DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

HITACHI
SHIPBUILDING & ENGINEERING CO., LTD.

Separate Sheet III

Particular Explanation on Use

Name of machinery:	Vertical Lathe
Code No.:	11-6 (8)
Inventory No.:	1337
Dimension:	2200m/m x 2800 m/m
Mannfacturer:	Ebara Seisakusho

1. Products to be made by the said machinery.

   a. Propeller boss for various kinds of repair ships or newly-built ships.

   b. Turning-gears, V-pulleys and fly-wheels, etc.

   c. Shafts for generators or dynamos, round brackets and other stationary machinery.

2. Comparison between the said machinery and the present machinery on hand.

   Owing to its dull speed-regulating gears, the present machinery on hand can not bear strong cutting and the weight of an object has to be limited less than 4 tons. Moreover, owing to its super-annuation and tow precision, it makes oval of 5/100, while the said machinery is able to make it of even 2/100.

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HITACHI
SHIPBUILDING & ENGINEERING CO., LTD.

3. Reason for desire. (2)

a. As the present tendency of the size of vessels is in favor of large size, the weight of propeller boss is after more than 4 tons.
This yard is responsible for materials for all Hitachi yards, therefore all of the large-size products must undergo machine-cutting here.
That is the reason why we should provide for the large-size machinery.

b. With the said machinery, strong and precise cutting and reduction of cost can be effectuated.

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Copy
Information only

Chugoku Finance Bureau

10 April 1951

Chugoku Civil Affairs Region

Subject: Petition for Authorized Use of Reparation Machineries.

Enclosed application has been submitted to Finance Ministry with our letter Chu Zai Dai No. 487 Dated 9 April 1951.

MANUFACTURING AND INDUSTRY FILE 11-06 sec II

Encl: Application of

1. Ohki Iron Works Co., Ltd.
2. Kanto Special Steel Works, Ltd.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

APPLICATION FOR MOVEMENT AND AUTHORIZED USE OF DESIGNATED REPARATION MACHINERY AND EQUIPMENT.

Date April 5, 1951

To: Minister of Finance.

From: President of Ohki Iron Works Co., Ltd.

Adress: Omatsu-Cho 5, Wakayama-City.

1) Name (Code No.) and Location for the Plant which intends to use designated reparation machinery and equipment.

Name: Ohki Iron Works Co., Ltd.(Non reparation)

Location: Omatsu-Cho 5, Wakayama-City.

2) Name (Code No.) and Location of the Plant where designated reparation machinery and equipment to be used acctually exist.

Name (Code No.): Ex - 11th Naval ~~Air Depot~~ Aero Arsenal do

11 - 6(9) ~~& 11 - 6(10)~~ do.

Location: Hiro - Machi, Kure - City, Hiroshima-Pref.

3) List of designated reparation machinery and equipment to be moved and used. As per Enclosure.

4) Necessity for movement and use of machinery and equipment.

Our Ohki Iron Works Co. is a special maker of fabric finishing & dyeing machinery , and the reparation machinery herein applied are hoped to be allotted for a link of the modernization plan of our machinetool power, the aim of which being the most efficacious improvement of production capacity: almost 3 times larger than former state, without much increasing the head number of workmen.

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The said plan was formed in summer 1949, and we have been doing our best for its realization, either in purchasing market machine-tools or in applying the move and use of designated reparation machinery: the latter 56 items were fortunately anthorized in last September.

But, still more, the expected good balanced Scheme necessitates the machinery herein applied. We solicit ardently for your permission of move and use of these reparation machinery.

Enclosure; List of facilities for application

J Ohki

Jun-ichi Ohki
President of Ohki Iron Works Co. Ltd.

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(Enclosure)

(3)

LIST OF FACILITIES FOR APPLICATION

(Ohki Iron Works Co. Ltd.)

Code No.: 11 - 6(9)

Name of Plant: Ex - 11th, ~~Air Depot.~~ Aero Arsenal. JO.

Address of Plant: Hiro-machi, Kure-City, Hiroshima-Pref.

Machinery etc.

Inv. No.	Name of Machinery	Brief Specification (m. m.)	Q'ty	Remarks & Work Sheet Page No.
11-6(9) -354	Lathe Engine	Matsushita Swing 430 C-C 700	1	Former A.U. Now. Idle P. 316
11-6(9) -486	Do	Kawanishi Swing 600 C-C 1,250	1	Idle P. 194
11-6(9) -503	Do	Ohsaka Kosaku Swing 510 C-C 1,100	1	Idle P. 185
11-6(9) -558	Do	Do	1	Idle P. 188
11-6(9) -560	Do	Nippatsu Swing 590 C-C 1,200	1	Do

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Attached Cutters	Maag Gear Cutters		10	Idle P. 345 of 11-6(9) Item 149 among 50
Do	Fellow Gear Cutters		3	Do among 12
Do	Hob. Cutters		3	Do among 14
Do	Gresson Bevel Gear Cutters		20	Do among 89
Do	Grinder Wheels	Size; up to 750D.	40	Do among 480
Do	Do	Size; up to 510D.	60	Idle P. 270 of 11-6(9) Item 3 among 10,671
Do	High Speed Bite & tips		300	Idle P. 346 of 11-6(9) Item 149 among 953
Total	Machine-Tools		5	
	Attached Cutters		436	

N. B.

(1) Above items are to be moved and used after permission.

(2) The machine-tools applied here are to be assigned for the supplemental use of the reparation machine group, the movement and the use of which were authorized on 15th Sept. 1950 (Application date, 5th Oct. 1949). The attached cutters are to be used for the machinery of the said application and this application.

fo

(End.)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

APPLICATION FOR MOVEMENT AND AUTHORIEED USE OF DESIGNATED REPARATION MACHINERY AND EQUIPMENT

5 April 1951

To : Minister of Finance

From: Kanto Special Steel Works, Ltd.

Address: 1,110 Tsujido, Fujisawa City, Kanagawa Prefecture.

1. Name and Location of the Plant which intends to use designated reparation machinery and equipment.

Name: Tsujido Plant, Kanto Special Steel Works, Ltd.
(Non designated reparation plant)

Location: 1,110 Tsujido, Fujisawa City, Kanagawa Prefecture

2.

Name of Plant	Location	Code No.	Category
11th aero Arsenal	Kure city Hiroshima Prefecture	11-06(8)	Naval Arsenal

3. List of designated reparation machinery and equipment to be moved and used.
The details will be given on the attached list.

4. Necessity for movement and use of machinery and equipment.

(1) The purpose is

(a) to manufacture heat treated forged steel rolls, special high alloy, rolls, die block steels, motor shafts, piston rods, special tool steels for cold or hot, bearing races, plastic molds, etc.

(b) to manufacture tools of various kinds for the production of the various steels mentioned in (a).

(c) to repair manufacturing equipments.

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(2) Reasons for requiring these machinery.

(A) Outpine of the Tsujido Plant, Kanto Special Steel Works, Ltd.

(a) The history of the Kanto Special Steel Works, Ltd., dated back to October 1st, 1936, when the plant was first established by the Sumitomo Metal Industries, Ltd. (now called the Fuso Metal Industries, Ltd.) furnishing entire capital.

(b) Total area of the Tsujido Plant : 47,7 acres
Building area of the Tsujido Plant : 9 acres

(c) Capital : 14,000,000yen (all paid up)

The entire capital was furnished by the former the Sumitomo Metal Industries, Ltd.

(d) Main Equipments

For melting:

Electric arc furnace	Capacity	10 tons..1(now in installation)
-do-	-do-	6tons ..1(now in use)
-do-	-do-	1ton....1(-do-)
High frequency electric induction furnace	-do-	1ton....1(-do-)

For forging:

Hydraulic forging press	Capacity	1,500tons.....1
Air hammer	-do-	3tons.....3
-do-	-do-	1½tons....1
Coal fired heating furnace		8

For heat treating:

Electric heating furnace	from 70 to 250kw 11
Coal fired heating furnace	7

For Machining:

Machine tools	100
Industrial machinery	5
Other machinery	14

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(e) Production (monthly)

Name of products	Actual products (tons)	Price(¥)	Planned Productions (tons)	Price(¥)	% for actual output.
Heat treated forged steel rolls Special high alloy rolls	70	17,500,000,-	120	30,000,000,-	175
Die block steels Motor shafts Pistonrods Special tool steels for cold or hot Bearing races Plastic molds	10	1,000,000,-	30	3,000,000,-	300
Total	80	18,500,000,-	150	33,000,000,-	

(f) Employee

Staffs	Workers	Total	Remarks
120	269	389	As of October

(B)

(a) At the outset we should like to point out that the kind of machinery mentioned above are either not in our possession or extreamely short.

Our company, as a only established producer of heat treated forged rolls, has satisfied 85% of the nation's requirements for the products. While the demand for the rolls has steadily been increasing, it has not been possible to meet the requirements due to the fact that the replacements of the worn-out machinery and equipments have not been possible since the war days. In this way, this machinery department is causing a great setback to its production. The actual ituation today is that while the monthly demand is 120 tons, the supply is limitted to 70 tons.

In order to fulfil the requirements in time both in quality

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and quantity, it is quite necessary to have always these machinery on hand. The shortage of these machinery at present leaves us no alternative but to rely upon outside sources for the machining of above mentioned products.

(b) To have the help of outsiders in the machining of abovementioned products is not only expensive but inefficient in that much time is wasted in securing the needed products when they are actually wanted.

(c) It must be mentioned that despite our efforts we have found it difficult to obtain the above mentioned machinery. Needless to say we have no idle machinery of these kinds in our company's plant, and we are faced with the difficulties in getting them in time, in obtaining necessary fund and also in finding proper suppliers.

(d) Lastly we would like to state what kind of benefit we may get by obtaining the above mentioned machinery. By obtaining these we will be able to have a well equipped machinery department to match other departments (such as melting, forging and heating) so that it will then become possible to increase the production of forged steel rolls and alloy cast steel rolls, and consequent to meet the merket requirements.
We will then become less dependent upon outsider's assistance in the machining of rolls.

Sadaji Ouchi

Sadaji Ouchi
Managing Director
Kanto Special Steel Works, Ltd.

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List of Facilities for Application

Code No.: 11 - 06(8)

Name of Plant: 11th aeronautical Arsenal

Address of plant: Hiro-Machi Kure City Hiroshima Prefecture

Machinery

Inv. No.	Name of Machinery	Brief Specifications (mm) (cm)	Quantity	Remarks
11-06(8)-1.311	Lathe	L1.010 x W205 x H200 S.O.B. : 1.540 Bed Leng. : 9.800	1	idle
~~11-06(8)-1.409~~	-do-	L1.100 x W290 x H210 S.O.B. : 1.500 Bed Leng. : 9.000	-do-	-do-
~~11-06(8)-1.411~~	-do-	-do-	-do-	-do-
11-06(8)-1.410	-do-	L1.030 x W365 x H235 S.O.B. : 1.500 ~~1.800~~ Bed Leng. : ~~17.800~~ 9.000	-do-	-do-
11-06(8)-1.407	-do-	L1.050 x W200 x H200 S.O.B. : 1.350 Bed Leng. : 10.000	-do-	-do-
~~11-06(8)-1.331~~	-do-	L1.700 x W300 x H200 S.O.B. : 800 Bed Leng. : 16.000	-do-	-do-
~~11-06(8)-1.329~~	-do-	L1.960 x W365 x H235 S.O.B. : 1.800 Bed Leng. : 17.800	-do-	-do-
Total			3	

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APPLICATION FOR MOVEMENT AND AUTHORIZED
USE OF DESIGNATED REPARATION MACHINERY
AND EQUIPMENT

NAGASAKI SHIPYARD & ENGINE WORKS,
WEST JAPAN HEAVY-INDUSTRIES, LTD.
1-CHOME, AKUNOURA-MACHI,
NAGASAKI-SHI, NAGASAKI-KEN.

6 Mar.

- 1951 -

File 11-06 Sect II

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

APPLICATION FOR MOVEMENT AND AUTHORIZED USE OF
DESIGNATED REPARATION MACHINERY AND EQUIPMENT

Date: 6 March 1951

TO : Minister of Finance

FROM : Hisashi Sato
General Manager,
Nagasaki Shipyard & Engine Works,
West Japan Heavy-Industries, Ltd.
1-chome, Akunoura-machi,
Nagasaki-shi, Nagasaki-ken.

1. Name, Code No. and Location of the plant which intends to use the designated reparation machinery and equipment.

   Nagasaki Shipyard & Engine Works,
   West Japan Heavy-Industries, Ltd.
   1-chome Akunoura-machi, Nagasaki-shi, Nagasaki-ken.

2. Name, Code No. Category and Location of the plant where designated reparation machinery and equipment to be used actually exist.

   The 11th Ex-Naval Arsenal (11-06, 11-08)
   Hiro-machi, Kure-shi, Hiroshima-ken.

3. List of designated reparation machinery and equipment to be moved and used.

   As shown on the attached sheet No.1.

4. Necessity for movement and use of machinery and equipment.

   Because our establishment has an old history, 30% of our equipments are already superannuated, especially greater part of the equipments in the Engineering Department were lost by war damage and inspite of the fact that these machines were overused during the war, they were practically impossible to be replaced or make new addition to the equipment, therefore these machines began to prove themselves either unfit for use or inefficient recently causing much anxiety in the completion of the major products.

   Unless we make improvements on these equipment immediately, there is a fear of delay in the delivery of the products and also a great effect on the future production plans.

   Besides the above reasons why we would like to replace the superannuated equipment with those of the reparation items apply for so that, we may be able to overcome the adverse

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condition thereby bringing the cost of production down.

For detailed reasons of necessitating use of the each machine under application, please refer to attached sheet No.2.

HISASHI SATO
General Manager

Incl: 1. List of designated reparation machinery and equipment to be moved and used. (Attached sheet No.1)

2. Reasons necessitating the use of each machinery. (Attached sheet No.2)

3. Letter of Assent. (Attached sheet No.3)

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ATTACHED SHEET NO. 1

LIST OF DESIGNATED REPARATIONS MACHINES TO BE MOVED AND USED

Code No. : 11-06, 11-08

Name of Plant: Ex-11th Naval Air Arsenal

Location : Hiromachi, Kure-shi, Hiroshima-ken

Applicant : Nagasaki Shipyard & Engine Works,
West Japan Heavy-Industries, Ltd.,
1-chome, Akunoura-machi,
Nagasaki-shi, Nagasaki-ken.

Machines:

Code No.	Name of Machine	Brief Spec.	Q'ty	Remarks
11-06(8)-428	Drilling Machine - Radial	70x200		
		1,800	1	Cincinati
445	Broaching Machine - Vertical - Internal- 2 Spindles	20 tons	1	American Broach Mch. Co.
975	Milling Machine - Vertical - Knee	800x350x360	1	Cincinati
982	Gear Cutting Machine - Straight Bevel	430x100x8	1	Karatsu
1333	Boring Machine - Vertical Boring & Turning Mills	6,200	1	Niles
1334	Lathe - Engine	4,500	1	"
1339	Lathe - Face	2,500	1	Shibaura
1523	Shearing Machine - Square Shears	14x2000	1	Ishihara
11-08(8)-201	Straight Line	1,020	1	Genevoise
202	Circular Graduator	800	1	"
	Total		10	

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ATTACHED SHEETS NO. 1 - Engine

Reasons Necessitating the Movement and Use of Each Machine

(11-06(8)-425) Drilling Machine - Radial

There are four machines of the kind at the machine-shop of this Shipyard, but, manufactured in 1913, three of them are already rendered too old and inefficient, getting out of order very often. As they are disabled to do an accurate operation upon holes of medium type parts for marine diesel engines, we earnestly desire to obtain the subject machine. With this machine, efficiency will be increased by 100 percent over the present.

(11-06(8)-445) Broaching Machine - Vertical-Internal - 2 Spindles

Although there is one machine of this kind at the machine-shop of this Shipyard, it is in capable of performing operation on holes of diameter of over 40 mm, causing a bottle-neck to the production of diesel engine parts. Such being the situation, we earnestly desire to obtain the subject machine. With this machine, efficiency will be improved by 300 percent over the present.

(11-06(8)-975) Milling Machine - Vertical - Knee

Although there are two machines of this kind at the Tool-Shop of this Shipyard, because of short capacity, they fail to meet the demand for necessary jigs and tools, causing a bottle-neck to production. Under these circumstances, we earnestly desire to obtain the subject machine. With this machine, efficiency will be increased by 50 percent over the present.

(11-06(8)-982) Gear Cutting Machine - Straight Bevel

There being only one machine of this kind, at the machine-shop of this Shipyard, it is impossible for us to dispose of all the work requireing its service even with all-night work. Such being the case, we earnestly desire to obtain the subject machine. With this machine, efficient will be increased by 120 percent over the present.

(11-06(8)-1333) Boring Machine - Vertical Boring & Turning Mills

These machines of the kind used at the machine shop of this Shipyard having a cutting diameter of only 4900, their capacity is not sufficient for making propelers for foreign vessels and other heavy parts demanded recently, causing a serious obstruction to production. Since this Arsenal is the only place where this type of machine is located, we earnestly desire to obtain the subject machine. Efficiency will be improved by 300 percent over the present.

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(11-06(8)-1334) Lathe - Engine

The maximum capacity of the lathes used at the machine shop of this Shipyard being swing of 3700, we are obliged to employes boring machine for the work requiring the greater swing causing inefficiency in the cutting of land turbines of large type, etc. As it is impossible to find this type of machine at other places than this Arsenal, we earnestly desire to obtain the subject machine. With this machine, efficiency will be improved by 15 percent over the present.

(11-06(8)-1339) Lathe - Face

While there are only two machines of the kind at the machine shop of this Shipyard, the work requiring the service of the machine is too large in volume, causing the cutting of crank-webs for large cranks and turbine-blade discs to become a source of a serious bottle-neck to production. Such being the case, we earnestly desire to obtain the subject machine. With this machine, efficiency will be improved by 50 percent over the present.

(11-06(6)-1523) Shearing Machine - Square Shears

There is only one machine of the kind at the boiler shop of this shipyard, and as a result, the shearing of steel plate has proved to be a source of a tough bottle-neck to production. The products manufactured at this shop being boilers, chimneys, smoke-tubes, air-ducts, tanks, etc., the shearing work is the first process required. Such being the case, we earnestly desire to obtain the subject machine so that we may overcome the present difficulty. With this machine, efficiency will be increased by 200 percent over the present.

(11-08(8)-201) Straight Line Graduator

(11-08(8)-202) Circular Graduator

This machine will be used for the graduating of jigs. For want of this type of machine, a milling machine is being employed as substitute at this shipyard, resulting in an extreme inefficiency. In order to attain the required accuracy of graduation, we earnestly desire to obtain the subject machine. With this machine, efficiency will be increased by 300 persent.

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ATTACHED SHEETS NO.3

WRITTEN ACKNOWLEDGMENT

Date: 6 March 1951

TO : Minister of Finance

FROM : Hisashi Sato
General Manager

ADDRESS: Nagasaki Shipyard & Engine Works,
West Japan Heavy-Industries, Ltd.
1-chome Akunoura-machi,
Nagasaki-shi, Nagasaki-ken.

Referring to the responsibility for custody and maintenance of reparations designated machines applied for herein, we have no objection to follow the condition you designate, and I hereby wish to submit my written acknowledgment, pledging that the responsibility will be held by me for the custody and maintenance of the above listed machines and equipment.

H. Sato

HISASHI SATO
General Manager

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

YOKOHAMA SHIPYARD & ENGINE WORKS
EAST JAPAN HEAVY INDUSTRIES, LTD

APPLICATION FOR MOVEMENT AND AUTHORIZED USE OF THE DESIGNATED REPARATIONS MACHINERY AND EQUIPMENT

March 14, 1951

To : Minister of Finance

From : Yasuke Kotake, General Manager
Yokohama Shipyard & Engine Works,
East Japan Heavy-Industries, Ltd.

1) Name (code No.) and location for the plant which intends to use designated reparations machinery and equipment.

Yokohama Shipyard and Engine Works,
East Japan Heavy-Industries, Ltd. (19-68)
4-2, 3-chome, Midori-cho, Nishi-ku, Yokohama

2) Name (code No.) and location of the plants where designated reparation machinery and equipment to be used actually exist.

11th Naval Aero Arsenal (11-6 (8), 11-8 (8))
Hiro-cho, Kure, Hiroshima.

Kure Naval Arsenal (11-5 (7))
Miyahara-dori, Kure, Hiroshima.

3) List of designated reparations machinery and equipment to be moved and used.

