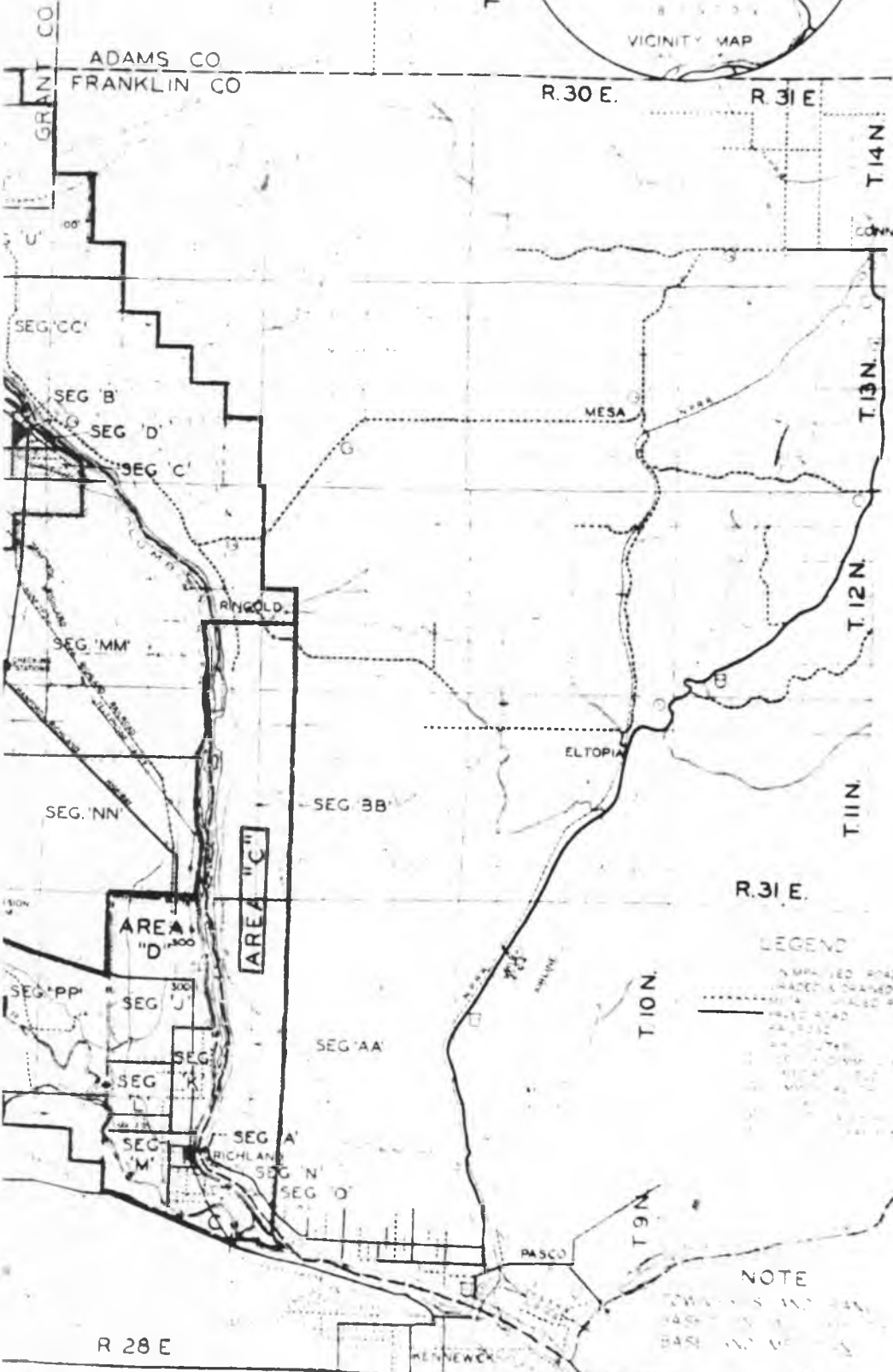
R 31 E

T 10 N

T 9 N

PASCO

R 28 E



KEY MAP OF SEGMENTS

STATE OF WASHINGTON
 COUNTY OF GRANT, ADAMS, FRANKLIN
 DIVISION OF LAND
 DISTRICT OF WASHINGTON
 SERVICE COMMAND
 USING AGENCY
 10 MILES W OF PASCO, WASHINGTON
 27 MILES NNE OF PROSSER, WASHINGTON

TRANSPORTATION FACILITIES

NO. 1, 2, 3, 4, AND 5 PASCO AND GRANT COUNTY RAILROAD
 NO. 1, 2, 3, 3A, AND NO. 3E STATE HIGHWAY
 NO. 395 AND NO. 410 FEDERAL HIGHWAY
 UNITED STATES AIR FORCE

LAND AREA

ACRES OWNED BY W.D.
 ACRES LEASED BY W.D.
 ACRES LEASED FROM W.D.
 ACRES TRANSFERRED TO W.D.
 ACRES DONATED TO W.D.

DISPOSALS

ACRES SOLD
 ACRES TRANSFERRED
 ACRES EXCHANGED
 ACRES OTHERWISE

LEGEND

- RESERVATION LINE
- STATE OR PROVINCE LINE
- COUNTY LINE
- CIVIL DISTRICT PRECINCT
- LAND GRANT LINE
- CITY, VILLAGE, OR BOROUGH
- CEMETERY, SMALL PARK, ETC.
- TOWNSHIP LINE
- SECTION LINE

SCALE
MILES

WAR DEPARTMENT, D.C.E.
CONSTRUCTION DIVISION

REAL ESTATE

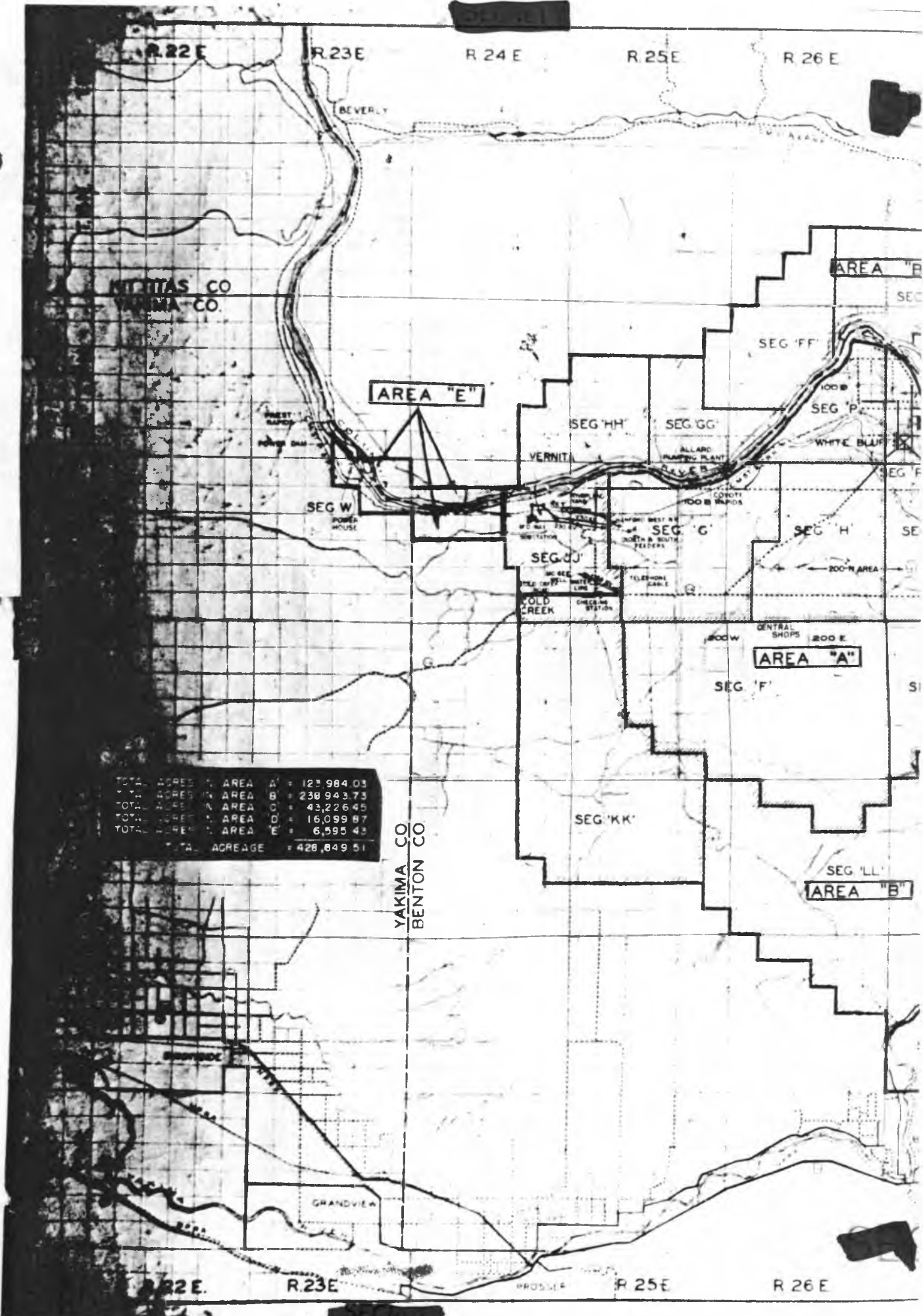
HANFORD ENGINEER WORKS

RECOMMENDED BY DATE
 APPROVED BY DATE
 COMPLETED DATE
 REVISIONS
 CHECKED BY
 DRAWING NO. 111

NOTE

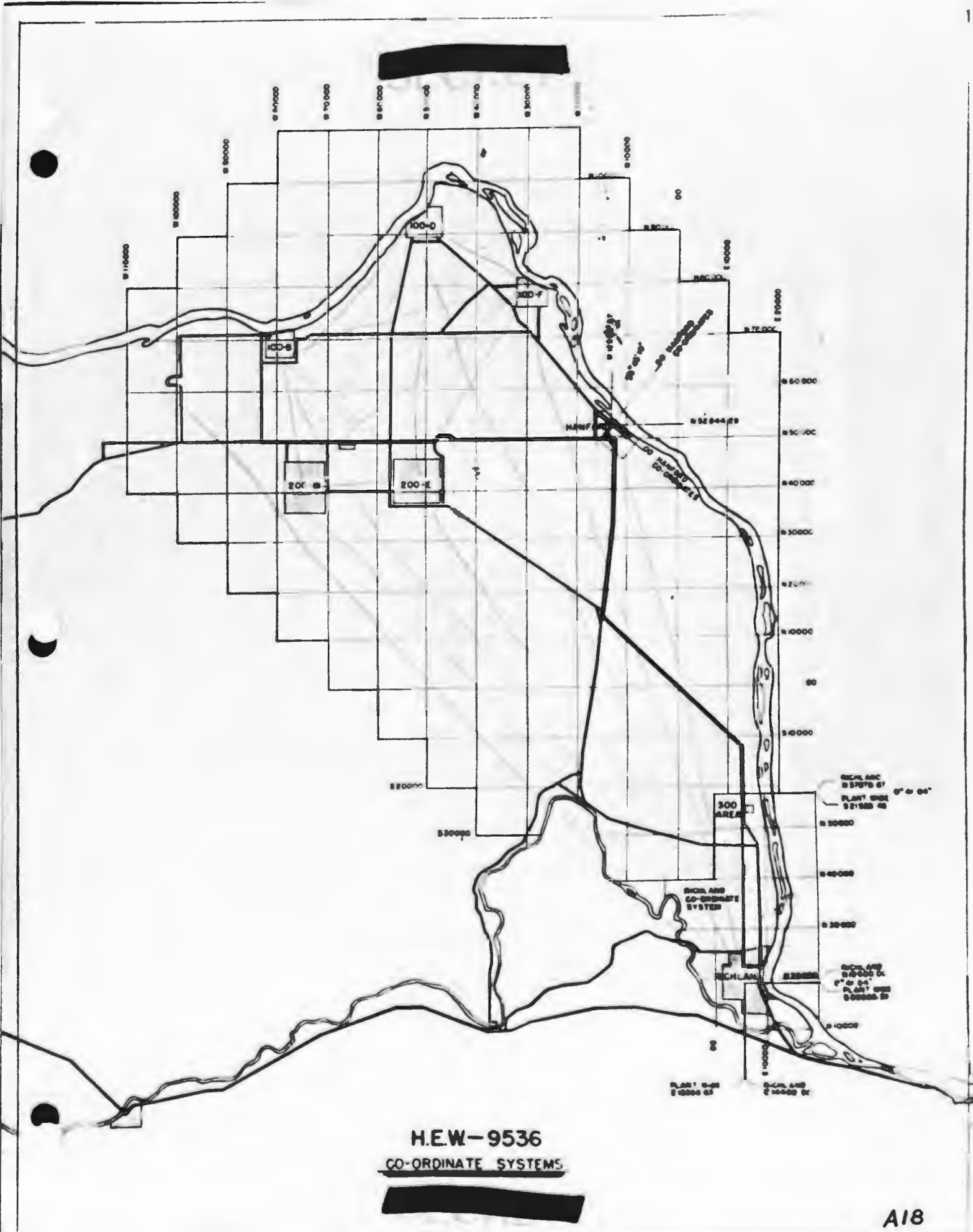
TOWNSHIP AND SECTION
 BASE LINE

A16



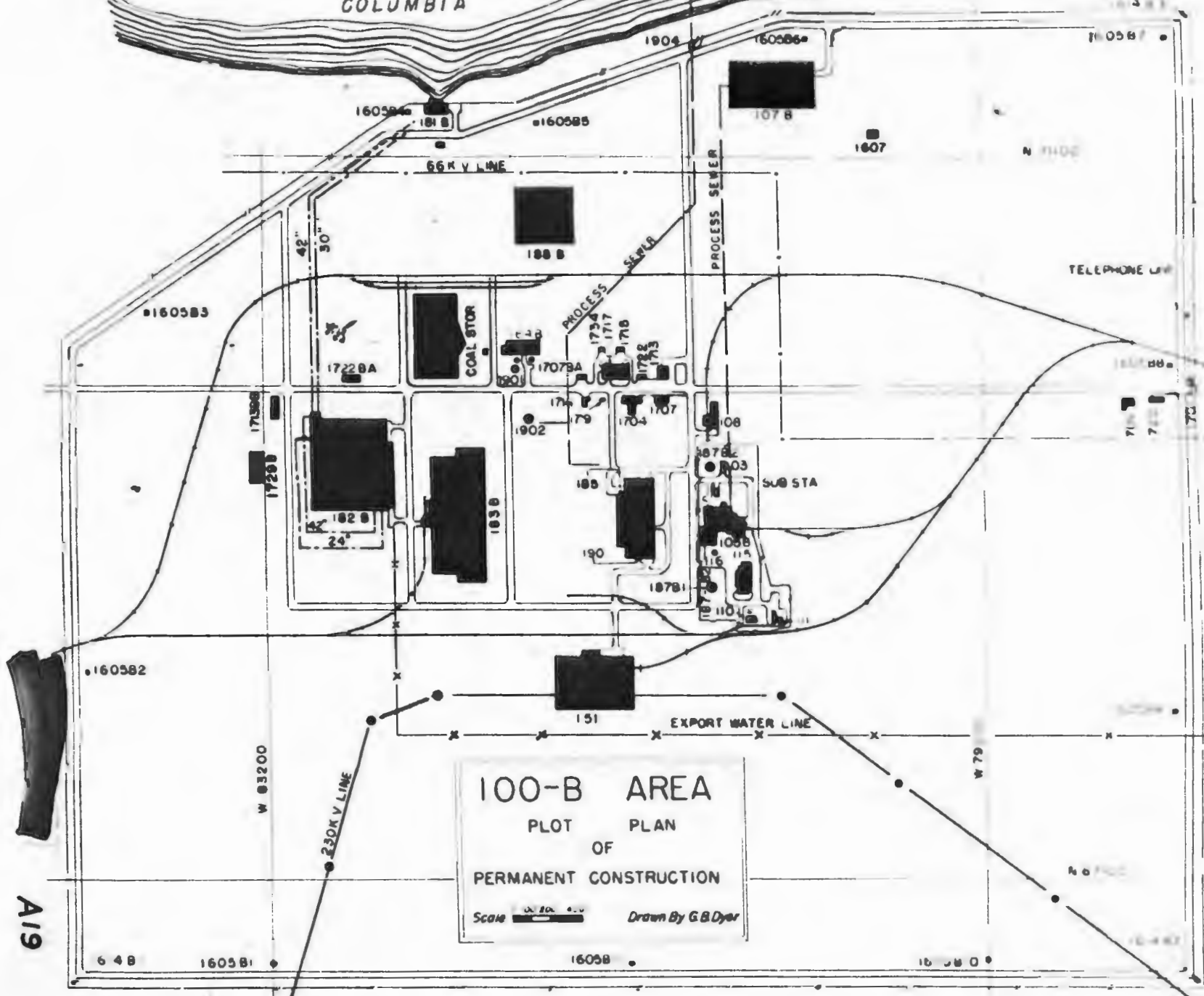
TOTAL ACRES	AREA A	= 12,984.03
TOTAL ACRES	AREA B	= 238,943.73
TOTAL ACRES	AREA C	= 43,226.45
TOTAL ACRES	AREA D	= 16,099.87
TOTAL ACRES	AREA E	= 6,595.43
TOTAL ACRES	TOTAL ACREAGE	= 428,849.51

YAKIMA CO
BENTON CO



H.E.W-9536
CO-ORDINATE SYSTEMS

COLUMBIA RIVER

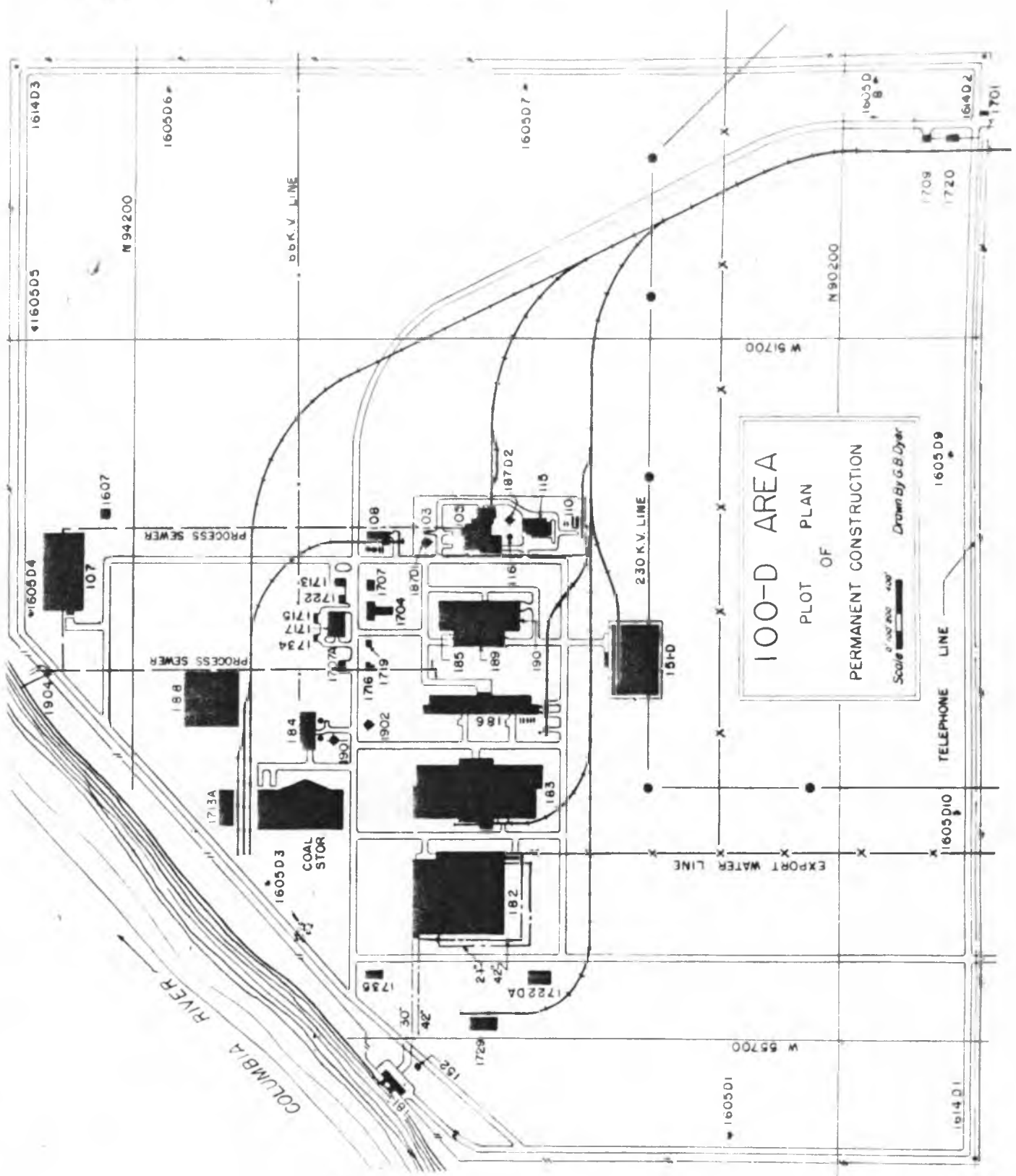


100-B AREA
 PLOT PLAN
 OF
 PERMANENT CONSTRUCTION
 SCALE Drawn By G B Dyer

A19

See plan for details

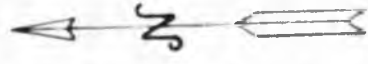
"See App. D 38
Identification"



100-D AREA
PLOT PLAN
OF
PERMANENT CONSTRUCTION
Scale 1" = 400'
Drawn By G.B. Dyer

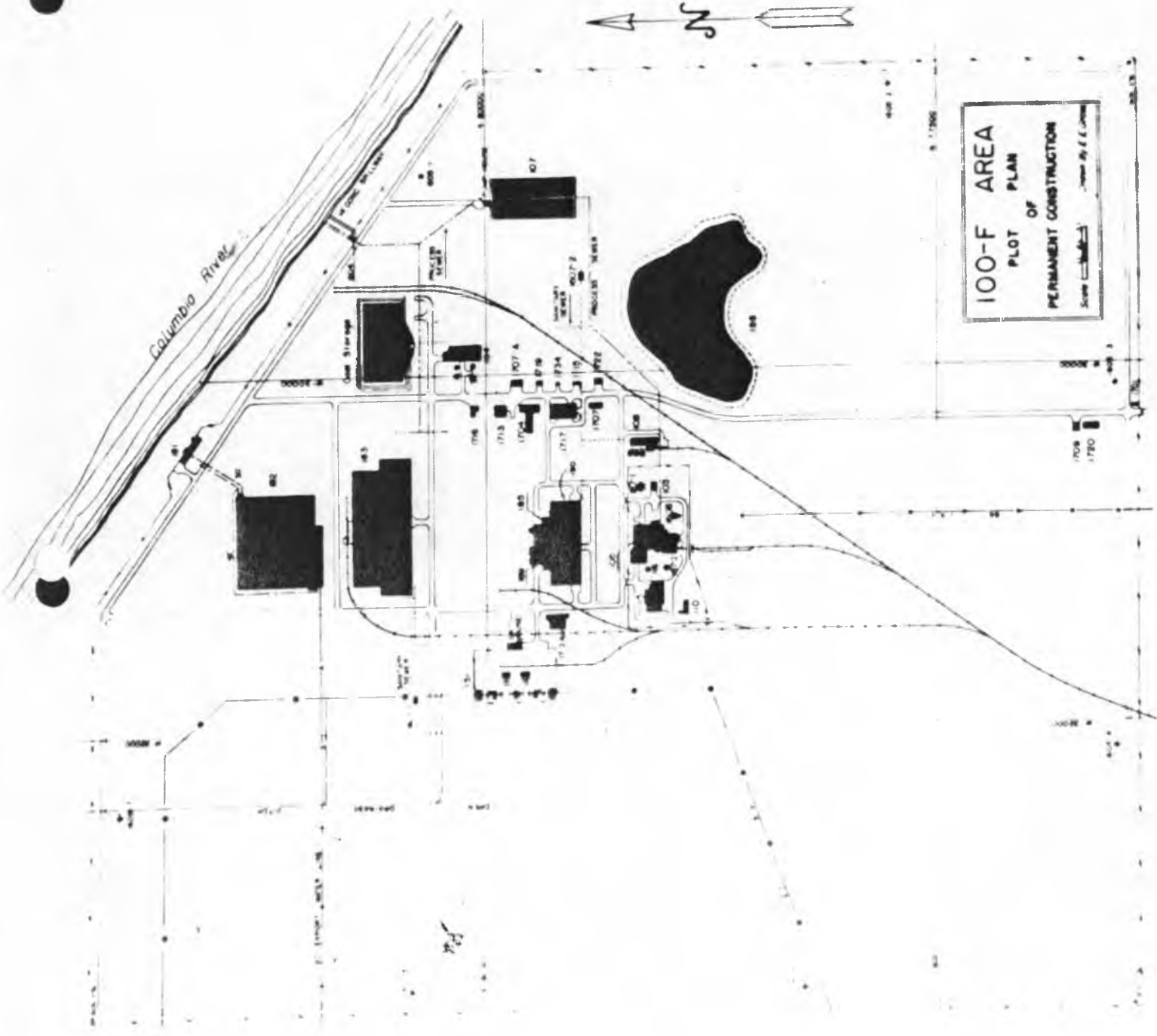
* See App. D for identification

Ref. to
App. 28 for
identification

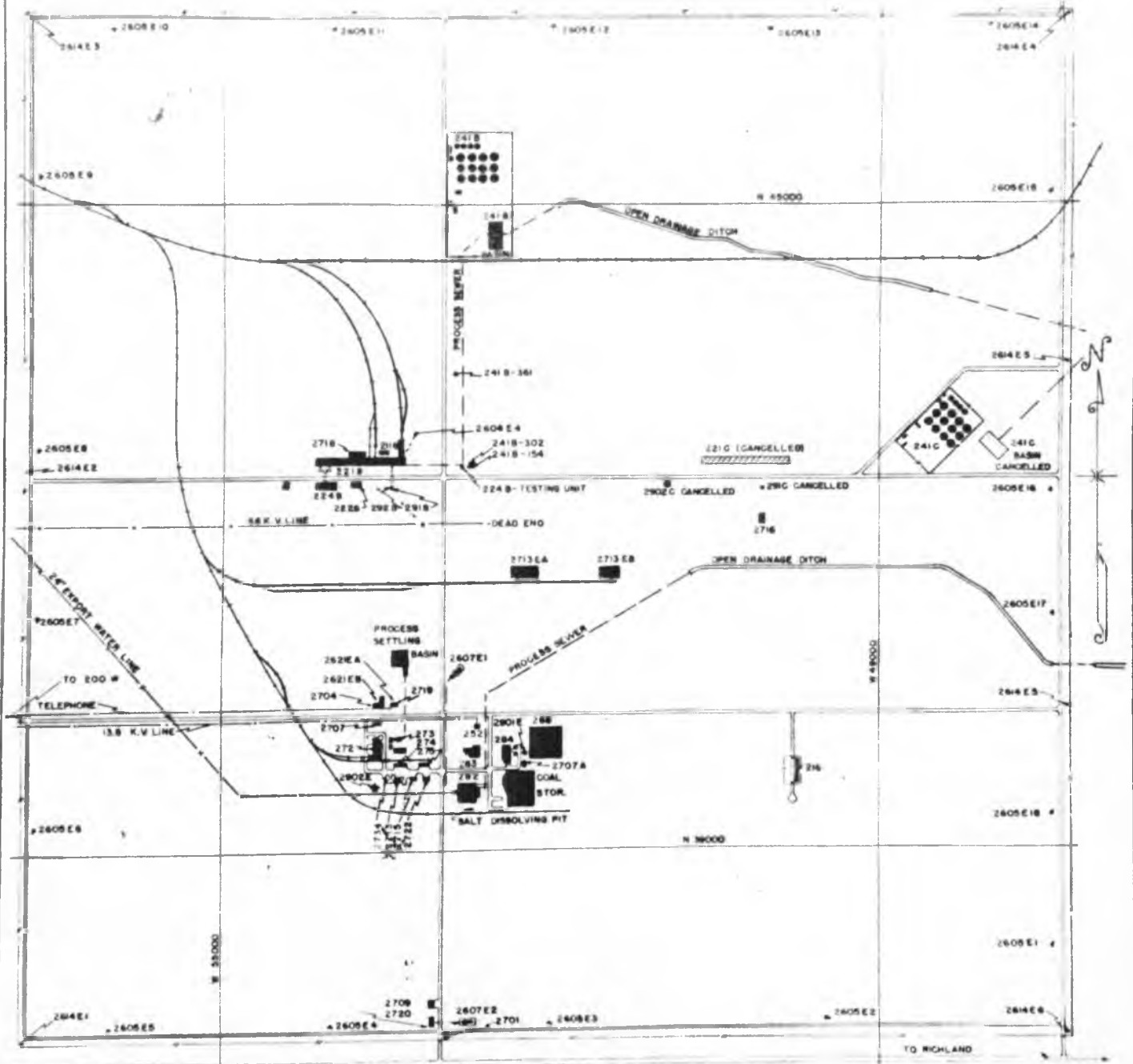


Columbia River

100-F AREA
PLOT
OF
PERMANENT CONSTRUCTION
Scale 1" = 100'

