ANALYTICAL/ENVIRONMENTAL ASSESSMENT REPORT

MASTER PLAN

FUTURE DEVELOPMENT PLAN

HIRO AMMUNITION DEPOT
HIROSHIMA PREFECTURE, JAPAN

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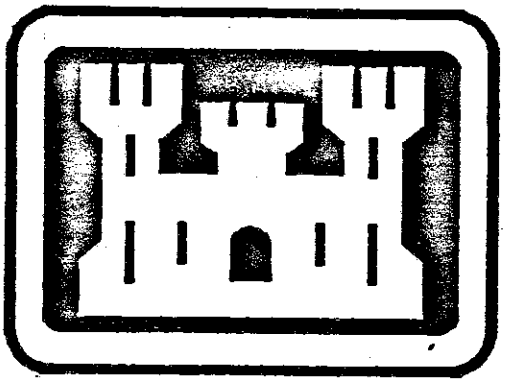

U.S. ARMY CORPS OF ENGINEERS

JAPAN ENGINEER DISTRICT

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CHAPTER I
INTRODUCTION

This Analytical/Environmental Assessment Report accompanies the folder of drawings, "Mater Plan, Future Development Plans, Hiro Ammunition Depot, Japan" dated 16 April 1987. A companion reference document is the "Tabulation of Existing and Required Facilities - Facilities Requirements", compiled in accordance with AR 210-20 and AR 415-36 and attached herewith. This separate document identifies proposed improvements as identified in the Major Construction Projects, 9th Area Support Group (Prov), dated 8 October 1986.

This report summarizes the basic considerations for orderly development of the Hiro Ammunition Depot and evaluates any environmental impact that may occur from proposed improvements. Reference is made to the "Analysis of Existing Facilities Report", dated December 1985, which provides information on the environmental assessment of present facilities, historical and cultural aspects, and land use factors.

Complete description of these projects are presented beginning on page IV-3 under the heading "Proposed Major Facilities" and in Appendix I of this report.

The proposed development fully utilizes the existing permanent facilities, within the limitations of available land.

The plans referenced in this report are as follows.

Title	SHEET NO.
Regional Map	1 of 3
Reservation Map	2 of 3
General Site Map	3 of 3

CHAPTER II
SUMMARY OF PROPOSED ACTIVITIES - MISSIONS

A. PRESENT MISSION

Hiro Ammunition Depot is presently assigned as one of the three ammunition storage, receiving, and processing installations of the U. S. Army Ammunition Depot Akizuki Command. Hiro Ammunition Depot is also missioned to temporarily store ammunitions, which are destined for Kawakami Ammunition Depot, a major inland ammunition storage facility.

CHAPTER III
ENVIRONMENTAL SETTING

A. HISTORICAL ELEMENTS

There are no historical places or monuments on-post which qualify as historic place/property under the definition of Executive Order 11593 and of AR 420-40. Therefore, mission increase including the proposed facilities will not impinge upon the environment of an historic place.

B. CULTURAL

1. Regional Development, Socio-economic/Trends, and Community Facilities

Kure-Hiro city, which was once known as one of the three greatest naval post in Japan, was economically supported by the Japanese Navy until the termination of World War II. After the war, the city faced many social and economic problems due to the large number of unemployed people. Today Kure-Hiro contains upgraded port facilities and many commercial heavy industries such as shipbuilding and steel manufacturing. Industries such as these often started their operations by taking advantage of ex-military facilities. The current trend in these industries, however, points toward marked decline. This decline is accompanied by decreasing population. A shift from a heavy industrial economic base to an economy supported primarily by service industries, commercial establishments, and tourism is beginning to take place in Kure-Hiro city.

a. Express Highways

(1) Sanyo Express Highway

The express highway will be approximately 470 km (294 miles) long and will connect Suita city, Osaka and Yamaguchi city, Yamaguchi prefecture. Detailed route of the highway was made public in March 1985 and the construction has already been started. Exact completion date of the highway is still unknown. The highway will be constructed by Japan Highway Public Corporation (JHPC).

