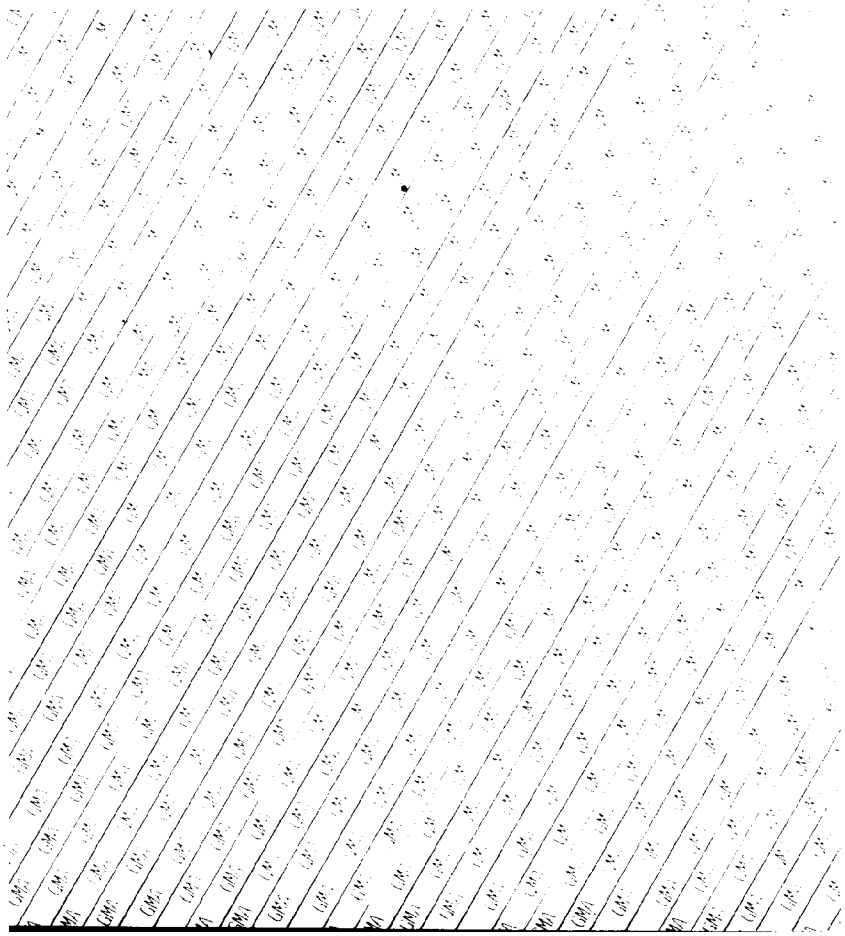
American Samoa Government

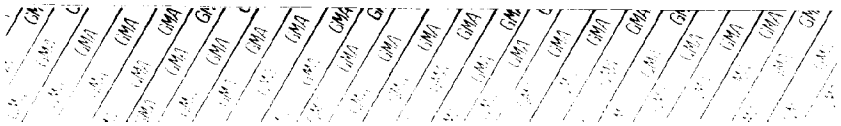
American Samoa · Coastal Zone Management Program

PROPOSED ROADING DEVELOPMENT OF PAGO PAGO HARBOR AMERICAN SAMOA



GM MEREDITH & ASSOCIATES

Planners



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THE DIRECTOR OF ECONOMIC PLANNING

AMERICAN SAMOA GOVERNMENT

PROPOSED ROADING DEVELOPMENT OF PAGO PAGO HARBOR AMERICAN SAMOA

June 1982

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B.E.,BSc.,MNZIE...,MICE.

PHONE: 633-4638
TELEX: 782-543

March 8, 1982.

Department of Economic Planning,
American Samoa Government,
Pago Pago,
AMERICAN SAMOA. 96799

attention: Mr. Joseph Pereira.

Dear Sir,

We are pleased to transmit the Proposed Roading Development of Pago Pago Harbor Study Report and model in accordance with our contract C-0012.

In submitting the report, we acknowledge other reports written in the past on the same subject, and we cannot help but conclude that the transportation problem has been somewhat over studied and that the need for positive action is long overdue. Consequently, the Pago Pago harbor area roadway system is causing increasing congestion and increasing numbers of accidents and the economic effects of this situation are becoming increasingly serious.

As a result therefore and as discussed with you during the course of the assignment, we have tended to be more practical than academic, having spent considerable time in the field updating past recommendations to suit current requirements.

This report serves in conjunction with:

[i] our three dimensional model of Fagatogo and,

[ii] the Pago Pago harbor wall map to illustrate our proposals and recommendation for roading improvements.

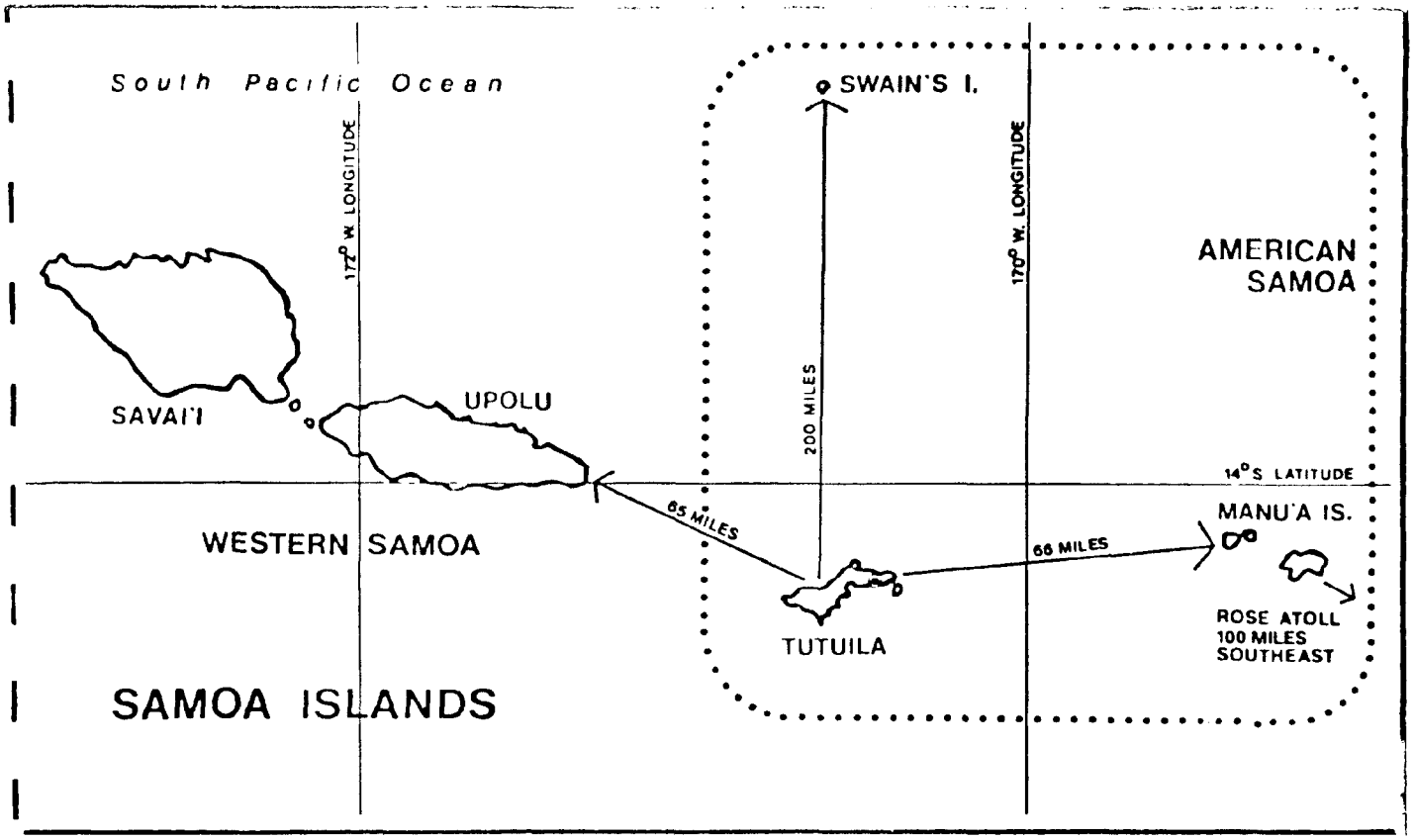
.../2

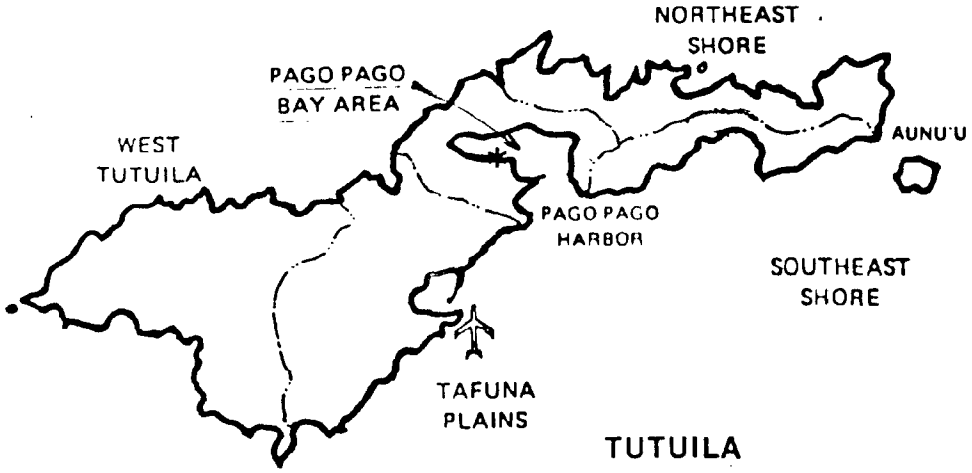
The evaluation of the transportation problem has been carried out with close reference to the Yamamoto Land Use Study to ensure that modifications recommended conform with the Land Use guidelines proposed in the Harbor Land Use Plan.

We deeply appreciate the co-operation and assistance of the Department of Economic Planning, Mr. Joseph Pereira, Tini Van Yeun, the Department of Public Works, Mr. Mark Nelson and Mr. Meko Paopao, of the Highway Branch.

Sincerely,

G.M. Meredith.
MANAGING DIRECTOR.

