



# THE DATUM POINT

Newsletter of the  
NORTHERN VIRGINIA CHAPTER OF THE  
ARCHEOLOGICAL SOCIETY OF VIRGINIA

Chapter Website – [www.nvcasv.org](http://www.nvcasv.org)

February 2014

Chapter meets at the James Lee Center, 2855 Annandale Rd, Falls Church, 2<sup>nd</sup> Weds. of each month

## FROM THE PRESIDENT – JACK HRANICKY

The chapter officers met on Martin Luther Kingø Day for a chapter overview of business for the upcoming year. We reviewed the budget, tours, updating the website, and laboratory procedures. We will report them to you at the February meeting. John Kelsey, Patrick OøNeill and I attended the ASV Board meeting in Charlottesville. Other than the replacement of the Quarterly Bulletin editor with our Patrick OøNeill, most of the business discussed was routine. mainly Kittiewan is in good financial conditions.

One item keeps coming up which is the National Geographicø show, Diggers. It is truly an anti-archaeology program as the show advocates treasure hunting with metal detectors. There is a change.org petition about this issue and many state members received an email about it recently. All members are encouraged to write National Geographic or sign the online petition. If anyone would like to read the letter written by the Society for American Archaeology, it is posted at <http://saa.org/Portals/0/SAA/Press/Diggers.pdf>.

What is interesting about National Geographic is that they are presenting a program called ø Culture Heroes: Saving the Past. It airs on May 14 at 7:30 pm on their cable channel.

So far, this has been a rather interesting winter weatherwise. meaning no fieldwork. Guess we will have to wait for spring.

## February 12<sup>th</sup> talk

### A Late Nineteenth Century Slaughterhouse in Old Town Alexandria

By Becca Siegal  
and Garrett Fesler

Staff and volunteers at Alexandria Archaeology, in collaboration with URS Corporation archaeologists, recently completed excavations of a possible slaughterhouse in operation from the 1870s to 1890s. During excavations, a well/sump, several post holes/molds, and industrial metal artifacts were uncovered.

Becca Siegal has participated in several archaeological excavations in Virginia and Maryland over the last few years. She is currently an intern at Alexandria Archaeology. She was named Volunteer of the Year. She has helped excavate at several sites in Alexandria, including the slaughterhouseø site.

This past summer she helped out with Alexandria Archaeologyø summer camp at Fort Ward. This fall GWU and Alexandria Archaeology held a field school, and Becca assisted supervising the field and lab work during the semester. She is also the Friends of Alexandria Archaeology (FOAA) Membership Chair.

## A WELL-TRAVELED MOLLUSK

By  
**Dave Shonyo, Staff Archaeologist**  
**Gunston Hall Plantation**

It had lain there for perhaps 250 years ó unseen, far from home, in strange company. Then it came to light again on a summer day in 2013.

One of George Mason's sons, John, mentioned in his *Recollections* two clusters of slave dwellings near the Gunston Hall mansion. One was called "Log Town" and was located somewhere to the northwest of the mansion. To the east of the mansion were "servant houses." The remains of slave dwellings on colonial-era plantations are notoriously difficult to find, and none had been found at Gunston Hall. The structures seldom had masonry foundations. Rather, they were usually anchored to the ground with posts. So, all that is left of the structures are a series of discolorations in the soil where the posts used to be.

Slave dwellings usually had earthen floors. Pits were often dug into the floors by the occupants. These sub-floor pits (sometimes called "hidey-holes") could be used to store certain kinds of food items and keep personal belongings out of sight. They could also sometimes be used to house ritual items. It is often these pits that provide an archaeologist a first clue that the site of a slave dwelling has been found.

During the 2013 field season we excavated in an area to the east of the mansion, well beyond where the formally-maintained lawns and gardens would have been in Mason's time. Among the findings were two adjacent, well-defined circular pits. One was a bit over two-feet in diameter and the other was about six feet in diameter.

