Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

GHQ/SCAP Records (RG 331, National Archives and Records Service)

Description of contents

(1) Box no. 320

(2) Folder title/number: (8)
City Planning and Zoning

(3) Date: Nov. 1948 - Apr. 1949

(4) Subject:

Classification	Type of record
440, 622, 640	c, e, p

(5) Item description and comment:

(6) Reproduction: (Yes) No

(7) Film no. Sheet no.

(Compiled by *National Diet Library*)

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

APO 500
23 April 1949

MEMORANDUM

To: Chief Fire Administrator

Subject: Report on conference

1. On 22 April, from 1430 to 1530, I was in conference with the Mayors of Kokubunji, Koganei and Kodaira - Mr. Nagato, Mr. S. Ogawa and Mr. M. Ogawa respectively. The came to this office for advice and guidance in solving their fire defense problem.

2. The three cities, with a combined population of 66,000, have formed a union for the purpose of fire defence. A breakdown of their present organization is as follows:

Kokubunji (22,000) ..... 16 men, 430 Shobodan, 3 pumpers
Koganei (24,000) ..... 12 men, 250 Shobodan, 1 pumper
Kodaira (20,000) ..... 11 men, 500 Shobodan, 1 pumper

Pumpers listed are only those used by the organized department. There are numerous trailer units used by the Shobodan.

3. The total cost of the fire defense organization was given as ¥ 8,350,000. Of this amount, ¥ 2,000,000 goes for the support of the Shobodan. The total area protected by the fire department is approximately 45 square kilometers.

4. The Mayors said that they believed it might be necessary to reduce, or perhaps eliminate entirely, their organized fire department and rely entirely on Shobodan. They said that even if this becomes necessary no increase in personnel strength of the Shobodan is contemplated but that additional pumping units might be necessary. The difficulty is, of course, one involving finances.

5. I explained to the Mayors that the decision of what to do with their fire defense forces was theirs to make but that a decision to abandon the organized department was certainly not one to be reached lightly and without careful consideration of all appects of the problem. I pointed out that even the best volunteer organization could not be expected to give as good protection as a full time department. I mentioned the possible increase in insurance rates in the area and cautioned them that volunteer organizations have a tendency to expand and might eventually be more expensive to operate then an organized department.

6. I suggested to the Mayors that the union of three cities be preserved as a means of increasing the protection for each of the cities. I suggested that they consider carefully the possibility of eliminating or drastically reducing the expenditures for Shobodan and make every effort to maintain the organized department at its present strength. If it becomes necessary to reduce the force the Mayors will probably again contact this office for approval of reinstatement of released men in the Tokyo MFD.

Carlyle R. McKibbin
CARLYLE R. McKIBBIN
Fire Administrator

CITY PLANNING AND FIRE ZONES
FOR JAPANESE CITIES
PRESS CONFERENCE
GEORGE W. ANGELL

6 December 1948

Much good work has been done by the Ministry of Construction and by various Building Bureaus in planning and re-construction of Japanese cities and the setting-up of fire zones in high value districts, but partly because of the shortage of cement, and largely through the lack of public interest, little has been accomplished in the carrying out of these plans. Ever since the end of the war, flimsy wooden buildings have been permitted to be constructed in practically any location because it has been felt that people simply must have homes. Tomday's problem deals more with shops and offices than it does with homes and, if Tokyo ever is to become a modern city, a start must be made toward constructing more permanent buildings.

In the earthquake of 1 September 1923, in Tokyo alone, many thousands of people were killed, thousands of others were injured, 3886 buildings were demolished, and 368,262 others were lost through the fires which followed the earthquake. Immediately plans were made for re-building the city. Wider streets were proposed to serve as fire breaks and fire zones were designated for the purpose of controlling the type of construction which would be permitted in these areas. But, aside from

Declassified E.O. 12065 Section 3-402/NNDC NO. 775009

problem deals more with shops and offices than it does with homes and, if Tokyo ever is to become a modern city, a start must be made toward constructing more permanent buildings.

In the earthquake of 1 September 1923, in Tokyo Zone, many thousands of people were killed, thousands of others were injured, 3886 buildings were demolished, and 366,262 others were lost through the fires which followed the earthquake. Immediately plans were made for re-building the city. Wider streets were proposed to serve as fire breaks and fire zones were designated for the purpose of controlling the type of construction which would be permitted in these areas. But, aside from widening a few of the main thoroughfares, practically nothing was done to enforce the new City Plan, and Tokyo again grew into a huge settlement of congested wooden buildings, narrow streets, and dead-end alleys, almost perfectly arranged for producing conflagrations.

The air raids during the war found Tokyo to be an excellent target for fire bombs, and once again the greater part of the city was levelled. Once again, also, plans were made for re-building with wider streets and more substantial construction, and once again practically no attention is being given to the approved plan or setting up of Fire Zones. Today, three and a quarter years after the war ended, we know of not one single new building erected within the high-value districts of the city which can be classified as a permanent structure or which conforms to the term "fireproof" as defined to Ordinance #8, issued by the Ministry of Construction.

Declassified E.O. 12065 Section 3-402/NNDC NO. 775009

Any conflagration is a public calamity which may be started by a small fire, and a poor City Plan may be a considerable aid in producing such conflegaration. Cities never are proud of their slum areas, and Tokyo should be no exception. The City Plan approved by the Construction Bureau and by the Ministry of Construction would eliminate many of the worst slum areas in which fire after fire has raged since the end of the war, and make them over into much more attractive neighborhoods. Unsightly and unsafe structures would be replaced with buildings which would not become mere piles of ashes within a few minutes after the outbreak of fire, and which would have better eye appeal. Narrow and dead-end alleys would be replaced with streets of reasonable width, and public fire protection would become much more efficient as a result. We wish to make it clear that we are advocating a good, sound, economical City Plan and are not attempting to design "The City Beautiful". Good fire prevention and fire protection starts on the drafting board.

Many will point out that cement necessary for fireproof or fire resisting construction is not available in sufficient quantity and therefore it is necessary to use wood. About 2.2 tons of cement can be produced by burning one ton of coal, and since Japan's coal production is inadequate for all of the country's requirements, only 1,500,000 tons of cement are being produced annually. This amount must be allocated for use in coal mines, dams, power projects, government buildings, flood control, rail-

Declassified E.O. 12065 Section 3-402/NNDC NO. 775009

wish to make it clear that we are advocating a good, sound, economical City Plan and are not attempting to design "The City Beautiful". Good fire prevention and fire protection starts on the drafting board.

Many will point out that cement necessary for fireproof or fire resisting construction is not available in sufficient quantity and therefore it is necessary to use wood. About 2.2 tons of cement can be produced by burning one ton of coal, and since Japan's coal production is inadequate for all of the country's requirements, only 1,500,000 tons of cement are being produced annually. This amount must be allocated for use in coal mines, dams, power-projects, government buildings, flood control, railroads, harbors, etc., and Tokyo receives about 10,000 tons for construction requirements. It is realized, of course, that this amount is not adequate to provide the non-combustible buildings in the high value districts as determined by the Construction Bureau and the ministry of Construction. Vastly inferior construction has been allowed under temporary building laws which void the Urban Building Law, but at this late date temporary construction should be curtailed in the Fire Zones. Allowing buildings of inferior construction to expose those of a permanent type is unfair to the owners of the latter type, unfair to the insurance companies, and unfair to the taxpayers who, in the end, must pay the bills for the losses incurred.

Both Occupational and Japanese agencies directly interested in the economic use of scarce building materials, in public fire protection, and in the building of the modern Tokyo, are in agreement that a start should

Declassified E.O. 12065 Section 3-402/NNDC NO. 775009

be made <u>now</u> toward re-building in accordance with the adopted City Plan and with the development of Fire Zones. We fail to believe that any fair-minded or public spirited person will object to the carrying out of such program which is designed for the benefit of <u>all</u> people within the community. Along with the city planning and fire zoning there should be adopted a zoning ordinance that regulates the use of buildings, segregates industrial, mercantile, and residential occupancies, and provides for the isolation of occupancies which create excessive fire exposures to other properties. Such zoning is covered to some extent in the Urban Building Law, but is not being enforced.

These agencies recognize that the shortage of cement prohibits the construction of reinforced concrete buildings throughout the Fire Zone areas, but it recognizes, also, the fallacy of a great city cintinuing indefinitely to disregard building codes, fire zoning, and good city planning. It is proposed, therefore, that all buildings upon which construction is started after 1 January 1949, regardless of the date of issuance of the permit for construction, and which are to be erected within the fire zone districts of Tokyo shall: (1) In Fire Zones "A" be constructed of non-combustible materials or of wood frame suitably coated on the outside walls and underside of eaves with cement plaster, protected inside with cement plaster or other suitable non-combustible finish and with roofs covered with cement tile, metal, or other suitable non-combustible covering; and (2) In

Declassified E.O. 12065 Section 3-402/NNDC NO. 775009

indefinitely to disregard building codes, fire zoning, and good city planning. It is proposed, therefore, that all buildings upon which construction is started after 1 January 1949, regardless of the date of issuance of the permit for construction, and which are to be erected within the fire zone districts of Tokyo shall: (1) In Fire Zones "A" be constructed of non-combustible materials or of wood frame suitably coated on the outside walls and underside of eaves with cement plaster, protected inside with cement plaster or other suitable non-combustible finish and with roofs covered with cement tile, metal, or other suitable non-combustible covering; and (2) In Fire Zones "B" be constructed of non-combustible materials or wood frame suitably covered on outside walls and underside of eaves with cement plaster, perferably protected inside with non-combustible finish, and with roofs covered with non-combustible materials.

It was agree also that no permit for construction in the Zone "A" area which includes the Old Kaijo, the Dai Itchi Building, Dai Iti Hotel, Finance Building, Metropolitan Police Board Building and others, should be approved unless such building is to be constructed throughout with substantial "fireproof" materials. No permits for construction in Fire Zone "A" or "B" should be approved unless the location of the structure conforms to the adopted City Plan. Any structure erected within Fire Zone "A" after 1 January 1950 should be of "fireproof" construction as defined in Ordinance #6, Ministry of Construction.

This is recognized as a radical change from the existing lax Temporary Building Law which allows just about any kind of building to be erected

Declassified E.O. 12065 Section 3-402/NNDC NO. 775009

in any area of the city. But, as stated previously, it is high time that Tokyo began to build a permanent city and that the Temporary Building Law be rescinded. Experience shows that neither fire nor earthquake, Japan's two greatest peacetime enemies, cause much damage to substantially constructed reinforced concrete buildings.

In this paper we have referred only to Tokyo merely because all of you are more familiar with conditions here, and because Japan's largest city and seat of the National Government, certainly should take the lead in rebuilding. Similar conditions exist in other Japanese cities, where people continue to build and burn, rebuild and reburn endlessly; and steps should be taken in these municipalities, also, towards permanent building along the lines mentioned.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Table showing number of Applications dealt with for construction of new buildings between august and december 1948.

Month	Approval / Disapproval	Type of Bldg →	Shops, store Residence combined	Residence	Hotel Apartment Lodging House	Factory warehouse office	others school church assemble Hall etc.	Total	grand Total
August	approval		661	665	20	194	481	2021	2021
	Approval on condition		79	75	7	48	72	281	281
	Disapproval								
	Total		740	740	27	242	553	2302	
September	Approval		479	290	22	208	329	1328	3349
	Approval on Condition		580	364	15	196	133	1288	1569
	Disapproval								
	Total		1059	654	37	404	462	2615	
October	Approval		245	154	17	109	368	893	4242
	Approval on Condition		673	487	24	238	201	1623	3192
	Disapproval			1		1	1	3	3
	Total		918	642	41	348	570	2519	

Declassified E.O. 12065 Section 3-402/NNDC NO. 775009

	Total	1059	654	37	404	462	2615	
October	Approval 許可	245	154	17	109	368	893	4242
	Approval on Condition 条件付許可	673	487	24	238	201	1623	3192
	Disapproval 不許可		1		1	1	3	3
	Total 計	918	642	41	348	570	2519	
November	Approval	197	118	10	70	309	704	4946
	Approval on Condition	697	444	9	212	200	1562	4754
	Disapproval	1	1			2	4	7
	Total 計	895	563	19	282	511	2270	
December	Approval	173	110	33	69	330	715	5661
	Approval on Condition 条件付許可	704	411	16	224	220	1575	6329
	Disapproval 不許可		1			1	2	9
	Total 計	877	522	49	293	551	2292	
合計	grand Total	4489	3121	173	1569	2647	11999	

備考 Remark

Approval on condition: Surface treatment with non flamable substances, distance apart of or space between houses, fire wall, etc.

