

RESTRICTED

SECTION 42 – PRIMARY SELCETION OF ROUTE

Preliminary Investigation

0906. Thorough preliminary study of the problem will save both time and effort in reconnaissance.

0907. The requirement must be clearly laid down. Instructions should include definite decisions and information on essentials:

- a. Instructions given by the staff:
 - (1) Starting and finishing points.
 - (2) Intermediate points or areas to be served.
 - (3) Load class and volume of traffic.
 - (4) Whether permanent or temporary. "Life" expected of temporary construction must be stated.
 - (5) Completion date.
- b. Instructions and information given by the engineer commander:
 - (1) Whether single, double, or multi-lane.
 - (2) Standards to be observed.
 - (3) Any special instructions about bridging, water supply, communications etc.
 - (4) Plant, materials and labor available.
 - (5) Technical assistance, e.g., soils laboratory, quarry adviser.
 - (6) Time by which preliminary and final recce reports are required.

0908. All available information should be studied. Sources of information include:

- a. Maps, topographical and geological.
- b. Photographs, air and ground.
- c. Civil authorities.
- d. Local inhabitants.
- e. Meteorological records.
- f. Intelligence summaries and reports.

Choosing the Route

0909. The preliminary investigation will have narrowed down the choice of possible alignments or will at least indicate areas which are not worth reconnoitering. The procedure is then:

- a. Select from the map and air photographs routes which fit the ruling points and which appear to be feasible.
- b. By comparison decide which is the most promising alignment and arrange likely alternatives in order of apparent merit.

0910. In making the selection remember that bridging must be reduced to a minimum and that the tasks which generally affect most seriously the time and resources required are:

- a. Earthwork.
- b. Work in rock.
- c. Construction over poor or wet soil.
- d. Heavy clearing.
- e. Drainage, especially culvert construction.

0911. Notes should be prepared for the guidance of the ground reconnaissance party, who should start by investigating the first choice, but should also have particulars of the selected alternatives in case unforeseen difficulties are encountered. These notes should include:

- a. Details of the alignment usually marked on a map or overlay.
- b. Details of the requirement and instructions (see para 194.).
- c. A summary of important information.
- d. Notes of points requiring verification or special investigation.