

Annual Road Committee Report 7/29/2020 thru 6/26/2021

The mission of the road crew is to maintain the 75 miles of the Davis Mountains Resort's road right-of-ways and the deeded easement through the 3.3 miles of privately owned Paradise Ranch road from highway 166 to the Tomahawk cattle guard.

The Paradise Ranch road, also known as the Main Road, as indicated on the Road Plan map has three land owners each owning the section of road adjacent to their property. Permission is acquired to maintain the road and to park equipment within the private road easement. Unauthorized use of the land owner's entrances is considered trespassing. Speed limit signs have been posted to establish a safe driving limit for all drivers and for respect to the land owners of Paradise Ranch road.

As the resort population continues to grow and traffic volumes from delivery services to contractors increase accordingly, the courteous etiquette of driving a safe speed limit or even slowing down when passing the road crew equipment is a thing of the past. Speed limits are not enforceable on private roads but the land owners have the right to install speed control devices such as "speed bumps" with appropriate signage. So please, Save a road and slow down.

"Wash-boarding" is a term used to describe the ripple effect created on the surface of a gravel road bed. The mechanical nature of tires rolling on a loose gravel surface creates a resonating frequency starting at 20MPH. Heavy acceleration, excessive speeds, high traffic volumes and deceleration all contribute to this "nerve racking" road hazard condition. The lack of moisture during any time of the year greatly compromises the compaction of the road surface creating loose gravels that quickly "washboard".

The scheduling of road work follows the clockwise rotation of the Road Plan map posted in the Community Center. The road plan is divided into six sections consisting of approximately seventy-five miles of road. The main road will be worked into the rotation as needed to maintain a safe roadway. During times of high traffic volumes, bad weather and extreme dry conditions, maintenance intervals will increase on the main road.

We reclaim materials from side drainages, culvert inlets, pond catches and creek crossings. The rock crusher turns windrows of rocks and clay into a usable road base material. As our native materials continue to diminish by rain, wind and traffic, the purchase of caliche to mix with our processed road mix provides a longer lasting road base. The installation of culverts channel water under the road way minimizing road bed erosion.

Additional time may be spent in a section to adequately construct the road bed geometry with the dozer and the hauling of materials to adjust road pitch. The road bed may need to be scarified with the motor grader to remove embedded rocks. The rock crusher is then used to reprocess the embedded rocks and windrowed materials into a usable road base. As the windrows are consumed replacement materials are hauled and placed to be processed as needed on-site.

The acquisition of the 1996 Ford C8000 water truck has increased our water supply needs when working the main road with little rainfall. With 2,500 gallons of water and cab controlled water pump with front water cannon and rear spray nozzle, water can be placed with control. The short wheel base of the truck allows for a turning radius on our narrow roadways and quick turn-around time when using the vehicle as compaction roller.