

standards at the time this work was being designed, which would prohibit the placement of the shoulders entirely across the bridge.

Mr. CONSTANDY. Did they prohibit it or did they prohibit Federal participation in the cost of it?

Mr. HUFF. It may be that in the adjustment of the curb ends the basic solution there may be to go back and take the full operation and widen the bridge and carry the full shoulders across.

Mr. CONSTANDY. A lot of these other problems stem from that initial decision to not carry the shoulders through?

Mr. HUFF. I could not speak for Indiana, of course, but we did have national standards which limited the length of the bridge on which you could carry full shoulders across. I say this in defense of the Indiana engineer who designed this, that—

Mr. CONSTANDY. Of course this bridge, we will see, does have full shoulders. The opportunity is afforded to them to make a transition from the guardrail to the bridge rail correctly; and while I am not saying this for or against them, they have not done it right.

This is on the left side. We will see in a moment the view from the right side.

Mr. HUFF. It could be argued that this is not a full shoulder.

Mr. CONSTANDY. Let me ask you this. The same shoulder precedes the bridge on the roadway. So we are really not concerned with restriction of anything, whether 6 feet is wide enough or not is really not the point. The significant thing is whether there is a reduction in the shoulder as it is carried across the bridge. In this case there is not.

Mr. HUFF. It could be argued that the 6-foot shoulder on the roadway is not enough. Those are the kind of decisions made based on what people thought at that time when the span—

Mr. CONSTANDY. This particular bridge on the right side does carry the full shoulder. It is a little complicated inasmuch as the ends have an acceleration—

Mr. HUFF. It has not been hit.

Mr. CONSTANDY. For what reason? There has not been any traffic on it. If it is hit, as it stands there now, just in advance of this path, what might you reasonably expect to have happen?

Mr. HUFF. It could still be hit like it is; but if it had wide shoulders on it, it might not be hit. You get into the range of probability there as to whether it would be hit or not.

Mr. CONSTANDY. Yes, but I think we agree that there is no restriction as it goes across the bridge. Whatever shoulder crosses the bridge is the same shoulder on the roadway. It is a straight line.

Mr. HUFF. That would be true if you say 6 feet—it does not represent a restriction.

Mr. CONSTANDY. OK.

Mr. PRISK. This is a closeup of that transition point between the approach rail and the guardrail, approach rail and the bridge rail, excuse me. Some architectural treatment has been given to this end wall, and we know there is a similarity in the design here and this is the same State. It has been straightened out. The bridge rail is aluminum of a new design.