As attached sheet (7 items)

4) Necessity for movement and use of machinery and equipment.

a) We wish to use these machines for the 6th Government Shipbuilding Program (~~Two (2)~~ One (1) 6,700 ton Cargo Boats) and its additional (One (1) 9,100 ton Cargo Boat) large type export vessel (One (1) 24,000 ton oil tanker for Panama), 7th Government Shipbuilding Program which will be decided in the near future, and repair works of Foreign, SCAJAP and domestic vessels, and Diesel engine production both for marine and land use.

b) We intend to contribute to the rehabilitation of the Japanese economy and to the promotion of export industry thru the execution of the above-mentioned work.

c) However, as our company was organized in 1949, the greater part of our machines are superannuated, and, therefore, we are planning to improve machine tools, testing machines and other equipment

MANUFACTURING AND INDUSTRY FILE 11-96

Set II

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

e) Furthermore, it is next to impossible to obtain these machines from any other plants, and if we were to place a new order, it not only takes a long time to obtain, but would need a large sum of money, and therefore we cannot do so in view of our urgent work orders in hand and the present economic situation.

Thanking you in anticipation of your kind attention to this application and hoping to be favoured with your approval at an early date, we remain

Yours sincerely,

T. Manno

General Manager
Yokohama Shipyard & Engine Works,
East Japan Heavy-Industries, Ltd.

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List of Facilities for Application

Code No.: 11 - 6 (8)
11 - 8 (8)
Name : 11th Navel aero Arsenal
Location: Hiro-cho, Kure, Hiroshima

Registered No.	Name of Mach.	Specification	Maker	Q'ty	Reason
11-6 (8)-1,409	Lathe	1,500 swing 6,000 distance c to c	Shibaura	1	To be used for machining of crankshaft, connecting rod, piston cross head, shaft bearing, cylinder cylinder cover, cylinder liner for marine diesel engine (large type) Among the nine large type lathes on hand, six are poor in precision, one is lacking of capacity. Additional lathes are needed.
" " 1,411	"	" 1,500 " 6,000	"	1	
" " 1,316	Turning	3,200 Table	Kojima	1	Among the three vertical lathes on hand, one is poor in precision. Additional one is needed.
11-6 (8)-1,525	Shearing	12 thickness length 550	Unknown	1	We have one shearing machine for shell plate of steel ship, which is very old.
" " 134	Fresh water pump	132 T/H 49 "	Fujita Meizuru	1 1	We have two pumps for filling water in No.2 Dry Dock, which is very old.
Total				6	

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List of Facilities for Application

Code No.: 11-5 (7)
Name: Kure Naval Arsenal
Location: Miyabara-cho, Kure, Hiroshima

Registered No.	Name of Mach.	Specification	Maker	Q'ty	Reason
11-5 (7)-440	Lathe	Swing 1,000 distance 2,600 c. to c.	Ikegai	1	To be used for machining of crankshaft, connecting rod, piston cross head, shaft bearing, cylinder cylinder cover, cylinder liner for marine diesel engine (large type)
Total				1	

Remark: Above machine is now installed in former 11th Naval aero Arsenal

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Permission to Continue Operation

Date of Permission	Permission No.8 Occupational authorities	Remarks
Sept. 27, 1945	M&I No.5 Military Government Office, 8th Army	as per attached coby of permit (A)
Aug. 28, 1946	APO 503, AG-E, 004-04 Kanagawa Military Government Team	(B)
Feb. 10, 1949	Permit to continue operation of reparation factories, issued to Reparation Board from ESS, GHQ/	(C)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

(A)

HEADQUARTERS EIGHTH ARMY
G-1- MILITARY GOVERNMENT SECTION
ECONOMIC DIVISION

File: M&I 5

DateP 27 Sept. 1945

SUBJECT: Ship Repair and Construction.

TO : Mitsubishi Heavy Industries, Ltd., Yokohama.

The Governor, Kanagawa Prefecture, Yokohama

1. a. Pursuant to authority contained in Directive Number Three (3) from the Supreme Commander to the Japanese Imperial Government, dated 22 September 1945, the Mitsubishi H-I. Ltd., is permitted to immediately start production of Repair and construction of ships as listed by the attached document.

b. Maximum production currently authorized is (see attached list)

2. The acquisition of material, parts and sub-assemblies as well as the disposition of finished products, and the establishment of sales prices will be in accord with the regulations of the Imperial Japanese Government.

3. Until otherwise directed by this headquarters, a monthly report in English of each item, by name, type and quantity produced by each factory, sub-contractor or subsidiary within this company's control will be delivered to this office by the fifteenth (15) day of the following month.

(Signed)
DONOVAN M. VANCE,
Colonel, GSC,
Chief, Military Gov't Sec.

COPIES TO: CINCAFPAC GHQ, (Attn: Econ)
Imperial Japanese Gov't
(Central Liaison Section)
Corps Commander Concerned
File

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

MITSUBISHI HEAVY INDUSTRIES, LTD.
YOKOHAMA SHIPYARD & ENGINE WORKS.

YOKOHAMA, Sept. 26th, 1945

Commanding General,
Headquarters, Eighth Army,
Yokohama, Japan.
Attn: Economic Section, Military Government.

Dear Sir:

We beg to request permission to engage in the following activities:

1. To complete the following Japanese vessels now under construction as per attached sheet.

2. To repair all type vessels under one hundred (100) tons.

3. To repair Japanese vessels up to ten thousand (10,000) tons when so authorized by the proper occupation authorities.

4. As required by the proper authorities, to perform maintenance or repair of American or other Allied vessels of any type or tonnage existing shipyard or dock facilities will accommodate.

Trusting that you will favour us with the above request, I am

Respectfully yours,

Mitsubishi Heavy Industries, Ltd.
Yokohama Shipyard & Engine Works.

By_____
K. Watanabe

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

JAPANESE VESSELS UNDER CONSTRUCTION. (Sept. 26th, 1945)

No.	Type of vessel	Size	Stage of Construction	Estimated date of completion	Require Material.
S409	Tug Boat (Steel)	G.T. 320	Deck 95% Eng. 75	Dec. 15th, 1945	
S623	Cargo ship (Steel)	10,000	Deck 70 Eng. 50	Dec. 30th, 1945	Plate 58 T. Section 10 T.
S663	Car Ferry (Steel)	2,850	Deck 30 Eng. 20	March 31st, 1946	Plate 593 T. Section 18T. Bar 1 T. Condenser 2 Pcs. Oil cleaner 1 only Screw 2 " Capstan 3 pcs. Pumps 7 " Shafts 4 " Funs 7 " Main turbine 2 " (with reduction gear)
S659	Cargo ship (Steel)	2,800	Deck 50 Eng. 30	April 30th, 1946	Plate 20 T. Section 7 T. Pumps 5 pcs. Generator 1 only. Main turbine 1 "
S626	Oil tanker (Steel)	10,000	Deck 50 Eng. 45	May 31st, 1946	Plate 120 T. Section 30 T. Pumps 2 pcs. Oil cleaner 1 only. Funs. 2 pcs.
S627	Cargo ship (Steel)	10,000	Deck 45 Eng. 30	June 30th, 1946	Plate 165 T. Section 26 T. Pumps 6 pcs Oil cleaner 1 only Funs. 2 pcs.

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(B)

HEADQUARTERS
TOKYO-KANAGAWA
MILITARY GOVERNMENT DISTRICT
APO 503

AG-E 004.04

28 August 1946

MEMORANDUM FOR: Kanagawa Prefectural Government

THRU: Yokohama Liaison Office

SUBJECT: Permission for Additional Items of Production

1. Reference is made to the following:

a. Memorandum, Eighth Army, file M & I #5, subject: "Production Permission", dated 27 September 1945.

b. Memorandum, your office, file YLO #887, subject: "Factory conversion Mitsubishi Heavy Industries, Ltd., Yokohama Ship Yard and Engine Works", dated 19 August 1946.

2. Additional manufacturing or repair of essential consumers' goods (other than ship building), as outlined in reference "b" is authorized in addition to the products permitted in reference "a".

BY ORDER OF COLONEL MELBERG

JAMES W. JACORSON, II
Captain CAC
Adjutant

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

YOKOHAMA LIAISON OFFICE
IMPERIAL JAPANESE GOVERNMENT

19 August 1946

YLO NO. 887

MEMORANDUM FOR: The Commanding-Officer of the Tokyo-Kanagawa Military Government District

SUBJECT : Factory Conversion - Mitsubishi Heavy Industries, Ltd. Yokohama Shipyard & Engine Works.

The Yokohama Liaison Office has pleasure in forwarding an application (4 copies) of Mitsubishi Heavy Industries, Ltd. Yokohama Shipyard & Engine Works for permission for conversion to the essential consumers' goods, (other than ship building) already approved by the Kanagawa Prefectural Government.

The Yokohama Liaison Office would highly appreciate it if the Commanding Officer of the Tokyo-Kanagawa Military Government District would be good enough to give his kind consideration to the above application.

YOKOHAMA LIAISON OFFICE

_____ Chief
Tadakatsu Suzuki

(T. Takahashi, Officer in charge)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

APPLICATION FOR CONVERSION AND REPORT ON INDUSTRIAL FACILITIES.

TO : Head-quarters,
Kanagawa Military Government
District.

FROM: Yokohama Shipyard & Engine Works,
Mitsubishi Heavy-Industries, Ltd.

10 Aug., 1946

1. Name of Facility — Yokohama Shipyard & Engine Works.
Mitsubishi Heavy-Industries, Ltd.

2. Location — 3 Midoricho Nishiku, Yokohama,
Japan.

3. Name of Manager — T. Rinoiye

4. History

a. Date of construction: June 4, 1891 Yokohama Dock Co.Ltd.

b. Date of 1st operation: Jan. 1896

c. 1935-1941 Production:

1935	¥15,000,000 (in Yen)
1936	20,498,000
1937	22,841,000
1938	19,123,000
1939	18,682,000
1940	25,936,000
1941	34,141,000

d. Present Capital ¥1,000,000,000

(Unpaid ¥250,000,000)

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e. Changes

	Capital	Paid	Old shares	New shares
1-11-35	60,000,000	60,000,000	1,200,000	-
1- 5-37	120,000,000	75,000,000	1,200,000	1,200,000
1-12-37	"	90,000,000	"	"
1- 3-39	"	105,000,000	"	"
14-12-39	"	120,000,000	2,400,000	"
10 3-40	240,000,000	180,000,000	""	2,400,000
15-11-40	"	210,000,000	"	"
1-12-41	"	240,000,000	4,800,000	-
1- 7-42	480,000,000	300,000,000	4,800,000	4,800,000
1- 5-43	"	360,000,000	4,800,000	"
15- 3-44	"	420,000,000	4,800,000	4,800,000
15- 9-44	"	480,000,000	9,600,000	-
20-12-44	482,500,000	482,500,000	9,650,000	-
20- 6-45	500,000,000	500,000,000	10,000,000	-
1- 8-45	1,000,000,000	750,000,000	10,000,000	10,000,000

f. Name and address of parent company Nil

g. Number of outstanding shares 20,000,000 shares

h. Number of stockholders and Names of holders holding above 10% of all Mitsubishi Co. Ltd.

i. Funds received from Government Nil

j. Outline sketch of plant (See attached sheet)

5. Description

a. Principal Products

1. Wartime
(1) Merchant Marine Cons ruction
(2) Warship Construction
(3) Ship repair
(4) Diesel Engine
(5) Lents Engine
(6) Boiler
(7) Oil Burner

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2. At present

(1) Merchant Marine Construction
(2) Fishing Boat (3) Ship repair
(4) Salvage
(5) Marine and land Engine
(6) Manufactures of Iron
(7) Salt, Oxygen, nails and essential daily commodities making plant
(8) Fertilizer maker
(9) Woodwork
(10) Others

as per list below

(I) Manufactures & Repairs of Land and Marine Engines

Diesel Engine; Steam Recipro-Engine; Steam Turbine; Water & Smoke Tube Boiler; Heavy Oil Feeder; Gas Maker; Salt-Making Equipment; Paper Machine; Pumps; Electric Heater; Refrigerator; Flour Grinder; Freezer; Kitchen Equipment; Presser; Air-Compressor

(II) Manufactures of Iron

Bridge; Steel Structure for Building; Tower; Reservoir Gate; Iron Post; Steel Frame (Guarder); Steel Pipe; Tank; Float; Buoy; Electric Car; Automobile Body; Wagon; Farm Implement; Steel, Iron and Alloy Casting Pounding

(III) Patent

Mitsubishi M.A.N. Diesel Engine
Mitsubishi Lents Steam Engine
Mitsubishi Buich. Turbine Super-Charger
Mitsubishi Low Pressure Heavy Oil Burner
Mitsubishi Simple Oil Burner
Mitsubishi Yokohama Water & Smoke Tube Boiler
Mitsubishi Yokohama Air Heater
Mitsubishi Rotary Pump
Mitsubishi Suspension Turbo-Vortex Pump
Mitsubishi Suspension Motor Vortex Pump
Mitsubishi Horizontal Three Cylinder Pump
Mitsubishi Wing Type Equilbrium Rudder
Mitsubishi Yokohama Ventilator
Mitsubishi Gas Trimmer
Mitsubishi Single Sleeve Thrust Bearing
Mitsubishi Yokohama White Metal
Mitsubishi Yokohama Electric Welding Flux

(IV) Woodwork Construction

Furniture; Fittings; Daily Necessities

(V) Salt; Oxygen; Nails, Etc.

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3. Planned for 1946-47

Essential consumer' goods other than shipbuilding, ship repair and salvage same as at present as above-mentioned #2.

b. Capacity

1. Wartime

(1) 56,000 G.T. (2) 25,000 Dispt. T.
(3) 3,184,699 G.T. (4) 38 (5) 4 (6) 80
(7) 271

2. At present

(1) 38,550 G.T. (2) 10,000 G.T.
(3) 4,000,000 G.T. (4)-(10) Unknown
(Due to the difference in consumption and production)

3. Planned for 1946-47

(Due to the difference in consumption and production)

c. Number of Employee

	On List	GIs	Practically Workable
1. Wartime	15,333	4,513	10,820
2, At Present	5,734	1,012	4,722
3, 1946-47	8,000	-	7,000

6. Machinery & Equipment in Plant.

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MACHINERY & EQUIPMENT LIST

	Number	Made in: Nippon	Made in: Foreign countries	Workable	Unworkable	Condition: Workable after repair	Condition: Unusable	Condition: Under construction / Not in use
Berth	5	5		5				
Dry Dock	3	3		3				
Mooring Band	822M	822M		822M				
Ship way	2	2			2	2		(( ))
Landing equipment	1	1			1	1		(( ))
Tug-boat	6	6		5	1	1		
Traffic boat	6	6		5	1	1		
Floating Crane	3	3		2	1	1		
Tower Crane	12	12		12				
Travelling Crane	65	65		62	3	3		
Steam hoist	14	12	2	14				
Various hoist	132	132		131	1	1		
Air compressor	24	15	9	16	8	7	1	
Press	42	35	7	37	5	5		
Shearing machine	14	13	1	13	1	1		
Punching machine	9	6	3	9				
Iron cutting machine	28	20	8	21	7	7		
Joining machine	119	76	43	114	5	5		
Pumps	42	40	2	42				
Welding machine	399	398	1	373	26	26		(10)
Machine tools	787	611	176	496	291	273	18	(181)
Forging Equipment	53	53		53				(2)
Casting Equipment	63	57	6	47	16	16		(2)
General machine & Equipment	990	973	17	889	101	58	43	
Total	2820	2545	275	2350	470	408	62	

Remarks (( )) shows those under construction

( ) shows machines not in use

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7. Present stocks of Raw Materials, Supplies and Unfinished Goods.

Description	Quantity (Kilo) (Ton)	Condition
Pig iron	75	Planned for work use
Steel Plate	8,000	"
Boiler Plate	960	"
Steel Angle	3,450	"
Steel Bar	1,070	"
Boiler Bar	470	"
Foundry	880	"
Steel Pipe	1,185	"
Gas Pipe	300	"
Special Steel	300	"
Lumber	2,052 M^3	"

8. Present Stocks of Finished Goods — Nil

9. Present Stocks of Fuel

Description	Quantity (Ton)	Condition
Coal	60	Planned for work use
Cokes	3	"
B Heavy Oil	200	"
Carbide	25,400 Cans	"

10. Additional Machinery and Equipment needed for Maximum Production 1946-47

Description	Quantity
Deck Dept. Press	10
General work shop with its machines & tools	2
Engine Dept. Machine tools	25
Other general equipment	10

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Forging equipment	3
Casting equipment	5
Shearing hydraulic & punching equipment	2
Transformer	3
	48

11. Raw Material and supplies required (Monthly)

a. For Present Capacity (5 b 2 above)

Description	Quantity (Ton) a.(For Present Capacity)	b.(For Maximum)
Pig Iron	50	200
Steel Plate	1,800	2,200
Boiler Plate	235	280
Steel Section	610	730
Steel Bar	285	340
Boiler Bar	55	65
Forged Steel	120	140
Steel pipe	350	40
Gass pipe	75	90

12. Fuel Required (Monthly)

Description	Quantity (Ton)	(Scrapping)
Coal	1,300	(30 Ton)
Cokes	120	
B Heavy Oil	50	
Carbide	31,500	
Oxygen	18,000 M^3	
Charcoal	6,450	

13. Additional Personal required

Special Skills	Number
Rivet Cutter	6

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14. Prices

Description	Unit	Price	Remarks
Lentz No.8 Engine	1	1,100,000	
Flour Crasher	1	10,000	
Salt making Plant	1	450,000	

Beside above-mentioned articles, we can make farm implements, tank, sleeping berth for allied powers, street car, water pipe, tyre steel frame, gas watering tube, etc.: but we cannot specify those prices herewith, because they vary with the charucter of work.

15. Balance Sheet

Annexed sheets.

16. Profit & Loss Statement

Annexed sheets.

17. Remarks

Due to the following handicaps we were unableto carry out some of our productions to schedule in the past.

(1) Shortage of trucks
(2) Impossibility of transporting essential machines once removed for precautions against air-raid.
(3) Increase of cost influenced by the high prices of essential commadities.
(4) Lack of skillful labourers.
(5) Deflation of funds.
(6) Gasoline (600 gal.) coal (600 tns)

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18. Certifications by Applicant

I certify that the information contained herein is true to the best of my knowledge and belief.

Mitsubishi Heavy Industries, Ltd.
Yokohama Shipyard & Engine Works.

Signed _____ Gr. Mgr.
T. Rinoiye

19. Action by Occupation Forces.

The factory described in this application has been inspected and the following action taken:

a. Ordered to remain closed — Yes _____ No _____
b. Ordered to cease operation immediately — Yes _____ No _____
c. Authorized to produce at the following rate

Item to be manufactured	Monthly Quantity

Signature of Authorizing Officer

Designation of Authorizing Unit

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(C)

10 February, 1949.

1. Reconversion permits issued to aircraft and munition factories:

Prefecture	Company	Plant
Aichi	Sumitomo Kinzoku K.K.	Nagoya
Hyogo	Kubota Tekkosho K.K.	Mukogawa
Ishikawa	Hokuriku Kinzoku Kogyo K.K.	Iburibashi
Osaka	Dai-ni Kubota Tekko K.K.	Waka
"	Osaka Kinzoku Kogyo K.K.	Kanzakigawa
"	Toa Kikai Kogyo K.K.	Urae & Owaza
Tokyo	Mitsui Seiki Kogyo K.K.	Tokyo

2. Conversion permits issued to shipbuilding factories:

Prefecture	Company	Plant
Fukuoka	Mitsubishi Jukogyo K.K.	Wakamatsu Dockyard
Hiroshima	Setodo Shipbuilding Co.	
Hyogo	Harima Shipbuilding Co.	Matsunoura Dockyard
"	Kawasaki Jukogyo K.K.	Kansen Plant
"	Mitsubishi Jukogyo K.K.	Kobe Dockyard
"	Sanko Shipbuilding Co.	Kobe Plant
Kanagawa	Hitachi Shipbuilding Co.	Kanagawa Dockyard
Osaka	Fujinagata Shipbuilding Co.	Funamachi Plant
"	Sanoyasu Dock Co.	
Tokyo	Tokyo Shipbuilding Co.	
Yamaguchi	Mitsubishi Jukogyo K.K.	Shimonoseki Dockyard

3. Shipbuilding factories which has permits for all product they applied for previously issued by the Military Government Team:

Prefecture	Company	Plant
Kanagawa	Mitsubishi Shipbuilding Co.	Yokohama Dockyard
Fukuoka	Kyushu Shipbuilding Co.	Wakamatsu Plant
Kanagawa	Uraga Dockyard Co.	Kawama Plant
Osaka	Fujinagata Shipyard	Main Plant
"	Osaka Shipyard Co.	

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1. Shipbuilding, repairing and conversion:

Building, repairing and conversion of various type of ships, and incidental work thereof.