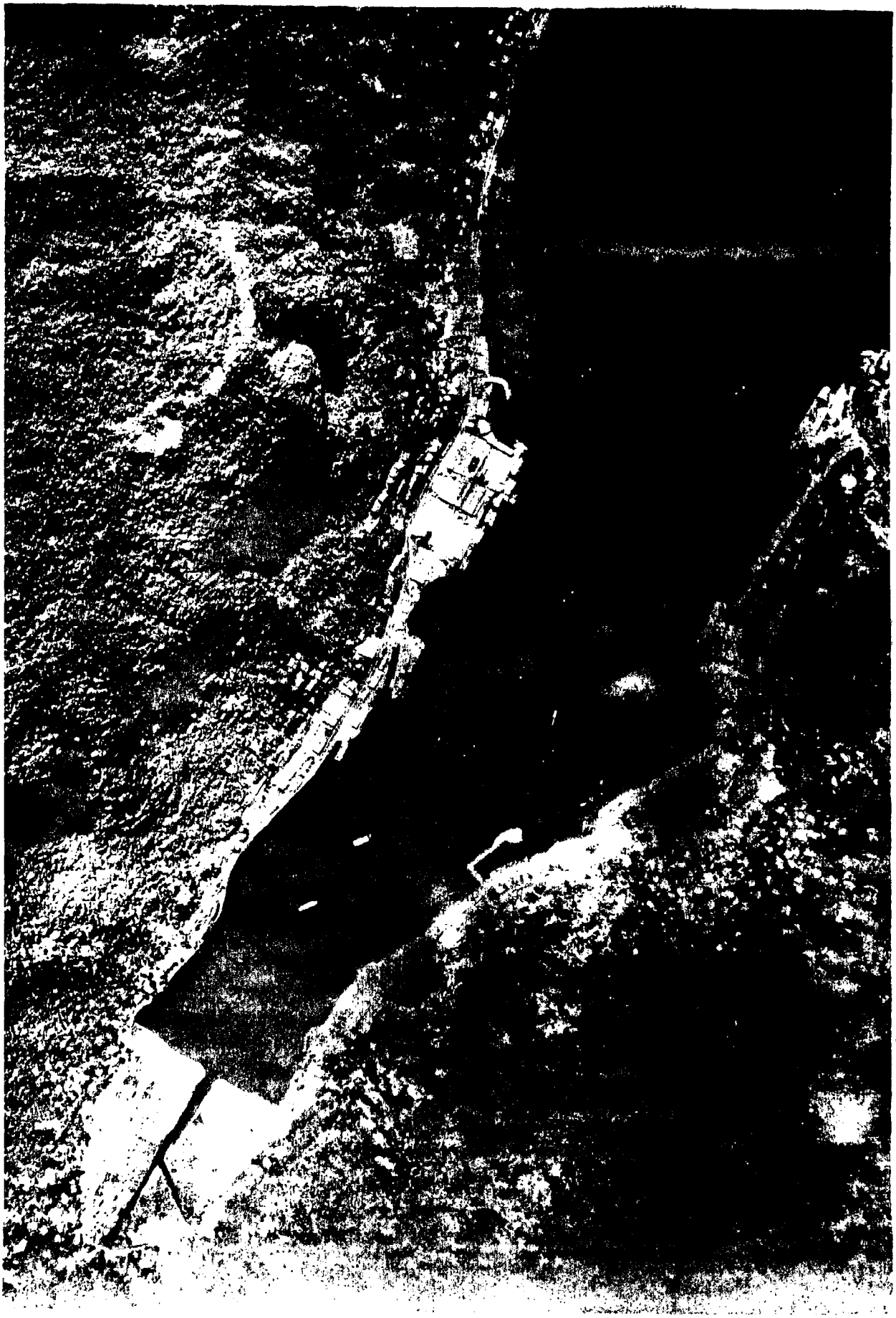




1 PAGO PAGO HARBOR
GENERAL LOCATION

North No Scale

AMERICAN SAMOA GOVERNMENT



I N D E X

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LIST OF FIGURES

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BACKGROUND

This report is prepared in conjunction with the conceptive physical plan for Pago Pago harbor lands prepared by Yamamoto as a management instrument which aims at improving the use and development of public lands found in the Pago Pago Harbor area. The plan is part of the American Samoa Coastal Management Programme. The responsibility for plan formulation lies with the Bay Area Planning Committee, chaired by the Lieutenant Governor, whose membership has been appointed by the Governor of American Samoa.

In a meeting of the Bay Area Planning Committee, the following recommendations put forward by Yamamoto were approved by the Committee.

a] Expansion of Utulei Beach Park.

b] Conversion of the Petroleum Dock to Recreational purposes.

c] Expansion of Commercial Port and Terminal.

d] Improvement of Inter-island Dock and Terminal.

e] Establishment of Regional Business Centre at Fagatogo.

f] Establishment of Small Boat Service Centre at Malaeloa.

g] Expansion of Commercial Centre at Autapini.

h] Establishment of a Territorial Park and Government Sub-centre at Pago Pago.

i] Reservation of a LPG Site at Anasosopo, and establishment of a District Park.

In considering the projected development in view of the recommendation approved and in particular considering the expansion of the main dock (to allow for the possibility of trans-shipment from Pago to other neighboring Pacific Islands) the expansion of Fagatogo as a regional business centre, and future expansion of the fish canneries, the Government was particularly concerned on the issue of congestion and safety of the existing corridor road.

To determine therefore what measures are required to alleviate both congestion and hazard, and to determine what the long range goals and objectives would be and what these would cost, the Department of Economic Planning of the Government commissioned

G.M. Meredith and Associates to study the Transportation requirements within the harbor corridor with particular emphasis on the proposed Fagatogo Commercial Centre.

Information for the study has been drawn from reports already in the hands of the Government which deal with many aspects of projected energy use and production, land use planning, harbor related operations and traffic studies. A list of these reports is submitted in Attachment 1.

RECOMMENDATIONS

A great deal of time has been devoted in the study to surveying and assessing the existing roading situation, having realized the need to make practical recommendations in order to immediately assist in solving the serious problems of congestion and traffic accidents facing the Territory.

We have studied many past reports submitted on the same subject and we make particular mention of a comprehensive report "Pago Pago Harbor Corridor Transportation Study" prepared by Enplan Corporation of Washington. Quoting Enplan:-

"The existing road and street system serving the Pago Pago Harbor has evolved over a period of years and was intended, initially, for lower volumes of traffic. Today's traffic travelling on yesterday's roads brings the inevitable consequence of congestion and accidents." Unquote.

This was written in 1975 and to date, there has been very little physical evidence of efforts to either rebuild old streets or construct new streets, in accordance with recommendations made in the report. This lack of action has consequently led to increasing levels of congestion, accidents and subsequent shifts in population and economic activity.

It is our strong recommendation that the time is now long overdue for the remedial action to commence. Further delays can only compound the already poor situation which is strangling the development of one of the Pacific islands major ports.

We suggest that this development be undertaken by phases as follows:

Phase 1	-	Fagatogo business area.
Phase 2	-	Pago Pago Park By-pass.
Phase 3	-	Lalopu'a to Canneries.
Phase 4	-	Pago Pago Park to Lalopu'a.
Phase 5	-	Extension of Phase 1 past Burns Philp main store.
Phase 6	-	Pago Pago to Fusi.

Intersection upgradings are also proposed at the following locations;

A] Y Intersection at Utulei.

B] Rainmaker Hotel turn-off.

C] Samoana High School roads.

D] Motor Pool Road.

E] Hospital Road.

These phases are shown in Fig. 1 and proposals are detailed by phases herein.

PROPOSED ROADING DEVELOPMENT AND UPGRADING

PROPOSED ROADING DEVELOPMENT & UPGRADING & COST ESTIMATES

An analysis and updating has been made of the "Pago Pago Harbor Corridor Transportation Study" by Enplan Corporation, 1974. The basic conditions and problems at that time still exist today and are compounded by the increase in the number of vehicles combined with very little upgrading of road facilities in the intervening period. It is now quite common to see traffic delays originating in the Fagatogo area and extending from Pago Pago to Utulei, several times each day.

The Enplan Corporation's report made several alternatives proposals for re-development of the harbor area for each of which the "pros and cons" were fully elaborated upon. An appraisal of these, again in the light of present conditions, combined with the American Samoa Government's wishes and our firm's local knowledge, has led to our recommendation that a six phase development be undertaken as follows:-

	Description	Cost**
PHASE I	Design and construct a one-way system extending from the harbor terminal to the yacht basin.	$1,500,000
PHASE II	Design and construct the Pago Park by-pass route. Route behind the Korea House is the most favoured.	$900,000
PHASE III	Design and construct the three lane roadway facility and cannery parking area serving the canneries/marine railways/power station.	$1,200,000
PHASE IV	Design and construct new widened roadway section with curbs and sidewalks between Pago Park and Lalopu'a.	$700,000
PHASE V	Extend the one-way system from the yacht basin to Autapini.	$1,200,000
PHASE VI	Replace Vaipito and Lao Lao Stream bridges in the village of Pago Pago if not accomplished previously as an emergency measure.	$550,000
	Rebuild old Pago Pago Road	$450,000

Intersection upgradings are also proposed at the following locations;

A]	Y Intersection at Utulei.	
B]	Rainmaker Hotel turn-off.	Cost
C]	Samoana High School roads.	$30,000 each
D]	Motor Pool Road.	$150,000 TOTAL
E]	Hospital Road.	

It is recognized that, due to the high total cost of the six phases, it may be some time before full implementation of all the scheme can be completed, it is imperative, however, that planning proceed as soon as possible, including at least preliminary design of all phases so that steps can proceed for acquisition of land whilst it is still relatively available and so that accurate costing estimates can be made. An adequate right of way survey and acquisition is essential as soon as possible.

Steps required to qualify for Federal Highway funding for each phase are;

1. Adoption of the scheme as proposed.
2. Holding of a public route hearing.
3. Preparation of an environmental impact statement and holding of a public environmental hearing.
4. Preparation of preliminary design plans and holding a public design hearing.
5. Preparation of final design and right-of-way plans.
6. Finally advertise and let construction project.

A detailed analysis of each phase follows herein. No suggested time scale is given in this report, the need for these improvements is long overdue and it is recommended that work on each phase commence as soon as funds can be made available and as a matter of high priority.

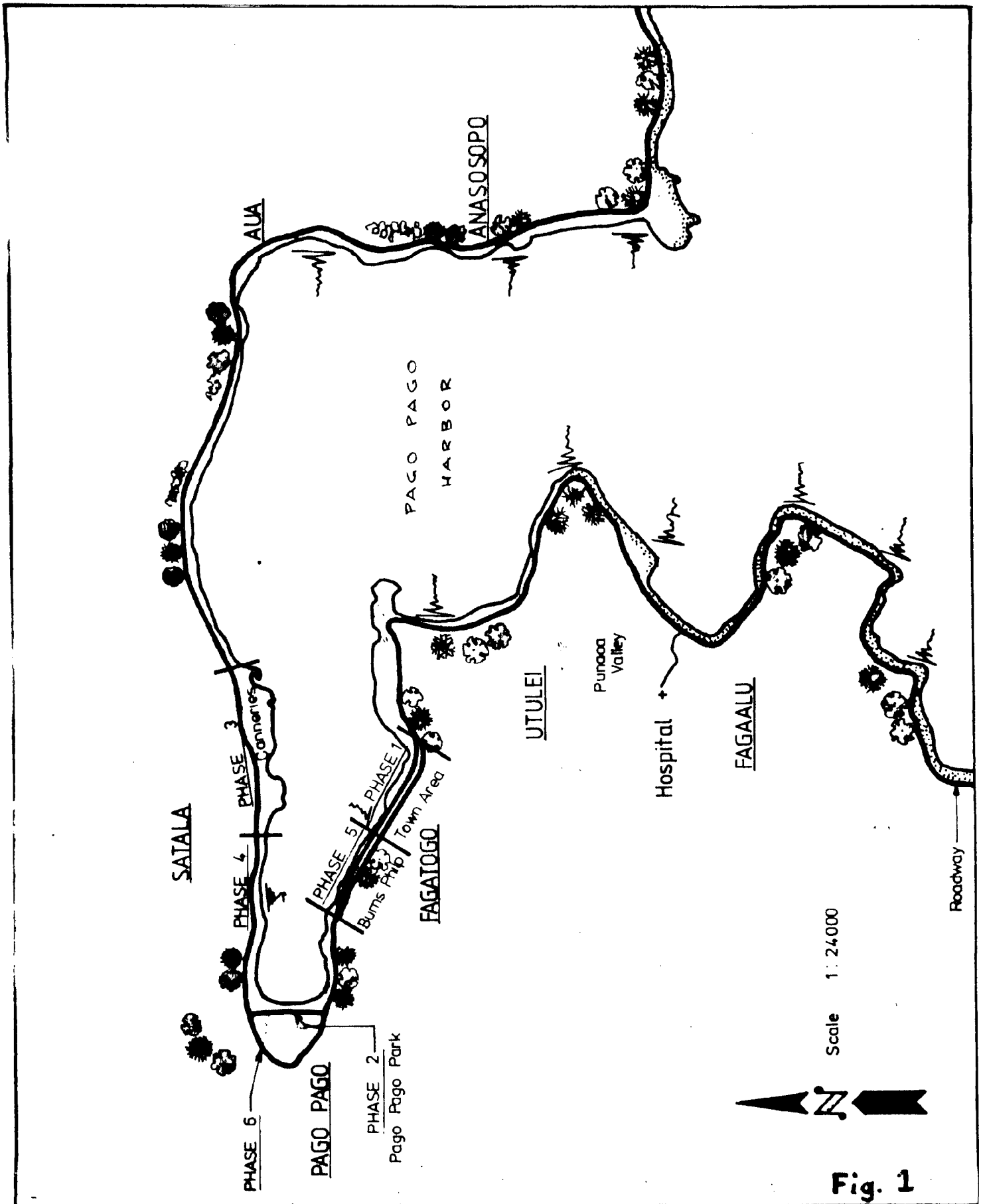


Fig. 1

PROPOSED PHASED DEVELOPMENT.