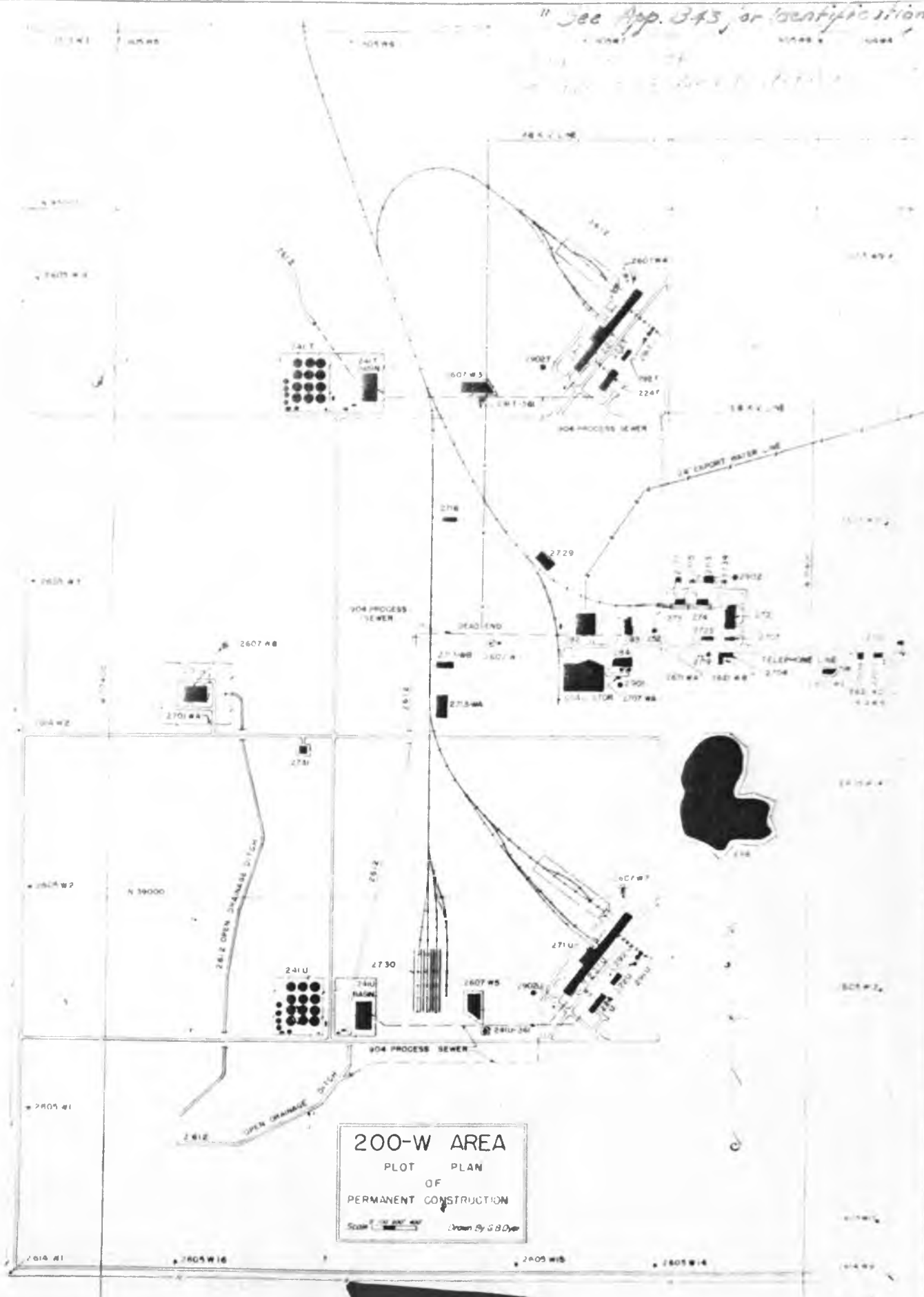


"See App. B43 for
identification"



200-E AREA
PLOT PLAN
OF
PERMANENT CONSTRUCTION

" See App. 343, for Identification

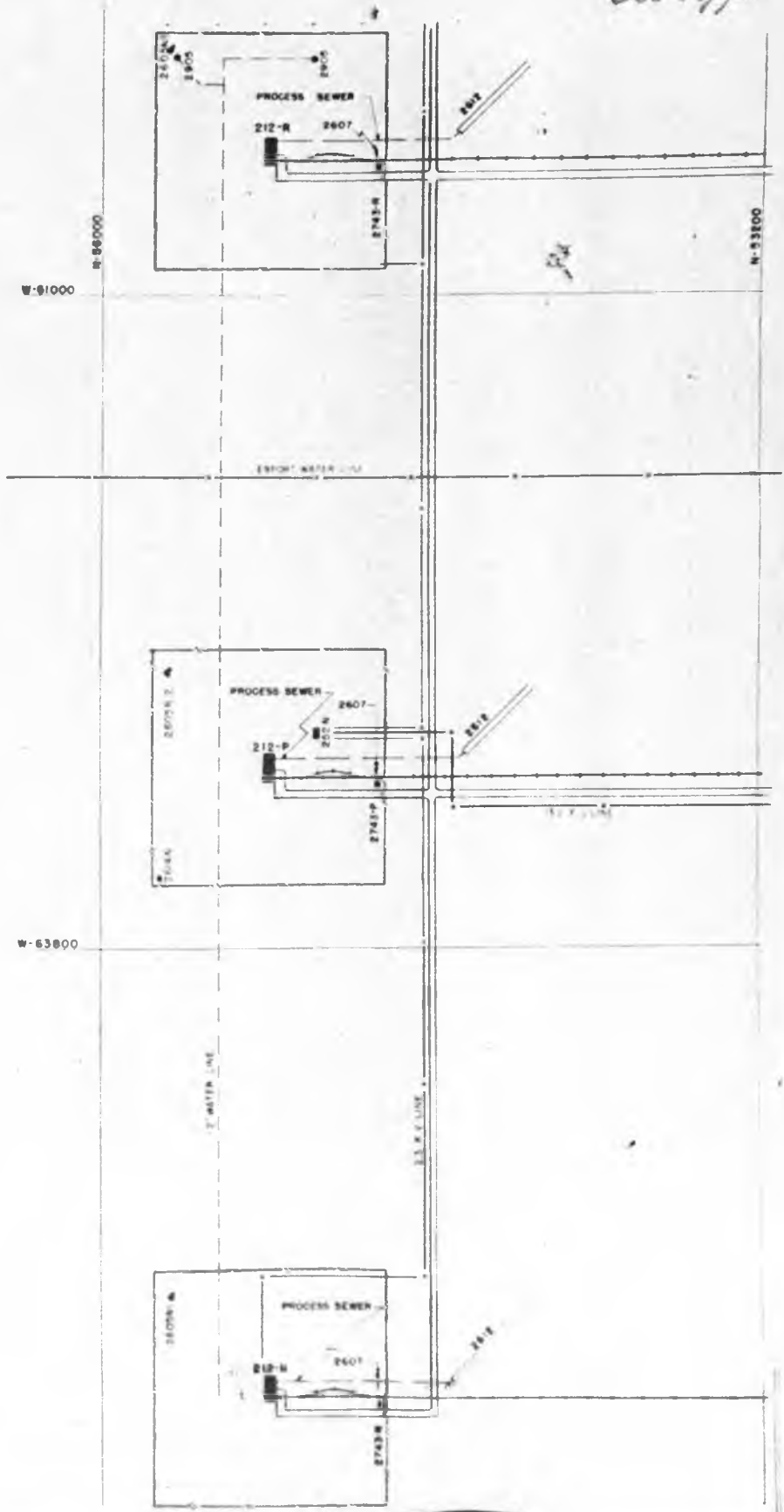


200-W AREA
 PLOT PLAN
 OF
 PERMANENT CONSTRUCTION
 Scale: 1" = 20' 0"
 Drawn By: G.B. Dyer

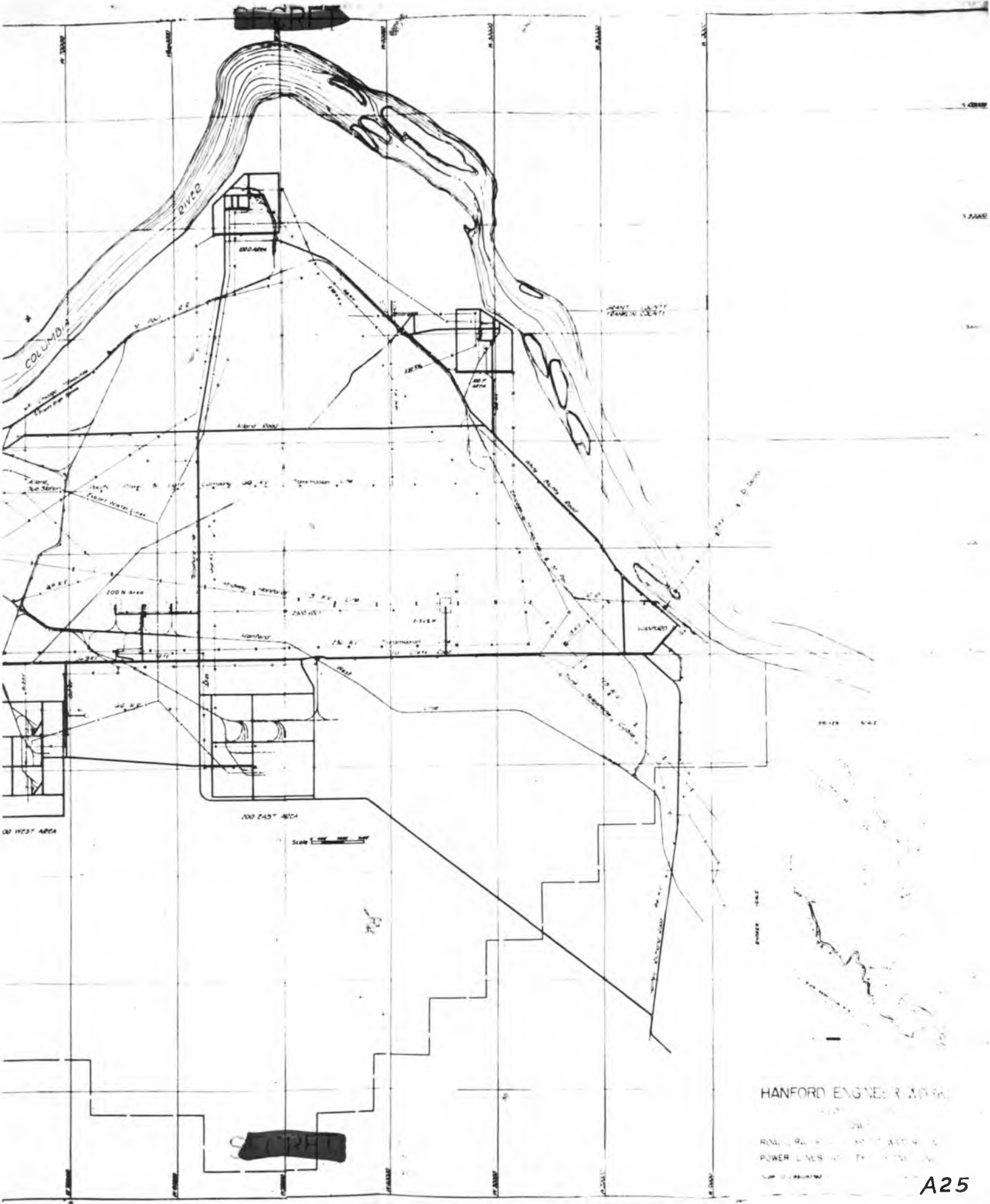
SECRET

[Add Note ref. to App. B43]

"See App. B43 for identification"

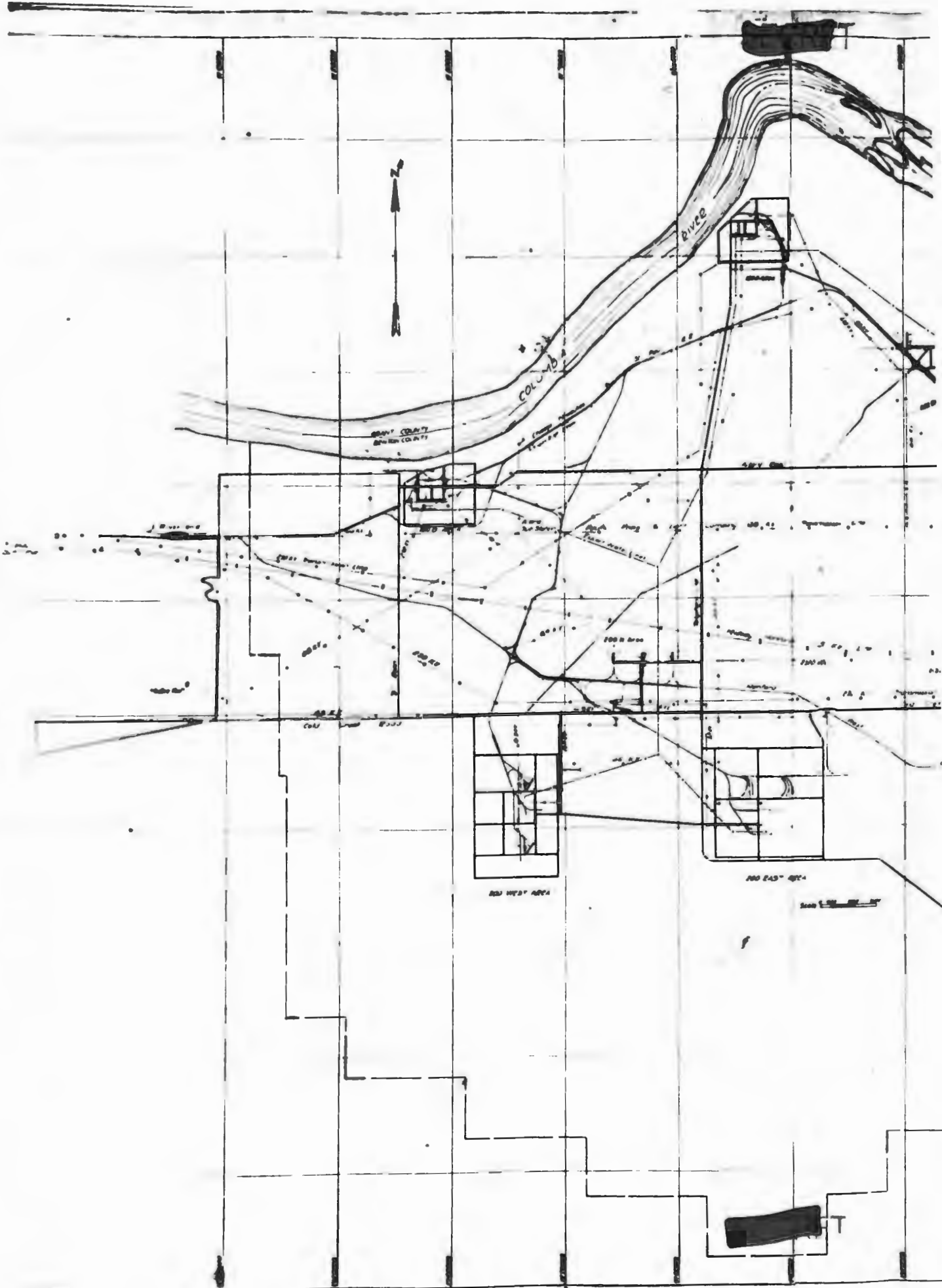


200-N AREA
PLAT 142A
PERMANENT CONSTRUCTION
Scale 1" = 100' 0"
A24



HANFORD ENGINEER WORKS

PLAN
 SHOWING
 REACTOR BUILDINGS AND
 POWER LINES AND TRANSMISSION LINES
 AND OTHER STRUCTURES



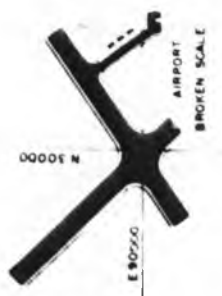
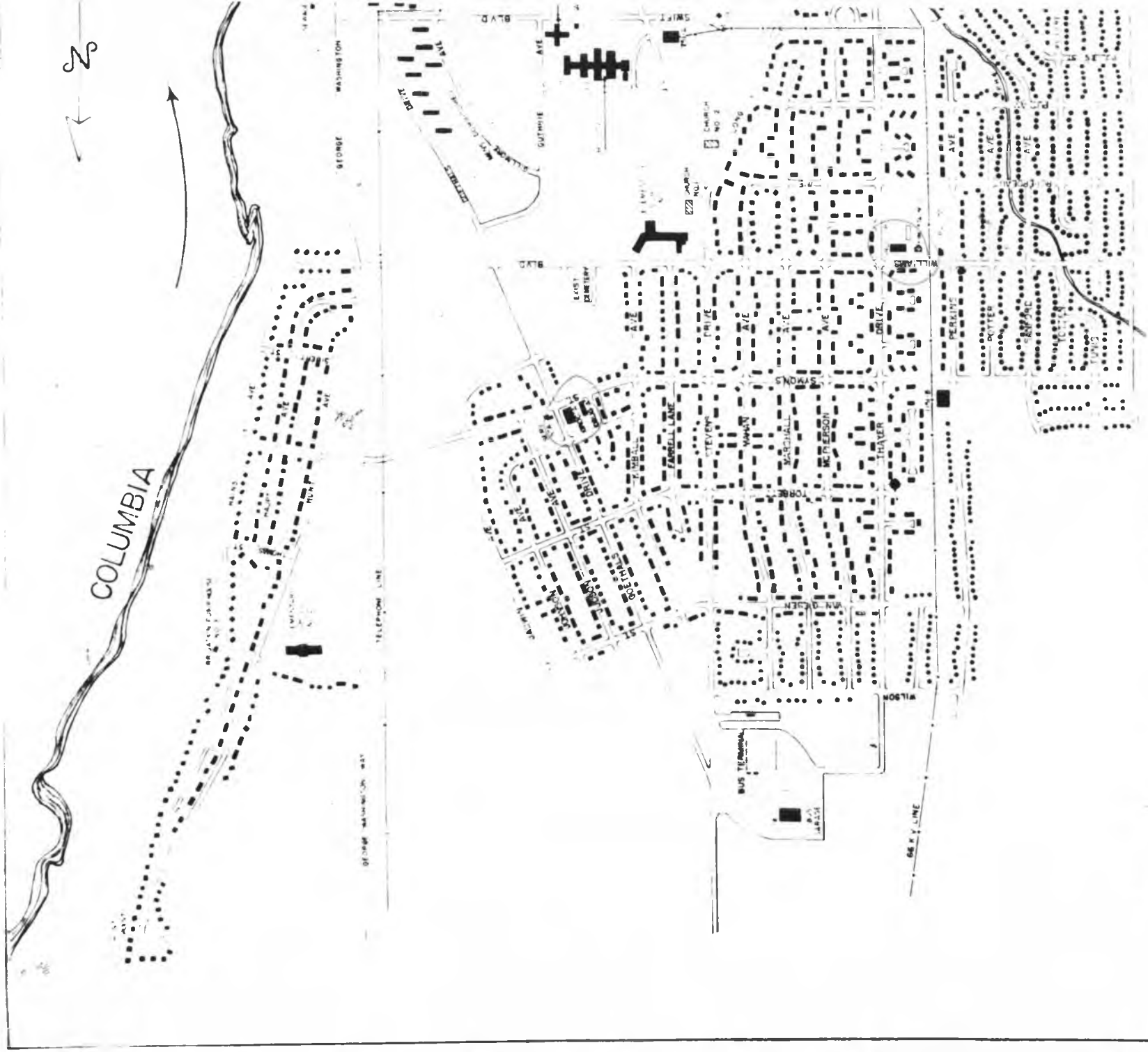


RICHLAND AREA

KEY

- Original Existing Buildings
- Under Construction
- 100% Complete
- Prefabricated House Locations & Constr Progress

SECRET



2
7

SWIFT BOULEVARD

700 STORAGE



E 15400

RICHLAND ORDINATE N 21800

PLANT ORDINATE S 57900

STEVENSON DRIVE

SCRAP YARD

PLANT ORDINATE E 10000

GOVERNMENT CAR POOL

SWITCH STATION

722-R

717-A



723

717

700



722-P

701

713-B

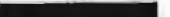
720

713-A



718

714



700-C

704

722-A

722-N

702

703

704

705

FLAGLER AVENUE

LOCKWOOD STREET

N 20700

GOETHELS DRIVE

700 AREA PLOT PLAN OF PERMANENT CONSTRUCTION

Scale 1" = 100' Drawn by R.A. McQueen

KNIGHT STREET

3RD BRASS

SWIFT SCALE BAR

A27

1962 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025

9-17

LOW KEY B.N.P.

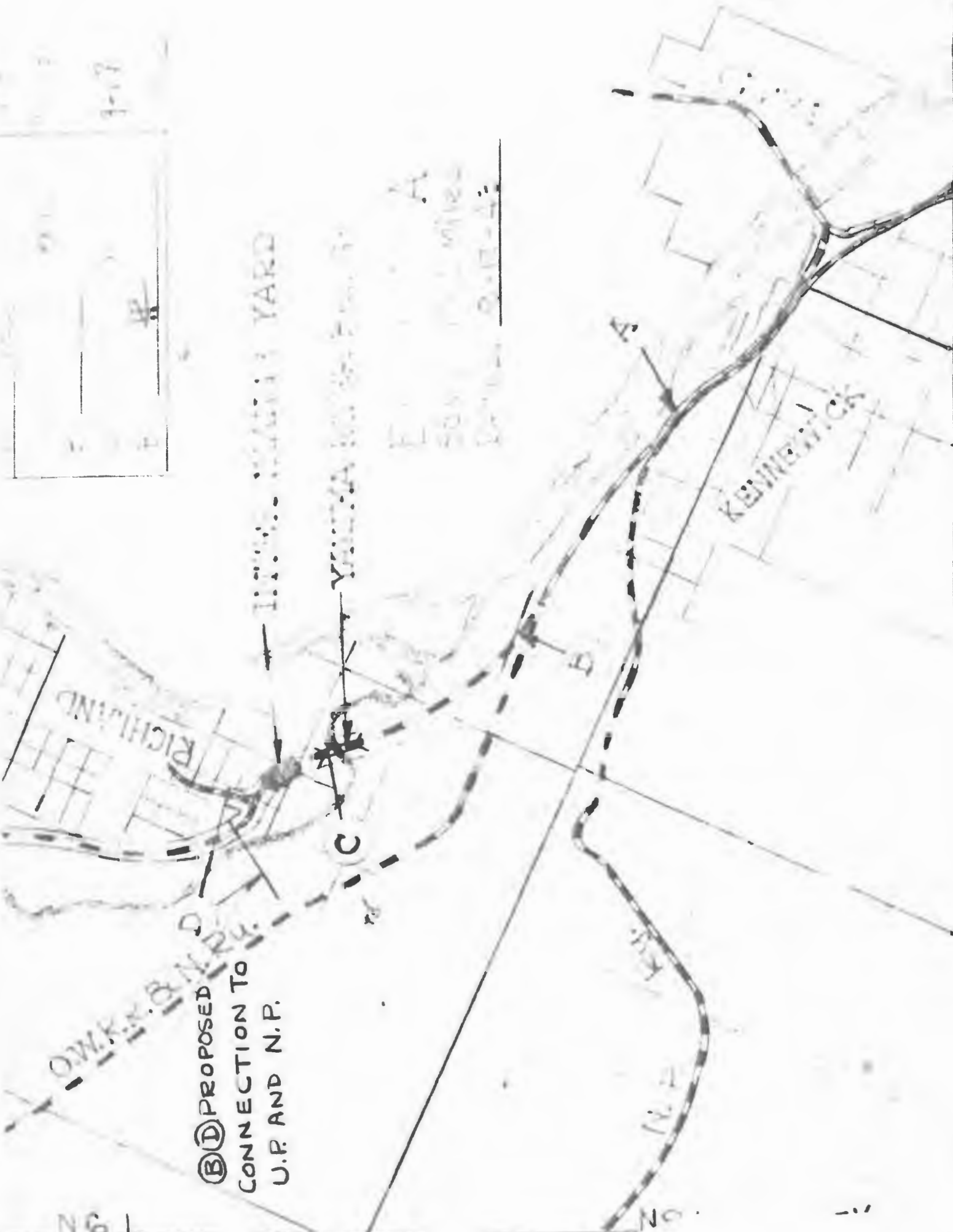
② PROPOSED
CONNECTION TO
U.R. AND N.P.

INDUSTRIAL YARD

YARD

500 Miles
D. 0.17-1.1

KENNEWICK





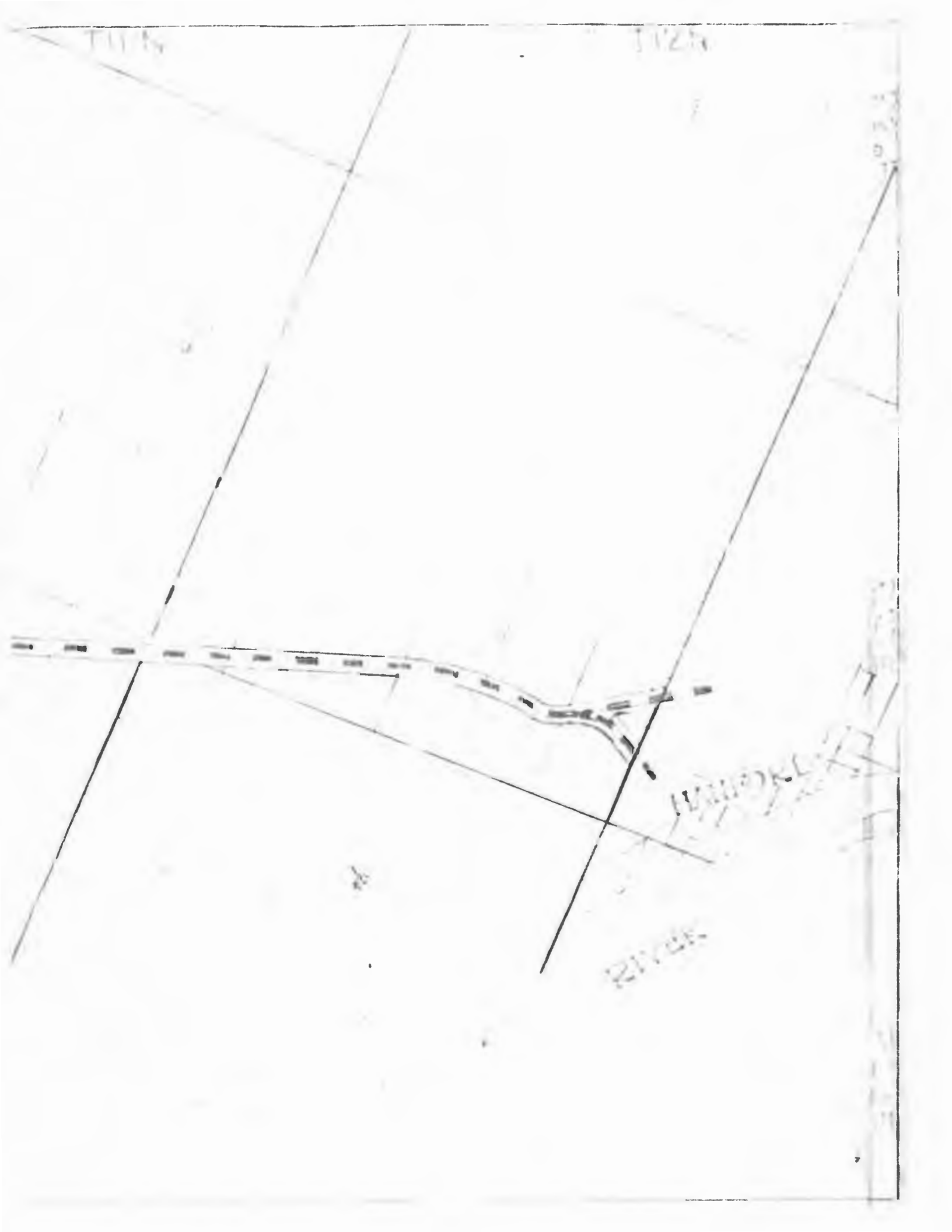
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52	53	54	55
56	57	58	59	60
61	62	63	64	65
66	67	68	69	70
71	72	73	74	75
76	77	78	79	80
81	82	83	84	85
86	87	88	89	90
91	92	93	94	95
96	97	98	99	100