(2) Higashi-Hiroshima - Kure Connecting Highway

This highway is still at concept design stage and no concrete plans have been presented yet. Hiroshima prefectural government, however, strongly desires the highway for the development of the area. The undertaking body of the highway has not been determined yet.

(3) In-Yoh Connecting Highway

This road is planned to directly connect Matsue city, Shimane prefecture and Onomichi city, Hiroshima prefecture. The Highway is also at concept design stage. Neither exact route nor the undertaking body of the project has been determined yet. Hiroshima, however, has strong desire to construct the highway before the beginning of next century.

(4) Chugoku Transverse Express Highway

A part of the highway, between Hiroshima junction and

Hiroshima north interchange has already been completed and opened to public use. The part was completed in March 1985 and the remaining portion has been under construction. The highway will be 80 km (60 miles) long and will connect Hiroshima city, Hiroshima prefecture and Hamada city, Shimane prefecture. Exact completion date of the highway is unknown. The road will be constructed by JHPC.

b. National Highways, By-pass and Toll Roads

The following roads are going to be constructed in Hiroshima prefecture. These roads will contribute to the reinforcement of ties among the cities and promote local industries.

(1) Under Construction or At Design Stage Projects

Higashi-Hiroshima By-Pass
Kamine and Kabe By-Pass
Gion New Road
Hiroshima - Kure Road
Hiroshima - Iwakuni Road
Ysuura By-Pass
Mihara By-Pass
Matsunoya - Akasaka By-Pass

(2) Future Projects

Yasumiyama New Road
Hiroshima Minami Road
Fuchu - Niho Road
Akinada Islands Connecting Bridges and Roads

c. Honshu - Shikoku Connecting Bridges

The bridges and the connecting highways will be 60.1 km (33.4 miles) long in total and are constructed by Honshu-Shikoku Connecting Bridges Public Corporation. Innoshima Bridge was already completed in 1983 and has been opened to public use. The remaining bridges under construction or at design stage. Exact completion date of the project is unknown.

d. Dams

Following dams are going to be constructed in Hiroshima prefecture. The dams are for flood control and multipurpose water supply system.

Name	Completion Date	Purpose
Yasaka Dam	-	Multipurpose
Sekigawa Dam	-	Multipurpose
Fukutomi Dam	-	Multipurpose
Mitsugi Dam	-	Flood Control
Nukui Dam	-	Multipurpose
Haizuka Dam	-	Multipurpose
Hattabara Dam	-	Multipurpose
Shikawa Dam	-	Flood Control

e. Ports Improvement Projects

Hiroshima prefecture has four main commercial ports, Hiroshima, Kure, Onomichi-Itozaki, and Fukuyama ports. The functions of the port will be reinforced by the end of this century to meet the requirements of the next century.

f. City Improvement Projects

(1) Hiroshima Chuo Technopolis

The technopolis consists of three cities and two towns, Kure city, Higashi-Hiroshima city, and Takehara city; and Kurose town and Akitsu town. The technopolis, as the name implies, is for high-tech industries or knowledge intensive industries which will be the leading industries of the next century. This project is also aimed at the general improvement of the district. Hiroshima prefectural government conceives several big projects to achieve the city improvement.

a) Relocation of the Hiroshima National University to Higashi-Hiroshima city.

b) Higashi-Hiroshima - Kure Connecting Express Highway.

c) Higashi-Hiroshima Shinkansen (Bullet Train) Station.

(2) West Hiroshima Hill City

For the redevelopment of Hiroshima city, western hilly area of the city, Numata and Ishiuchi, is going to be improved. This improvement aims at the expansion and reinforcement of the Hiroshima city by constructing roads, sanitary sewer and other supporting utilities at the area. Hospitals and some research institutes will also be constructed. Urbanization of the surrounding area of the city is also an improtant part of the project.

