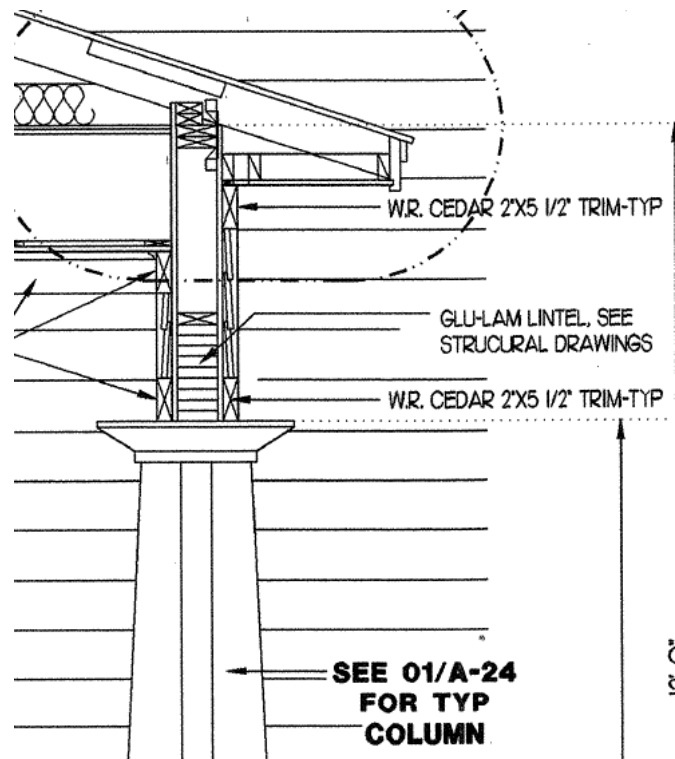


ARCHITECTS'S FIELD REPORT

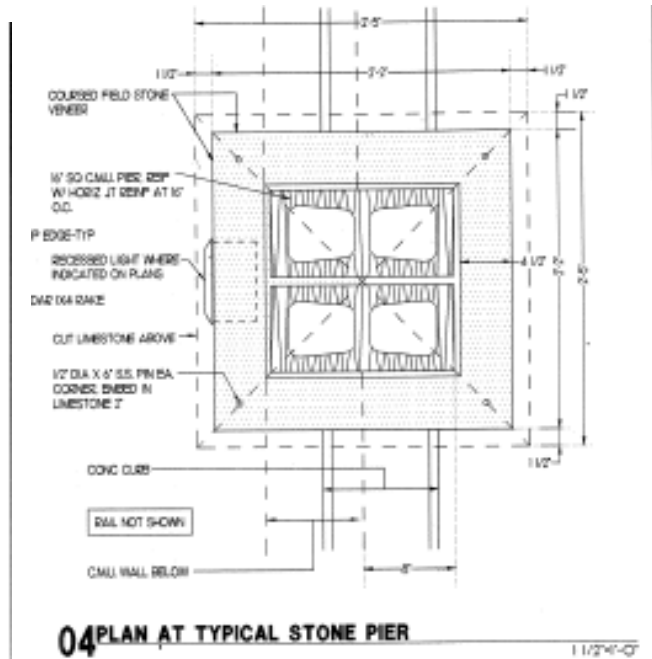
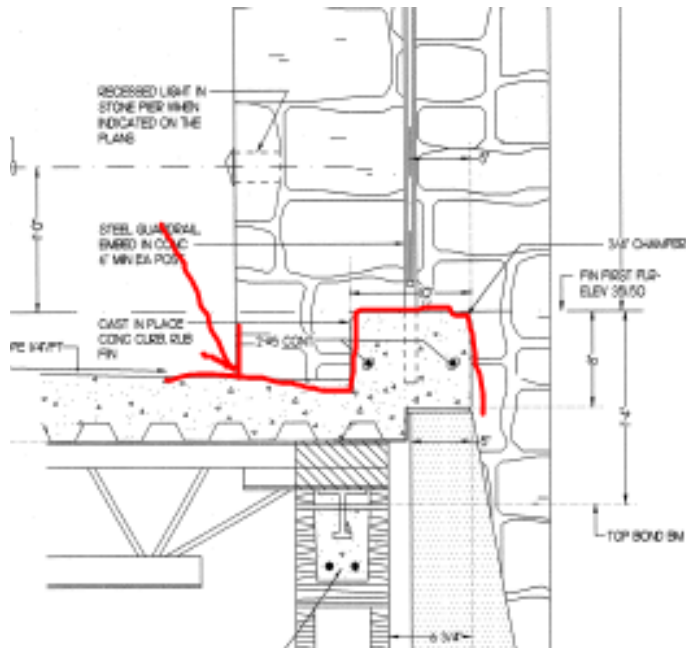
STATE PARK	Arkansas State Parks	Notice to Proceed – 27 July 2021	
	Lake Dardanelle State Park	100 Contract Days to 26 Sept 2002	
Project	Visitor Information and Education Center	25 July 2003 Substantial Completion Date	
Contractor:	Johnson Engineering, Inc.	Phone	
Office Contact	Don Johnson	Phone	
Project Manager		Phone	
Job Superintendent		Phone	
Architect / Engineer	The Borné Firm Architects, P.A.	Phone	
DBA Inspector		Phone	
DBA # 0003.15		Contract Amount \$2,297,000.00	
State Park# 07BF98103			
Date of Visit	2022-08-09		
Friday, Aug 9, 2022	Weather Condition	sunny	Temp: 90°
	People on site – 5		