G.M. MEREDITH & ASSOCIATES
ENGINEERS ARCHITECTS & PLANNERS

PHASE 1

FAGATOGO BUSINESS AREA

PHASE 1

FAGATOGO BUSINESS AREA

A] Existing Situation.

By far, the major constraint to traffic flow around the harbor is the Fagatogo area. This area constitutes the main concentration of commercial activity, government offices, banks, etc.

As previously mentioned, traffic delays frequently originate here and then extend for a considerable distance either side into Pago Pago and Utulei. Because of this and the current relative availability of land, this area, this area has been accorded first priority and has been designated as Phase 1.

B] Proposed Action.

We have prepared a three dimensional model of the area which is now held by the American Samoa Government; upon this is shown our recommended proposals which conform closely to the 1974 study's Plan B - an extract of which is included (Appendix 1).

C] CONCEPT of this scheme is shown in Figures 2 and 3 and in full detail on the three dimensional model, the intention being to create a one-way traffic flow pattern. It is proposed that a new two lane road be constructed exclusively for the use of westbound traffic (ie. towards Pago Pago village). This road would depart the existing road near the existing entrance to the main wharf, thence pass through the Meadow Gold building (which would be the only major building requiring demolition) and thence along the existing harbor frontage, between the market and Office of Marine Resources building and then temporarily rejoin the existing road opposite the yacht harbor (See Phase 5 for future extension).

A two-way connecting road would be constructed opposite the existing road at the Western end of the Fagatogo Malae and the existing road between the market and the

market taxi stand would be made a two-way flow with suitable channelization at intersections and the taxi stand. The purpose of these two-way flow cross connections is to create a series of smaller circular flow patterns, thus minimising the distance required for a vehicle to reach any particular point and thus minimise the slight inconvenience inherent in a one-way flow.

The existing two lane main road would become a one way flow Eastwards (towards Utulei).

The direction of traffic around the existing one-way road South of the Fagatogo Malae would be reversed and access to the Police headquarters and Lumana'i building reorganised. The Lumana'i building is the main bottle neck causing current congestion.

A full system of physical traffic channelization would be employed and there should be no requirement for more sophisticated traffic control devices, such as traffic lights, in the foreseeable future. It is our aim to keep all such devices as simple as possible to avoid driver confusion, expense and high maintenance.

D) Advantages of a One-way flow.

1. Assists Capacity, Safety and Performance.
2. Pairs of streets provide essentially a divided highway.
3. Elimination of Medial Friction.
4. Minimizes delays and conflict from turning vehicles.
5. Pedestrian crossings more orderly.
6. Speed control more easily maintained.
7. Emergency lanes can be established easily.
8. Delays the need for traffic signals.
9. Buildings, some of historic importance, trees and roadside structures can be retained.
10. Can fit interim program without loss of capital outlay.
11. Provides additional parking and ease of access to parking.
12. Provides access to future building development.

E] Particular advantages of the proposed scheme are:

a. Preservation of existing commercial areas and historic structures.

b. Additional parking area gained.

c. Delays need for traffic signalization.

d. No commercial or residential relocation costs.

e. Water front area enhancement.

f. Capacity requirement gained between Lumana'i and Market place.

g. By-passes Lumana'i restriction.

h. Good access to port & Lumana'i parking.

i. Museum Park vista enhanced.

j. Few buildings removed.

k. Improved circulation for Fono, new development area and market.

l. Provides by-pass for ceremonial occasions in front of Fono.

m. Has received Fono approval in principle.

n. Provides a basis for a general upgrading of the Fagatogo commercial area and allows for better implementation of an integrated town plan.

F] Some disadvantages are:

a. Removal of Meadow Gold Building which has little remaining useable life.

b. Loss of some of the port's container space.

c. Segregation of existing market buildings.

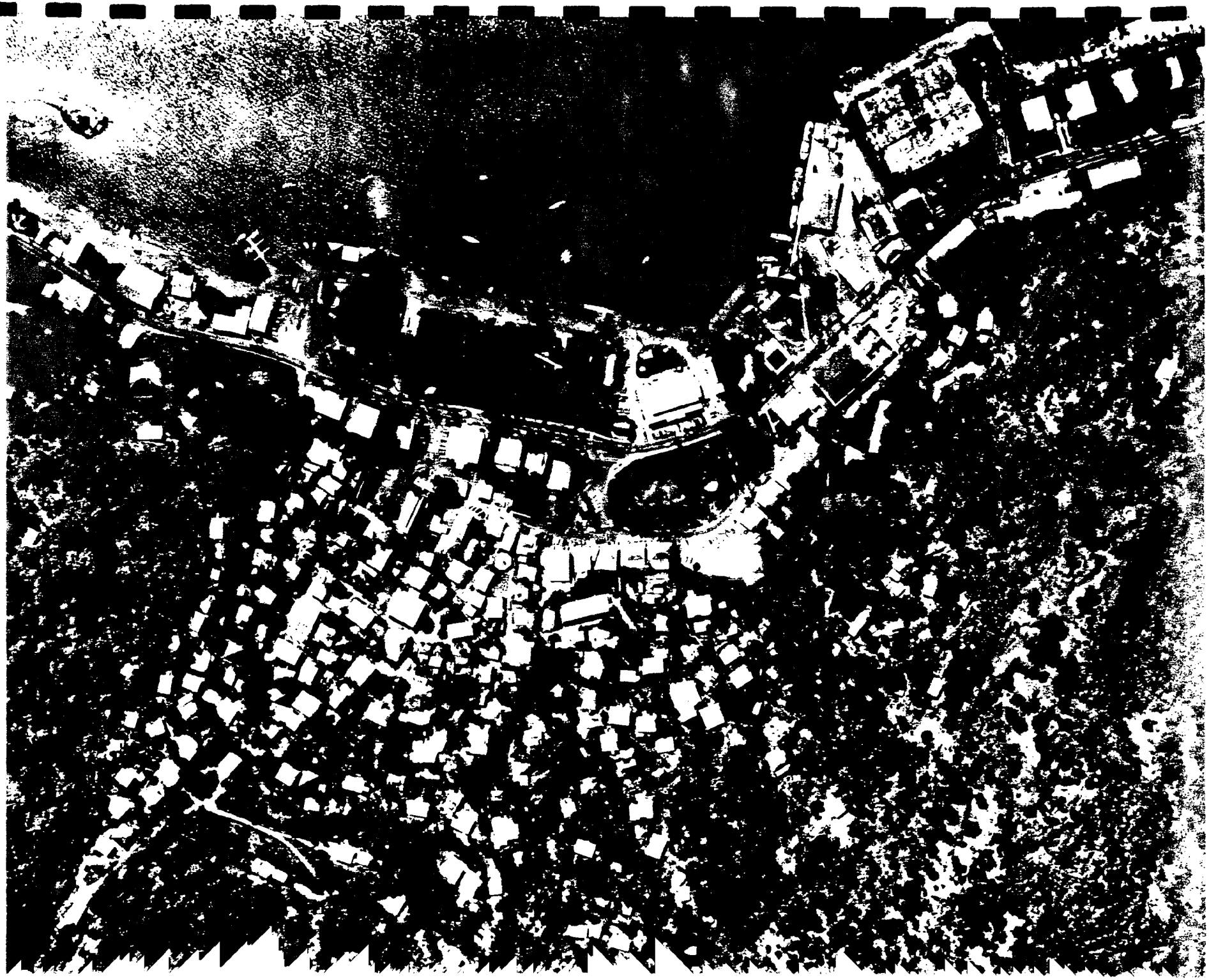
It is felt that these disadvantages are of a relatively minor nature apart from loss of container space, however, this situation is currently being alleviated by extension of the main wharf and storage area towards the East.

Further environmental and planning considerations are shown in Appendix 2, "Extracts from Chapter VII of the "Conceptual Physical Plan, Pago Pago Harbor."

G) Cost Estimate.

Preliminary estimate of cost is as follows:

New two lane roadway	- 2,550'	@	$260/ft	663,000
Reconstruct existing road	- 1,800'	@	$431/ft	776,200
Culverts over two streams	- 120'	@	$ 90/ft	10,800
Demolish Meadowgold Building etc.				50,000
			TOTAL -	$1,500,000