(3) New Port City

The new airport extends over the two towns, Hongo town and Kawachi town in Toyota district. The airport is located at the midst of Hiroshima prefecture and will be connected to other main cities in the prefecture by an express highway, national highway, etc. This project aims at general improvements of the area as a new traffic terminal.

(4) Bihoku New City

Bihoku new city consists of Mitsugi city, Shohara city and their surroundings. This project by Hiroshima prefectural government aims at the renovation of the area as a new industrial area. An interchange of Chugoku-Judan Express Highway will be located at the center of the city. General improvement of the area is also included in the project.

C. HEALTH

1. Air Quality

The renovated facilities will not impact on the existing air quality in-base or off-base since they will involve no new sources of air pollution. While some air pollution is anticipated during the construction phases, it will be temporary in nature and will be minimized through proper construction procedures.

2. Water Quality

Potable water for Hiro Ammunition Depot is obtained from the Kure City Water System. This water meets GOJ physical and chemical water standards and U. S. standards. The increase in water use due to the additional mission requirement will be minimal since the population will only increase by 15 people.

3. Sewage and Wastewater Disposal

There is no industrial waste generating facility, nor a central sewage treatment facility in Hiro Ammunition Depot. The only wastewater generated from the depot is classified as domestic wastewater from each building installed with an individual septic tank and a chlorination device. The increase in wastewater due to the additional mission requirement will be minimal since the population will only increase by 15 people.

4. Herbicides and Insecticides

There should be no significant impact generated by the proposed facility improvements, as the use of herbicides and insecticides should not increase due to the proposed constructions.

5. Solid Waste Disposal

The only increase of solid waste disposal will be from the pallet and box repair, which will generate waste lumbers. But because the pallet and box repair will only be limited to a small percentage of ammunition processing, amount of solid waste generated per day will be minor and can be transported to an on-site "burning pit" for incineration.

E. SIGHT

The proposed projects within the Hiro Ammunition Depot will not have a significant impact upon the installation's visual environment.

F. HEARING

The proposed projects are not sources of noise contributor at the depot, other than equipment noise anticipated during the construction phases. But the generated noise during the construction will be temporary in nature and will be minimized through proper construction procedures.

