

11. 付 録

(1) 質問書及びその回答

(2) S/W (写)

(3) M/M (写)

(1) 質問書及びその回答

QUESTIONNAIRE

TOPOGRAPHIC MAPPING OF SAN JOSE METROPOLITAN

AREA IN THE REPUBLIC OF COSTA RICA

PRELIMINARY SURVEY TEAM

OF

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

I . NATIONAL STATUS

I T E M	D E S C R I P T I O N	A V A I L A B I L I T Y	N O T E S ; (R E S P O N S E)
1. CENTRAL GOVERNMENT ORGANIZATION	(1) ORGANIZATION CHART (2) POSITION OF THE ICM	Yes Yes	Enclosed Enclosed
2. ORGANIZATION IN CHARGE OF AND/OR CONCERNED WITH THE SURVEY	(1) ORGANIZATION CHART (a) HEAD OFFICE (b) LOCAL OFFICES (c) ANNUAL REPORT (d) NUMBER OF EMPLOYEES	No No Yes No 6 Employees	
* 3. LATEST ECONOMIC INDICES (NATIONAL/LOCAL)	(1) GNP AND GDP (2) POPULATION (3) GROWTH RATE OF POPULATION (4) OTHERS	Yes Yes Yes	
4. ECONOMIC DEVELOPMENT PLAN (NATIONAL/LOCAL)		No	
5. ONGOING DEVELOPMENT SURVEY/PROJECT IN THE PROPOSED SURVEY AREA		Yes	GAM Land Register

*3

- (1) GNP
 - 115 640.8 in 1983
 - 149 206.8 in 1984
 - 183 805.0 in 1985
 - 232 929.0 in 1986

(2) Population

- 2 416 809 to January 1, 1984
- 286 558 to January 1, 1988

(3) Growth Rate Population

- 2.8 for 1985
- 2.7 for 1986

II. CONFIRMATION OF THE REQUEST

I T E M	D E S C R I P T I O N	A V A I L A B I L I T Y	N O T E S : (R E S P O N S E)
1. OBJECTIVES OF THE REQUESTED MAPPING PROJECT	(1) RELATIONS WITH NATIONAL/LOCAL DEVELOPMENT PLAN	Yes	GAM
2. ONGOING MAPPING PROJECTS	(1) DESCRIBE THE DETAIL OF THE PROJECTS	Yes	USA 1946 - 1988 Topographic Mapping 1:50,000
3. ANY OTHER COOPERATION BY THE THIRD COUNTRY IN THE FIELD OF MAPPING	(1) COUNTRY (2) PERIOD OF THE COOPERATION (3) CONTENTS OF THE COOPERATION	Yes Yes Yes	
4. CONTENTS OF THE REQUESTED SURVEY	(1) AREA OF AERIAL PHOTOGRAPHY (ATTACH THE LOCATION MAP) (2) SCALE OF AERIAL PHOTOGRAPHY (3) AREA OF TOPOGRAPHIC MAPPING (ATTACH THE LOCATION MAP) (4) SCALE OF TOPOGRAPHIC MAP (5) CONTOUR INTERVAL (6) PROJECTION (7) ELLIPSOID ELEMENTS (8) SHEET DIMENSION (9) NUMBER OF COLORS (10) OTHER REQUEST	Yes Yes Yes Yes Yes Yes Yes Yes	(1600) km' 1/(20000) (1600) km' 1/(10000) (5) ^a Lambert Clarke 1866 (0) ° (3) ' X (0) ° (2) ' (4)
B) TOPOGRAPHIC MAP	(1) AREA (INDICATE THE PRIORITY OF THE DISTRICTS ON THE INDEX MAP) (2) SCALE (3) NUMBER OF COLORS (4) CATEGORIZED UNITS OR CONTENTS TO BE REPRESENTED FOR THE LAND USE MAP	Yes	(800) km' Enclosed 1/(10000) (12 colors) Enclosed
3) LAND USE MAP		Yes	

