CHAPTER IV

SITE SELECTION AND EVALUATION (I)

In the near future, Esso shall be launching an expansion programme whereby a large amount of financial resources has been budgeted for the retail sales functions and retail sales development.[15] This is certainly a very significant as well as ambitious programme, and its success or failure hinges very heavily on the potentialities of the new retail outlets envisaged in this programme. In view of this, these new retail outlets which will be developed when the programme is implemented must be capable of high sales volumes both immediately after they are developed and in the future so that desirable returns may be assured on the large investment. The key factor which should be considered becomes apparent; it is the sales volumes of these new retail outlets. How can the new outlets be

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[15] At the time of budget preparation for the year 1967, the Retail Sales Dept. had planned to increase the rate of expansion of retail outlets. For this particular budget, the number of new proposed retail outlets was about 27, which was about twice the rate of expansion envisaged in previous budgets. The writer regrets that the actual budget in monetary terms is not available, due to its confidential nature.

capable of high sale volumes? Certainly site selection plays a very important part, and the solution is that there must be a systematic, realistic as well as scientific approach to the selection of sites for these outlets, not forgetting the part played by the dealer which has already been discussed. This chapter focuses on the selection of sites and the general approach towards such a selection as adopted by the company.

Very broadly, the approach may be outlined as follows:

1) Pinpointing the suitable areas within a city or area for Esso to market its products.
2) Identifying and isolating the site factors which are influential.
3) Summarising the available research findings and evaluating the relative importance of relevant factors which affect sales potential.
4) Presenting a logical method of estimating the sale volume of a site.

AREA ANALYSIS

A complete discussion of factors related to all types of outlets such as service station, marina,

mobile fuel station, curb pump, etc. is not possible. The analysis presented here is limited to the most common as well as most important type of retail outlets, i.e. the service station, locating in or near a residential area, in a city or metropolitan area. The illustration chosen is an area in Ipoh, Perak.

The steps taken are outlined below as a broad guide:

Step 1

On a street map of the city, the commercial, industrial and residential areas are outlined (see illustration 7). It is not necessary to go into great detail to classify the smaller sections within them which may be zoned for other uses. Information on zoning of the city may be available from the local authority such as the Ipoh Municipality Council, by observation, or from the zoning maps of the city, if available.

This will bring to focus the area where the company has immediate interest in terms of acquisition for development into service station. The area chosen is then indicated on the map. In this illustration the area chosen is situated on the east of the Central Business District (CBD), demarcated by Ashbey Road, Anderson Road, Kampar Road.