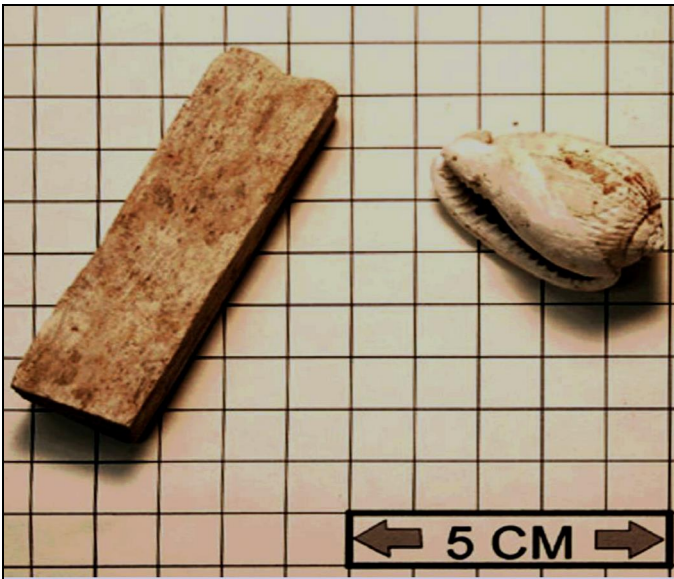
Could these be sub-floor pits that once resided in a slave dwelling? Circular sub-floor pits have been reported from other plantation sites, but they are not common. Circular pit six-feet in diameter would be particularly unusual. The soil that filled the smaller pit did not contain any artifacts. However, the bottom of the pit contained a layer of small cobbles. The top-most layer of cobbles was arranged in a

spiral pattern. Spirals are powerful symbols in many West African traditional cultures. It is possible, therefore, that the pit had some spiritual significance.

The larger pit appears to have been used as a receptacle for trash and garbage after it was no longer being used for its original purpose. The abundant artifacts found here are just what would expect from the dwelling of slaves that worked in the mansion and the surrounding grounds and outbuildings. The floor of the pit was lined with a single layer of cobbles. Near the center of the pit floor was found an interesting assemblage of artifacts, including a bottle seal bearing the initials of George and Ann Mason (plus the date, 1760), two pieces of petrified wood and a cowrie shell.



Bottle seals are not uncommon artifacts at Gunston Hall, but petrified wood and cowries are not native to any place near the site. The cowrie is of particular interest, since these shells are usually associated with slave occupation areas when found in this region of North America. Traditionally, two species of cowrie (and ours is not one of those species) were used as money in West Africa. Other cowries had a symbolic significance, representing fertility, childbearing and wealth. They were also used in divination. These traditions accompanied the West Africans who were brought as slaves to the New World.



The species found at Gunston Hall has been identified as a reticulated cowrie helmet (*Cypraea testiculus*). This is a mollusk native to the waters of the tropical West Atlantic and Caribbean. The Gunston Hall specimen is the only example of the species to have been found an archeological site in Virginia. In fact, cowries (all of other species) have been found at only two other sites in Northern Virginia: Ferry Farm (one specimen) and Mount Vernon (two specimens).

According to records covering the years 1700 to 1770, only 36% of slave ships disembarking in Northern Virginia ports came directly from Africa. The others came from the Caribbean or mainland North America. So, it seems reasonable to surmise that the Gunston cowrie was originally gathered by a slave residing in the Caribbean region or a more southerly American colony and accompanied a slave who was traded north. It may have been passed from hand to hand, perhaps over several generations. (The glossy surface typical of cowrie shells has been almost completely worn away.)

So, what was the shell doing at the bottom of a pit dating to the 1760s or 1770s. First of all, it should be said that the evidence uncovered so far strongly suggests that we have a sub-floor pit in a slave dwelling, but there is not yet enough evidence to declare that with certainty. The investigation is still a work in progress. However, assuming for the moment that this was a sub-floor pit, let's speculate a little about the assemblage of artifacts found at its

base. First, there is the cowrie shell with its strong traditional symbolisms. Then, there is the petrified wood. What kind of powerful magic would it take to turn the wood to stone? Perhaps some of that power still resided in the stone. Finally, the bottle seal with its initials has a strong personal connection with the Master and his wife. Could this be a kind of magic kit? Were spells being cast here and fortunes being told?

