

**SOUTH EAST JOHOR PROJECT TANJONG PENGGERANG AND
JOHOR TENGAH REGIONAL MASTER PLAN**

FOR
THE GOVERNMENT OF MALAYSIA
AND
THE STATE OF JOHOR

INCEPTION REPORT

OCTOBER 1969

● HUNTING TECHNICAL SERVICES — LAND USE AND AGRICULTURAL CONSULTANTS ●

BINNIE AND PARTNERS
CONSULTING ENGINEERS ●

OVERSEAS DEVELOPMENT GROUP
UNIVERSITY OF EAST ANGLIA
SOCIO ECONOMIC STUDIES ●

SHANKLAND COX OVERSEAS
PLANNING CONSULTANTS

SOUTH EAST JOHOR PROJECT TANJONG PENGGERANG AND
JOHOR TENGAH REGIONAL MASTER PLAN

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Correspondence to be addressed to THE PROJECT MANAGER

1st November, 1969.

CONFIDENTIAL

Chief Secretary to the Government,
Prime Minister's Department,
(Economics),
Kuala Lumpur.

Sir,

THE TANJONG PENGGERANG AND JOHOR TENGAH REGIONAL
MASTER PLAN PROJECT - INCEPTION REPORT

I now have pleasure in submitting the Inception
Report provided for under Article III, Clause 8 (a) to
the AGREEMENT and referred to in my letter accompanying
the First Progress Report.

I have the honour to be, Sir,
Your obedient servant,

W. Swinson

(W. Swinson)
Project Manager
SOUTH EAST JOHOR PROJECT

WS/PW

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Herts,
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SOUTH EAST JOHOR PROJECT TANJONG PENGGERANG AND
JOHOR TENGAH REGIONAL MASTER PLAN STUDY
FOR THE
GOVERNMENT OF MALAYSIA & THE STATE OF JOHOR

INCEPTION REPORT

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1. ESTABLISHMENT

The Project headquarters have now been established at 677, Jalan Petri, Johor Baharu in the State of Johor for the duration of the Project.

We are grateful to the State Government for so readily making this facility available and for their help with the adaptation of the building. The conversion works, will, it is hoped, be completed during November.

We would also like to take this opportunity of placing on record our appreciation for the assistance rendered by officers of both the Central and State Governments during this period.

2. PLAN OF OPERATIONS & TIMING

The outline Plan of Operations submitted by us in January this year still holds good for the twenty four months period, but subsequent amendments to the Scope of Work and shortening of certain study periods could, conceivably, result in a shortening of the Master Plan period from six to four months. This will depend to a large extent on the duration and intensity of the monsoon and the anticipated reduced output of the field parties and other support staff during Puasa.

A detailed Plan of Operations and Progress Chart will be found at cover of the First Progress Report. This takes no account of the above or any other constraints dealt with in subsequent sections of this report, and must, therefore, be regarded as provisional. A network analysis undertaken in the project office on the overall study based upon the revised Plan of Operations has not yet come up with a precise critical path due to the above factors. Reprogramming will be carried out monthly in order to ensure proper co-ordination of data flows, work schedules and completion of the project on schedule.

3. REVIEW OF SCOPE OF WORK

During the establishment period and programming of the works a number of points have arisen on which I now seek guidance. They concern four of the studies under the Natural Resources heading in the Scope of Work as follows:

Forestry: Based upon our studies of the aerial photographs, the Forest Resources Reconnaissance Survey Report No. 8 - Kota Tinggi District, dated 1966, and other data supplied by the Forestry Service an inventory plan was prepared in consultation with the Commonwealth Forestry Institute and submitted to the Director of Forestry for comment. In that plan we had assumed that certain areas in the Johor Tengah region would fall in the category of "steep and broken ground" which might not be "suitable for modern methods of exploitation." Also, that in all areas to be sampled the minimum girth measurement would be four feet.

The Director has now advised that he would like, at this stage, for consideration to be given to sampling over all steep land but excluding areas already logged for future management purposes. As for girthing, he feels that it may be necessary to drop the lower limit to two feet in the light of developments in technology which ease any technological constraints in further utilisation of wood. We understand the UNDP/SF project for the development of forest industries in Malaysia shares this view.

We had originally proposed eighteen man months for the Forester and six months for a Timber Utilisation Specialist. These were subsequently amended to twelve months for the Forester and one month for a Forest Economist in place of the Timber Utilisation Specialist, although the Scope of Work remains unaltered. The original man month estimates were based on our interpretation of the Scope of Work as set out

in our Proposal dated January, 1969. This also envisaged some work on the marginally productive freshwater swamp forests in the Tanjong Penggerang region. As regards the latter, the State Conservator has also requested that these areas be sampled.

Reviewing the works programme we find that we can, after allowing for possible non productive periods such as moving camps, sickness, monsoon etc., just complete the Johor Tengah study on schedule. Unfortunately within the time constraint of twelve months, little or no time will be available for work in the Tanjong Penggerang region.

It is proposed to discuss the inventory plan further with the Director of Forestry, Mr. Adlard, Research Officer of the Commonwealth Forestry Institute and Project Manager of the U.N.D.P. Forest Industries Development Project early in November. This should resolve some of the problems and I will report back to the Steering Committee the outcome.