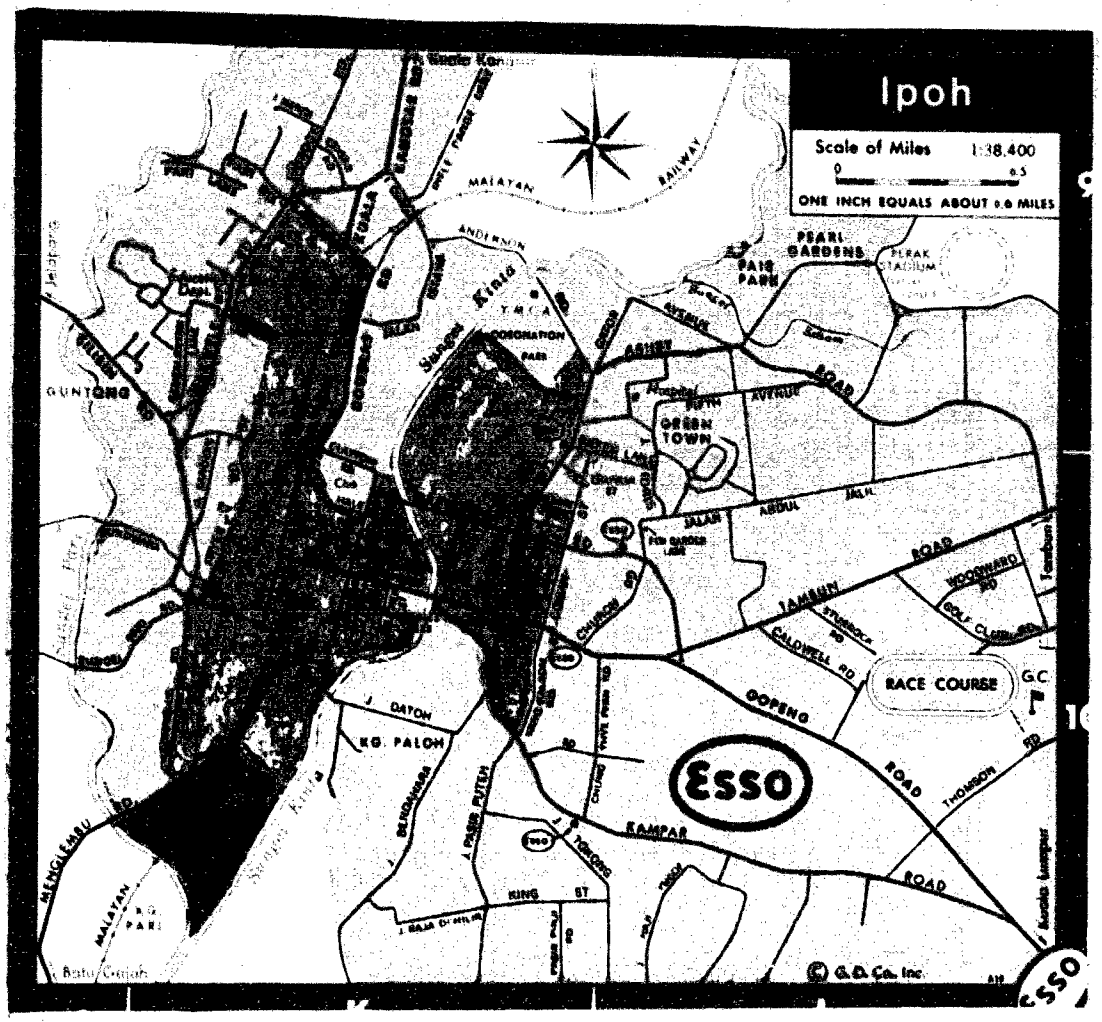

ILLUSTRATION 7: MAP OF IPOH MUNICIPALITY SHOWING THE COMMERCIAL, INDUSTRIAL AND RESIDENTIAL AREAS.

Commercial

Residential

Light Industrial

Step 2

Having classified the areas, and pinpointed the area which interests the company, an analysis of the residents' income levels is then made[16] (see illustration 8). Although in many residential areas, there are sub-sections composed of residents in different economic levels who as customers, can differ

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16 It is difficult to obtain information about the income levels in a particular area like this. No statistical report is certainly available. However, in determining the income levels, some economic indicators can be used as the bases of differentiation. In this respect, the writer has made use of types of residence and rough estimation of incomes as the bases for demarcating the area into "high", "middle" and "low" income areas.

Number of cars owned or types of car owned may also be used as indicators of income levels. However, this is difficult to observe and such information is non-existent. By basing on estimated income and type of residence, one can safely generalise that the "high" and "middle" income groups are generally car-owners or vehicle-owners.

This can be summarily presented as follows:

	Income	Type of residence	Estimated Income
1.	Low	Houses generally with no garden compound, and mostly wooden.	Below $300 per mensem
2.	Middle	Single-detached or semi-detached houses, may or may not have garden compound.	$300 - $1,000 per mensem
3.	High	Single or detached houses, or mansions, with spacious garden compound.	Above $1,000 per mensem.