T11/14

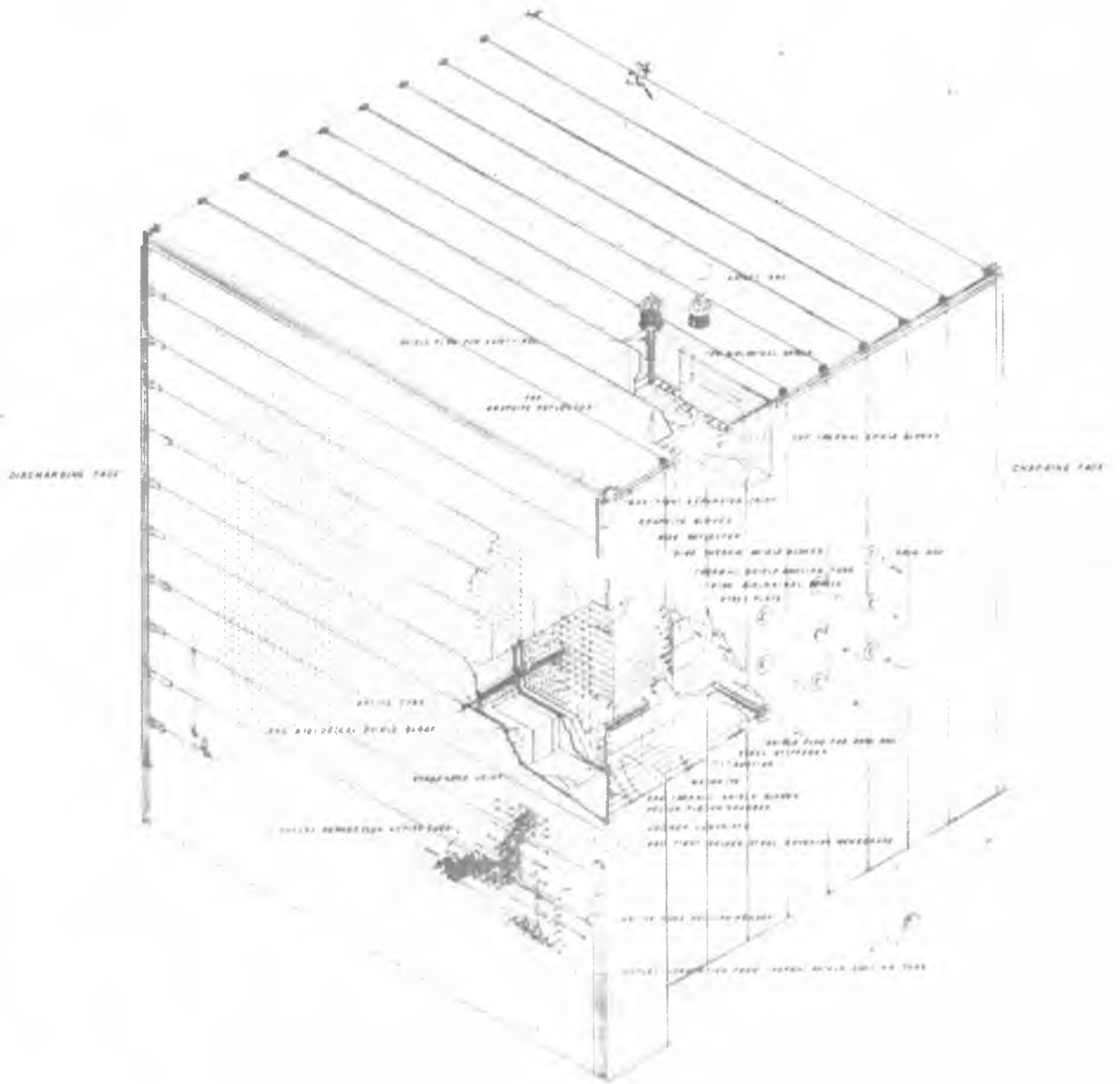
T12/14

0 3 1

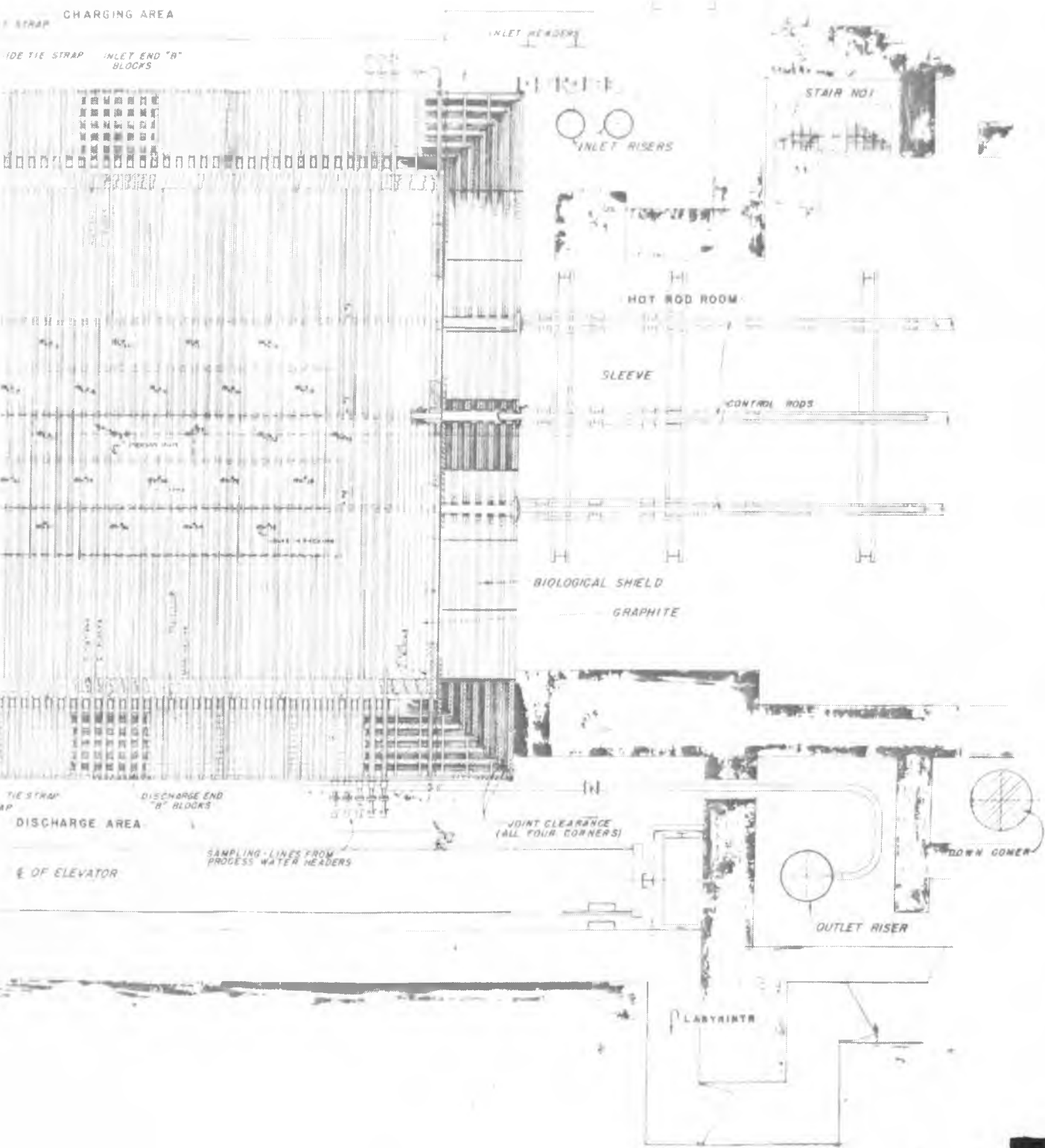


RIVER
WINDMILL

PILE SHIELDING

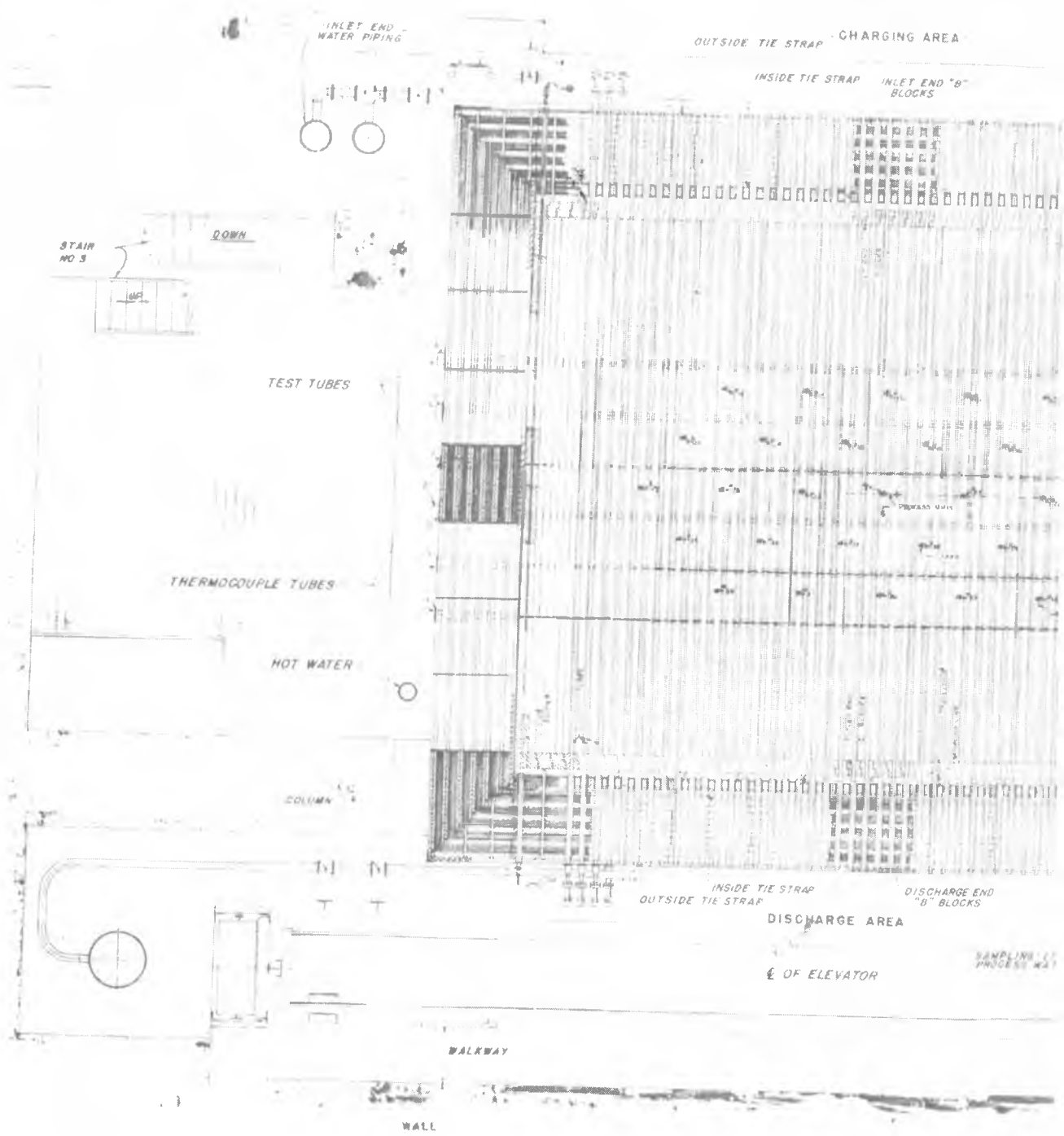


ONAL VIEW OF PILE FROM TOP



H-M-D-922-2
A30

SECTIONAL VIEW OF PILE



INLET END WATER PIPING

OUTSIDE TIE STRAP CHARGING AREA

INSIDE TIE STRAP INLET END "B" BLOCKS

STAIR NO 3

DOWN

TEST TUBES

THERMOCOUPLE TUBES

HOT WATER

COLUMN

INSIDE TIE STRAP
OUTSIDE TIE STRAP

DISCHARGE AREA

DISCHARGE END "B" BLOCKS

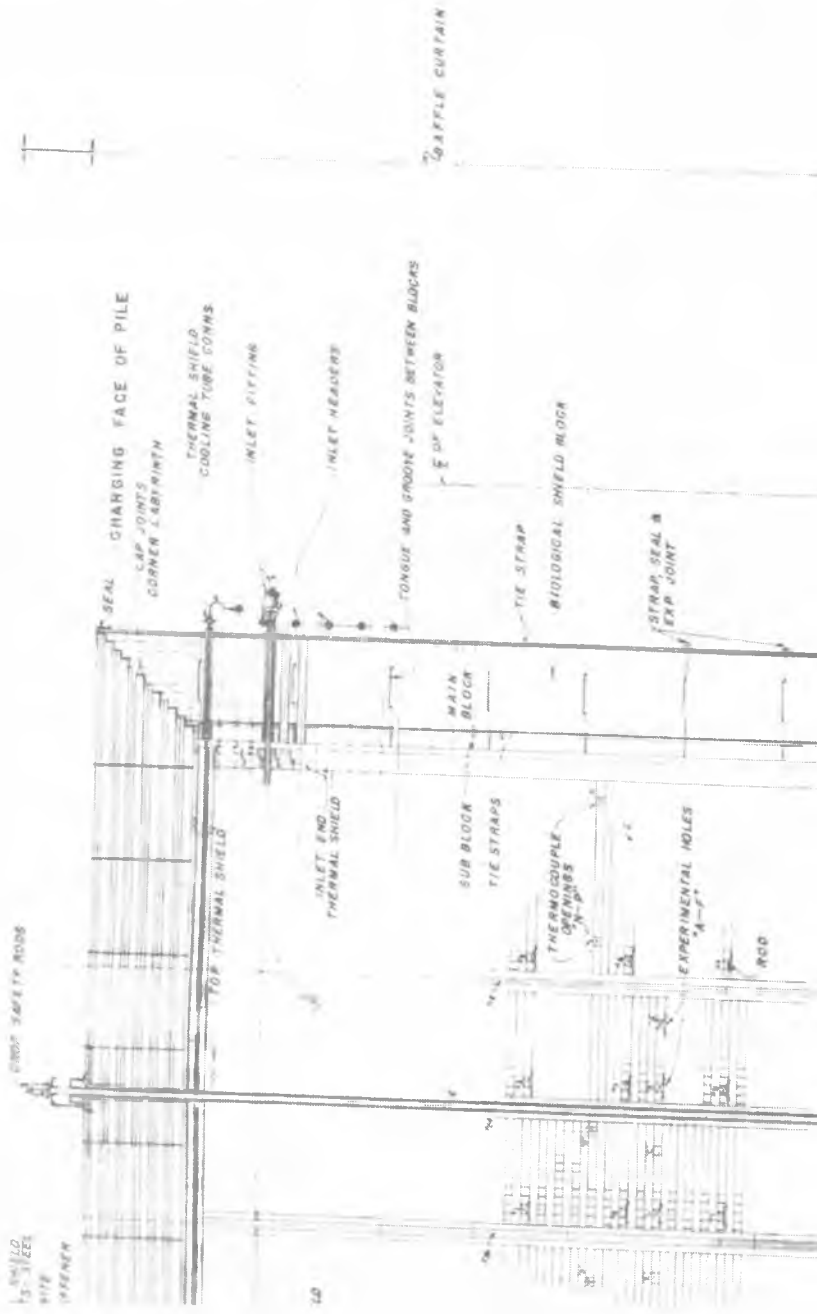
OF ELEVATOR

WALKWAY

WALL

SAMPLING POINT PROCEDURE

ONAL VIEW OF PILE FROM CONTROL ROD SIDE

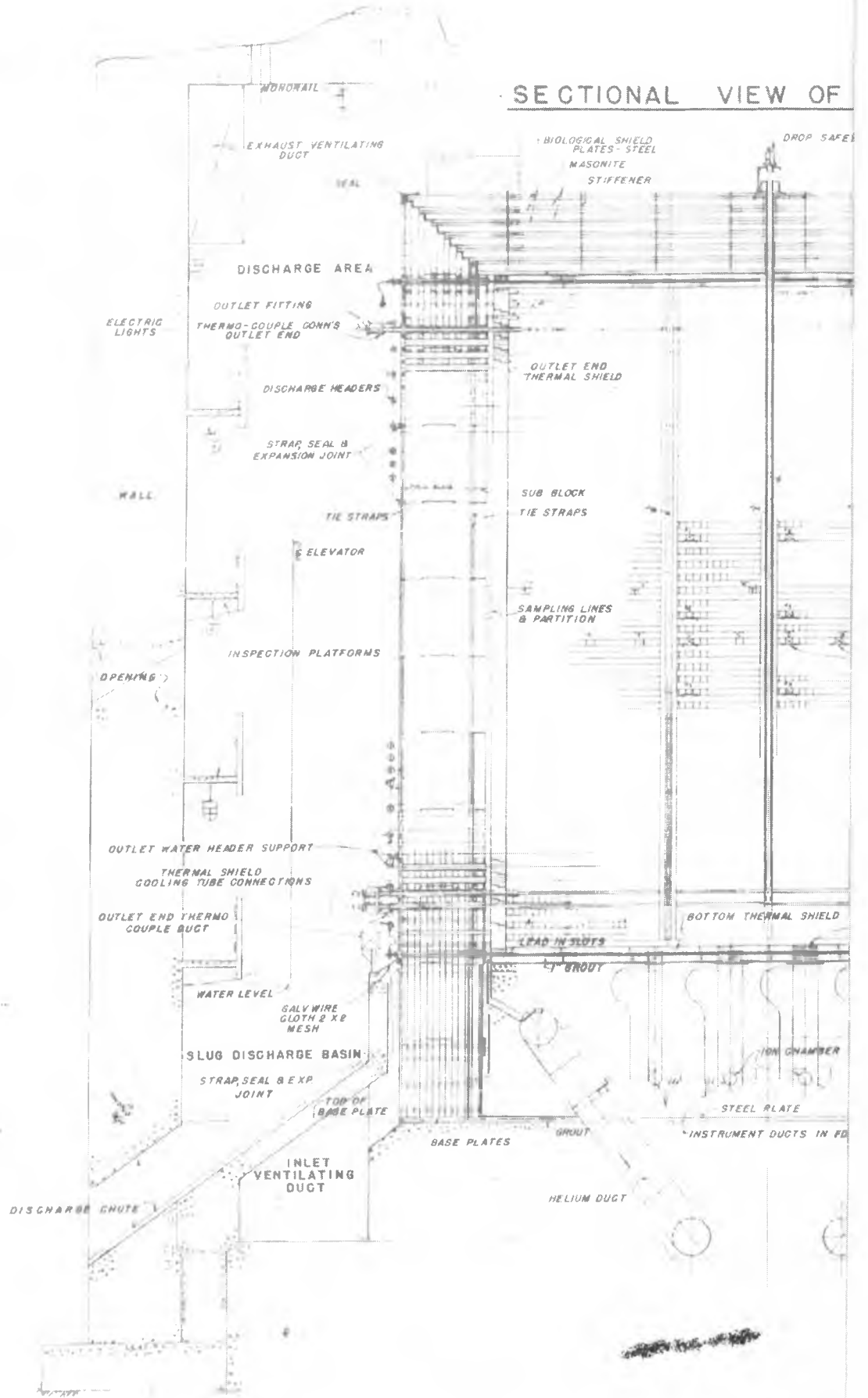


H-M-B-821-1

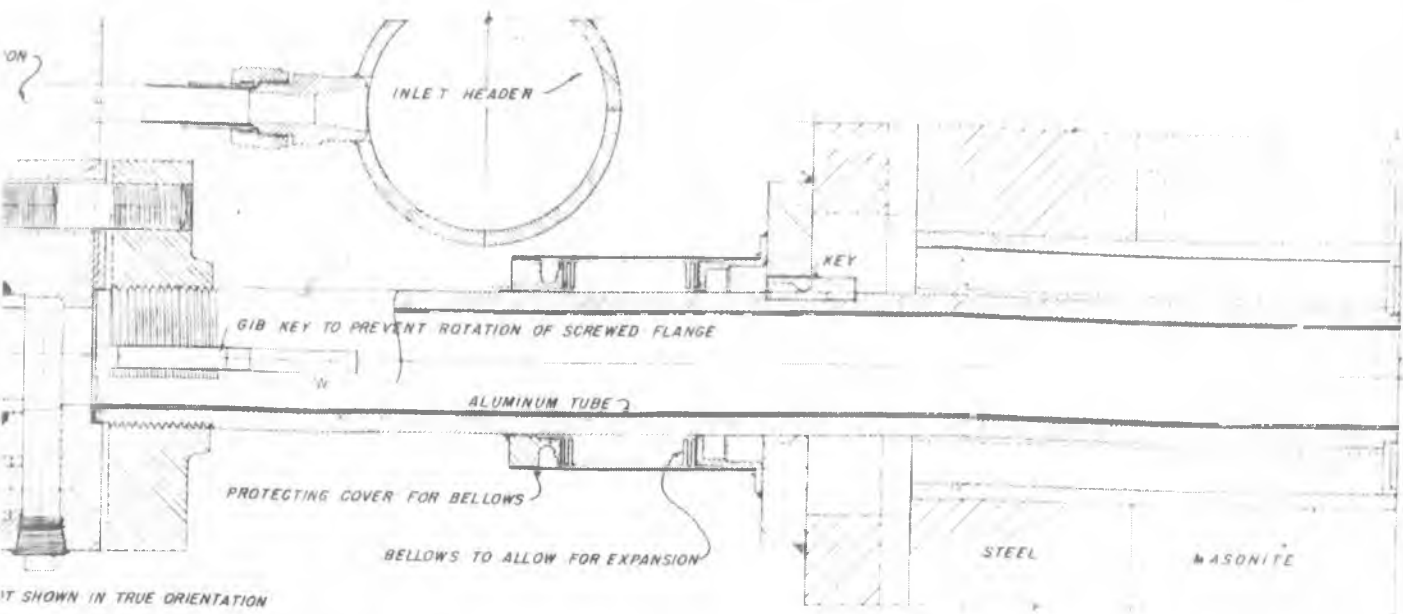
A31



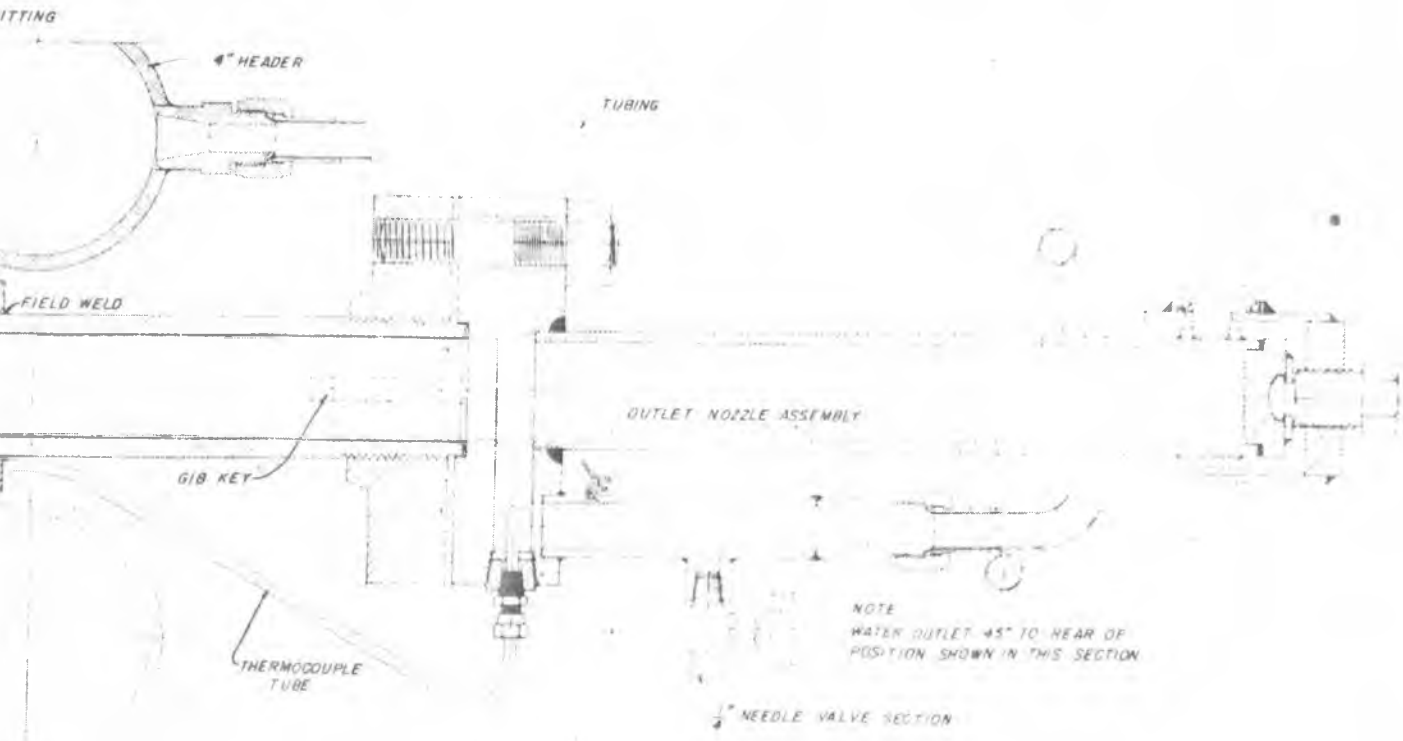
SECTIONAL VIEW OF



OUTLET WATER FITTINGS



INLET TUBE SECTION

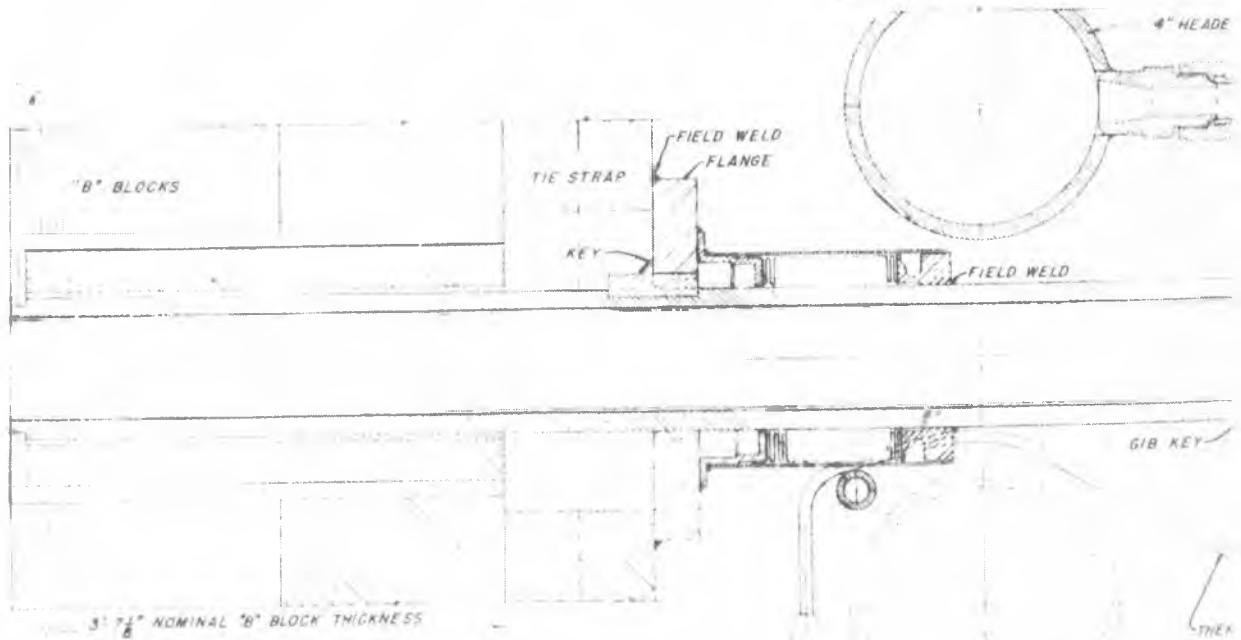
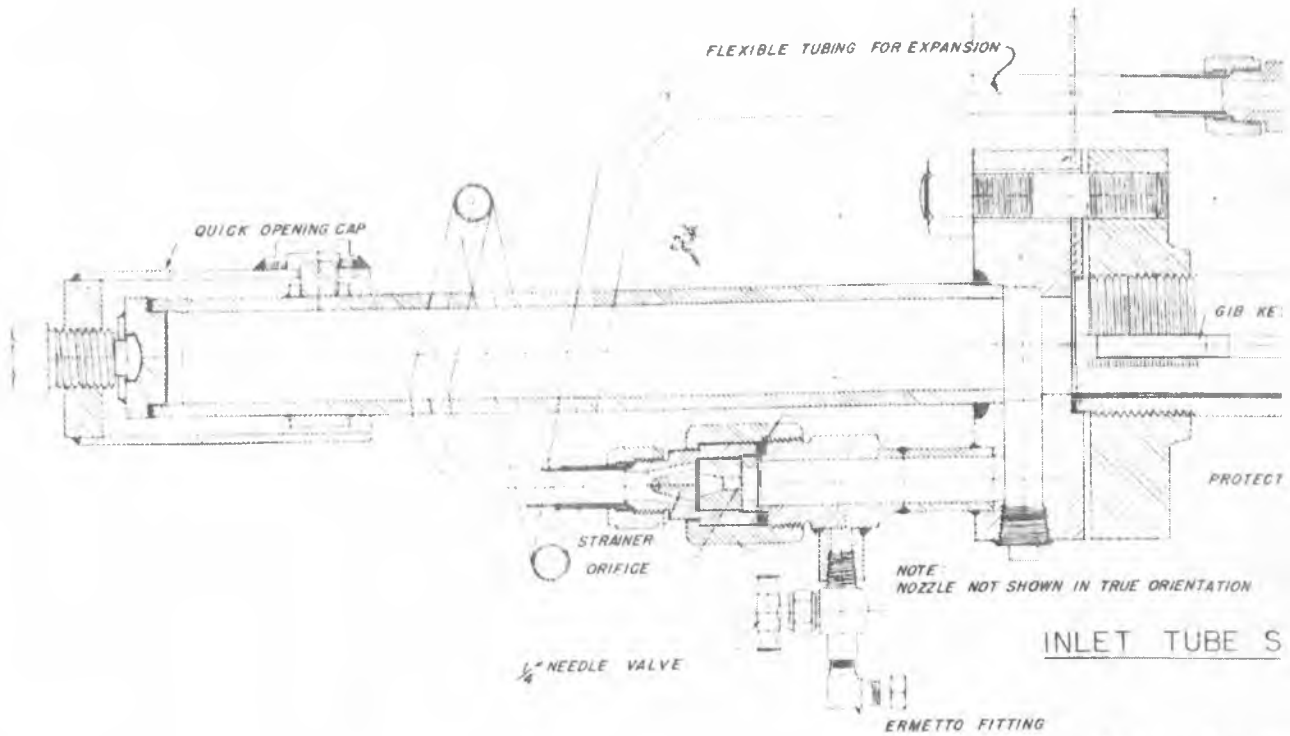


OUTLET TUBE SECTION

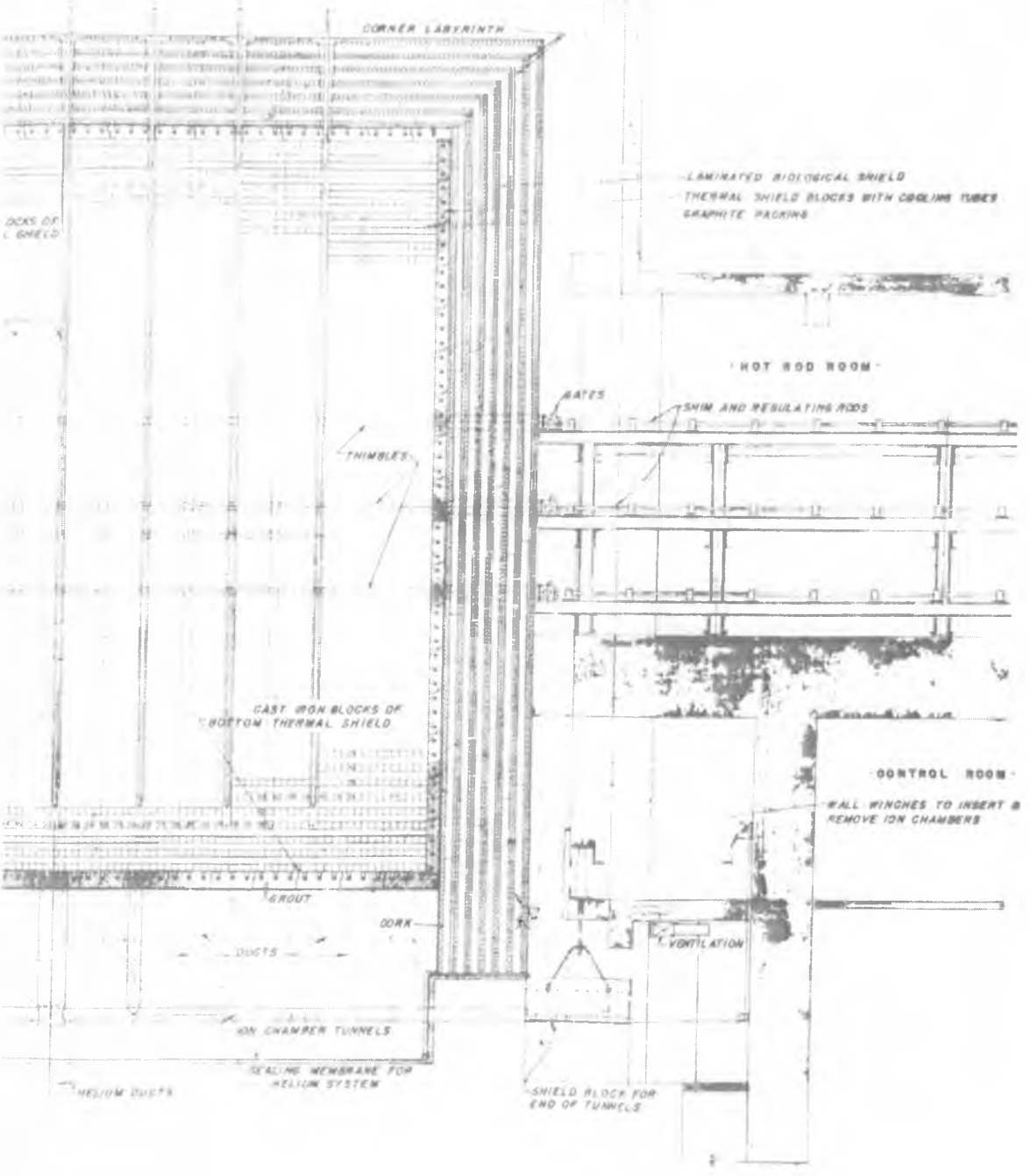
A32

H-M-B-509-2

INLET AND OUTLET WATER

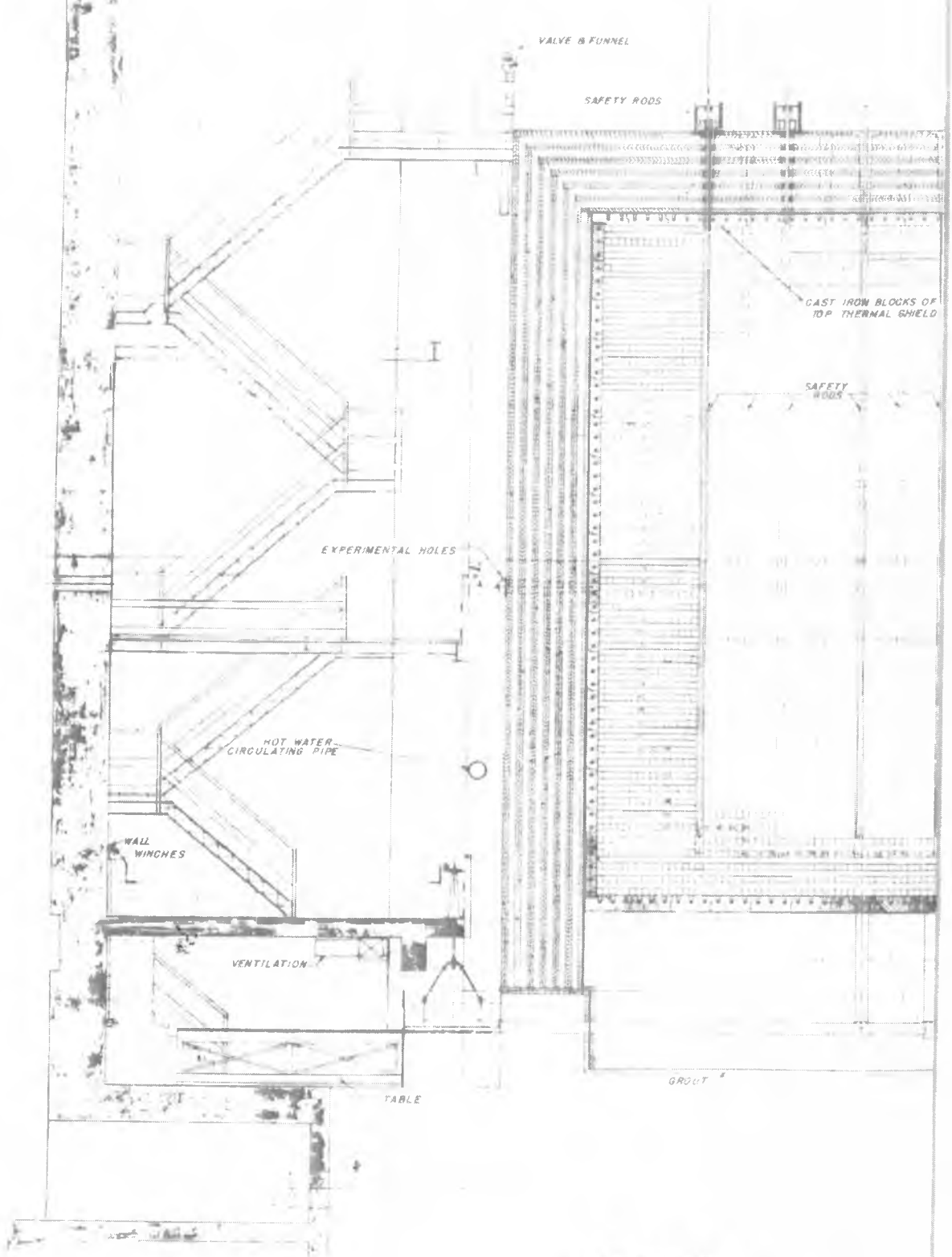


EW OF PILE FROM
GE END



~~XXXXXXXXXX~~
H-M-B-820-1
A33

SECTIONAL VIEW OF
DISCHARGE



VALVE & FUNNEL

SAFETY RODS

CAST IRON BLOCKS OF
TOP THERMAL SHIELD

SAFETY
WOODS

EXPERIMENTAL HOLES

HOT WATER
CIRCULATING PIPE

WALL
WINCHES

VENTILATION

TABLE

GROUT

APPENDIX A 34

AERIAL VIEW OF HANFORD CAMP



APPENDIX A 36

AERIAL VIEW OF MEN'S AND WOMEN'S BARRACKS

The men's barrack units at the left of the photograph were "H"-shaped with four separate wings, one utility room, and four shower rooms (one shower room for each individual wing). The shower rooms and utility room formed the cross-bar of the "H."