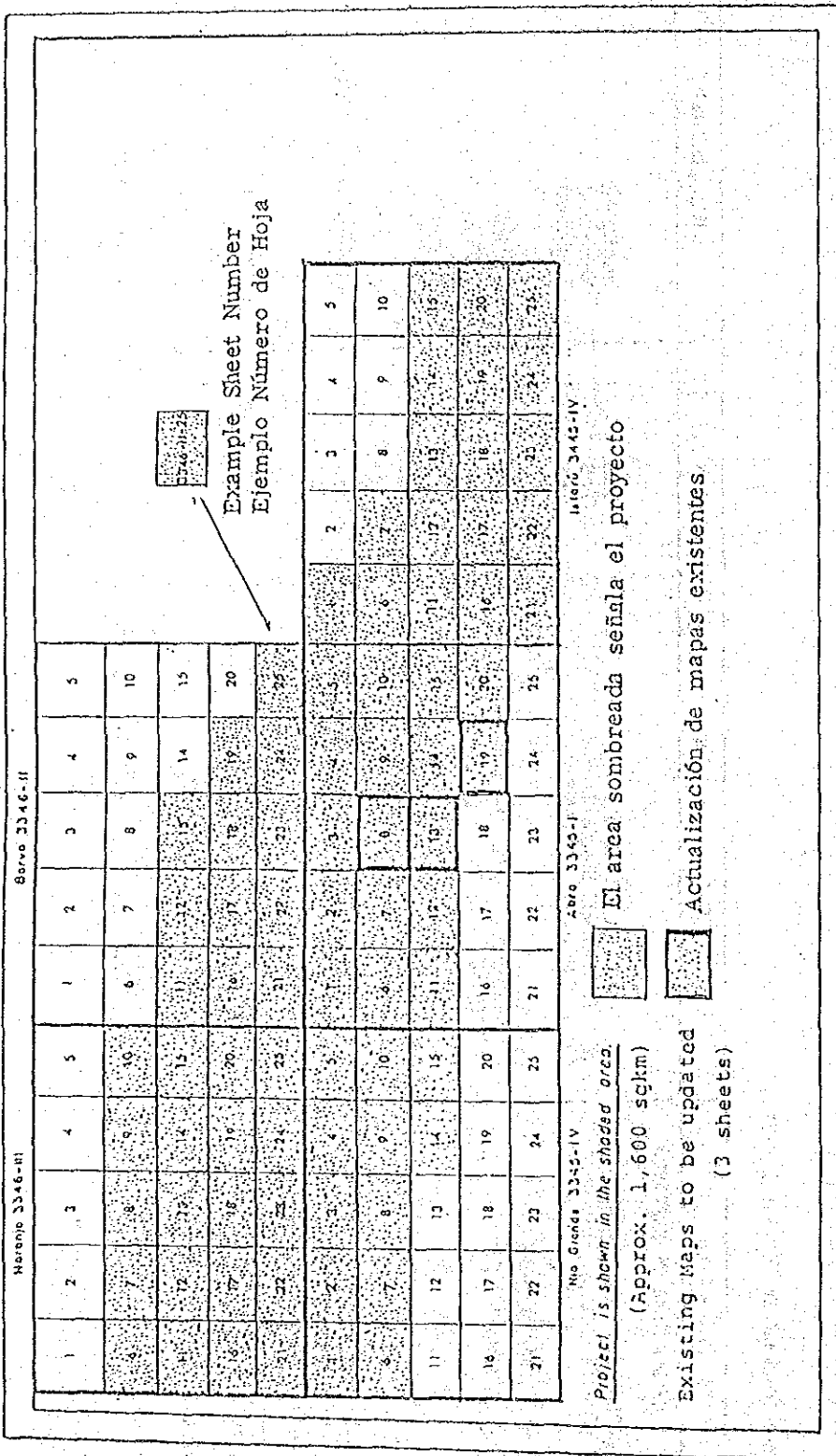
III. BASIC INFORMATION FOR THE SURVEY

I T E M	D E S C R I P T I O N	A V A I L A B I L I T Y	N O T E S : (R E S P O N S E)
1. AERIAL PHOTOGRAPHY	<p>(1) EXISTING AERIAL PHOTOS IN THE PROPOSED AREA</p> <p>(2) AVAILABILITY OF AIRPLANE</p> <p>(3) AVAILABILITY OF AERIAL CAMERA</p> <p>(4) ANY ORGANIZATION FOR AERIAL PHOTOGRAPHY</p> <p>(5) AVAILABILITY OF AIRPORT BASE</p> <p>(6) AVAILABILITY OF FACILITIES FOR AERIAL PHOTOGRAPH PROCESSING</p> <p>(7) PERMISSION OF TAKING THE AERIAL PHOTO</p> <p>(8) FILMS OUT OF COSTA RICA FOR THE IMPLEMENTATION OF THE SURVEY</p> <p>(9) APPROPRIATE MONTHS OF THE YEAR FOR AERIAL PHOTOGRAPHY</p>	<p>Seneca II Turbo RMKA 15-23 No Yes Yes Yes</p>	<p>TO BE PREPARED VERY URGENTLY</p> <p>Piper Calibration June 24, 1986</p> <p>Pavas Airport IGN</p> <p>On Loan Bases January, February, March.</p>
2. MAPS	<p>(1) EXISTING TOPOGRAPHIC & THEMATIC MAPS</p>	Yes	TO BE PREPARED VERY URGENTLY Enclosed
3. CONTROL POINT SURVEY	<p>(1) INDEX MAPS AND CONTROL DATA LISTS OF CONTROL POINTS (HORIZONTAL/VERTICAL)</p> <p>(2) DATUM (HORIZONTAL/VERTICAL)</p> <p>(3) CONFIRMATION OF EXISTENCE OF THE POINTS</p>	Yes Yes	Enclosed Ocoepeque, M.S.L.
4. AERIAL TRIANGULATION	<p>(1) METHOD OF AERIAL TRIANGULATION</p>	Yes	SIMBA
5. SPECIFICATION OF MAPPING			