Conditions imposed on disapproval cases: no proper fire escape for building of 3rd floor, house to be built at the dead end of narrow street, small plants or shops among the blackmarket places where all roof = use shingles, small combustible houses built in row within the former licensed quarter; two storied house where the 1st floor is used for storing combustible stocks, and the 2nd floor for sleeping quarter,

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Time taken for dealing with Application for permission to construct new buildings

Month → / Time spent unit... day ↓	Number of Cases October	Number of Cases November	Number of Cases December	Total
1 day	544	649	877	2070
2 日	1304	1147	980	3431
3 日	392	360	224	976
4 日	122	69	75	266
5 日	47	21	14	82
6 日	20	11	7	38
7 日	23	3	4	30
8 日	9	5	2	16
9 日	6	3		9
10 日	4		1	5
11 日	4	1		5
13 日	3	3		6
14 日	2	1		3
15 日	4	1		5
16 日	1	1		2
17 日	2		1	3
18 日	1			1

Declassified E.O. 12065 Section 3-402/NNDC No. 775009

8 日	9	5	2	16
9 日	6	3		9
10 日	4		1	5
11 日	4	1		5
13 日	3	3		6
14 日	2	1		3
15 日	4	1		5
16 日	1	1		2
17 日	2		1	3
18 日	1			1
19 日	2		1	3
20 日		1		1
21 日	3			3
22 日	2			2
23 日		1		1
24 日	1			1
26 日	1			1
27 日		1		1
28 日	1			1
34 日	3			3
44 日	1			1
Total	2502	2278	2186	6966
Average time spent for each month	2·4 日強 day	2·0 日強 day	1·9 日弱 day	2·1 日強 day

Remark

Reasons for Delay in dealing with application

a. Inflamable substances to be store in warehouse to be built.
b. Applicant are late in turning in application after correction
c Applicant never turn in again after correction for application is required
d. Incorrect statement in application, etc.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Outline of Fire-Prevention Exhibition and Promotion of Interest in Fire-Prevention

1. Purpose: The fire is "cancer" to the will for production and the reconstruction of Japan. It is not an act of God. Careful precaution and proper knowledge will check the disaster to the least damage. For this mere enactment and promulgation of laws will not do. We must also try by all means to promote interest in fire-prevention among all people. For this purpose we are planning to hold an exhibition, lecture meeting, etc. as mentioned in separate paper.
2. Scheduled Period: A week or ten days beginning on Feb. 2, 1949.
3. Promoted by: Ministry of Construction, National Fire ~~Service~~ Defence Board, Tokyo Metropolis and Tokyo Fire-Service Board.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Exhibit

1. Name of Exhibit: Incombustible City Exhibition (subject to change)
2. Where held: In Tokyo first, then in the five big cities and other cities when desired.
3. When held: On and after Feb. 2, 1949.
4. Period: Seven to ten days.
5. Seat of Exhibit: Mitsukoshi Shinjuku Branch.
6. Materials shown:
   (1) Photographs (mostly), pictures and various kinds of statistic data.
   (2) Articles for reference.
   (3) Others.
7. Standard of Materials shown: Pictures will be framed veneer, 3 shaku x 4.5 shaku
8. Subjects of Materials:
   (1) Explanation of measures for fire-prevention at large.
   (2) Explanation of fire-prevention by the fire-service offices
   (3) Explanation of measures for fire-prevention from the city planning point of view.
9. Number of Pictures: About 50 sheets.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Meeting for Promotion of Interest in Fire-Prevention (Draft)

1. Name of Meeting: "Eve for Fire-Prevention" (Subject to change)
2. Time: About Feb. 5.
3. Place: Mainichi Hall, Kyoritsu Hall or Yomiuri Hall.
4. Contents: Lectures, films, etc. on fire-prevention.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Plans Scheduled Relative To The Incombustible City Exhibition

1. Information Office: Will be established during the period of the Exhibition in a part of the exhibition hall, where officials will answer to questions and give advices.

   Construction Ministry: Concerning fire-resisting building.

   Fire Defence Board: Guidance in fire-prevention and fire-fighting.

   Merchants, etc.: Pump dealers, contractors concerning fire-resisting buildings, fire assurance companies.

2. Issuing of Leaflet: To be distributed free at the exhibition hall. "Explanation of the Regulations for Fire-Resisting Building and the Fire-Prevention Law" (with illustrations)

   Standard: B4, 9p, double column setting.

   May insert some advertisements.

3. Survey of Public Opinion: Opinions will be surveyed about the Exhibition and fire-prevention.

   Paper: B6.

4. Broadcasting Advertisement: A loud speaker and siren will be prepared in the hall for advertisement.

5. Eve for Fire-Prevention (Cf. separate paper).

   New film for spreading of fire-prevention. "Construction of the Paradise"

6. Radio Broadcasts:

   Man in the Street, discussion, spot-announcement, March of Time, Eve for Fire-Prevention(if possible).

7. Show in the Show-window of the Departmentstore where Exhibiton is held.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Subjects of "Incombustible City Exhibition"

Title		Contents	Number
(1)	Fire and Our Life;	Fire that makes our life happy;	2
	Disaster of Fire	Fire sometimes brings disasters to our life.	2
(2)	Conflagration	Statistics on fires (Scenes, ruins, damages and casualties);	2
		A little fault may cause a big disaster.	5
(3)	What is the cause?	Because of bad buildings and bad cities;	2
		Because of carelessness;	2
		Because of powerless fire service.	2
(4)	How to prevent this?	(A) Improvement of equipment	
		Increase of fire-resisting power of buildings;	3
		Reconstruction of cities;	
		Incombustible building;	2
		Enforcement of the Temporary Regulations for Fire-Preventive Building.	2
		(B) Increase of Power to Fight the Fire	
		Comparison with foreign countries (pumps and hydrants)	1
		Fire-fighting equipment New fire-fighting machines Fire-Prevention Law	2
		(C) Carefulness	
		Meaning of the fire alarm (Humidity, velocity of wind);	
		Mind the fire;	
		Electricity.	

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

		(D) If a fire should happen,	
		Report as soon as possible so as to minimize the damage;	2
		What shall be done first of all?	1
		Prevent it from spreading;	
		Beware of leaping flames;	
		Obey directions of fire-men;	1
		Punishment against causing a fire.	
(5)	Conclusion	Fire shall be utilized;	4
		But don't let it rage.	
		Strong buildings	
		Constant carefulness	
		Well equipped fire service	
(6)	Articles shown for reference	Materials for incombustible buildings, color prints, "matoi" (fireman's standard), tools for fire-fighting posters for fire-prevention,	
(7)	Articles presented by Assisting Bodies	Fire-fighting machines and tools	
(8)	Others		

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

PUBLIC SAFETY DIVISION
ROUTING SLIP

	FROM: Fire Br. DATE: 10 Dec 48	
3	Chief of Division	
2	Executive Officer	
	Executive Assistants	
5	Lt Colonel Whitmore	
6	Captain Jump	
4	Captain Nealon	
1	Administrative Officer	BFB
	Chief Clerk	
7	Fire Branch	
	Legal Branch	
	Liaison	
	Maritime Branch	
	Police Branch	
	Prison Branch	
	Sta & Anal Branch	

For:

Information 1-6 Comment _____

Action _____

Approval _____ File _____

REMARKS:

For circulation and return

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Proposed Association for Fire-Proofing of Cities and Towns

(Proposal, Prospectus and Articles of Association)

Proposal for the establishment of the
"Association for Fire-Proofing of Cities and Towns."

In the light of the conditions of urban areas in this country at present and also of the disastrous damages done to them in the past, the reconstruction should have the end in view, as the primary objective, to forestall the possible losses of nation's material resources, and to form the urban areas into bases of sound productive activities. How closely the rebuilding of urban areas is related to the nation's general economic reconstruction is beyond dispute.

The conditions of reconstruction of war-damaged cities, as they are found at present, and the disastrous consequences of Fukui earthquake and the conflagration that followed, have renewed our attention to the keen necessity of staging a campaign right now to build a utopia of fire-proof cities, which will utilize all the scientific techniques available, in defiance of any difficulties, whether economic or otherwise. The times are tending toward democratization. Not even the highest scientific and technical achievements can be brought into employment without the support of popular recognition and support. Therefore it is proposed, in cooperation with the organizations and individuals concerned, who have common interests and champion the common cause, to organize an association as a nucleus for arousing the public opinion and for developing a vigorous drive. Will the public approve our proposal and cooperate in our drive.

November, 1948.

Promoters of the "Association for
Fire-Proofing of Cities and Towns."

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Prospectus for the establishment of the
"Association for Fire-Proofing of Cities and Towns."

One of the results of the war is that, in a matter of few months, some 2.6 million housing units were lost, and about 120 cities of various sizes were wiped out. If to this is added the number of houses lost after the war's end in frequent calamities or otherwise destroyed, the number of housing units, which are required for the relief of the immediate need at the moment, is said to amount to well over 4.6 million units. In the recent major quake in Fukui, some 36,000 houses were destroyed in the twinkling of an eye. The reason for this appalling loss is not far to seek. Fukui was not an exception of Japanese towns, which are made up of wooden houses, both frail and inflammable.

Even the 500,000-odd units, already built by the state, local communities and private individuals drawing upon their valuable stock of materials, may not be free from the possibility of being devoured by one calamity or another, if only past practices and easy-going methods are adhered to, without giving full consideration to precautionary measures. The following table will sufficiently demonstrate the increasing rate of losses by fire, month after month, since the termination of the war.

YEAR	UNITS BUILT	UNITS DESTROYED BY FIRE	RATE	FLOOR AREA BUILT (Tsubo)	FLOOR AREA LOST BY FIRE (Tsubo)	RATE
1946	288,761	15,735	5.6	4,733,321	1,070,886	22.5
1947	406,196	33,885	8.4	6,408,538	1,323,540	20.7

(These figures are based on the statistics compiled by the Ministry of Construction and the National Fire Service Board.)

The

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

The loss of buildings in value was some ¥3.3 billion in the fiscal year 1946, with a sharp rise in 1947 to about ¥10.7 billion. The total amount of loss, including that of objects other than buildings, will reach an astounding figure. In spite of this, the actual state in the war-devastated cities is that the people are seeking shelter for their lives and properties in houses made of materials which are no better than a bundle of hay in respect of fire-resisting nature. We cannot help feeling as if treading on the proverbial thin ice.

Unquestionably, the fire-proofing of cities and towns has to be planned on a broad basis, not only in reference to house-building industry but also to politics, economics and all the other fields including science and technique. But, of the utmost importance are the fire-fighting equipments. As a matter of fact, however, even the publicly-owned open spaces or squares in cities and towns are now being encroached upon by newly built wooden houses, resulting in a situation, wherein the fire-fighting equipments which are the only resort to be relied upon in case of emergency may not be expected to give full play to their capacities and thus the sense of security is more and more diminished.

Unfortunately the Japanese people, with their so-called "flickering-out" disposition and deep-rooted leaning toward irrationalism, did not possess the wisdom to learn from the costly experiences of the Great Earthquake in Kanto District of 1923 a lesson which should have been embodied in their subsequent restoration plan. This has brought about once again the devastating havoc wrought during the late war. Is it not time to reconsider

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

the whole problem, tracing to its essentials?

While the general situation at the moment is anything but favorable for our scheme, we venture to propose, in the circumstances as described above, to lay the axe to the root of evil, by means of promoting a campaign for making fire-proof cities and towns; in the hope that not only the people may be thereby protected from disasters but the accumulation of the nation's material resources started one day sooner may expedite the general recovery by several scores or even hundreds of days; and in the belief that this seemingly bold undertaking has every chance of success with the backing of popular support and the proper employment of scientific technique.

Believing that it is our duty as a nation, who has pledged her efforts for reconstructing herself as a cultural nation before the eyes of the whole world focused on her, to promote the welfare of her people for all time to come by means of expediting the fire-proofing of her cities and towns, as well as to wipe out, of her own initiative and through her own efforts, the dishonor of being called "a land of fires," we, with the cooperation of those interested in the proposal, do hereby organize the "Association for Fire-Proofing of Cities and Towns," and do give our word to make endeavors to attain the intended objectives.

Articles of Association of the
"Association for Fire-Proofing of Cities and Towns."

CHAPTER I General Provisions.

Article 1 This Association shall be composed of various juridical

persons,

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

persons, organizations and individuals, who intend to expedite the fire-proofing of cities and towns and to promote their sound development.

Article 2 This Association shall be called the "Association for Fire-Proofing of Cities and Towns," with its head office set up in Chuo-ku, Tokyo, and local branch offices in respective districts.

The provisions in reference to the Association's branch offices shall be prescribed separately.

CHAPTER II Objects and Undertakings.

Article 3 This Association shall have the objects in view to coordinate and connect scientific technique with government administration for expediting the fire-proofing of cities and towns in order to protect the people from disasters on the one hand, and to arouse the public opinion for rebuilding the urban areas of this country into cultural communities perfectly immune from disasters on the other.

Article 4 For the purpose of attaining the objects as mentioned in the preceding Article, the Association shall perform the following undertakings:

1. To make inquiries and researches into various subjects pertaining to fire-proofing of cities and towns;
2. To present proposals and make representations to the Diet, Government, political parties, etc., pertaining to fire-proofing of cities and towns;
3. To make enlightenment propaganda and give guidance for arousing public opinion, pertaining to fire-proofing of

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

cities and towns;

4. To give cooperation in materializing the results of researches obtained by members of this Association, pertaining to fire-proofing of cities and towns;
5. To run a periodical paper of this Association, and publish related books;
6. Any other work which may be required for the purpose of fire-proofing of cities and towns.

CHAPTER III Membership.

Article 5 The member of this Association must carry out his duties as a member, which are defined in the present Article of Association or may be prescribed in resolutions of the general meeting, and give cooperation to the performance of undertakings which are the objects of this Association.

Article 6 The classification of and eligibility for membership shall be as follows:

Group A: Local public body, cultural organization, public corporation and such individuals as may be recognized by the directorate;

Group B: Persons other than those belonging to Group A.

Article 7 Any person, who intends to apply for membership, shall submit his application in the prescribed form, and any member, who intends to relinquish his membership, shall file a report accordingly. In either case the approval of the directorate shall be required.

The acquisition or relinquishment of membership shall take effect as from the following month.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Article 8 The rights and privileges of a member shall belong to the member himself, and shall be not transferable.

Article 9 The membership fee shall be as follows. In addition to this, a member shall share in the contribution as mentioned in Article 35.

Member belonging to Group A: ¥500 per month

Member belonging to Group B: ¥1,000 per month.

It is provided, however, that a member belonging to Group A may have his membership fee reduced or be exempted therefrom, in case where unavoidable circumstances exist, subject to the approval of the directorate.

Article 10 In case of special need for the purpose of executing the work of this Association, persons with learning and experience may be recommended for membership, after referring the matter to the council meeting. In such case the admission procedure as well as the membership fee may be eliminated.

Article 11 Any member, who may have acted in contravention of the present Articles of Association or disgraced himself as a member, may be expelled from membership by the resolution of the general meeting.

Article 12 Any person, who may have lost his membership on account of expulsion, withdrawal or otherwise, shall not be entitled to a claim for the refund of membership fee already paid, or of other contributions already made.

CHAPTER IV Functionaries.

Article 13 This Association shall have the following functionaries:

President	1
Chief director	1

Deputy....

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Deputy chief director	2
Director	Several
Auditor	2
Council-member	several

Article 14 The council meeting shall elect well-qualified persons to directorship from among persons related to organization-members, or individual members.

Article 15 The president, chief director and deputy chief director shall be appointed by mutual election of directors.

Article 16 The auditors shall be elected by the council meeting from among persons who are representatives or their deputies of organization-members, or individual members.

Article 17 The term of office of the functionaries shall be two years, beginning in April and ending in March of the next year but one.

The term of office of a functionary, who has succeeded to a post to fill a vacancy, shall be the remainder of the term of office of his predecessor. However, any functionary may be re-appointed.

The functionaries, after expiry of their term of office, shall continue to take charge of their duties until such time as their successors assume office.