The physical measurements for a single wing were 192' long by 30' wide, having one hall, 5' wide, running the entire length and a hall at one end connecting with the attached shower and utility room. The over-all dimensions of a barrack unit were 334' long by 110' wide. Every barrack unit included four separate shower rooms, one designated for each of the wings. Physical dimensions of the shower rooms were 35' long by 14' wide and standard equipment included six lavatories, five showers, five toilets, and three urinals.

The women's barrack units at the right of the photograph were "H"-shaped with two separate wings ("A" and "B") having the same number of rooms and identical layout. The washroom, one for both wings, formed the cross-bar of the "H" and had a laundry room attached to one end and a utility heater room to the other. Physical over-all measurements for a women's barrack unit were 147' long by 111' wide. A single wing measured 147' long by 30' wide, with a hall 5' wide extending the entire length and connecting, approximately at the center of the wing, to another hall forming a "T" which led into the attached washroom. Two doors, one at each end of the main corridor, opened to the outside.

In the foreground are the Administration Building on the left and the Hospital on the right.



APPENDIX A 36

AERIAL VIEW OF HUTMENTS

This view shows a portion of Hutments erected (foreground) with the single units at the extreme left and the double units occupying the space to the right. In the background are the mess barracks and these extend to the right of the photograph.

Hutments were erected in blocks of twenty 40-foot units, each housing 11 men; single units (40' by 16') bordered the outside row of bathhouses (nearest the main thoroughfares) and double units (80' by 16') between each row of bathhouses. Huts were spaced twenty feet apart, ten to a row with rows forty feet apart. Each bathhouse served the ten adjacent units on the north side and ten adjacent units on the south side.

The "Temperate Design" of the "Pacific" hut was selected, as the local semi-desert climate did not require the heavier-insulated type. These huts were semi-cylindrical in shape, having self-supporting side walls and roofs made up of four-foot wall sections bolted together. A single hut had one door and two windows at each end, as well as two windows on each side. A double hut had one door at each end but had four windows on each side. Wooden louver transoms were built over all outside doors.

The physical measurements, general layout and design of hutment bathhouses were the same as those of the combined shower and utility room provided for a single barrack, with a few minor revisions. A bathhouse served 440 men. Two janitor's closets, each 4' 6" by 4' 6", for the storage of supplies were installed in opposite shower rooms; and the size of the janitor's closet in the utility room was increased to 10' 4" by 5' 4". Vestibules (4' 4" by 4' 8") were constructed at the outside entrance to each shower room.



APPENDIX A 37

AERIAL VIEW OF HANFORD TRAILER CAMP



P 6148

APPENDIX A 38

TYPICAL TRAILER CANOPY



TYPICAL TRAILER CAMP BATHHOUSE

A total of 139 bathhouses of similar design were constructed for the use of the entire trailer population. All but two of these were built in the white trailer camps. Bathhouses were erected in the center of lots measuring 52' wide by 30' deep and in rows with a separate row to every other section. A single bathhouse served an average of twenty-six families and the physical measurements were 30' wide by 34' long containing men's and women's shower and toilet rooms, laundry room, utility room, janitor's closet and hallways. Bathhouses were always oriented with the laundry rooms opposite the clothes drying lots for convenience. Men's and women's shower rooms had approximately the same floor area, and each was fitted with four showers and three lavatories in addition to four water closets and a urinal in the men's rooms and three water closets in the women's rooms.

All bathhouses were equipped with 2 $\frac{1}{2}$ -gallon soda acid fire extinguishers conveniently located on the street side of the bathhouse wall. These extinguishers were for emergency use and supplemented the underground fire system which covered each camp.



APPENDIX A 40

TYPICAL TRAILER CAMP PLAYGROUND

A total of 39 lots was set aside in the seven trailer camp areas for children's playgrounds in addition to the two larger parks and playgrounds located at the northeast and northwest corners of the main trailer camp area. Of this total, one was located at the west end of the colored trailer camp and four in Trailer Camp No. 6. Playground lots were surrounded by wooden picket fences, and contained swings, sandboxes, and teeter-totter boards.



TYPICAL MESS HALL

Eight mess halls were constructed at central locations in the Hanford Camp Area, and were generally identical in size, shape, and construction except Mess Hall #1 which had a 48' lean-to extension on the east end of the building to house the main offices of the Olympic Commissary Company. A typical mess hall was 176' wide by 270' long (over-all), with each dining room being approximately 120' wide by 160' long and the kitchen portion being 40' wide by 120' long.

Mess halls were one-story, wood frame structures, rectangular-shaped with two dining rooms, one to each side of the central kitchen portion. Each mess hall originally was designed to feed 4000 people (requiring two complete settings); later enlargements increased the seating capacity and numerous revisions were made to improve the operating efficiency. At the completion of the changes, an average mess hall seated approximately 2600.



APPENDIX A 42

LAUNDRY, PRESSING, GARMENT ALTERATIONS
and LADIES READY-TO-WEAR SHOP



D-3325

APPENDIX A 43

WESTERN UNION OFFICE



APPENDIX A 44

MEN'S CLOTHING STORE



APPENDIX A 45

OPTOMETRIST SHOP



APPENDIX A 46

JEWELRY SHOP



APPENDIX A 47

SEARS ROEBUCK STORE



APPENDIX A 48

SHOE REPAIR SHOP

SHOE REPAIR

PREVENT
CIVIL DISOBEDIENCE
FIRE

• HOURS •
MON AM 12:30-5:00
TUE PM 1:30-5:00 PM
WED PM 1:30-5:00 PM

D-229
11-8-43



APPENDIX A 49

HANFORD GARAGE



16

APPENDIX A 50

COMBINED STORES BUILDING (GROUP NO. 2)

Two one-story, wood frame, T-shaped shed-type structures were erected in the Camp Area for the purpose of housing jointly more than one commercial facility. The original, or No. 1, unit was constructed on the Hanford Shopping Circle and housed a Drug Store, Barber Shop, Beauty Parlor, and a Notary Public Office. (At one time Western Union occupied the latter office space.) A second, or No. 2, unit was constructed on the southwest corner of "C" Avenue and Fourth Street East to serve the workers living in that area, and housed a Drug Store, Barber Shop, and Beauty Parlor. These buildings were identical in size, shape, and type of construction except for the 30' extension which was later added to the end of the storeroom in order to provide more storage space for drug store supplies at unit No. 1. The storage room comprised the leg of the "T", and was situated directly behind the drug stores and also contained a 3-room apartment and bath in both units. A 3-room apartment and bath was provided in the rear of the beauty parlor in the No. 1 unit only. These apartments were provided as living quarters for the commercial operators. A soda fountain was installed along the front wall in Drug Store No. 1 only. The fountain equipment was furnished by the concessionaire.

Listed below are the floor areas allocated to the use of the commercial facilities located in the respective units:

<u>Commercial Facilities</u>	<u>Combined Stores No. 1</u>	<u>Combined Stores No. 2</u>
Drug Store	40' x 90'	40' x 90'
Beauty Parlor	31' x 40' *	32' x 40'
Barber Shop	16' x 40' (6 chairs)	32' x 40' (12 chairs)
Notary Public Office	18' x 35'	-----
Storage	40' x 75' *	40' x 45' *

* Includes 3-room and bath apartments.



APPENDIX A 51

SERVICE STATIONS



APPENDIX A 52

HANFORD BANK



D 2298

APPENDIX A 53

HANFORD THEATER



APPENDIX A 54

VALLEY THEATER



COMMISSARY BUILDING (No. 4)

Four large, wood frame, flat roof, buildings were erected at central locations in the Hanford Area. These buildings were known as Commissary No. 1 (White Men's Recreational Hall), Commissary No. 2 (Colored Recreational Hall), Commissary No. 3 (Women's Refreshment Center), and Commissary No. 4 (White Tavern).

Commissary No. 1. - This building was a one-story, wood frame, "U"-shaped structure having an overall dimension of 192' wide by 352' long. Commissary No. 1 had 50 rooms containing the following recreational facilities; pool and billiard parlor, beer parlor, card and pin ball machine room, sandwich bar, soda fountain and ice cream parlor, barber shop, canteen bar for the sale of tobacco, magazines, notions, candy, etc., and public telephone booths.

Commissary No. 2. * This building was a tavern for the colored population, and measured 192' long by 112' wide with a seating capacity of 508 patrons. It had sixteen rooms and served primarily as a canteen.

Commissary No. 3. - This building known as the White Women's Refreshment Center, is a one-story, wood frame building measuring 128' by 144'. One half consisted of a tavern, and the other half a soda fountain and "snack" bar.

Commissary No. 4. - This unit consisted principally of a tavern with a seating capacity of 530 persons and was constructed on the southeast corner of Fifth Street and "C" Avenue. This building was nearly the same size and arrangement as Commissary No. 2.

D-3264



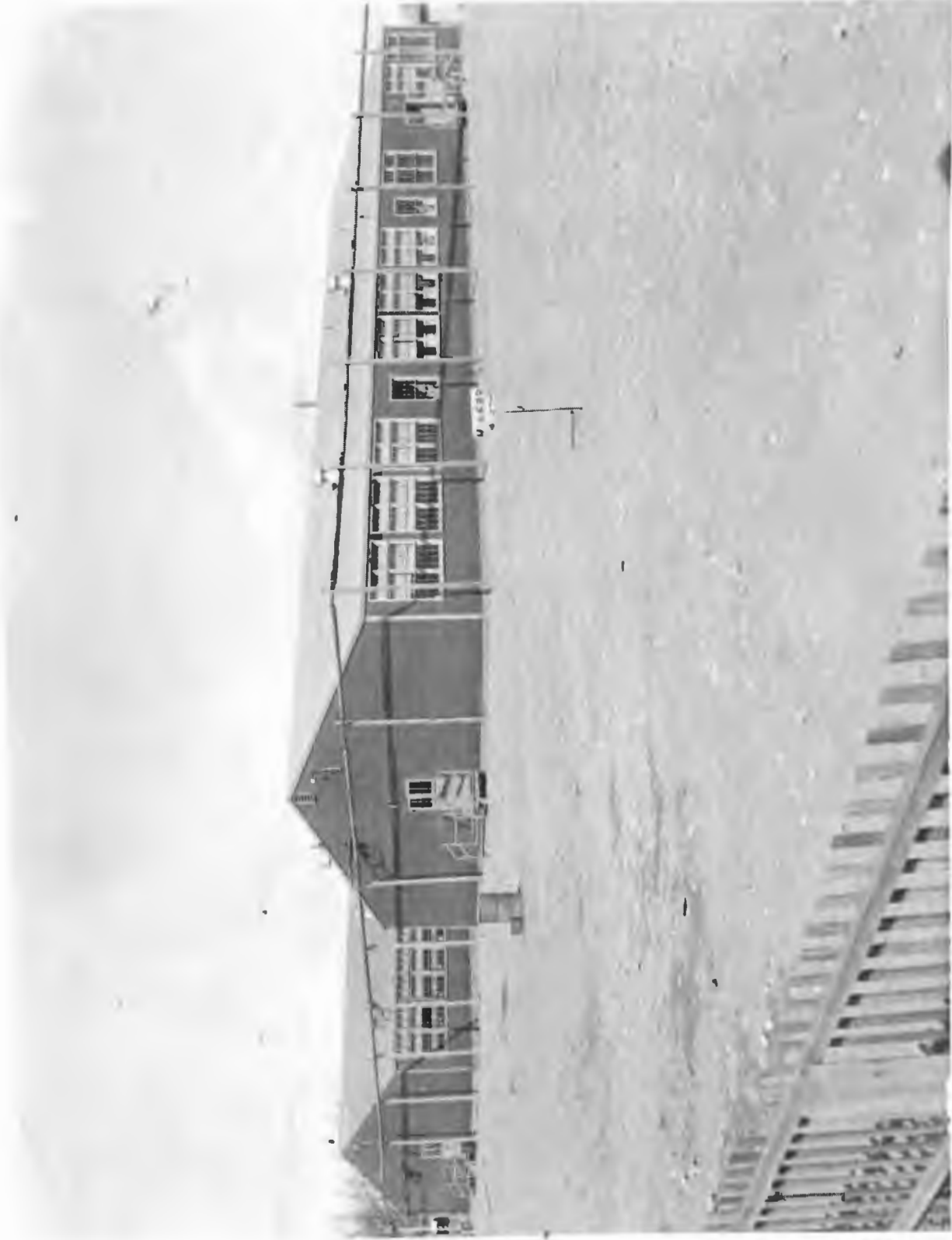
APPENDIX A 56

AUDITORIUM and GYMNASIUM



APPENDIX A 57

HANFORD GRADE SCHOOL



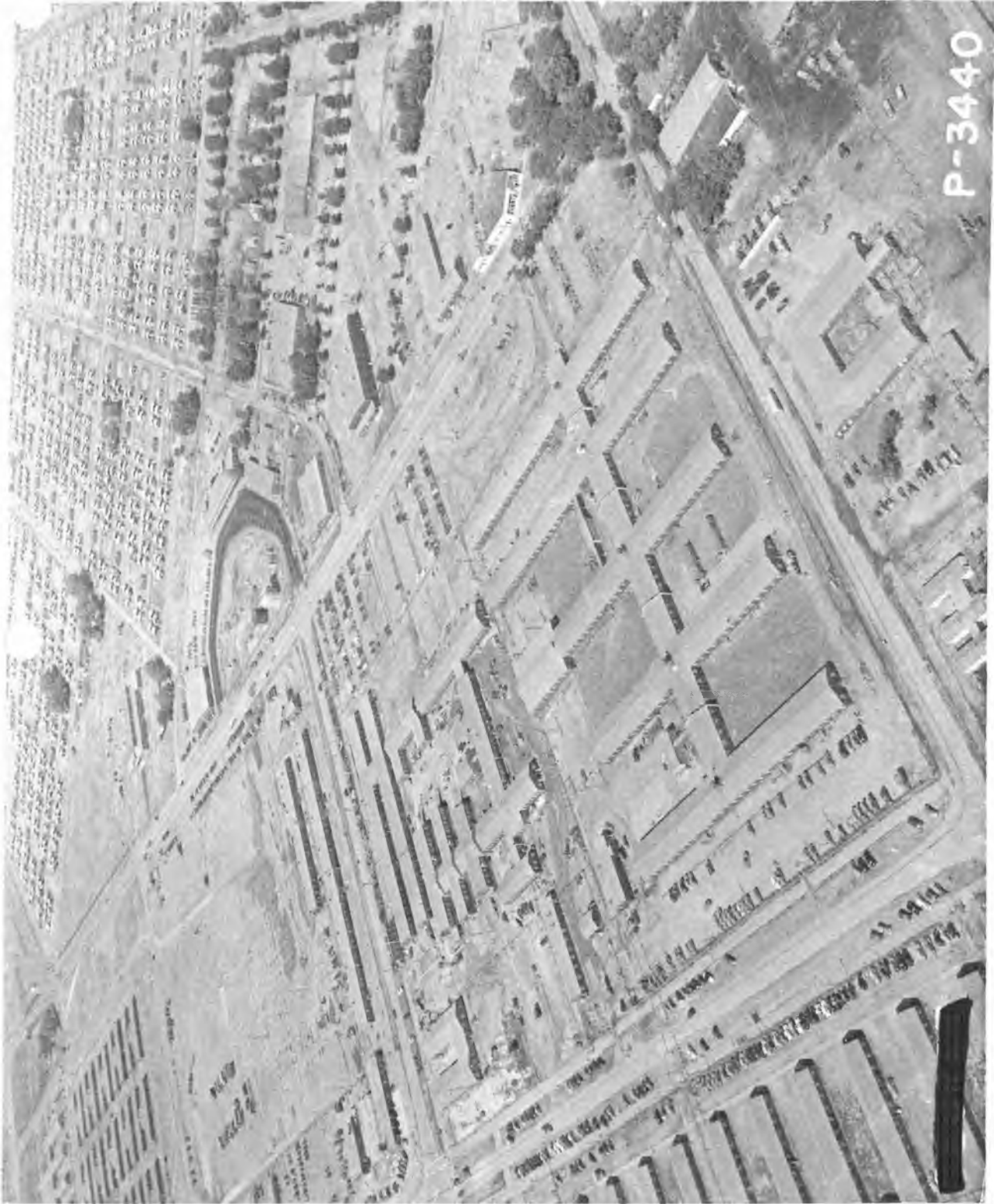
APPENDIX A 58

HANFORD DAY NURSERY



APPENDIX A 59

HANFORD ADMINISTRATION BUILDING (FOREGROUND)
AND HOSPITAL (CENTER)



P-3440

APPENDIX A 60

PUBLIC HEALTH AND INFIRMARY BUILDING



APPENDIX A 61

UNITED PROTESTANT CHURCH



APPENDIX A 62

CATHOLIC CHURCH TEST



APIENDIX A 63

FIRE STATION



APPENDIX A 64

PATROL HEADQUARTERS



APPENDIX A 65

HANFORD LIBRARY



APPENDIX A 66

AERIAL VIEW OF 3000 AREA



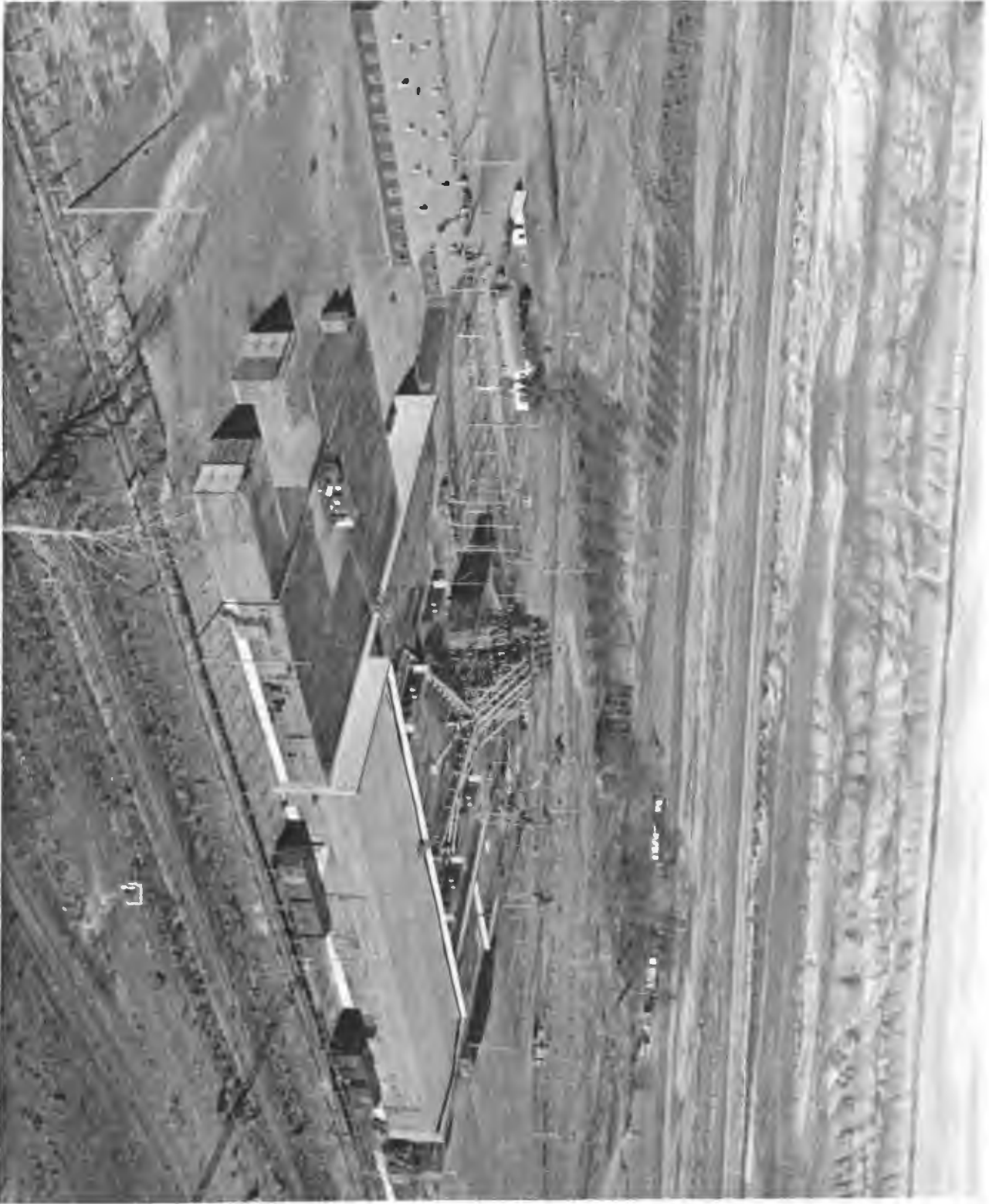
APPENDIX A 67

CENTRAL SHOPS



APPENDIX A 68

GRAPHITE SHOP



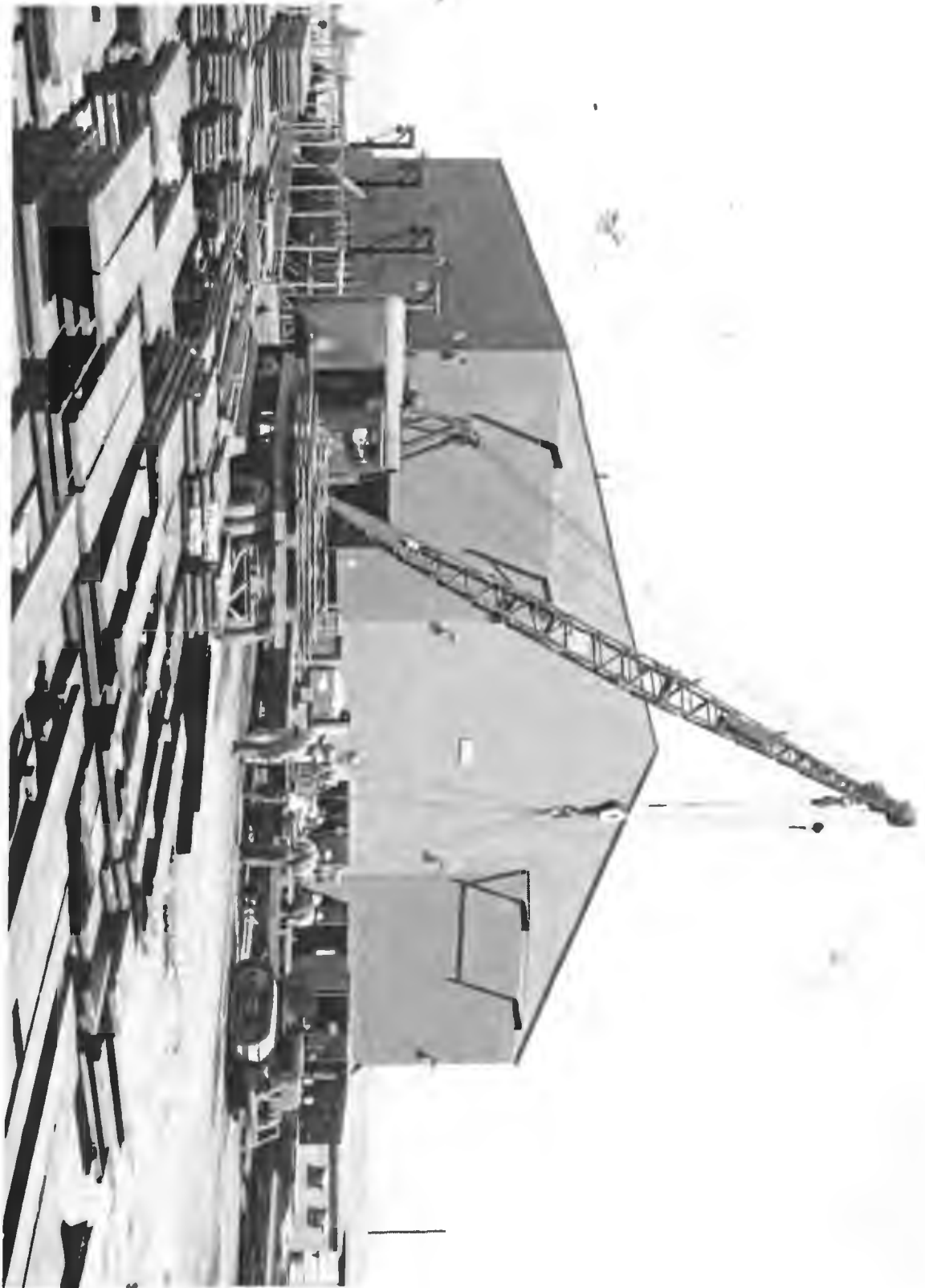
APPENDIX A 69

WHITE-BLUFFS CONCRETE PIPE SHOP



APPENDIX A 70

WHITE-BLUFFS FABRICATION SHOP



APPENDIX A 71

CONCRETE PLANS



APPENDIX A 72

AGGREGATE PLANT (HAVEN)



APPENDIX A 73

HANFORD BITUMINOUS WALK



APPENDIX A 74

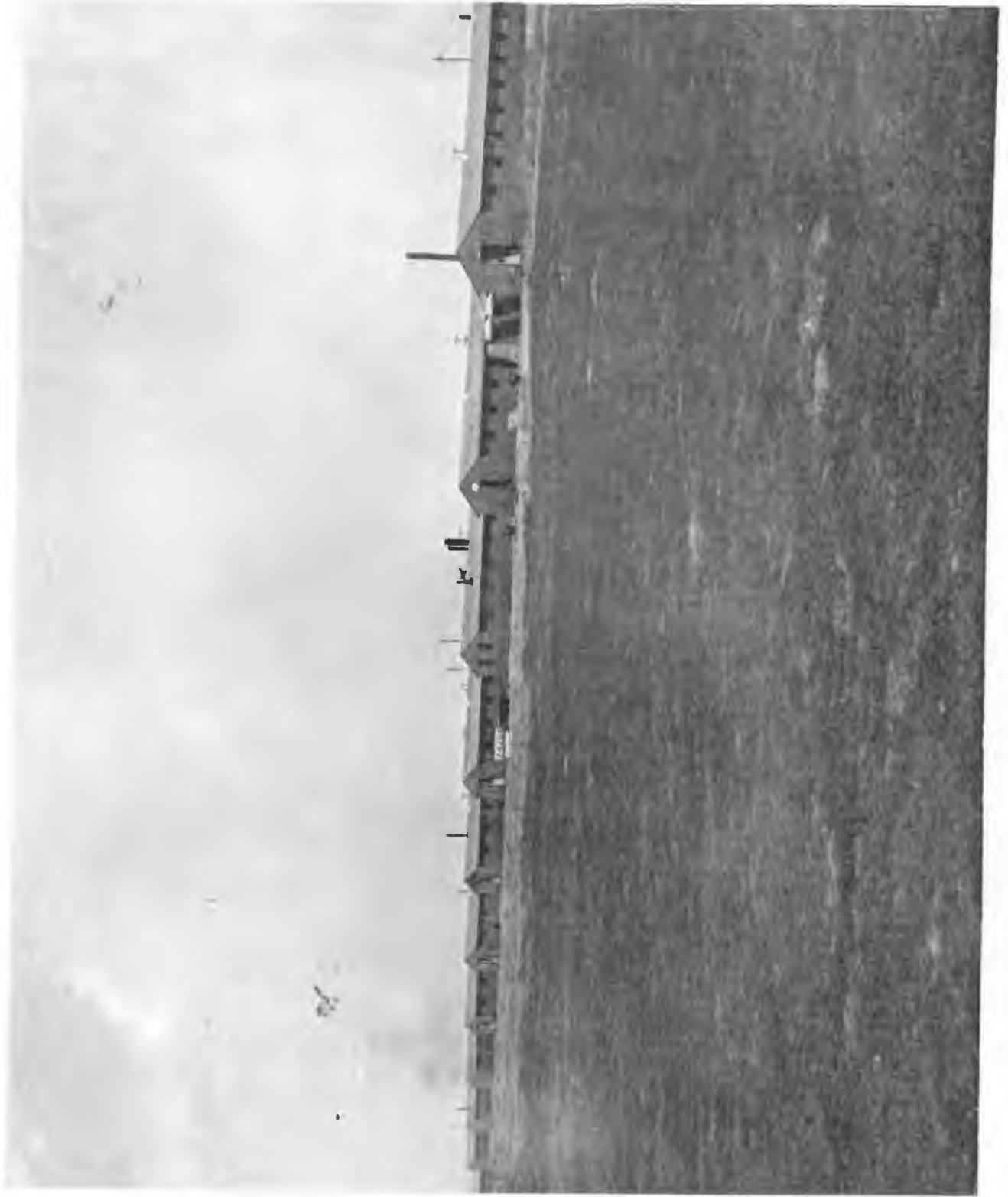
RIVERLAND YARDS



P 8017

APPENDIX A 75

LITTLE PASCO CAMP



APPENDIX A 76

FAMILY TYPE (TRACT) HOUSE



APPENDIX A 77

BACHELOR QUARTERS (TRACT HOUSE)