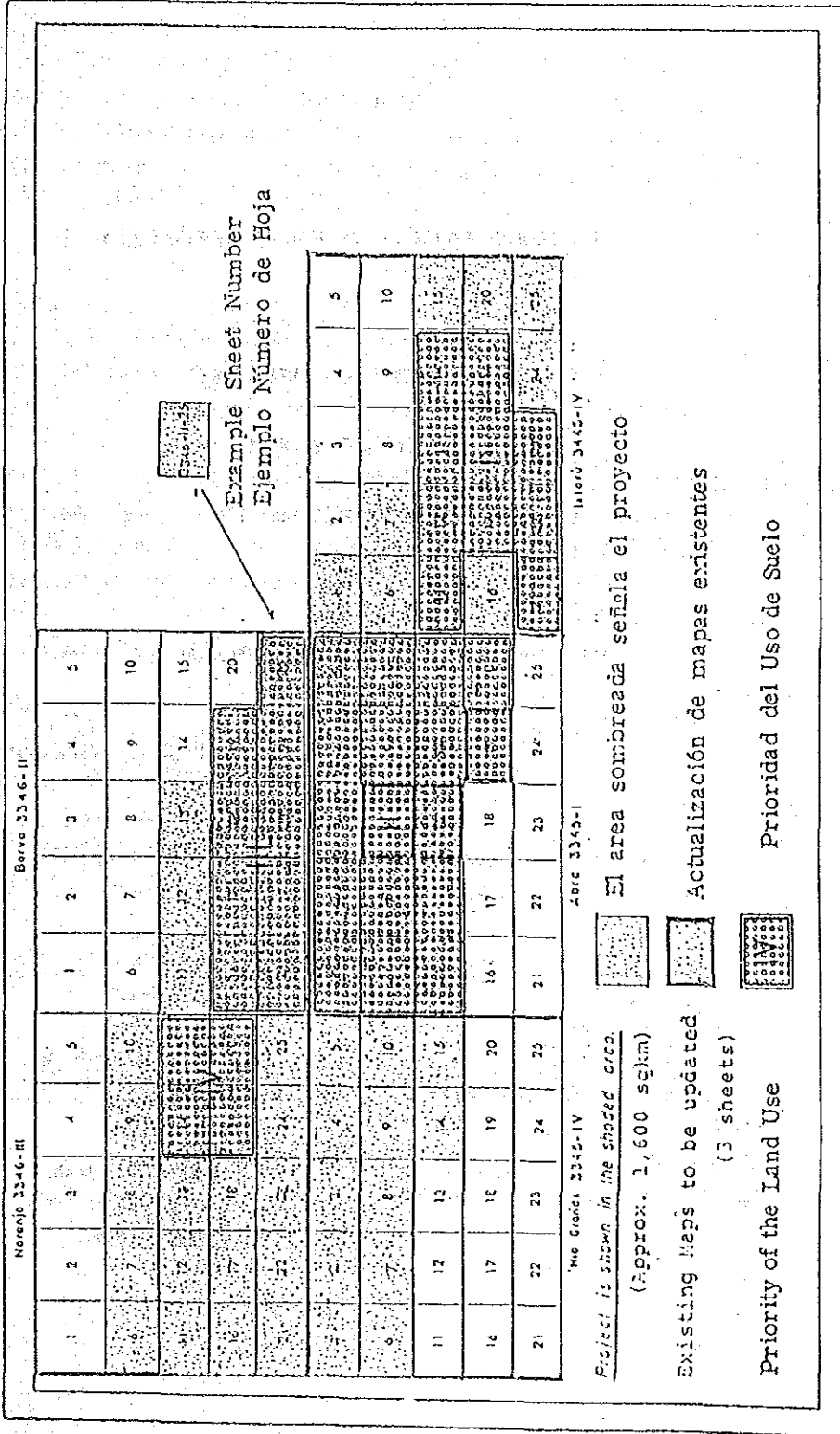
IV. OTHER INFORMATION FOR THE SURVEY

I T E M	D E S C R I P T I O N	A V A I L A B I L I T Y	N O T E S : (R E S P O N S E)
1. LAWS & REGULATIONS OF MAPPING			
2. METEOROLOGICAL DATA IN THE PROJECT AREA	(1) RAIN FALL BY MONTH (2) TEMPERATURE BY MONTH (3) CLOUD AMOUNT BY MONTH	Yes Yes Yes	Enclosed Enclosed Enclosed
3. LIST OF SURVEY EQUIPMENT	(1) EDM (2) THEODOLITE (3) LEVEL (4) COMPASSATOR (5) PLOTTER (6) COMPUTER (7) OTHERS	No Yes Yes No Yes Yes	4 T-2 2 N-2 1 N-3
4. AVAILABILITY OF TRANSPORT (EITHER YOUR GOVERNMENT VEHICLES OR RENTAL CARS)	(1) 4WD CARS (2) TRUCKS (3) OTHERS	Yes No	4 Jeeps - 2 Pickups
5. APPROVAL OF USE OF RADIO CALL EQUIPMENT			
6. AVAILABILITY OF COUNTERPARTS			
7. AVAILABILITY OF LABOURERS	(1) DRIVERS (2) WORKERS (ALSO LET US KNOW WAGES/DAY)	6	\$ 12.00 / Day.
8. ANY SPECIFIC RESTRICTIONS RELATED TO THE PROJECT			