Article 18 In case where any vacancy left by a director, who is the president, chief director or deputy chief director, has to be filled, a by-election shall be held in accordance with Article 14 to appoint a substitute director. ~~However, it is provided that a vacancy left by any one of the other directors shall be filled~~

by

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

~~by one of the three substitutes, in the order of precedence~~, ~~who are previously designated by the council~~. A vacancy left by an auditor shall be filled in accordance with Article 16.

Article 19 The president shall represent this Association, preside over its affairs, and act as chairman of the general meeting, council meeting and meeting of directorate.

The chief director shall give assistance to the president, and shall act on his behalf in case where the president is prevented from doing his duties on account of unavoidable circumstances.

The deputy chief director shall give assistance to the chief director, and shall act on his behalf in case where the chief director is prevented from doing his duties on account of unavoidable circumstances.

The directors shall deal with the affairs of this Association, acting upon the instructions given by the president and the chief director.

The auditors shall make auditing of financial conditions, and take such relevant actions as may be required therefor.

The council-members shall deliberate upon important affairs of this Association.

Article 20 The council-members shall be appointed on a vocational basis, and mutually elected by members of the Association in each vocational group.

The election shall be held by correspondence before the end of March.

In case where any vacancy is left by a council-member, the president must cause a mutual election to be held by the members

of

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

of the Association belonging to the particular vocational group concerned, and notify all the Association members of the results thereof.

CHAPTER V Organs

Article 21 A general meeting shall be either an ordinary or an extraordinary general meeting, which shall be called by the president.

The ordinary general meeting shall be convened in May every year.

The extraordinary general meeting shall be called in the following cases:

1. In case where the council meeting has voted to demand the convocation;
2. In case where the directorate has recognized the necessity of convocation;
3. In case where the auditors have demanded the convocation;
4. In case where one-tenth or more of the entire membership has demanded the convocation.

In convening a general meeting, the object and agenda thereof shall be previously notified to the members.

However, with the approval of one-third or more of the members present, the meeting may take up subjects other than those included in the agenda as mentioned in the preceding Paragraph.

Article 22 The subjects, on which the general meeting shall decide, are as follows:

1. Validation of estimates of revenue and expenditure, and of closing accounts;

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

2. Matters pertaining to the Articles of Association;
3. Matters pertaining to important properties owned by the Association;
4. Establishment and/or abolition of branch offices;
5. Matters which the council or directorate has recognized as essential;
6. Other matters which are stipulated in the Articles of Association.

Article 23 The decision of a general meeting shall be given by a majority vote of the mebers present. In case of a tie, the chairman shall give a decision.

Any change in the Articles of Association shall require an agreement of one half or more of the entire membership.

Article 24 Each member shall have one vote.

The voting right of a member may be delegated to another member who attends the meeting.

The delegation of voting right by a member as mentioned in the preceding Paragraph shall be regarded as attendance of the said member.

Article 25 The council meeting shall be constituted by the president and council-members, and convened by the president.

The council meeting shall be convened in March and September every year. However, the meeting may be held at any time when it is deemed necessary by the directorate.

Article 26 The subjects, on which the council meeting shall decide, are as follows:

1. Draft proposals to be submitted to the general meeting;

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

2. Grouping of members on vocational basis and allocation of membership to each group, in reference to election of council-members;
3. Election and appointment of directors and auditors;
4. Recommendation to employ the services of advisers and consultants;
5. Allocation of members' contributions as mentioned in Article 35;
6. Other matters, which the directorate has recognized as essential.

Article 27 No council meeting, unless attended by one half or more of its members, shall have the authority to give a decision.

The proceedings of a council meeting shall be governed by the provisions of Paragraph 1 of Article 23, and Article 24.

Article 28 The proceedings of a council meeting may be replaced by correspondence.

Article 29 The meeting of directorate shall be constituted by the directors, and convened not less than once a month.

Article 30 The matters to be conducted with the decision of the meeting of directorate are as follows:

1. Matters pertaining to performance of the Association's undertakings;
2. Admission of members and their withdrawal;
3. Matters pertaining to administration of properties;
4. Other matters essential for the management of the Association's affairs.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Article 31 The decision of a meeting of directorate shall be given by a majority vote of directors present. In case of a tie, the chairman shall give a decision.

CHAPTER VI Advisers and Consultants.

Article 32 Recommendations may be made to employ the services of advisers or consultants, after referring the matter to the council meeting.

The advisers and consultants shall give counsel to the president on request and may give suggestions in regard to the management of this Association.

CHAPTER VII Accounts.

Article 33 The business year of this Association begins on April 1 and ends on March 31 of the following year.

Article 34 Immediately on termination of every business year, the directorate must prepare the undermentioned documents, which, having been audited by auditors beforehand, shall be submitted to the council for its examination, accompanied with the views of the auditors.

Inventory;

Business report;

Estimates of revenue and expenditure; statement of closing accounts.

Article 35 The expenses of the Association shall be met by membership fees, contributions made by the members, and other revenue.

Article 36 The directorate may prescribe regulations relative to accounting affairs, subject to the approval of the council meeting.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

CHAPTER IIX Secretarial Office.

Article 37 The directorate shall select and appoint several secretaries from among persons related with the members, to set up a secretarial office. However, a director is not precluded from functioning concurrently as a secretary. The term of office of a secretary shall be two years, and shall coincide with that of the director.

Article 38 The secretaries shall give assistance in executing the affairs of the Association under the supervision of the directorate.

The secretaries shall designate a chief secretary by mutual election.

The chief secretary shall superintend the secretarial office.

The secretarial office may employ a paid staff of several employees.

The appointment and dismissal of employees shall be determined by the directorate.

SUPPLEMENTARY PROVISION

The first functionaries shall be elected at the inaugural general meeting, and their term of office shall begin with their assumption of office and end on March 31, 1950.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

LIST OF PROMOTERS

(No special order observed)

Asahi Slate K.K.

Branch Office of Kawasaki Sangyo K.K.

Technique Laboratory Construction.

Association for Fire-Fighting Equipment.

Housing Cultural Association.

Cement Association.

Association for Increased Production of Building Stones.

National Nail and Wire Association.

Institute of Civil Engineering.

Tokyo Chamber of Commerce and Industry.

Association of Construction Industry in Tokyo.

Tokyo Department Store Association.

Tokyo Metropolitan Association of Construction Industry.

Tokyo Communicator Manufacturing K.K.

City Planning Association.

Institute of Japan Mechanics.

Practicing Architects Association of Japan.

Japan Electricity Association.

Japan Ecomonic Reconstruction Association.

Marine & Fire Insurance Association of Japan.

Japan Warehouse Association.

Japan Asbestos Association.

Japan Fire-Engine Association.

Nomi Anti-Disaster Kogyo K.K.

Fire-Proof Housing Association.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Murakami Kogyo K.K.

Association for Increased Production of roofing Tiles.

Fabricated Fire-Proof House K.K.

General Building Equipment Association.

Housing Association for Factory Production.

New Japan Building Material Association.

Water-Work Association.

Cement Products Association.

National Association of Construction Industry.

Institute of Electro-Technology.

Tokio Institute for Municipal Research.

Municipal League of Japan.

Tokyo Associated Fire Prevention League.

Tokyo Metropolitan Housing Association.

Tokyo Metropolitan Construction Association.

Association of Tokyo Building Agents.

Architectural Institute of Japan.

Meteorological Institute of Japan.

Iron and Steel Association of Japan.

Japan Chamber of Commerce and Industry.

Japan Fire-Prevention Association.

Japan Buildings Association.

Japan Mechanical Industry K.K.

Japan Fire-Extinguisher Association.

Reconstruction Building Assistance K.K.

Maruyama Sekosho K.K.

Woodwool Cement Board Popularization Society.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

THE NAGOYA CITY HALL

NAGOYA, JAPAN

13 January, 1949.

To : The Commander of the Aichi Military Government Team

Subject : Petition for the Increase of State-Subsidy for Municipal Reconstruction Works

Dear Sir:

On behalf of the respective commissions for rehabilitation and land adjustment of four war-torn cities in the Aichi Prefecture, we hereby wish to present you a petition asking for your kind assistance on the subject.

As regards the reconstruction of war-devastated cities, extensive plans have been laid down in accordance with the basic policies for reconstruction programs fixed by the national government some time ago. Under these plans and programs, works of land adjustment, street-repair and restoration of facilities have been progressing since 1946 to clean up the burnt area, secure lands for public use (roads, parks, greenery area, etc.), and to restore public utilities (water works, sewerage, gas-pipes, etc.).

Although land adjustment is the groundwork for all these works, three years have already passed before we can attain even the 10% of the entire works due to adverse conditions.

We can mention the insufficiency of the amount of state subsidy to these works as the only real cause for this situation. The administrators of these works have done their utmost in the midst of various difficulties and the provisional designation of the substitute lands is going on to be completed in the not distant future. Under the present circumstances, however, the full utilization of the substituted lands can not be expected and the ownership of land is apt to be left insecure as it is now owing to the shortage of the working expenses, which is sure to lead to the prolongation of the reconstruction program of the dwelling-houses for citizens and to the increase in the number of unauthorized constructions under the pretence of provisional ones. It is also feared that these conditions will make the execution of the works all the more difficult, the expenditures more enormous and will also cause the citizens to take more gloomy views of the future.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

In order that these works may be properly carried out, we the members of the land adjustment commissions elected by the land-owners and lease-holders at large, feel keenly that we are now entering into the most important stage to advance these works, are earnestly desiring that as the biggest possible amount of subsidies from the national treasury be given to us as far as the domestic situations for the coming year permits.

We, the undersigned, earnestly request that you will duly consider the present state of affairs and give us your necessary assistance for the matter so that our aim may be attained.

Yours respectfully,

For the Federation of the Land Adjustment Commissions of Aichi Prefecture.

Signed: Rinzo Sugiura

Representative of Nagoya District

Signed: Manzei Yamamoto

Representative of Toyohashi District

Signed: Mitsuni Ohta

Representative of Okazaki District

Signed: Zenichi Take

Representative of Ichinomiya District

Representative to Territory
District

Signed: _____

Representative to Oklahoma
District

Signed: _____

Representative to Territory
District

Signed: _____

Representative to Nevada
District

Signed: _____

For the Legislature of the State
Adjustment Commissioner of Alaska

Yours respectfully,

will duly consider the present state of affairs and give
me, the undersigned, certainly feel that you
as much assistance for the matter as that you
may be afforded.

affairs for the coming year permits.
national fraternity be given as far as the domestic
part as the pleasure possible amount of expenditure from the
portant state of advance these works, are certainly desiring
feel keenly that we are now entering into the most im-

Kobe Vessel
Tokyo Kyoto
SIX CITIES
1.6 Billion Yen to

Declassified E.O. 12065 Section 3-402/NNDC NO. 775009

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Jan. 1949

Dear Sir,

We are very glad to know that you are in good health and engaged in your political affairs diligently.

Now we are going to have a consultation meeting about the problems of promotion of inflammable building in the presence of the below mentioned dignitaries and to get your leadership and support in these problems.

Here we cordially invite you to the meeting on the following date though we know that you are very busy in your job at this time of year.

Respectively yours,

Okada Shozo
Headman of Shinjuku Ward

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Time : at 5 p.m. /9 th Jan. 1949
Place : Tokyo Kaikan Annexe at Marunouchi

Attendants:

Economic & Scientific Section

Mr. Angell	Chief of fire-service division
Mr. G. A. Heart	Chief of Construction
Mr. E. F. Stanek	Charge in Building
Mr. R. L. Houpz	Construction branch

Construction Ministry

Mr. Yoshibumi Saizu	Director of Municipal Bureau
Mr. Goro Ito	Director of Building Bureau
Mr. Kenshiro Morooka	

Tokyo Metropolitan Office

Mr. Seichiro Yasui	Governor of Tokyo
Mr. Shoichi Sumita	Vice-governor of Tokyo
Mr. Eiyo Ishikawa	Director of Construction Bureau
Mr. Katsura Ishii	Director of Building Bureau

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

A Short Cut to Fire-resistive Cities

New Mass-production Method for Fire- and Earthquake-proof Houses

Heigaku Tanabe, Dr. Eng.

Professor of the Tokyo Institute of Technology
Director of the Building Materials Research Laboratory

April 1948

The Marine and Fire Insurance Association
of Japan

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

A SHORT CUT TO FIRE-RESISTIVE CITIES.

DWELLINGS ARE DECREASING!

Japan enjoys an unenviable reputation for being the first country in the world for fires. Tokyo and all the other cities in Japan have always suffered from fire since the remote days. Even to-day fires, large and small, are frequently breaking out in all parts of the country, nullifying the costly fruit of our endeavours at reconstruction, and its ultimate cause is to be sought in the fact that the houses in this country are built of inflammable wood and paper.

In rebuilding the cultural and peaceful new Japan, first of all the causes of fire in cities must be eliminated to make them free from fear of fire, large or small. As counter-measures against fire, it is needless to point out the importance of localizing and limiting ravages of fire by fire-resistive city planning providing broad streets, spacious parks, green and other free areas and by improving fire-fighting equipments. But our experience in the past and recent large fires in this country clearly shows that these measures alone are not sufficient to attain the end of making our cities fire-resistive. There can be no other way but, getting at the root of the cause, to make each house not inflammable, as it has been done in the cities in the West for the last few centuries. In brief, chase inflammable, dangerous timber houses completely out of the principal parts in our cities and towns, and replace them with fire-resistive houses such as reinforced concrete building, the use of which is to be made general and extensive.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Wooden building has become a long tradition in Japan, and to the Japanese, "house" is almost a synonym of "wood." However, besides being fatally defective on account of its danger to fire, timber-construction will no more be permissible in the present-day Japan from the point of view of material resources. Wood in Japan must be conserved hereafter as the essential industrial resources for pulp, resin etc. If rebuilding of the dwellings was attempted all in wood,—and the shortage is reported to reach over 4 million houses in the whole country—, all the hills and mountains in this country which are already suffering from excessive deforestation, will soon be literally deforestated, presenting serious problems to forestation, flood-prevention, irrigation, and finally even to food-growing. Further it should not be forgotten that wooden buildings have not much durability.

