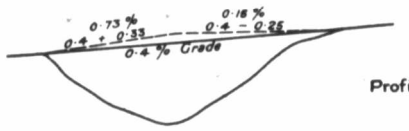
customary 1.5 to 1 is easily done in the field by adding or subtracting 1/10 or 2/10 for every foot in height of fill to the 1.5 to 1 half-breadths.

Tables 1, 2, and 3 are inserted for purposes of comparison; the quantities being based on these different methods of applying shrinkage (figured to profile grade only) whilst the actual percentage increase from the standard roadbed and side slopes, is stated.

To provide the full shoulder (always desirable), the width required at profile grade from considerations of height of fill at that point (fig. 4) is taken, reduced for practical purposes to the nearest foot and slope stakes set in accordance with Fig. 2 or 3.

Fig. 4



(I)		Profile
(II)	.33 .67 1.0 1.33 1.67 2.0 2.0 1.75 1.5 1.25 1.0 .75 .5 .25	Top Shrinkage
(III)	17.0 18.0 19.0 20.0 21.0 22.0 22.0 21.25 20.5 19.75 19.0 18.25 17.5 16.75	Width at Profile Grade from Top Shrinkage
(IV)	6 10 14 16 18 20 20 17 15 12 10 6 3 1	Height of Fill.
(V)	17.8 18.0 20.2 20.8 21.4 22.0 22.0 21.1 20.5 19.6 19.0 17.5 16.6 16.3	Width at Profile Grade from Height of Fill
(VI)	18 18 20 21 21 22 22 21 21 20 18 18 17 18	Practical Width at Profile Grade used in Cross sectioning as per Fig 3, or in figuring quantities and setting second grades as per Fig. 2.

Note discrepancy between III and V.

This representation in the cross section notes of the quantities to profile grade represents the cross sections as they are staked without additions or alterations, and avoids complication and consequent chances of error in figuring the quantities. It gives a definite and straightforward basis to work on, and enables another man to pick up one's notes and follow what has been done.

In paying for embankment quantities if an arbitrary classification of shrinkage is adopted, such as:

Team and slip work	*Nil*
Wheeler and wagon work.	5%
Dumpcar and wheelbarrow...	10%

and from a consideration of the fact that earth, when first moved