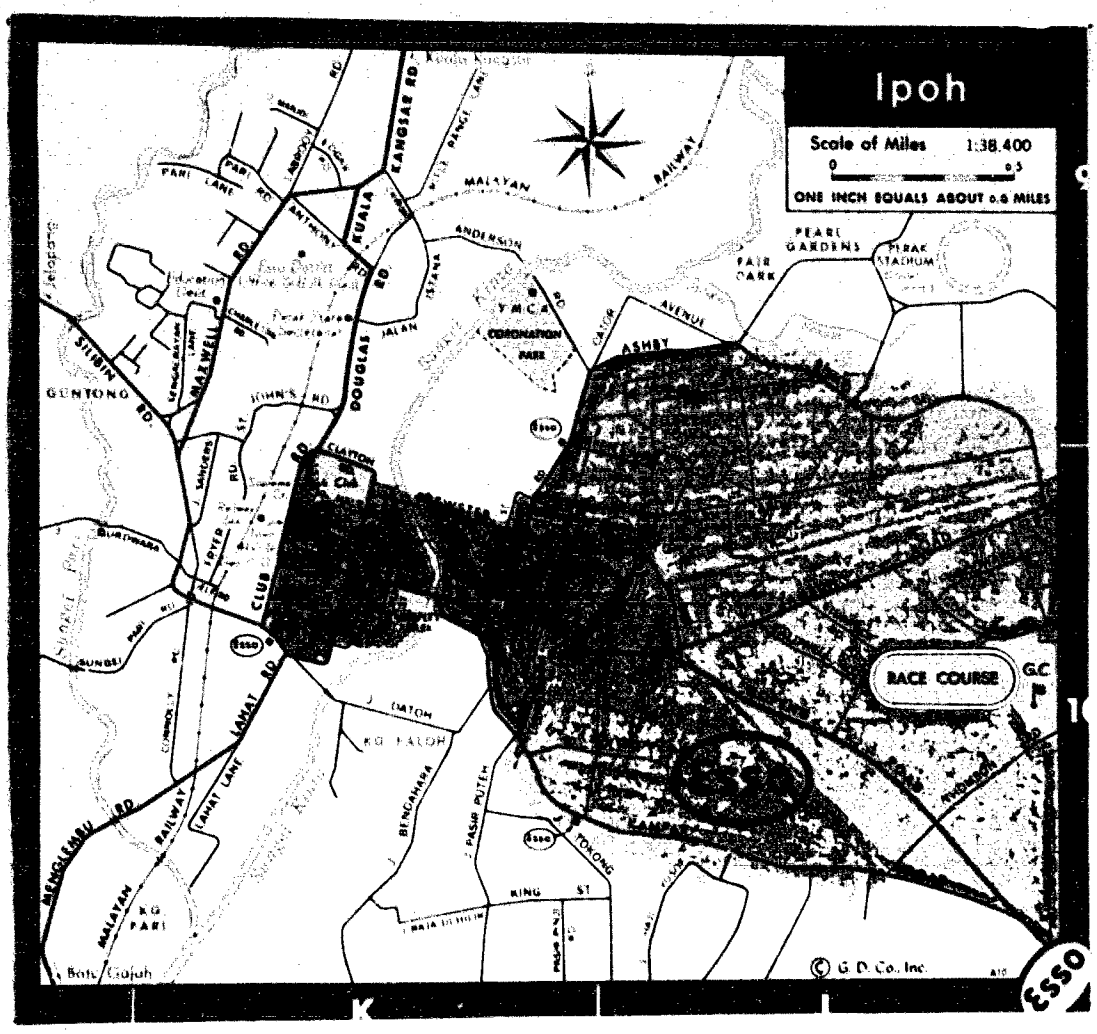

ILLUSTRATION 8: CLASSIFICATION OF THE SELECTED AREA BY LEVELS OF INCOME

Commercial Area Showing The CBD.

Middle Income

High Income

in their purchase potentials, such an analysis is only broadly made.

This step will enable the company to identify at a glance the most desirable location to operate in. Secondary types of data to be collected within an income group are the age-levels, the number of cars per dwelling unit, and the level of standard of living of the residents. Such information may be obtainable from the local authority, by observation, or by rough estimation.

Step 3.

The next step is to evaluate the area chosen and determine the rate and direction of economic growth. It is important to know what the area will be like in the future, as an area that looks good to-day and is still growing is of more value than one that looks good but has reached maturity or has begun to decline.

A reasonable estimate of the growth of the area may be made on the basis of housing development. Data on the number of new housing units erected over the past few years may be obtainable from the local authority. Another good indicator is the housing projects that are under construction in the

area. This can be gathered by observation. Information about roads constructed recently and about new proposed roads is also very useful.[17]

Contacts with local real estate agencies are also beneficial since they are generally well informed of growth trends. Informal discussions with one or a few of these individuals can be of great help in estimating the rate and direction of growth in the area.