While we are speculating, let's take another look at that large pit. Why would someone go to the trouble of digging an almost perfectly circular, bowl-shaped pit just to store yams (or whatever) when it would be easier, faster and just as useful to dig another shape? Does this pit also have some spiritual significance? Oh, well. It may turn out to be something much more mundane. Nevertheless, I kind of like the idea of magic being worked out behind the Big House at Gunston Hall.

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My thanks go to Prof. Barbara Heath for sharing the text of her presentation on Cowrie Shells in Colonial Virginia (given at the Annual Meeting of the Council for Northeastern Historical Archaeology, Nov. 8-10, 2013), from which I have shamelessly borrowed some of the above information. I also thank Dr. Jerry Haresewch of the Div. of Mollusks, Smithsonian Institution, for identifying the species of the Gunston cowrie.

## **BARREL WELL FROM DELAWARE**

by Patrick O'Neill

The following update from DelDot is on a late 18<sup>th</sup> century barrel well I excavated in 1999, as part of the SR-1 project between Dover and Wilmington, Delaware. The main focus of the site was a brick clamp, where I got my teeth cut on hand-made bricks that you have heard me discuss for over 14 years!

In trying to find the house or structure the bricks were used for, a post-in-ground structure was found, and a few feet outside what we think was the back door, we found this barrel well. The surface was identified only as a 6-foot wide circle of darker soil.



Excavation soon found a dark ring of what looked like decayed wood about 2.5 feet across.

Realizing this was a buried barrel (not yet comprehending it was a well), the area inside the barrel was screened separately than the soil outside, and this was our saving grace factor! Wells are usually excavated with backhoes because of safety reasons, but the context of any artifacts and construction details are immediately lost, and I was determined to not let this happen to this feature.

The first (upper) barrel was bisected and the wood staves were entirely a stain, with very little wood remaining, since it was above the waterline. The upper half of the 2<sup>nd</sup> (middle) barrel was primarily a stain, but in the central area, where the water line was normally located, the stain transitioned to decayed wood and was solid wood by the base.

The 3<sup>rd</sup> (bottom) barrel, completely submerged in the water table, was solid wood. So solid, in fact, that I was able to step back the subsoil around the well shaft and remove the staves individually, where the barrel was restored at the Delaware State Museum. The soft branches used to wrap the barrel instead of a metal ring still had bark on them! Great preservation.

Because the soil inside the barrels was screened separately from the soil in the shaft (builder's trench), only one artifact was found in the builder's trench: a flat disc button dating to the last quarter of the 18<sup>th</sup> century. This date correlated to the artifacts found at the nearby brick clamp!

The following article is about barrel wells in Delaware, but highlights the well I just described!

### [US Route 301 Archaeology Update](#)

Tuesday, December 17th, 2013

Alternative Mitigation of the Polk Tenant Site (7NC-F-111). This month at Versar we're blogging about an example 3D cut-away model of an 18<sup>th</sup> or early 19<sup>th</sup>-century well found in New Castle County. Part of our task in examining the archaeological record of wells excavated across Delaware is to prepare 3D models that help show

what they might have looked like, and how they were built.

We've found evidence for at least four broad types of well construction: circular brick wells, circular stone wells, square or rectangular wood-frame wells, and barrel-lined wells. Wells had to be lined in order to prevent the sides from caving in. The material chosen says something about the kinds of resources available at the time. Barrels with the tops and bottoms knocked out offered a simple and expedient way to build the needed support.