2. Prime movers and power transmission equipment:

Internal combustion engines for marine and land use, Steam engines, Steam boilers, Steam trubines, Gas turbines, Water wheel and water turbines, Shafts, Pulleys, Couplings, Hydraulic drives, Toothed wheel gears, Clutches, etc.

3. Pumps, blowers and compressors:

Pumps of all type such as rotary, reciprocating, spiral, centrifugal, etc. Condensers, Blowers, Compressors, etc.

4. Chemical industry machines and apparatus, pulp and paper industrial machines:

Reaction vessels, Gas producers, High-pressure vessels, Heaters, Refrigerators, Coolers, Salt producing machines, Separators, Electrolysis tanks, Digesters, Diffusers, Super calenders, Dryers, etc.

5. Food products machines, farm implements and tobacco manufacturing machines:

Powderring machines, Wheat grain pressing machines, Straw rope twisting machines, Cereal manufacturing machines, Tobacco dryers, Tobacco coolers, etc.

6. Cranes, derricks and winches:

7. Vehicles:

Street cars, Bus, Freight-cars, etc.

8. Steel structures, railway construction and scrapping:

Bridges, Steel tower, Steel structure for buildings, Steel frames, Steel pipes, Steel piles, Reservoir gates, Tanks, Floats, Buoys, Railway construction, etc.

9. Castings and forged goods:

10. Wood work and construction:

Furnitures, Fittings, Construction work, etc.

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APPLICATION FOR PERMISSION

TO CONTINUE OPERATION OF DESIGNATED REPARATIONS PLANT

TO : Minister of Transportation

FROM : Yokohama Shipyard & Engine Works,
Mitsubishi Heavy Industries, Ltd.
3-chome, Midoricho, Nishiku,
Yokohama

DATE : November 22, 1948.

(1) Name of Plant:

Yokohama Shipyard & Engine Works, Mitsubishi Heavy Industries, Ltd.

(2) Location of Plant:

2-4, 3-chome, Midoricho, Nishiku, Yokohama

(3) Name of Production Planned:

1) Shipbuilding, Shiprepairing and Conversion.

2) Prime movers and power transmission equipment.

3) Pumps, blowers and compressors.

4) Chemical industry machines and apparatus. pulp and paper industrial machines.

5) Food products machines, farm implements and tobacco manufacturing machines.

6) Cranes, derricks and winches.

7) Vehicles.

8) Steel structures, railway construction and scrapping.

9) Castings and forged goods.

10) Wood work and construction.

Contents of the foregoings, for example, are as follows:

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1. Shipbuilding, repairing and conversion:

Building, repairing and conversion of various type of ships, and incidental work thereof.

2. Prime movers and power transmission equipment:

Internal combustion engines for marine and land use Steam engines, Steam boilers, Steam turbines, Gas turbines, Water wheel and water turbines, Shafts, Pulleys, Couplings, Hydraulic drives, Toothed wheel gears, clutches, etc.

3. Pumps, blowers and compressors:

Pumps of all type such as rotary, reciprocating, spiral, centrifugal, etc. Condensers, Blowers, Compressors, etc.

4. Chemical industry machines and apparatus, pulp and paper industrial machines:

Reaction vessels, Gas producers, High-pressure vessels, Heaters, Refrigerators, Coolers, Salt producing machines, Separators, Electrolysis tanks, Digesters, Diffusers, Super calenders, Dryers, etc.

5. Food products machines, farm implements and tobacco manufacturing machines:

Powderring machines, Wheat grain pressing machines, Straw rope twisting machines, General manufacturing machines, Tobacco dryers, Tobacco coolers, etc.

6. Cranes, derricks and winches:

7. Vehicles:

Street cars, Bus, Freight-cars, etc.

8. Steel structures, railway construction and scrapping:

Bridges, Steel Towers, Steel structure for buildings, Steel frames, Steel pipes, Steel piles Reservoir gates, Tanks, Floats, Buoys, Railway construction, etc.

9. Castings and forged goods:

10. Wood work and construction:

Furnitures, Fittings, Construction work, etc.

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(4) Experience of the Production Planned:

1. Experience in Shipbuilding:

Since 1917, this Shipyard has been engaged in the building of vessels. In the line of passenger ships the Kamakura Maru (17,498 GT) and Hikawa Maru (11,622 GT), were built and as cargo boats the Kanto Maru (10,779 DW) and Kansai Maru (10,774 DW) as oil tankers the Teiyo Maru (13,740 DW) and Nissho Maru (14,058 DW) and many other ships were built in this yard which are considered the largest and finest in Japan. Furthermore, our construction experience covers every type of ships such as car-ferry boats, cable-layers, storage ships, fishing boats, steam-launchs, tug-boats, steel barges, dredgers, naval vessels, guard boats, etc.

After the termination of war, under the authorization of G.H.Q., the shipyard has built passenger ships (3 ships, 3,600 GT), car-ferry boats (3 ships, 8,550 GT), fishing boat (35 ships, 6,710 GT), cargo-boats (3 ships, 6,750 DW) and a cable-layer (1 ship 1,500 GT).

At present, three cargo-boats (9,250 DW) are under construction.

Ships built in this Shipyard are summarized as follows:

Type of ships	Number of ships	Tonnage in total (mark indicates Displacement, others GT)
Passenger Ship & Cargo boat	129	459,690
Oil tanker	34	182,586
Naval vessel	62	97,258
Fishing boat & Tug boat	68	2,889)
Others	204	10,085
		9,216
		36
Total	497	109,363
		652,397

2. Experience in Shiprepairing:

Being located in the heart of Yokohama, the largest trading port in Japan, the Shipyard has always took the lead among other shipyards thr out Japan in the

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volume of shiprepairs since prior to the war. After the war, under the direction of occupational authorities, such as the W.S.A. (present U.S.M.C.) and SCAJAP, etc., the Yard has exerted every effort, leading Japanese industry, in urgent repairs of Allied vessels as well as in extensive repair work of ships for repatriation. In such a way, this Shipyard is displaying its undivided endeavor to execute important works for the Allied Forces, together with the rehabilitation of Japanese industry.

The following are the records of past shiprepairing:

YEAR	GENERAL REPAIR		DOCKING REPAIR		TOTAL	
	No. of vessels	Gross Tonnage	No. of vessels	Gross Tonnage	No.of vessels	Gross Tonnage
1928	152	1,049,249	153	767,000	305	1,816,249
29	174	1,173,413	166	884,000	340	2,057,413
30	158	1,352,197	174	901,000	332	2,253,197
31	165	1,379,209	158	857,000	323	2,236,209
32	236	1,569,322	156	888,000	392	2,457,322
33	237	1,621,856	176	909,662	413	2,531,518
34	236	1,636,591	194	1,069,434	430	2,706,035
35	266	1,817,533	220	1,258,395	486	3,075,928
36	309	2,201,878	210	1,190,230	519	3,392,108
37	292	2,103,187	244	1,449,283	536	3,552,470
38	292	1,943,066	191	1,252,220	483	3,195,286
39	285	1,959,800	197	1,215,977	482	3,175,777
40	321	2,115,573	172	1,022,967	493	3,138,540
41	358	2,238,638	192	1,040,080	550	3,278,718
42	321	1,904,634	123	684,324	444	2,588,958
43	248	1,259,742	139	717,831	387	1,977,573
44	381	1,131,782	76	247,486	457	1,379,268
45	150	405,627	86	141,586	236	547,213
46	708	3,831,161	89	404,944	797	4,236,105
47	602	2,747,804	138	482,997	740	3,230,801
48/to Oct.	457	1,843,404	128	304,249	585	2,147,653

3. Experience in manufacture (of articles other than vessels):

Manufacture of steel products began with the Company's establishment. At the time of the Kanto Earthquake in 1923, the Yard has cooperated in the rehabilitation of Kanto district in supplying a large number of steel tower, steel structure for buildings, steel frame, steel tube, reservoir gate, etc. With the expansion of facilities in the Shipyard, we have produced numerous items such as internal combustion

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engine, steam engine, oil burner, gas producer, paper industrial machinery, pump, blower, crane, derrick, heater, cooler, float, buoy, vehicle, etc., all of which have met the demands of the public on account of our careful planning and skillful workmanship. These products are most suitable to our line of engineering and equipments, and indispensable to the shipbuilding enterprise which is susceptible to the economic fluctuations. This is also a characteristic of the Japanese shipbuilding industry.

The followings are the records of past production:

Classification	Item	Orderers	Number
Prime movers & power transmission equipments	Mitsubishi MAN Diesel engine.	Home Ministry and 122 others.	156
	Mitsubishi low pressure oil burner.	Dai Jippon Beer Co. and 62 others	148
	Mitsubishi Oil burner.	Hotel New Grand and 26 others.	88
	Steam boiler.	Yokohama Rubber Co. and 91 others.	170
Pump, blower, and compressor	Pump	Home Ministry and 59 others.	126
	Blower	Osaka Iron Works and 8 others.	14
	Compressor		
Chemical industry machinery, pulp and paper industrial machinery	Heater and Cooler.	Okura Trading Co. and 25 others.	65
	Gas producer	Tokyo Gas Co. and 21 others.	157
	Paper machine	Oji paper Industrial Co. and 29 others.	101
	Chemical machine	Kirin Beer Co. and others.	a large number
	Knoules electrolysis Tank.	Showa Denko Co. and others.	327
Food products machinery. farm implement and tobacco manufacturing machinery	Powdering machine	Nippon Shokuhin Co. and others	283
	Tobacco manufacturing machine	Monopoly Bureau of Finance Ministry and others	17
Crane, derrick and winch	Crane	Finance Ministry and 8 others.	9
	Transporting machine.	North Saghalien Oil Co. and 2 others.	3
Vehicle	Vehicle	Electric Bureau of Yokohama Municipality and 5 others.	90

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Classification	Item	Orderers	Number
Steel products and railway construction Work	Bridge	Yokohama Municipality and 47 others.	458
	Steel tower	Keihin Electric Power Co. and 16 others.	456
	Steel structure for building and steel frame.	Fuji Electric Co. and 26 others.	37
	Reservoir gate	Home Ministry and others.	a great deal
	Tank	Toshin Electric Co. and 19 others.	105
	Float and Buoy	Gas Bureau of Yokohama Municipality and 46 others.	371
	Railway construction Work	Tokyo Municipality and 11 others.	194 Ton
		Tokyo Subway Co. and others.	10,000
Castings and forged goods	Castings and forged goods	Nippon Kogaku Kogyo Co. and others	a great deal
Wood work & construction	Furniture and fittings	Nippon Seihyo Co. and others.	a great deal
	Construction	Yokohama Country Club and 98 others	"

(5) 1939 - 1945 Production:

1. Shipbuilding

Number and tonnage of ships built according to years:

Year	Passenger & Cargo boat		Oil tanker		Fishing & Tug boat		Naval vessels		Other boat		Total	
	No.	G.T.	No.	G.T.	No.	G.T.	No.	G.T.	No.	Disp' G.T.	No.	Disp' G.T.
1939	6	22,129	-	---			5	709	1	4	12	709 22,133
1940	4	21,457					10	14,207	26	772		14,979 21,457
1941	4	18,434					5	8,840	40	2,960		11,800 18,434
1942	6	20,499	2	10,338			1	750	46	820		1,570 30,837
1943	1	4,291	10	51,430			4	10,900	11	425		11,325 55,721
1944	9	7,992	5	35,890			6	10,800	3	75		10,875 43,882
1945			2	20,845			1	3,000				3,000 20,845
Total	30	94,802	19	118,503			32	49,206	127	5,052 4	208	54,358 213,209

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

2. Shiprepairing

Numbers and tonnage of ships repaired according to years.

Year	General repair		Docking repair		Total	
	No.	G.T.	No.	G.T.	No.	G.T.
1939	285	1,959,800	197	1,215,977	482	3,175,777
1940	321	2,115,573	172	1,022,967	493	3,138,540
1941	358	2,238,638	192	1,040,080	550	3,278,718
1942	321	1,904,634	123	684,324	444	2,588,958
1943	248	1,259,742	139	717,831	387	1,977,573
1944	381	1,131,782	76	247,486	457	1,379,268
1945	150	405,627	86	1 141,586	236	547,213
Total	2,064	11,015,796	985	5,070,251	3,049	16,086,047

3. Manufacturing (of articles other than shipbuilding and repairing)

Volume of sales according to years

Year	Volume of Sales
1938	¥ 3,333,000
1939	4,998,000
1940	2,404,000
1941	4,665,000
1942	8,582,000
1943	16,297,000
1944	14,671,000
1945	1,365,000
Total	¥ 56,315,000

Remarks: Amounts from May to December is unknown due to the lost of data.

(6) Scale of production planned by Months for Period on this Application:

Name of production	Scale of production planned
Shipbuilding, repairing and conversion	Shipbuilding : per year 50,000 GT Shiprepairing: " " 720,000 (Docking repairs only)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Name of production	Scale of production planned
Prime movers and transmission equipment	Including products to be used on vessels constructed in our yard, per year 50,000 H.P.
Pumps, blowers and compressors.	per month 50 ton
Chemical industry machine and paper industrial machine	per month 100 ton
Food products machine, farm implements and tobacco manufacturing machine	per month 100 ton
Crane, derrick and winch	per month 50 ton
Vehicles	per month 5 vehicles
Steel structures, railway construction work and scrapping work	per month 1,000 ton
Castings and forged goods	per month 500 ton
Wood work and construction	Lumber per month 1,500 koku

(7) Period of desired permission:

Until removal of repairation designated equipments.

(8) Plan and Location to continue the production after reparation removal:

We have no concrete plan at present.

(9) Scale of proposed changes in physical facilities:

No change is planned in facilities of factory.

(10) Intended expense for conversion or reconversion:

None.

(11) Name or Location to which products are to be delivered:

Our products are to be delivered to the demands of:
P.D. of Occupation Forces, Domestic use and Export sales.

Signed _____

T. Rinoiye
General Manager
YOKOHAMA SHIPYARD & ENGINE WORKS,
MITSUBISHI HEAVY-INDUSTRIES, LTD.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Attached sheet No.1

Machine Equipment

Classification	Registered Machine	EX machine	Total	Remarks
1. Industrial machinery	104(10)	2	106	
2. Machine tool	769(189)	2	770	
3. Transporting machinery and cranes	227(7)	1	228	
4. Electric machinery	311(4)	18	329	
5. Power machinery	104(0)	8	112	
6. Woodworking machinery	107(0)	3	110	
7. Other machines	2,990(565)	5	2,995	
Total	4,612(755)	39	4,650	

Remarks: Numbers in parentheses show idle machines.

Employees

Classification	Number
Clerks	948
Workers	6,107
Female	426
Total:	7,481

Land and Building

a) Land 82,870 tsubo
b) Building 36,289 "

Shipbuilding Berth

Berth	Land (Dimensions)	Water	Ships to be built
No.1	306' x 25'	25'	4,000 GT
No.2	449'6"x30'	63'	8,000
No.3	537' x32'	46'	13,000
No.4	543' x35'	40'	13,000
No.5	624'5"x38'	90'	25,000

Dry Dock

	Length (Dimension)	Width	Depth	Entrance	Capacity
No.1	625'-0"	83'00"	32'07"	75'05"	20,000 GT
No.2	376'05"	48'11"	30'00"	45'06"	4,500 GT
No.3	465'05"	63'06"	25'00"	62'06"	8,000 GT

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Attached sheet No.2

Mooring Pier

Total length 2,730 ft.

Cranes

Classification	Capacity	Number
Floating crane	120 ton	1
"	50 "	1
		2
Tower crane	3 ton	2
" "	6 "	8
" "	10 "	1
" "	16 "	1
" "	20 "	1
		13

..... ooo .....

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

TO : Col. Wm.M.Keane, Chief,
HQ. C.C.A.R., Kure.

FROM : Tadashi Adachi, Director & President,
Toyo Pulp Co., Ltd.,
1 Higashi Matsushita-cho, Kanda, Chiyada-ku, Tokyo.

Ser.No. : TP(K)No.26-269.

29 March 1951

Re: PETITION FOR USE OF PART OF BLDG. No.3 IN CHUKO AREA

Our Kure Plant is now under construction as planned in the site which was authorized for our use with the Notice No.287.6 (15 Jan 51) ESS/IND. But the site was too narrow, then we submitted an application for converted use of part of under-mentioned Bldg No.3 for repairing Workshop through the proper channel.

As the busiest stage of construction is to be expected near at hand, various machines ordered are coming there one by one from makers and waiting to be installed. Therefore we ask your favorable arrangement for temporary use of them in prospect of authorization.

1. Subject Matters:
Part(686.2 tsubo) of Bldg No.3,a wing of U-shaped building in Chuko Area sa per attached map.

2. Period:
About 2 months from 15 April 1951 until officially authorized.

3. Necessity for Temporary Use:
Considering its condition and position the part of the building is indispensable for machines to be newly installed and for repairing work in future, we would like to arrange things as per attached map to have Tool Room, Material Yard, Design Room, and Locker Room. Because the part is a wing of the Bldg.Nos.1 and 2 which were *authorized* *for use* ~~Released~~, and is especially adjoining to the Bldg.No.2, the main Pulp factory.
As mentioned above we are expecting the busiest stage of construction near at hand, we made this petition because of avoiding to have idle period will the official authorization comes.

11-a(2) Sect II

4. Expenses:
All expenses will be paid by us for it, and your direction be strictly observed.

FOR THE PRESIDENT:

Hajime Chida

HAJIME CHIDA
Gen. Manager
Toyo Pulp Co. Kure Plant

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

POWER OF ATTORNEY

I Tadashi Adachi President of Toyo Pulp Co., Ltd.
constitute and appoint, the Kure plant manager
Hajime Chida of Toyo Pulp Co., Ltd. a true and
lawful attorney for me.
To apply for temporary usage of the reparations
facilities and installments of the former IIth
Japanese Navy Aircraft Ordance at Hiro-machi Kure,
in the matter of constructing a plant at the
preceding site.
And generally to do and perform all such acts, matters
and things as my said attorney shall deem necessary
and expedient for the completion of the authority as
fully as I might and could do were I personally present.

Signed Tadashi Adachi
Title President
Date 29 March 1951

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Design of the Ma

Toyo Pulp Co.

Area 2

(

BLDG. No. 2

PULP MIL

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

gn. of the Machine Shop at BLDG. No. 3.

Toyo Pulp Co. LTD. March, 12th, 1951.

Area 2,176.0 m²
(668.2 tsubo at Japanese unit.)

LDG. No. 2

PULP MILL. (パルプ製造工場 第2号建家)

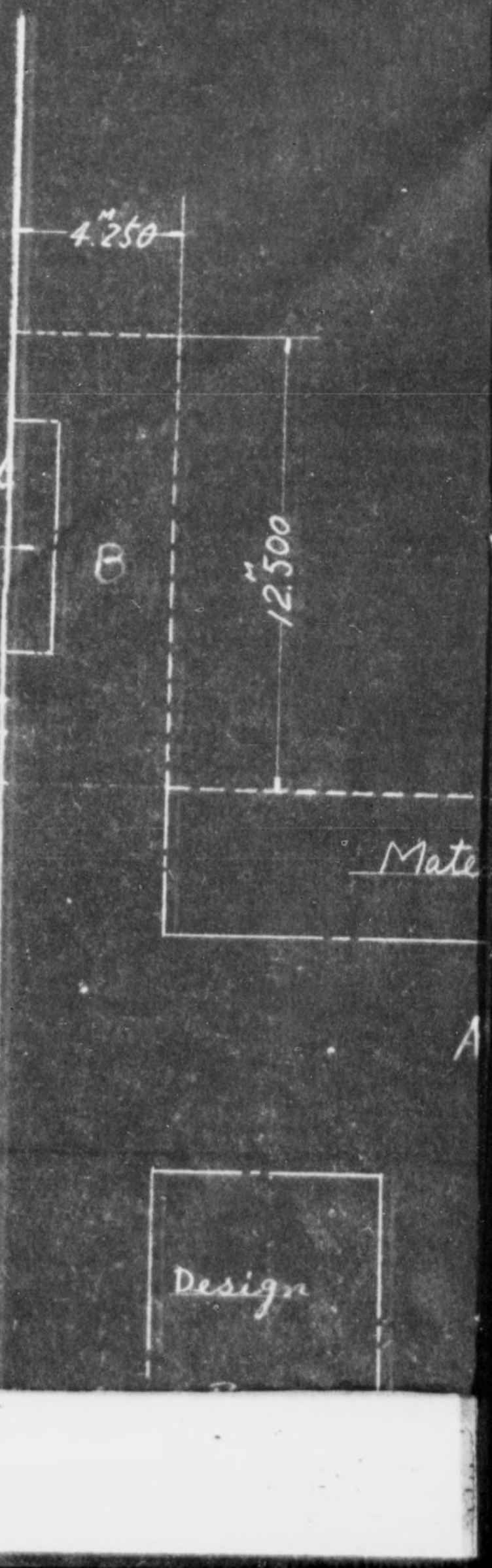
DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

at BLDG. No. 3.