Step 4

This step involves identifying the traffic arteries passing through the area. The feeder roads of these main arteries, which also connect the various sub-sections are also noted.

Generally, traffic is oriented towards the central business district (CBD) and the local shopping areas of the city. The network of major streets and roads is identifiable from a knowledge of the area by means of observation or the traffic flow map of the city, if available. This will indicate how traffic flows in, out and through the selected area. From

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17 Information on new proposed roads is generally very difficult to obtain as this is treated as confidential.

Illustration 9 the major streets are Tambun Road, Gopeng Road, Hugh Low street and Brewster Road.

Step 5

Having identified the major traffic arteries the next step is to measure the traffic volumes along the main thoroughfares in the area. This will indicate the traffic volumes and help to differentiate between (a) the possible routes motorists can take to and from work or shopping, and (b) the actual ones they do gravitate towards. The taking of a traffic count is usually very time-consuming. In order to have an accurate measure of the traffic volume it is necessary to take the count for at least one whole week so that the result obtained may be representative of the weekly traffic flow pattern of the area. If such information is obtainable from the planning unit of the local authority or the road transport authority, the traffic count may be saved.

Based on this information, the sub-sections can now be listed in order of traffic volumes, as indicated in the Illustration 9.

Up to this point, in the analysis, efforts have been directed towards gathering data about the various sub-sections in the area where the company wishes to market. It is now necessary to decide as to