APPENDIX A 78

HANFORD AIRPORT

HANFORD AIRPORT



APPENDIX A 79

METAL FABRICATION AND TESTING (300) AREA



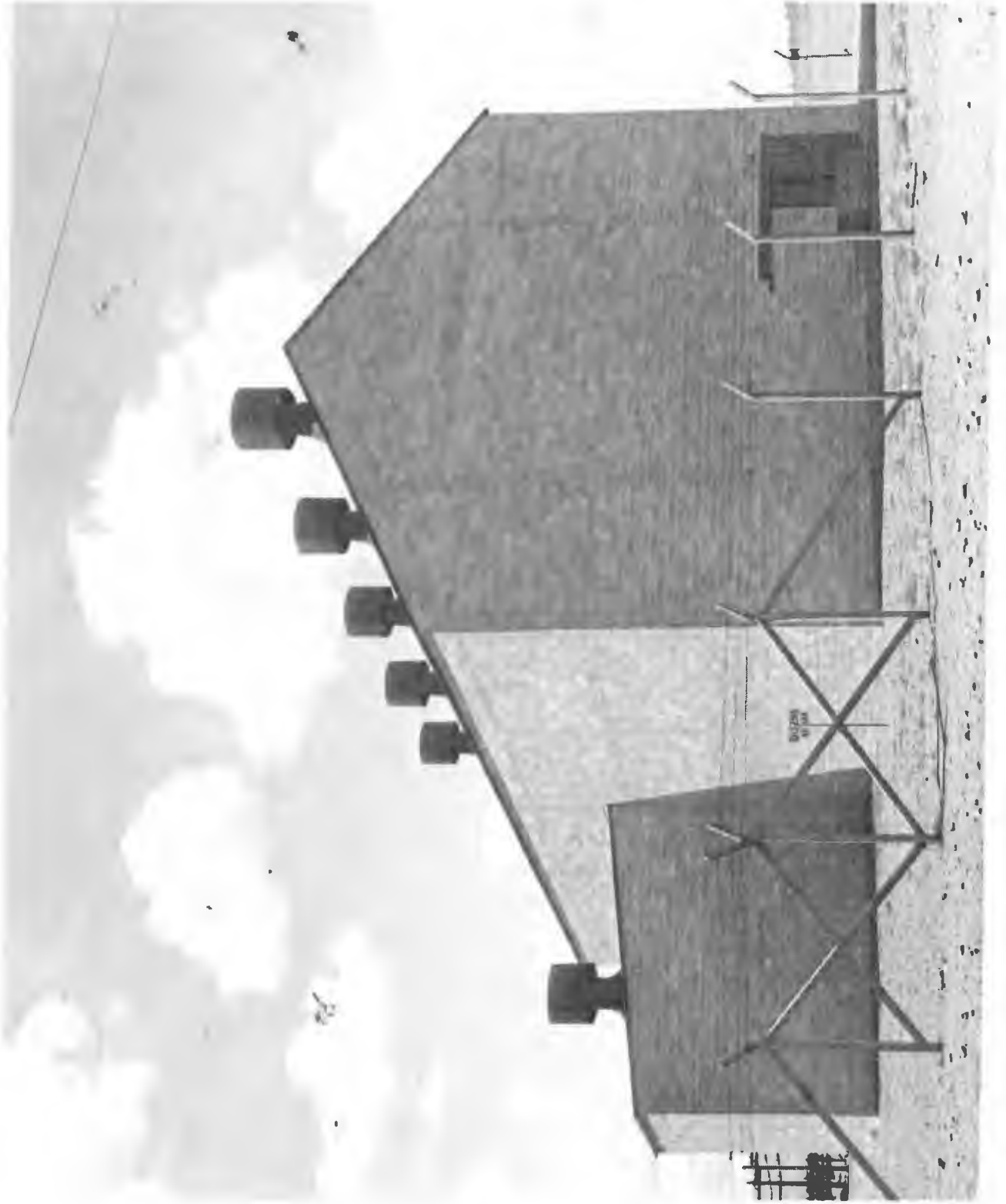
APPENDIX A 80

PILE BUILDING (305)

This building is located in the northwest corner of the 300 Area, and consists principally of a large oblong, steel-framed, concrete block, gable-roofed structure. The main axis of the building is on an east-west line. At the west end of the main structure are two small storage rooms spanning the width of the building, with a fan room above. Along the south side of the building at the west end are an Instrument Room, Supervisors' Office, Locker and Toilet Room, General Storage Room, and an Apparatus Room.

The building is steel-framed throughout; walls are of 8" concrete block construction on the outside and 4" between rooms. The roof consists of two-ply, 44# and one-ply 15# felt applied with hot asphalt on a pre-cast tile deck. The air entering the building is washed and circulated, and a pressure of approximately 1" of water is maintained. The Instrument Room itself is air-conditioned and the air-conditioning equipment is contained in the General Storage Room. There are five 36" ventilators on the roof of the main structure, one 30" ventilator on the roof of the Equipment Room, and two 30" ventilators on the roofs of the Storage Rooms. There are no outside windows in the building and all outside doors except two pedestrian doors are 8' square, metal-sheathed sliding doors. Floors of the building are of 8" reinforced concrete throughout, set on concrete wall foundations and concrete piers with spread footings.

This building is approximately 163' long by 87' wide by 51' in height. It has an area of 7,000 square feet, and a displacement volume of 247,000 cubic feet.



APPENDIX A 81

METAL FABRICATION BUILDING (313)

One Metal Fabrication Building was provided for the 300 Area. This one-story, thick-set, T-shaped structure is located in the center of the area approximately 100 feet east of Building 314. In the central portion, the building contains space for numerous electric furnaces and metal presses, Canning Process #1, Canning Process #2, recovery process, a welding area, a car washing area, a can washing area, two offices, and a toilet. The protruding western portion of the building contains a control room, a toolroom and shop, a storeroom, a women's rest room and toilet. The protruding eastern portion of the building houses Canning Process #3.

This structure consists of a 4" reinforced concrete slab floor supported on reinforced concrete foundation, structural steel framing, concrete block walls and a precast concrete slab roof with tar and gravel surface. The interior partitions are of concrete block and concrete brick.

The over-all dimensions of this building are $199\frac{1}{2}'$ x $186\frac{1}{2}'$ x 20'. The cross-sectional area is 35,020 square feet, and the displacement volume is 609,700 cubic feet.



PRESS BUILDING (S1A)

One Press Building was provided for the 300 Area. This one-story, gable roof building is located in the center of the area approximately 150' east of the S1B Building. This building is rectangular in shape with the long axis running east and west. A wing is located along the north side of the building at the east end. The structure has a reinforced concrete floor supported on reinforced concrete foundation walls and piers, structural steel framework, concrete block walls and corrugated asbestos roof. A 36" continuous roof ventilator with operable dampers extends along the gable roof for almost the entire length of the building. At the east end of the building is located an sublevel platform. Four unit heaters with air-intake openings are located, one at either end and two along the south side of the structure.

The over-all dimensions of this building are 190' x 80' x 40', and the cross-sectional area is 14,842 square feet. The displacement volume is 598,560 cubic feet.

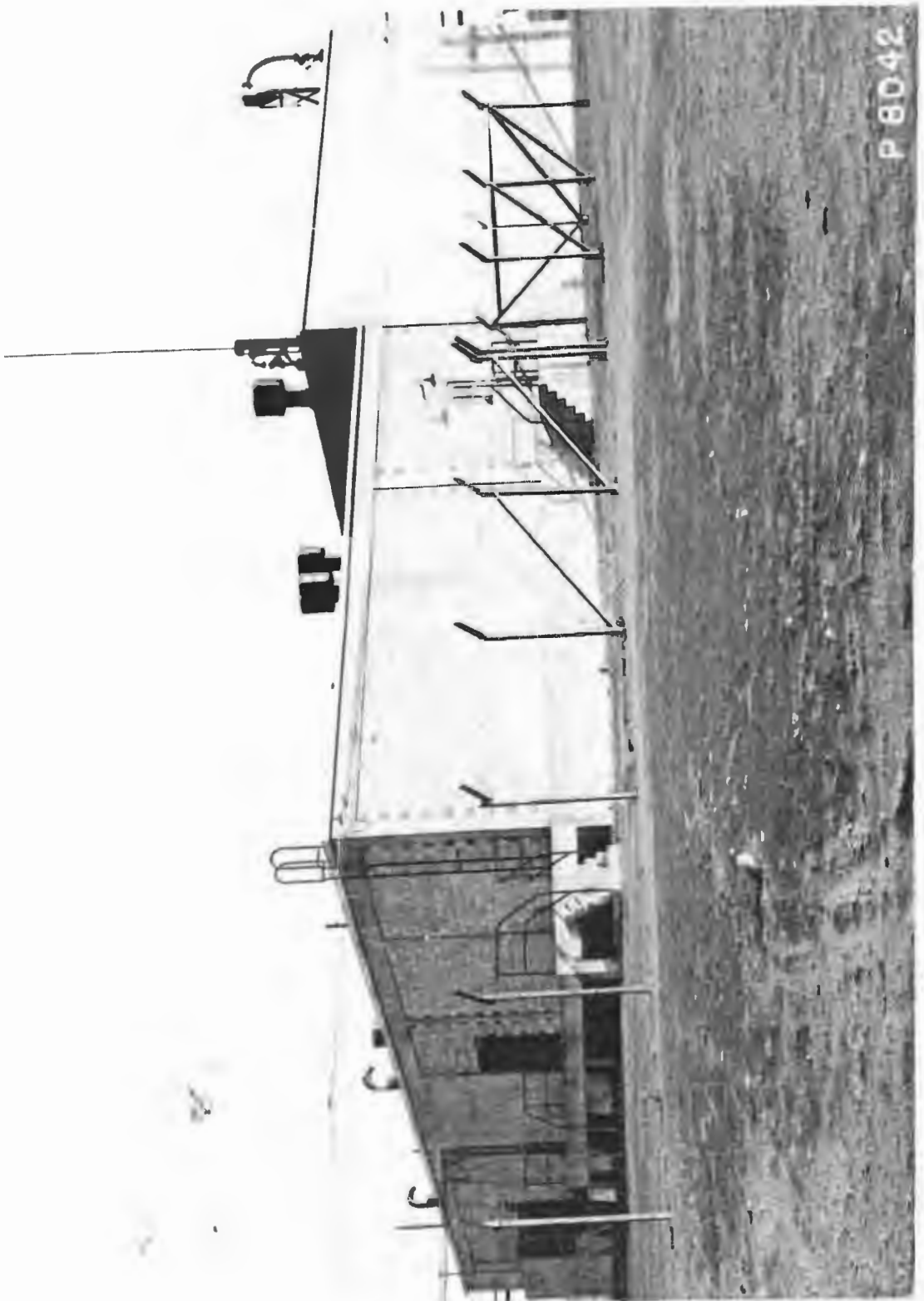


SEPARATION BUILDING (321)

One Separation Building was constructed in the south portion of the 300 Area approximately 100 feet south of the 3706 Building. It is a two-story partially below grade, reinforced concrete frame, windowless structure, with concrete and concrete block exterior and interior walls. This building contains 14 rooms, not including stairwells and closets. The building foundations are composed of reinforced concrete walls with spread footings and support reinforced concrete slab floors varying from 4" to 12" in thickness.

The south half of the structure is one-story high, having outside walls of concrete 1' in thickness. This section of the building contains a 12' below ground level cell area which extends the entire width of the building and contains numerous tanks or cells. A Mezzanine floor runs along the south wall of this building on which are mounted gauge boards and weight tanks. The north half of the structure contains on the below ground level floor, a large chemical storage room in the northwest half, a process air conditioning, heating, and ventilating equipment room in the northeast half, with #1 sample room in the northeast corner. At this level a pipe gallery runs the entire width of the building between the cell area on the south and the equipment and chemical storage area on the north. A large chemical preparation room is located on the second floor above the chemical storage room. This area also contains on this floor, an office, large locker room with toilet, cleaning room, receiving room, lunch room, laboratory, and sample room #2.

The overall dimensions of this building are 122' x 87½' x 33'. The cross-sectional area is 10,675 square feet, and the displacement volume is 323,300 cubic feet.



P 8042



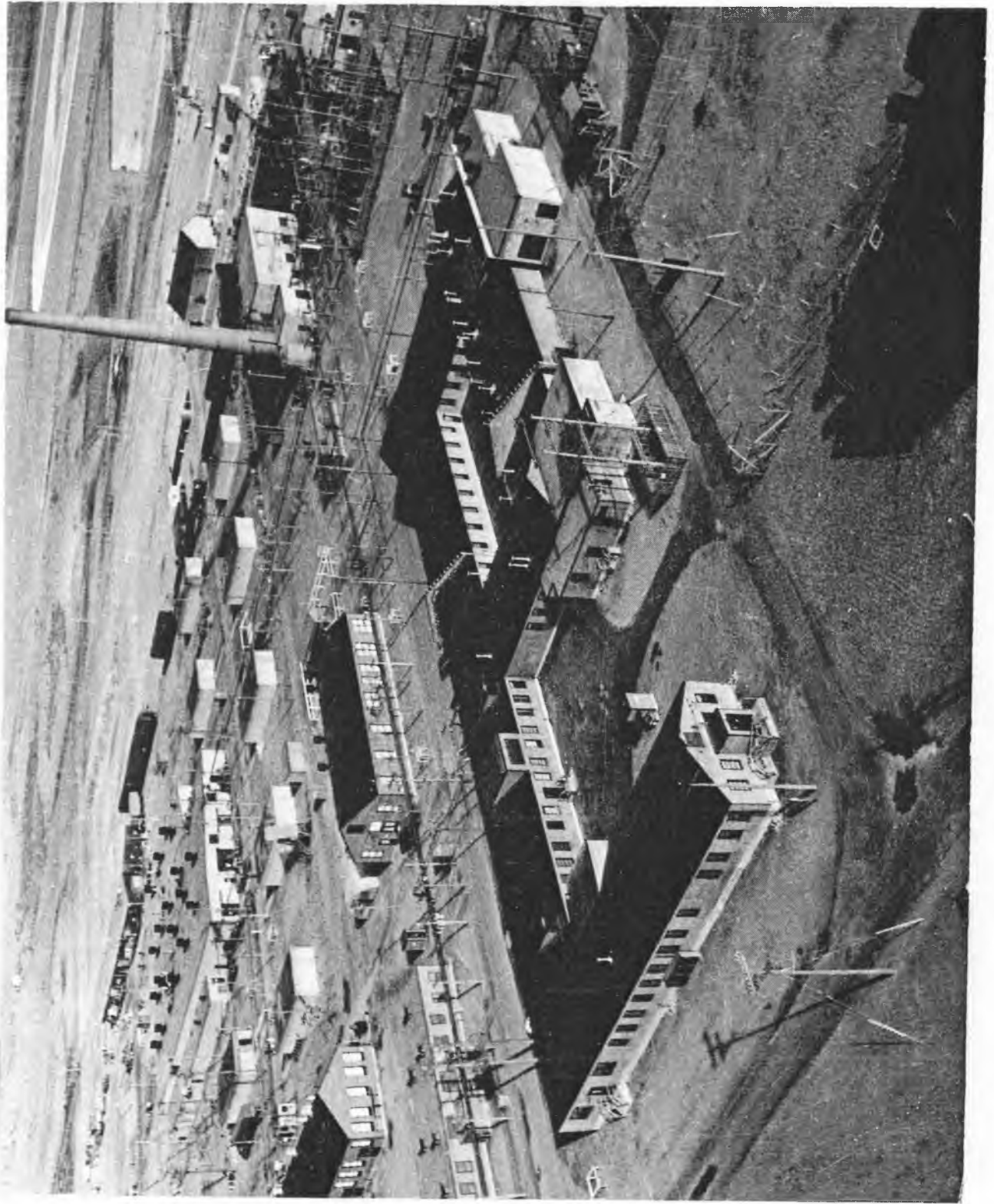
APPENDIX A 84

LABORATORY (3706)

One Laboratory was provided for the 300 Area. The Laboratory is a large, one-story building, roughly rectangular in shape with a center court at one end and an open court at the other end. It is located in the south-central portion of the area just south of the main gate road, with its long axis running east and west. At the extreme right of the photograph is the Air Conditioning Equipment Building which is in the shape of a thick-set "L" and contains the air conditioning equipment for the Laboratory.

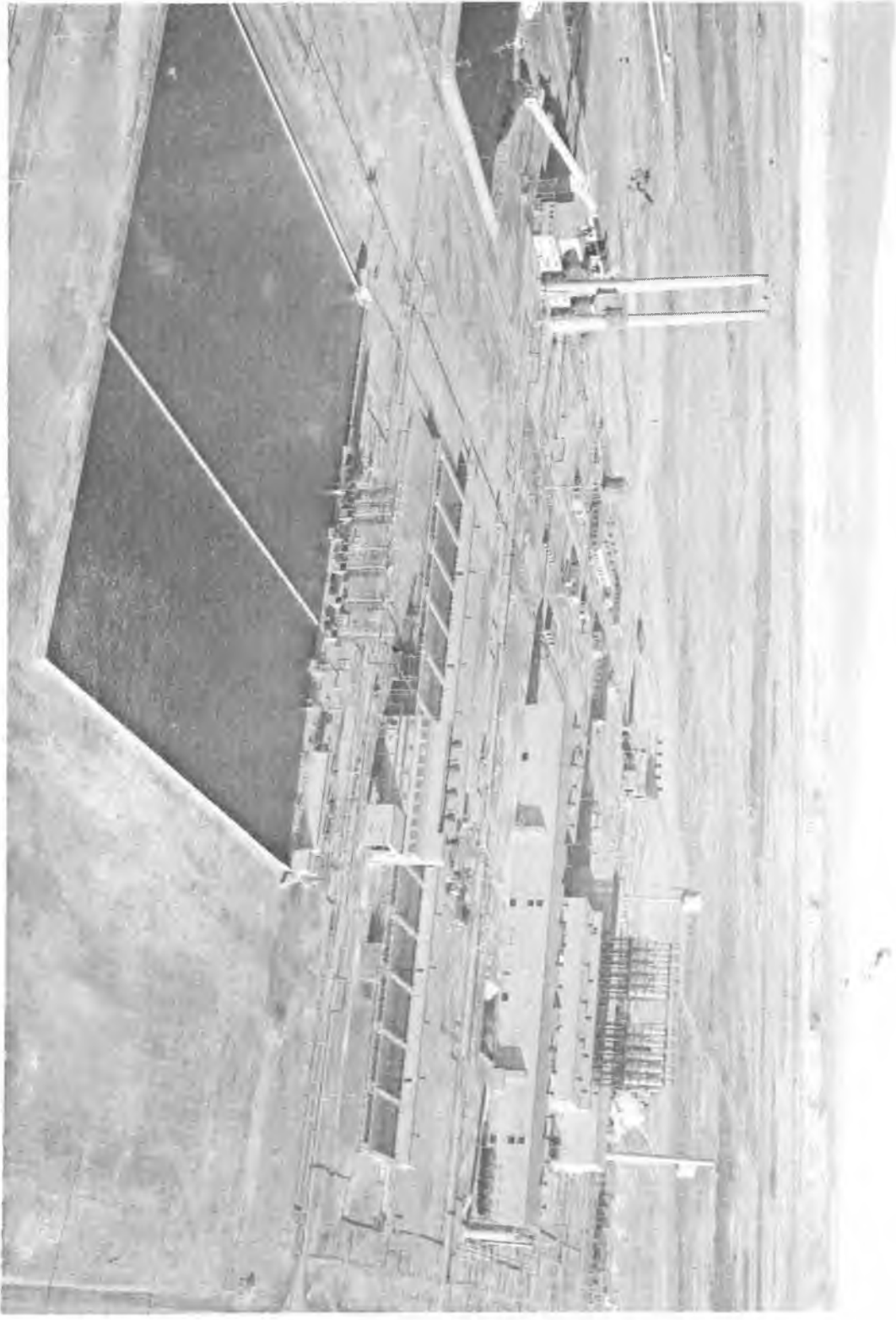
The Laboratory contains 90 rooms with central corridors. There are 57 laboratories, 19 offices, 4 toilets, 2 rest rooms, 2 store-rooms, 2 shops, lunch room, locker room, dark room, and ventilating equipment room. Along the south side of the structure, near the center, is located a large laboratory of concrete. It has seven ventilating systems which provide air conditioning, ventilation and laboratory exhaust facilities for the numerous rooms and laboratories.

The over-all dimensions of this building are $327\frac{1}{2}'$ x $140'$ x $22'$, the cross-sectional area is 30,100 square feet, and the displacement volume is 511,700 cubic feet.



APPENDIX A 85

AERIAL VIEW OF PILE (100 D) AREA



APPENDIX A 86

RIVER PUMP HOUSE (181)

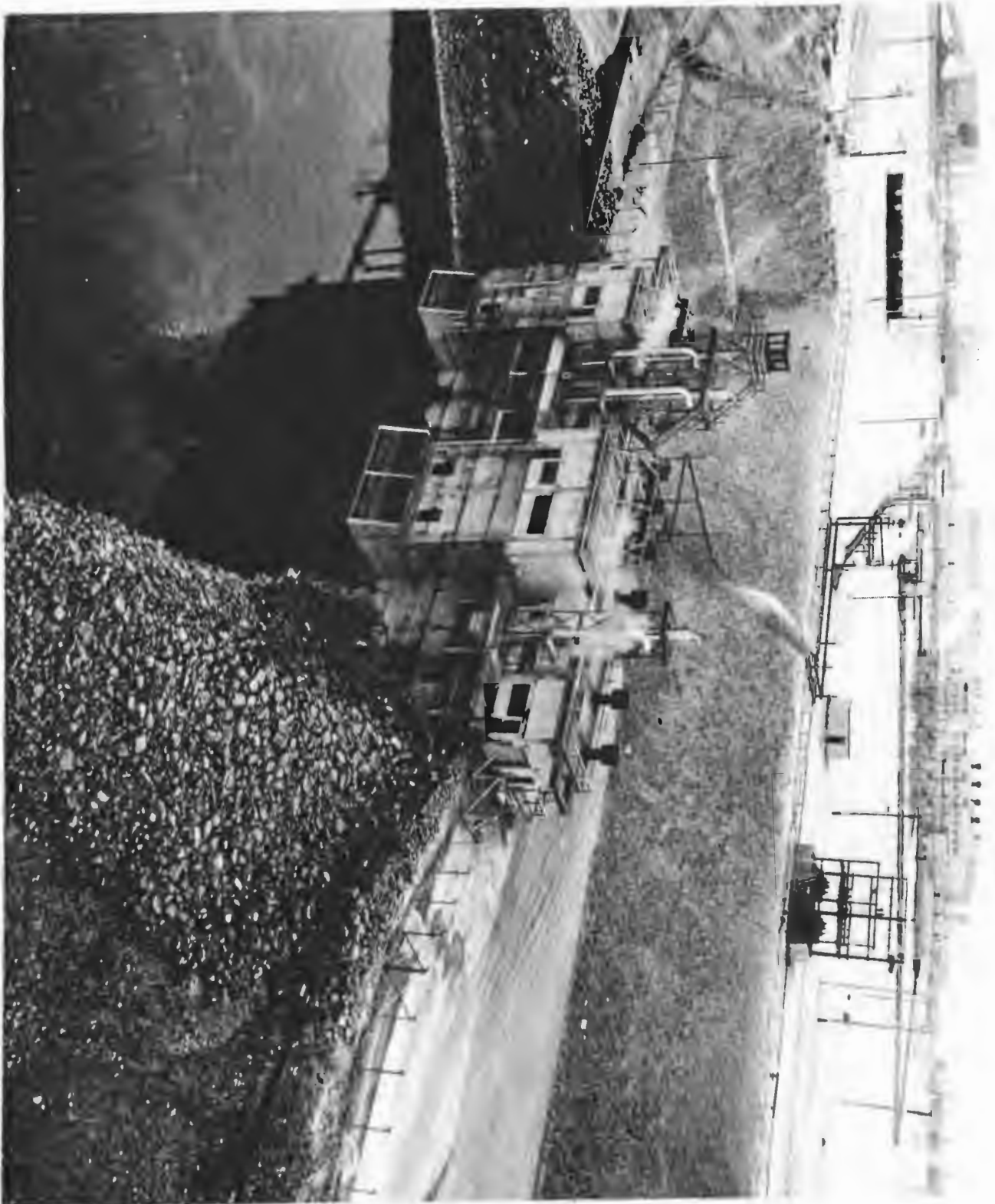
A River Pump House is provided in each of the three Pile Areas. These buildings are similar in design; however, they differ considerably in size, quantity of equipment and in the construction of the river intake channels. Each building is constructed of reinforced concrete and concrete blocks. Structural steel is used on portions of the exterior of the buildings for the support of equipment and platforms. The foundations of the buildings are divided by reinforced concrete walls that form the pump wells, which receive water from the river intake channels.

To provide a sufficient quantity of water for each of the river pump houses, channels were constructed, extending from the pump house into the main river channel. Each channel was excavated to a depth of approximately 10 feet below extreme low water level and the bottom of the channel is essentially the same depth as the deepest part of the river channel opposite the pump houses.

The following are the dimensions of these buildings:

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
181-B Overall	130' x 64' x 80'	*412,000 Cu.Ft.	6,100 Sq.Ft.
181-D Overall	170' x 64' x 80'	*572,000 Cu.Ft.	8,350 Sq.Ft.
181-F Overall	170' x 64' x 86'	*606,000 Cu.Ft.	8,350 Sq.Ft.

*From bottom of foundation to top of roof.



RESERVOIR AND PUMP HOUSE (182)

This building consists of two main structures, a reinforced concrete reservoir, and a reinforced concrete and concrete block pump house.

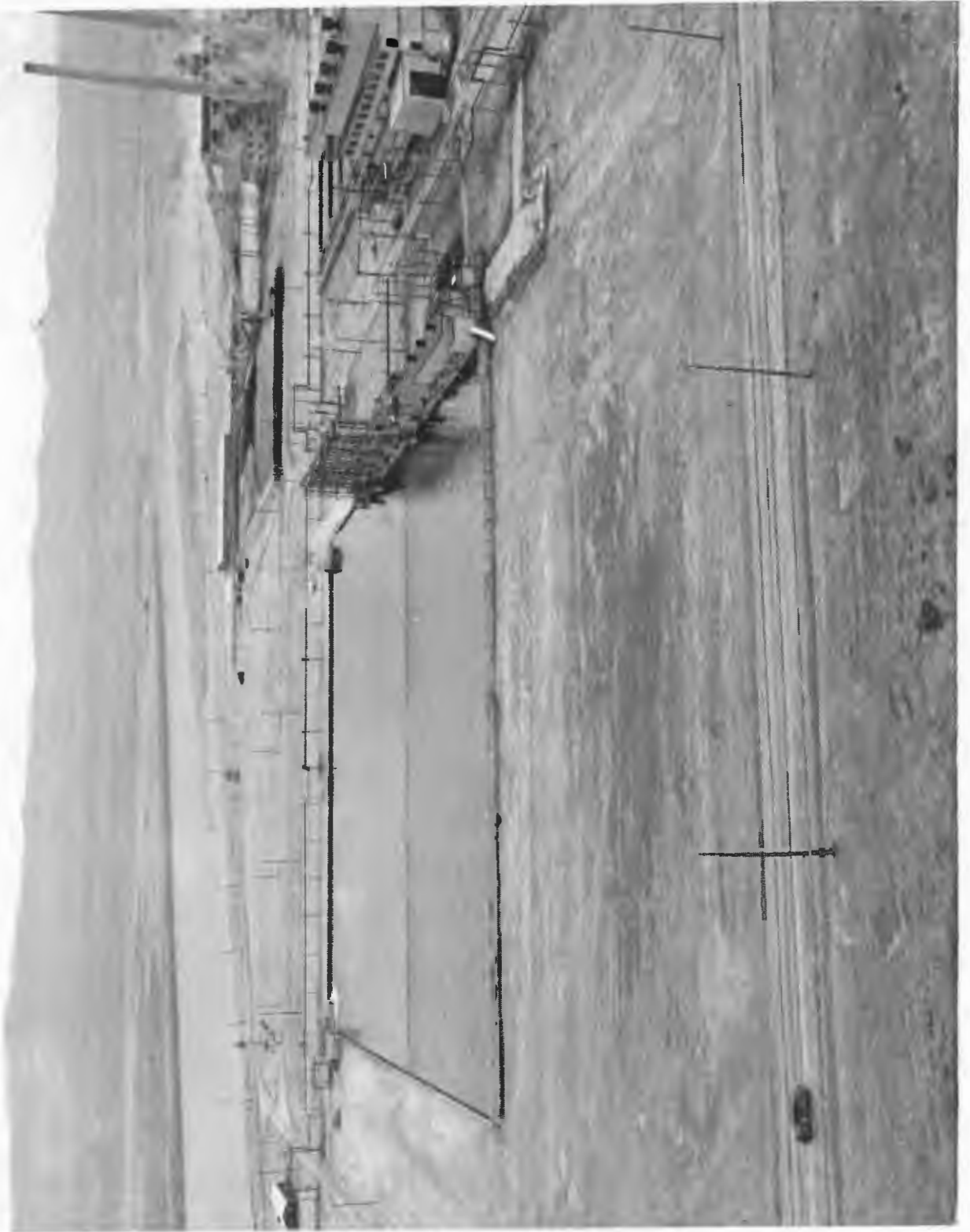
The reservoir consists of a rectangular, sloped, reinforced concrete basin. The bottom is a poured reinforced concrete slab 6" thick; the sloping sides are of reinforced Gunite 4" thick; and the vertical portion of the side walls is of poured reinforced concrete 10" thick. The reservoir is divided into two sections by a 10" reinforced concrete wall (with reinforced Gunite sloping sides) running parallel to the short dimension of the structure. The inlet section of the reservoir, known as the reserve section, holds 15 million gallons of water, while the other, or working section, holds 10 million gallons. Top of dividing wall between the two sections is approximately 2-3/4' below the top of side walls and thus acts as a weir between the two sections.