Scale 1/200

ch, 12th, 1951.

Japanese unit.)



(製造工場 第2号建家)

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BLDG. No. 3

(第3号 建家)

4.250

12.500

B

Material Yard 材料置場

A

Design

11-6(8)-1309
Lathe.
旋盤

Surface plate.
定盤

11-5(7)-316
Lathe
旋盤

11-5(7)-440
Lathe
旋盤

11-5(7)-
Sawing
金切盤

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

No. 3

(第3号 建家)

材料置場

Surface plate.
定盤

11-5(7)-316
Lathe
旋盤

11-5(7)-440
Lathe
旋盤

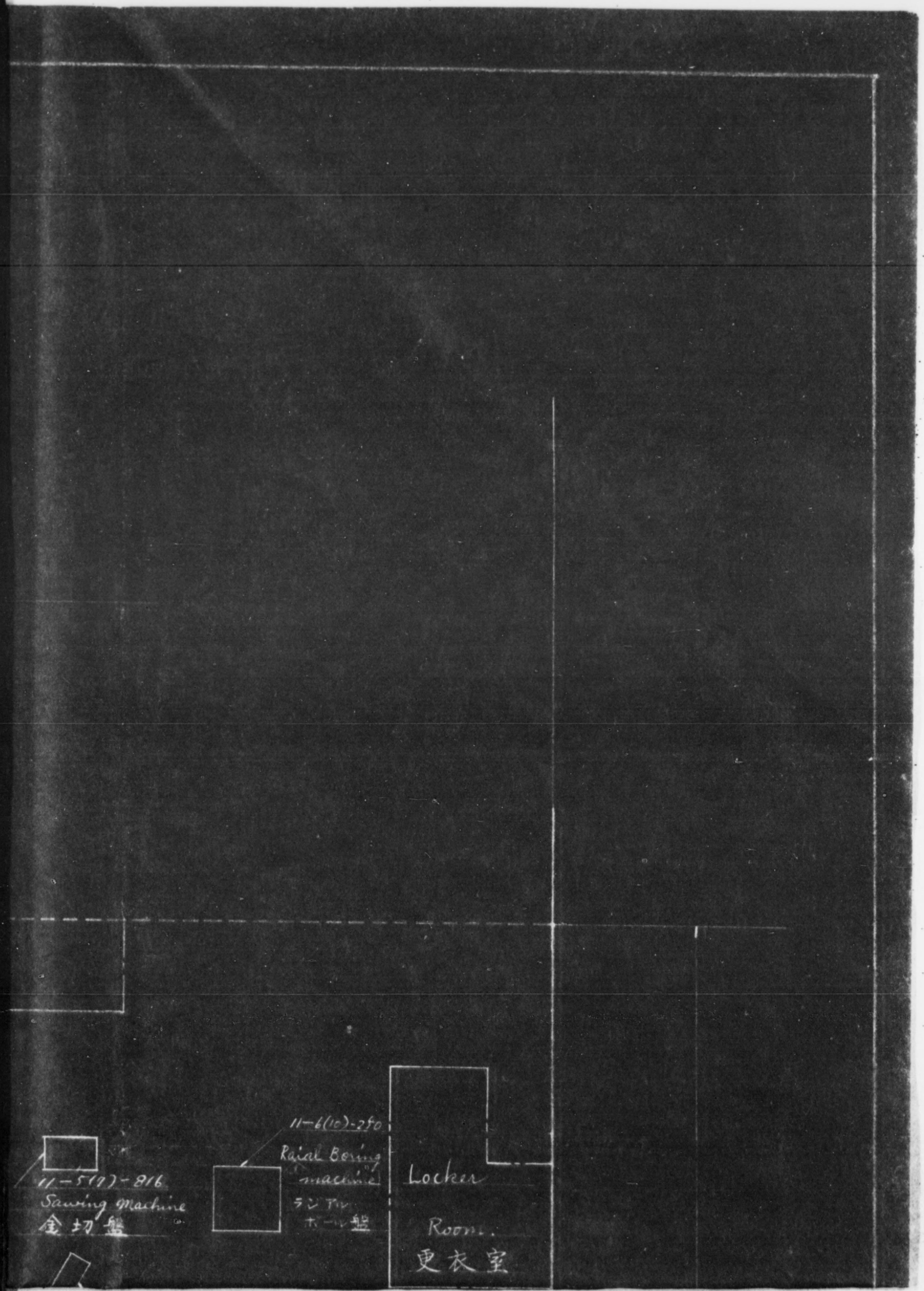
-1309

11-5(7)-816
Sawing Machine
金切盤

11-6(10)-250
Raial Boring machine
ラジアル ボール盤

Locker Room.
更衣室

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



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BLDG. No. 2

PULP

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

BLDG. No. 2

PULP MILL. (パルプ製造工場 第2号建家)

Area of section,

Machine Shop.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

ルプ製造工場 第2号建家)

Desig

Room

工作設

Area of section A 2. 22.87 m²
" " " B 53.13 m²

Shop.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Material Yard 材料置場

A

Design Room. 工作設計室

Surface plate. 定盤

11-5(7)-316 Lathe 旋盤

11-6(8)-1309 Lathe. 旋盤

11-5(7)-440 Lathe 旋盤

11-6(8)-1319 Lathe. 旋盤

Tool Room. 工具室

11-6(9)-384 Slotter. 竪削盤

11-6(1 Grin 研磨

11-5(7)-936 Huminer. ハンマー

11-5(7 Boring ボーン

11-16) 8-1519 Hand press. 手切プレス

11-6(8)-2766 Small Furnace. 小火炉

11—3(0 Boring ボーン

58.M000

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Material Yard 材料置場

A

Surface plate.
定盤

11-6(8)-1309
Lathe.
旋盤

11-5(7)-316
Lathe
旋盤

11-5(7)-440
Lathe
旋盤

11-5(7)-816
Sawing Machine
金切盤

11-6(10)-250
Raial Boring machine
ラジアルボール盤

Loc
下
更

11-6(8)-1319
Lathe.
旋盤

11-6(9)-384
Slotter.
竪削盤

Tool Room.
工具室

11-5(7)-936
Hammer.
ハンマー

18-1519
d press.
プレス

11-6(8)-2766
Small Furnace.
小火炉

11-6(13)-82
Grinding Machine
研磨盤

11-5(7)-841
Boring Machine
ボール盤

11-5(7)-272
Shaper
セーパー

11-5(7)-833
Shaper
セーパー(形削盤

11-5(7)-230
Lathe
旋盤

11-5(7)-774
Milling Mach
フライス盤

Gri
研

11-3(0)-284
Boring Machine
ボール盤

11-5(7)-240
Lather
旋盤

11-6(11)-
Planer
平削盤

58.M000

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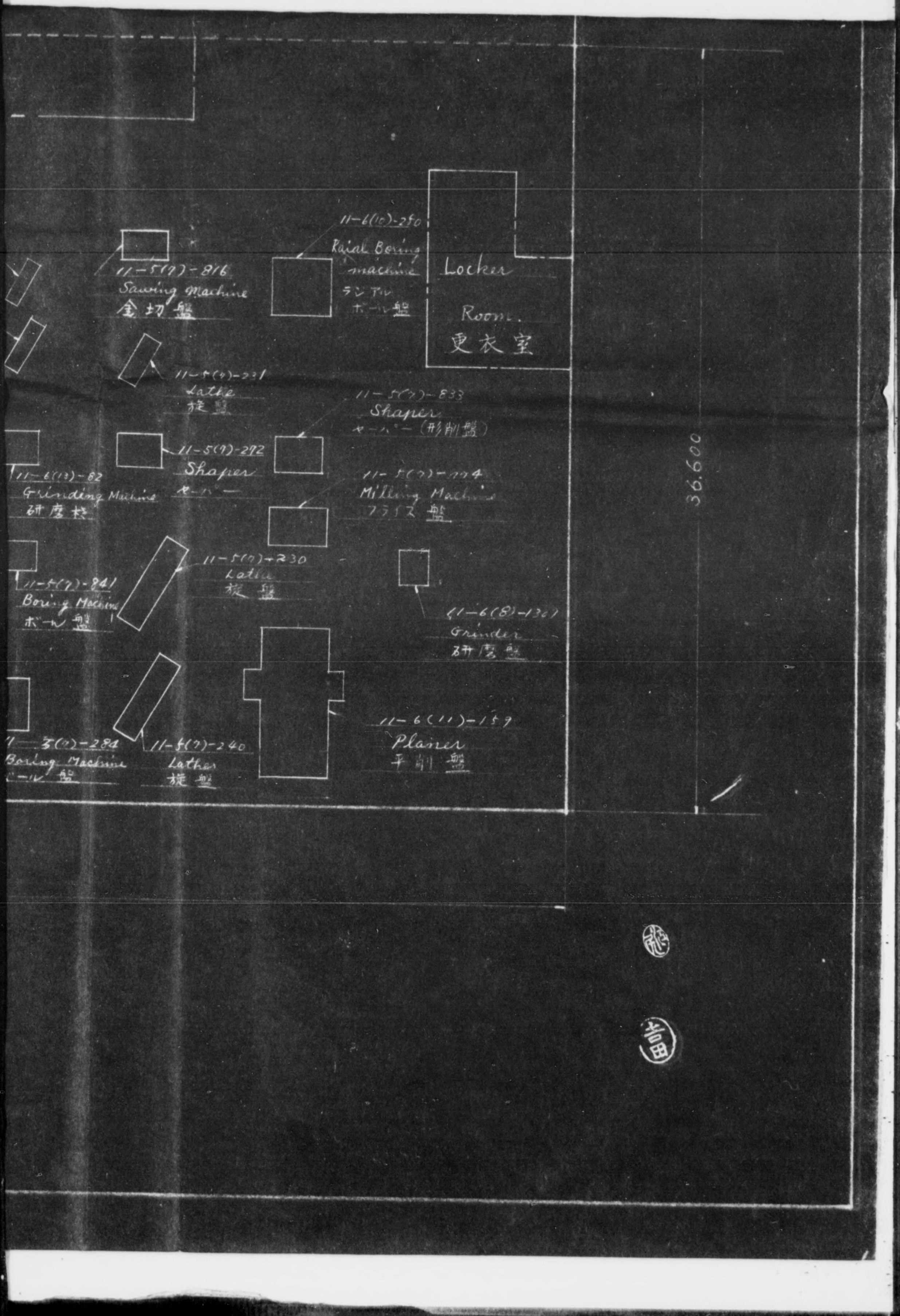

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

APPLICATION FOR AUTHORIZED USE OF
REPARATION MACHINERY AND EQUIPMENT

Ser.No.:TP(K)No.26-137
17 March 1951

TO : Col.Wm.M.Keane, Chief,
HQ C.C.A.R.,Kure.

FROM : Tadashi Adachi, Director & President,
Toyo Pulp Co.,Ltd.
1 Higashi Matsushita-cho,Kanda, Chiyoda-ku,Tokyo.

Our Kure Plant is now under construction in the site of Chuko Area, 11th Air Arsenal, Hiro-machi, Kure-shi. Under-mentioned Overhead Travelling Cranes are deisred to be used for moving of part of reparation machinery from Bldgs. Nos. 1 and 2 to Bldg.No.3. Your kind arrangement is requested for authorized use of those cranes.

1. Machinery to be used:

Inventory No.	Machine	Capacity	Location	Remarks
11-6(8)-1830	Overhead Travelling Cranes	30 tons	Chuko Area Bldg.No.3	one
11-6(8)-1831	" " "	15 tons	" "	one

2. Necessity for Use: According to the Movement and Arrange-ment Plan of Idle Reparation Machinery, of which submitted separately through Director of Kure Branch Office of the State Property, above-mentioned cranes are desired to be used for moving of part of reparation machinery from Bldgs.No. 1 and 2 to Bldg.No.3. Authorization is requested for the use.

3. Period: 46 days from 15 March 1951 to 30 April 1951

4. Others: As per attached map.

FOR THE PRESIDENT:

Hajime Chida

HAJIME CHIDA,
General Manager,
Toyo Pulp Co. Kure Plant.

Encl II (8)-11-47

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

POWER OF ATTORNEY

I Tadashi Adachi President of Toyo Pulp Co., Ltd.
constitute and appoint, the Kure plant manager
Hajime Chida of Toyo Pulp Co., Ltd. a true and
lawful attorney for me.
To apply for temporary usage of the reparations
facilities and installments of the former IIth
Japanese Navy Aircraft Ordance At Hiro-machi Kure,
in the matter of constructing a plant at the
proceding site.
And generally to do and perform all such acts, matters
and things as my said attorney shall deem necessary
and expedient for the completion of the authority as
fully as I might and could do were I personally present.

Signed Tadashi Adachi

Title President

Date 15. March 1951.

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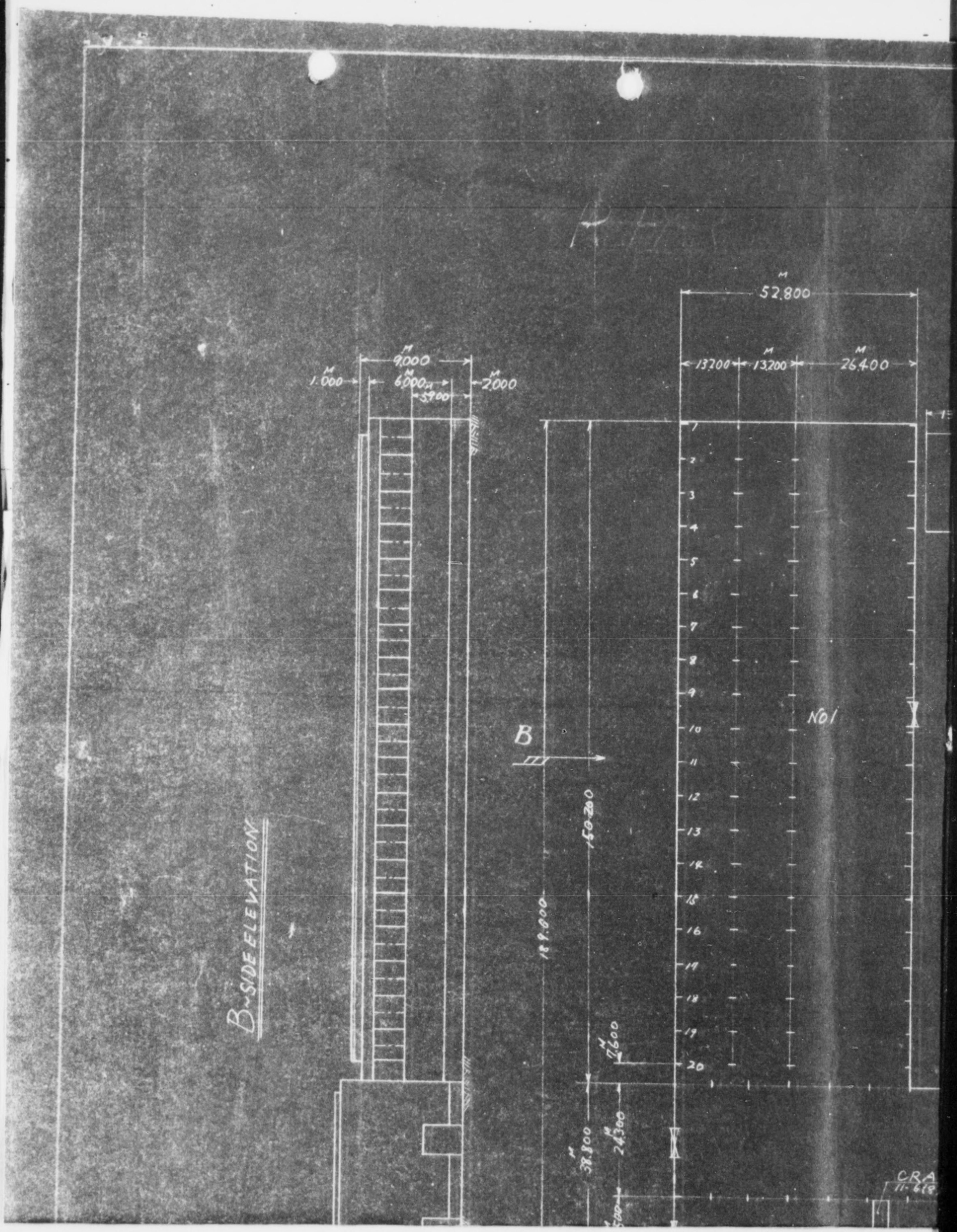


B-SIDE ELEVATION

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

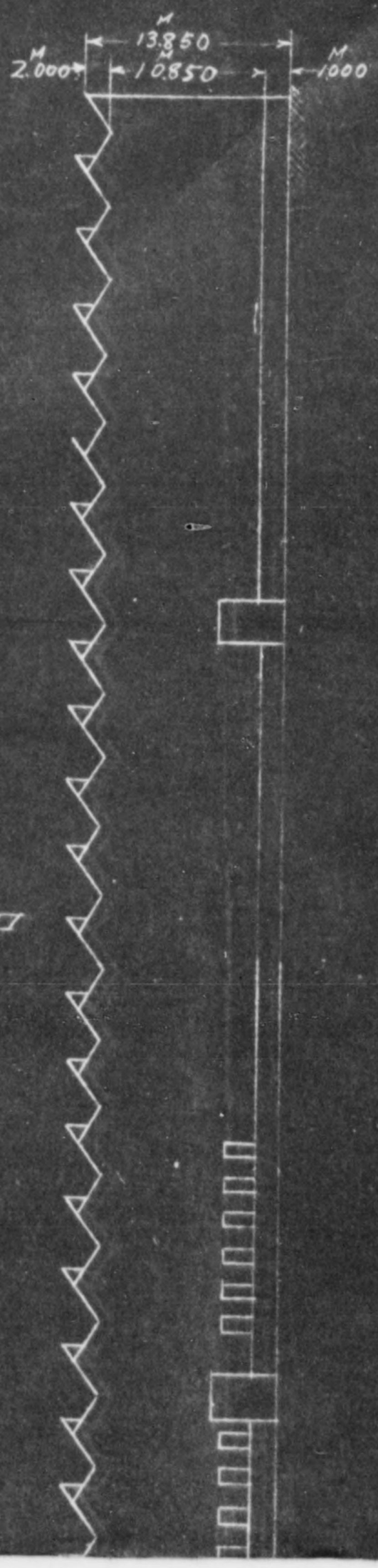
CHŪKŌ AREA

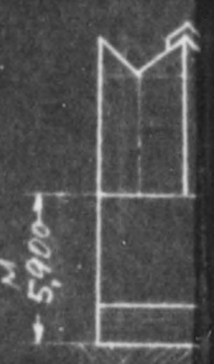
PLAN

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDS NO. 775013

JKŌ AREA

SCALE 1/1000





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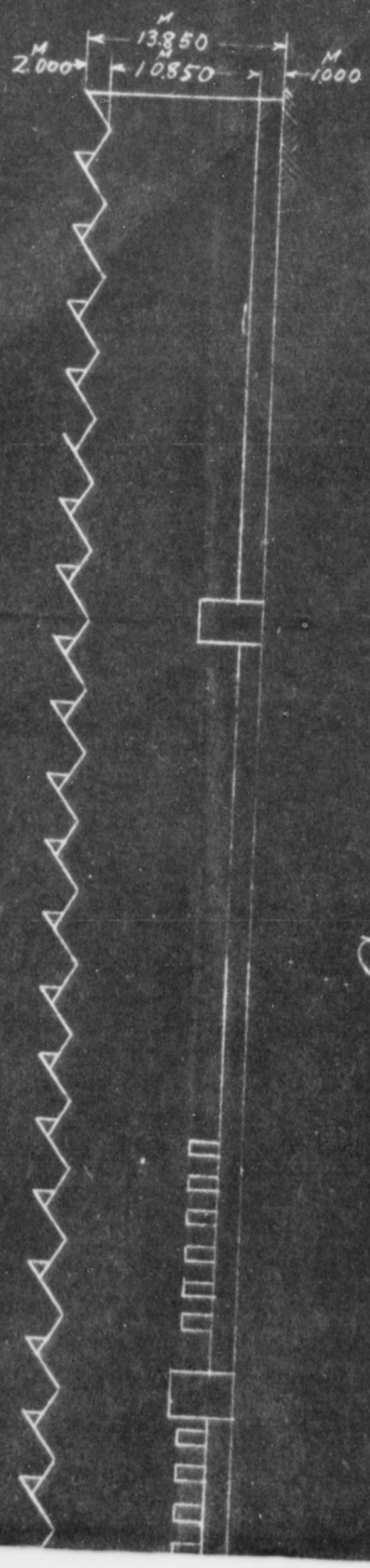