GRAN AREA METROPOLITANA

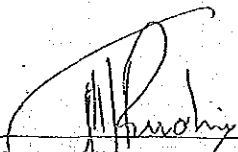


GRAN AREA METROPOLITANA



(2) S/W (写)

SCOPE OF WORK
FOR
TOPOGRAPHIC MAPPING OF SAN JOSE METROPOLITAN AREA
IN
THE REPUBLIC OF COSTA RICA
AGREED UPON BETWEEN
NATIONAL GEOGRAPHIC INSTITUTE
AND
JAPAN INTERNATIONAL COOPERATION AGENCY
ON
OCTOBER 20, 1988


HR. FERNANDO H. RUDIN RODRIGUEZ
DIRECTOR GENERAL
NATIONAL GEOGRAPHIC
INSTITUTE


HR. KUNITO NONOHURA
LEADER OF JAPANESE
PRELIMINARY STUDY TEAM,
JAPAN INTERNATIONAL
COOPERATION AGENCY

I. INTRODUCTION

In response to the request of the Government of Republic of Costa Rica, the Government of Japan has decided to conduct the Topographic Mapping of San Jose Metropolitan Area (hereinafter referred to as "the Study") in accordance with the Agreement on Technical Cooperation between the Government of Japan and the Government of Costa Rica signed on May 24, 1985 (hereinafter referred to as "the Agreement").

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programmes of the Government of Japan, will undertake the Study, in close cooperation with the authorities of Costa Rica.

National Geographic Institute (hereinafter referred to as "IGN") shall act as counterpart agency to the Japanese Study Team (hereinafter referred to as "the Team") and also as a coordinating body in relation with other relevant organizations for the smooth implementation of the Study.

The present document sets forth the Scope of Work for the Study.

II. OBJECTIVE OF THE STUDY

The objectives of the Study are;

- (1) To prepare 1/10,000 topographic maps covering an area of approximately 1,600 Km². (see APPENDIX I - 1)
- (2) To prepare 1/10,000 land use maps covering an area of approximately 800 Km². (see APPENDIX I - 2)

III. SCOPE OF THE STUDY

In order to achieve the above mentioned objectives, the Study will cover the following items. (The technical specifications are as shown in APPENDIX IV)

1. Aerial photography

Aerial photographs shall be taken at the scale of approximately 1/20,000. Setting of air-photo signals shall be done, if necessary, prior to commencement of the aerial photography.

2. Ground Control Point Survey

Existing ground control points shall be utilized, however, the following works will be carried out, if necessary:

2.1 Triangulation and traversing

Minor horizontal control shall be established by triangulation or traversing.

2.2 Leveling

Leveling shall be carried out to obtain vertical controls necessary for aerial triangulation and mapping work.

3. Pricking

Pricking on the aerial photographs shall be done in the field.

4. Field identification

The topographic and land use map information shall be identified in the field by using the aerial photographs.

5. Aerial Triangulation

Aerial triangulation shall be carried out by analytical block adjustment method.

6. Stereo Plotting

Stereo plotting shall be carried out using stereo plotting instruments at the scale of 1/10,000.

7. Field Completion

Topographic features, land use, vegetation, etc. which cannot be properly identified on the aerial photographs shall be identified in the field and plotted on the compilation sheets. Administrative boundaries and geographic names shall be prepared by IGH.



31

8. Drafting

Based on the compiled sheet, scribing shall be carried out on the stable polyester base for several colors separation plates. Map style and symbols shall be those adopted by IGH.

9. Printing

Plate making shall be carried out using 1/10,000 scribed negatives, and printing shall be carried out by the offset method.

IV. STUDY SCHEDULE

The whole work will be conducted in accordance with the tentative schedule.

(see APPENDIX II)

V. REPORTS AND FINAL RESULTS


A report in Spanish shall be presented to the Government of Costa Rica by JICA every fiscal year (from April to March).

The materials mentioned in APPENDIX III will be submitted to the Government of Costa Rica by JICA. These materials will belong to the Government of Costa Rica after having completed the whole work.

All maps produced by the Study shall bear at the lower margin the following:

Este mapa ha sido preparado en un programa cooperativo entre el Gobierno de Costa Rica y la Agencia de Cooperación Internacional del Japón.

VI. UNDERTAKING OF THE GOVERNMENT OF COSTA RICA

- 
1. To facilitate smooth conduct of the Study, the Government of Costa Rica will accord privileges, exemptions and other benefits to the Team in accordance with the Agreement and shall take necessary measures;
- 24

- (1) to secure safety of the members of the Team.
- (2) to permit the members of the Team to enter, leave and sojourn in Costa Rica for the duration of their assignment therein, and exempt them from alien registration requirements and consular fees;
- (3) to exempt the members of the Team from taxes, duties and other charges on equipment, machinery and other materials brought into Costa Rica for the conduct of the Study,
- (4) to exempt the members of the Team from income tax and charged of any kind imposed on or in connection with any emolument or allowance paid to the members of the Team for their services in connection with the implementation of the Study,
- (5) to provide necessary facilities to the Team for remittance as well as utilization of the funds introduced into Costa Rica from Japan in connection with the implementation of the Study,
- (6) to secure permission for entry into all necessary areas for the implementation of the Study,
- (7) to secure permission for the Team to take all necessary data and documents, including original negatives of aerial photographs, related to the Study put of Costa Rica to Japan by the Team,
- (8) to provide the medical services as needed. Its expenses will be chargeable on members of the Team.