Below is a photo of the column at the observation deck with the construction section for the column to the right. There was no flashing at the top of the column, and the weather coming off the lake wasn't taken into consideration that water would get to area, but it has and over the years that has caused rot at the column, with water evidence being seen at the underside of the decking in this area where it has been dripping down to the crawl space. Work is in progress to add flashing to the top of these columns.



ARCHITECTS'S FIELD REPORT

At the short columns at the perimeter of the observations deck, there is water coming through them. I'm not finding in the drawings any verification that the cast in place concrete curb that I have outlined in red below is continuous through the column. The detail of the column to the right does suggest that the curb is not continuous. What is now happening is that water is getting behind the rock and making its way down to the crawl space. A solution for this may be to add a bead of caulk along the base of the rock, where it meets the concrete deck (indicated by the red arrow.)

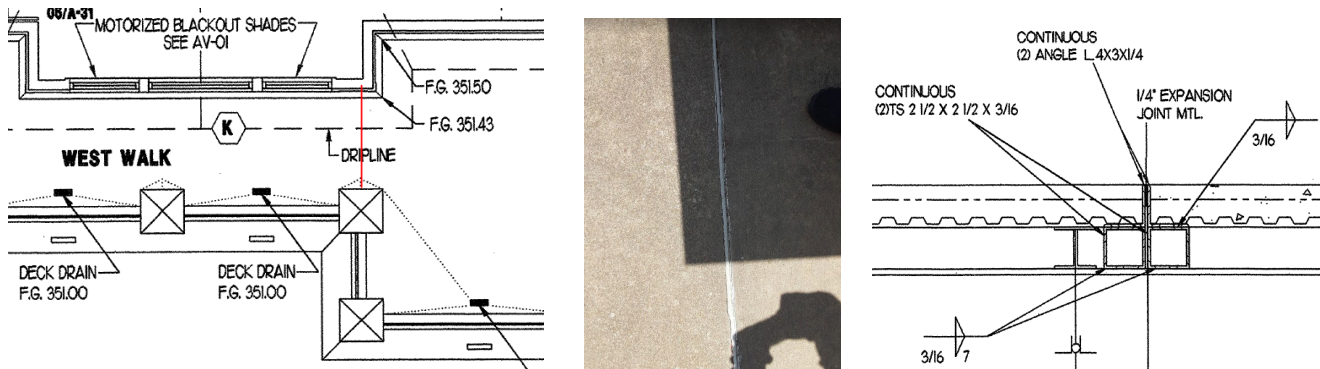


At the underside of the concrete decking, at the drain locations, there is evidence of water damage. Water could be seeping between the drain and the concrete, and this area could be caulk. The top can be taken off and a bead of caulk can be applied to the lip that may prevent water from getting between the drain and the concrete.



