

along here to prevent that very shallow approach from leaving the expressway.

Mr. W. MAY. You are suggesting that guardrail should have been extended toward us?

Dr. HUELKE. Yes, very definitely; because we see that this is a very shallow approach. This is a car that went out of control and almost left at right angles to the roadway. In fact, I have never seen an accident quite like that. But it appears many of the guardrails are put in with that in mind, that the car is going to come at right angles to the road system.

This is a very shallow angle at which this vehicle left, maybe 15° or so. If that is shown and the known speed of a vehicle—remember, it is legal along here to travel 70 miles an hour—we have to think of the deceleration distances and it is not adequate in this area.

Mr. W. MAY. As we travel in the country, we notice this is not an uncommon situation.

Mr. Prisk, do you have any idea why we so frequently see the guardrails really beginning too late to prevent the motorist from going down an embankment into a hazard?

Mr. PRISK. I suspect that some of these determinations as to guardrail locations may be based strictly upon the height of the fill at the point where the guardrail starts and not appropriately take into account the dynamics of the situation; the fact that in order to get behind the guardrail, you necessarily would leave the road at some distance ahead of the point where the fill becomes high.

Mr. W. MAY. Yes, that has been our observation. So frequently, they have certain warrants for the installation of guardrails, the slope is a certain height, a certain type slope; three to one, two to one, that calls for a piece of guardrail. But so frequently they begin the guardrail at that point where it meets the warrant instead of coming back here and beginning it long before the motorist is apt to reach the hazard.

Doctor, you may proceed.

Dr. HUELKE. This is the edge that he caught on to cause the car to flip over.