Mining: In connection with this study a technical matter has arisen which calls for clarification regarding the scope of the mineral survey during the time permitted to us for the mineral survey, i.e. three months for the Economic Geologist.

Paragraph A(3), the Scope of Work, is sufficiently general for us to accept, whether it be a three month or sixteen month assignment. Paragraph C(3) under Socio-Economic studies which was incorporated during negotiation of the AGREEMENT is, however, a different matter as it calls, inter alia, for an assessment of the extent to which minerals in the regions are likely to be commercially exploitable with particular use being made in this part of the study of risk and sensitivity profiles, in view of the difficulty of estimating mining costs and mineral yields and prices.

Within the time now allocated it will be impossible to make an assessment of the extent to which minerals are likely to be commercially exploitable, although we can indicate which minerals we consider are likely to be exploitable or which should be investigated more fully. Neither will it be possible to provide the economists with details of quantities of workable deposits and values unless the documentation of the area records a substantial amount of detailed observation, which would form an immediate basis for such estimates.

On the face of it some modification to the programme of economic studies would appear necessary as suggested in our letter SEJ/3/Mineral Geology dated 4th October, 1969 to your Economic Planning Unit.

It is hoped to discuss this matter with the Geological Survey and Department of Mines early this month, with a view to clarification and the outcome will be reported at the meeting of the Steering Committee on the 12th November next.

Water Resources: Although the Terms of Reference only include a study of water resources within the two project areas we consider it essential that a quick appraisal should be made of the water supply position in Johor State.

The present (1968) domestic and industrial water consumption in the State is about 20 m.g.d. (We understand that it is possible for private firms to develop their own water source to supply their own needs and the above figure excludes them). This is 150% increase over the last 15 years (1954=7.8 m.g.d.). Our experiences elsewhere in Malaysia show that water consumption at least doubles every 15 years. It therefore seems probable that the domestic and industrial water demand in the State for the years 1985 and 2000 may well lie in the following ranges:-

Assumed % increase in 15 years	1968	1970	1985	2000
100	20mgd	22mgd say	44mgd	88mgd
150	20mgd	22mgd say	55mgd	137mgd

Large new sources of supply will have to be found to satisfy these demands.

Additional demands on the water resources of the State arise from the terms of two Agreements dated 1st September 1961 and 29th September 1962 under which the P.U.B. Singapore are entitled to abstract all water from the Gunong Pulai Catchment, the River Tebrau and River Scudai and up to 250 m.g.d. from the River Johor subject to certain conditions.

There may also be an irrigation requirement details of which have yet to be studied.

The State Engineer at present operates 26 separate sources of supply each with its own treatment works. In addition treated water is purchased in bulk from the P.U.B., Singapore under the terms of the above two Agreements. The majority of the sources of supply are river intakes consisting of run-of-river pumping stations and in some instances weirs. No substantial storage is provided. Each source supplies its own area of demand and there is little, if any, interconnection between the main supply mains.

The reason for the present individual supply/demand pattern is largely historical, due in the past to smaller population and possibly the relatively poor communications between centres of population. As the demand and areas of supply increase, we can foresee that intergration of present sources and new sources will have to be studied and long term system planning will be required if difficulties in the future regarding sufficiency of supply, quality of water and pollution control are to be avoided.

The water supply position in the districts of Batu Pahat

and Pontian are at present critical and a new source of supply will have to be found for these areas in the very near future. It seems to us that there is a possibility that the future demands of these two districts together with the district of Johor Baharu and parts of the districts of Kluang and Kota Tinggi may have to be met or partly met from the water available in the Johor Tengah project area. It may well be of course that these areas could be supplied more economically from elsewhere but this would not be known unless a study of the water available in other parts of the State was carried out. In addition the development proposals arising from our studies of the project areas (especially the Johor Tengah area) may create a deficiency of water within the area, in which case water would have to be transferred from other catchments. This in turn would affect the availability of water resources to meet future demands outside the project areas.

To produce a water balance sheet for the project areas without considering the availability of water and future demand for water throughout at least a large area of the State (if not the whole State) will involve making assumptions that may not be warranted. Bearing this in mind and considering the general difficulties of the present water supply situation together with the large increase in demand that is likely to take place, we wish to place on record our view that a comprehensive study should be made of the water supply resources of the State of Johor and a Master Plan should be prepared to cover the estimated water requirements until the year 2000.

Soil Survey: Schedule D of the AGREEMENT allows for laboratory analysis of soil samples up to a maximum of about 300 samples to be undertaken as a service by the Client. A very limited provision has also been made in the Consultants'

own estimates for certain physical analyses which it may not be possible to arrange for in Kuala Lumpur.

We have now had an opportunity of discussing this aspect of the work with the Soils Science Division of the Department of Agriculture. It is now considered that analyses should be run on some 600 samples as opposed to 300 based upon 15 sites x four samples per site on each of ten major soil units.

This we feel is the minimum not only for land capability mapping but also to determine the manurial requirements for agricultural and economic planning.