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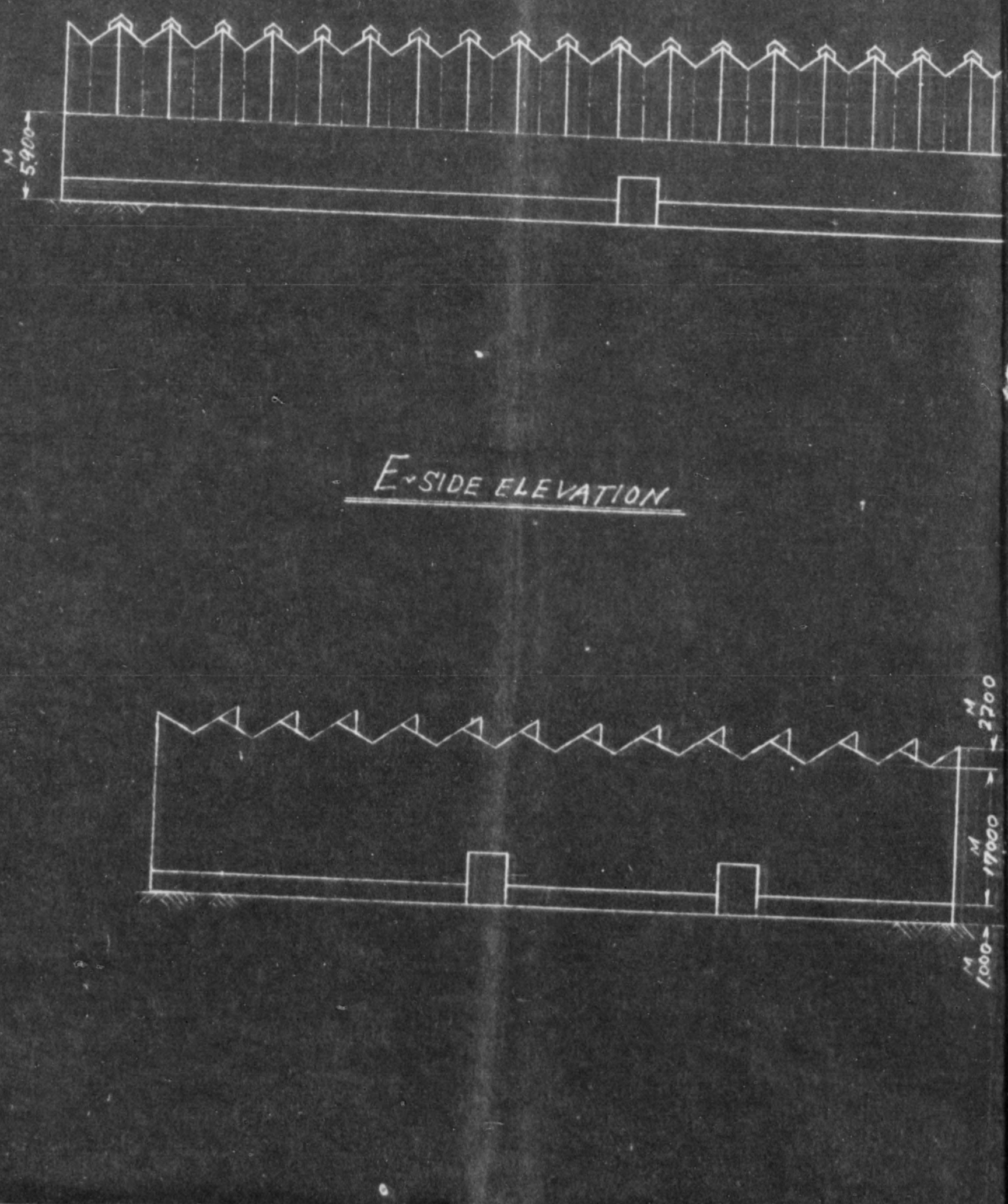
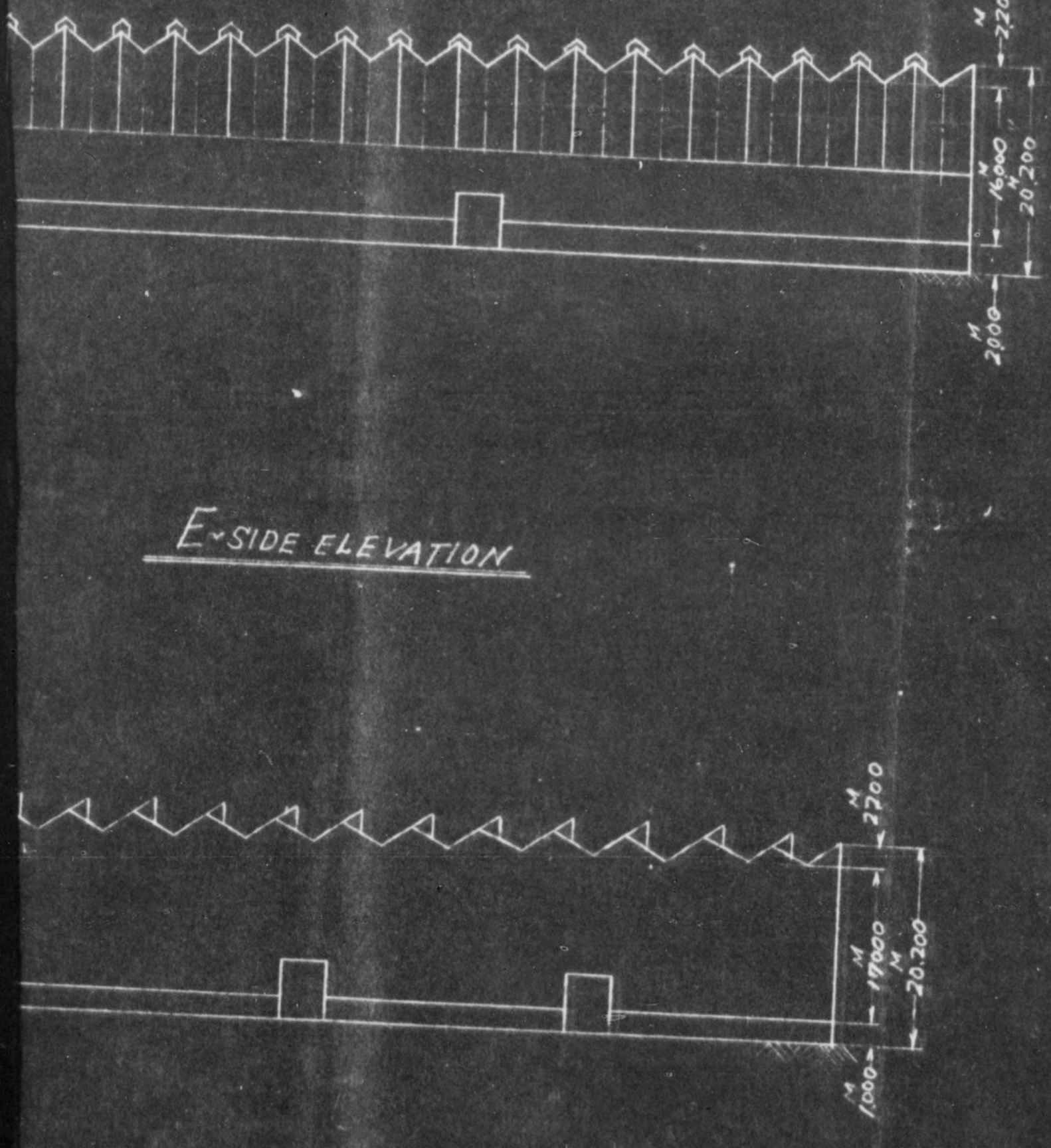


D ~ SIDE ELEVATION

E ~ SIDE ELEVATION

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

D~SIDE ELEVATION



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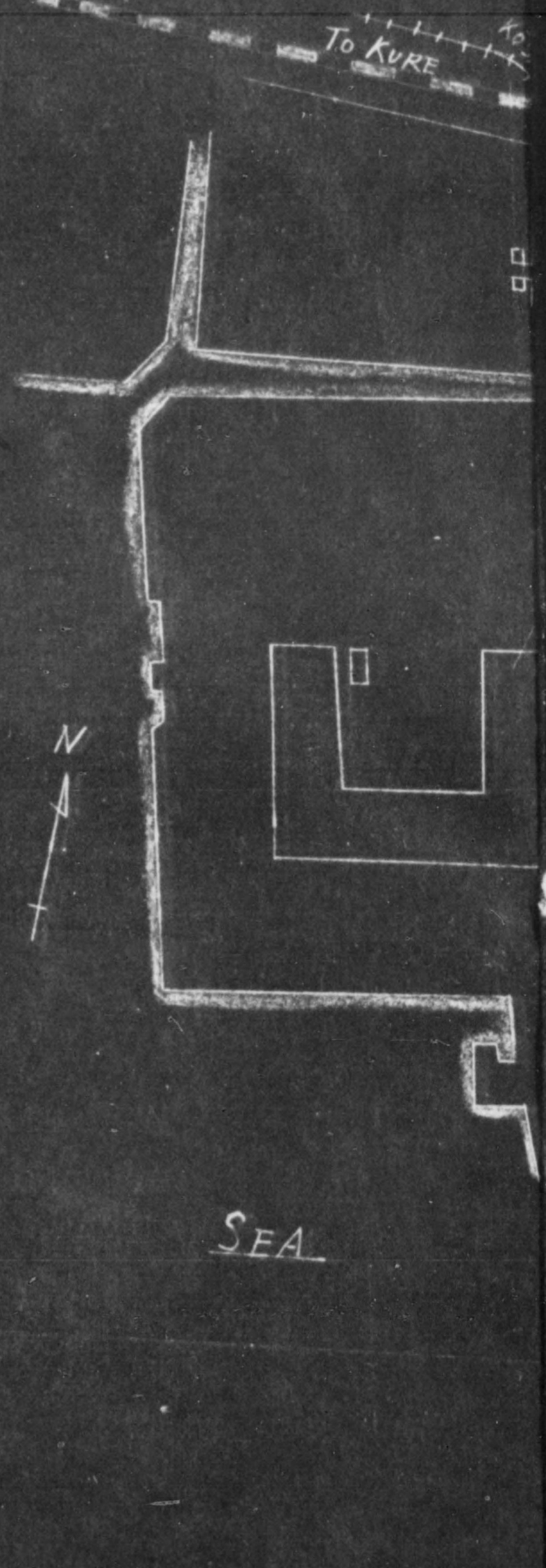

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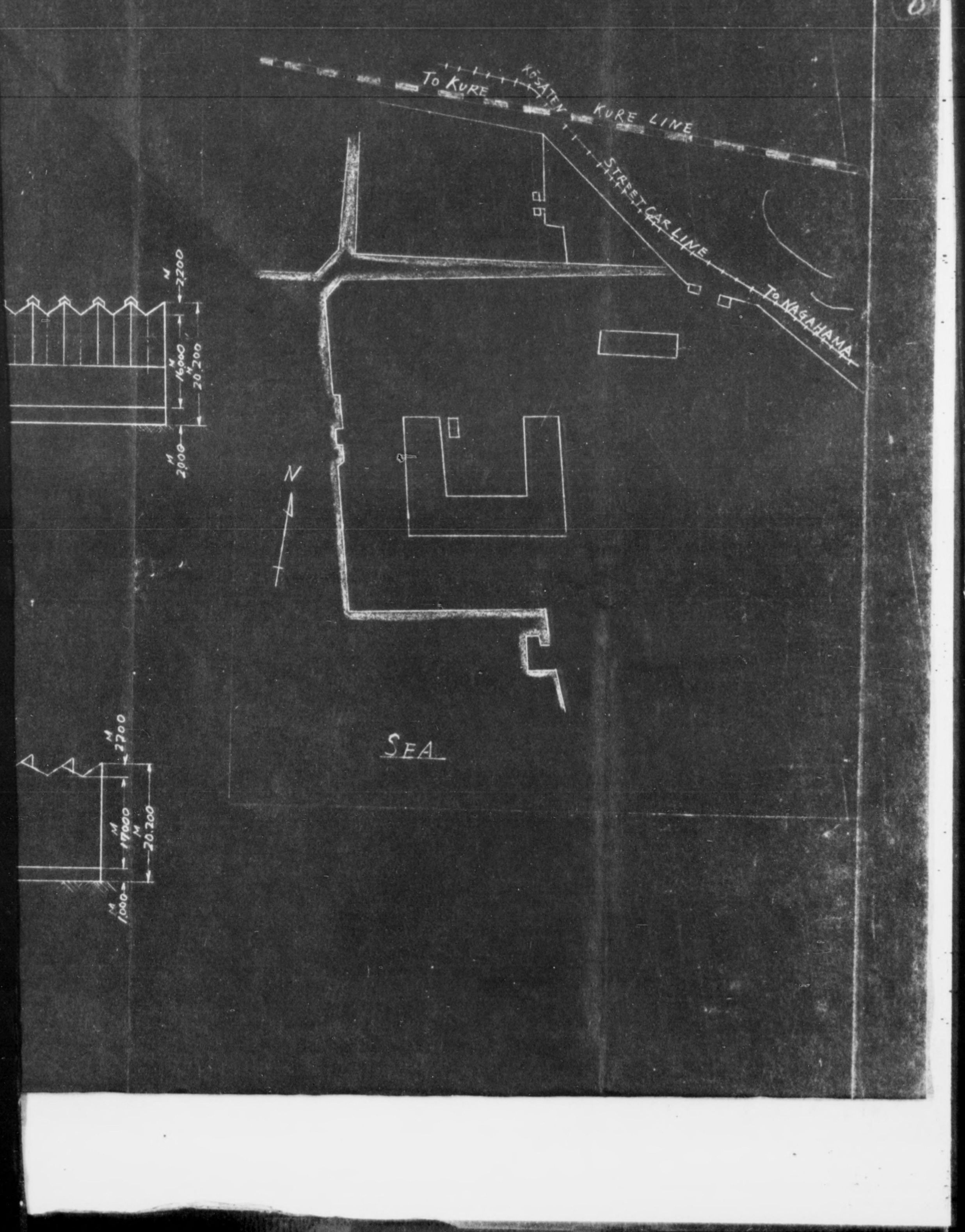

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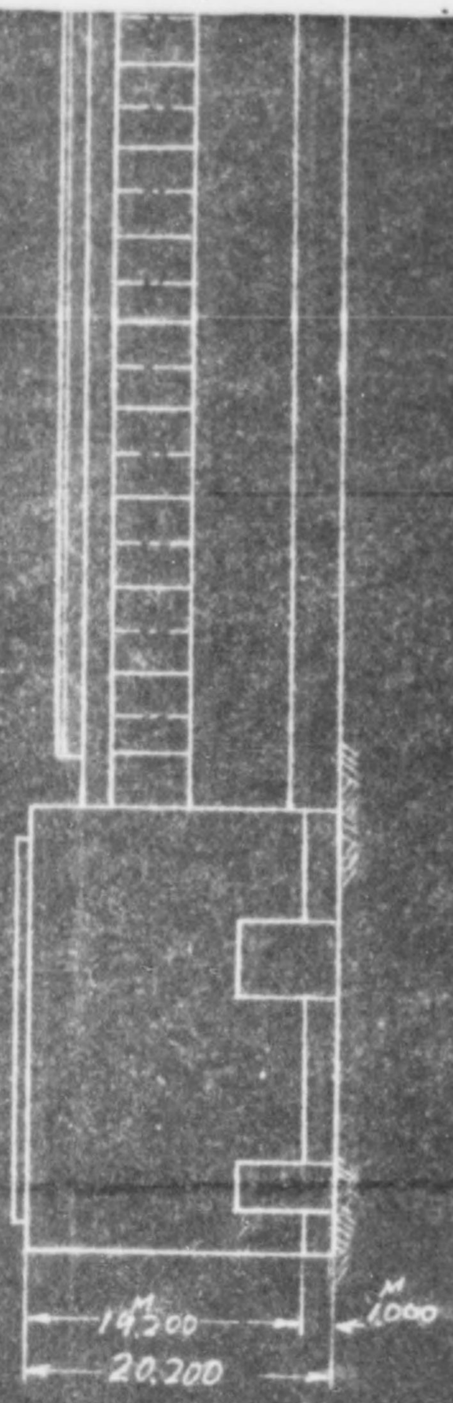
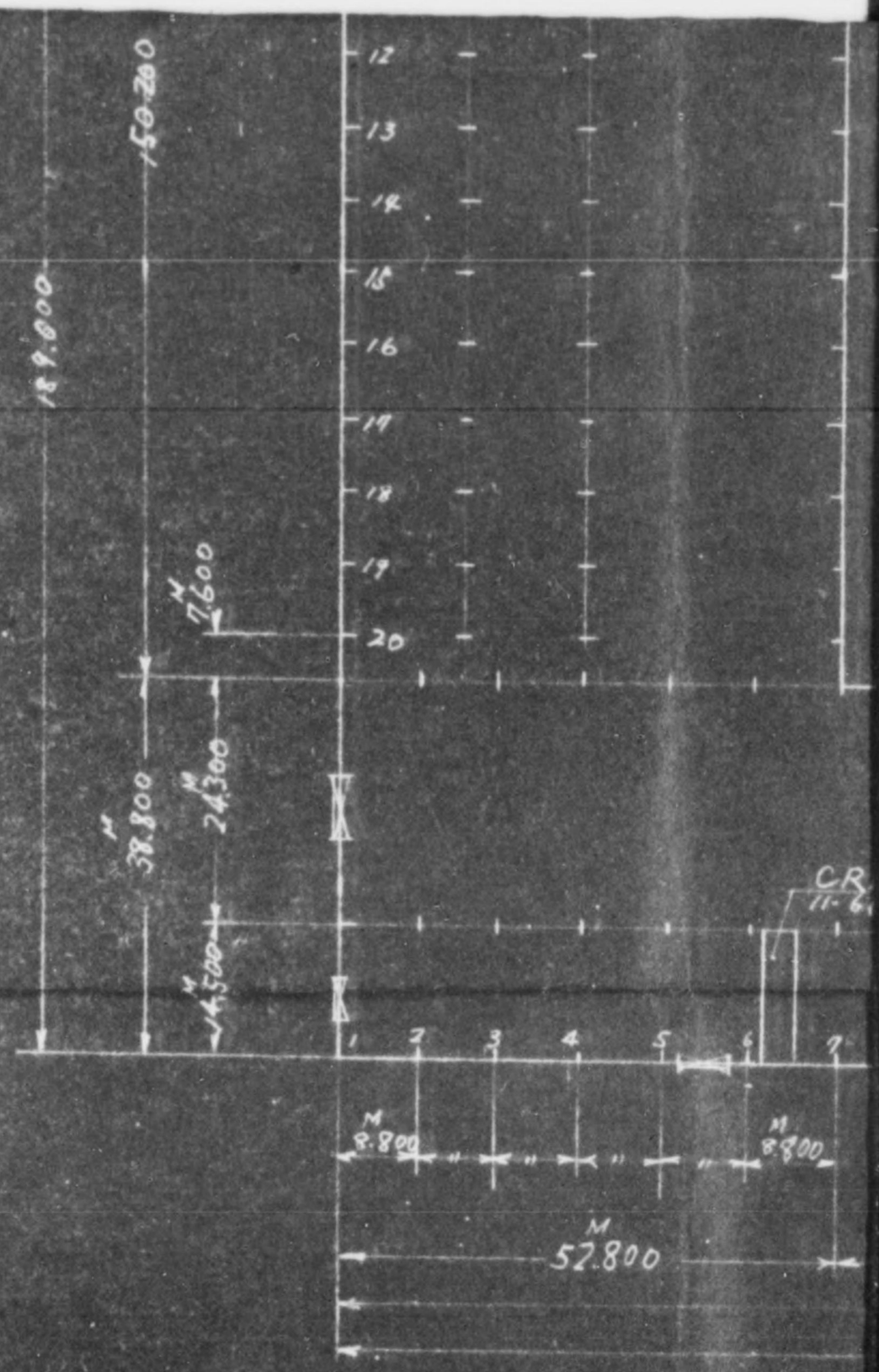
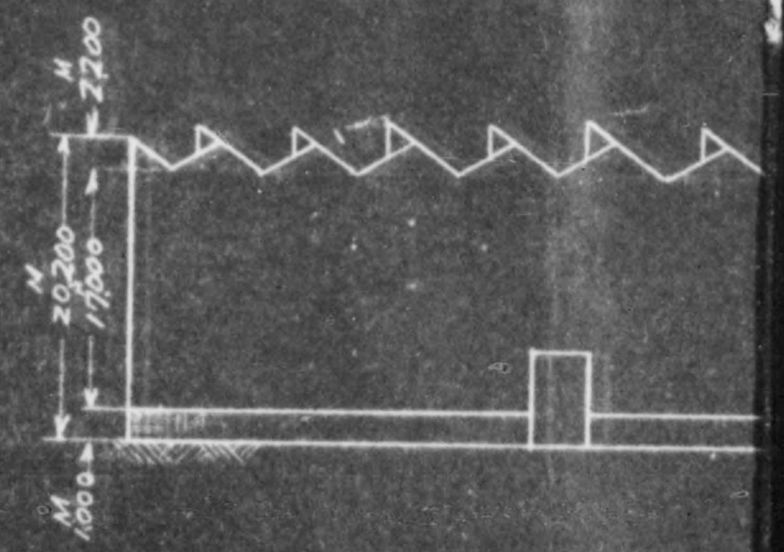
B-SIDE ELEVATION







