

NOTES ON THE SPECIFICATION FOR THE MAINTENANCE AND REPAIR OF TRAFFIC SIGNAL INSTALLATIONS

1. GENERAL

These notes are for the guidance of Supervising Officers only and must not be included in the Contract documents.

TNZ C1 specification must be included as part of the contract documents. Special attention must be paid to the notes for this specification.

2. DRAWINGS AND RECORDS

The Engineer is required to provide the Contractor with traffic signal installation layout drawings showing the positions of detector loops, cables, poles etc. and the type of controller and detectors installed. Previous maintenance records should also be made available.

3. COMPUTERISED AREA CONTROL SYSTEMS

Some state highway traffic signal installations form part of a Local Authority computerised area control scheme (eg. a SCATS system). These installations are usually closely tied in with the local authorities traffic management policy.

Maintenance of state highway traffic signal installations in such a system should be the responsibility of the local authority.

4. THE ENGINEER'S RESPONSIBILITY

The Engineer shall not be responsible for altering the phasing or timing of the signals unless specifically required to undertake this work by Road Controlling Authority. Apparent anomalies in the phasing or timing shall be reported by the Engineer to the Road Controlling Authority staff member responsible for traffic signals.

5. SCHEDULE "A"

This schedule is a listing of all traffic signal installations in the contract and gives:

- Signal installation identification number.
- Location description or local installation name.
- When applicable, the State Highway Route Position.
- Road Group Number.

The Road Group Number identifies the importance of the signal installation as determined by the Road Controlling Authority. It defines the response time for action by the Contractor. The values used should be realistic and achievable by a Contractor.

- '**MINOR**' and '**MAJOR**' work definitions.

MINOR and MAJOR work will typically be defined by financial limits. For example:

MINOR work: All work that is estimated to cost less than \$200.00

MAJOR work: All work that is estimated to cost more than \$200.00

These limits define the work that may be carried out by the Contractor without prior approval by the Engineer.

6. PC SUM

The Engineer needs to make an allowance for the Contractor to carry out some Equipment Replacement (ie. due to unrepairable or obsolescent equipment) and '**MINOR**' Modification work for each installation during the Contract period. This allowance will depend on the age and state of each installation and the Road Controlling Authorities need for ongoing Modification works.

7. PAINTING OF SIGNAL POLES AND LANTERNS

All traffic signal installations should be kept clean and tidy. Painting of poles and lanterns is a maintenance work and is required on a regular basis - 5 years is a suggested period but this will be determined by site conditions.

A separate painting contract should be let, as and when required, for this work.

INDICATIVE SCHEDULE OF COSTS

1. Preventative Maintenance - An All Inclusive Rate Per Year Per Installation

Installation Number								
Preventative Maintenance								
PC SUM (Allowance for Equipment Replacement and Modification Work)								
TOTAL								

2. Preventative Maintenance - A Unit Rate Per Month

Installation Number								
Controller Maintenance								
Detector Maintenance (per detector)								

2. Labour Rates

Standard Hourly Rates : \$ per hour

Overtime Rates : \$ per hour

Minimum Call Out Charge : \$

Travel : \$ per kilometre

**3. Percentage On-Cost : %
(For equipment and materials supplied)**