



Doug Ducey
Governor

Sue Black
Executive Director



Date: July 1, 2016

Re: Kartchner Caverns State Park; The Villages at Vigneto - Development Approval Stipulations Request

The Arizona State Parks believes that the Vigneto development will have a net economic benefit to the region and Kartchner State Park and is in favor of its approval if the following stipulations are added to the Final Community Master Plan to ensure there are no net negative impacts to the quality and quantity of the Kartchner Caverns and the quality of the experience for its visitors.

a. No net changes to the Kartchner Caverns water levels.

- i. There are serious concerns that if the development is to use on-site wells to provide potable water for the project, that this may cause a drop in water levels in the Caverns which can cause the death of the delicate cave eco-systems and subsequent closing of the park.
- ii. The development must be required to ensure that there will be no net increase or decrease in the ground water levels in the Kartchner Caverns due to the activities associated with the development and operation of Vigneto. There needs to be a series of monitoring wells put in place to measure potential impacts as well as a series of action strategies in place to cure and cease any changes to the water levels in the Caverns.

b. No net change in the water quality of the Kartchner Caverns

- i. There are serious concerns that if the development is to have chemical fertilizers on the golf course, roadway run-off chemicals, and sanitary sewer reuse treatment, that these may cause an adverse change in water quality in the Caverns which can cause the death of the delicate cave eco-systems and subsequent closing of the park.
- ii. The development must be required to ensure that there will be no net increase or decrease in the ground water quality in the Kartchner Caverns due to the activities associated with the development and operation of Vigneto. There needs to be a series of monitoring wells put in place to measure potential impacts as well as a series of action strategies in place to cure and cease any changes to the water quality in the Caverns.

c. Provide Kartchner Caverns State Park future use of City of Benson and/or Developer water lines associated with the San Pedro aquifer

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- d. **Minimal visual impact to the Kartchner Caverns State Park Edges**
- i. There is concern that the quality of the Park experience can be diminished by having too much development occur adjacent to the boundaries of the park and visible from within the park.
 - ii. The developer needs to provide a visual photo simulation of the proposed development along the edges of the park and work with the Arizona State Parks to minimize the negative visual impacts to the Park.
- e. **Minimal traffic impacts to the safe access to the Kartchner Caverns State Park**
- i. There is concern that at some point in time during the phased development of the Villages at Vigneto that there will be enough added traffic to cause a negative impact on the safe and timely vehicular access into the Park.
 - ii. The traffic volumes need to be monitored on an annual basis to determine if the added traffic has reached a certain pre-determined threshold which will indicate that the park's safe and efficient entrance traffic operation has been impacted negatively. In addition, there needs to be a set of roadway geometry changes and improvements that will need to be constructed and paid for by the developer in order to mitigate the negative impacts.
- f. **Provide trail connectivity in partnership and coordination with City of Benson and Kartchner Caverns State Park.**

Arizona State Parks looks forward to continued participation and partnering with the City of Benson and the developer on this project. For more information, please contact Dr. Bob Casavant or Mr. Brent Smith, both on staff at Arizona State Parks, and visit Kartchner Caverns State Park webpage at <http://azstateparks.com/Parks/KACA/index.html>

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