The Pump House runs along the east wall of the reservoir in 182-B and D, and along the north wall in 182-F. The Pump House is an essentially below ground level structure which houses the necessary pumping equipment to transfer the water from the reservoir to other process buildings within the area and also to the 100 and 200 Process Areas. Located next to the reservoir wall are a series of seven reinforced concrete-enclosed suction wells. The water enters each of these wells or compartments through a 4 ft. square, manually-operated sluice gate. Fish screens are provided in front of four of the sluice gates.

The following are the dimensions of this building:

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
Reserve Reservoir	432' x 309' x 18'	15,000,000 Gals.	136,488 Sq.Ft.
Working Reservoir	432' x 209' x 18'	10,000,000 Gals.	90,288 Sq.Ft.
Overall Pump House	374' x 49 1/2' x 22 1/2'	*418,760 Cu.Ft.	18,513 Sq.Ft.

*From bottom of foundation to top of roof.



APPENDIX A 89

FILTER PLANT (183-D)

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 Room.

The Head House and Chemical Building consists of a three-story, steel-framed reinforced concrete and concrete block enclosed structure, including a covered car spot. There is a dock for unloading package material directly from the car while bulk shipments can be unloaded by bottom dump cars or by scooping to the side into a bulk conveyor hopper under the track.

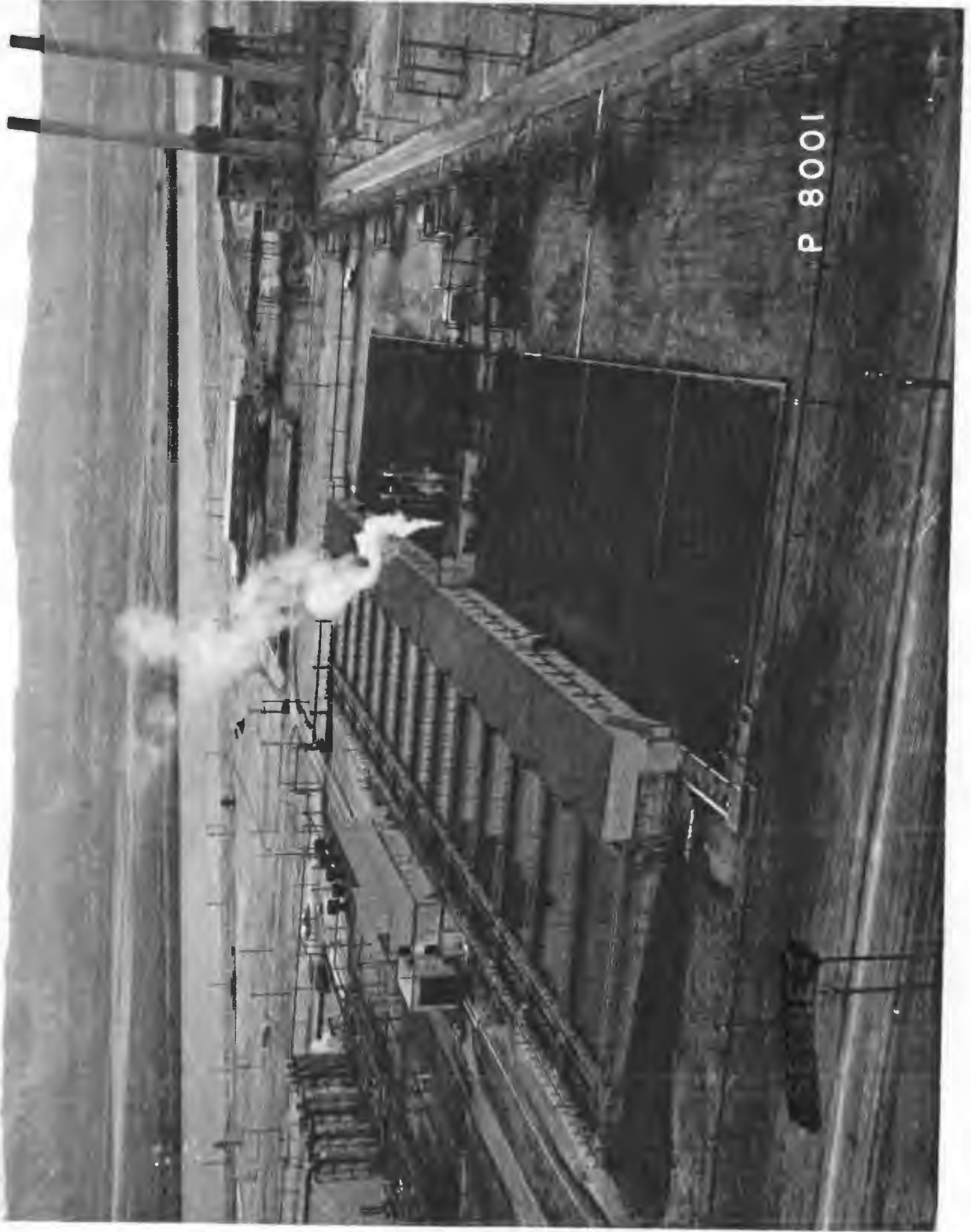
Flocculation and Subsidence Basins consists of a number of open reinforced concrete basins. The distribution flume empties into any one or all twelve 55,000 gallon Flocculation Chambers equipped with agitators. Next to each Flocculation Chamber is a 500,000 gallon concrete subsidence basin.

The Filter Building consists of a series of twelve two-section filter beds having a total capacity of 36,000 GPM. In the 183-D Building there are thirteen beds having a total capacity of 39,000 GPM. The filter beds consists of a 12" layer of gravel, then a 10" layer of sand, and finally a 20" layer of anthrafilt.

The Clear Water Reservoir and Pump Room consists of two 5,000,000 gallon reinforced concrete, completely enclosed, reservoirs between which is a pump room. The Pump Room contains nine electric pumps (ten in 183-D), and six steam turbine pumps. Two of these pumps are used for backwashing the filter beds and four pumps are connected to the combined sanitary and fire protection system. The remaining nine pumps, (ten in 183-D), handle the distribution of filtered water.

The following are the dimensions of this building:

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
Head House and Chemical Building (Overall)	133' x 62½' x 52'	213,200 Cu. Ft.	5,230 Sq. Ft.
Flocculation Basins	654' x 30' x 10'	660,000 Gals.	19,620 Sq. Ft.
Subsidence Basins	650' x 100' x 20'	6,000,000 Gals.	65,000 Sq. Ft.
Filter Building (Overall)	648' x 40' x 40'	1,036,800 Cu. Ft.	25,920 Sq. Ft.
Pump Room & Elect. Room	130' x 35' x 34'	117,900 Cu. Ft.	4,560 Sq. Ft.
Clear Water Reservoirs - B and D Areas - Two	712' x 150' x 22'	10,000,000 Gals.	92,560 Sq. Ft.
Clear Water Reservoirs - F Area - Two	712' x 150' x 16½'	9,000,000 Gals.	106,800 Sq. Ft.



P 8001

APPENDIX A 89

DEMINERALIZATION PLANT (186 D)

There is only one Demineralizing Plant and it is located in the 100-D Area between the 183 Building and the 189 - 185 - 190 Buildings group. Space has been provided, however, in the same location in the 100-B and 100-F Areas for the possible future construction of a 186 Building in those Areas.

The Demineralizing Plant is a two-story structure having reinforced concrete foundations, reinforced concrete slab floor, steel framing, concrete block superstructure, and built-up roofing over precast concrete tile slabs. The main axis of the building extends in a north-south direction, paralleling the 189-195-190 Buildings Group.

The overall dimensions of this building are 670' in length by 128' in width by 87' in height. The displacement volume is 2,819,460 cubic feet, and the cross-sectional area is 69,424 square feet.



P 8243

[REDACTED]

APPENDIX A 90

.

DEAERATION (185), REFRIGERATION (189), PROCESS PUMP (190) BUILDINGS.

There is one Deaeration Plant in each of the three 100-Areas. These buildings are identical in size and very similar in design; however, no adjacent refrigeration plant is provided in 185-B as in 185-D and 185-F.

The over-all dimensions of this building are 306' in length by 48' in width by 182' in height. The displacement volume is 796,800 cubic feet, and the cross-sectional area is 14,688 square feet.

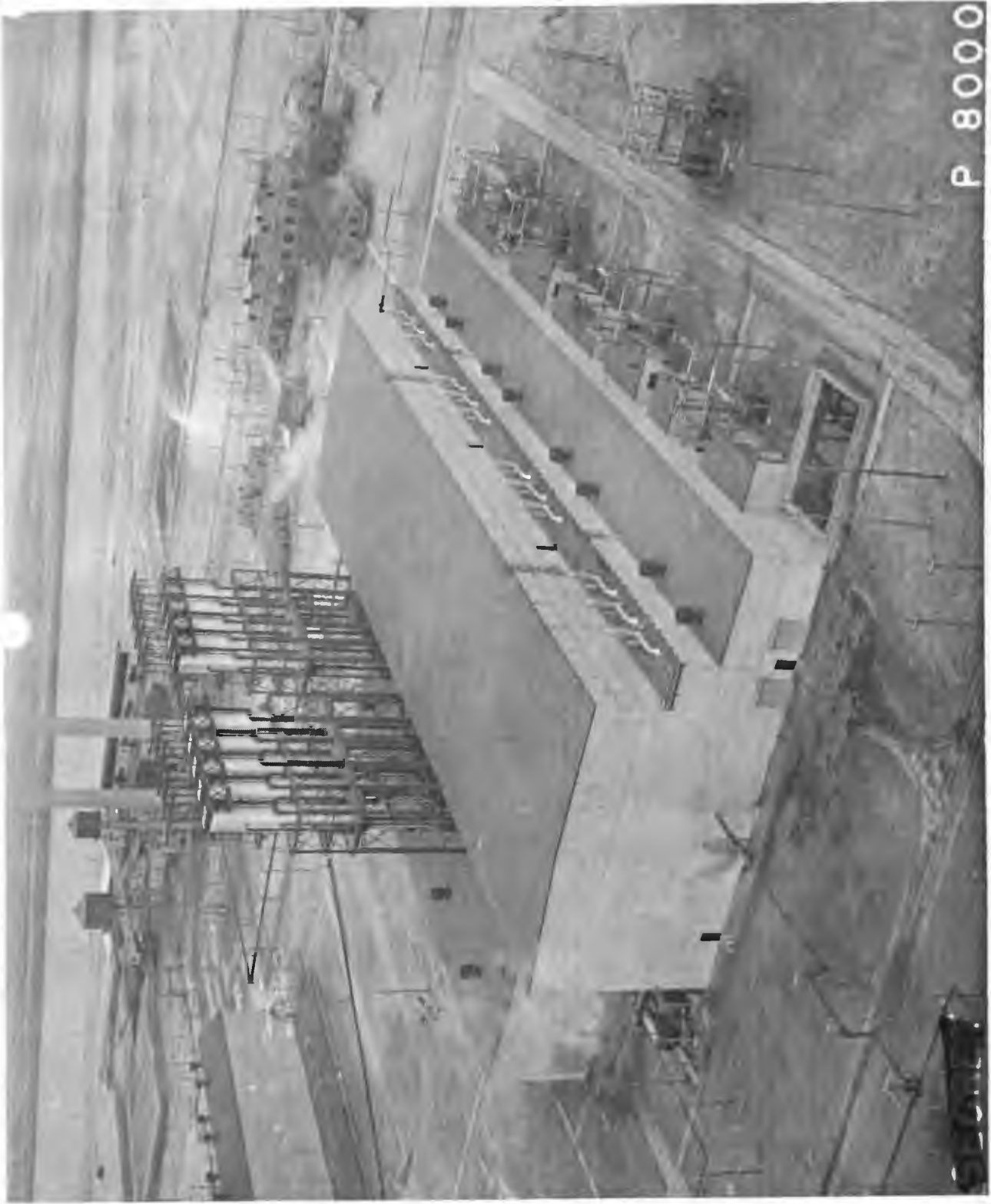
There are two Refrigeration Buildings - one in the 100-D Area and one in the 100-F Area. The 189-D Building is approximately 50 per cent larger than the 189-F Building, both in equipment and in the size of building structure.

The over-all dimensions of 189-D Building are 307' in length by 76' in width by 58' in height. The displacement volume is 723,960 cubic feet, and the cross-sectional area is 20,181 square feet.

There is one Process Pump House in each of the three 100-Areas. These buildings are identical in design, size, and installed equipment, except that in the 190-D Building, the four Process Water Storage Tanks are lined with Buna-S rubber and most of the process piping is either stainless steel or rubber lined.

The over-all dimensions of this building are 456' in length by 184' in width by 67' in height. The displacement volume is 4,473,760 cubic feet, and the cross-sectional area is 100,610 square feet.

[REDACTED]



P 8000

SECRET

APPENDIX A 91

HELIUM PURIFICATION BUILDING (115 F)

The Helium Purification Building is essentially a one-story building of reinforced concrete and located directly south of the 105 Building in the 100-B and 100-D Areas, and directly west of the 105 Building in the 100-F Area. This building includes an underground reinforced concrete pipe tunnel connecting with the 105 Building. This tunnel is identical in the D and F Areas, but is longer in the B Area and has two right angle turns. This building contains a Control Room, three Dryer Rooms, two Cooler and Blower Rooms, two Blower Rooms, two Ventilator Rooms, two Purification Rooms, a large Fan Room having an Office and Toilet Room in one corner, a large underground Pipe Room, and 15 outside instrument cubicles.

The building is supported on reinforced concrete piers having spread footings and by reinforced concrete underground pipe room which serves as a support for the center of the structure. Exterior walls of the structure are of reinforced concrete and concrete block. The roof is of reinforced concrete having a tar and gravel surface with the exception of that portion over the large Fan Room where the roof is pre-cast reinforced concrete tile with tar and gravel surface.

The overall dimensions of this building are 168' x 98' x 33 $\frac{1}{2}$ '; the cross-sectional area is 14,810 Sq. Ft., and the displacement volume is 457,800 Cu. Ft.

SECRET



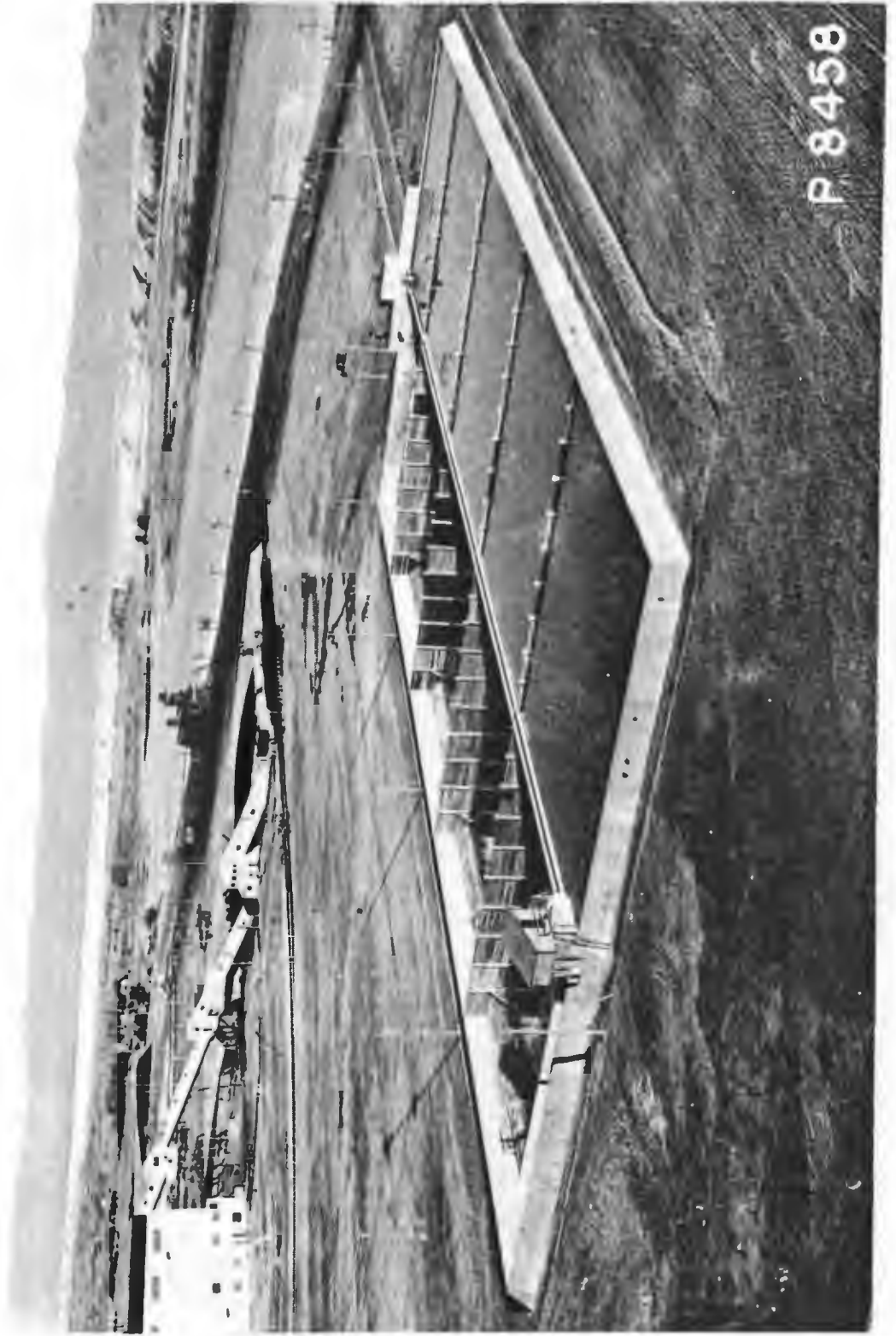
RETENTION BASIN

There is one Retention Basin in each of the three 100-Areas, identical in size, shape and design, and located near the Columbia River in the north portion of B and D Areas and east portion of F Area. The long axes of the 107-B and 107-D Basins run in an east-west direction with the discharge end of 107-B Basin on the east, and the discharge end of 107-D Basin on the west. The long axis of the 107-F Basin runs in a north-south direction with the discharge end of the basin on the north. Each structure consists of a large rectangular basin with intake chamber and shelter at one end and pump house and water-sampling laboratory at the other.

The Retention Basin has reinforced concrete retaining walls which slope in thickness from 1 ft. at the top to 3 ft. to 8 ft. at the base. Above certain portions of this retaining wall, where the terrain of the ground requires it, is a vertical concrete block wall with 3" concrete top slab. The interior sides of the basin are 4" reinforced gunite on a 2 to 1 slope and the floor of the basin is a reinforced concrete slab 6" in thickness. At the intake end of the basin is a waste water pipe from the 105 Building, 48" in diameter in the B Area, 60" in diameter in the D Area, and 42" diameter in the F Area, which discharges into a 12 ft. long by 8 ft. wide by 20 ft. high reinforced concrete intake chamber lined with 2" thick spruce planking. Opposite the intake pipe is a reinforced concrete weir approximately 15-1/2 ft. above the bottom of the chamber which discharges into a reinforced concrete overflow flume running along the center line of the basin to the discharge end, and dividing the basin into two equal parts. One 4ft. square sluice gate is located near the bottom on either side of the intake chamber and opens into the Retention Basin.

At the discharge end of the basin is the discharge pipe and a one-story Pump House which houses the Retention Basin pumping equipment. This structure has a reinforced concrete slab floor, drop-siding walls over 1" sheathing, and a smooth surface, sloping roof of built-up asphalt felt. Adjacent to this structure, but approximately 10 ft. above it, is the discharge water-sampling laboratory which contains three water-sampling pumps, laboratory testing table and small diameter water-sampling piping. This one-story building has a wooden floor, walls of drop-siding over 1" sheathing and smooth surface sloping roof of built-up asphalt felt. A wooden stairway provides access to this building.

The overall dimensions of this building are 496' x 240' x 20', the cross-sectional area is 115,100 sq. ft., and the displacement volume is 1,153,500 cu. ft. Each side of the basin is capable of holding 6,000,000 gallons of process waste water.



P 8458

POWER HOUSE (154 D)

This building is called the Power House but is primarily a Boiler House, containing only a small turbine generator for emergency, capable of supplying building lights and motors that must be maintained in continuous service. The building consists of the following structures: Main Power House, two 300' reinforced concrete smoke stacks, coal handling conveyor system, including crusher house, two transfer houses and track hoppers, an open coal storage pit, salt dissolving pit and brine pump house.

The main Power House consists of a three-story, steel frame, windowless building with reinforced concrete foundation, concrete block superstructure and concrete pre-cast roof, covered with built-up roofing consisting of felt, tar and gravel. The building is entirely above ground-level, with the exception of sliver trenches and piping.

The four boilers are connected to two reinforced concrete-lined stacks by means of four outside steel breechings, two breechings running to each stack. The stacks are 300 ft. tall and are 25 ft. at the base, tapering to 15 ft. at the top. They are located approximately 20 ft. from the Power House proper. In the base of each stack is an ash disposal system which connects with the main system under the Power House.

The following are the dimensions of this building:

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
Power House (Overall)	210' x 75' x 40'	600,750 Cu. Ft.	15,900 Sq. Ft.
Stacks (2)	25' diam. x 300'	150,000 Cu. Ft.	850 Sq. Ft.
Coal Con- veyor System	300' long	150,000 Cu. Ft.	0,800 Sq. Ft.
Coal Storage Pit	300' x 300' x 15'	1,350,000 Cu. Ft.	150,000 Sq. Ft.



APPENDIX A 94

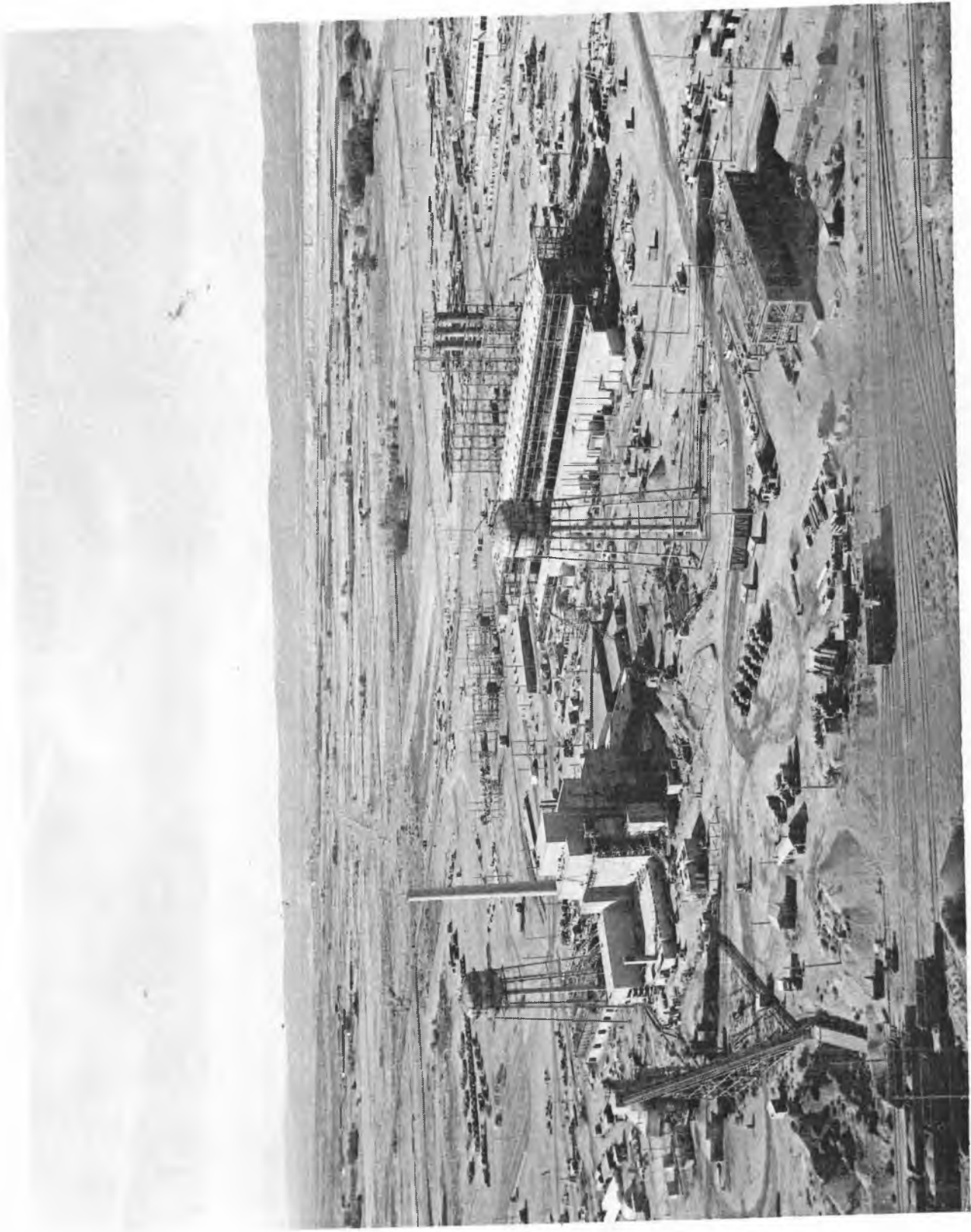
AERIAL VIEW OF FILE (100 D) AREA (6/20/44)



P-3402

APPENDIX A 95

AERIAL VIEW OF PILE (100 F) AREA (9/27/44)



CLASSIFICATION CANCELLED

DATE 4/19/77

For The Atomic Energy Commission

G.H. Kahn /amd

Chief, Declassification Branch
DIVISION OF CLASSIFICATION

APPENDIX A 96

AERIAL VIEW OF FILE (100 B) AREA (6/20/44)



APPENDIX A 97

AERIAL VIEW OF FILE (100 B) AREA (9/25/44)



P 6143

APPENDIX A 98

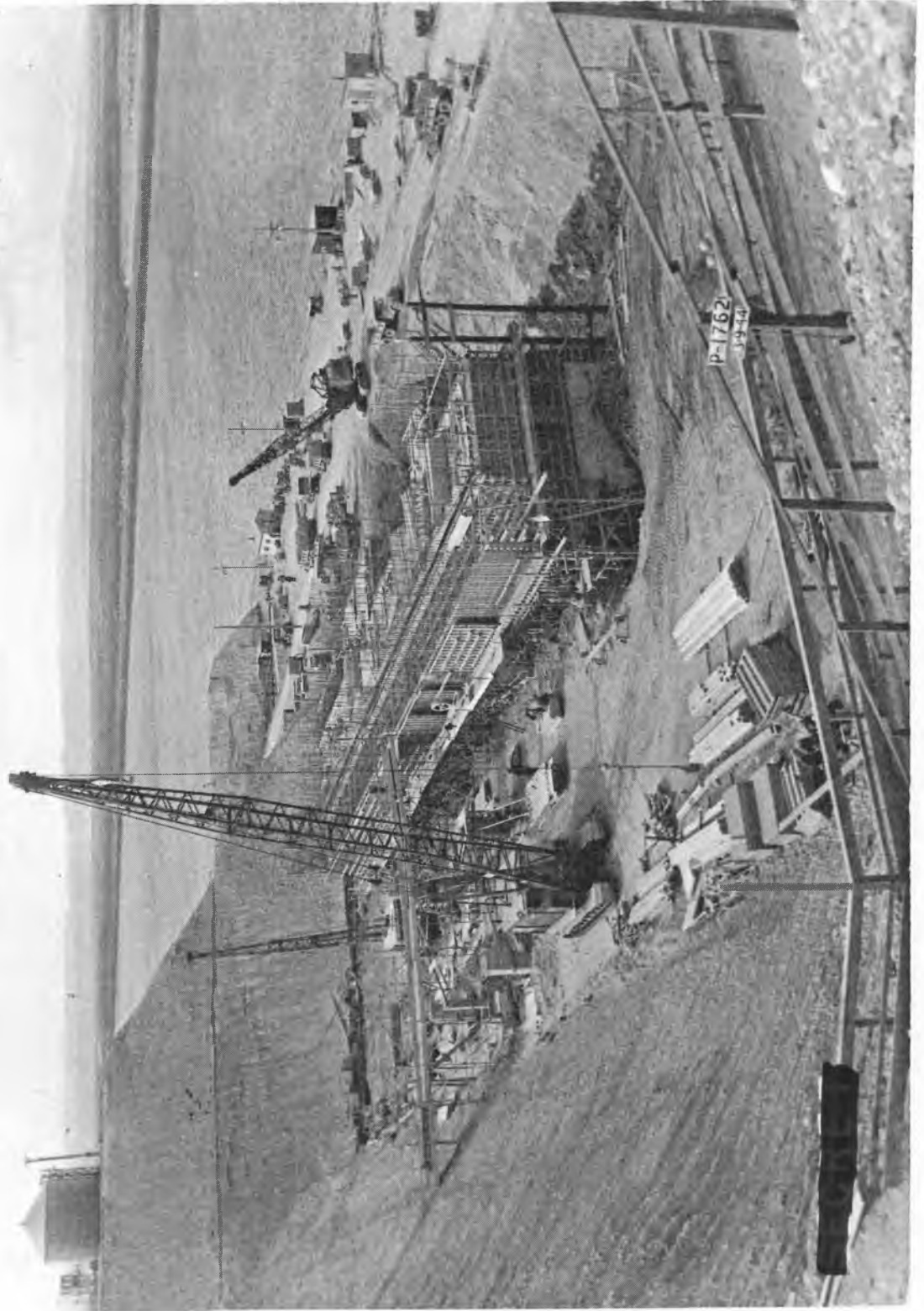
CONSTRUCTION OF RIVER PUMP HOUSE (181D BUILDING)

(3/9/44)



APPENDIX A 99

CONSTRUCTION OF PILE (105 F) BUILDING (6/20/44)



APPENDIX A 100

CONSTRUCTION OF PILE (105 D) BUILDING (3/10/44)



[REDACTED]

[REDACTED]



APPENDIX A 101

CONSTRUCTION OF PILE (105 D) BUILDING (4/21/44)





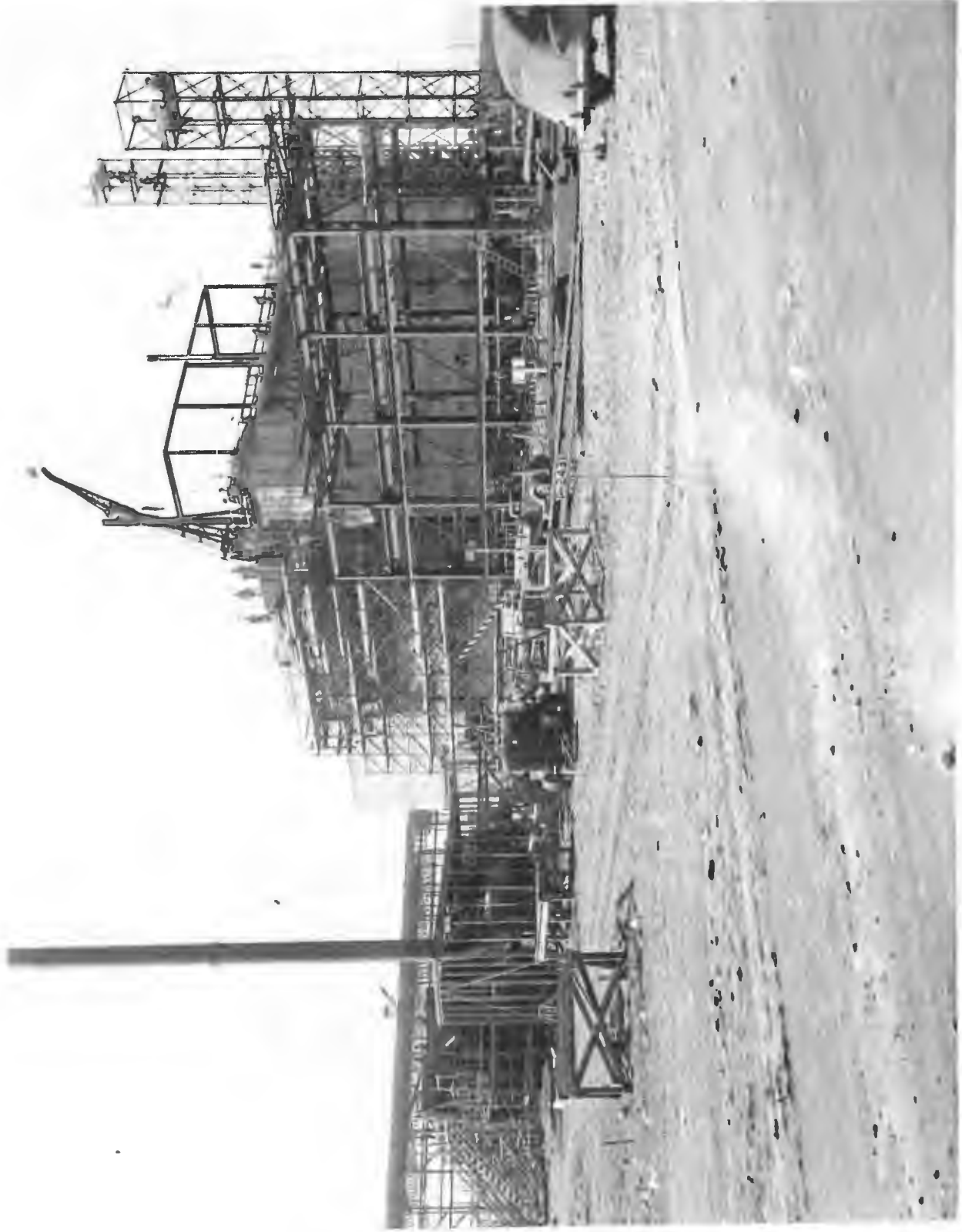
APPENDIX A 102

COMPLETED FILE (105 D) BUILDING (11/24/44)

The 105 Building is a concrete and concrete block pyramidal-shaped structure with a portion of it being steel frame. The main portion of the building houses the Process Unit or Pile. Separated from the rear face of the Pile by a concrete wall approximately 5 feet in thickness is the storage pit and transfer area. This portion of the 105 Building is exactly the same as the 212 Lag Storage Building.