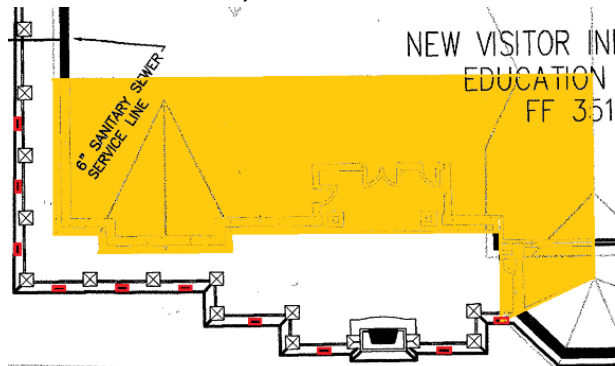
ARCHITECTS'S FIELD REPORT

At the transition between the west walk and the observation deck, floor plan for reference, there is a construction joint that doesn't show up in the drawings, shown in red. The support joist change directions at this point, so this detail is similar to another detail that is shown on the drawings. The water seepage to the crawlspace may be the greatest at this point, and the joint needs to be maintained with the proper caulking process on a regular basis. It was done by a contractor approximately five years ago.



About thirty percent of the roof drains onto the observation deck and the west deck and there are no gutters. I propose gutters that will have a down spout that is cored through the deck and then connects with the existing wall spout to drain to the exterior. Do to the volume of water and the size of the existing outlets, we will need to size a holding pipe to control the flow to the exterior while being able to contain the volume of water that is coming off the roof.

The area shaded in yellow is the area that drains to the observation deck and the west walkway, with the existing drains at the deck shown as the red squares.