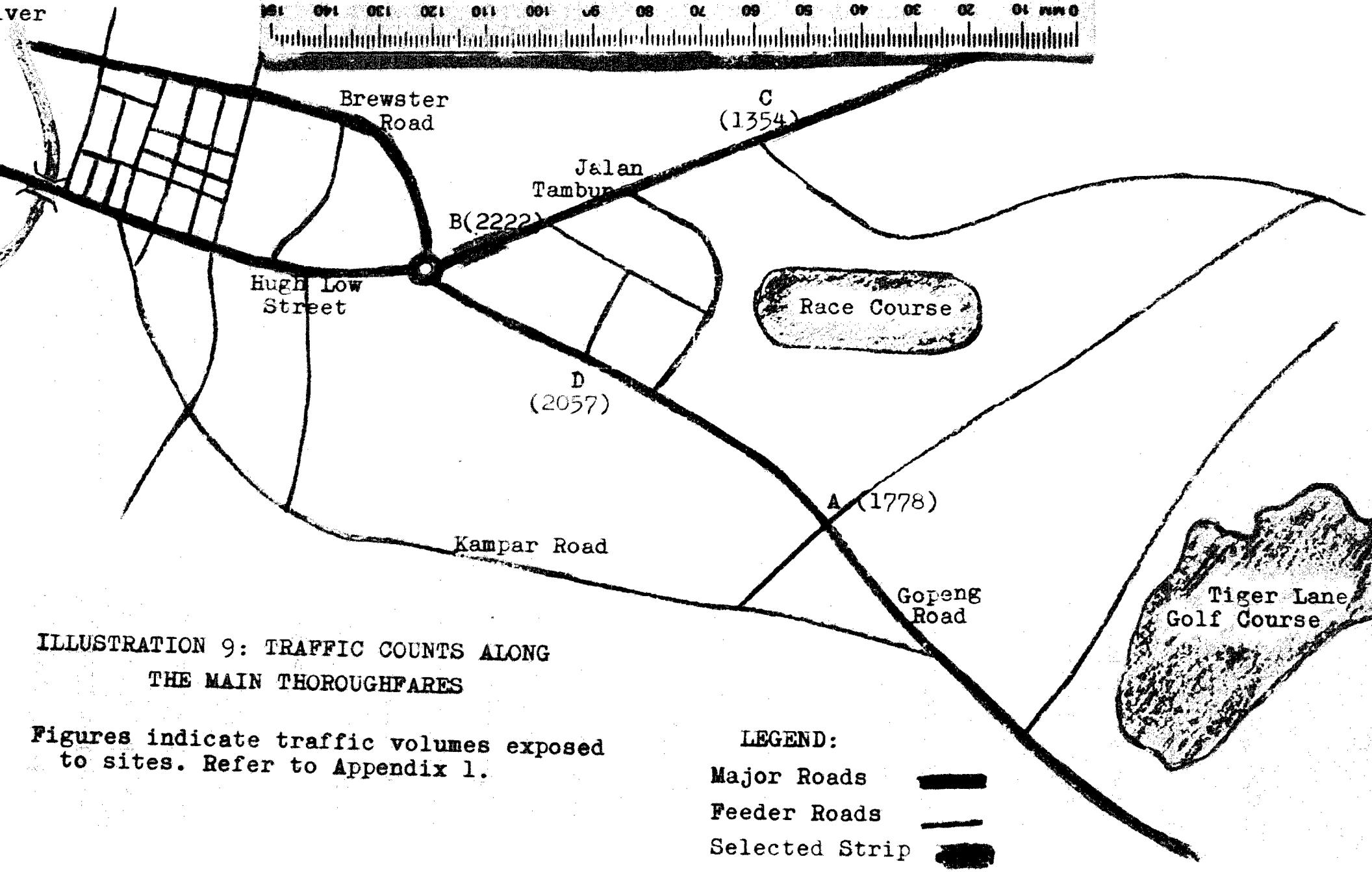

ILLUSTRATION 9: TRAFFIC COUNTS ALONG THE MAIN THOROUGHFARES

Figures indicate traffic volumes exposed to sites. Refer to Appendix 1.

LEGEND:

Major Roads

Feeder Roads

Selected Strip

which of these sub-sections the company would like to consider first. Some considerations that go into the evaluation can be briefly discussed here:

a) List the sub-sections in order with respect to potential.

It is noted that sub-sections with a higher income level are usually preferrable, but it is also necessary to investigate the average age of the residents in the sub-sections. If the age level is higher than the overall age the sub-section may be less desirable since the number of miles driven per year normally decreases with age[18] (say, over 40 years). Thus, a sub-section whose income level is more "middle" than "high" but the age level is lower indicating that the younger people would be expected to travel more often, may be preferrable.

The traffic flow information can also temper judgement on which is the most likely sub-section to be developed. For one thing, one must know how many alternative routes there are in the particular area in going to the CBD. Since alternative routes are available, potential volume would be lost. Perhaps those with only one route are the most potentially

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[18] RSE Inc., Retail Sales Development, January 1, 1963, "Site Selection and Evaluation".

profitable when compared to others which have many alternative routes. This may be true even though the latter areas have a larger population or a higher income level.

All these factors must be considered in order to arrive at a list of the areas which can be expected to obtain the greatest volume based upon economic and gross traffic factors.

b) Within the desirable sub-sections, identify the strip or portion of the main thoroughfares where an outlet can be developed:

One important aspect in making such a choice is the zoning restrictions. If, for example, a section of a particular thoroughfare has no service station, it is almost a certainty that zoning restrictions are against establishing a service station there. If, however, it appears to be zoned as a residential area, but there are service stations that were erected during the past few years, it is then evident that permit variances have been obtained or rezoning may be possible. A further inspection of those existing service stations will indicate whether there are any severe restrictions on building design or placement that would make the section desirable. In any case, if the strip is desirable, rezoning application may

be attempted and building design planned to comply with any specific regulation current in the area, should this particular strip be chosen.

In choosing the desirable strip, these factors will have to be considered. If there are already a few stations existing in the particular strip, then it may not be so desirable since full potential may not be realised. Thus, a strip where there is no service station established as yet may be preferrable. Also the distance of the strip from the CBD and the possible routes that lead to the CBD but bypassing the strip have to be carefully considered. Therefore, a strip where there are no alternative routes to the CBD and which is not too distant from the CBD may be preferred.

In making the choice, all the data collected in the area analysis are applied. In brief one can generalise that a strip where the traffic volume is high, and where there are not too many service stations already in existence as well as few alternative routes to CBD available, would be chosen. On these bases, the strip as indicated in Illustration 9 is chosen.

c) Locate and identify sites that are available within the desirable strip.

This is the final step in area analysis and

brings the analysis down to the evaluation of the site. This is discussed in the next chapter.