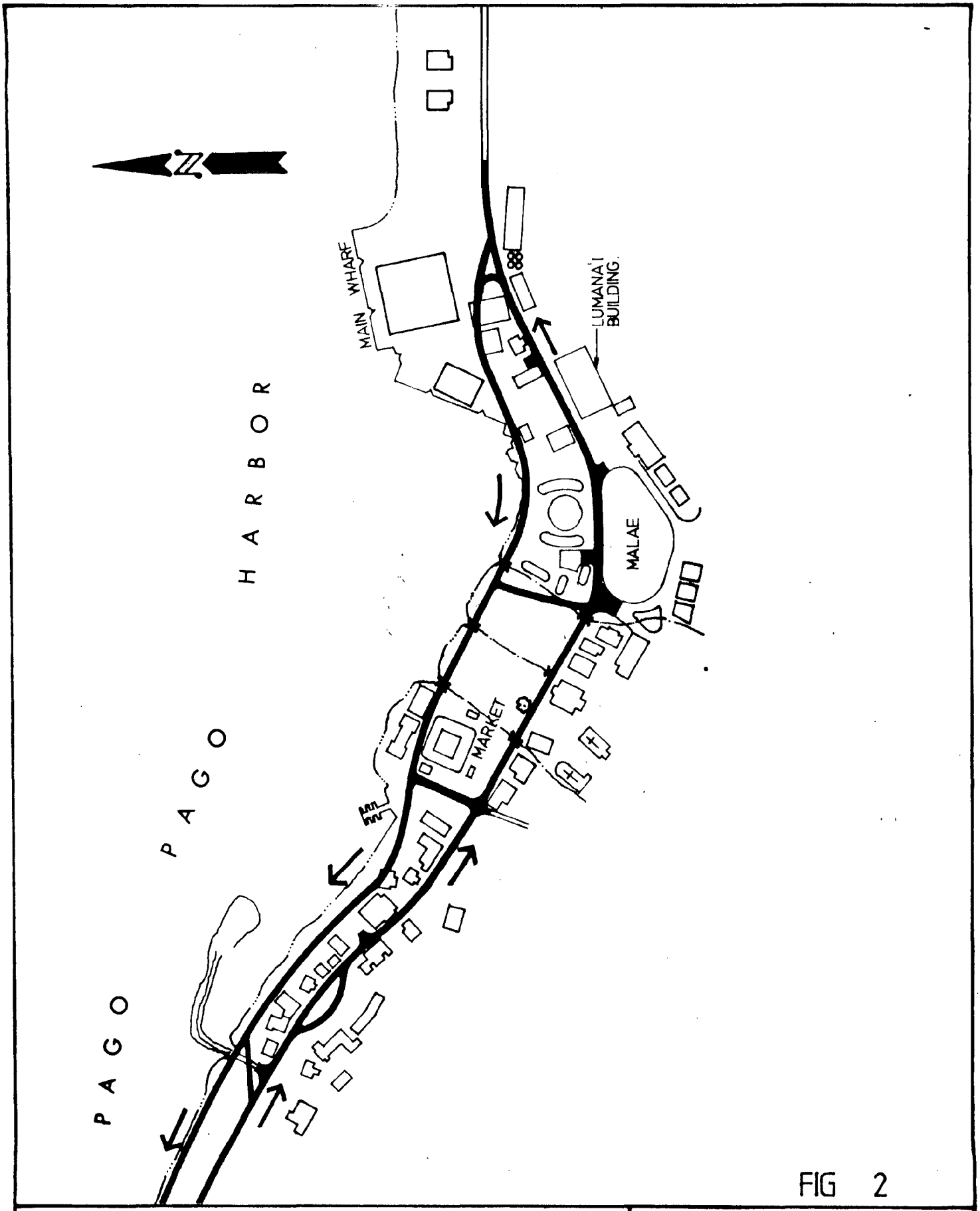


FIG 2

PHASE 1 FAGATOGO TOWN AREA

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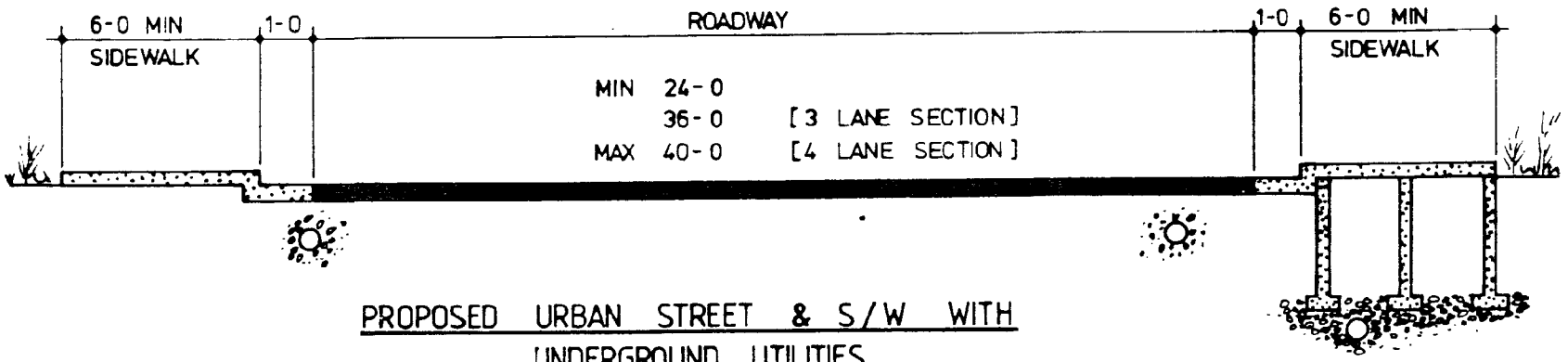
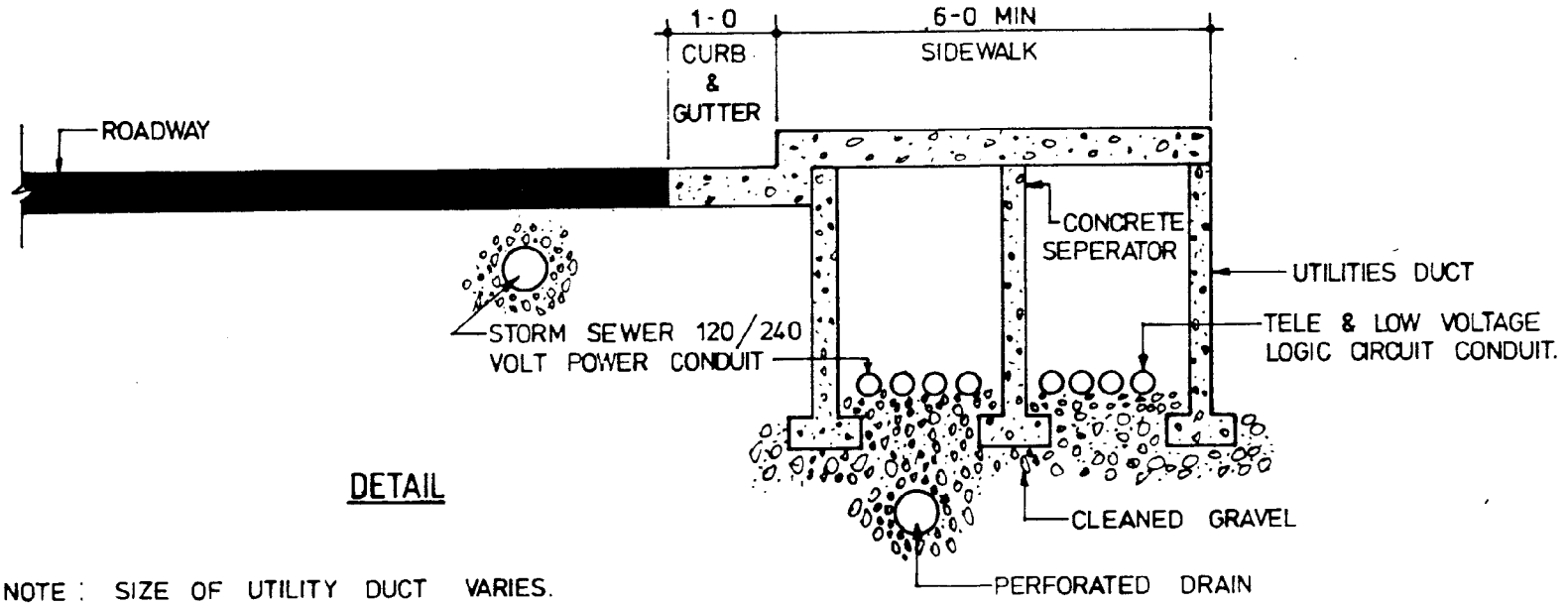
ENGINEERS ARCHITECTS & PLANNERS.

PHASES 1, 2, & 3



PROPOSED URBAN STREET & S/W WITH UNDERGROUND UTILITIES



DETAIL

NOTE : SIZE OF UTILITY DUCT VARIES.

FIG 3

G.M. MEREDITH & ASSOCIATES
ENGINEERS ARCHITECTS & PLANNERS

PHASE 2

PAGO PAGO PARK BY-PASS

PHASE 2

PAGO PAGO PARK BY- PASS

A] BACKGROUND.

The Pago Pago Park By-pass concept evolved from several factors. First, the chiefs and officials in the village of Pago Pago desire to locate the main traffic on a facility by the harbor. It is their hope that congestion, hazardous conditions for their residents, noise, and other detrimental aspects of heavy traffic carrying facilities could be alleviated. Also, in terms of shortening the route between the main dock and the canneries, significant long-term travel time savings can accrue. Finally, it is very probable that major facilities will be built for the Department of Public Safety and direct, immediate, and safe access for their emergency vehicles requires the consideration of a route built to higher standards than that presently located through the village of Pago Pago.

Originally, it was intended that Phase 2 would be accorded a lower priority however, the bridge has already been designed and materials for this acquired,hence there is now relatively little work required so that implementation can be undertaken and the consequent benefits felt. Increasing importance of Pago Pago Park as a recreational facility and its importance as the principal site for flag day celebrations and other major public gatherings also necessitates early implementation of this phase so that integrated development of the park can take place.

B] THE EXISTING ROADWAY.

While the new by-pass will remove significant volumes of traffic from the old roadway, the old roadway will require substantial investments to bring the two bridges up to safe standards and, also, to ensure that the ever increasing commercialization of the area and the traffic it produces can be accomodated. On completion of the by-pass, traffic volumes will drop on the old road. However, by 1990 the old road is likely to be carrying a volume almost equal to half its present volume, if more of the area is given to commercial uses, this volume could increase substantially and hence this section of road has been accorded Phase 6 priority.

C] CONCEPT.

It is envisaged that a gently curving road be constructed some two hundred feet inland from the shoreline and crossing Vaipito Stream via a bridge. The road would meet the existing main road at channelized intersection. (See Fig. 4).

The typical cross section would be a two lane carriageway with concrete curbing and a footpath at least on one side of the road. (See Fig. 5)

The alignment chosen runs behind Korea house, which provides a superior intersection than if the road was immediately adjacent to the shoreline and also provides a "green belt" of land between road and shoreline. The surroundings of Korea House are also enhanced by maintaining a foreshore frontage. It has been proposed, however, that the road should be on the shoreline to provide the maximum possible space for park development althouth with consequent loss of the advantages mentioned above. Before a final decision on alignment can be made, it will be necessary to create a full scheme plan for the ultimate development of Pago Pago Par,.

D] COSTING.

1,280' of new road @ $260/ft.	332,800
70' x 40' new bridge over Vaipito Stream @ $203/s.f.	567,200
TOTAL	$900,000

Some work has already been done on design and construction of the bridge across Vaipito Stream and, depending on the extent of this, will effect the cost of the bridge. It is also our belief that the structure may be excessively elaborate in relation to the size of the stream and it may be practical to reduce the scope of this structure considerably. Further investigation is required before a decision can be made on this.

At this stage, therefore, the cost of the bridge structure has been allowed in the estimate as the highest value only and considerable cost reductions are possible.

