SECTION 108 – ROAD MAKING PLANT

2408. Road-making plant comprises:-

a. Earth moving plant (see section 107 and RESPB NO. 5C)
b. Compaction plant (see table 13.1 and RESPB NO 5c, sections 15,16,17)
c. Plant for bituminous surfacing (see section 98).
d. Concrete mixing, distributing and compaction plant (see section 102).
e. Plant for processing aggregate.
f. Specialized plant, designed for :---

(1) Production of particular materials, eg, tarmacadam.
(2) Large scales distribution, e.g., concrete pumps, agitator Lorries.
(3) Laying and finishing.

2409. Crushing and screening plant. If quarried stone is the only source of aggregate, the output from the crushers may determine the maximum rate of road construction. Details of plant and organization are given in RESPB No 5E (WO Code No.9552)

Figure 24-1: Crushing and Screening Plant

2410. Specialize plant. In organizing large – scale work each major item specialized plant should be considered as replacing a complete team of general

purpose plant and labour. The specialized plant should be operated at its most efficient rate and other operations must be planned accordingly.

Comprehensive plant, such as concrete pavers, should be used only for the proper task. A paver for example is designed to lay a standard pavement slab: separate mixers and compaction equipment should be provided to deal with curve-widening and ancillary task.

2411. Brick paving machine. The brick paving machine is an innovative machine that mechanizes the laying of brick pavements so that brick masons and the labores supplying them work more. Normally the brick paver machine is a six meter wide and the street / road at one time can be perfectly retreat ergonomically and productively to build brick pavements more quickly with less expense. Laying capacity 600 Sqm/Day. Crew 6 to 7 persons.

24-2: Brick Paving Machine

2412. Pavement milling machine. Pavement milling (cold planing, asphalt milling, or profiling) is the process of removing at least part of the surface of a paved area such as a road, bridge, or parking lot. Milling removes anywhere from just enough thickness to level and smooth the surface to a full depth removal. There are a number of different reasons for milling a paved area instead of simply repaving over the existing surface.

Figure 24-3: Pavement Milling Machine

2413. Asphalt paver. A paver (paver finisher, asphalt finisher, paving machine) is a piece of construction equipment used to lay asphalt on roads, bridges, parking lots and other such places. It lays the asphalt flat and provides minor compaction before it is compacted by a roller. The asphalt is added from a dump truck or a material transfer unit into the paver's hopper. The conveyor then carries the asphalt from the hopper to the auger. The auger places a stockpile of material in front of the screed. The screed takes the stockpile of material and spreads it over the width of the road and provides initial compaction.

Figure 24-4: Asphalt paver