With the present speed of construction which is about 300,000 houses in a year, it leaves only 100,000 houses after supplementing 200,000 houses, the number corresponding to the shortage due to the natural growth of population. Therefore it can not even catch up with the wear and tear of wooden buildings due to rotting, and together with the loss of 40,000 houses a year in average caused by fire and other losses due to earthquakes, storms, floods etc., the absolute number of dwellings is not only not increasing, but is in fact rather decreasing.

Thus viewed from every angle, reconstruction of the cities and towns in Japan by wooden building is not only to be avoided from the point of view of preventing and fighting fire, but it is becoming actually impossible. Fortunately we have reinforced concrete construction which is at once fire-resistive and earthquake-proof, an absolutely necessary condition in this country of earthquakes, and which also satisfies the condition of durability. Japan

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

abounds in cement which is the principal material for reinforced concrete construction, and the quantity of steel required will also be extremely small in amount for the quantity of steel Japan is to be permitted to produce. Therefore the central parts in Tokyo and all the principal cities of the country must be rebuilt as extensively as possible by this reinforced concrete construction. However, the usual reinforced concrete construction has hitherto been costly, requiring much mechanical equipment, material and labour in building it, and it has been a matter of regret that owing to this very much higher cost compared to wooden building, it could not be used for the general public, though its superiority has always been recognised. "Prefabricated reinforced concrete" is a devise to overcome this defect hitherto considered unavoidable, and to obtain sufficiently safe reinforced concrete building which is comparatively simple in construction, and, not requiring much material, is consequently not much different in cost compared to wooden building.

Brief Description of Prefabricated Reinforced Concrete Houses.

The Author has been studying this Prefabricated Reinforced Concrete House since 1939 in the Building Material Research Laboratory of the Tokyo Institute of Technology with Assistant Professor Kazuo Gotoh and other collaborators, as a means to make our cities and towns fire-resistive, aiming at the popularization of reinforced concrete as the new type of fire-resistive construction which shall replace the inflammable wooden structure and which, both earthquake-proof and durable, shall fit in with the climate in Japan and the Japanese way of living.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

This construction principally aims at the following points.

1) It shall be fire-resistive and earthquake-proof.
2) It shall economize materials.
3) It shall be erected easily and quickly.
4) It shall be possible to design it freely.
5) It shall be freely added or reconstructed. It shall also be possible to dismantle or move it.
6) It shall be effectively heat-insulated, sound-proof and damp-proof.
7) Mass-production shall be possible and as a consequence the building cost shall be low.

The basic study of the new construction to satisfy more or less all these conditions is nearly complete now and a few test houses which suggest the possibility of mass-production have recently been completed and the Author considers the stage has already been reached for its large-scale industrialization. Let the Author describe briefly this construction.

This prefabricated reinforced concrete house is roughly speaking the hitherto-known wooden house replaced by reinforced concrete, preserving its old form etc., following the principle of erecting wooden houses. Namely columns, footings, beams and girders, wall plates, floor slabs and all the other pieces are made of reinforced concrete and produced in a large scale in factories, and they are transported to the site where the houses are to be built, and are assembled and erected quickly in a similar way as wooden houses are erected. The joints of the pieces are joined by bolts and nuts, steel plates etc., or are fixed by pouring cement mortar. The exterior will be appropriately finished, ceiling will be put up in the interior, floor will be put in, and it can be finished up either in the Western or the Japanese style as one

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

wishes, freely after any design, just as in case of the wooden houses.

Columns are hollow pipes with square section manufactured with centrifugal force for the sake of the strength, lightness, facility in manufacturing, convenience and resistance at the time of transportation etc. Namely a rotary machine with a horizontal axis manufactures them hollow and compact with centrifugal force of about 500 revolutions per minute. The cross section is 15cm × 15cm, and is therefore not much different from columns of ordinary wooden houses. The standard length is 3.5 m. Columns are not designed according to the ordinary reinforced concrete design, but special calculation method has been applied taking the stage of ultimate stress as the standard. As column footings, pedestals are used which have the base of 30 cm × 30 cm manufactured in factories. If bearing power of the earth is not sufficient, base plate will be extended by using concrete on the site of the building, or foundation piles may be used at the same time, as in case of ordinary buildings.

Beams are made in truss-form in order to make them light. The reinforcement of the beams is designed according to the steel construction calculation. The concrete part is designed for the forming of the piece, and, besides being cover for heat insulation, at the same time it is made to serve for preventing buckling of the steel bars. The standard size of the beam is width 9 cm, depth 41 cm, and length from 1 to 4 m. Except the above-mentioned columns, beams and all the other pieces are manufactured by the method of vibrated concrete. Namely steel bars are arranged in the shuttering board, and after filling it up with concrete, it is placed upon the shaking table, and by giving it several thousands vibrations per minute, the concrete is put in

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

dense and compact. The proportion of concrete mixture is: cement 1, sand 2.5, gravel 2.5. The water-cement-ratio is approximately 40%.

At the joints between columns and beams, the bars protruding at the ends of beams are supported on a square box made of steel plates which is welded to the main bars at the top of the column, and are thus made to resist the shearing force of the beam. For the sake of further safety, axial bolts are used to fasten them. The exposed steel part is painted in later with mortar. This joint is specially designed to be earthquake-proof, and the experiment has shown that there is no fear of beams being pushed aside in earthquake or their falling by the dead load. From the view point of statics, the joints between column and beam are pin joints. Consequently the beam becomes a simple beam and it is so designed that the horizontal force due to earthquake will be resisted exclusively by the diagonal braces to be described later. By such a special design it is so constructed that the bending moment will not be conveyed to columns, and that such slender columns as described above are sufficiently safe. In case of buildings higher than two-stories, columns must be joined one on the top of another. Rectangular steel plates, bolts and nuts are used to join columns of the upper and lower stories, as in case of wooden buildings.

Wall-plates are reinforced concrete plates of thickness 3 cm and width 20 cm and the standard length is 1 m. Wall-plates and other small pieces of length within 1 m are manufactured in mass and quickly using tubeform press and belt conveyer. Walls are double and columns are closed in on both sides by the above-descrived wall-plates, and fastened with small bolts and nuts. As these wall-plates can be freely fixed or removed, it is convenient

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

for making windows, doors and other openings. Walls are made double for the following reasons, apart from increasing safety in case of fire, namely for increasing heat insulation, facility of water-proofing, convenience for arrangement of the diagonal braces, piping and wiring, appearance etc. Specially for interior wall-plates, it is desirable to use saw-dust concrete plates and such others for the sake of lightness and heat insulation.

Floor slabs are manufactured in channel form section to make them light. Width 40 cm, and depth 12 cm. The length varies from 1 to 4 m. Floor slabs are so constructed that the both ends are placed on the beam, and are specially designed that they will not get apart in case of earthquake etc. The floor slabs are firmly joined together with one another by mortar joints with small pieces of steel bar buried in them, forming one big floor slab which will prevent horizotal deformation of the building in case of earthquake. Safety is also expected against vertical vibration.

Roof is constructed exactly in the same way as the floor slabs. Roof is flat, but it is made water-proof to prevent leakage. Specially in the districts where much snow is expected, it is possible to make it a sloped roof with due inclination.

Diagonal braces are set according to the principles of the earthquake-proof construction in the outer walls and in the essential points inside the house to resist horizontal load. Steel bars of 16 mm ø or reinforced concrete struts with rectangular section of the same strength as the former are used for diagnoal braces, and the both ends of diagonal brace are fastened by bolts through holes prepared in the columns. Diagonal braces are set in X form, one pair in each 20 m^2 floor area in case of one-storied house, and one pair in each 12 m^2 floor area in case of two-storied house. These diagonal braces are designed to resist earthquakes of 0.2 seismic

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

coefficient (which approximately corresponds to the intensity in the neigh bourhood of Tokyo in the great earthquakes of Kanto district in 1923), but as walls also bear a part of the force due to earthquake, there should be in fact surplus strength left to resist considerably stronger earthquakes.

Apart from the above-mentioned pieces, sub-members of special form, of width 7.5 cm, depth 11.5 cm, length from 1 to 4 m are used. These sub-members are one of the foremost characteristics of this construction. Owing to these, the freedom of plan is assured in designing, and setting doors and other fittings is made very easy.

All the pieces are made as light and smart as possible, and the heaviest beam of 4 m length weighs only 230 kg and can be carried by 4 men.

Characteristics of the Prefabricated Reinforced Concrete House.

The advantages of the Prefabricated Reinforced Concrete House of the construction as described above may be enumerated as follows:

1) As for fire-proofing, as the steel bars are covered with concrete of thickness necessary for fire-resisting, it can as sufficiently be trusted as usual reinforced concrete buildings in general.

As for earthquake-proofing, the experimental test applying alternate horizontal loads which would correspond to the forces due to earthquakes to full-size frames has shown results more satisfactory than was expected in strength, rigidity and particularly in tenacity of frames, and it has been ascertained that

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

it can be fully trusted to resist earthquakes too.

2) The sections of the pieces are designed to be as small as possible, so far as there is no danger, and the strength of the concrete is remarkably increased by special methods of centrifugal force, vibration etc. As the result, the needed materials are very much economized, both cement, steel and timber requiring about 25 to 30% of what is needed for usual reinforced concrete buildings. Specially as to steel only 27 kg/m² is required, that is only 22.5% compared to about 120 kg/m² hitherto required for reinforced concrete buildings.

Further, if special steel is used, more economy of steel is expected and its requirement will be less than 20% of what used to be needed for usual construction, and we are continuing the study in this direction. Reinforced concrete buildings hitherto have usually required also a large quantity of wood to be used as shuttering boards, but in mass-production of pieces for this construction, steel shuttering boards will be used, thus making wood for shuttering boards almost entirely unnecessary and this too is one of the prominent characteristics. In short, with the materials hitherto needed to build one reinforced concrete house, 3 or 4 houses of the prefabricated reinforced concrete can be built.

3) The examples of the several buildings already completed according to this construction clearly show that the erection is extremely easy and consequently the time needed for construction is remarkably shortened.

Specially as it is not necessary to wait for hardening of concrete as in the case of usual reinforced concrete buildings, finishing can be done as it is assembled and erected, consequently shortening the time of construction as a whole. It is also one

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

of the characteristics that the work is possible in winter. By using such mechanical power as special trucks with crane, trailers or movable cranes, efficiency of transportation and erection will be increased when erecting them.

4) When mass-production is intended it is necessay to standardize the scale of the houses as well as their form, namely plan, elevation, section etc. All the pieces of this construction are manufactured in universal form and through various constructions of the same pieces, it is relatively easy to design houses of free plan, form and style outside the standards. The use of this construction is for dwellings which are most urgently needed in the present-day Japan, including single houses, apartment houses, dormitories etc., but it is to be extended also to shops, offices, factories, hospitals, garages, store-houses, libraries etc., and the variety of the examples of the houses already completed or to be completed soon shows that the sphere of its application is very extensive.

As to the stories of the building of this construction, houses below two-storied are more desirable, but it is not difficult either to build four-stories or so. Even in case of high buildings of seven or eight stories, if this construction is applied to the uppermost 2 or 3 stories there will be much economy in building materials.

5) As the joints of the pieces of this construction are fastened by simple bolts and nuts, it is not only easy to add or rebuild in future, but in case it becomes necessary to move it, it is most convenient for dismantling or removing. This is a decided advantage over the hitherto practised method of erecting reinforced concrete houses on the site of the building, and specially in rebuilding the war-ravaged cities and towns, it is very con-

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

venient when city-planning, land-resubdivision, or changing, abolishing or widening streets requires removal of buildings.

6) The use of double wall of reinforced concrete plates gives advantage for water-proofing and sound-proofing, but in particular it is appropriate for the climate in Japan, where humidity is remarkably high and it is hot in summer and cold in winter. Namely double walls have greater heat-insulation, and its ratio of heat penetration is about the same or even below that of the double walls of outside weather-board and inside plaster finish used in Western-style timber houses. Consequently together with finishing of wall surfaces, the indoor-climatic defects owing to the high ratio of heat penetration as in the usual reinforced concrete buildings,—namely it is hot in summer and moisture tends to cause water drops on walls and cold in winter—, will be solved.

7) Lastly the most important question of building cost. All the pieces of this construction are designed both in form and size to be specially fitted for mass-production in factories, and the materials are very much economized, and the erection is easy and quick, therefore the cost is bound to become low. Though the value of such building can never be compared to timber houses, the already completed few test buildings also show that their building cost is not higher compared to wooden buildings more or less of the same finishing. If they are produced in mass by throwing in a large capital, with the improvement of design and of manufacturing machines, increase in the efficiency of production process, application of mechanical power to transportation and erection, and further economy of steel by the use of special steel etc., it can be expected that they may be supplied eventually at even cheaper

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

prices than timber houses.

TO THE AUTHORITIES.

In short, realisation of fire-resistive cities in Japan is no day-dream. Practical measures are also ready for adoption from the point of view of both material resources and technical engineering. Though there may still be room for further study as to details, the Author considers this prefabricated reinforced concrete construction which aims to kill two birds with one stone, aiming at fire-resistive cities and at economy of materials, to possess sufficient value and practicability justifying its immediate application for the reconstruction of the cities and towns of Japan which are suffering from the danger of fire and the shortage of timber. Furthermore the Author is convinced at heart that this new construction, meeting the characteristics of the Japanese climate, and specially devised to overcome the shortage of materials of to-day, is the best and unique scientific solution for reconstructing the ravaged cities and towns of this country, most speedily and most effectively from the point of view of fire-prevention.

Thus, if the task of making the cities fire-resistive is expedited by mass-production of dwellings of such new construction, and specially if the plane cities of to-day are heightened and cubified by fire-resistive apartment-houses in place of small, flat houses scattered and spread wide, it will not only greatly increase the safety from fire, but, as the cities will be more centralized to a large extent, it will very much mitigate the excessive traffic congestion which is seen in all the large cities at present, thus increasing the efficiency of the inhabitants of those cities. It will also improve their health by making increased green spaces, and

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

it will contribute in no small degree to beautifying those cities and towns.

This is not only one of the effective measures to solve the housing problem which is one of the most pressing needs for the stabilization of the people's life, but it offers at the same time one of the important keys that may eventually lead to solving the very difficult question of city-life in Japan for the improvement of the health and welfare of the Japanese people in general. For these reasons, as one of the students who have almost exhausted the energy in the study of this construction in the last ten years, the Author wishes most eagerly that this Prefabricated Reinforced Concrete House will be taken up by the Authorities determinedly and in a large scale, and powerfully put into execution, so that it will be produced in mass as soon as possible, to open the way for it to reach and permeate into all strata of the people.