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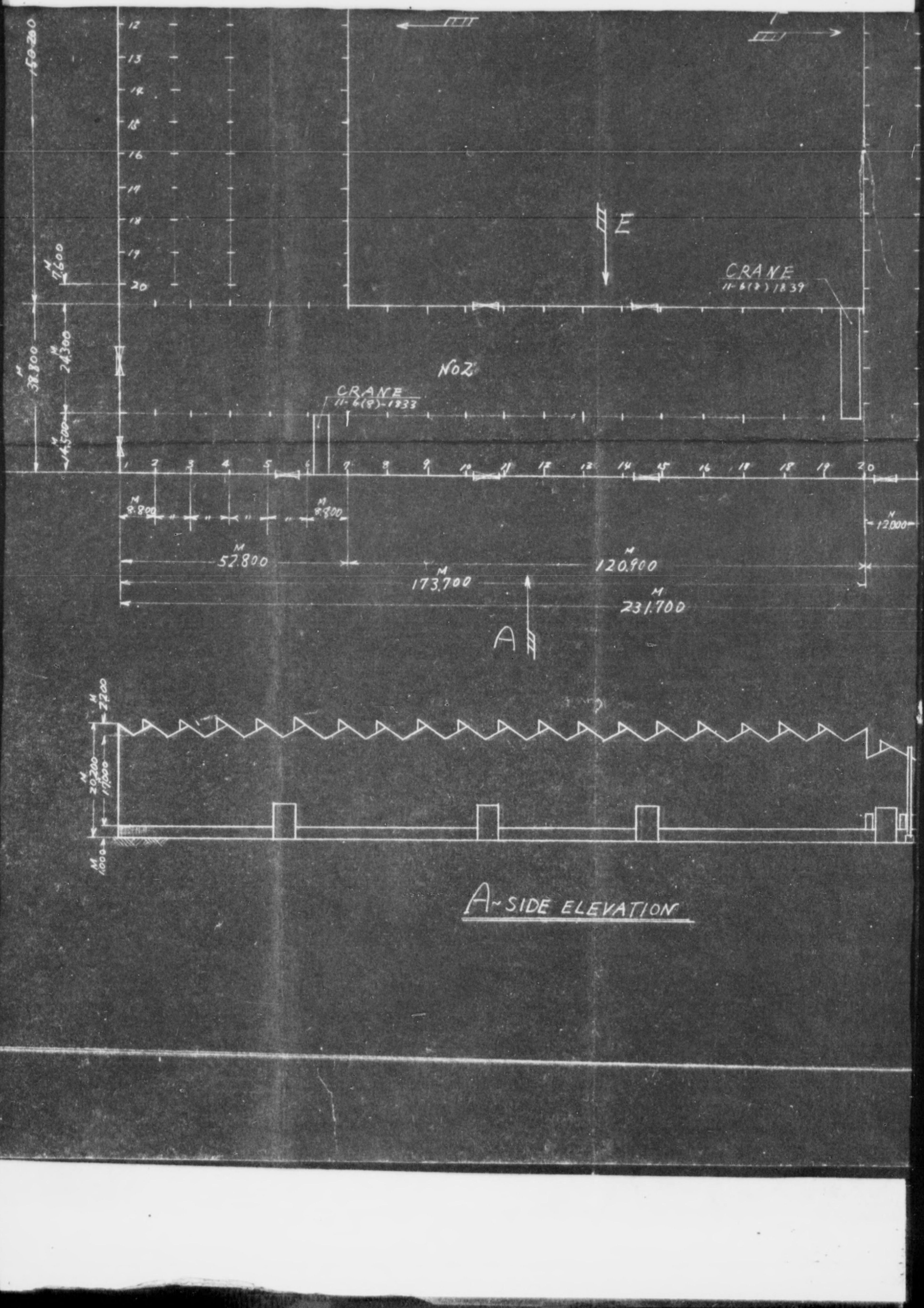
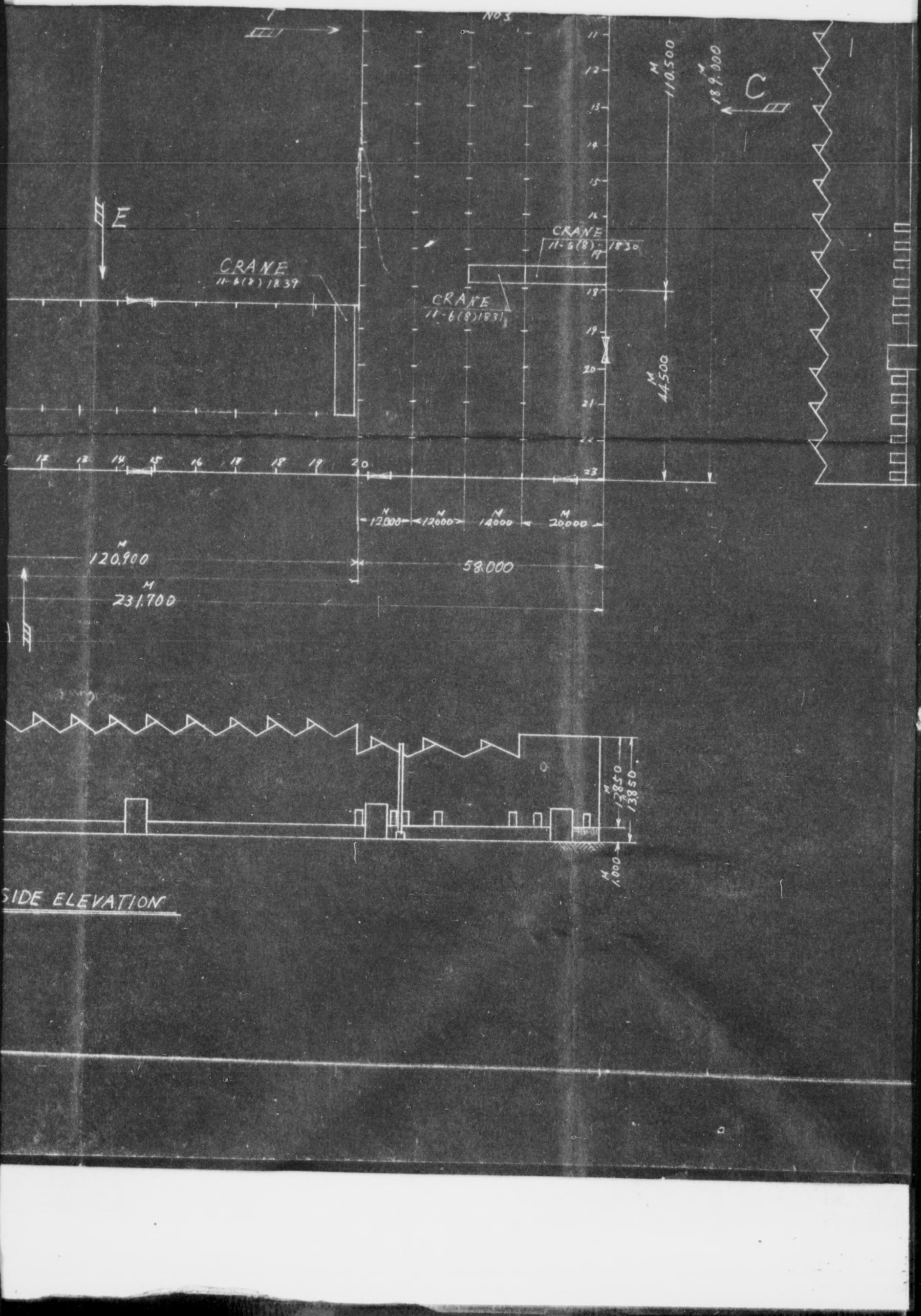


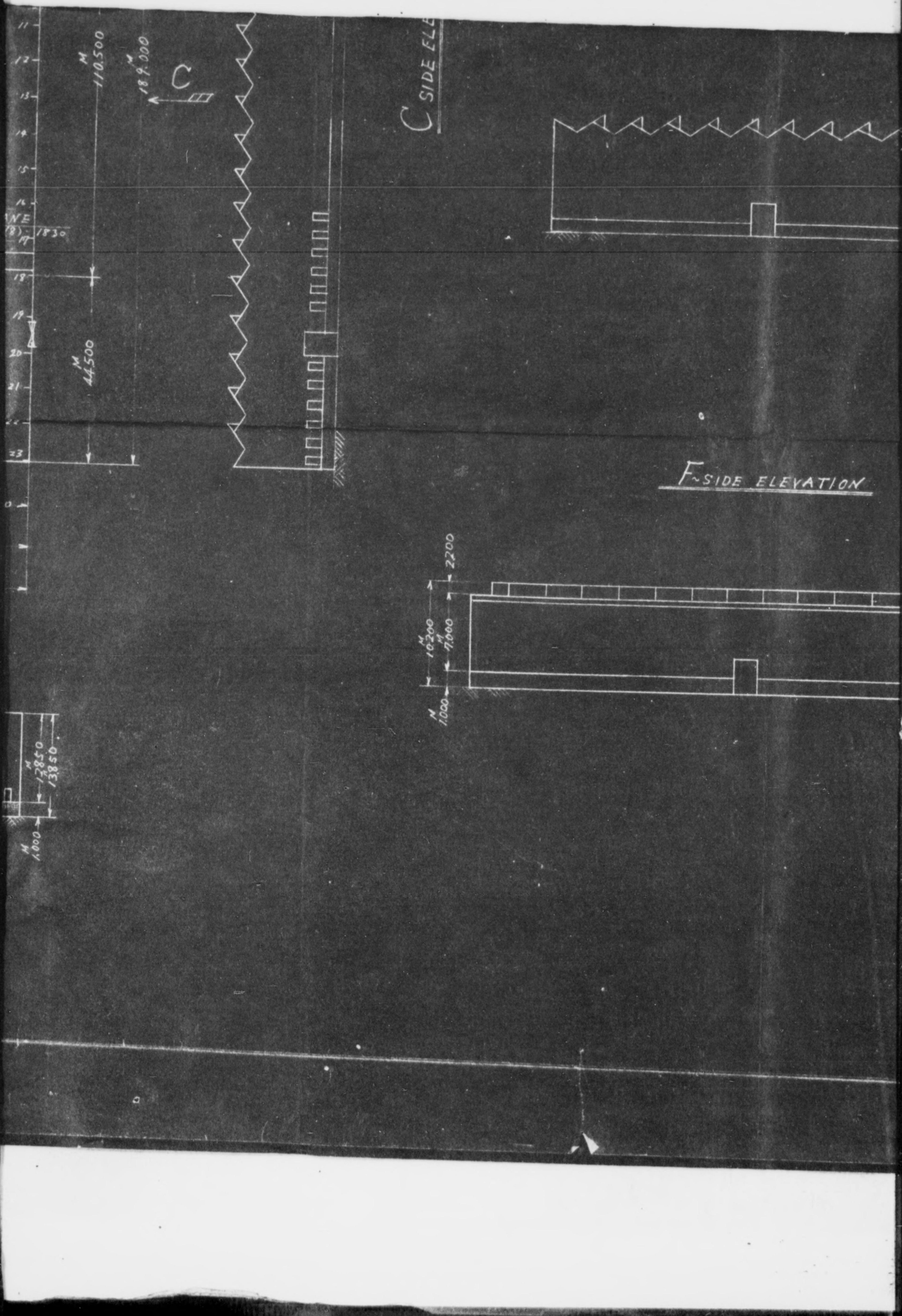
A-SIDE ELEVATION

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



SIDE ELEVATION

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDS NO. 775013



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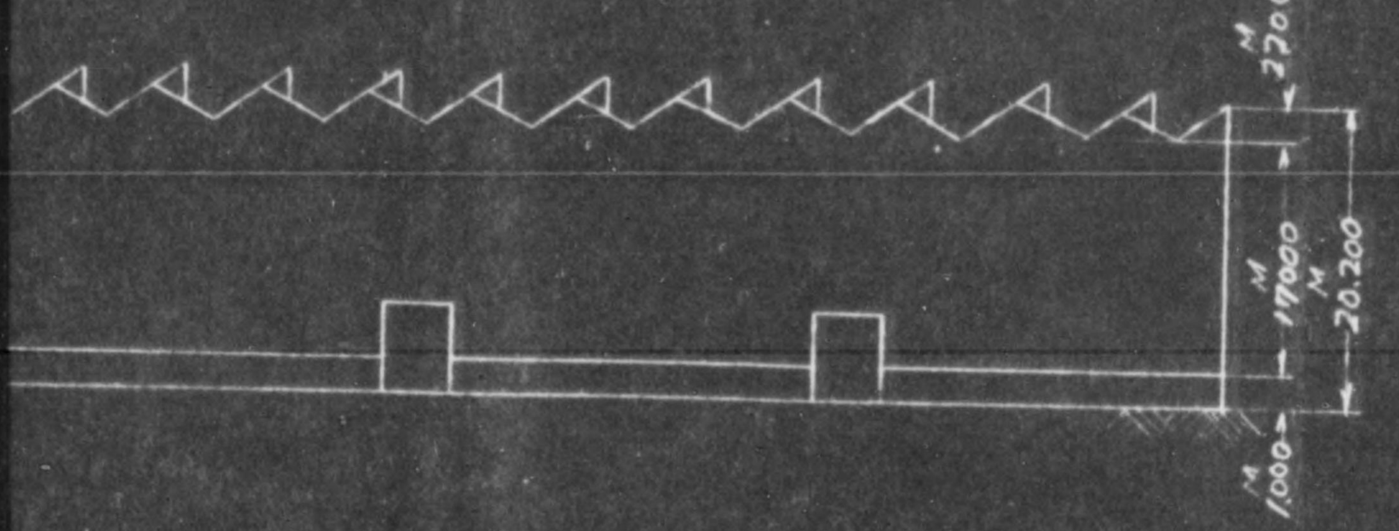
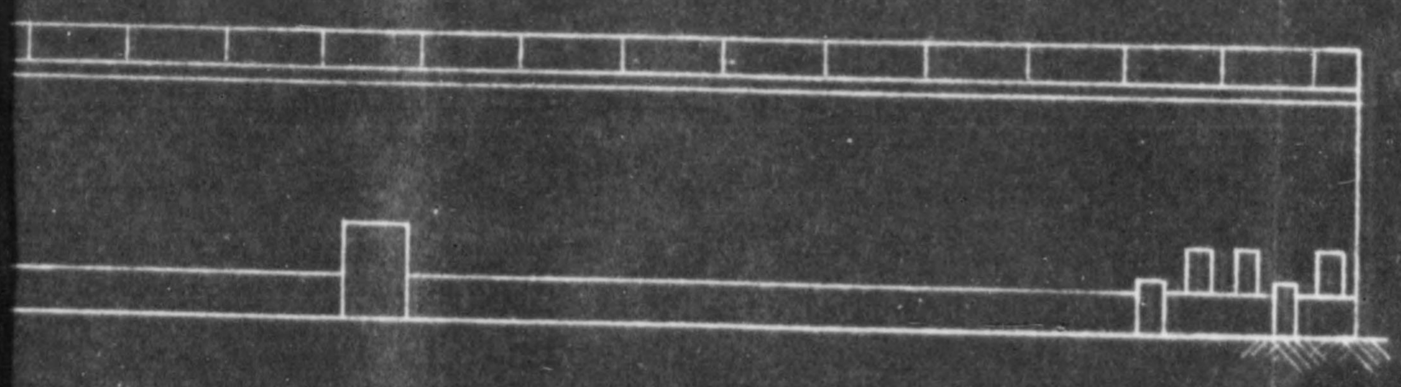
SEA

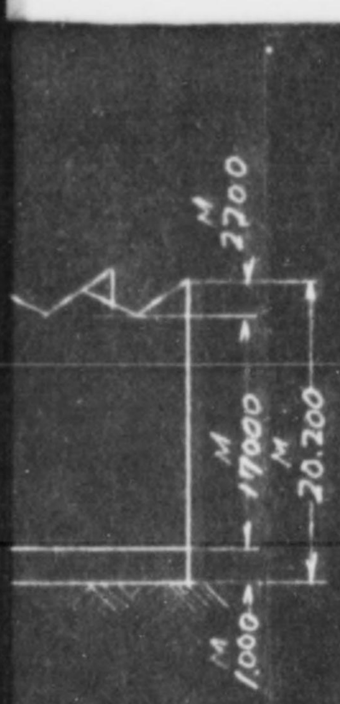


F~SIDE ELEVATION



TOYO PULP Co.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



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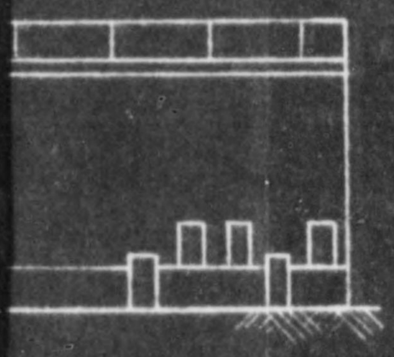


TOYO PULP Co.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Ser.No.:TP(K)No.26-174
17 March 1951

SUBJECT: APPLICATION for Movement of Idle Reparation Machinery

TO : Col. Wm.M.Keane, Chief,
HQ. C.C.A.R., Kure.

FROM : Tadashi Adachi, Director & President,
Toyo Pulp Co., Ltd.,
1 Higashi Matsushita-cho, Kanda, Chiyoda-ku, Tokyo.

For constructing our Kure Plant, we made a Movement and Arrangement Plan of Idle Reparation Machinery being kept in Chuko Area according to the direction of your Officer concerned.

Enclosed herewith are the summary and a map with details. Your approval is requested for it by all means.

We have submitted the same application to the Director of Kure Branch Office of State Property, and got his consent.

FOR THE PRESIDENT:

Hajime Chida

HAJIME CHIDA
General Manager
Toyo Pulp Co. Kure Plant.

Approved
24 March 1951
by Mr. Studley

Text II (8)-11

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

POWER OF ATTORNEY

I Tadashi Adachi President of Toyo Pulp Co., Ltd.
constitute and appoint, the Kure plant manager
Hajime Chida of Toyo Pulp Co., Ltd. a true and
lawful attorney for me.

To apply for temporary usage of the reparations
facilities and installments of the former IIth
Japanese Navy Aircraft Ordance at Hiro-machi Kure,
in the matter of constructing a plant at the
proceding site.

And generally to do and perform all such acts, matters
and things as my said attorney shall deem necessary
and expedient for the completion of the authority as
fully as I might and could do were I personally present.