G. SMELL

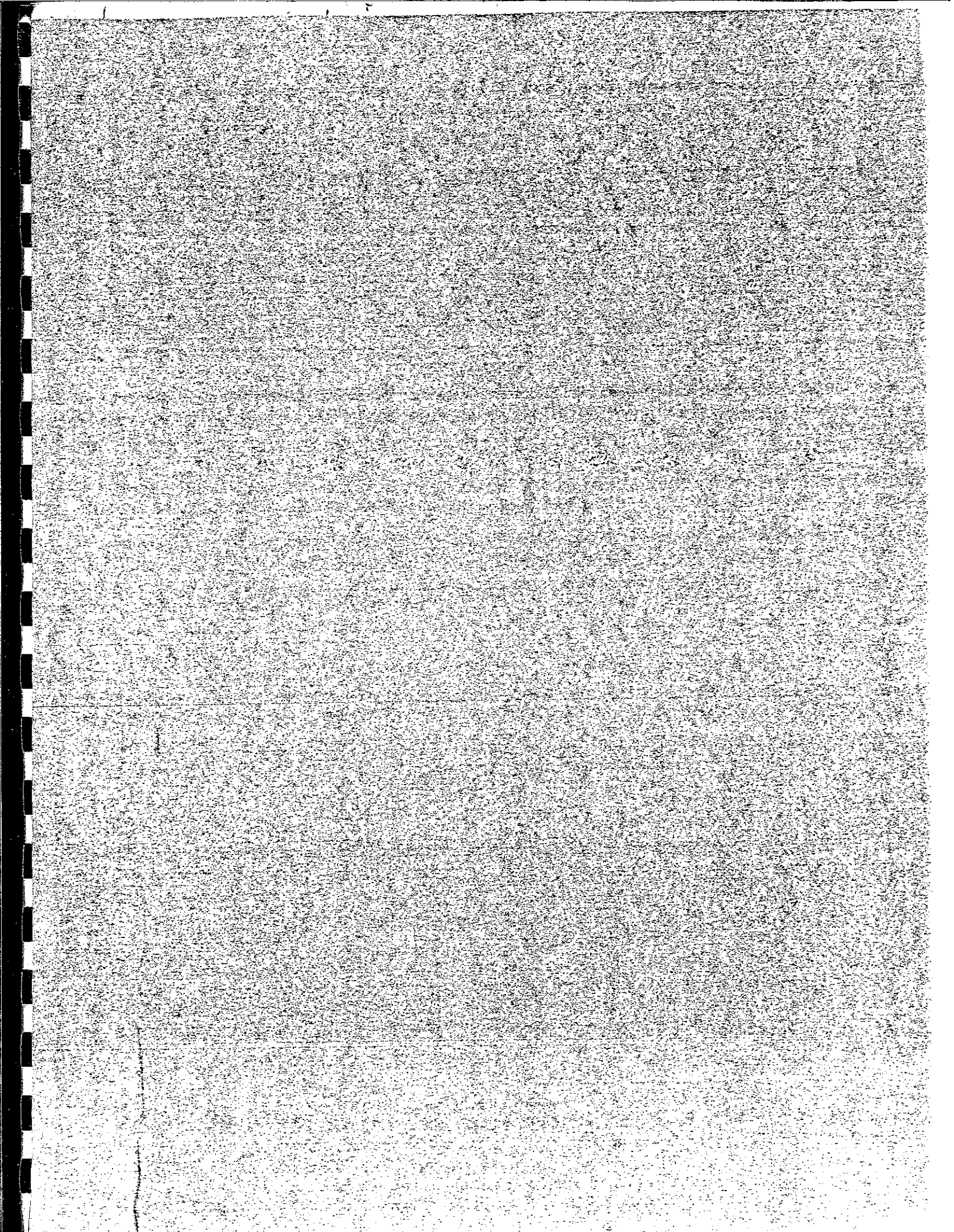
The proposed projects do not involve any odoriferous operation, nor are there any specific sewage disposal considered odoriferous operation in Hiro.

H. LIFE FORMS

There are no rare or exotic animal, birds, fish, or trees and ground cover at Hiro Ammunition Depot, other than common life forms, such as birds in the woody hill or fishes in the adjacent waters. In any case, the proposed projects will not generate any changes to the life forms at the depot, nor will the projects involve any cutting of trees or significantly reduce existing turf area.

A. LAND USE PLANS AND ENVIRONMENTAL IMPACTS

The proposed development is based on continuing the existence of Hiro Ammunition Depot as an ammunition storage facility that will not adversely impact the living environment.



CHAPTER V

UTILITIES, STORM DRAINAGE AND INTERIOR ROAD SYSTEMS

A. WATER SUPPLY

There will be no significant impacts on the water system from the proposed projects as stated in Chapter III, Section C, Paragraph 2. Other than population increase of about 15 people due to mission increase, majority of the proposed projects involve repair, replacement, renovation or construction of unmanned structures and facilities.

