

Red Rock Canyon State Park – Mapper’s Notes

(Water, water, everywhere, nor any drop to drink)

by Clare Durand

1:15,000 scale, 5m contours, ISOM 2017-2
from LiDAR basemap by Matthew Robbins

LAOC began using Red Rock Canyon for local events in 2016. The previously existing map was a simple USGS base with some prominent cliffs, boulders, and mining features added over time. We’ve now created a full ISOM map of the area and extended the area of the map as well.

Only areas being used by the courses are field-checked. The basemap extends beyond the edges of the field-checked area. The extent of field-checking is bounded on the map by either a purple line, impassable cliff, or out-of-bounds (olive green). Out-of-bounds areas are mapped as such for your safety and may not be entered. You may legally cross the purple line, but there’s not any good reason to do so.

The features:

BLUE:

Why is this map so blue if we’re in the desert? Without vegetation to reduce erosion and with such high visibility, the areas where water would run are very noticeable. All of the mapped water features are mapped with dashed symbols indicating their “seasonal” nature. Most are always dry unless it’s currently flooding.

Seasonal Marsh symbol has been used to map wider streambed areas. These usually have at least one obvious mapped stream channel through them. The rest of the area may be a combination of vegetation, sand, rocks, and other networks of stream channels.

Stream/Reentrant/Ditch/Gully

I’ve tried to map a linear feature where justifiable to help with more clearly seeing the reentrant/spur patterns. Streams are usually identifiable by having a sandier bottom than the surrounding terrain and are more likely to be mapped in flatter terrain. In steeper areas, the reentrants are more obvious from the map.

Ditches mostly follow reentrants, but a few are man-made features.

Gully is deep enough that you won’t want to cross it directly.

Rocks:

The minimum size for cliff and boulder features is one meter. A few boulders that are smaller than this are mapped in areas without other detail. Very few cliffs are drawn with tick marks to allow for mapping the detail under the cliff. At the western edge of the mapped area, only the lowest edge of the cliffs are mapped with olive green over the rest of the cliffy area.

The eastern hills are blocky sandstone and erode into larger blocks that have created alluvial stony ground areas. The western cliffs are deposits from volcanic ash and other sediments. These

erode into very dramatic badland formations which are quite porous. The gray muddy looking stone can be very hard or can just give under your feet. It's hard to tell which until you're on it.

Rocky ground is very much about what slows you down. What looks rocky may not be mapped that way and some areas mapped as rocky may not look like it. Most of the area is easily runnable without any trouble. The steeper the terrain is, the more likely that rocks/gravel will make the slope slippery and slow you down.

Where the volcanic ash deposits are hard and sloped, even a small amount of gravel can make them slippery. These are mapped as rocky ground, but don't look rocky.

Vegetation:

The entire map is covered with a rough open base. Some areas are barren and some have brush, but almost nothing is enough to slow you down. There are a few areas of darker green and one spot where the bushes get tall enough that I added the scattered bush pattern over the rough open.

Mapped individual bushes/trees are almost all Joshua Trees. These often grow in clusters. The size of the dot is related to whether it is a smaller or larger cluster. Joshua Trees need to be at least 2m high to be mapped. Where the Joshua Trees are less clustered and more scattered, they may be mapped as scattered trees, white, or light green. This depends on how large the area of Joshua Trees is, how close together they are, and whether there is a lot of deadfall slowing down progress.

Two areas on the map - around the parking lot and one other spot - have a line of black dots similar to vegetation boundary. This represents a noticeable line of small rocks in the terrain that were clearly placed to define a parking boundary.

Other Stuff – Past mining operations have left some areas with small depressions, knolls, and rocky piles. Deep shafts in the hills are surrounded by fences. I found one open steep pit which is mapped with the black pit symbol.

The area is popular for OHV. A major dirt road runs through the map which was used to travel from one OHV area to another, but is closed at the southern end due to excessive erosion. Vehicles are not allowed off the road, but you are. Many old pathways exist from mining and past OHV use. Where trails are clearly the current hiking trail, they are mapped as trail. Other old scars are mapped as rides.

Hazards:

Be careful on steep slopes and don't fall off any cliffs.

Cholla – Red Rock Canyon has very little cactus, but you may see a cholla or two. Some of the plants are a little sticky, so gaiters are recommended.