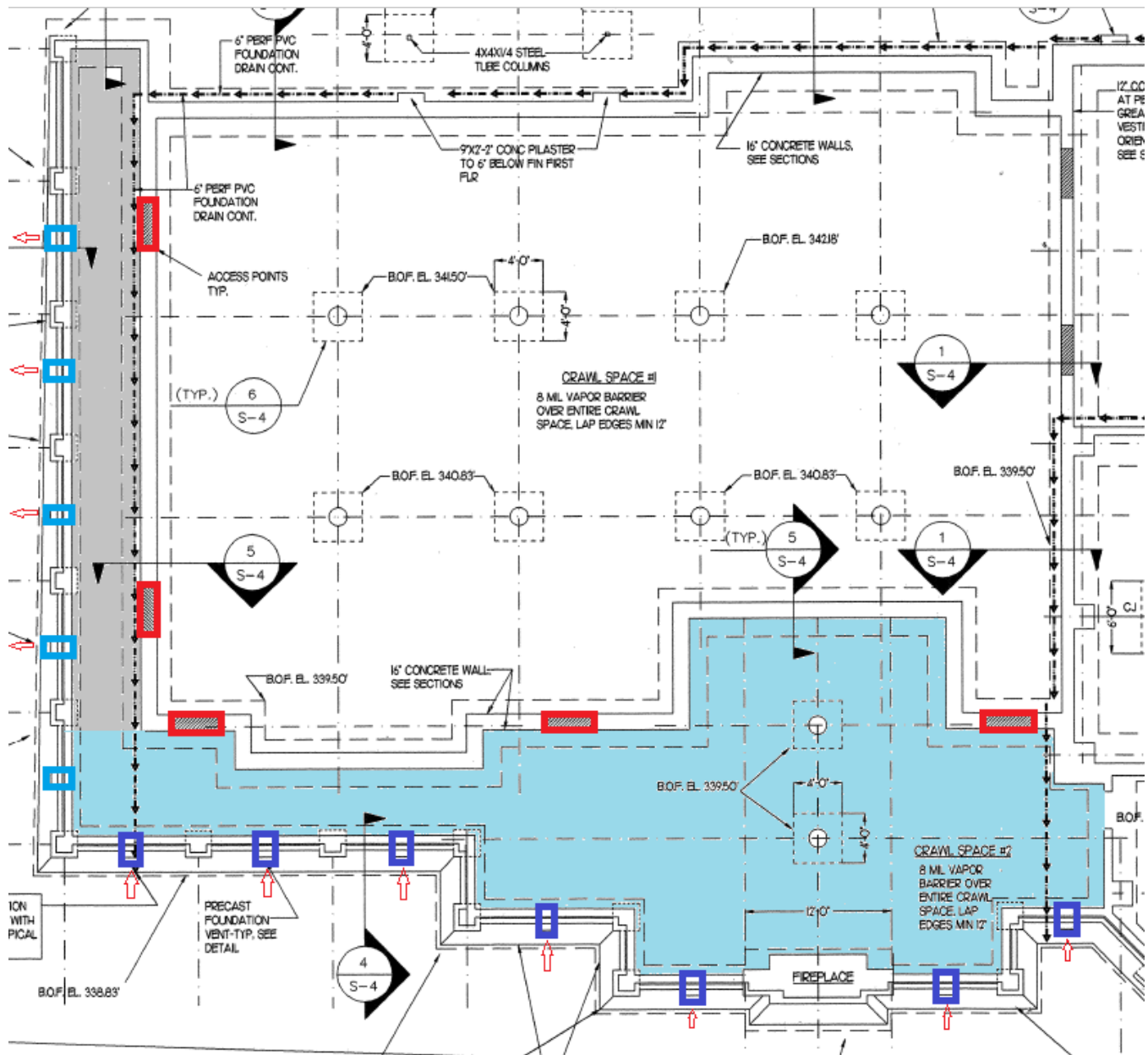


This is where I'll do the calculations to determine the volume of water that is coming off the roof and the size and number of the down spouts needed.

Waterproofing the grout of the columns and the fireplace on the deck side may be a way to keep water from entering the cavity space behind the brick, at the surface of the CMU block.

ARCHITECTS'S FIELD REPORT

At the crawl space the plans called for all areas to have an 8 mil vapor barrier, but at the area colored light blue in the image below, there is only exposed dirt. The area shaded in gray, has the vapor barrier as well as gravel. The light blue area needs to have the vapor barrier installed as well as a layer of gravel. Also on this image, the darker blue squares on the left of the plan are the ventilation openings with the decorative grill that is seen at the exterior. To reduce the amount of moisture in the crawl space, exhaust fans could be installed at the vents under the north walk. This would draw air from the vents on the west side to ventilate the space. There are several openings to the greater part of the crawlspace that would need to be covered up with a simple frame and plywood to minimize air being drawn from those areas. The openings are show below as red squares.



ARCHITECTS'S FIELD REPORT

The rust that is seen at the underside of the decking needs to be dealt with by removal, cleaning, and primer

Photo: beam that is centered on the fireplace above.



Photo: right side corner of fireplace from below.



Photo: rust at underside of decking at drain lines.



Photo: view of decking below the columns at porch.



Photo: beam to outer wall to south of fireplace.

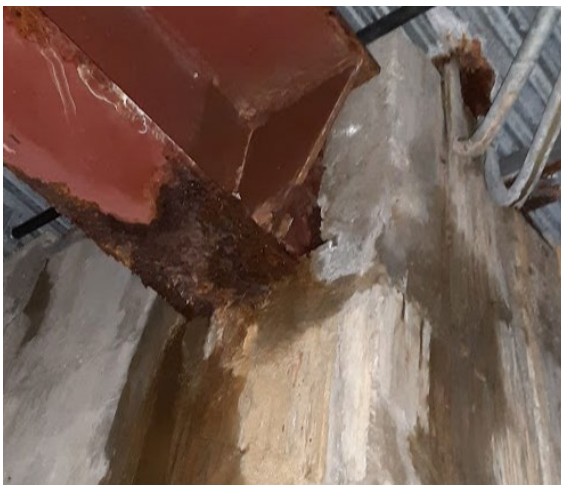


Photo: beam to outer wall to north of fireplace.



ARCHITECTS'S FIELD REPORT

Summary:

The column at the northwest corner of the walkway shows the least amount of water infiltration to the crawlspace area but is as exposed to the weather as the rest of the areas in question. One reason for this is that water from the roof rarely makes it over to this corner of the walk and the drain in this area handles the water in the proper manner. This would suggest that gutter to take the water directly from the roof to grade would benefit the rest of the deck area.

ARCHITECT

Andrew F. McCauley

Date 9 Aug 2022