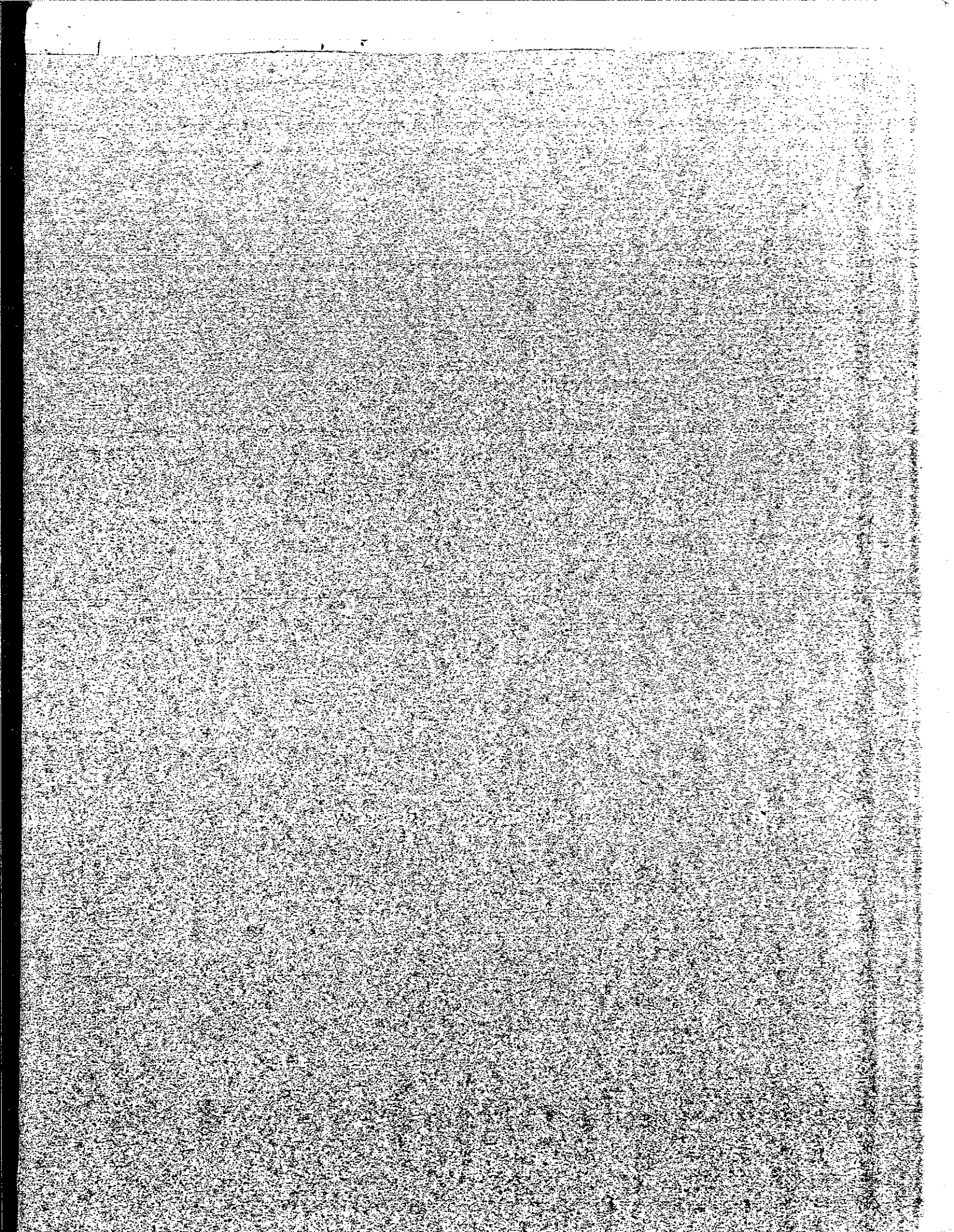
The renovation of Buildings

will not require any plumbing, with the possible exception of a hose-bibbs for general washing purposes. Water is available from the potable water system in the adjacent area.

B. SANITARY SEWER SYSTEM

The proposed projects will not involve any industrial waste generating facility. The increase in domestic sewage due to population increase of about 15 poeple will be minimal and will be treated through the existing septic tanks and a chorination device employed in Hiro Ammunition Depot.

In accordance with the Pollution Control Ordinance of Hiroshima Prefectural Government, dated 13 July 1961, the effluent from the septic tanks meets the standards.



APPENDIX I

PROPOSED PROJECTS