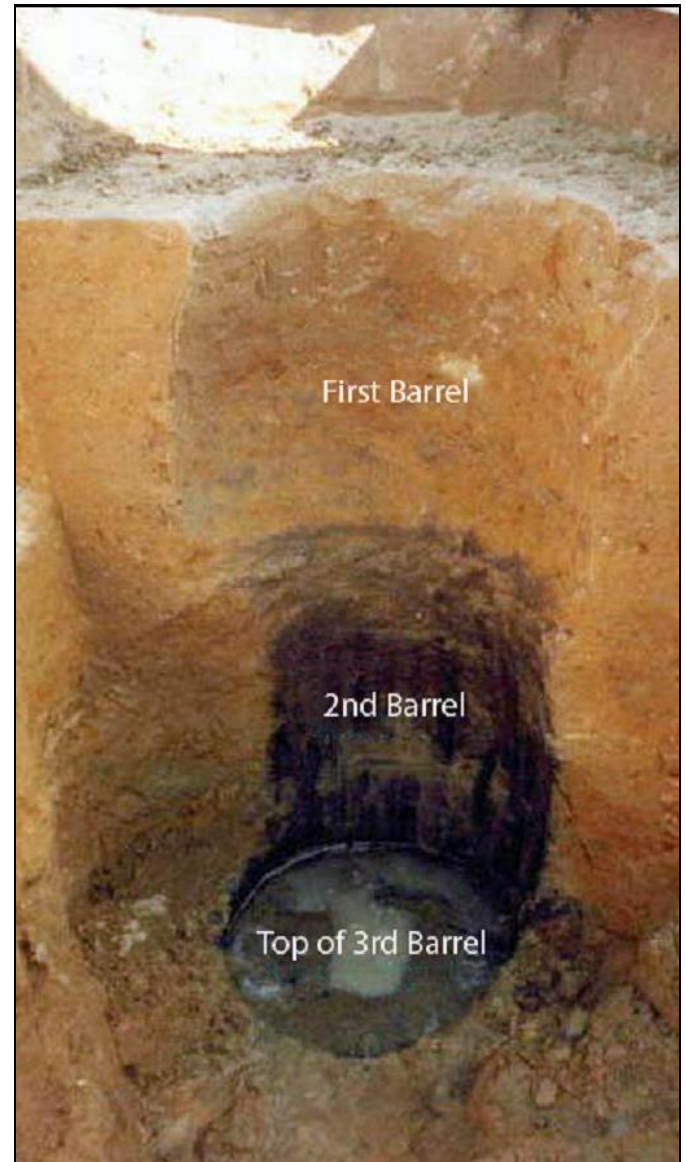


Figure 1: barrel well, Jones Site

There was an excellent example of this type of well excavated by Versar for DelDOT at the Jones Site (7NC-J-204) during the State Route 1 project that we chose for our first model. The well was made

from 3 barrels stacked on top of each other inside a hole dug some 12 to 15 feet into the ground to just below the water table. Only wood from the bottom-most barrel survived because it was saturated with water. The other barrels were found mostly as stains in the surrounding soil. Nevertheless, it was possible to accurately record the original shape and dimensions.