2. The Government of Costa Rica shall bear claims, if any arises against the members of the Team resulting from, occurring in the course of, or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the Team.

3. To facilitate smooth conduct of the Study, IGM shall take necessary arrangements for the Team as follows, in cooperation with other relevant organizations;

- (1) to secure permission for the aerial photography and use of airplane and airports for the implementation of the Study,
- (2) to secure permission for the use of communication facilities including transceiver,
- (3) to employ labourers.

4. IGN shall, at its own expense, provide the Team with the followings in cooperation with other related organizations;

- (1) available data and information related to the Study,
- (2) counterpart personnel,
- (3) suitable office space with necessary equipments, e.g. typewriters, furniture and telephones in San Jose Metropolitan Area,
- (4) credentials or identification cards to the members of the Team,
- (5) administrative and technical support,
- (6) processing the aerial films and the photographs under the Team's supervision,
- (7) information of the necessary administrative boundaries and geographic names on the maps, at its full responsibility,
- (8) annotation sheets in the project area,
- (9) appropriate number of vehicles with drivers.

VI. UNDERTAKING OF JICA


For the implementation of the Study, JICA shall take the following measures, in accordance with the relevant laws and regulations in force in Japan:

1. to dispatch, at its own expense, the Study Team to Costa Rica for Aerial Photography, Ground Control Point Survey, Pricking, Field Identification and Field Completion,
2. to carry out Aerial Triangulation, Stereo Plotting, Drafting, and Printing, in Japan,
3. to pursue technology transfer to the Costa Rican counterpart personnel in the course of the Study.

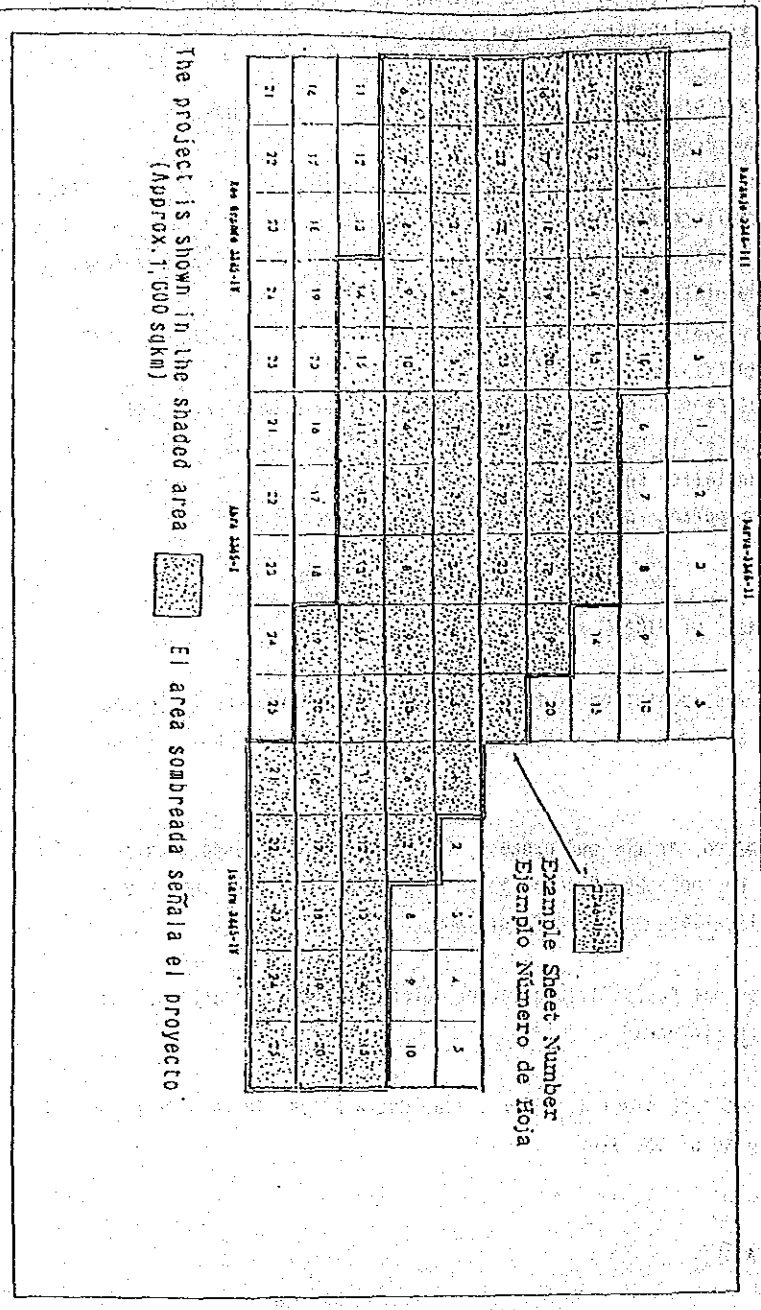


VI. CONSULTATION

JICA and IGN shall consult with each other in respect of any matter that may arise from or in connection with the Study.



