

SECTION 65 – SUBGRADE TREATMENT

1328. The sub-grade must:

- a. Provide adequate, conditions, and uniform support for the road structure.
- b. Be finished to the correct shape and formation level.

1329. It usually pays to make the sub-grade as strong as possible so as to reduce the thickness of pavement. On sufficiently strong sub-grades only a waterproof wearing course is necessary.

1330. For final shaping a grader is the best machine. Angledozers, scrapers, and road drags can be used of necessary.

1331. Through compaction is most important, preferably at OMC (see Table 13.1).

1332. The most usual requirements, in order to achieve adequate and uniform bearing strength, are set out in Table 13.2.

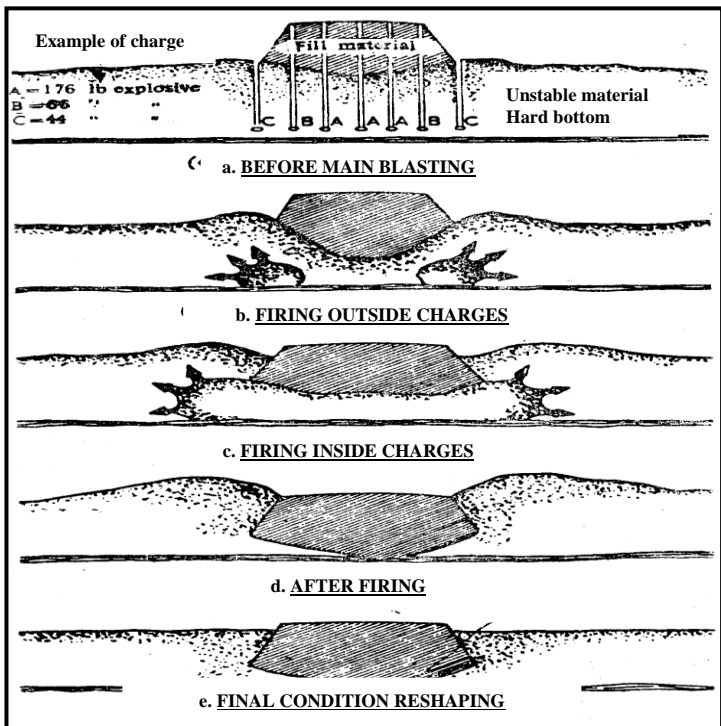


Figure 13-2: Displacement of Unstable Material by Blasting

TABLE 13.2 – SUBGRADE TREATMENT

Ser No	Sub-grade weakness	Treatment	Remarks
(a)	(b)	(c)	(d)
1	Soft spots (pockets of inferior soil)	Cut out soft soil. Substitute sound material and compact	Cut out clean and square. Compact in 3-in or 4-in layers (by hand rammer in small areas)
2	Permeable soil exposed to flooding or seepage	Improve drainage by intercepting ditches, subsoil drains (see Section 69)	Waterproof surfacing required. If hard core base or concrete to be super imposed a sub-base will be necessary
3	Cohesive soil of low bearing strength- Light improvement	Mix in coarser grained soil (sand and gravel) and compact	Mix with disc harrow, scarifier, or pulverizing mixer
4	Heavy improvement	Scarify whole area to 9 ins depth. Moisture to OMC, compact to a specified dry density	Use rotover of scarifier and road drag or grader. Water truck is required. For compaction plant see Table 12.5
5	Unstable soil	Carry out soil stabilization or remove and replace	See Section 86