To the south of the valve pit in the 105-B and 105-D Building and west of the valve pit in the 105-F Building is the fan house. This portion of the 105 Building houses the main blowers, heaters and air-filters for the entire building. There are four large blowers in this room and each is housed in its individual concrete-enclosed cubicle. Attached to the fan house is the concrete-enclosed exhaust duct for the 105 Building which exhausts all of the air into the 116 Stack. This building has an internal pressure of approximately one inch of water.

The overall dimensions of this building are approximately 120' x 150' x 120' high. The cross-sectional area is 24,000 square feet, and the displacement volume is approximately 2,000,000 cubic feet.





2

DIVISION OF CLASSIFICATION
Chief, Declassification Branch
For The Atomic Energy Commission
DATE
CLASSIFICATION CANCELLED



CLASSIFICATION CANCELLED
DATE 4/19/71
For The Atomic Energy Commission
S. H. Kohn
Chief, Declassification Branch
DIVISION OF CLASSIFICATION

DUPLICATE COPY FILED

CLASSIFICATION CANCELLED
DATE 4/19/71
For The Atomic Energy Commission
S. H. Kohn
Chief, Declassification Branch
DIVISION OF CLASSIFICATION



PLATE (105) BUILDING AIRLOCK

APPENDIX A 104



~~SECRET~~

APPENDIX A 106

AERIAL VIEW OF SEPARATION (200E) AREA (9/25/44)

~~SECRET~~



LAG STORAGE BUILDING (212)

This building is essentially a one-story, steel frame with 3" concrete block walls and pre-cast tile roof covered with built-up felt, graveled surface roofing. It is divided into three parts: Transfer Room, Storage Room, and Fan Room.

Transfer Room: This is the high east portion of the building containing two transfer pits, and accommodations for one special railroad car. An electrically operated overhead steel roller door covers the railroad entrance. This room is served by a 30-ton overhead bridge crane operated with a pendant cord control to handle basks from the car to the transfer pit and vice-versa. The transfer pits are equipped with manually-operated hydraulic systems for the handling of storage buckets. Inside surfaces of the transfer pit were painted with "Amercoat" to provide a non-porous surface.

Storage Room: This west portion of the building houses a sub-level 20'09" deep, water-filled concrete pool. A monorail system runs from the transfer pits to the Storage Room from the trolleys of which are suspended 130 galvanized dipped yokes and buckets. Buckets are weighed and counted by an automatic, printing, monorail scale located near the doorway leading to the Storage Room. The operating floor is made up of movable wooden sections supported by T-shaped concrete piers and slotted to allow yokes to pass.

Fan Room: This room is attached to the east side of the building, housing a selective forced draft heating and ventilating system. Air is discharged by wall ducts into the Storage Room after having been filtered and pre-heated by an electric unit heater. A separate unit heater is located in the Transfer Room.

This building contains no windows; three louvres and five pedestrian doors with outside concrete platforms and steps, one at each corner of the building and one for access to the Fan Room.

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
Overall	74' x 89'-8" x 37'-6"	169,090 Cu.Ft.	6,150 Sq.Ft.



CONCENTRATION BUILDING (224)

Three reinforced concrete, three-story frame structures with concrete and concrete block exterior and interior walls were constructed - one for each of the 200 Process Groups, T, U, and B. The front of these buildings is 150' from the back of Building 221, and is in line with the front of Building 222. Each building contains a total of 21 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. This portion of the building is separated into Cells A to E inclusive, with Cells A, B, D, and E having a walled platform for supporting 40" centrifuges.. These cells are served by a hand-operated overhead crane. In Cell C, the right hand portion is a pit which connects with an underground pipe tunnel that runs from the center line of Sections 13 and 14 in Building 221 to the 224 Building. The floors in the cells are sloped to a trench along the wall in a manner similar to cell bottoms in Building 221. The equipment is designed to rest upon the floor. Bolted flange connections were used for cell vessels and equipment instead of the special piping connectors used in Building 221. All chemical and service lines enter the building on this level at the end of the building facing Building 222. The third floor is the Operating Gallery containing gauge boards and weigh tanks, etc. The bare panel boards are identical in size with those in Building 221 and in most instances, the arrangement of instruments and piping is the same.

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
Overall	60'-1" x 197' x 60'-5"	507,445 Cu. Ft.	11,982 Sq. Ft.



P 6726

LABORATORY BUILDING AND STACK (291)

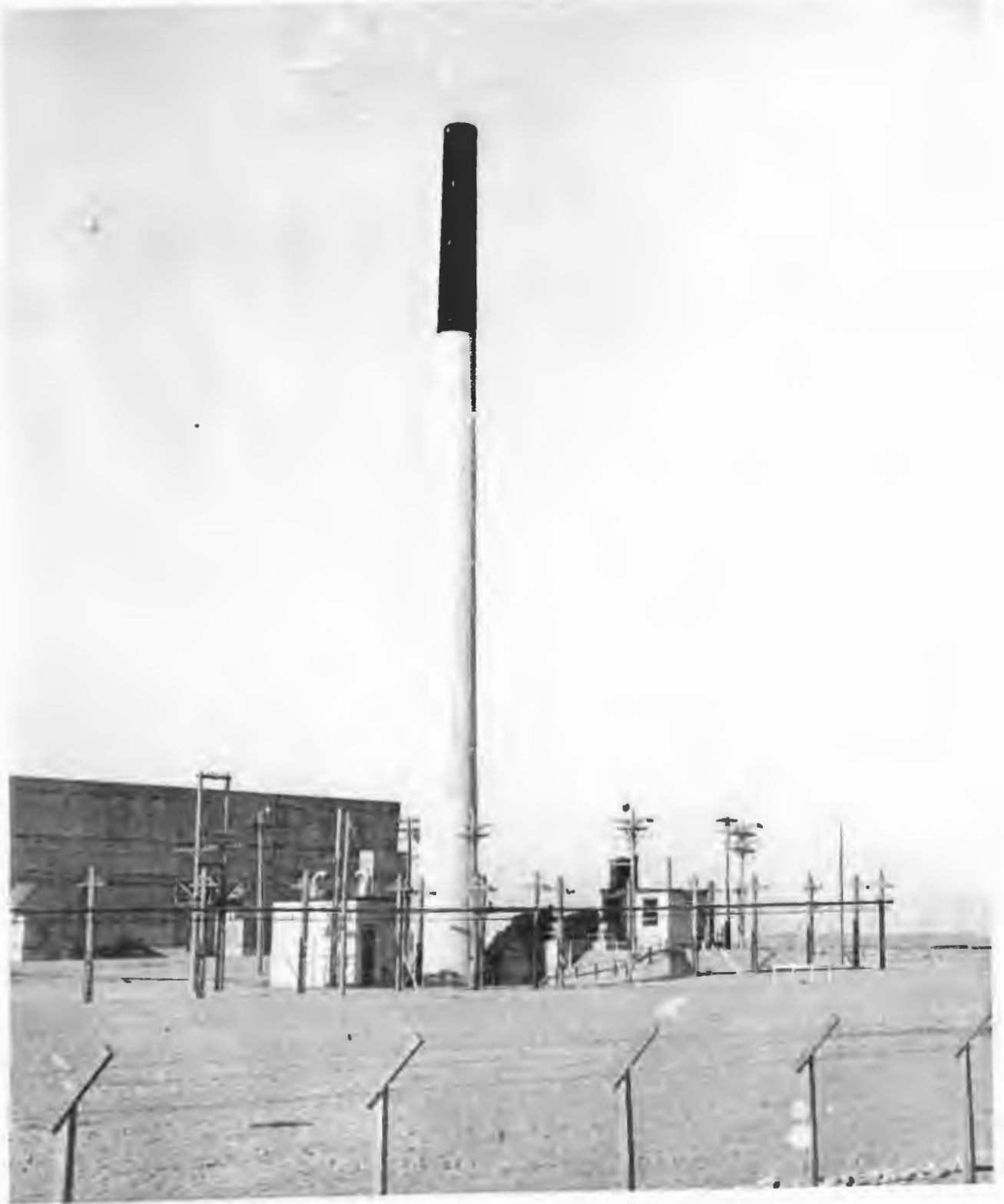
This building consists of a stack, three blowers, control house, and an underground inlet and exhaust duct system.

Stack: The stack is a reinforced concrete shell, 200' tall, having an independent acid-proof brick lining 5' inside diameter at the top. The stack foundation is reinforced concrete, octagon-shaped, 7' thick and is built having the top of the stack foundation 19' below the deck level of the 221 Building and 137' from the head face of the building, with the exception of 221-F, in which case the stack was located 252' from the head face. The stack foundation is so orientated that the breeching opening is on the axis parallel to the 221 Building, with the opening facing in the head end direction. An access door was provided opposite the breech opening, as well as ladder runs, lightning protection, and stainless steel breeching.

Exhaust Fans: Three stainless steel fans are mounted on concrete foundations which are adjacent to the inlet and outlet air ducts, with the latter fan being steam-powered and enclosed in the control house. These fans are in line with the stack breeching parallel to the 221 Building. Exhaust gas is removed from the inlet duct by means of metal duct work between the concrete inlet duct and the fan and from the fan to the outlet concrete duct, then it is exhausted to the stack.

Control House: This building houses the third fan farthest from the stack, steam engine, and controls. The structure is reinforced concrete and concrete block having a 9" curtain wall foundation, 8" thick floor slab, 8" thick concrete block walls, and a 6" thick concrete flat roof slab covered with built-up felt, gravel surfaced roofing. It contains two doors, one double and one single door, and one window. The building is steam heated.

Inlet and Outlet Ducts: The inlet duct consists of an L-shaped underground concrete passageway with the main part 4' wide by 7' high, which runs at right angles to the line of the fans and the 221 Building and directly connects with the center line of Section 5, that is, between Cells 5 and 6 of Building 221. The latter section of the inlet duct parallels the outlet duct and is separated only by a concrete wall. Walls are, in most cases, 12" thick reinforced concrete, having the inside surfaces painted with bitumastic.



ISOLATION BUILDING (231-W)

In the western portion of the 200-W Area, midway between Building 241-F and Building 241-J, is located a two-story, flat roof, reinforced concrete, frame building with 8" concrete block panels and 4" and 8" concrete block partitions. In this building, the end product reaches its final process stage. The structure is of fireproof construction throughout, having most of the rooms completely air conditioned. For the latter reason, windows have been omitted.

The building contains a total of 57 rooms including approximately twenty Laboratories for various purposes, several Process and Chemical Receiving and Storage Rooms, Offices, Change Room facilities for 190 employees, air-conditioning equipment, distilled water system, ventilation and exhaust systems, and a compressed air system. All of these facilities except one toilet room are located on the first floor, with the second floor serving as a pipe and service loft containing duct work and filters for the ventilation and exhaust systems.

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
Over-all	147' x 189'-10" x 34'	803,240 Cu. Ft.	27,964 Sq. Ft.

CLASSIFICATION CANCELLED
DATE 4/19/71
For The Atomic Energy Commission
J.H. Kaden
Chief, Declassification Branch
DIVISION OF CLASSIFICATION

CLASSIFICATION CANCELLED

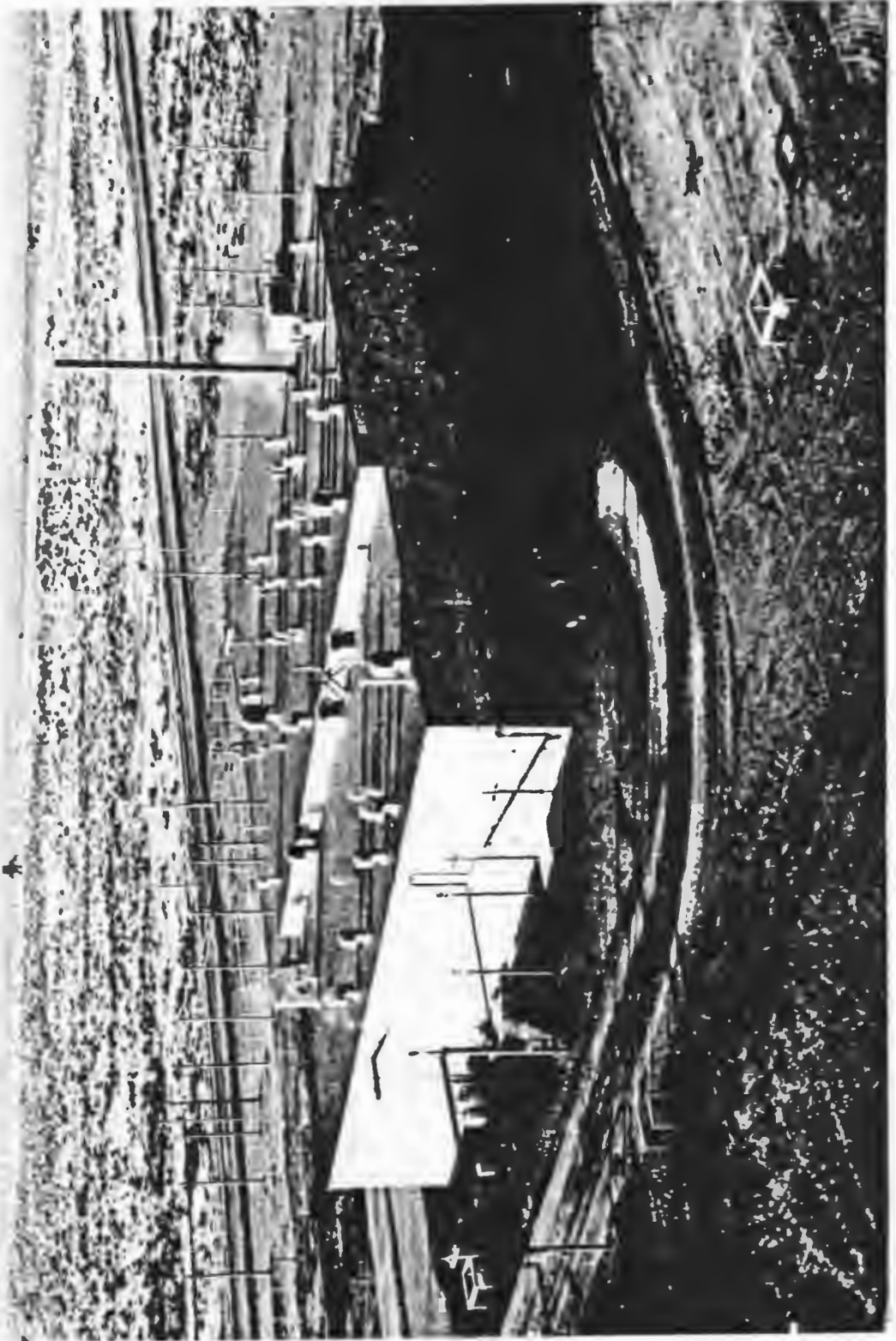
DATE 4/19/71

For The Atomic Energy Commission

J.H. Kahn James

Chief, Declassification Branch
DIVISION OF CLASSIFICATION

A-109



APPENDIX A 110

MAGAZINE STORAGE BUILDINGS (213 J & K)

A reinforced concrete, earth-covered, magazine building containing two parallel vaults, was constructed in the easternmost portion of the 200 North Area for the storage of the product. The south end of each vault forms a continuous reinforced concrete wing-shaped retaining wall which has an attached reinforced concrete loading platform for each vault section. The structure is oriented north and south, having its center line identical with the center line of its access road. Distance between vault sections is 44'-6" face to face. Each section contains three rooms, namely, Magazine, Vestibule, and Instrument. The latter two have outside, steel-hinged doors opening out onto the loading platform.

Ventilation is provided by four 12" diameter A.C.M. ventilators in each unit, equipped with dampers and bird screens. These extend approximately 4 ft. above the backfill which averages 6' to 10' above the roof slab. Six-hour fire-resistive, double combination lock, steel doors are installed in the bulkhead wall. Reinforced concrete shelving with concrete brick partitions line each side of the Magazine Sections. The floor is built-up an additional 6" under the shelving portion.

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
Overall	47' x 147' x 21'	14,477 Cu. Ft.	1,155 Sq. Ft.

APPENDIX A 111

CONSTRUCTION OF SEPARATION (221 B) BUILDING (6/24/44)

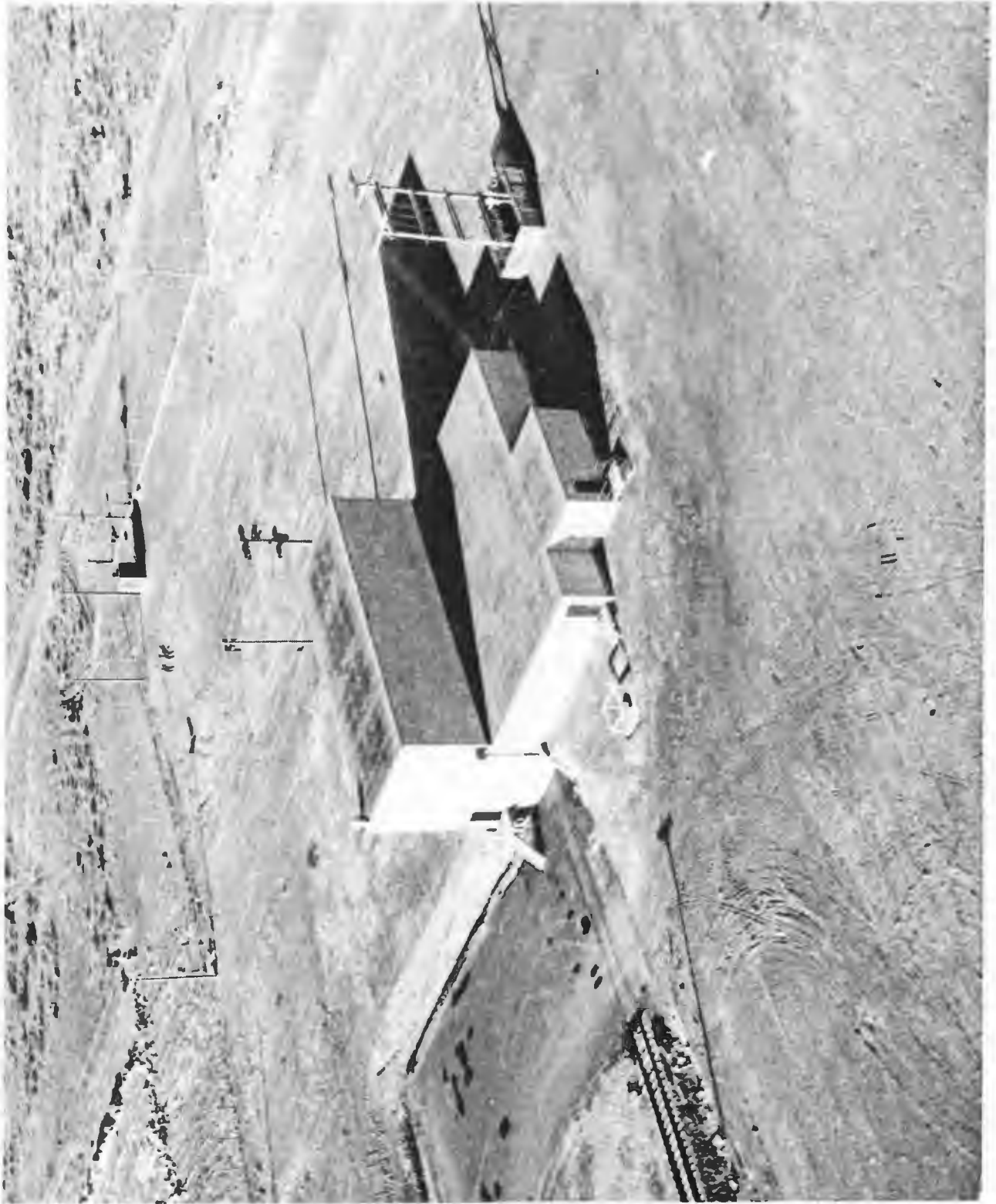


[REDACTED]

APPENDIX A 113

CONSTRUCTION OF SEPARATION (221 T) BUILDING (3/21/44)

[REDACTED]



[REDACTED]

[REDACTED]



APPENDIX A 112

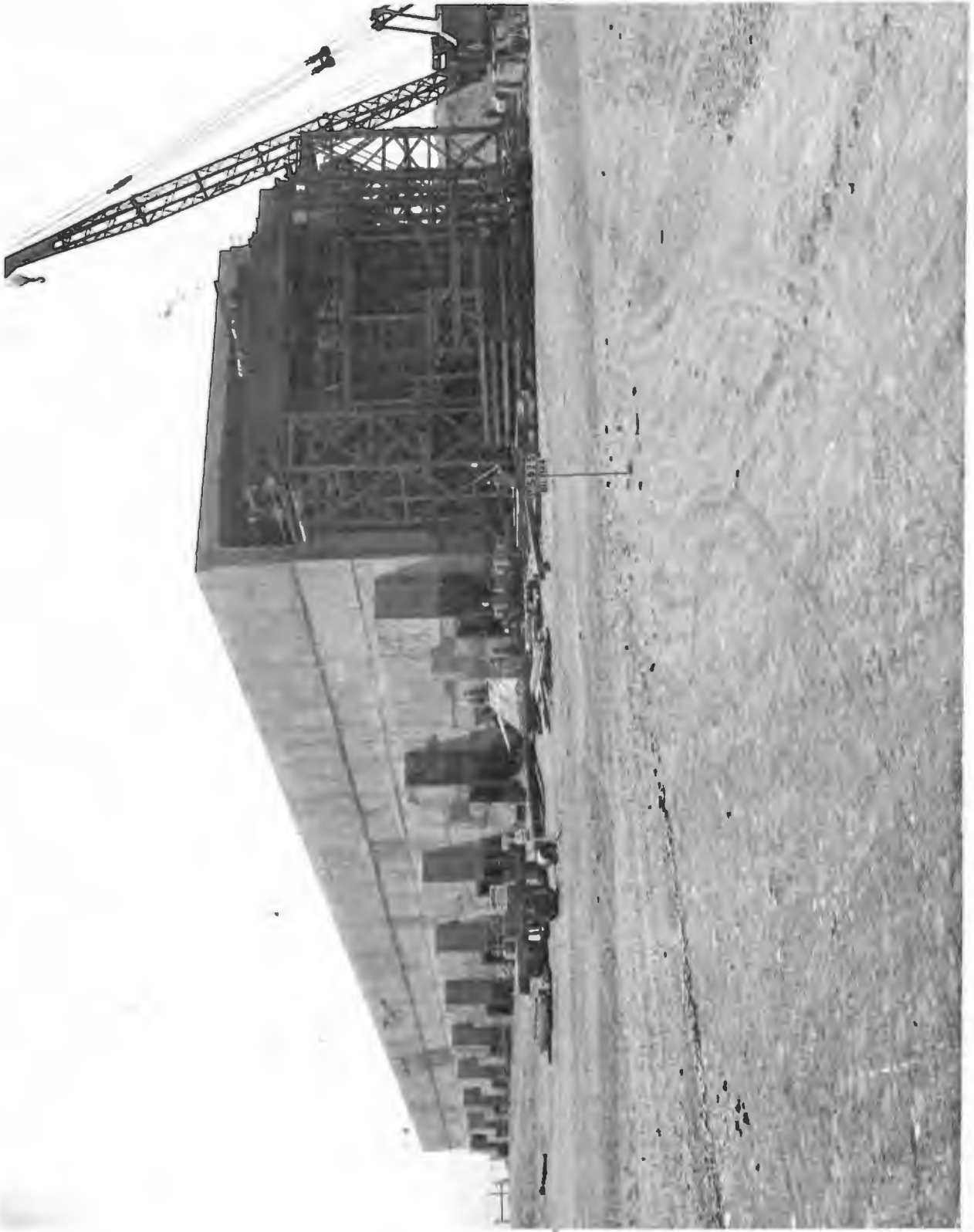
CONSTRUCTION OF SEPARATION (221 B) BUILDING (7/17/44)





CONSTRUCTION OF SEPARATION (221 B) BUILDING (8/17/44)

APPENDIX A 114





APPENDIX A 116

CONSTRUCTION OF SEPARATION (221 T) BUILDING (5/5/44)





P 4165



APPENDIX A 116

CONSTRUCTION OF SEPARATION (221 B) BUILDING (12/22/44)





APPENDIX A 117

COMPLETED SEPARATION BUILDING (221 T) (9/27/44)

In each Process Plant, T, U, & B, is a long, flat, rectangular-shaped mass concrete structure of which approximately one-quarter is below finished grade. These buildings are designated as Cell Buildings due to their design, and are identical in all respects except Building 221-T, which is 65' longer, containing a Head-End Addition. These buildings are of extremely unusual design due to process requirements. In other words, once the equipment in any of the cells is placed in operation, it will not be possible to approach it for maintenance or to manually remove or fit up piping. Each process group is symmetrically laid out, paralleling and supporting the 221 Building. In addition to it, the group is composed of the following: 211 Tank Farm, Building 222 - Sample Preparation Laboratory, 224 - Bulk Reduction Building, 241 - Process Waste Storage and Disposal System, 271 - Chemical Preparation and Service, 291 - Exhauster Building and Stack, and 292 - Exhaust Gas Laboratory.

The 221 Building structure is separated into two main portions - Galleries and Canyon, with the inside of the building being divided into twenty sections, each encompassing two cells. Sections are 40' long with the exception of Sections 1, 2, and 20 which are 44', 43', and 43½' respectively.

Galleries: Building 221 is so designed that the control panel boards, chemical and service distribution, are located in three galleries, one above the other along the front side of the building. The first gallery is called the basement gallery and is used principally for electrical distribution and control cabinets. The first floor gallery consists principally of a piping loft containing steam, water, air, and chemical headers as well as piping connections between the panel boards and weigh tanks on the second floor and through-wall cell piping. The second floor gallery is the control center for the cell equipment.

Canyon: The lower portion of the canyon below the deck level contains 40 individual concrete cells having removable concrete cell-block covers. A 10'-6" x 10'-6" exhaust duct runs along the back wall of the building paralleling the bottom of the cells and is connected by an underground concrete duct to the 291 Exhauster Building and Stack for the removal of cell fumes. A reinforced concrete railroad tunnel, extending 150' from the front side of the building, provides rail service to this section.

	<u>Dimensions</u>	<u>Volume</u>	<u>Area</u>
221-T	85'-2" x 875'-6" x 102'	5,485,220 cu. ft.	66,319 sq.ft.
221-U & B	85'-2" x 810'-6" x 102'	5,098,464 cu.ft.	61,582 sq.ft.