Signed Tadashi Adachi

Title President

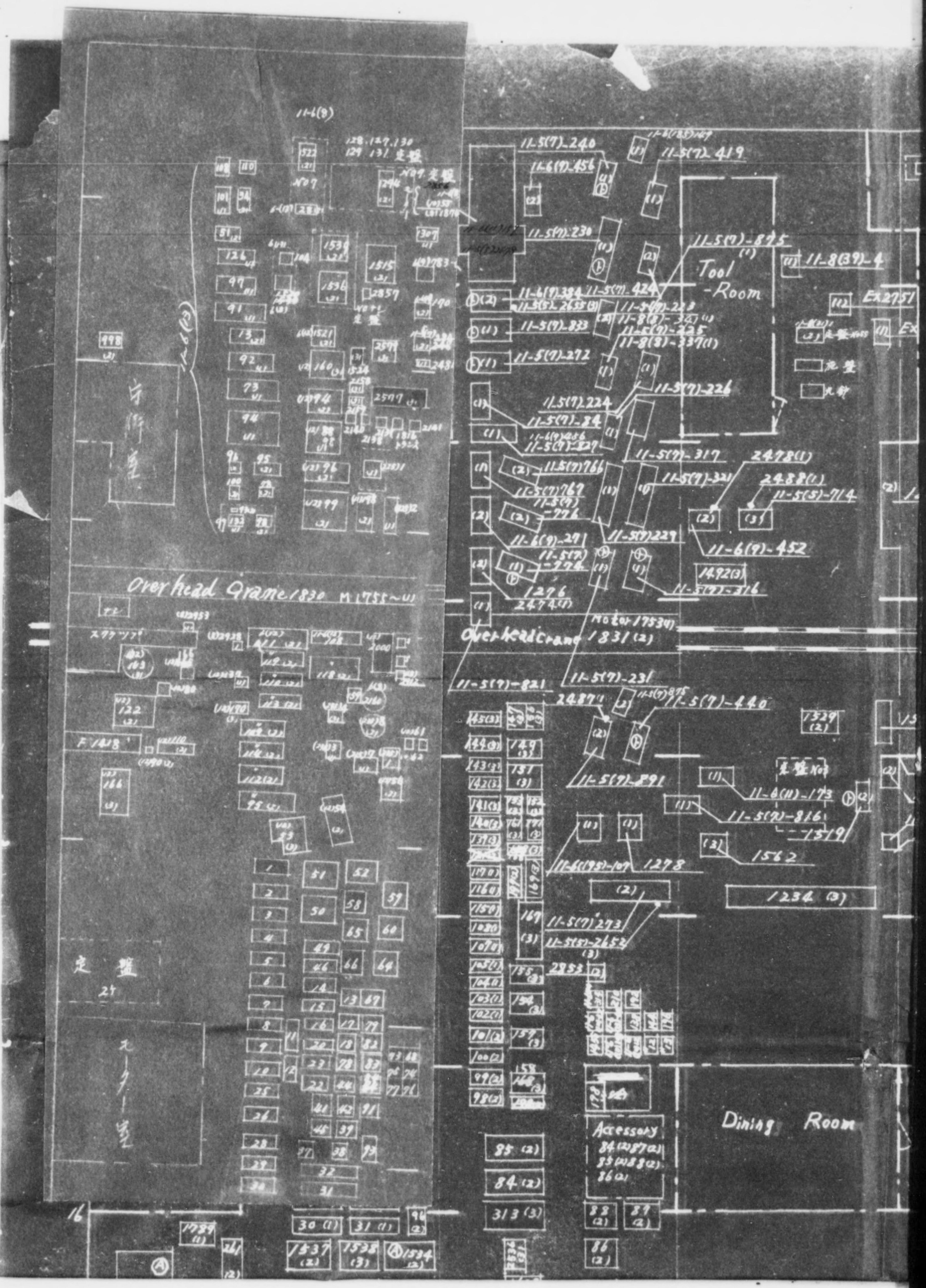
Date 17. march 1951

DESTINATION OF MOVEMENT

Present Storing Place	Bldg.No.3		Hiro Railway Bld'g.No.4		Bld'g. No.15		Yard		Outside of Bld'g. No.3		East-side of Bld'g. No.3		Total	Remarks
	No.	Weight	No.	Weight	No.	Weight	No.	Weight	No.	Weight	No.	Weight		
Bld'g. No.1	46	254.14					42	236.30				88	88 490.44	
Bld'g No.2	113	1,743.50	321	288.422	167	417.25			29	622.00	5	8.30	635 3,079.472	
Bld'g. No.3	118	78.484			91	73.50	1	300.00	15	92.00	32	93.10	256 637.084	
Hiro Railway Bld'g.No.4			40	60.00									40 60.00	
Total	277	2,076.124	361	348.422	258	490.75	1 42	536.30	44	714.00	37	101.40	1,019 1 4,266.996	

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 77 5013

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



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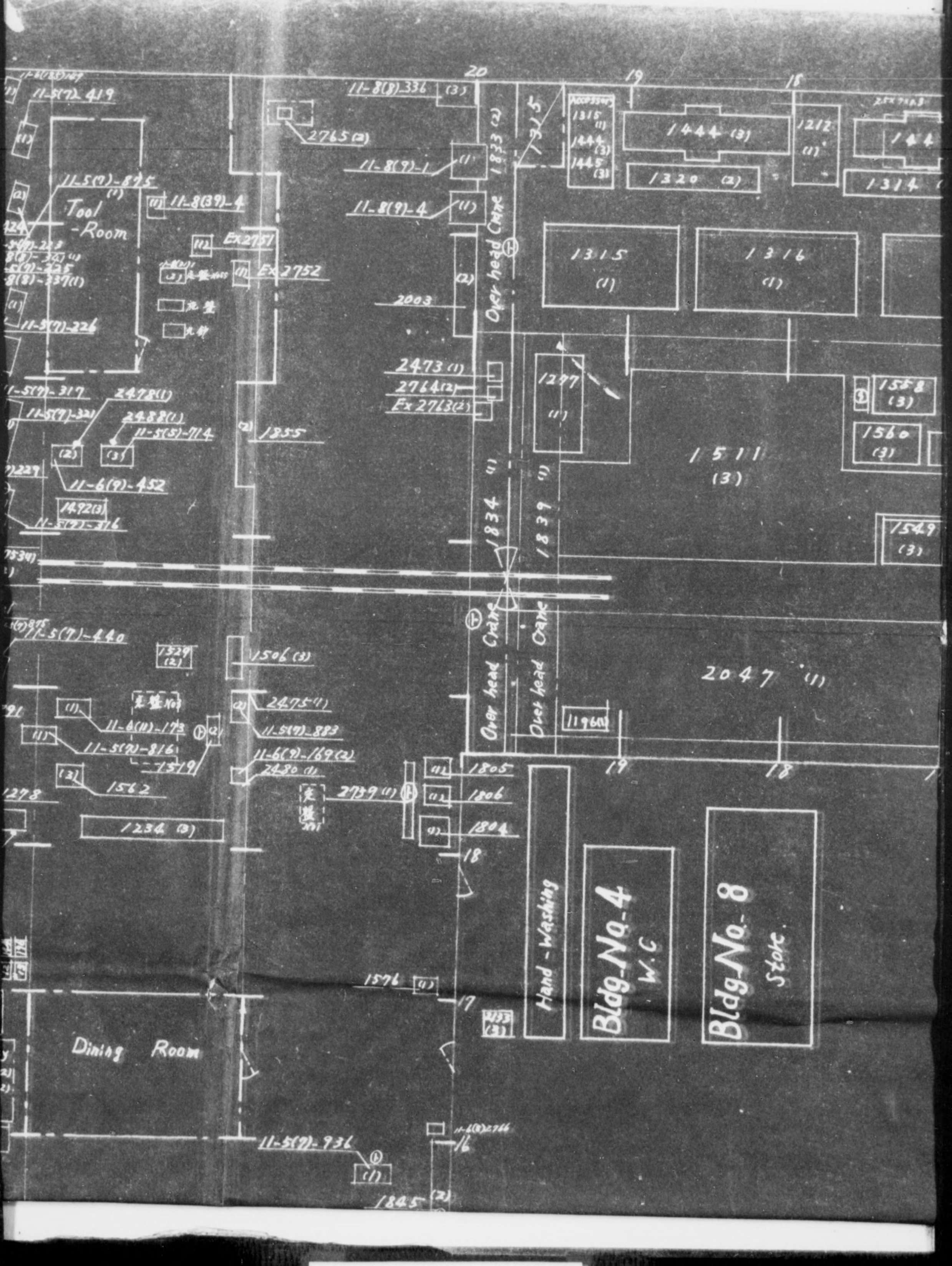

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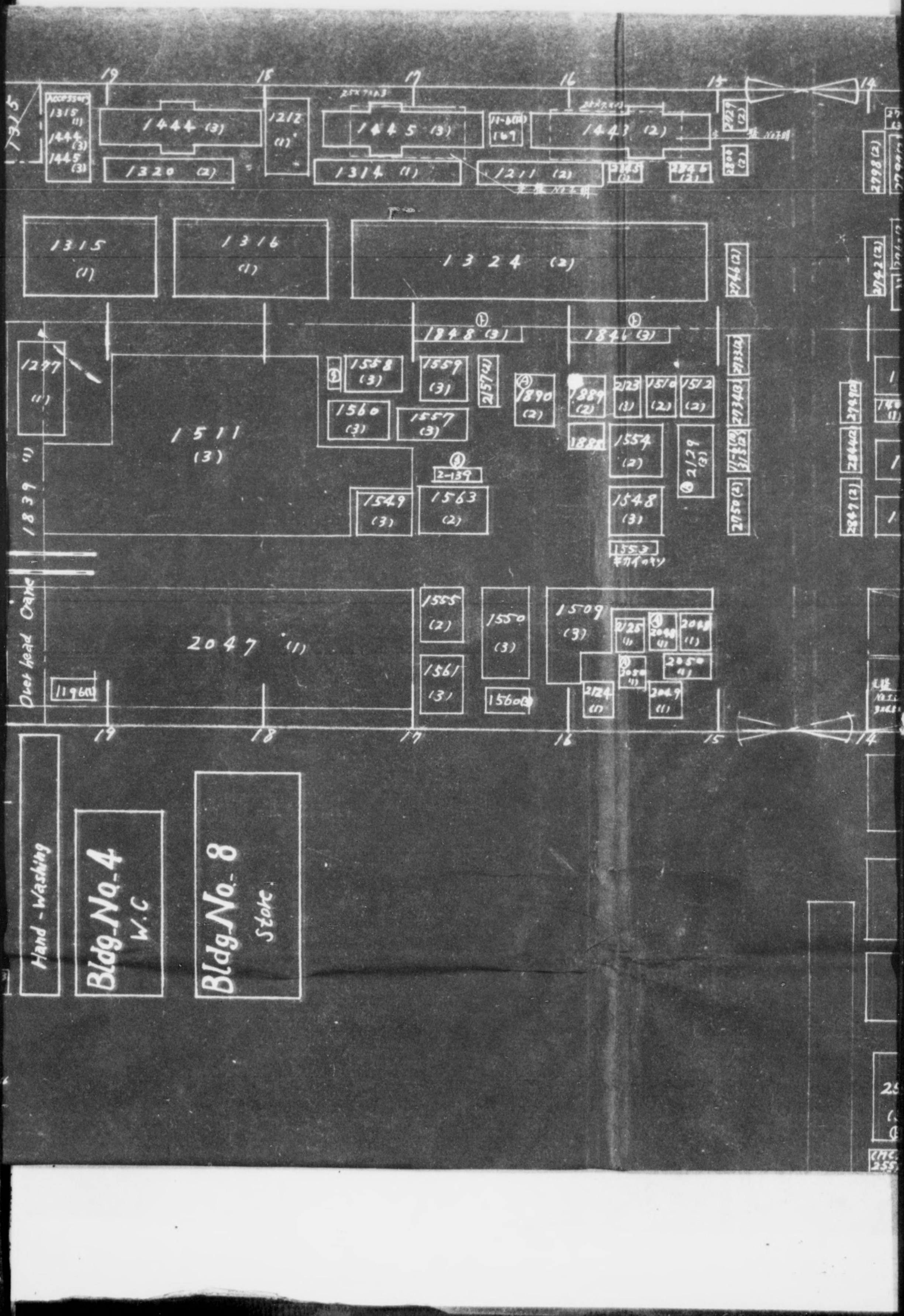


DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Bldg - No - 2

Electric - Machinary - Location

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

No - 2

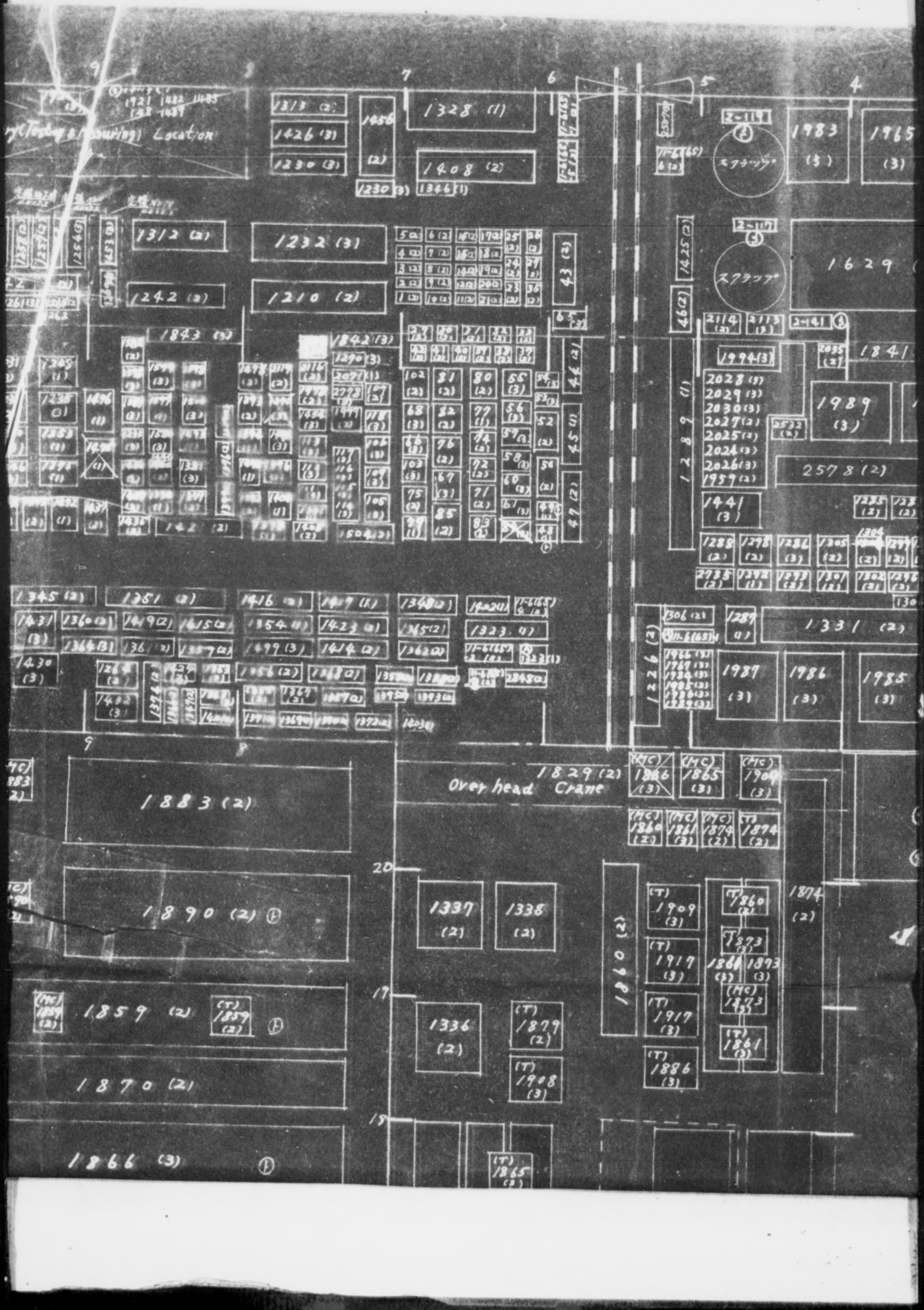
Machinery (Testing & Measuring) Location

12 11 10 9 8 7

Machinery - Location

12 11 9 8 20 19

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



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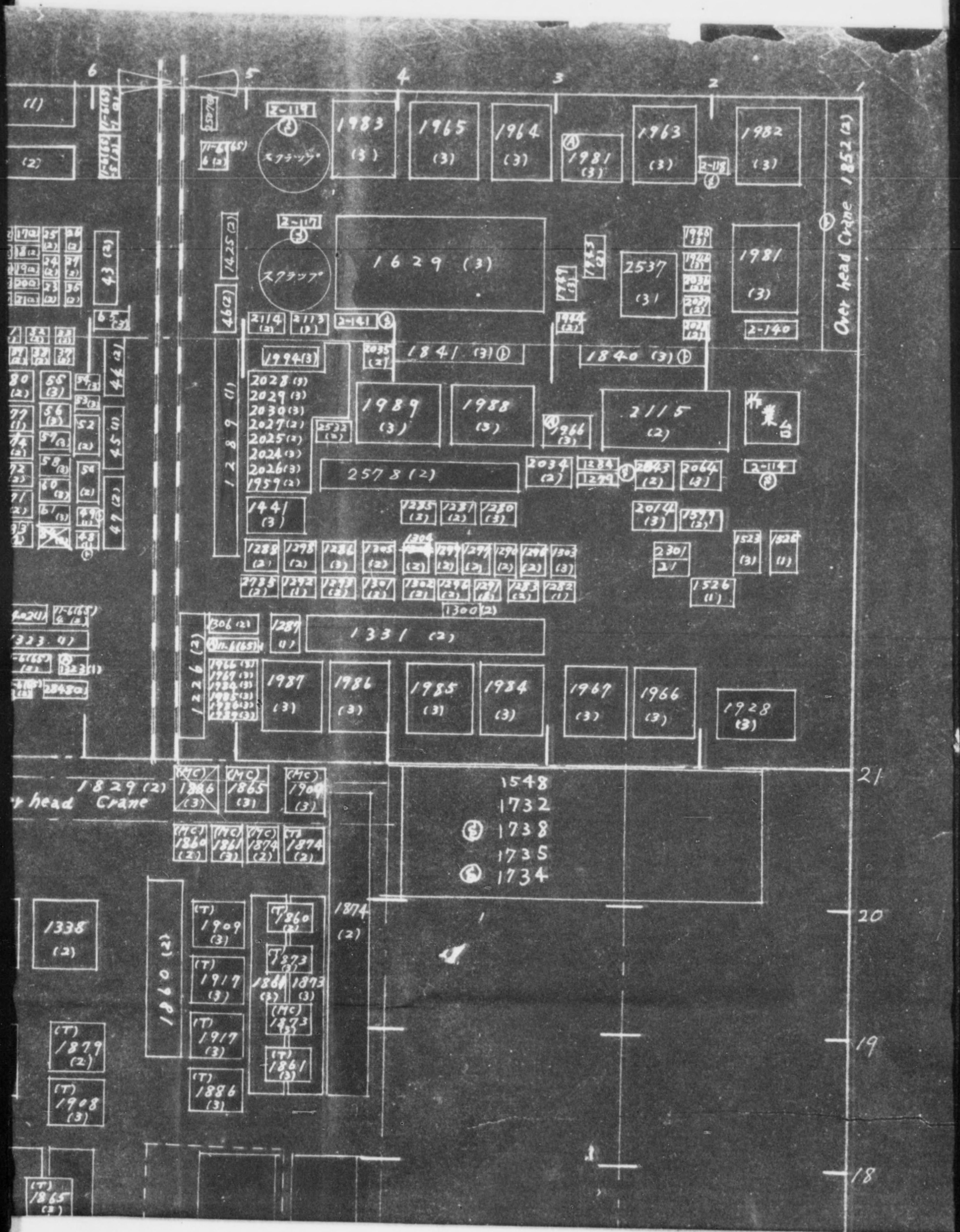

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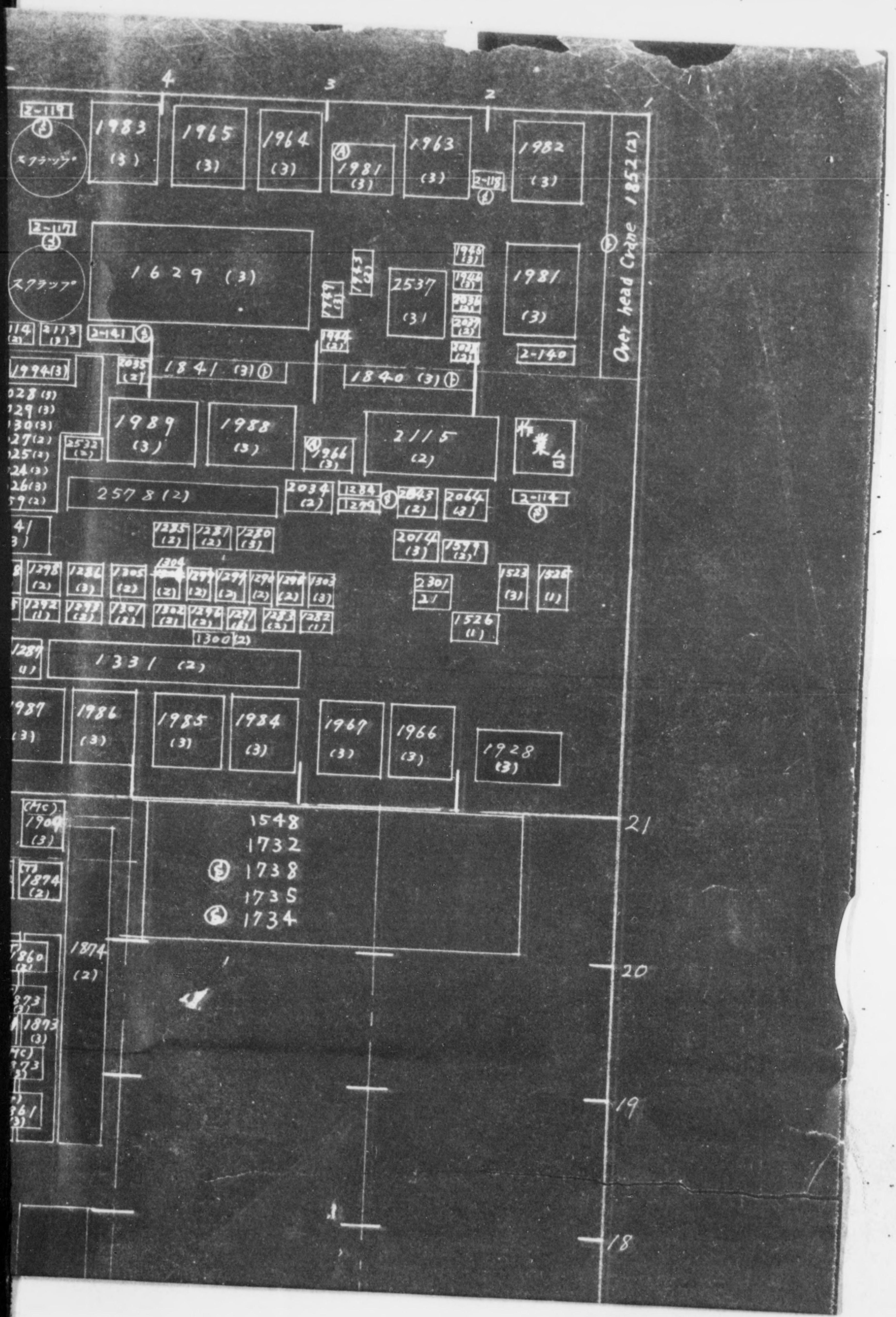

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Dining Room

Accessory
84 (2) 87 (2)
85 (2) 83 (2)
86 (2)

Bldg No.