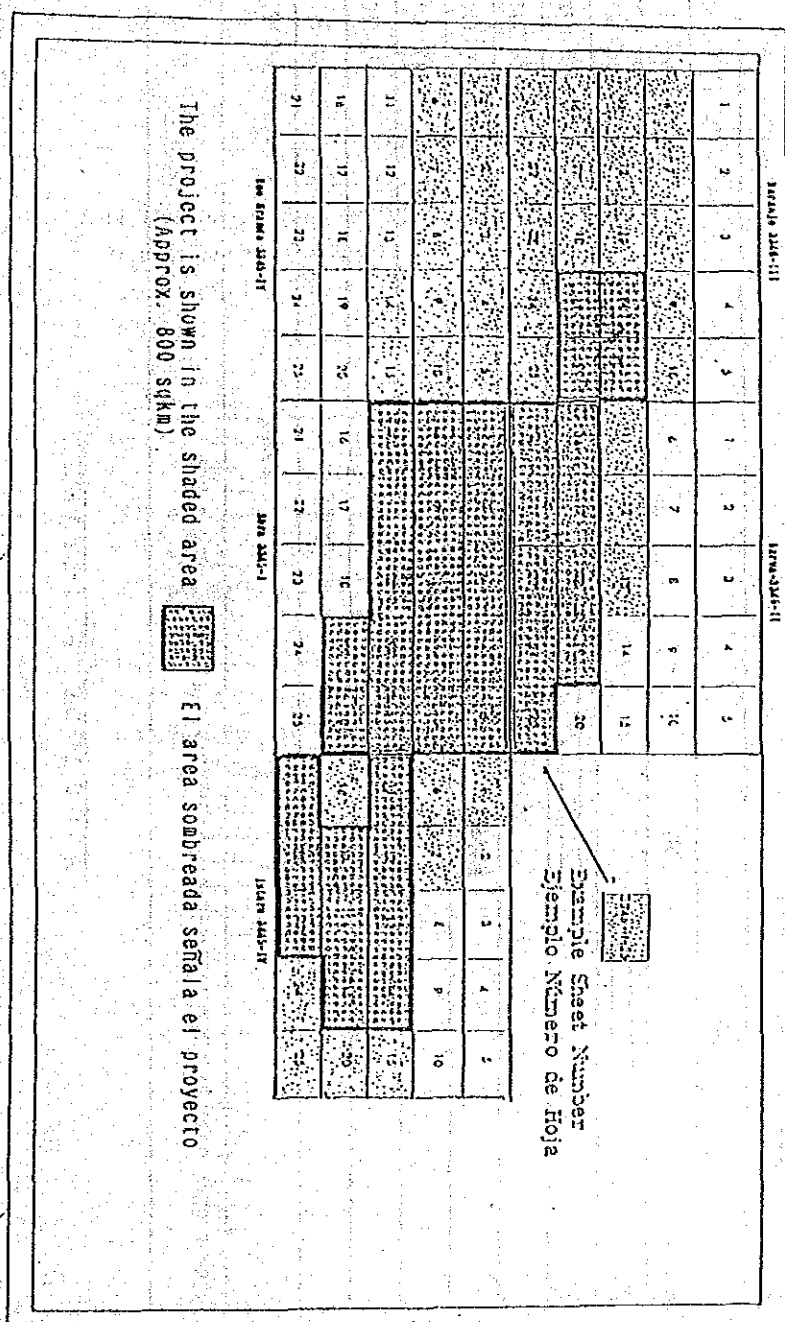
GRAN AREA METROPOLITANA



[Handwritten signature]

[Handwritten mark]

GRAN AREA METROPOLITANA



[Handwritten signature]

[Handwritten mark]

APPENDIX III

FINAL RESULTS

I. Aerial Photography

1. Original negatives (roll)
2. Contact paper prints
3. Index map

II. Topographic Mapping

1. Aerial triangulation results
2. Color separation scribed sheets
3. 1/10,000 topographic maps in Spanish (1,500 copies)
4. Pricked photographs
5. Original manuscripts

III. Land Use Mapping

1. Color separation scribed sheets
2. 1/10,000 land use maps in Spanish (1,000 copies)
3. Original manuscripts



APPENDIX IV

TECHNICAL SPECIFICATIONS

1. Topographic Mapping:

"A" class mapping specifications in the Technical Manual of Overseas Surveying of JICA will be applied with the exception of some subjects and some areas such as obscure areas on photographs, generalized building area, periphery of road in the suburbs and in rural areas, etc.

2. Contour lines:

5 meter contour intervals.

