



Aggregate Shoulder Spreader Box

District 8

Problem:

Drop-offs along pavement edges caused by settling or other disturbances pose a serious safety hazard to motorists. Aggregate shoulders must be frequently maintained to prevent these hazards. A quick and efficient method was needed to place uniform aggregate shoulders while minimizing the amount of material wasted.



Solution:

An aggregate shoulder spreader box was designed that attaches to the back of a truck. It uses a modified surplus salt auger box to deposit aggregate into the spreader, which was made from leftover materials. The spreader runs along the edge of the pavement and places a consistent aggregate shoulder, matching the pavement and eliminating drop-offs. The amount of aggregate placed is controlled by the speed of the truck. Lowering the bed of the truck raises the spreader box for transport. This spreader places a more uniform and better-quality shoulder while wasting far less aggregate material than alternate placement methods.



The aggregate shoulder spreader box was created using surplus materials found at the yard.



The spreader efficiently and consistently places aggregate with minimal waste.



Quality aggregate shoulders eliminate dangerous drop-offs and improve motorist safety.