With this most ardent desire, the Author addresses this urgent appeal particularly to the Authorities concerned!

— END —

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

FIRE HISTORY OF FUKUI

1.

JUN 45

2.

MAR 46

REPEATING CYCLE OF DESTRUCTION AND RECONSTRUCTION IN FUKUI ···

The remarkable series of photographs on this page, all taken from the Daiwa Department Store, shows four high points in the fire history of the city of Fukui in Fukui Prefecture, Honshu. The first photograph graphically illustrates the devastation left in the city by the B-29 attack of Jul 45 which resulted in death of almost 1,600 persons and the destruction by fire of over 21,500 buildings. Shown in the second photograph is the same area almost completely rebuilt with congested temporary and highly inflammable structures with no thought given to city planning with rigidly enforced building codes for protection of the majority. On 28 Jun 48 disaster, in the form of a violent earthquake, struck Fukui again and lack of city planning resulted in collapse of many large temporary wooden structures, killing thousands of people, and in the simultaneous outbreak of many fires which spread, unchecked by firebreaks, to destroy thousands of buildings. Photo No. 3, below, shows the same area pictured in the first two photographs. All of the congested temporary wooden structures are gone, as well as a more permanent brick building which survived the air attack in 1945. Following the disaster strong efforts were made to persuade city authorities to develop an adequate city plan, to include building codes, and to enforce the plan to the limit. The plan was partly successful in that several wide firebreaks were established, one of which is shown in Photo No. 4. However, as also shown in the last photograph, taken in Oct 48, no adequate building codes were developed or enforced, and the great industry of the Japanese people once more filled the destroyed areas with congested temporary and highly inflammable structures, ready to be claimed by the next holocaust at great and unnecessary cost to the people of Fukui. Similar conditions exist in most other Japanese cities in spite of repeated warnings by the Chief Fire Administrator of PSD; some progress is being made, however, in a few places such as Tokyo, where closer observation of enforcement is possible. By way of education, the Civil Information and Education Section of GHQ is currently holding a series of meetings with city authorities and residents of various cities to discuss the value of city planning. Such a meeting occurred in Sendai in Dec 48, and meetings have been scheduled in Tokyo for 29 Jan, in Fukuoka

JUN 45 MAR 46
REPEATING CYCLE OF DESTRUCTION AND RECONSTRUCTION IN FUKUI · · ·

The remarkable series of photographs on this page, all taken from the Daiwa Department Store, shows four high points in the fire history of the city of Fukui in Fukui Prefecture, Honshu. The first photograph graphically illustrates the devastation left in the city by the B-29 attack of Jul 45 which resulted in death of almost 1,600 persons and the destruction by fire of over 21,500 buildings. Shown in the second photograph is the same area almost completely rebuilt with congested temporary and highly inflammable structures with no thought given to city planning with rigidly enforced building codes for protection of the majority. On 28 Jun 48 disaster, in the form of a violent earthquake, struck Fukui again and lack of city planning resulted in collapse of many large temporary wooden structures, killing thousands of people, and in the simultaneous outbreak of many fires which spread, unchecked by firebreaks, to destroy thousands of buildings. Photo No. 3, below, shows the same area pictured in the first two photographs. All of the congested temporary wooden structures are gone, as well as a more permanent brick building which survived the air attack in 1945. Following the disaster strong efforts were made to persuade city authorities to develop an adequate city plan, to include building codes, and to enforce the plan to the limit. The plan was partly successful in that several wide firebreaks were established, one of which is shown in Photo No. 4. However, as also shown in the last photograph, taken in Oct 48, no adequate building codes were developed or enforced, and the great industry of the Japanese people once more filled the destroyed areas with congested temporary and highly inflammable structures, ready to be claimed by the next holocaust at great and unnecessary cost to the people of Fukui. Similar conditions exist in most other Japanese cities in spite of repeated warnings by the Chief Fire Administrator of PSD; some progress is being made, however, in a few places such as Tokyo, where closer observation of enforcement is possible. By way of education, the Civil Information and Education Section of GHQ is currently holding a series of meetings with city authorities and residents of various cities to discuss the value of city planning. Such a meeting occurred in Sendai in Dec 48, and meetings have been scheduled in Tokyo for 29 Jan, in Fukuoka for 25-26 Feb and in Kyoto in Mar 49.

· · · COULD BE INTERRUPTED BY CITY PLAN AND STRONG ENFORCEMENT!

3.

JUN 48

4.

OCT 48

PLATE XII

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

BASIC PRINCIPLES CONCERNING THE RECONSTRUCTION PROGRAM OF WAR-DAMAGED AREAS

(Adecision of the Cabinet council of December 30, 1945)

Damage caused by the last war in cities, towns and villages of this country extends almost over the whole territory, and the areas destroyed by fire-bombing during the war total 160 millions tsubo.

The program of reconstruction of these devastated areas must in the first place aim at the restriction of overpopulated big cities and the development of local middle and minor towns by means of rational measures concerning the location of various industries and the re-distribution of urban and rural population. It must be planned in compliance with different character of each city, town and village as well as with their future development. Of course the works belonging to such a program would only be carried out one after another over a long space of time, but the land readjustment work which constitutes the basis of the hetire planning should by nature be executed as promptly as possible.

1. Areas to be included in the reconstruction program

The reconstruction program will be carried out on important stricken areas that was destroyed by fire-bombing and other areas connect with it in the cities, towns and villages.

2. Object of the reconstruction program

The program will be decided with a view to promote the efficiency, sanitation and disaster-prevention of urban and rural communities on the basis of their peculiar characters and scales that are to be determined by measures concerning the location of industries and distribution of population. It will also aim at the construction of towns and villages with characteristic features fit for their local climates, manners and customs by elevating the people's living standard and raising the local ed scenic beauties.

3. Planning concerning the utilization of land

(1) The planned distribution of land for industry, commerce, business except commerce, and housing will be decided in full consideration of the efficiency, sanitation and disaster-prevention in urban and rural communities.

(2) In order to secure the realization of the planning concerning the utilization of land, the zones and sections will be designated as precisely as possible, and their exclusive use will be developed to the utmost.

(3) When the sections that were reserved for special purposes, have previously arranged or distributed wrongly, they will be converted or amalgamated on this occasion.

(4) As regards government and public offices, schools, stations, post, telegraph and telephone offices, markets cemeteries and other

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

buildings important for the constitution of towns and villages the proper location will be considered, and the damaged establishment or buildings inconveniently situated will be transferred to other places.

4. Important facilities

(1) Streets

a) The street network will be constituted according to the character and scale of each town or village as well as to the planning concerning the utilization of the land. It will be conceived so as to fit the traffic of automobiles and the form and scale of buildings in future and also to contributed to the prevention of disasters, public health and beautiful sights.

b) Main arterial streets will have 36m. in width in middle and minor cities and more than 50 m. in big cities, while other arterial streets less important will have the width of more than 25 m. in middle and minor cities and more than 36 m. in big cities.
The width of supplementary arterial streets will be as a rule more than 15 m., and in any circumstances it will not be less than 8 m. block streets will have the width of more than 6 m.

c) Boulevards or plazas of more than 50 to 100 m. in width will be made in necessary places, we must constitute the prevention of disaster and fair sights in view of utilization of it.

d) The system and width of the street will be determined in conformity with a prospective operation if arrangement of any of the subway, tramroad, or motor-bus are expected.

(2) Public open space

a) Parks, playgrounds, walks, greens and other reservations will be arranged systematically according to the character of each town and to the planning of land utilization there.

b) Total area of public open space will be arranged so as to have more than 10 o/o of the total area of the town.

c) In case of necessity, a green belt will be designated in order to preserve open spaces such as agricultural land, forests. meadows, river-beds etc. on the circumference of a town. It will be wedged into the urban area with supplement other open spaces.

(3) Harbors, canals, air-fields

Railroads, tramways, harbors and canals will be arranged adequately in order to carry out suitable location of industries and the expected development of each district in future. Air-field, tramway subway etc. will be projected in main cities.

(4) Others

With the completion of urban areas, electric wires will in principle be laid underground: water-service and sewerage will be made necessary improvement or be created newly: transportation facili-

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

ties by water will be enlarged: garbage-dump, crematorium, slaughter-house etc. will be furnished if necessary: and in main cities the establishment of fish and vegetable markets will be encouraged.

5. Adjustment of land

(1) In order to proffer land for streets, the parks and other public open spaces and increase the utility of urban areas, adjustment of land will immediately be executed on the whole of the stricken districts.

(2) The adjustment of land will be carried out by means of replotting or purchase of land. Issuing title-deeds and other means may alsonbe considered if necessary.

(3) In each replotting scheme, all the areas concerned will be included, except the places of historic interest, natural beauty and old mounds.

(4) The sites of destroyed structures or equipments to be removed and (the cites) of barracks and other places for military use will be made residential lots except those reserved for public purposes such as government and public offices, streets, parks, etc.

(5) In case a lot be cut off as a result of replotting from a private property, a certain portion of that lot will be offered gratis by the owner.

(6) In order to reduce congested areas and to promote the construction of solid buildings, excess plotted lots will be adjusted in the land replotting, and for the easier execution of land replotting a small lot will be replotting more land if necessary, while a lot particularly large will be given more than decrement of standard.

(7) For the easier execution of land replotting, public entities or their agencies, etc. will be recommanded to conduct the works of construction of building site.

6. Management of evacuated sites

(1) The public entities concerned will buy up the evacuated sites not yet bought up within the replotting areas for the purpose of facilitating the exedution of the replotting.

(2) The evacuated sites outside the replotting areas and in cities not stricken by the war will be bought up by public entities concerned only when it is required for the city planning.
State subsidy subvention will be given concerning the cost of purchasing.

7. Buildings

(1) Stress will be laid on the fire-proofing of urban areas and advancement of public health and disaster-prevention. According to the rehabilitation program of the war-destroyed areas, the supervision concerning the structure and equipment of urban buildings will be strengthened and the guidance thereof will also be exercised.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

(2) In the central parts of cities and areas within the fire-prevention zone, constructing buildings other than "the solid buildings" will be prohibited.

(3) In other areas, buildings other than the solid buildings will be put under the strict control concerning their location and structure, and their fire-resisting quality will be improved to the possible extent.

(4) The restriction concerning the rate of the building-area to the whole site of a building will be strengthened in order to leave a necessary open space in that site.

(5) Effective means of assistance for spurring the construction of solid buildings will be considered, and regulations will be made in regard the condemnation of such land within a block that may be required for constructing solid buildings.

8. Execution of works

The whole planning of the reconstruction program will be controlled by the central government, but the invention of each local community will fully be taken into account in framing the project.

The execution of the works to be undertaken in the course of the program will be confided to the greatest extent to the head of each city, town or village (confiding to the governor of Tokyo Metropolis in reference to the area comprised in the wards of Tokyo Metropolis) and only the works exceeding its competence by reason of their difficulty will be carried out by the prefectural governor.

9. Work expenses of the Reconstruction Program

(1) Expenses of the works in the Reconstruction Program will be defrayed by each public entity concerned, but subsidies will be granted by the State for a part of the expenses surpassing the local financial ability.

(2) A part of the expenses defrayed by public entities may be taxed on the inhabitants outside the stricken areas.

(3) The central government will accommodate a low-interest loan to be applied to the expenses defrayed by local public entities, and a government grant will be made for paying the interest of such a loan.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

WAR-DAMAGED AREAS

(The agreement of the Cabinet council of November 12, 1945)

War-damaged areas shall mean, for the time being, the areas comprised in the wards of Tokyo Metropolis and the following cities and towns.

Hokkaido : Nemuro, Kushiro, Hakodate, Muroran, Honbetsu.

Aomori Pref. : Aomori, Hachinoe.

Iwate Pref. : Kamaishi, Miyako, Hanamaki, Morioka.

Miyagi Pref. : Sendai.

Fukushima Pref. : Koriyama, Taira.

Tokyo Metropolis : Wards of Tokyo Metropolis, Hachiji.

Kanagawa Pref. : Yokohama, Kawasaki, Hiratsuka, Odawara.

Chiba Pref. : Chiba, Choshi.

Saitama Pref. : Kumagaya.

Ibaragi Pref. : Mito, Hito, Hidachi, Takaogi, Taga, Toyoura.

Tochigi Pref. : Utsunomiya, Shikanuma.

Gunma Pref. : Maebashi, Takasaki, Isezaki.

Niigata Pref. : Nagaoka.

Yamanashi Pref. : Kofu.

Aichi Pref. : Nagoya, Toyobashi, Okazaki, Ichinomiya.

Shizuoka Pref. : Shizuoka, Hamamatsu, Shimizu, Numazu.

Gifu Pref. : Gifu, Oogaki.

Mie Pref. : Tsu, Yokkaichi, Kuwana, Ujiyamada.

Toyama Pref. : Toyama.

Osaka Pref. : Osaka, Sakai, Toyonaka, Fuse.

Hyogo Pref. : Kobe, Nishinomiya, Himeji, Akashi, Amagasaki Naruo, Mikage, Ashiya, Motoyama, Sumiyoshi, Honjo, Shikama.

Wakayama Pref. : Wakayama, Kainan, Tabe, Shingu, Katsuura.

Fukui Pref. : Fukui, Tsuruga.

Hiroshima Pref. : Hiroshima, Kure, Fukuyama.

Okayama Pref. : Okayama.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Yamaguchi Pref. : Shimonoseki, Ube, Tokuyama, Kudamatsu, Hikari, Iwakuni.

Tottori Pre. : Sakai.

Kagawa Pref. : Takamatsu.

Tokushima Pref. : Tokushima.

Kochi Pref. : Kochi.

Fukuoka Pref. : Fukuoka, Moji, Yahata, Omuta, Kurume, Wakamatsu.

Nagasaki Pref. : Nagasaki, Sasebo.

Kumamoto Pref. : Kumamoto, Arao, Mizumata, Udo, Ooita.