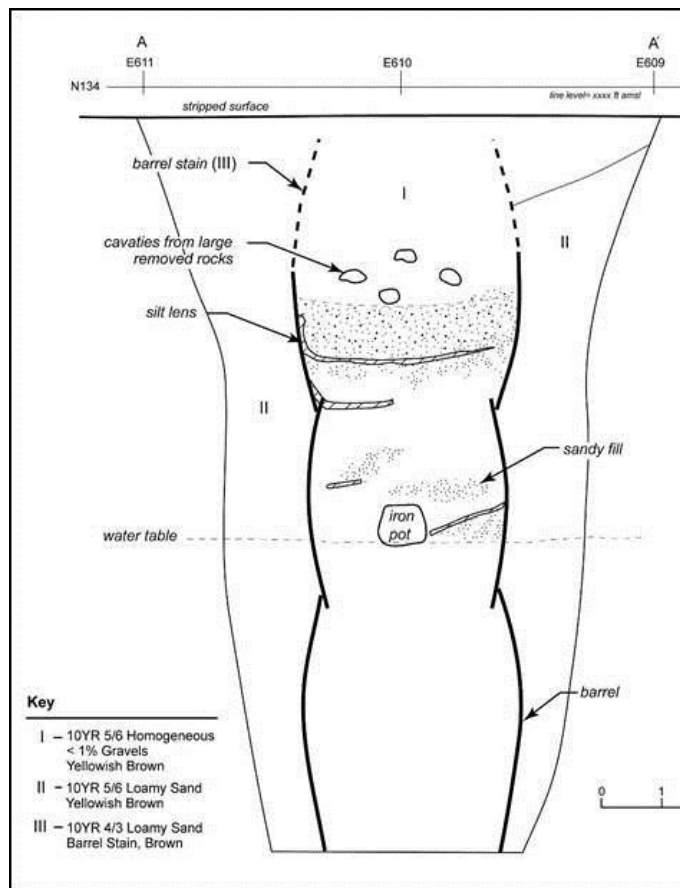


Figure 2: Profile drawing, barrel well

To make our model, we started with both photographs of the well taken while it was being excavated, and a measured profile drawing of the well prepared by field archaeologists. Our first step was to bring the measured profile drawing into Autodesk Maya, a software package designed for 3D modeling and animation. With the profile drawing as a reference, it was possible in orthographic view (a flat view with no perspective) to build 3D barrel shapes that match the size and shapes of the barrels we found in the field. We were also able to create a cut-away image of the surrounding soil showing the size and shape of the hole made for the barrels when the well was first

dug. After the barrels were placed in the hole, the remaining open space was filled in with dirt. This fill dirt would have been a mix of all the soil excavated including dirt from near the top and bottom of the well shaft. This mixing gave the fill a different color and texture from the surrounding earth, which is what allowed us to identify it.

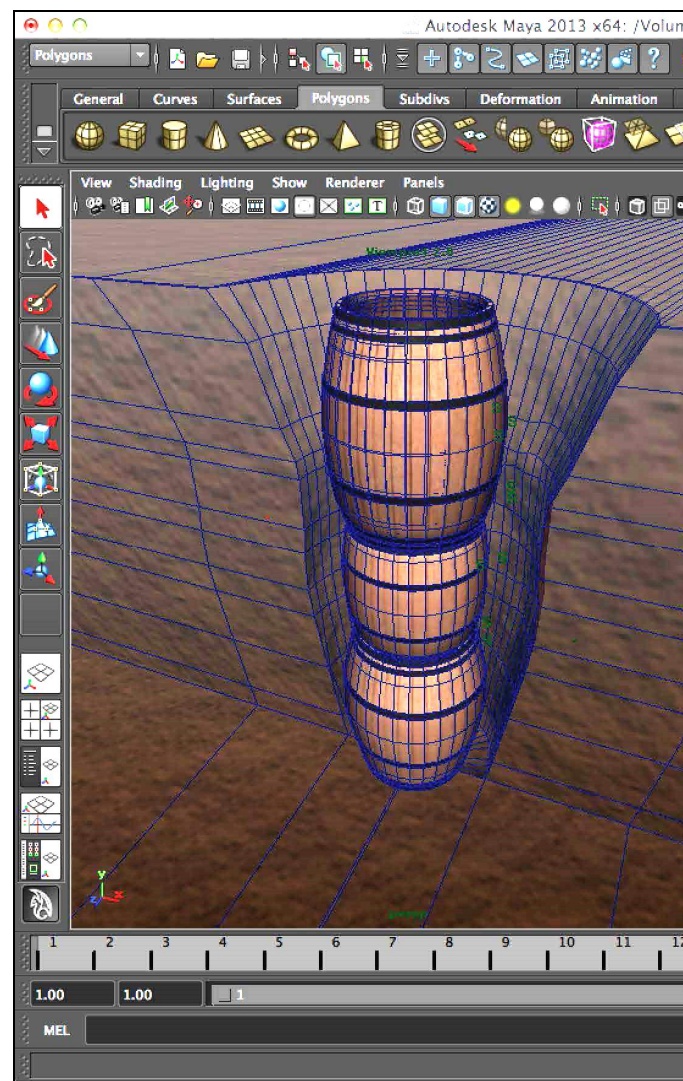


Figure 3: screen shot of well model in Autodesk Maya.