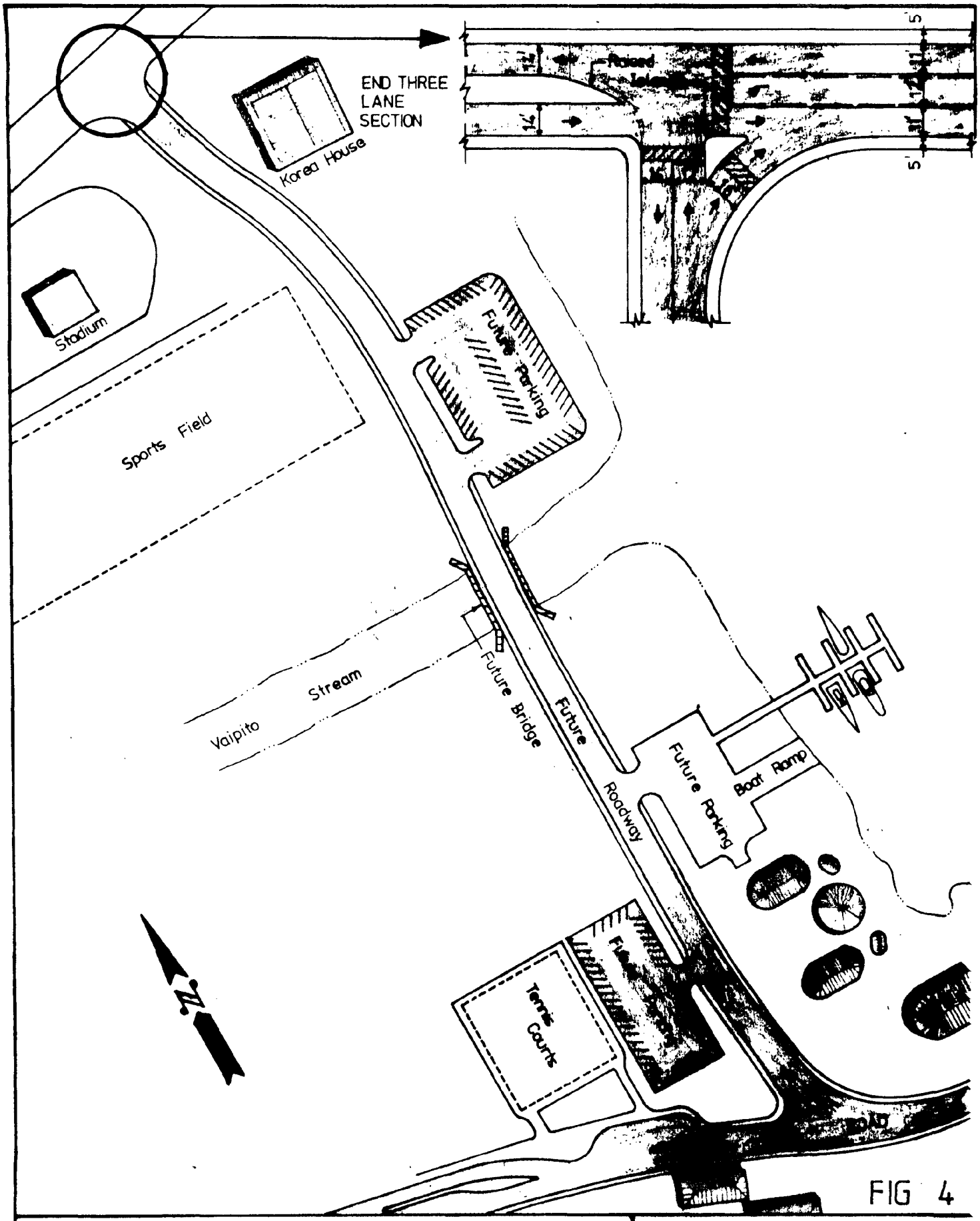


FIG 4

PHASE 2 PAGO PARK BY — PASS

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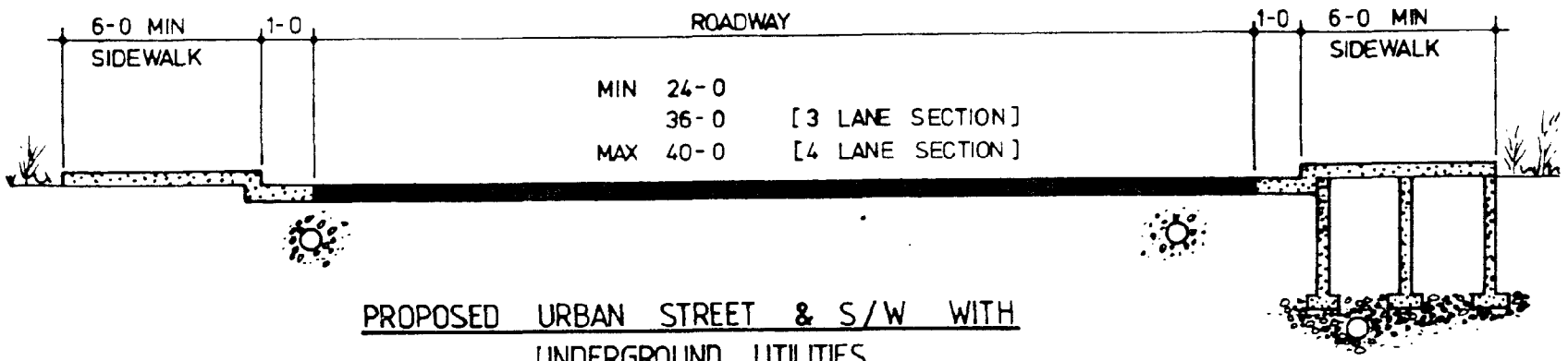
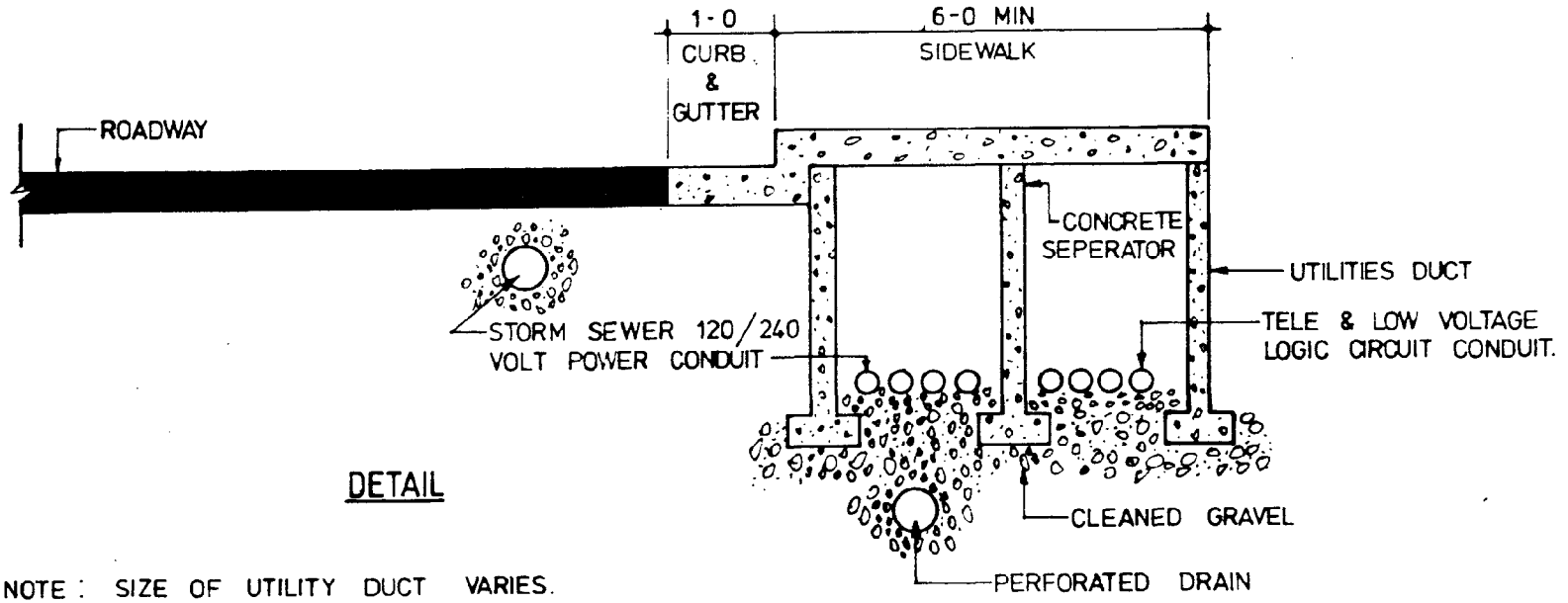
ENGINEERS ARCHITECTS & PLANNERS



PROPOSED URBAN STREET & S/W WITH UNDERGROUND UTILITIES



DETAIL

NOTE : SIZE OF UTILITY DUCT VARIES.

FIG 5

G.M. MEREDITH & ASSOCIATES
ENGINEERS ARCHITECTS & PLANNERS

PHASE 3

LALOPU'A TO CANNERIES

PHASE 3

LALOPU'A TO CANNERIES

A] BACKGROUND.

Presently, the main roadway passing in front of the power plant and canneries is a two-lane facility, slightly more than twenty feet wide and limited in capacity due to parked vehicles, numerous left turn conflicts and unregulated bus stops. Large numbers of employee owned vehicles park along the road frontage during working hours and large commercial vehicles are frequently entering and leaving the Van Camp and Starkist premises.

The current situation is very disorganized, with vehicles frequently turning across the path of through traffic and frequent minor accidents result.

The economy of American Samoa is very highly dependant on the Tuna industry and the economic benefits of upgrading this area are considerable.

B] CONCEPT.

This situation can be alleviated by restricting the number of points where cannery vehicles enter the traffic flow and channelising these entries to safely merge the traffic with the through flow. Pedestrian safety is also enhanced by the provision of physical pedestrian protection.

To improve both capacity and safety, the widening of the roadway to a three-lane section is proposed (as shown in Fig. 6). In front of the power plant, where adequate off-street parking exists, a three-lane section is proposed. The sketch also indicates the possible locations for bus turnouts.

At the canneries, however, off-street parking is very limited and the opportunity for providing additional parking on private land is unrealistic. Consequently, the proposed three-lane section passing in front of the canneries has been modified to include additional, formal, regulated parking.

Shown is a three-lane section with right angle parking provided on a removed portion of the roadway. Being removed from the main roadway, little interference will be encountered and, with the middle lane handling left-turning traffic, the facility is adequate to handle projected demand. Its cross section is shown herewith.

C] COSTING.

1.	3,480' 3 lane existing as 2 lane @ $300/l.f.	1,044,000
2.	Retaining wall	156,000
	TOTAL	$1,200,000

