

of a curve than inside. You need wider traversable roadsides for higher speed operation, and so forth. So you are correct that the 30 feet is a nominal figure, but it is not one to be fixed for every road in the country.

Mr. CONSTANDY. You have to be very careful with minimum values, apparently. The sign manual suggests that signs should be placed at the minimum of 2 feet from the shoulder, and throughout the country they are placed just 2 feet. They could just as well, very frequently, be placed at some greater distance than 2 feet.

If the people who set standards were to adopt the minimum and it were blindly followed, you may have another problem later to overcome.

We have seen situations where States have adopted some figure for a clear roadside, say 20 feet, and at 21 feet there would be a row of very heavy trees. Depending upon the circumstances, judgment must be exercised as to what would be appropriate for that highway for that speed limit at that particular place; what is the clear road width that you used on the proving ground?

(At this point Mr. McCarthy assumed the chair.)

Mr. LUNDSTROM. We use as much as 100 feet, if possible.

Mr. CONSTANDY. Yes, building safe highway and using 100 feet, you minimize the problem of the single-car-run-off-the-road type of situation.

Mr. LUNDSTROM. Yes.

Mr. CONSTANDY. I think it is worth pointing out, too, you count every vehicle which leaves the traveled roadway as an accident, do you not?

Mr. STONEX. That is right.

Mr. CONSTANDY. Whether it hits anything or not?

Mr. STONEX. Right.

Mr. CONSTANDY. The driver is obliged to report back to you each instance when he leaves the highway?

Mr. STONEX. Yes.

Mr. CONSTANDY. Before we get on to the movie, is there something, Mr. Stonex, you would say relative to slopes and the condition causing rollover?

Mr. STONEX. It is described, Mr. Chairman, in the film. I could say that we have concluded that the 6-to-1 slope ought to be about the steepest which should be used on a road. We have no slopes steeper than that.

Mr. CONSTANDY. That would be what you would consider a minimum?

Mr. STONEX. That is a minimum, yes.

Mr. CONSTANDY. In those circumstances where drainage permits a slope that flat?

Mr. STONEX. We would not permit one steeper than 6 to 1, and where possible we would like to have them flatter.

Mr. CONSTANDY. 8 to 1?

Mr. STONEX. 8 to 1, 10 to 1, again depending on circumstances.

The flatter it is, the less problem you have with erosion, the easier it is to mow it; so all is in favor of the flattest slope possible.

Mr. CONSTANDY. Yes. I suggested that at times you may find it necessary to have something less than 6 to 1, say 4 to 1; if it were