Miyazaki Pref. : miyazaki. Nobeoka, Miyakonojo, Takanabe, Aburatsu, Tomishima

Kagoshima Pref. : Kagoshima, Kawauchi, Ibusuki, Kushikino, Akune, Kajiki, Makurazaki, Yamakawa, Amaizumi.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

GENERAL HEADQUARTERS
SUPREME COMMANDER FOR THE ALLIED POWERS
Civil Intelligence Section, C-2
PUBLIC SAFETY DIVISION

APO 500

MEMORANDUM TO: Director of Planning Bureau,
Board of Reconstruction

SUBJECT : Fundemental Principles of the Rehabilitation Plans in the War Devastated Area.

1. a. With reference to the attached report entitled "Fundamental Principles of the Rehabilitation Plans In the War-devestated Areas", clarification is requested of Section I which reads as follows: "Areas which are the object of the rehabilitation plans comprise the important damaged portions of the war stricken surface of the cities, towns and villages whose no small part was destroyed, as well as the land connected to them." This section raises the following questions:

(1) Do the rehabilitation plans propose to include only the important war damaged areas of cities, villages and towns, and not include all other war devastated areas?

(2) Do the rehabilitations plans propose to include cities, towns and villages the major portions of which were not destroyed by fire?

In answer to both questions, if the affirmative be true, this office does not concur in this belief, but holds that all war devastated areas in all cities, towns and villages should be included in the rehabilitation plans.

2. a. With reference to paragraph 2, Section IV of reference report, this office does not concur in the proposed plans for boundary roads as explained at the conference held in the office of the Chief of the Planning Bureau on 6 January 47. A sketch of the proposed plan is attached and marked enclosure 1.

b. With reference to enclosure 1 the opinions held by this office are that:

(1) Too much value is being concentrated in one fire area without fire breaks.

(2) Fire originating in any one of the numerous houses in a block 500 meters square with only 6 meter intervening streets could rapidly spread throughout the entire block, and assume such proportions the 36 meter trunk road bounding the block would present little or no barrier to the extenation of the fire.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

(3) The narrow intervening streets within the block do not permit the ready access of fire apparatus nor do they provide adequate space for fire fighting operations.

(4) Narrow intervening streets do not permit the strategic location of fire alarm boxes and post pattern fire hydrants so essential to the rapidity of apparatus response, and the control of fires while still in an incipiant stage.

c. Supporting evidence of the contention advanced in paragraph b (2) above, is found in the report of fire tests made of a Japanese home by the Tokyo Imperial University (see "Fire and Architecture", published 1943). The results of one of these tests desclosed that a fire in an average one-story Japanese home reached its maximum temperature of 1200 degrees C. within a period of 8 minutes. This rapid temperature rise and intense heat will readily cause fire to be communicated to structures over 6 meters distant.

d. It is believed by this office that no block should be more than 100 meters square—that each block should be provided with an alley 6 meters or less in width and that the streets bounding the block should not be less than 20 meters in width. Sketch of suggested block is attached and marked, enclosure 2.

e. As added justification for increased width of streets trunk roads and highways, it is believed consideration should be given to the national fire losses for the past year. The reports to date indicate that these losses will well exceed two million yen or over 2o/o of the national budget.

f. It should be born in mind that these staggering losses include only replacement values of recorded losses and do not include the numerous losses due to fire which has not been reported to the fire department. Nor do these losses include the general increase in insurance rates; the interruption of business; loss of regular patronage and clients; wages of employees thrown out of work; the irreplaceable works of art and priceless heirlooms. Such enormous irretreable losses are an unfair burden to the people, particularly when concomitantly there is heaped additional human suffering upon the nation.

g. In a large measure these losses are sustained in conflagrations over five of which have come to our attention in the past two months. These large fires are due to the burnable nature of the material involved and the amount within the fire area. Reason surely dictates therefore, that congested frame building areas without adequate street widths to provide fire breaks will breed conflagrations.

3. a. With reference to paragraphs 5 and 6 Section V, clarification is requested of the following:

(1) V "A part of their decressed land shall be disposed of without any compensation."

(2) VI "To facilitate this task, if it is necessary, small house-lots shall receive another one in exchange with increased dimension while excessively large areas shall incur bigger decreased."

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

b. While this office believes that a system of property redemacation and right of emonent domain, are essential to city planning in war devastated areas, it does not believe that property should be acquired or disposed of by the planning commission without just compensation to the owners.

4. Additional points submitted for consideration are included in an except from a recent report on city planning which was submitted to this office. Copy of excerpt is attached and marked enclosure 3.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

- E X C E R P T -

F. Action Taken

1. It was strongly suggested to the planning commissions of Fukui, Osaka and Nagoya that consideration be given to the following points:

a. That the city be divided into four building districts for the purpose of limiting type and kind of building construction, and that the first building district include all high valued sections of the city and be limited to fireproof or fire resistive material.

b. That consideration be given in city planning to occupancy and use zones, thus limiting certain manufacturing and industries having high inherent fire risks to certain sections of the city and thereby reduce the cities exposure hazards. It was further suggested that a wider spread be given to occupancy and use zones and that the existing 3 zones, namely residential, business and industrial, be increased to include a second residential district, a commercial district and a manufacturing district.

c. That temporary buildings be restricted to the second, third and fourth building districts and not be permitted within the first building district. That these buildings be limited to a longevity such as 3 years in second building district, 5 years in third building district and 8 years in the fourth building district.

d. That consideration be given to adequacy of water main sizes to provide water in sufficient quantities for both domestic use and fire flow. That in estimating the fire flow for any given area consideration must be given to the type and kind of construction and that the ratio of the fire flow to the fire department pumper capacity be not less than 3 to 2.

e. That city blocks should not exceed 100 meters in length and that no street bounding such block should be less than 60 feet in width. That every block should be provided with an alley not more than 6 meters in width.

2. While it is understood that the suggestions regarding building districts, occupancy and use zones, retroactive requirements on temporary buildings and type and kind of construction permitted in building districts are matters which pertain to the Reconstruction Board, it was believed advisable to consider these factors particularly in view of proposed codes by the Reconstruction Board.

3. Fire Department officials were acquainted with the need for adequate city planning to provide for their fire defense. That the maximum in fire prevention can now be obtained in reconstructing their cities to preclude the possibility of fire to a reasonable degree. It was stated however that these suggestions to the planning commissions should be of such a nature that they regulate the normal functions of the city rather than prohibit them.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

G. Recommendations

1. It is recommended that all phases of city planning refered to in paragraph F-1 above be presented before the Reconstruction Board.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Construction of A Non-inflammable Town

"MOENAI MACHI"

(A Non-inlammable Town)

- 2 Reels -

Directed and presented by The Japan Marine Fire Insurance Association.

Produced by The Tokyo Motion Picture Co.,Ltd.

Scene	Narration & Dialogue
T.	Mark: Produced by The Tokyo Motion Picture Co.,Ltd.
T.	"A NON-INFLAMMABLE TOWN"
T.	This is a film produced on the basis of the story "THE CONSTRUCTION OF A NON-INFLAMMABLE TOWN" lectured by Dr.Heigaku Tanabe, a professor at the Tokyo Technical College.
T.	Constituted by: Shizuka Fujii Directed by: Tosaichi Miyata Photography by: Munekiyo Yaginuma
T.	Players: Akira Tatematsu Mayumi Mizutani Announce: Kiyoshi Shirasu Musical director: Senji Ito The Orchestra Band, Chorus: The Tokyo Gunseisha
	The Kanto Earthquake Memorial Monument

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

at the side of Sukiyabashi bridge.
There are many people coming and
going in front of the monument.
Medium shot of the monument.

People have forgotten all
about it.

Close-up of the monument.
The figure of a wild animal.

What does it suggest to us ?
(As if crying)
"The Kanto Earthquake Disaster!"

A selection from the documen-
tary pictures of the Kanto Earth-
quake Disaster.
The Kanto Earthquake Disaster:
1923
Asakusa
Ryogoku, Honjo
The Clothing Depot at Honjo
The back of the Earthquake Memo-
rial Monument, an inscription reading
"A constant care for an unex-
pected earthquake."
The English News paper reporting
the Kanto Earthquake Disaster.

News paper reported to the
world that Tokyo and Yoko-
hama was wiped out.

Scenes of the Kanto Earthquake
Disaster.
Yokohama
Nihonbashi, Tokyo
Buildings saved from fire
Ginza, Kyobashi

At that time foreign scholars
reported as follows:
We believed that the Japanese
could sonn reconstruct the
damage of the earthquake dis-
aster through the spirit of

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

inquiry and the energy peculiar to the Japanese and also the intelligent and resolute Japanese are sure to reconstruct whole structures into earthquake-proof, fire-proof and lasting concrete buildings before long and set an example to whole world.
The foreign scholars hoped for the reconstruction of the Kanto Earthquake Disaster.
Did the Japanese reconstruct as they expected ?

The street collapsed by war.

The war disaster of 1945
'The defeat of men who have no knowledge of science."

After twenty years, the Kanto Earthquake Disaster, we experienced over again the terrible accidents. Whose fault is it?
The foreign News-film Company exhibited a film with the title "The defeat of men who have no knowledge of science" to whole world.

There are too many wooden structures in the reconstructed street.
A storm and rough seas.
Houses in the muddy stream.
The ruins of the earthquake.

The new Japanese began to reconstruct ~~ﾌﾗﾊﾞ~~ houses and streets from the confusion of the defeat.
But.....
Kazalin typhoon! Aion typhoon!
A disastrous floods!

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Houses burning fiercely.
Collapsed houses.

The fresh debris.
A fire in the night.
Burnt down.

A terrestrial globe.
Japan is seen at the center part of the globe.
The terrestrial globe begins to turn.
It stops and England is seen at the center part of the globe.
A picture of Elizabeth-style buildings and manners of those days.
The same picture.

The present London city.

An earthquake disaster!
A fire! To be collapsed!
To be swept away! Fall down!
Burn!

There are no countries like Japan in the world which repeated the same disaster. But we think we can prevent it through our knowledge.
The histric fire of the world is the fire of London which broke out on September 2, 1666 and burnt for five days at a stretch. This fire broke out at a certain place and half of the town was reduced to ashes.
Elizabeth-style buildings of those days in London were of woods and roofs were of miscanthus.
In that year, more than one million people died of typhoid fever, on the other hand England was attached by Holland. England was in greater difficulties than that of Japan today.
But struggling with all difficulties, the conservative England

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

accomplished the construction of fire-proof buildings through the law against all wooden structures in London city.

A picture of various non-inflammable town in European countries.

France (Paris)
Australia (Vienna)
Hungary (Butapesto)
Italy (Rome)
Swiss (Berne)
Sweden (Stockholm)
Soviet (Moscow)

European countries followed England's example and prohibited all wooden buildings. Thus, a non-inflammable city was constructed. The big fire of London was a famous fire in the cultural history of Europe.

Line-drawing:

The big fire of London,
September 2, 1666.
The destroyed area by fire,
535,000 tsubo
The extent of damage,
107,300,000 yen

Line-drawing(in addition)

The big fire of Chicago
October 8, 1871
The destroyed area by fire
2,600,000 tsubo
The extent of damage
33,000,000 yen

A big fire broke out often in the new world America. The big fire of Chicago, 1871, and the big fire of San Francisco, 1906(directly after the big earthquake) are well known. Owing to the horrors of frequent big fire, it was forbidden to build wooden structures by law

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

and then steel concrete buildings like the modern style, even a skyscraper were built.

Line-drawing (in addition)
The Big fire of San Francisco
September 18, 1906
The destroyed area by fire,
3,680,000 tsubo
The extent of damage
750,000,000 yen
A photo of New York
A wood-engraving:
A picture of the fire of Yedo and firemen.

A fire is called as the flower of Yedo.
The big fire of Tokyo broke out 115 times during 300 years since Iyeyasu Tokugawa entered the Yedo Castle. In other words, a big fire broke out every two years and eleven monthes.
Among them, a fire which spread to 4 kilometers was counted by 40 times.
And the Kanto earthquake disaster made a world record.

Line-drawing (in addition)
The big fire and the big earthquake disaster of Tokyo.
September 1, 1923
The destroyed area by fire

Still more, the last war ravages made a super world record.
In the whole country, 120 towns were destroyed, 2,400,000 houses were burnt down, 280,000 people

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

10,127,000 tsubo

The extent of damage

5,500,000,000 yen

were killed, and 10,000,000 people were afflected. The extent of damage amounted to 80,000,000,000 yen. It was due to wooden structures.

Line-drawing (in addition)

The big fire and the war disaster.

From April 18, 1942

To August 14, 1945.

The destroyed area by fire

48,160,000 tsubo

The extent of damage

?

Planing a board

Chiseling a hole

Sawing a wood

The present people who are working in the world went through many disasters. But I wonder that they considered a perfect counter-measure to prevent a recrudescence of these disasters.

Wooden houses under construction

The debris

Owing to the reckless demudation of woods during war, timbers for structures will be exhausted for about 15 years.

Houses built of these valuable timbers, making an improper use of them after war, a quarter of them were reduced to ashes. It reveals that a house covering 4 tsubo was reduced to ashes in one hour. It

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

means that the burnt area is more than the area of a house which will be built.

(End of Reel 1)

The side face of a young man sitting on the hill
She is pressing her face to his shoulder.
He and she.

The young man:
"Under such a condition as this, we cannot expect our success for ever."
The woman:
"When can we make a peaceful home?"

She draws a long breath

The young man:
"We are not only in trouble but also nationwide young men are in great troubles."

He turn his chin to there.
There are lined with shacks in disorder

"Look there!"
"Even if people have houses to live, but they who are living in such shacks are sure to be in trouble of fire. We think that they shorten their lives by themselves.
We believe that the true happy life consists in the safety life."

In front of a house
A housewife shuts a door and goes out.
A narrow lane.
A housewife goes along.
A man of doutful character

She:
"Yes, I am sure of it."
"I prefer to live in a house which is free from cares while we are out."
"Today's house is in uneasiness

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

comes out.

Branches are swayed by the wind.

A bed-room in the night.

She wakes up with a start.

The ceiling....the electric bulb is being swayed softly.

A child night-watch.

A kitchen.

A small kitchen range and a card reading "Beware of a fire"

A smoke is rising.

A celluloid doll falls down.

White papers are fluttering to the ground.

She sits up in the bed.

She takes a smell.

The small door of a Buddhist Altar opens of itself.

The light is on.

A fire-lookout tower.

Beating the fire-bell.

On the hill. He stands up.

She stands up in succession.

A fire-engine runs through a street while sounding a siren.

in fire, earthquake, storm and thieves."