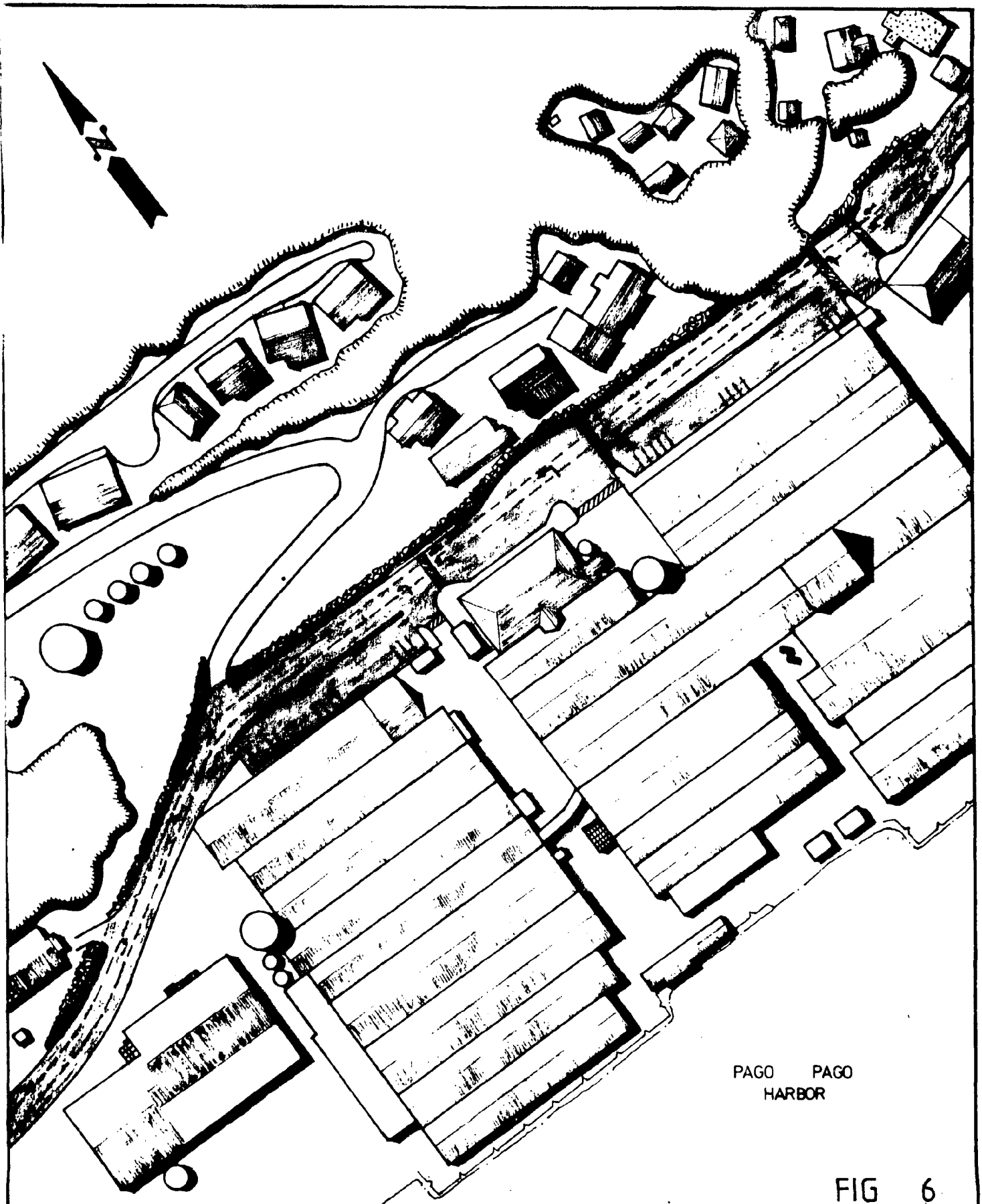


FIG 6

PHASE 3	VAN CAMP/STARKIST CANNERIES	G.M. MEREDITH & ASSOCIATES ENGINEERS ARCHITECTS & PLANNERS

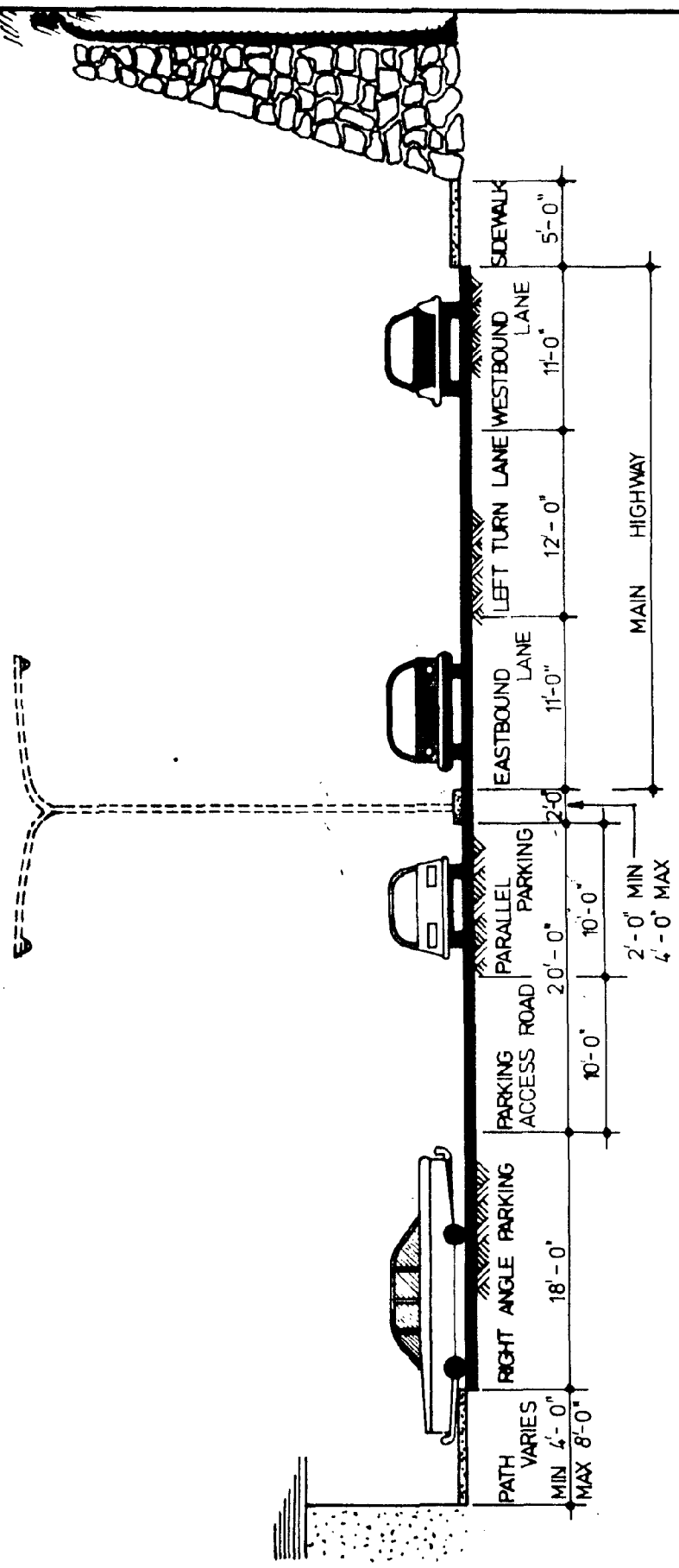


FIG 7

PHASE 3 CANNERY ROADWAY CROSS SECTION

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ENGINEERS ARCHITECTS & PLANNERS

PHASE 4

PAGO PAGO PARK TO LALOPU'A

PHASE 4

PAGO PAGO PARK TO LALOPU'A

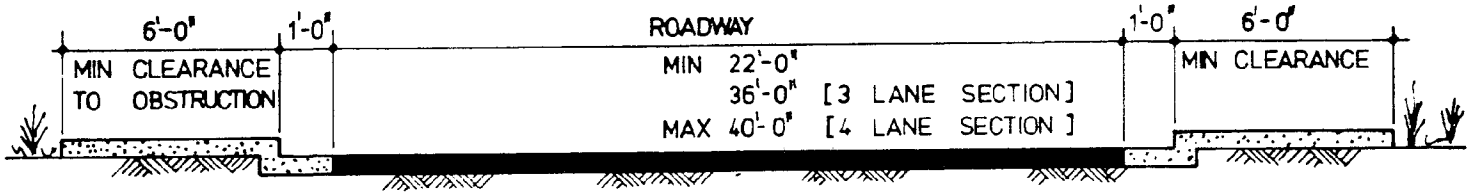
Although traffic volumes, both present and future, are relatively high on this segment of the corridor route, the absence of significant commercial or industrial facilities and lack of large traffic generators impacting on through traffic or creating marginal friction of this link precludes major roadway expansion. Consequently, the only proposed work is limited widening of the existing roadway by the incorporation of sidewalks, curbs and gutters to provide better guidance and control of traffic and improvement of pedestrian safety. Also, the location and construction of formal bus turnouts is recommended.

A typical proposed cross section is shown in Fig. 7. Detail design would be undertaken at time of implementation.

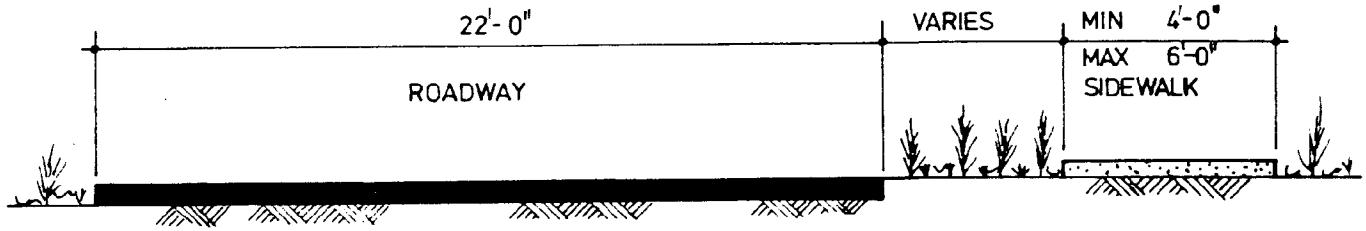
COSTING.

1960' of road upgrading to incorporate curb and footpaths and bus turnouts	-	$700,000

PHASES 4 & 6



PROPOSED URBAN STREET & S/W SECTION



EXISTING URBAN STREET & S/W SECTION

FIG 8

G.M. MEREDITH & ASSOCIATES
ENGINEERS ARCHITECTS & PLANNERS

PHASE 5

EXTENSION OF PHASE 1 PAST BURNS PHILP MAIN STORE

PHASE 5

EXTENSION OF PHASE 1 - PAST BURNS PHILP MAIN STORE

A) BACKGROUND.

This scheme provides the ultimate extension of the one-way couplet further Westward from the yacht basin and is shown on Fig. 8. This system eliminates the problem area in front of Burns Philp main store, while increasing the available parking area. The extension of this portion is not essential until about 1990 on present traffic projections and consequently is accorded a low priority.

Whilst the area does not contribute greatly to major traffic restrictions, the accident rate is high, due to turning vehicles and from a safety viewpoint it may become necessary to improve the priority accorded.

Land is currently readily available and action should be taken to reserve this simultaneously with land required for Phase 1. Hence, it is desirable to undertake the detailed planning of this phase considerably earlier than the likely time of execution of the work.

B) CONCEPT.

The new two lane shoreside roadway, to be created in Phase 1, should be extended from its temporary junction, opposite the yacht harbor, to again intersect the existing road opposite Patu's store. The temporary junction will then be removed and replaced by the interconnections shown (Fig. 8).

This lessens the problem of vehicles manouvering in front of Burns Philp, which is the main factor behind this area's poor safety record, by creating a two-lane, one-way flow (towards Utulei) along the existing road.

The considerable area of land created between the two carriageways may be suitably developed by landscaping, car parks etc, and assist in beautifying the foreshore of the bay.

COSTING.

1.	2,000' upgrading of existing road @ $371	742,400
2.	1,760' new 2 land roadway @ $240	422,400
3.	Carparks etc.	35,200
	TOTAL	$1,200,000

