

ROCK INSTALLATION PROJECT

The golf maintenance team has been working on a project to install larger rock, commonly called “rip-rap” in key desert locations throughout the Cottonwood Palo Verde property. At first glance, this may alarm some golfers as to the location, intention and need for this work. The following bullet points should answer most of the questions.

1. The rip-rap rock is being installed to help save operational costs.
 - a) Most people are not aware, but the golf course has sump pumps and drainage lines designed to help move water during heavy rain events.... for example, the sump pump at the tunnel between hole 7 and hole 8 and/or the large man-hole drainage cover at hole 2.
 - b) The rip-rap rock is installed to aid in cleaning surface runoff water of unwanted sediment before being deposited around the sump pump or dumped into the drain. This results in less money spent on clearing plugged drain lines and/or replacing sump pump motors that have been buried.
2. The rip-rap rock is being installed to help save on re-allocations of labor.
 - a) During the heavy rain events, in many areas the desert DG (decomposed granite) gets dumped onto the cart path and onto turf playing areas. This results in Golf maintenance reallocating labor from their pre-scheduled daily routine of projects into cart path clean-up / debris removal. Again, the rip-rap rock works to clean the runoff water before dumping sediment and other unwanted debris onto the cart path and/or playing surfaces.
3. The rip-rap rock is being installed in the desert areas to reduce injury and improve aesthetic appearance of the golf course.
 - a) After large rain events, specifically the storms like those of the summer monsoons, Mother Nature demonstrates where she wants the water to flow. This surface flow runoff water from the storms cuts through the desert landscape, resulting in dangerous, unsightly erosion channels. These channels form on the sides of slopes and outside homeowner fence lines working their way to golf cart paths. The rip-rap rock is being placed in these channels. The rock that is installed is more visible and reduces the unkept appearance of the desert areas.

A few of the benefits of the rip-rap that are appreciated by the Golf Maintenance team and Members at Cottonwood...

- b) The Cottonwood golf maintenance team is no longer cleaning up DG after rain storms at hole 12 tee (top of hill to forward tee)...ask Andy Alvarez opinion.
- c) The CW maintenance team is no longer cleaning up debris at hole 17 tee.

- d) The CW maintenance team is no longer needing to clean up DG on the cart path behind 15 green.
- e) The CW maintenance team is no longer seeing unwanted sediment/ debris being dumped into 16 / 17 lake.
- f) The CW maintenance team is no longer having to clean up cart path / turf areas along left side of hole 1 after rain events.
- g) Members are driving through less surface waters on cart paths at 1, 6, 8, 13, 16.
- h) The rip-rap rock is going to increase the life of the sump pump at the tunnel at hole 2.
- i) The rip-rap rock is going to reduce the need for drain jetting from hole 2 to hole 9 to clear clogged drain lines.

Staff does not feel that these rocks are any more of a tripping hazard than the many obstacles that already exist on the course including bunkers, rakes, benches, tee markers and others. The rocks are large and visible and have a great intended purpose. As players get used to their locations, precautions can easily be made to avoid those areas. The benefits outweigh the risks to assist the staff in providing the best golf experience possible.

Thanks for understanding and embracing this change in our operations.