Once the model was built we added textures to the shape based on photographs of the wood we recovered on the site. Lastly we added lights to the scene and prepared this render of what a cut-away of the well might have looked like before the well shaft was filled back in. Over the next couple of months, we will be doing similar models of other types of wells found in Delaware.



## NATURAL BRIDGE

**Natural Bridge in Rockbridge County, Virginia was sold to the Virginia Conservation Legacy Fund on February 6, 2014**

**Roanoke Times Thursday, February 6, 2014**

The Natural Bridge will become a state park under a deal reached between its former and current owners and several Virginia agencies. The complicated real estate transaction, recorded Thursday in Rockbridge County, fulfills its longtime owner's desire to preserve the national treasure once owned by Thomas Jefferson.

Angelo Puglisi donated the 215-foot limestone arch, valued at \$21 million, to the newly formed Virginia Conservation Legacy Fund and received conservation tax credits estimated to be worth about \$7 million along with \$8.6 million in cash for the balance of his Natural Bridge holdings that encompass more than 1,500 forested acres.

For Puglisi, entrusting the historic structure to the state offers the assurance that many generations yet to come see Jefferson's bridge on property surveyed by George Washington and hear the story of the nation's founding.

Last spring Puglisi contracted with Jim Woltz of Roanoke-based Woltz and Associates to auction the property, but told him that he wanted the national historic landmark to become a national or state park.

The deal with the Virginia Conservation Legacy Fund goes beyond protecting the bridge, Native American village and waterfall — features most visitors have viewed. Eventually, all of the holdings, save for the hotel and cottages, will become part of the state park system.

“This is truly a historic day for a very special place,” said Faye Cooper, executive director of the Valley Conservation Council. “Everyone acknowledges the historic value with Jefferson having owned it. But it has special significance as a rather large property with a great variety of conservation values — scenic, ecological, underlying caverns, rare forest connections — and the geological features are truly extraordinary to tell the history of the region.”

In order to fulfil Puglisi's desire, Woltz said he “banged on lots of doors. I contacted every

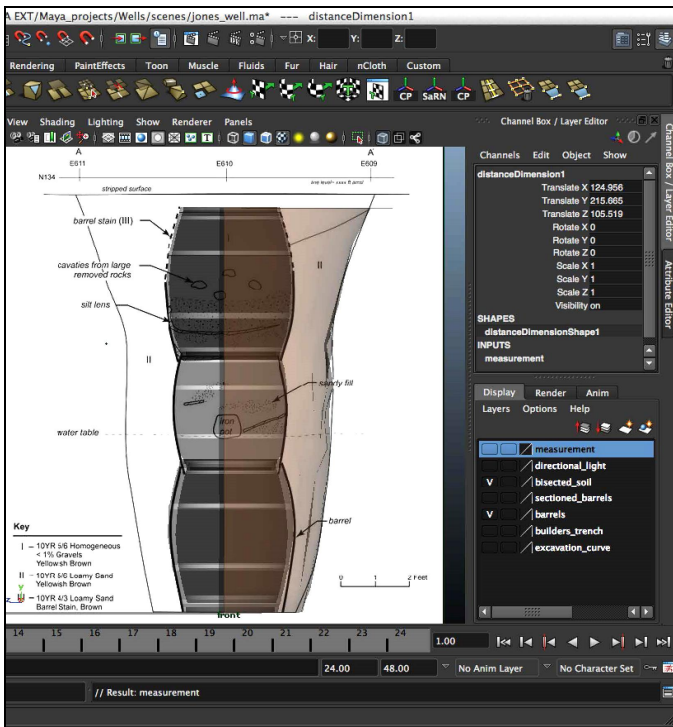


Figure 4: screen shot of well model in Autodesk Maya.



