

A **20 year old male** employee was **struck by a road grader** while in the process of flagging for dump trucks. The employer was contracted to widen the shoulders of Butler Drive with crusher run gravel. The process involved a dump truck dropping the material, the material being spread into place using a road grader, and finally being compacted using a roller.

On the day of the incident, the victim was positioned in the middle of the road while directing traffic using a stop/slow sign to control traffic as the roadway had been reduced to one lane in the construction zone. There was another employee positioned to direct traffic at the opposite end of the work area. Butler Drive is a 2-lane road with no turning lane and a narrow shoulder on each side. Other employees were operating machinery in the process of widening the shoulder of the road.

The grader operator stated that he looked behind him prior to backing up and saw the victim standing on the yellow dividing line of the road then proceeded to back up the machine while watching the front right wheel of the machine to ensure that it did not drop into the ditch. The operator went on to state that he felt a bump, looked down to his left and saw the victim's body lying on the ground next to the cab of the machine.

Co-workers stated that the crew had lunch at Arby's on the day of the incident. The victim had been seen by multiple co-workers drinking from a large plastic cup in the minutes leading up to the incident. Pictures of the scene provided by the Police Department showed a cup from Arby's along the shoulder of the road in close proximity to the victim's body. The cup was laying on its side, indicating that it had been dropped and not set down. Witnesses saw the victim place his drink cup near the white line at the shoulder of the road while directing traffic. It was determined that the victim's body was found perpendicular to the white shoulder line of the road, approximately 8-9 feet from the center line of the road, where the grader operator had seen him before backing up. It is likely that the victim was struck by the road grader while he was attempting to pick up his drink.

The Caterpillar 12G road grader was equipped with two axles on the rear of the machine just behind the cab. The tires of the machine measured 48" tall and 14" wide and the operational weight of the machine was listed as 31,592 pounds. Pictures indicated that the victim had his back to the machine when he was struck due to tire marks going up the backside of his body causing massive trauma to his body and head.

An inspection of the road grader and two other dump trucks determined that they were not equipped with functional backup alarms. The victim was wearing a high visibility vest at the time of the incident. Also, it was determined that the employer covers pedestrian safety around machinery in safety meetings regularly.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

Citation 1 Item 1

Type of Violation: Serious

\$5400

29 CFR 1926.601(b)(4)(i): The employer had in use motor vehicle equipment having an obstructed view to the rear which did not have a reverse signal alarm audible above the surrounding noise level:

In that in two instances tri axle dump trucks were not equipped with functioning backup alarms:

- a) Truck #311
- b) Truck #312

Citation 1 Item 2

Type of Violation: Serious

\$5400

29 CFR 1926.602(a)(9)(ii): Earth moving or compacting equipment which had an obstructed view to the rear was operated in reverse gear; such equipment did not have in operation a reverse signal alarm distinguishable from the surrounding noise level or did an employee signaled that it was safe to do so.

In that a Caterpillar 12G motor grader was operated in the reverse gear without a functioning back-up alarm.

46 Struck by Road Grader—Insp#1507304 Rollins Excavating