P 6147



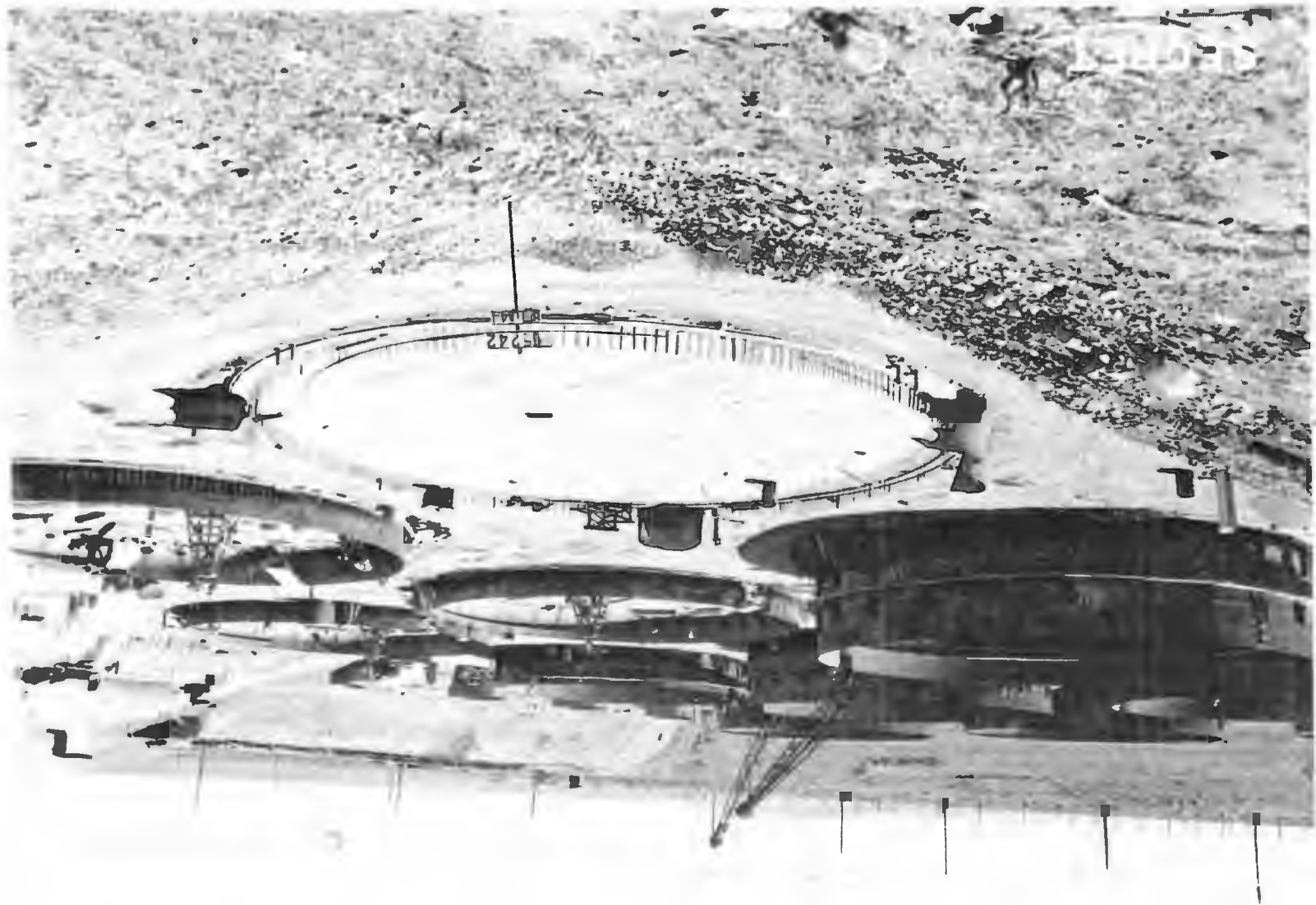
APPENDIX A 118

FOUNDATIONS FOR WASTE PROCESS
DISPOSAL TANKS (241 T-3/21/44)



APPENDIX A 119

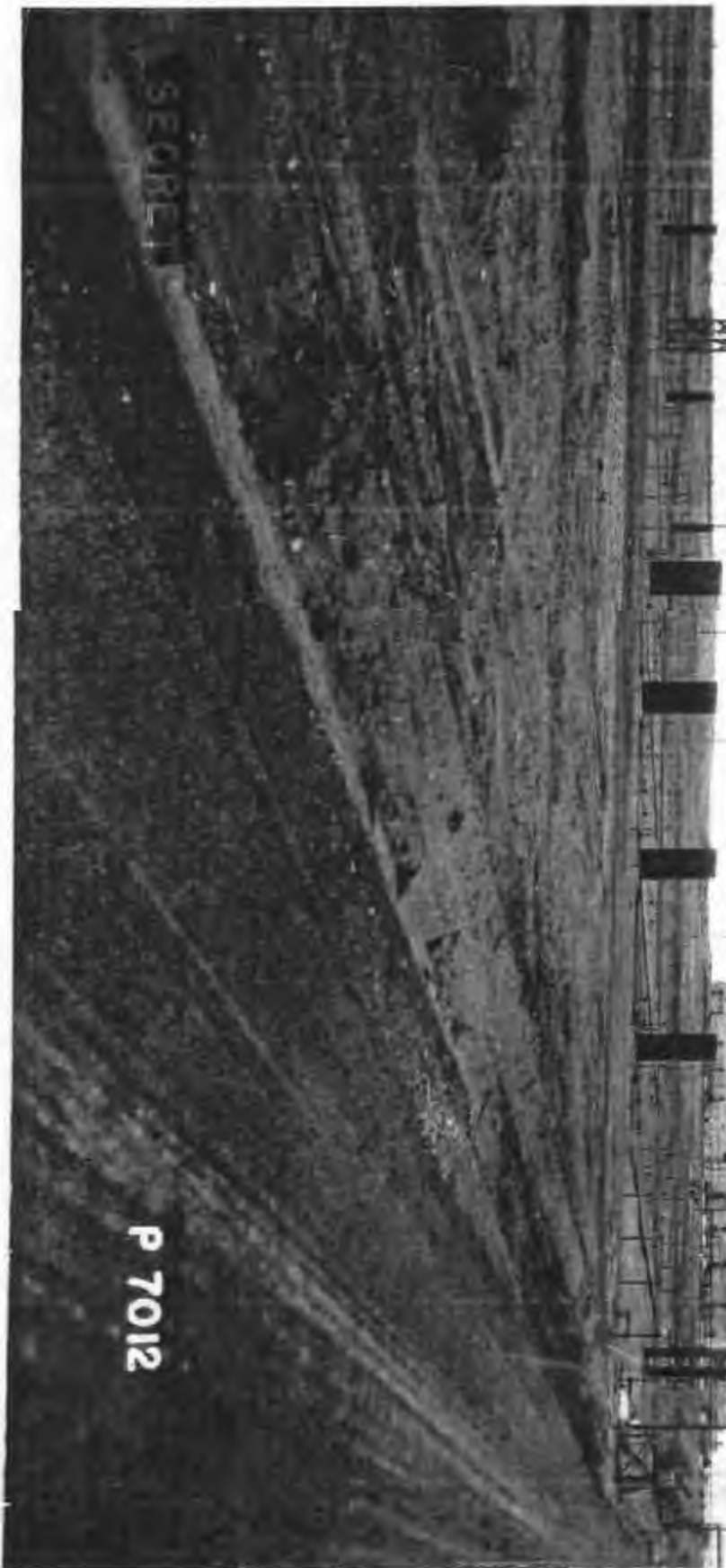
CONSTRUCTION OF WASTE PROCESS
DISPOSAL TANKS (241 C-3/1/44)



APPENDIX A 120

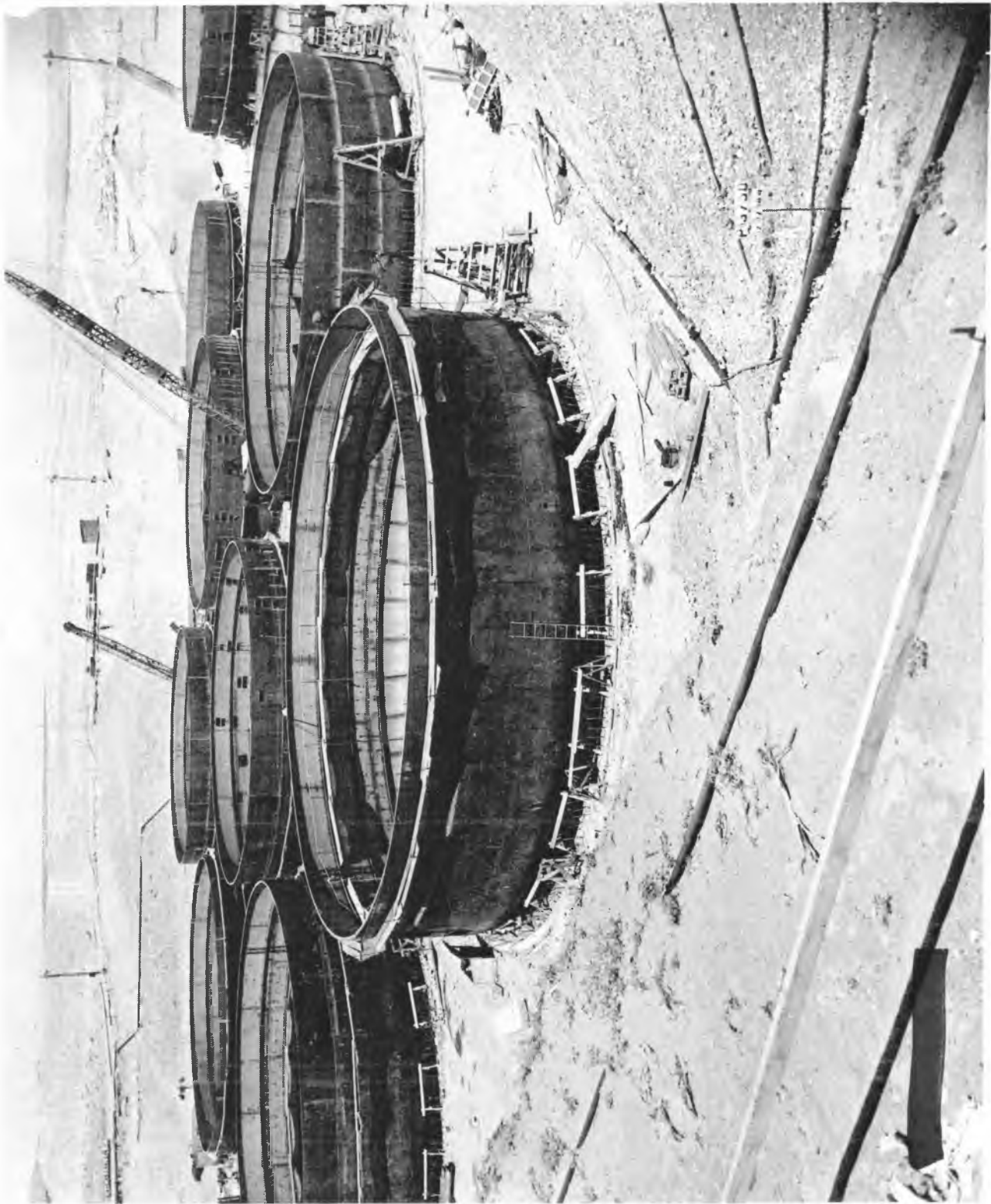
CONSTRUCTION OF WASTE PROCESS
DISPOSAL TANKS (241 B-7/7/44)





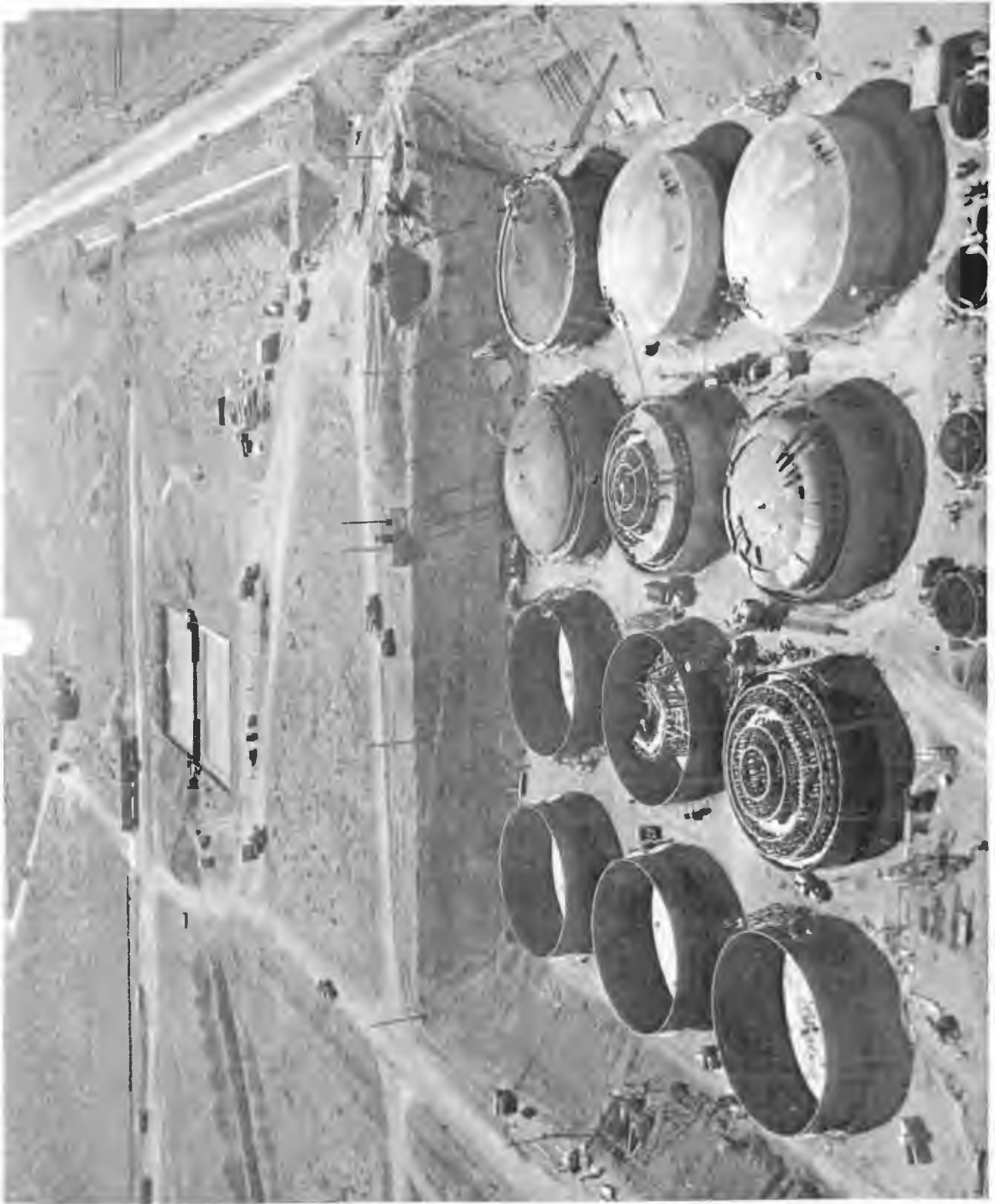
SECRET

P 7012



APPENDIX A 121

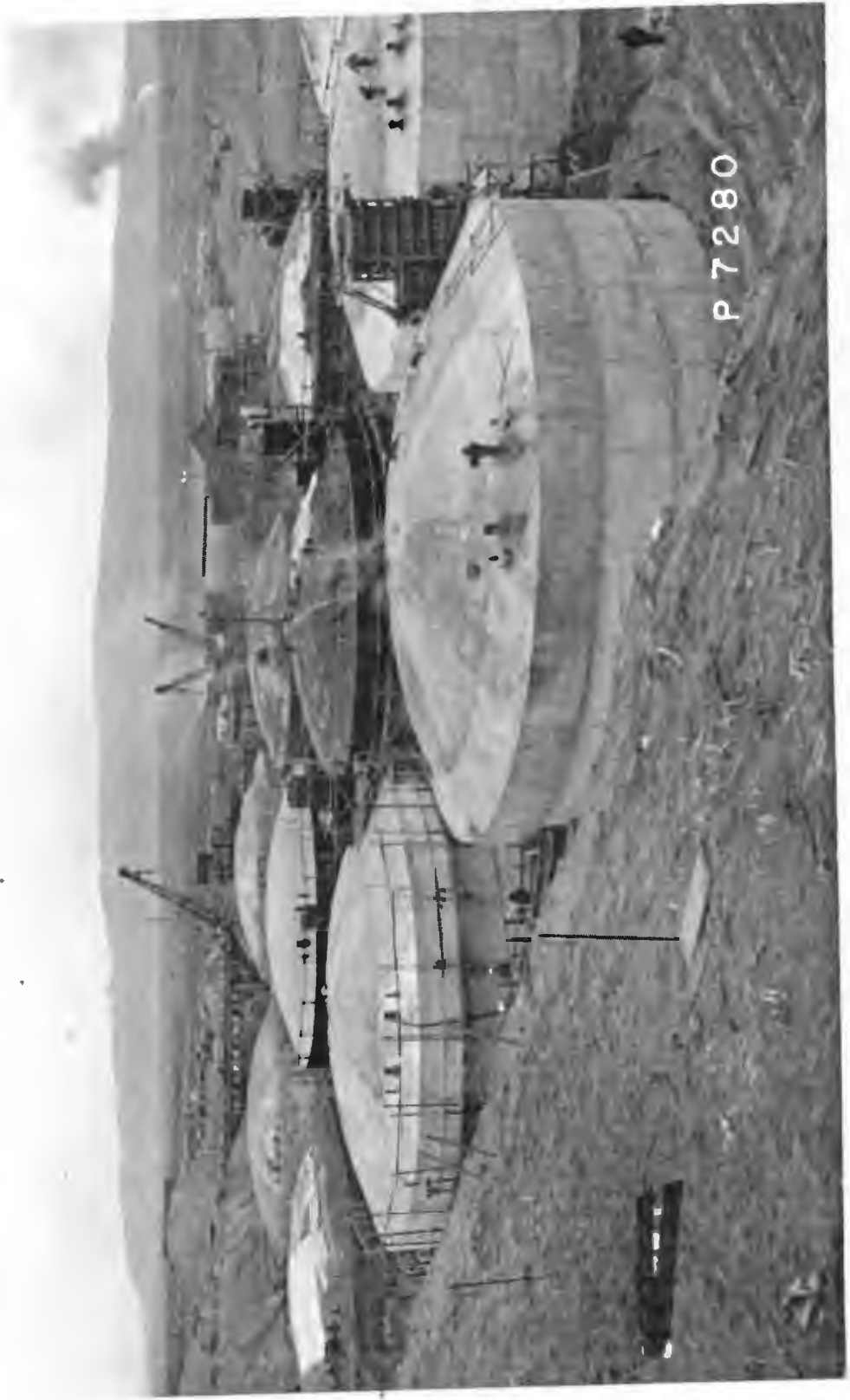
CONSTRUCTION OF WASTE PROCESS
DISPOSAL TANKS (241 B-9/25/44)



APPENDIX A 122

CONSTRUCTION OF WASTE PROCESS

DISPOSAL TANKS (241 C-11/20/44)



APPENDIX A 123

CONSTRUCTION OF WASTE PROCESS
DISPOSAL TANKS (241 C-12/7/44)

11-11-64



P 7470



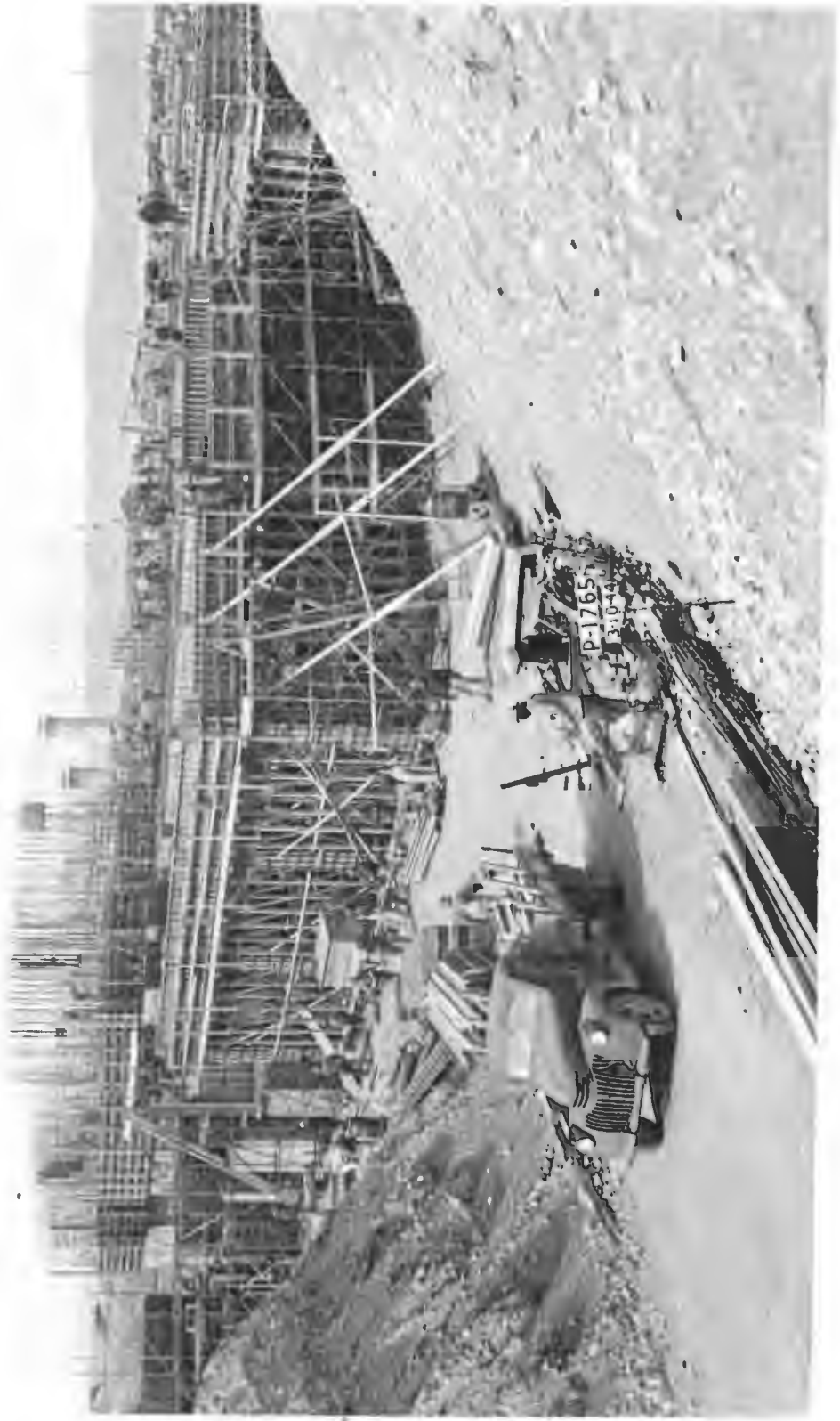
APPENDIX A 124

COMPLETED WASTE PROCESS
DISPOSAL TANKS (241 T-11/9/44)



APPENDIX A 125

MIDWAY SUBSTATION



P-1765
3-10-41

APPENDIX A 126

PRIMARY SUBSTATION



APPENDIX A 127

TYPICAL DISTRIBUTION SUBSTATION



CLASSIFICATION CANCELLED

DATE 4/19/71

For The Atomic Energy Commission

G.H. Kuhn/amb

Chief, Declassification Branch
DIVISION OF CLASSIFICATION

APPENDIX A 128

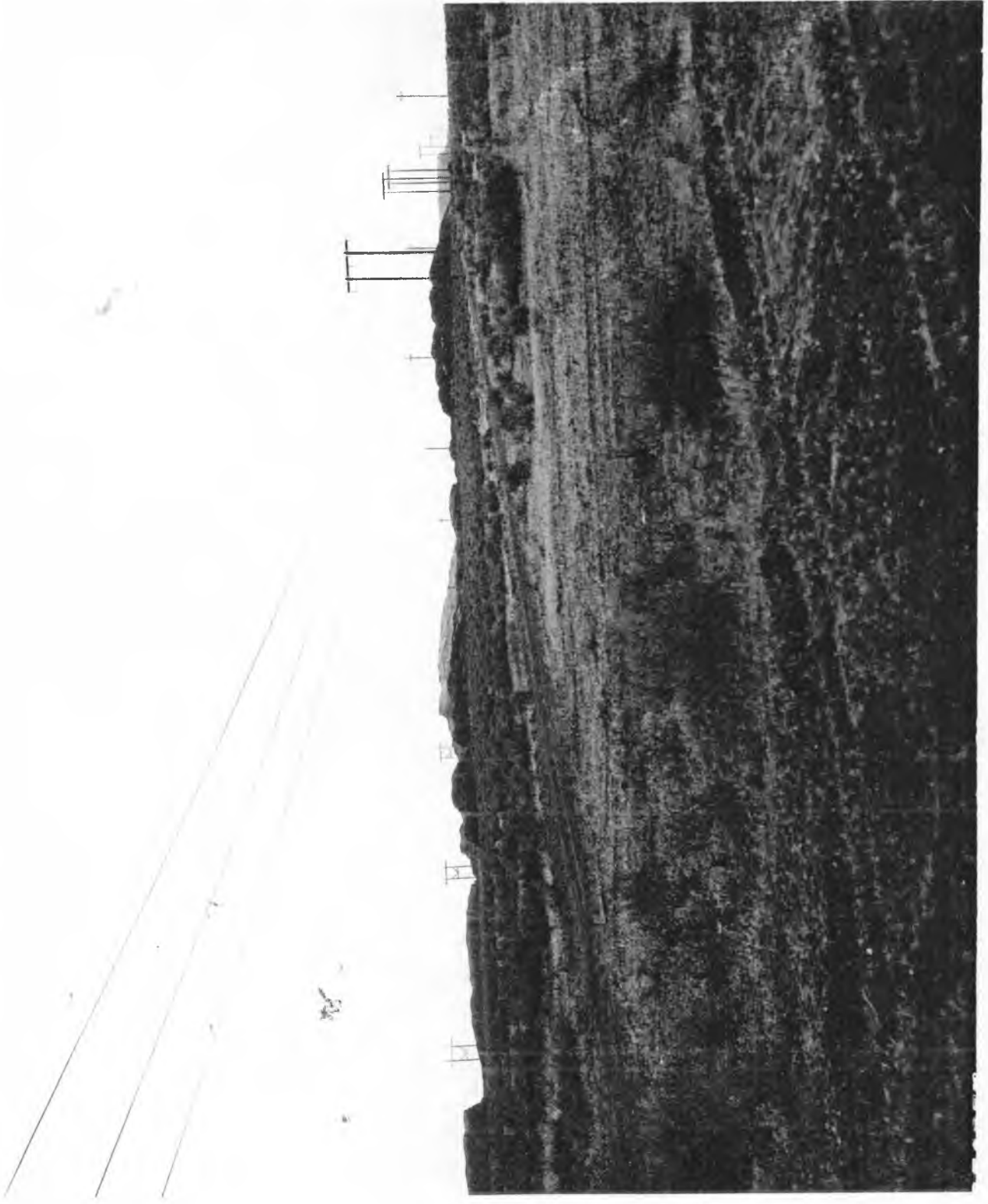
115 KV TRANSMISSION LINE

CLASSIFICATION CANCELLED
DATE 4/19/71
FOR THE Atomic Energy Commission
J. H. Klein / and
Chief, Declassification Branch
DIVISION OF CLASSIFICATION



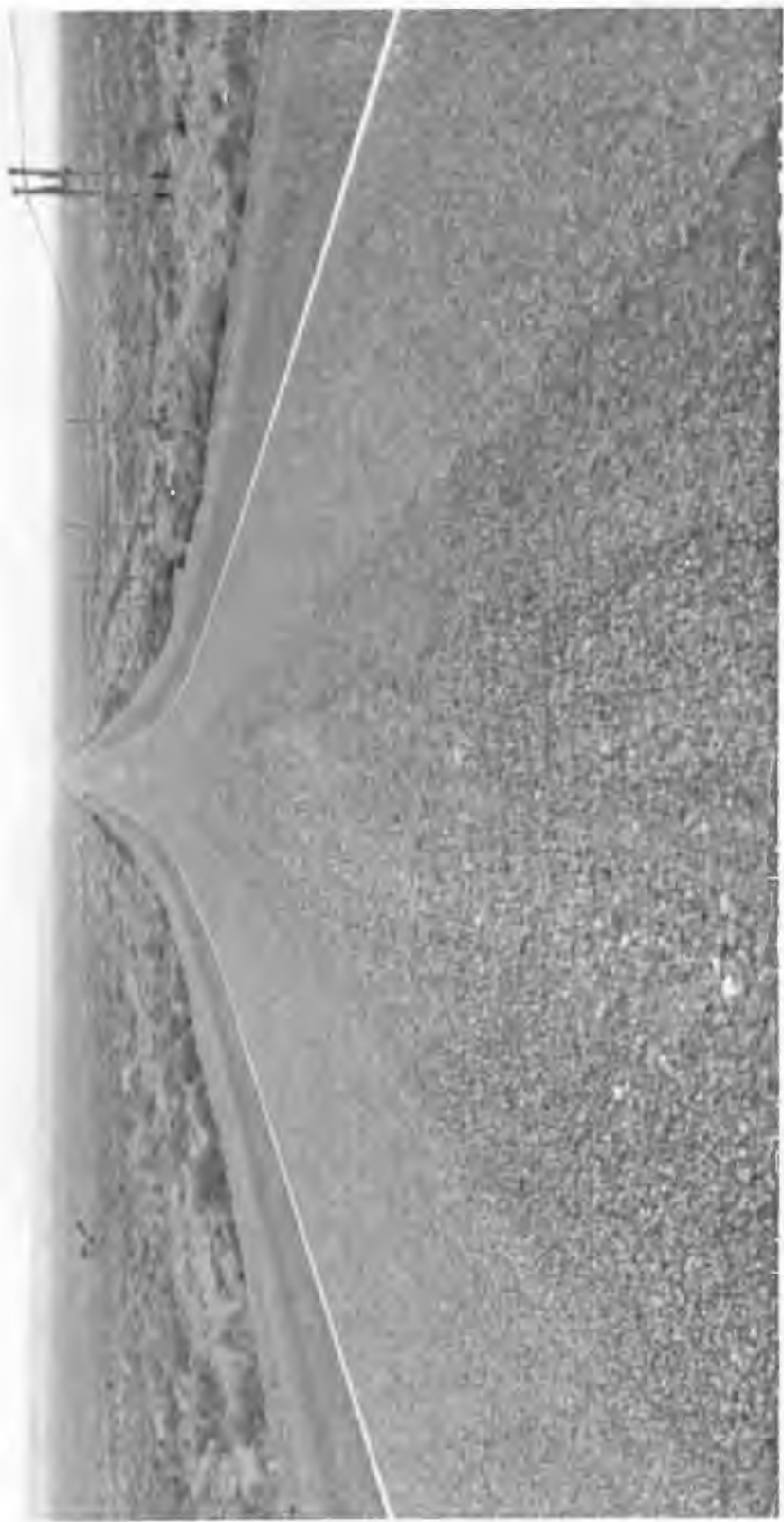
APPENDIX A 129

15.8 KV TRANSMISSION LINE



AP DIX A 150

WHITE BLUFFS-GOLD CREEK ROAD



APPENDIX A 131

AERIAL VIEW OF RICHLAND VILLAGE



APPENDIX A 132

AERIAL VIEW OF ADMINISTRATION (700) AREA