3. Format:

3' x 2'

4. Number of Colors:

4 for Topographic Maps

6 for Land Use Maps

(3) M/M (写)

MINUTES OF MEETING

ON

TOPOGRAPHIC MAPPING OF SAN JOSE METROPOLITAN AREA

IN

THE REPUBLIC OF COSTA RICA

BETWEEN

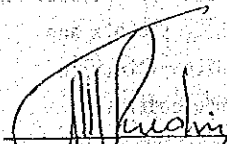
NATIONAL GEOGRAPHIC INSTITUTE

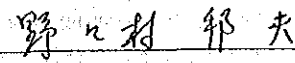
AND

JAPAN INTERNATIONAL COOPERATION AGENCY

ON

OCTOBER 20, 1988


HR. FERNANDO H. RUBIN RODRIGUEZ
DIRECTOR GENERAL
NATIONAL GEOGRAPHIC
INSTITUTE


HR. KUNIO NONOMURA
LEADER
PRELIMINARY STUDY TEAM
JAPAN INTERNATIONAL
COOPERATION AGENCY

The preliminary study team on the topographic mapping of San Jose Metropolitan area, organized by JICA and headed by Mr. K. Nonomura, visited the Republic of Costa Rica from September 15, 1988 to October 21, 1988, to carry out the preliminary survey for the captioned survey.

During the Japanese team's stay in Costa Rica, both sides had a series of discussions and exchanged views and opinions in very warm and cooperative atmosphere.

As the results of the series of discussion, both sides have agreed upon and signed the Scope of Work for the smooth implementation of the study.

The other main items understood by both sides are as follows:

1. IGN shall arrange the aerial photography and subsequent processing of aerial photographs with the top priority.
2. For the smooth and effective aerial photography, the Costa Rican aero-photography company, which is under IGN's control, was strongly recommended by the Costa Rican side. The recommendation was also made from the result of cost comparison among others.
3. The final results of aerial photography shall be submitted to the Costa Rican side as soon as possible.
4. IGN stated and the Japanese side agreed that the existing maps of 1/10,000 in some part of the study area are so differently varied in their symbols and contents that it was necessary for those maps to be revised completely, in other words, the mapping in all the study area should be done under the same specifications.
5. Items of symbols for the topographic maps and the land use maps are as attached hereafter. The symbols shall be prepared and determined at the stage of field identification.
6. As for the number of the copies for the topographic maps, the Costa Rican side had pointed out high demands of the maps, and requested strongly 1,500 copies for more effective and significant use of the maps.

7. IGN shall conduct the setting of air-photo signals at the necessary points prior to commencement of the aerial photography.
8. IGN shall provide, for the implementation of the study, the Japanese study team with, at least, 4 4WD station wagons and 2 pick-ups with a driver for each vehicle, while the expenses of fuel for the vehicles shall be born by JICA.
9. With regard to technical transfer, the Costa Rican side stressed the need of working together both in Costa Rica and in Japan in the course of the study.

List of Attendants:

1. Costa Rican side

(IGN)

Hr. Fernand H. Rudin Rodriguez	Director General
Hr. Claudio Vieto R.	Deputy Director General
Hr. Lic. Eduardo Bedoya Benitez	Surveyor (Geography)
Hr. Herna Cantillano Acosta	Chief Cartographer
Hr. Victor H. Guerrero Cruz	Surveyor

2. Japanese Side

(JICA Preliminary Team)

Hr. Kunio Nonomura	Leader
Hr. Tadao Hoya	Vice Leader
Hr. Yutaka Shoda	Member
Hr. Yasuo Ide	Member
Hr. Hiroshi Murakami	Member
Hr. Yoshikazu Yamada	Member
Hr. Hiroshi Hatsuoka	Member
Hr. Yasuhiro Mori	Member
Ms. Setsuko Ohtaki	Member

(Embassy of Japan)

Hr. Yasusada Oue	Second Secretary
------------------	------------------



21

Símbologia de mapa a escala 1:10,000
 Symbol of map in the scale of 1:10,000

HAPA TOPOGRAFICO TOPOGRAPHIC MAP

		No.	ACCIDENTES	ITEM	INDICE LEGEND
Punto de control	CONTROL POINT	1	Vértice geodésico	Horizontal control point	○
		2	Punto de nivelación	Bench mark	○
		3	Cota fotogramétrica	Spot height by Photogrammetry	○
Topografía	TOPOGRAPHY	1	Curvas de nivel índice	Index contour line	○
		2	Curvas de nivel intermedia	Intermediate contour line	○
		3	Curvas de nivel auxiliar	Auxiliary contour line	○
		4	Depresiones	Depression	○
		5	Peñasco o farallón	Cliff (soil, rock)	○
		6	Corte	Cutting	○
		7	Relleno o terraplén	Embankment	○
Aguas	WATER	1	Límite de aguas	Shore line	○
		2	Curso de agua	River, canal, etc.	
		3	Quebrada intermitente	Intermittent or dry river	○
		4	Acueducto	Water pipeline	
		5	Túnel de acueducto	Tunnel water pipeline	
		6	Saltos	Waterfall	
		7	Hanantial	Spring	