A Child: (a sound of Shoshinri)
"Beware of a fire! Beware of a fire!"
"Even if a house is burnt, it is disadvantageous to the country!"

She:
"I am sorry to give much trouble to children."

She: (a sound of a fire-bell)
'I can't sleep well every night as I must mind the fire.'

(a sound of a fire-bell)

(a siren and a fire-engine)

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

On the hill. She is looking after the fire-engine. She turns round and looks at him.

He nods and points at the hill.

Newly built Japanese style wooden houses.

An order-taker at the kitchen-door.

A woman visitor at the front-door.

The interior of the front-door.

A Tokonoma(an alcove)

A scene of two womwn who are exchanging greetings each other.

A maid-servant brings two cups of tea with her from the kitchen.

She opens Fusuma(a sliding-door) and comes in.

The woman looks round the room, the ceiling, the picture on

She:

"I am tired of a fire."

"I am sure that Japanese houses must be reformed radically from now for the sake of women's happiness."

He:

"Yes, you are right."

"It is required to reform houses now."

"Look there!"

(a sound of Koto)

"How much did the today's houses advance since the Yedo period?"

"European dress are now our daily clothes. But we feel uneasy about the feudal mode still remains in our living condition."

"How do we use the front-door and an alcove?"

"The washing of a new-born infant in the wooden tub, living in the wooden house, in the wooden coffin after the death and then we can find the permanent home under the stone grave."

A paper sliding-door,(Fusuma & Shoji).

A house built of wood and bamboo.

"Why are they particular about

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

the Ranma, Fusuma and Shoji.

A warden.

The assembly-hall is seen over wooden houses.

Line-drawing

It must be built a road between a house and a house. And it is necessary to build a park, a square and a green zone, and also there is need to set up a fire-alarm. Dusting his hands, he stands up and pushes up the peak of his hat slightly. He looks at her and smiles.

She.

such inflammable houses as a match-box forever?"

The whole statemen as well as the whole social beings went through various disasters such as a fire, an earthquake and a war.

A new-epoch has come to Japan. The peaceful revolution is being carried out. Just at the time we must construct a non-inflammable town on the scientific lines so as not to be destroyed by fire.

(Symphony)

first, houses are not be built closely one another, and build wide roads, open spaces and green zones. Improvement of water transportation, fire-alarms are necessary for preventing houses from fire. We must strengthen the fire facilities and observe the law of building and fire-fighting. If worst comes to worst, it is necessary to check the spread of the flames.

She:

"But if such a plan would be carried out at the time when the population is on the increase, the residential

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

He and she are walking along separately.

He turns round.

She looks at him and smile.

He speaks by signs.

Line-drawing.

The dotted houses replaces a four-storied building.

At the same time the environs of a house is beautified.

A cartoon.

She is in the room. She touches the heater and jumps up as she feels hot. She goes to the kitchen and turns the faucet.

Boiling water gushes out.

There is an equipment for washing and removing table wares automatically. Her triumphant look.

section of people becomes more cramped. I fear that it will get ~~r~~ into trouble about that plan."

He:

" We can't complete such a great undertaking unless we understand the construction for the sake of the stability in future.

It is vain to rehret after the house has been burnt down. The Japanese people have a tendency to seek a immediate gain for individuals and neglect the public welfare."

"If a one-storied house is reconstructed into a four-storied building, fourfold people can live in the building covering the same site. In this way the question of lot will be settled. We build a public apartment-house built of steel concrete, that is a non-inflammable structure which does not collapse against the earthquake. Then we can set up a public heating arrangement which we could not set up personally before.

She:

"You have said the ideal discussion But I think your ideal discussion

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

On the hill.

She lies down while saying.

He sit down by her.

He helps her up.

His face.

Her face.

He and she stand up.

His face closes to her face.

It occurred to him.

The Shosen train rushing along.

The inside of the Construction Bureau.

A clerk illustrates it on the street-map before them.

The external aspect of a four-storied apartment building.

is too great for Japan."

He:

"It was well realized in foreign countries. I think Japan can realize it too. People say Japan is a peaceful country or a cultural nation, but it strikes me as strange, because Japanese houses are of wood, paper and bamboo, and inflammable, easy to collapse by an earthquake and easy to be carried away by flood."

"We can't marry owing to a housing shortage. Therfore, if it is unrealizable during all our life days, we cannot make a safety and peaceful living in our life days."

"Ah, I'll call on my friend with you for inquiring."

She:

"O.K."

A clerk:

"In the city area, it is required to fix a central zone first, and then all inflammable houses should be strictly forbidden to build there. This plan must be carried out completely."

"From the point of view for checking the disaster by fire and

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

improving the public health, it is required to build steel concrete four-storied buildings covering a wide vacant lot round the buildings.

The external aspect of the Takanawa apartment building.

Stairs.

The corridor, the entrance.

Open the entrance and show the interior.

The high room.

The kitchen.

The room.

This is a building recently built in Tokyo for trial. It is scheduled to build non-inflammable strong and comfortable buildings in the whole countries according to this style

She:

"I wonder why such a good thing is not realized rapidly for making ~~pp~~ people glad ?"

"I think there is a narrow path such as a want of materials and high price of materials."

The interior of the construction Bureau.

He and she.

A clerk is talking.

The clerk:

"We can accomodate building materials because we do not build houses at a time.

The construction cost is a little dearer than that of wooden house at present, but I think it is far cheaper than the dark building cost. Moreover, its durability not to be compared with a wooden house, and the insurance rate of this building is very cheap owing to a sense of security for an earthquake and a

A reference picture of the fire-proof buildings and a picture of structures.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

A diagram of a house on the knock-down plan.

Kodai style buildings on the knock-down plan is gradualy being completed.

The interior of the Construction Bureau.

A clerk illustrating and he & she listening.

fire. From various points of view, it is very cheap.

And this building is free from curse of a fire, so that the more we build, the more buildings increase. Look at this diagram! There are seen various kind of a fire-proof building which are researched by the investigators of a university to build good and cheap building suitable to the condition of living and climate in Japan.

This steal concrete building on the knock-down plan is very economical in materials, and its durability is great and it is safe from a fire and an earthquake. And it is almost the same cost as that of the wooden house. Moreover it has strong points such as warm in Winter and cool in Summer, because walls are doubled and it is very easy to reconstruct this building.

(a sound of machines)

The fire-proof building industry has developed recently. It is testify to people's good understanding to the fire-proof building.

As to the problem of materials, we

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

are sure to get it more and construct more buildings at the cheaper cost, if the national outcry rises more. People recently started a movement of the construction of a non-inflammable building in co-operation with the Building and Loan Association.

In the democratic Japan, people's understanding and public opinion is important.

Illustration of a steel concrete building.

Fukui city that was wiped out by Hokuriku earthquake, was wiped out by flood again. Ichinoseki city rose bravely to reconstruct on earthquake-proof buildings.

A picture of an ideal town.

He:

"We desire to complete the construction of a non-inflammable town by our own abilities.

She:

And also we desire to live happily and peacefully.

He and she are walking cheerfully along the street.

He: (a chorus & symphony)

"A non-inflammable building"

She:

"A non-collapsable building"

He:

"A fine and safe town"

She:

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

"A peaceful life"

Their faces are seen in front
of the camera.
The Earthquake Memorial Monu-
ment and the man and the woman.
Title:
An earthquake-proof and fire-
proof building!
The construction of a non-inf-
lammable town!
Title:
The End.
Presentedby: The Japan Marine
Fire Insurance Association.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

December, 1948.

Messrs. (Mr.)--George W. Angell.

Dear Sirs (Sir):

While with a view to attaining the objective of making our urban areas fire-proof the preparations for organizing the "Association for Fire-Proofing of Cities and Towns" have been under way for some time past, it has been arranged to hold the inaugural meeting as well as the opening ceremony as mentioned below. You are respectfully requested to oblige us with your presence.

Very truly yours,

Promoters of the "Association for Fire-Proofing of Cities and Towns."

N.B. As we have to make arrangements beforehand, please let us have your replies by the 12th of this month by the enclosed postcard.

INAUGURAL MEETING

Time and date: Opening at 1.00 p.m., December 16th (Thursday).

Place: Keizai Club (In "Toyo Keizai" behind the Bank of Japan Building, 1 Honkoku-cho 3-chome Nihonbashi)

Agenda:
a. Deliberation on the draft, articles of association.
b. Election of council members.
c. Deliberation on the proposed estimates for the business year 1948.
d. Authorization of the establishment expenses.

OPENING CEREMONY

Time and date: Opening at 3.00 p.m., December 16th (Thursday).

Place: Keizai Club.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Program:

a. Opening address.

b. Formal address on the establishment of the "Association for Fire-Proofing of Cities and Towns."

c. Congratulatory addresses (by representatives of various groups).

d. Closing address.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Congratulatory Address of the President at
the Opening Ceremony of the "Association
for Fire-Proofing of Cities and Towns."

(Ladies and) gentlemen. Representing the "Association for the Fire-Proofing of Cities and Towns," I bid all of you welcome. My thanks are due to the officers of the General Headquarters of the Supreme Commander for the Allied Powers and the Military Government Teams, as well as to the Japanese Government officials, Diet members and other (ladies and) gentlemen, for sparing their busy time to attend this inaugural ceremony, held to commemorate the formation of this Association.

The objective of this Association, in short, is to protect the urban areas of this country from the threat of fires, to make contribution, however small, to the general economic recovery by saving the scanty material resources, and to minimize the possibility of fire damages, which have been a nightmare of the nation. With this objective in view, it is proposed to stage a campaign, with the united efforts of the organizations and individuals who earnestly champion the same cause, and to continue it, in close cooperation, until such time as all the cities and towns of this countries would become fire-proof. The campaign will have to be maintained for a long time. I think this campaign will prove to be a cultural as well as a political movement, and will play, in a certain sense, one of the essential roles in Japan's reconstruction.

Now let me take a look at the actual state in the war-damaged cities and towns under reconstruction at the moment. Without any pre-arranged planning, flimsy houses like bundles of fire-woods

are

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

are being built, which are even more harzardous than those of pre-war days. To be sure, there may be numerous grounds for justification, as they are being built as a matter of emergency measure. But it is statistically clear that a number of fires, ever on the increase year after year since the war's end, is devouring a tremendous amount of money and making the investment a bad economy. If this situation is allowed to continue indefinitely, I am afraid a fatal blow would be dealt on our recovery efforts, not to speak of our hope for an early reconstruction.

I am told in this connection that, with the cooperation of the Allied Headquarters and the Military Government Teams, the Japanese Government is going to adopt a housing policy to concentrate its efforts on the construction of concrete apartment houses. If this is true, such a policy will have our full support. However, in consideration of the existing conditions in this country, the magnitude of the question and the difficulty of the work should not be lost sight of. Imagine the task of supplying the shortage of housing units amounting to 4.6 million! Naturally, different opinions may be held on the practicability of this task, but after scientific studies I think it is not altogether impossible. In the final analysis the most important thing is the awakening of everybody to the critical situation. First of all, efforts will be directed, on the one hand, to the protection of the existing houses by means of integrating fire-fighting facilities, and their fire-proofing, so that their losses may be minimized; while on the other, to the gradual construction of new

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

fire-proof houses - which is the only reconstruction and accumulation in the true sense of the term - until eventually the whole cities and towns will be covered with fire-proof buildings. Unquestionably, the solution of this problem largely depends, in the last resort, on the government administration. Of course, before being taken up as a question of government, the scheme should be studied and dealt with from every angle; i.e. in relation to such basic matters as city-planning, water-supply, and so forth, no less than from the view-point of manifold production technique attending the house-building, and also economic and social questions. But I think the most important guarantee for the success of this scheme is that the people themselves take up this problem as their own and present it as an irresistible popular desire.

In forming this Association, we rely on the popular support. Success or failure of our Association depends on how the proposed objectives of our campaign will be understood, and what cooperation will be accorded to it, by the public of this country.

Once the drive has been launched, we pledge our efforts to attain the aims, in defiance of any obstacles. I hope our enthusiasm will appeal to the (ladies and) gentlemen present, which has enabled us, under the most difficult conditions, to undertake such a revolutionary task as is unprecedented in the architectural history of this country, to build fire-proof cities and towns. By soliciting support and guidance for our undertakings, (ladies and) gentlemen, I conclude my address to announce the establishment of our Association. Thank you.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Petition

1. In Japanese cities a row of houses formed a line by a ridge between rice-fields without plans which had been a pass for persons and horses from old days on the other hand, after built the houses, set up the pass to go in and out. indomuch as they grows larger, increasing in a number of people and the houses, as the result of it, towns were built owing to natural growth of population.

There have been the greater part of the cities which proceeded from the villages to towns, towns to the cities.

Such being the case, the Japanese cities expended naturally were being overlooked on the traffics, the preservation of public peace, sanitation, and proof-fire particularly being frail in structure against the fire.

2. Up to this days, the modern-fashioned roads were being reconstructed from city planning point of view, but there has been a very few of them rebuilt by enforcing the land readjument.

In big cities it was just partly restored to normal condition, after a great calamity.

Cousequently we must put the land readjustment in pratice in reconstructing on the wrecked places by all means.

The construction of cities prosuppose indispensably the land readjustment for the purpose of leading a cultural life and keeping people's health.

3. As things in Japan are in the utmost economical fifficullies under existing circumstances, the important work of the land readjustment is apt to be under-estimated as against another enterprise.

It is important in being the work increase the production, to restore disasters occurred, and in being the work of the land readjustment to produce good results to advance utilized value of land, to the nation owing to prevently the calamities, to make the city activity brisk.

4. In Japan A fire repeatedly damages us every year, hindering the reconstruction with great powers.

In 23 Showa, (1948) damages through fire was aggregated by the Fire board as follows.

The building area burnt down throughout countries. One million one hundred and eighth thousand tsubo (1,180,000 tsubo)

The damage is estimated at one Ten thousands eight hundreds and seventy million Yen. (10,870,000,000 yen)

If computed in terms of lumber, It will aggregate three million Koku (3,000,000 koku)

In terms of the dwelling-house in the 15 tsubo building area. (78,600 houses) Seventy-eight thousand and six hundred houses.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

They are mustering masses who entertain misgivings to complement of our work on account of the impoverished condition of the national power. It gradually has a tendency to spread its influence.