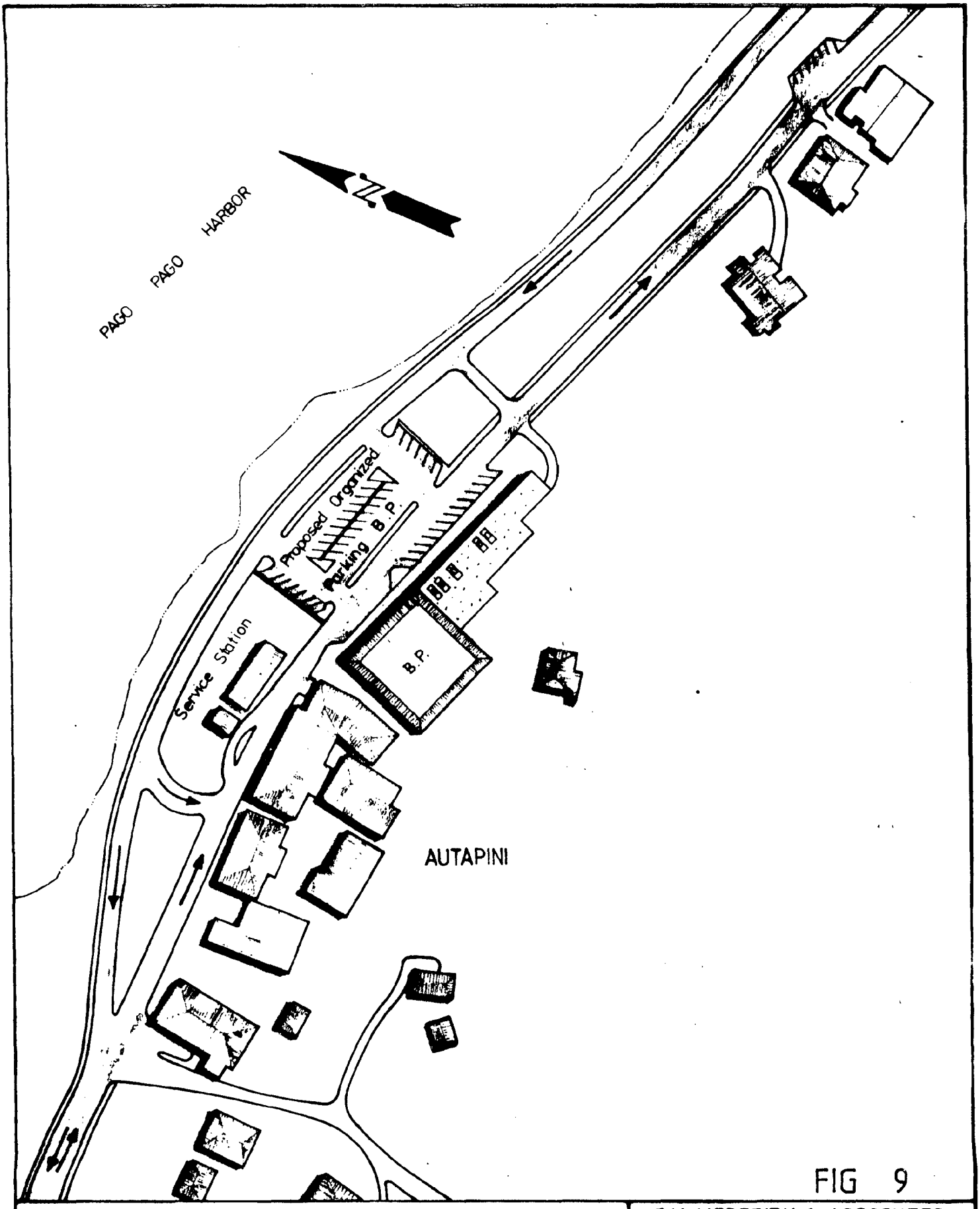


FIG 9

PHASE 5 BURNS PHILP FRONTAGE

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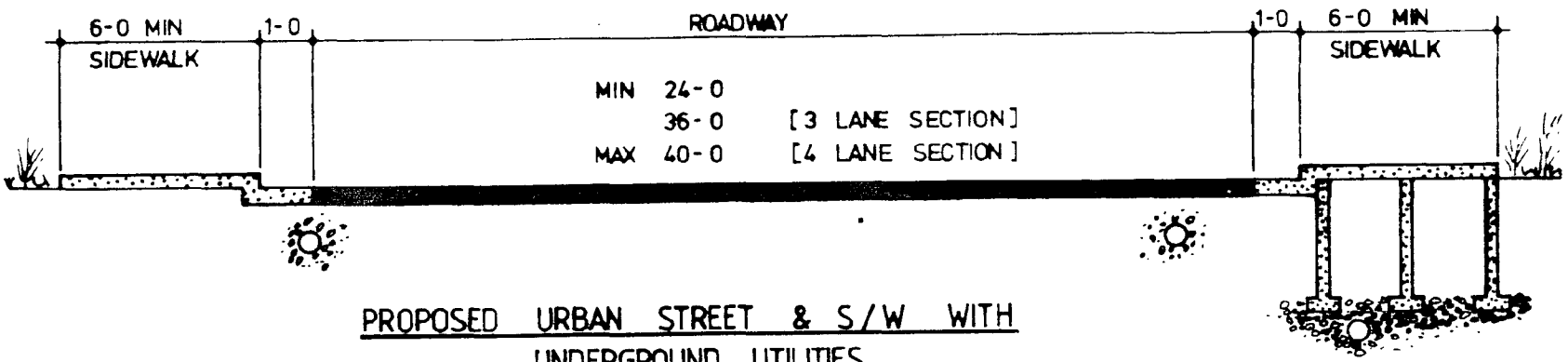
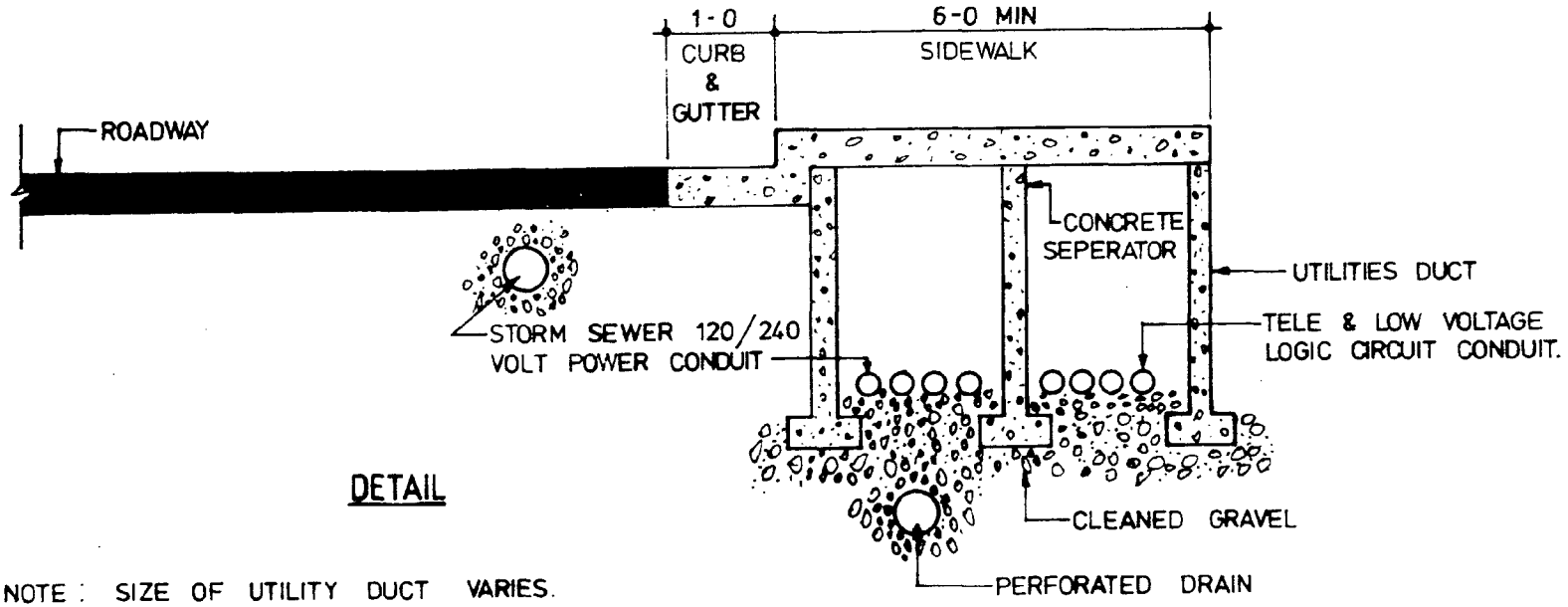
PHASES 1, 2, & 5



PROPOSED URBAN STREET & S/W WITH UNDERGROUND UTILITIES



DETAIL

NOTE : SIZE OF UTILITY DUCT VARIES.

FIG 10

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ENGINEERS ARCHITECTS & PLANNERS

PHASE 6

PAGO PAGO TO FUSI

PHASE 6

PAGO PAGO TO FUSI

A) BACKGROUND.

By the creation of Phase 2 (Pago Pago Park by-pass road) the existing road through Pago Pago village will experience considerable drop in traffic. The road at present is poorly aligned over bridges crossing Vaipito and Lao Lao stream and additionally both these bridges are too narrow and in generally, poor condition.

B) CONCEPT.

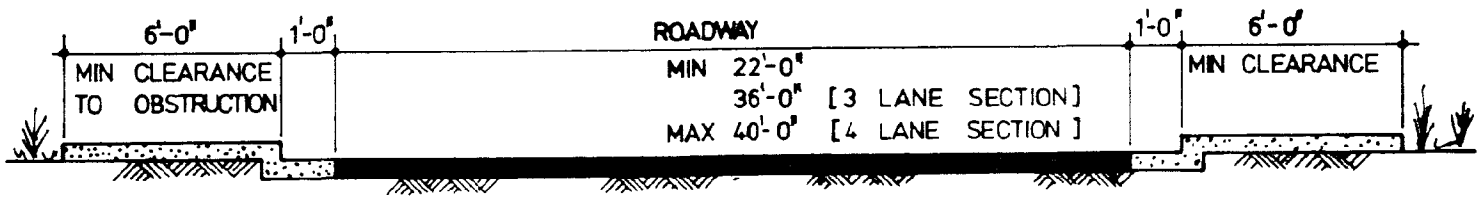
It is intended that with the creation of Phase 2, no work be undertaken until the area shows signs of traffic recovery. There will be a slight depressive effect, particularly on the commercial area, due to the loss in traffic and some adjustment of the areas role will occur. The benefits to the residential quality of the area will be significant and pedestrian safety will be enhanced by the reduced traffic.

When traffic warrants the road alignment should upgraded to adequate standards and the bridges replaced by new structures adequate in size and alignment.

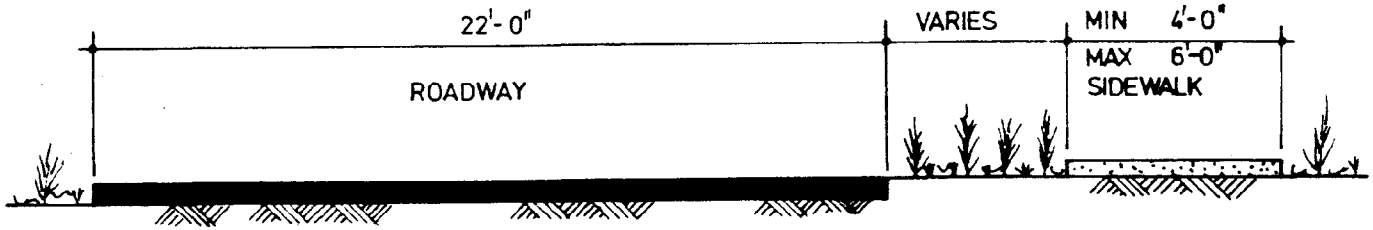
C) COSTING.

2,000' road upgrading @ $225/Ft.	450,000
bridge over Vaipito Stream	350,000
..... Lao Lao Stream	200,000
TOTAL	$1,000,000

PHASES 4 & 6



PROPOSED URBAN STREET & S/W SECTION



EXISTING URBAN STREET & S/W SECTION

FIG 11

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UPGRADING OF TEE INTERSECTIONS

UPGRADING OF TEE INTERSECTIONS.

Outside the scope of the phased development scheme, but nevertheless desirable for a complete corridor upgrading and improved safety are formal bus turnouts and improvement by channelization of the intersections of Route 1 with:

a. Y Intersection at Utulei.

b. Rainmaker Hotel.

c. Samoana High School roads.

d. Hospital road.

e. Motor Pool road.

The first three should be afforded high priority and undertaken as soon as funding becomes available as separate small projects.

COSTING.

It is estimated that the cost for intersection would be $30,000.