30

	No.	ACCIDENTES	ITEM	INDICE	
				LEGEND	
Carreteras	ROAD	1	Autopista	Express Way	○
		2	Camino pavimentado mayor de 3m de ancho	Pavement Road more than 3m wide	○
		3	Camino sin pavimentar mayor de 3m de ancho	Road without Pavement more than 3m wide	○
		4	Camino de herradura o huella	Road of cattle and horse	○
		5	Vereda, sendero	Footpath	○
		6	Puente	Bridge	○
		7	Puente para peatones	Pedestrian bridge	○
		8	Señal de identificación para carretera principal	Route number for main highway	○
		9	Señal de identificación para carretera secundaria	Route number for secondary highway	○
Ferrocarriles	RAILWAY	1	Vía sencilla	Railway	○
		2	Estación ferroviaria	Railway station	○
		3	Patio ferroviario	Yard	○
		4	Puente ferroviario	Railway bridge	○

	No.	ACCIDENTES	ITEM	INDICE	
				LEGEND	
Edificio	BUILDING	1	Edificio que no exceda de 0.5mm x 0.5mm	Buildings not over 0.5mm x 0.5mm	○
		2	Edificio que exceda de 0.5mm x 0.5mm, pero que ninguno de cuyos lados exceda de 5.0mm	Buildings over 0.5mm x 0.5mm, but none of the side doesn't over 5.0mm	○
		3	Edificio con cualquier lado mayor de 5.0mm	Buildings, any of the side are more than 5.0mm	○
		4	Zona densamente construida	Congested housing area	○
		5	Galerón	Cattle barn	○
Símbolo de edificio	BUILDING SYMBOL	1	Palacio Municipal	Municipal Office	○
		2	Edificio Gubernamental	Governmental building	○
		3	Poder Judicial	Court	○
		4	Hospital o casa de salud	Hospital, health center	○
		5	Estación de Policía	Police station	○
		6	Estación de Bomberos	Fire station	○
		7	Correos	Post office	○
		8	Escuela y colegio	School and college	○
		9	ICE	ICE	○
		10	Banco	Bank	○
		11	Iglesia	Church	○
		12	Estadio	Stadium	

94

		No.	ACCIDENTES	ITEM	INDICE LEGEND
Otras construcciones	OTHER CONSTRUCTIONS	1	Construcciones especiales (rotular según el caso: Chinenea, torre, silo, etc.)	Special constructions (annotate according to the case: chimney, tower, silo, etc.)	○
		2	Monumento	Monument	○
		3	Línea eléctrica alta tensión	High tension electric transmission line	○
		4	Tubería de gas o petróleo, superficial (rotular según el caso)	Superficial pipeline of gas or petroleum (annotate according to the case)	
		5	Represa de mampostería con camino sobre la misma	Dam with road on the dam	
		6	Represa de tierra	Earth dam	○
		7	Tanque: gasolina, petróleo, gas, agua, etc (rotular según el caso)	Tank: petroleum, gas, water, etc. (annotate according to the case)	
Tipo de uso	TYPE OF LAND USE	1	Límite de uso	Boundary of land use	○
		2	Huerto y plantaciones	Vegetable garden and plantations	○
		3	Café	Coffee	○
		4	Caña de azúcar	Sugar cane	○
		5	Pasto	Pasture	○
		6	Zona de reforestación	Reforestation zone	○
		7	Bosque secundario	Secondary forest	○
Límite administrativo	ADMINISTRATION BOUNDARY	1	Límite de provincia	Boundary of prefecture	○

2

Otro tipo de uso OTHER TYPE OF LAND USE	No.	ACCIDENTES	ITEM	INDICE
				LEGEND
	1	Parque	Park	○
	2	Cementerio	Cemetery	○
	3	Aeropuerto	Airport	
	4	Minas de tajo abierto y de desecho de minas	Open cutting mine and waste material mine	

HAPA USO DEL SUELO

LAND USE MAP

Area urbanizada y habitada		Urban and Inhabit area	
Uso residencial	Residencia general	Residential use	General residential
Uso comercial y de negocios	Comercio y negocios	Commercial and business use	Commercial and business
Uso industrial	Industria	Industrial use	Industrial
Uso público	Agencia gubernamental y público	Public use	Governmental and public agency
	Educación-cultura		Education-culture
	Salud y bienestar		Health and welfare
	Parque y/o zona verde		Park and/or greenzone
	Cementerio		Cemetery
Uso de servicios y recreativo	Deporte y atletismo	Facilities	Sport and athletic
	Transporte		Transportation
	Servicios		Utility
Area sin construir		Open space	

86

Area agrícola y forestal		Agricultural and forest area	
Uso agrícola	Agricultura estacional	Agricultural use	Seasonal agriculture
	Cultivo permanente		Permanent cultivation
	Fruticultura		Fruit cultivation
	Floricultura		Flower cultivation
	Cultivo múltiple		Multiple cultivation
Uso ganadera	Pasto	Cattle breeder use	Pasture
	Pasto con árboles		Pasture with trees
Uso forestal	Reforestación	Forest use	Reforestation
	Bosque secundario		Secondary forest
Tierra inculta	Charral	Uncultivated land	Natural grass land
	Tierra descubierta		Waste land

JICA