7. To take an example of damage by delaying the land readjustment, located east of Shinjiku station, 1-chome, Tsunohazu, April, 22 Showa, notifying as the land readjustment area, there were around temporary houses.

They increase to 400 houses at present. Making a rough estimate of damage about 150 increasing houses:

Construction materials	4,500,000 yen.
Compensation for move and business.	5,400,000 yen.
Damage of 30 burnt down houses all this while.	(10,000,000 yen.)

Beside this, if we include the work expenses of the government office concerned due to delay those works and material and immaterial damage, it will be obvious that we sustain a national damage by delaying the land readjustment, the permission of building in the land readjustment area.

8. Fire due to delaying the land readjustment and damage increasing in arrangement expenses will aggregate yearly a large sum of millions. Supposing it is estimated at one thousand million causing a fire, one of two, if we are able to ask for the loan two hundred million, one fifth among them from Reconstruction Financing Bank. As the reconstruction expenses of wrecked cities and the work expenses of the land readjustment, we will yearly be free from damage of four hundred million.

9. It is absolutely necessary to execute the land readjustment as the basis for reconstruction in Japan, moveover, the work is urgent.

This is really a difficult undertaking unless people work together for our enterprice and understand one another.

If it is universally known that G.H.Q. is our sympathizer and supporter to carry out this work, we believe firmly that the aforesaid sourse barred from our work will be removed.

We have the honor to say that you devote yourself to carrying out the occupation policies in Japan, we faithfally execute your policies.

We solicit your strong support with you as to our cultural city construction.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

In the 23rd Year of Showa (the current year), from January to September the damage throughout countries passed Ten thousand million yen. (10,000,000,000 yen)

In Tokyo city only a vast sum of materials. Seven hundred thirteen million yen. (713,000,000 yen.) reduced to ashes during ten months.

We can hardly imagine how much a fire ~~is~~ herribly damaged throughout countries.

5. ~~by means of according to~~ It is possible for damage by fire to decrease two-third checking the spread of the flames. There are three methods as follows.

a. To ~~be~~ build by incombustible materials as ferro-concrete building.

b. To build a fire-proof building.

c. To make the roads spread through the land readjustment, make the vacant lots, and facilitate the preventive activity of fire.

If any of three above-mentioned methods, can be materialized Japan will make a profit of six or seven thousand million yen.

If we make cumulative increase, directly unestimated interest, including they will make the incomputable profit.

We see no hope of realizing 1. 2. method under the present condition, however, third method the land readjustment can be realized only when we are opened to the way finance.

What with non-inflammable building, what with fire-proof building, what with the construction of cultural cities, all of them base on the land readjustment.

6. If the land readjustment were put normally in force, it will be completed for two years after being officially announced in an operative area. It takes us ten years to finish them when the tightness of money and the particial payment of a small sum of money out of government grant subsidy are made as the present state. Taking the arrangement a long period of time as this, the large sum of consolidated expenses is unnecessary demanded.

Consequently not only it brings about huge damages to increase of government grant subsidy, but trouble people in an operative area, to come to hinder the sound reconstruction in Japan.

There has been a movement against the land readjustment to bar its way on the other hand.

They block our way for sake of insuring the existing their gain, or object to enforcement of the land readjustment for the purpose of extending ~~prestige~~ politically party prestige.

Those who objects to us abuse being engaging in enforcement of this work, stirring up the accomplice and the ignorant masses against us.

Moving relatively numbers of people, making an ill use of democratism, they bar the way of the land readjustment.

They dilate upon impossibility of the enforcement of the land readjustment or declare time premature due to national financial straits. They talk them that they can hinder our work which is one of the main national policies,,unless GHQ issue an order.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

The object of the round-table conference on the construction of the wrecked cities

The gist:

1. It is necessary to carry out the land readjustment for the reconstruction of the wrecked cities at all costs.

2. There has been a fire which is one of the worst bottlenecks, but it is absolutely necessary to practise the land readjustment for the construction of proof-fire cities.

3. The land readjustment is little less work for the prevention of the damages than the productive industry.

4. What delays the work for the land readjustment causes a huge damage to a nation, putting obstacles in the way of reconstruction in Japan.

5. We must put restriction upon campaign-against the land readjustment, it causing delay, and make up a plan for supplies of funds on our enterprises.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

The object of the round-table conference on "Construction of the wrecked cities."

---

1. In Japanese cities a row of houses formed a line by a ridge between rice-fields without plans which had been a pass for persons and horses from old days, on the other hand, after built the houses, set up the pass to go in and out, insomuch as they grows larger, increasing in a number of people and the houses, as the result of it, towns were built owing to natural growth of population.

Where have been the greater part of the cities which proceeded from the villages to towns, towns to the cities.

Such being the case, the Japanese cities expended naturally were being overlooked on the traffics, the preservation of public peace, sanitation, and proof-fire, particularly being frail in structure against the fire.

2. Up to this days, the modern-fashioned roads were being reconstructed from city planning point of view, but there has been a very few of them rebuilt by enforcing the land readjustment.

In big cities it was just partly restored to normal condition, after a great calamity.

Cousequently we must put the land readjustment in pratice in reconstructing ~~on~~ the wrecked places by all means.

The construction of cities presuppose indispensably the land readjustment for the purpose of leading a cultural life and keeping people's health.

3. As things in Japan are in the utmost economical difficullies under existing circumstances, the important work of the land readjustment is apt to be under-estimated as against another enterprise.

It is important in being the work increase the production, to restore disasters occurred, and in being the work of the land readjustment to produce good results to advance utilized value of land, to the nation owing to prevent the calamities, to make the city activity brisk.

4. In Japan A fire repeatedly damages us every year, hindering the reconstruction with great powers.

In 23 Showa, (1948 damages through fire was aggregated by the Fire board as follows.

The building area burnt down throughout countries, One million one hundred and eighty thousand tsubo (1,180,000 tsubo.)

The damage is estimated at one Ten thousands eight hundred and seventy million Yen. (10,870,000,000 yen.)

If computed in terms of lumber, It will aggregate three million Koku (3,000,000 koku.)

In terms of the dwelling-house in the 15 tsubo building area. (78,600 houses) Seventy-eight thousand and six hundred houses.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

In the 23rd Year of Shewa (the current year), from January to September the damage throughout countries passed Ten thousand million yen. (10,000,000,000 yen)

In Tokye city only a vast sum of materials. Sevenhundred thirteen million yen. (713,000,000 yen.) reduced to askes during ten months.

We can hardly imagine how much a fire ~~is~~ horribly damaged throughout countries.

5. It is possible for damage by fire to decrease two-third according to by means of checking the spread of the flames. There are three methods as follows.

a. To ~~be~~ build by incom-bustible materials as ferro-concrete building.

b. To build a fire-proof building.

c. To make the roads spread through the land readjustment, make the vacant lots, and facilitate the preventive activity of fire.

If any of three above-mentioned methods, can be materialized Japan will make a profit of six or seven thousand million yen.

If we make cumulative increase, directly unestimated interest, including they will make the incomputable profit.

We see no hope of realizing 1. 2. method under the present condition, however, third method, the land readjustment can be realized only when we are opened to the way to finance.

What with non-inflammable building, what with fire-proof building, what with the construction of cultural cities, all of them base on the land readjustment.

6. If the land readjustment were put normally in force, it will be completed for two years after being officially announced in an operative area. It takes us ten years to finish them when the tightness of money and the particial payment of a small sum of money out of government grant subsidy are made as the present state. Taking the arrangement a leng period of time as this, the large sum of consolidated expenses is un necessary demanded. Consequently not only it brings about huge damages to increase of government grant subsidy, but trouble people in an operative area, to come to hinder the sound reconstruction in Japan.

There has been a movement against the land readjustment to bar its way on the other hand.

They block our way for sake of insuring the existing their gain, or object to enforcement of the land readjustment for the purpose of extending prestige. politically party prestige.

Those who objects to us abuse being engaging in enforcement of this work, stirring up the accomplice and the ignorant masses against us.

Having relatively numbers of people, making an ill use of domocratism, they bar the way of the land readjustment.

They dilate upon impossibility of the enforcement of the land readjustment or declare time premature due to national financial straits. They talk them that they can hinder our work which is one of the main national policies, unless GHQ issue an order.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

They are mustering masses who entertain misgivings to complement of our work on account of the impoverished condition of the national power. It gradually has a tendency to spread its influence.

7. To take an example of damage by delaying the land readjustment, located east of Shinjiku station, lchome, tsunohazu, April, 22 Shewa, notifying as the land readjustment area, there were around temporary houses.

They increase to 400 houses at present. Making a rough estimate of damage about 150 increasing houses:

Construction materials	4,500,000 yen.
Compensation for move and business.	5,400,000 yen.
Damage of 30 burned down houses all this while.	(10,000,000 yen)

Beside this, if we include the work expenses of the government office concerned due to delay those works and material and immaterial damage, it will be obvious that we sustain a national damage by delaying the land readjustment, the permission of building in the land readjustment area.

8. Fire due to delaying the land readjustment and damage increasing in arrangement expenses will aggregate yearly a large sum of millions. Supposing it is estimated at one thousand million causing a fire, one of two, if we are table to ask for the loan two hundred million, one fifth among them from Reconstruction Financing Bank. As the reconstruction expenses of wrecked cities and the work expenses of the land readjustment, we will yearly of be freed from damage of four hundred million.

9. Reconstruction Financing Bank, financing bank of the national policies, had not divised a means to the land readjustment enterprice. It is seemed that they have little understanding of national interest. These construction expenses mostly basing on guarantee of the national treasury, it is absolutely free from a bad debt for Reconstruction Financing Bank to to make a loan to the land readjustment work. Today fortunately we have the oppotunity to Talk with your esteemed companies.

We hope that the loan of the land readjustment work ranks first to Reconstruction Financing Bank.

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

Woodbridge

For Mrs. Angell

PRESS CONFERENCE 9 December 1948

Mr. George W. Angell, Chief Fire Administrator, PHD, G-2, SCAP, discussed "City Planning and Fire Zones for Japanese Cities" at today's 11 a.m. conference for members of the Japanese press. A copy of his prepared statement is attached.

Mr. Lester C. Hardwick presided.

(Mr. Angell) I have gone into the history of city planning here in Tokyo and found it very interesting reading. So many times since way back before the Meiji Era Tokyo started a city plan. It got up to a certain point and then fell right back to where it was or perhaps worse than it was before the city plan was made. That is about all I want to say. I would rather have you ask me questions.

QUESTIONS:

Q. (Kyodo) Where are the high value districts?

A. Along the Ginza, Shinjuku and Kanda or anywhere that a congested area is located.

Q. (Kyodo) Are there any fire zones besides A and B? Where are the standards for these zones set up?

A. Under your Urban Building Law they set up zones A and B. In fire zone A all buildings must be of reinforced concrete. In fire zone B the buildings may be of frame structure covered with stucco, outside of residential areas.

Q. (Nihon Keizai) I want to know whether there is any plan to increase the amount of cement that is rationed to construct more buildings.

A. I cannot answer that. The Construction Branch of ESS will give you the answer.

Q. (Sekai Keizai) I believe that the reason city planning in the past was not carried out is due to the fact that there wasn't sufficient material. Is the government prepared to back the plan?

A. The government has appropriated a certain amount of money for the reconstruction program. It may not be enough. Not only the national government but the city also has appropriated some money. It is also understood that the people who will benefit by it will pay a share of the expense.

Probably you all wondered as I did, why the streets in Tokyo and in most Japanese cities are so narrow and crooked. It goes back to the old Samurai days when they had a lot of street fighting. They didn't want a lot of people fighting so they built their streets narrow with a lot of corners. Then during the Tokugawa Shogunate they gave a lot of property to the Samurai for residences. These residences were set up and barred from all common people. After that during the Meiji Restoration these lands were

-(over)-

MORE

Declassified E.O. 12065 Section 3-402/NNDG NO. 775009

given back to the common people who took what they wanted without a city plan so they built homes any place they wanted them. In 1888 they drafted a city plan but no one paid any attention to it as Tokyo was growing so fast they thought they couldn't control it. In 1919 the government adopted a municipal plan and started to put it in effect in 1922, but they didn't get very far before the earthquake in 1923. Then all bets were off. These plans and building laws were voided after the earthquake. They issued orders in August 1924 that all building work started on that date would be permitted to stand for four years. Then in 1927 it wasn't progressing as fast as they had expected so they extended the time for temporary construction for theatres, hotels and some factories to five years. Only the buildings that were put up in the high value districts or nearby would be allowed to stand for 10 years. All other buildings would stand for only five years. That was only as far as they went. They did widen some streets before the earthquake. Then after the earthquake the buildings and many bridges burnt that was the main reason for them using less wood. They spent a lot of money rebuilding with steel and concrete. In 1922 there were 356,969 buildings of which 91 per cent were wooden. At that time they had quite a few of brick and stone construction but the earthquake proved that this construction was not suitable. In 1925 after the earthquake there was 329,000 buildings of which 98 per cent were of wood. You can see they went backwards on that type of construction. I don't think it is entirely a question of not being able to get the material. The main idea after the 1923 earthquake was that they were to put up these temporary structures for only four years but then they kept on extending until they voided the urban building law. Anybody could build anything any place they wanted. Then we put in the Fire Service Law. Now anyone wanting to build has to obtain a permit for construction work. It has to be approved by the Fire Department. A good example of this was the fire in the Shimbashi district one Saturday at 11:30 at night. I went to see the ruins on Sunday at noon and they had cleared away practically all the debris and one building was replaced. On Monday 3 other buildings were started. They had simply gone to the warrant officer who told them to go ahead and start building without any approval. This building and burning and rebuilding is being paid for by the public.

Q. (Yomiuri) Is there any control over people who violate this law?

A. The general laws do not give much protection but there are some provisions in the Fire Service Law. The only thing you had to hang on to get these buildings removed was the Fire Service Law. The Fire Department can order a building removed. If it isn't done within a certain period of time, in which time the owner has the right to appeal---I think it is 10 days---then if it is not removed he is subject to ¥25,000 fine or 1 year in prison.

Q. (Yomiuri) I read in the newspapers that the cause of the fire in the Saitama Prefectural Government buildings was due to the fact that the prefectural government disregarded the rules and regulations by constructing additional buildings to the original ones.

A. I do not know what the law is in Saitama Prefecture. At any rate, it was the wrong type of construction to be put there.

* * * * *