Figure 5: cut-away reconstruction of the Jones Site barrel well before the excavation hole was refilled.

conservation fund. I worked with hedge funds and investors. We were working with Tom Clarke on another deal, and I mentioned the Natural Bridge and what we were trying to do. He said, "Shoot, we'll try to make that happen."

Clarke is the owner of Kissito, a nonprofit Roanoke County-based health care firm. The company works in Africa on nutritional and health efforts. Clarke said one of Kissito's board members, Cabell Brand, had asked him, "What are you doing for the environment?"

Prompted by Brand's mentoring on sustainable environments, Clarke began working with Woltz on the Buffalo Creek-Purgatory Mountain special project area in Botetourt and Rockbridge counties.

"Jim said, 'Boy, have I got a deal for you. I've got a bridge you've got to see,'" Clarke said he and his family are no different than most local residents, having visited the Natural Bridge five or 10 years ago and viewing it as a place to take out-of-town visitors. Once he started learning the history and about the holding's ecological significance, he, too, wanted it preserved and set up the Virginia Conservation Legacy Fund.

The transaction is complicated. The holdings had been divided into 35 tracts of land. The 188-acre parcel that includes the bridge is valued at \$21 million and was donated to Clarke's VCLF. The deed was recorded with a conservation easement, which allows Puglisi to exercise a state tax credit. The terms require the bridge to be turned over to the state once VCLF retires the \$9.1 million loan used to secure the balance of Puglisi's Natural Bridge holdings. Clarke is aiming to have the note paid by Dec. 31, 2015, and then deed to the state all of the property with the exception of a few parcels that include the hotel, cottages and caverns.

Those parcels on Thursday were transferred to a newly formed for-profit limited partnership set up through Kissito that will allow Clarke to seek private investors to raise the capital needed to renovate the hotel.

To purchase the holdings, VCLF secured a loan through a state Department of Environmental Quality program set up to protect watersheds. Additionally, another agency, the Virginia Resource Agency, was brought in to oversee the loan.

The complexity of the deal, involving so many state agencies, delayed the closing, which was

first scheduled to occur in December. In January, the hotel and attractions were closed pending the change in ownership. On Wednesday afternoon, the attorney general signed off on the deal, allowing the deed to be recorded Thursday morning.

For now, VCLF will operate all of the attractions and use the admission proceeds, estimated to be about \$2 million a year, to help pay down the note.

Clarke will continue to own and operate the hotel and cottages. Staged renovations are planned for the hotel, with about \$5 million worth of updates expected to occur in the next two years.

Woltz credits Clarke's tenacity for putting together the complicated transaction and seeing through all the many details a bureaucracy creates. Mostly, though, Woltz lauds Puglisi for wanting to protect the unique limestone arch that Jefferson acquired in 1774 from England's King George III for 20 shillings.

"I hope the big story is Angelo's gift of the bridge. It's a huge \$21 million gift," Woltz said. "Angelo is a wonderful, wonderful, sweet man."

"We really all should be grateful to Angelo Puglisi to his commitment and stewardship of the property and his patience in seeing through this highly complicated deal," said Cooper, whose agency was also involved in the transaction.

Puglisi sought at the depths of the recession in 2007 to sell Natural Bridge along with all of the Rockbridge County property for \$39 million, but the timing was poor.

The National Park Service was studying the feasibility of taking the bridge into its system, but the process was laborious, and there was no assurance that the federal government was in a position to purchase it. The state was interested in the bridge but was clear that it did not have funds to buy it.

Though the property will not officially become a park until the loan is retired, Woltz said the state is already making plans for trails and an amphitheater.

Chris Wise, chairman of Friends of the Natural Bridge and a board member for the Rockbridge Area Conservation Council, said the transaction is exactly the outcome his groups had hoped for when the property was slated for auction. "Single ownership, with the bridge and undeveloped land going to a park," he said.

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