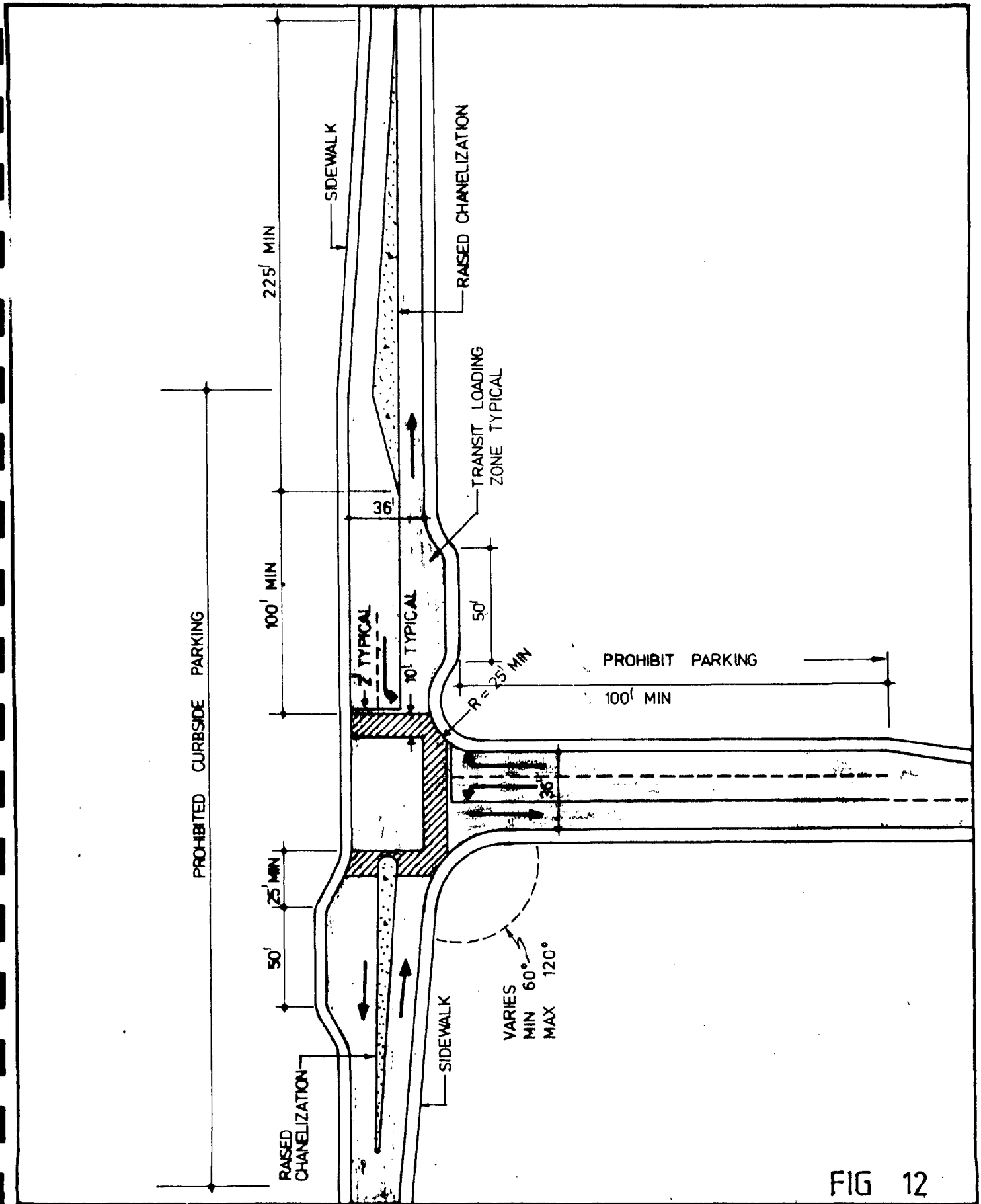

FIG 12

TEE INTERSECTION
HOSPITAL — MOTOR POOL — SAMOANA HIGH SCHOOL

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APPENDIX

APPENDIX 1.

EXTRACT FROM "PAGO PAGO HARBOR CORRIDOR TRANSPORTATION STUDY", ENPLAN CORPORATION (1974).

Description:

Roadway junction at the main dock. New Route located between Musuem, Office of Tourism, Fono and Sami.

Comment:

Because of Plan A's adverse roadway alignment with respect to the proposed park between the museum and the Office of Tourism a route that entirely mitigates this consequence was deemed mandatory. Plan B realigns the route so that the junction with existing road occurs in front of the main dock. It's advantage over Plan A is that it entirely by-passes the park. Indeed, it makes additional space available for the park .....space that can be easily beautified. As a positive consequence, it assists in defining the limits of the park, extends the pathway and people oriented aspects of the park, and otherwise serves to complement the area by providing a larger vista for both park users, pedestrians and motorists driving past the area.

Disadvantages with Plan B include the removal of the Meadow Gold building ..... a structure with little remaining usable life.....and the loss of a small portion of needed container handling space between the main road and the dock warehouse. Other but minor, disadvantages include the inability to directly enter any of the bank parking lots from the east, and the possible impacts of noise and other vehicular pollutants at the museum.

Modest changes in alignment at the main dock can be made in order to reduce the negative aspects of this plan. These changes can be fully explored in a preliminary design phase.

APPENDIX 2

May 15, 1981.

MEMORANDUM FOR RECORD.

re: Meeting re: PAGO PAGO HARBOR ENERGY CORRIDOR & LAND USE STUDY.

Discussants:

George Meredith.
James T. Yamamoto.

Discussion:

1. Items relating to the Port of Pago Pago - Commercial Harbor.

   The land requirements for the commercial harbor area of Pago Pago necessitates reservation lf land area - sami-side of the highway - as follows:

   From the interisland dock to the existing fuel dock - this concept was discussed with the Port Administration officials - Maiava and Herb concurred with this concept.

2. Items relating to the Down-town Area.

   The Fagatogo area is designated as the commercial and civic center of the island of Tutuila. The area is generally bounded by the two historic buildings to the Farmers Market.

3. Items relating to the Highway.

   After review of the highway design capacity - the existing ADT is less than 8,000 vehicles per day (1980). The problem of highway capacity is roadside friction and not roadway capacity. Accordingly, two options are generally considered or will be under study: A one-way pair per previous highway corridor study; and a two-way by-pass (following the road around the existing malae). Also urban design standards are required such as building setback, off street parking, reduction of curb cuts and the like.

4. Items relating to the Energy Corridor and Relocation of the Fuel Pier.

   Two general propositions were discussed:

   a) Move existing fuel pier away from the Convention Center towards the main wharf.

   b) Locate a single point mooring buoy off shore, perhaps near the existing Tank Farm at Utulei.

The energy corridor to service the Satala Power Plant is contingent upon the need to maintain this station. This contingency is based on the fact that the plant may sell steam to the canneries - if not, this site is not appropriate for a power generation plant. Pherhaps relocation outside of Pago Pago Harbor would be appropriate.

MKGK/Y, Inc: jty

APPENDIX 2 (CONTINUED)

"EXTRACTS FROM CHAPTER VII OF THE "CONCEPTUAL PHYSICAL PLAN, PAGO PAGO HARBOR"

(American Samoa Coastal Management Program, Development Planning Office American Samoa Government, M.K.G.K./Yamamoto Inc., 1981) which affects the preparation of a master plan for the Fagatogo "Down Town Area".

A. Principal Issues:

Issues Discussion - trends 1, 2 and 3.

1). The first is the changing role of the commercial port with increasing emphasis being placed on transhipment and its economic development potential. The second trend is the encouragement of fisheries development by the territorial government and its attendant impact on available maritime facilities. Thirdly, the Fagatogo commercial area is undergoing a basic role change with less emphasis in retail trade and more emphasis on business services.

Trend 3:

2). The environmental setting in the area is becoming less attractive as well in light of improvements found in other shopping areas; traffic congestion deteriorated structures, limited landscaping of available open spaces, mixed land uses all contribute to a general appearance of disrepair and neglect. The trend of commercial uses in Fagatogo area is shifting towards specialty shops, food services and business services; and, existing facilities do not accommodate an adjustment to this trend.

B. Harbor Land Use Objectives:

1) Expansions of the commercial port and terminal to accommodate alternative roles in support of overall economic development of the territory.

2) Relocation of the petroleum dock and/or off loading of petroleum products out of the existing fuel pier adjoining the Rainmaker Hotel.

3) Establishment of a regional commercial center of the territory and of the South Pacific at Fagatogo.

4) Enhancement of the hotel/convention complex serving the South Pacific business community as well as tourism.

C. Harbor Land Development Strategy:

Major catalysts for harbor land development are present today. The proposed establishment of a government administrative center at Utulei, extension of the main wharf to add another berth, construction of a commercial fishery dock and other proposals provide tools for directing, altering and improving developmental patterns within harbor lands and adjoining areas.

D. Conceptual Plan Elements:

1) Land Use Elements:

a) Expansion of Utulei Beach Park.

b) Relocation/Conversion of the Petroleum Dock.

c) Commercial Port Expansion.

d) Interisland Terminal and Docks.

e) Fagatogo Business Center.

f) Small Boat Marina and Service Center.

2) Land Management Element:

Land Management Policies:

a) General Site Plans-

Three general site plans are required to guide the development of harbor lands. These site plans cover the following areas:- The commercial port area; the Fagatogo Business Center; and the Pago Pago Territorial Park area. General site plans are necessary to guide site improvements and to assure compatible development of adjoining areas. These general site plans should minimally include circulation and parking, land use arrangement and use density, and general location of utilities (energy corridor if appropriate).

3) Circulation Concepts:

a) Future Street Lines:

1) Right-of-Way and Intersectional Design at Utulei.

The expansion of the beach park and the establishment of a government administrative center at Utulei consolidation major offices may require major highway improvements. These improvements must be designed to handle the traffic generated by these proposals in the future. In particular, left-turn movements northerly from Nu'uuli-West Tutuila may require additional right-of-way to channelize traffic. Moreover, the existing park bays at Utulei Beach Park may require redesign to lessen roadway friction and facilitate traffic movement.

2) The Malaloa - Fagatogo Segment.

This segment is the most congested along the bayshore highway. Moreover traffic separation is limited with pedestrians and parked vehicles sharing the right-of-way. Additional right-of-way is required to separate traffic as well as provide more roadway pavement to moving lanes of traffic, especially laong the Malaloa portion of this highway.

b) Other Circulation Improvements:

1) Realignment of the highway segment adjoining the commercial port is desirable in light of required backup space and the need to improve circulation into and within the terminal area. Realignment of the highway would provide for better vehicle and pedestrian separation as well.

2) Controlled loading zones along the highway are required to reduce roadway friction and facilitate traffic movement. Loading bays are preferable if right-of-way permits.

3) Some consideration of raised median strip from the Rainmaker Hotel to Malaloa should be included in the realignment and widening of the main highway. A raised median will provide space for landscape treatment, dramatically altering the existing character of the highway especially within the Fagatogo Malae area.

4) Highway improvement, expecially the South bayshore segment of the highway, should include curbs and gutters. This minor improvement will help separate traffic and limit uncontrolled turning movement into and out of adjoining parcels.

E. Plan Implications:

Probable Adverse Effects Which Cannot Be Avoided:

The land use proposes will indirectly result in relocation and/or displacement of households and businesses, alteration of the shoreline and may shift potential environmental pollution to other locations within the harbor. The scale and duration of these effects are contingent upon specific project actions that seek to implement the plan.

a) Alterations of the Shoreline:

1) Energy Facilities:

A new petroleum dock may be proposed to replace the existing dock at Fagatogo, however, an off shore single-point mooring facility may be substituted as a feasible alternative. An LPG facility with docking facility may be proposed.

2) Harbor Facilities:

a) Dock Extension, Commercial Port:

A new concrete wharf is proposed to expand the commercial port berthing capacity. The dock will extend 1,270 feet and will be 75 feet wide.

b) Dock Extension, Interisland Dock.

A dock extension at the interisland terminal is proposed. Approximately 193 feet extension is proposed to meet the existing concrete quay. Some backfilling and dredging are required depending upon the final design of this facility.

c) Commercial Fishing Dock, Fagatogo:

A 300 foot dock has been proposed at the existing Office of Marine Resources site in Fagatogo. Specific design features are unavailable.

ATTACHMENT 1

REFERENCE REPORTS

1. Enplan Corporation, Pago Pago Harbor - Corridor Transportation Study, 1974.

2. MKGK/Yamamoto Inc., Hawaii: Conceptual Physical Plan - Pago Pago Harbor American Samoa Coastal Management Program Harbor Land Use Planning Element 1981.

3. American Samoa Government, Development Planning Office Economic Development Plan for American 1979 - 1984, March 1979.

4. American Samoa Government, Economic Development & Planning Office Statistical Bulletin 1981.

5. American Samoa Government, Bay Area Planning Committee, et al, Pago Bay Area Master Plan Report 1975.

6. American Samoa Government, Economic Development & Planning Office, Economic Report of American Samoa to the Governor FY 1977 to FY 1980. April 1980.

7. Blume, John H. & Associates, Preliminary Design for Pago Harbor - '74 Port Improvements.

8. Department of Commerce and Economic Development & Planning Office, American Samoa, American Samoa Coastal Management Programme and Final Environmental Impact Statement, 1980.

9. Randall, Scanlan & Associates, Pago Pago Harbor Study and Recommended Programs for Development, 1972-1982, December 1972.

10. Kelly Pittelko Fritz and Forssen, "Master Plan for the Fagatogo Malae Commercial Area" 1972.

11. Austin Smith & Associates Inc., "Road Design Standards for Department of Public Works."