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Dining Room

Accessory
84 (2) 87 (2)
85 (2) 88 (2)
86 (2)

11-5(7)-936

1845 (2)

2534 (2)

16

15

14

13

12

11

10

9

No - 3

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Ha

Bld

Bld

253
(3)
(T)

(HC)
255
(3)

2176 (3)

(T)
255
(3)

256
(3)

2006
(3)

2506
(3)

188
(2)

(3)

2176

Out_D

2550 (3)

(T)
2550
(3)

(T)
2196
(3)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

2533 (3)

2538 (3) ⊕

(MC) 2176 (3)

1898 (3)

(T) 1898 (3)

(MC) 1898 (3)

(MC) 2551 (3)

1854 (2) 1858 (2)

1853 (3) 1851 (3)

1854 1858 1853 1851 3008 2001 1857

(MC) 1879 (2)

(MC) 1870 (2)

(T) 1870 (2)

(MC) 1866 (3)

(T) 1869 (2)

(MC) 1867 (2)

(T) 1897 (3)

(T) 1867 (2)

(MC) 1917 (3)

(MC) 1897 (3)

(T) 1862 (2)

(T) 2551 (3)

2551 (3)

(MC) 2503 (3)

(MC) 1928 (3)

1828 (3)

1862 (2)

(MC) 1869 (2)

(T) 1866 (3)

(T) 1828 (3)

(T) 1877 (2)

2006 (3)

1878 (3)

(T) 1894 (3)

2506 (3)

1884 (2)

1894 (3)

(T) 1872 (3)

(MC) 1872 (3)

(MC) 1903 (3)

(MC) 1887 (2)

(T) 1889 (2)

(MC) 1877 (2)

(MC) 1888 (2)

(MC) 1896 (2)

(MC) 2167 (3)

(T) 1888 (2)

(T) 1896 (2)

(T) 2167 (2)

(T) 2196 (3)

2104 (3)

2176 (3)

2176 (3)

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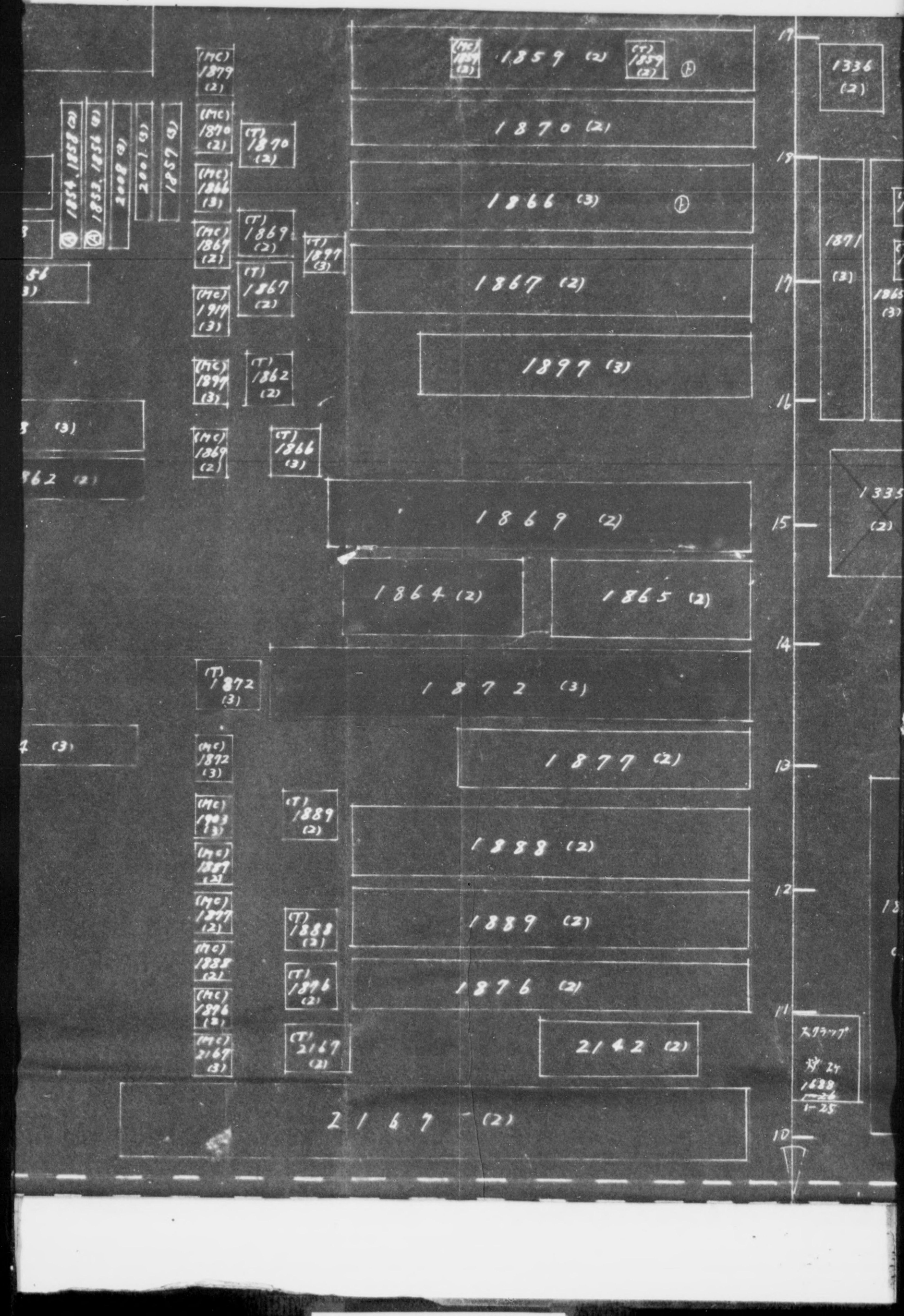
2 1 6

ut_ Door,

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

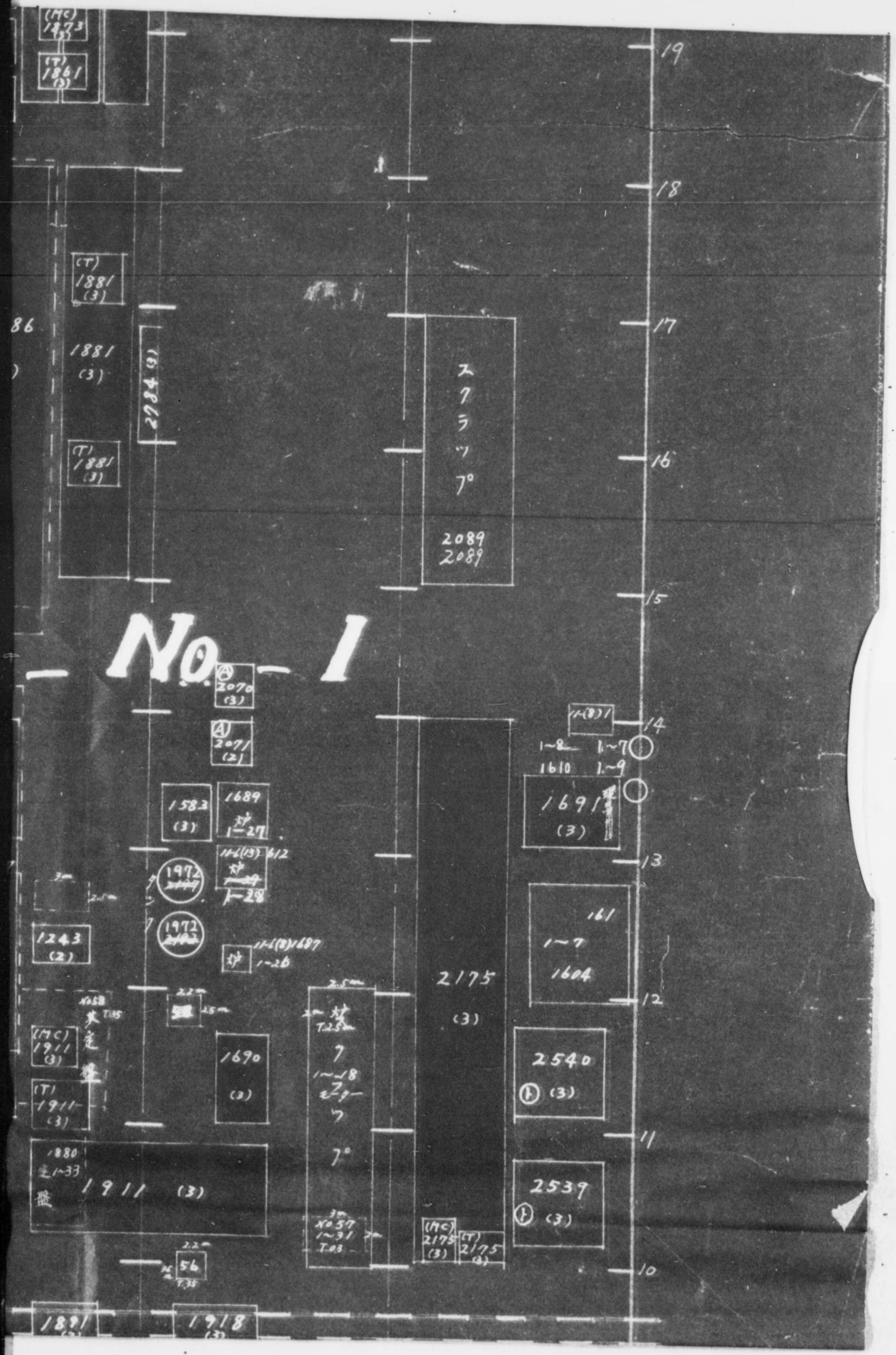
Bldg - No. -

1859 (2) (T) 1859 (2) A
1870 (2)
1866 (3) 1
1867 (2)
1897 (3)
1869 (2)
1865 (2)
2 (3)
1877 (2)
1888 (2)
1879 (2)
6 (2)
2142 (2)
19
18
17
16
15
14
13
12
11
10
1336 (2)
(T) 1879 (2)
(T) 1908 (3)
1871 (3)
(T) 1865 (3)
(T) 1871 (3)
1865 (3)
1908 (3)
1335 (2)
(T) 1917 (3)
(T) 1886 (3)
(MC) 1873 (3)
(T) 1861 (3)
定盤
1886 (3)
(T) 1881 (3)
1881 (3)
(T) 1881 (3)
2784 (3)
A 2070 (3)
A 2071 (2)
1582 (3)
1689 炉 1-27
1907 (3)
1917 (3)
定盤
1243 (2)
1972
1972
炉 1-26
(MC) 1911 (3)
(T) 1911 (3)
1690 (3)
1880 1-33 1911 (3)
56
1879 (2)
スクラップ 炉 24 1688 1-25
1891
1918 (3)

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

Bldg - No. - 1

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013



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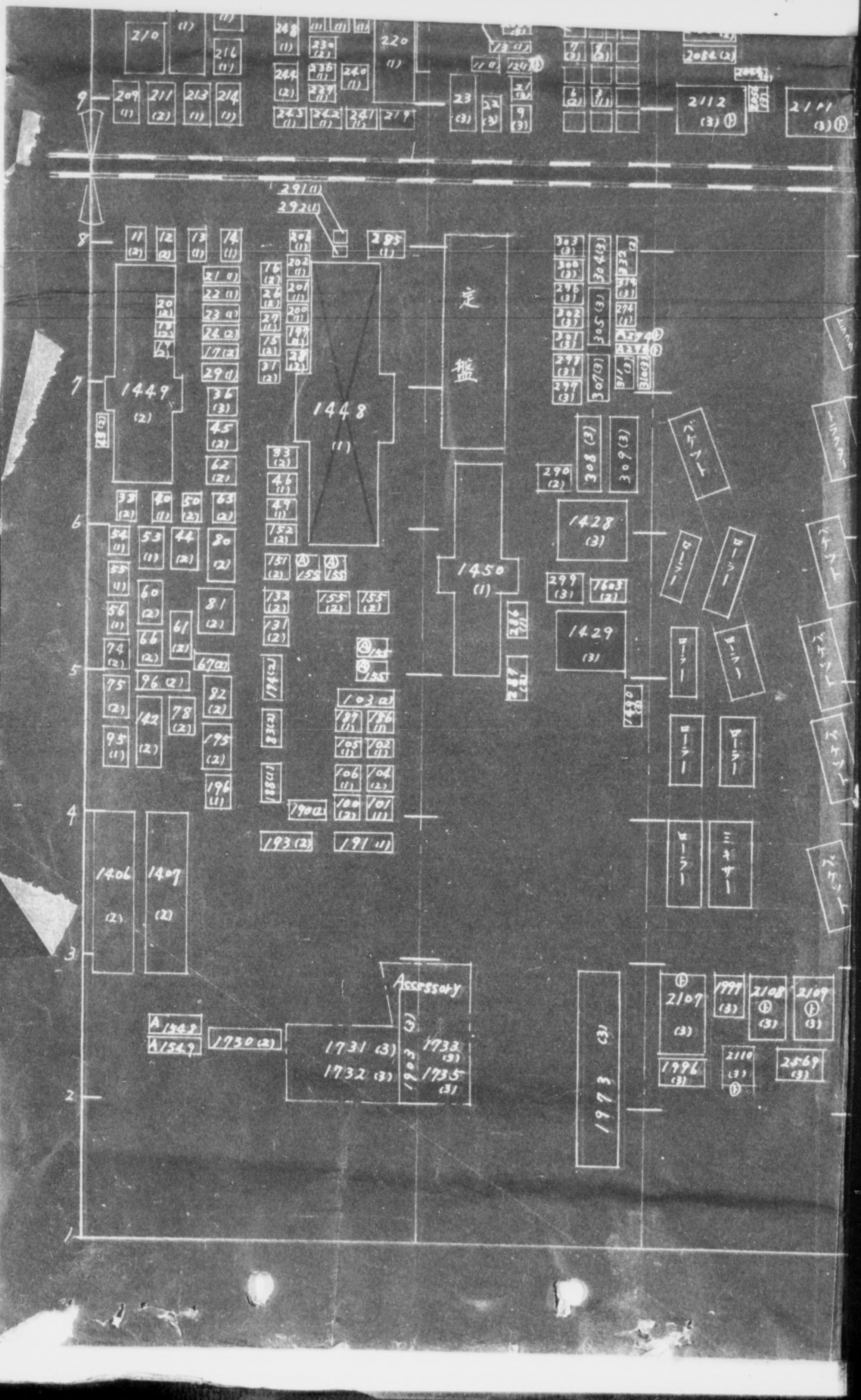

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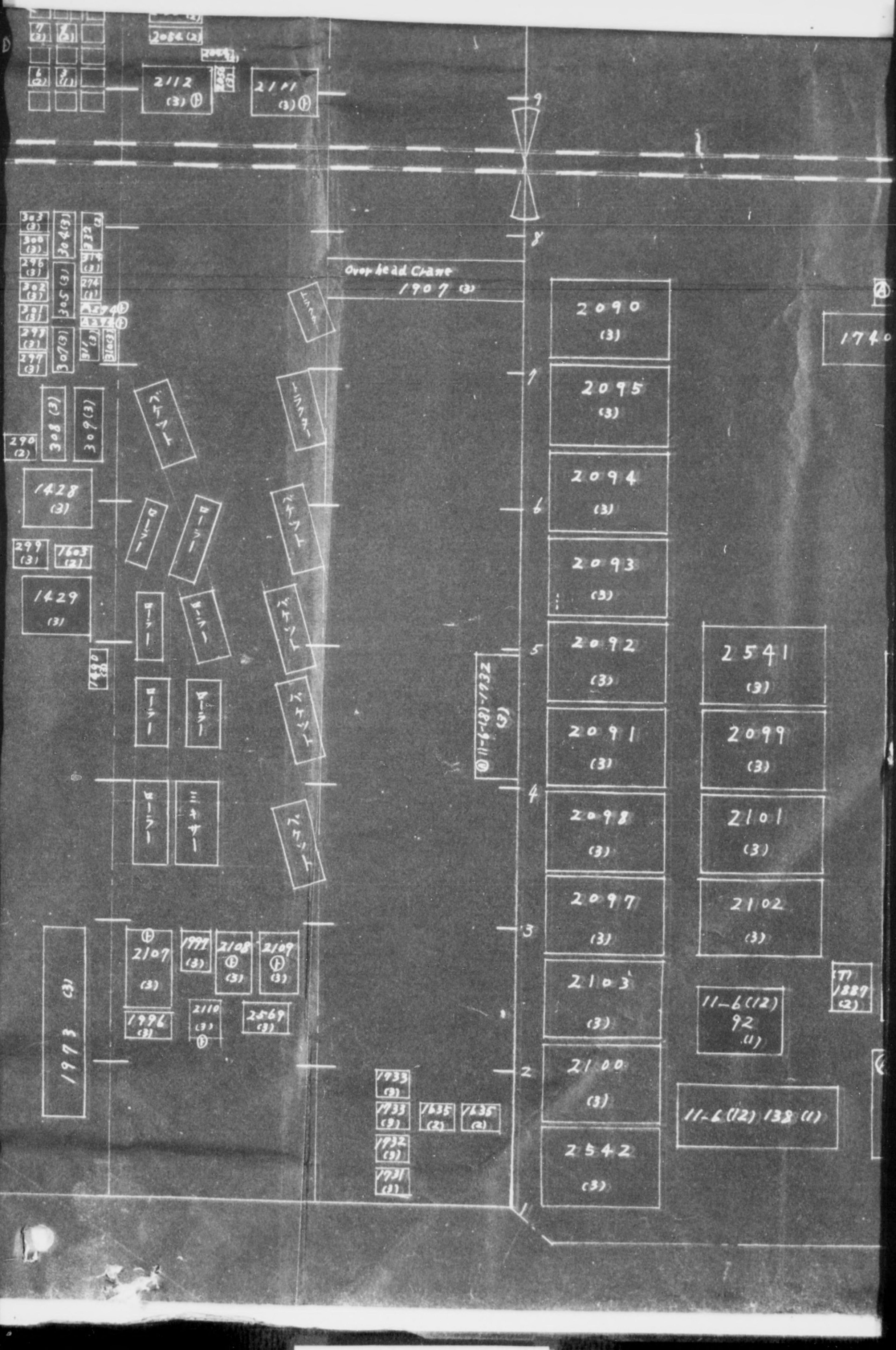

DECLASSIFIED E.O. 12065 SECTION 3-402/NNDG NO. 775013

(T) 2196 (3)

1543 (3)

1740 (3)

090 (3)

095 (3)

094 (3)

093 (3)

092 (3)

091 (3)

098 (3)

097 (3)

103 (3)

100 (3)

542 (3)

2541 (3)

2099 (3)

2101 (3)

2102 (3)

11-6(12) 92 (1)

11-6(12) 138 (1)

(T) 1887 (2)

1887 (2)

2047 (1)

7624

2126 (3)

2127 (3)

1875 (2)

(T) 1875 (2)

(NC) 1875 (2)