

Stable Winterization

While rain may seem like forever and a day away, your dedicated staff at Serrano is making preparations for that hopeful eventuality!

Arenas: With the completion of the new footing in the back arena at the end of October, and the still quite new footing in the front, we expect that at least one arena can be left open much closer to the actual start of the rain. Between now and then, some minor re-grading of the arenas will be done to restore the proper slope to facilitate drainage. As the rains approach, we'll either lock the arenas or tie them with string. SCR staff will send out rain notification emails as soon we can determine the likelihood and intensity of predicted storms. For those "select" few, please note that being able to cut locks or string doesn't qualify you for personal usage of the arenas. Interested on how we make our rain closure decisions? Click on this link [Arena Closures](#).

Sediment Control: You might notice a strange structure at the drainage point of the stable. In a recent water quality inspection we were cited for improper sediment control of the stable. Specifically, sediment is required to be captured before entering the creek. There are two reasons for this. The first is the sediment itself, which eventually makes its way to Newport Bay, where it then must be dredged out at a very high cost. Secondly, nutrients such a nitrogen and phosphorus will bind to sediment and then later feed the algae growth in Newport Bay. When these algae bloom, their eventual decay can absorb a large percentage of the oxygen in the water, thus killing the marine life from hypoxia.

This screen will be dropped in place prior to any expected rainfall. It is a series of smaller and smaller screens to trap the

sediment, and slowly allow the cleaner water to pass. After the rain, we'll tilt it up, and clean it for the next time. While down it will protrude slightly into the path of travel. So we ask that you exercise caution during those times. Also since it is designed to slow the flow of small and moderate rainfalls, expect it to create a pool of water while the sediment is trapped. In the case of heavy rain, it is designed to allow the flows to go across the top. So please don't worry, we're talking inches here, not feet.

Stall Winterization: We will begin the winterization of the stalls on November 3rd starting in the front breezeway. For folks that have been here many years, the stall-a-gram at the end of the newsletter will be familiar. Please return ASAP so that we can complete this arduous task as efficiently as possible. If you are new to the stable, each year we'll prepare your stall for the upcoming rains. Please note that while we seek to meet your specific requirements as noted on the stall-a-gram, the stable has a master drainage plan, and whatever is done in your stall must conform to the overall design. More on this further on. For more information about winterization please see the October 2010 SCR newsletter, or click on this link [SCR Winterization](#) and here [More SCR Winterization](#). As always, we're happy to answer any of your questions.

Stable Grounds: We'll also be fine tuning the walkways and roads to facilitate rapid drainage. During and shortly after it rains, we ask you to please not drive your car / truck on any dirt areas. The weight of the tires damages the grade resulting in standing water. Typically rain storms have a small break between them, and if the drainage is maintained, the paths and roads have a chance to dry. We can then restore them before the next storm. If they are heavily damaged from cars and trucks, then we can't re-grade them,

and with the next storm the road becomes impassable. We expect that horses and carts need to be able to access all areas of the stable all the time. Sadly, your desire to keep your dress shoes clean can result in a nightmare for others who need access. Thank you for your understanding.

Drainage Maintenance: As noted above, the stable has a master drainage plan. In order for it to work, rainfall must be able to exit the stall in a straight line. Whenever water is diverted, its longer path results in a flatter slope, which means that it is more likely to stay in the stall and cause problems (remember from Jr. High math: $\text{rise/run} = \text{slope}$). This straight line does not follow the pipe rails, it runs diagonally through the stall. Figure 1 shows the master drainage plan for the stable. As you see, every stall receives some from its upper neighbor, and in turn sends water to its lower neighbor. Figure 2 is a theoretical small grouping of stalls showing the approved drainage. In figure 3, Stall C has placed barriers to prevent water from entering that stall. The effect of this is that the water must travel a longer path to exit. Theoretically, rather than the 33' which is the hypotenuse, it must travel 48' ($24' + 24'$) or approximately 50% further. Put another way, the effective slope of the stall is reduced by 50%. The net effect is that water will much more likely pool in the stall, resulting in mud from the horse moving around.

Secondly, while Stall C is able to block the upper neighbor's water from entering, the problem hasn't gone away, it has just been shifted to stall D. Now stall D takes the water from its upper neighbor Stall B, plus the additional water that was supposed to have passed through stall C. The net effect is that Stall D now receives twice the rain. Therefore the actions of Stall C have placed an unfair burden on stall D. The same is true with Stall A as the slower moving water will pool behind the

barrier. Remember that the secret to a dry stall is to pass the rain as fast as possible through and out the stalls.

Additionally air movement is the key to drying out the stables. As barriers are constructed, airflow is greatly retarded, significantly extending the drying time not for just the "barriered" stall, but for neighboring stalls. To maintain not only the master drainage plan, but fairness to all stall occupants, the placement of barriers to divert incoming water along the stall's edge is prohibited. As noted in the [February 2013 newsletter](#) as well as your boarding agreement, modifying the overall drainage plan is prohibited.

If you desire to prevent water from entering your horse's principal stall area, you may place a barrier as long as it is a minimum 18" measured from the rail to the outside edge, to divert all received waters. All water that is diverted as a result of the barrier must now exit through the same stall. Figure 4 shows the allowable installation. Allowable barriers can be no more than 12" high, and made of a durable rubber, rot resistant posts such as pressure treated wood posts / railroad ties, or mounded dirt. As an alternative you may raise the stall footing grade for all areas other than the surrounding 18" of the two sides and back. These culverts must be maintained by you. No matter what option you choose, at no time may the water be diverted to other stalls. The small sections of plywood that have been placed by the SCR to prevent horses in 12' wide stalls from exchanging feed are exempt from the prohibition. If you have placed anti-kicking mats on the walls of the stall, there must be a minimum of 6" clearance between the master drainage grading level of the stall and the bottom of the mat.

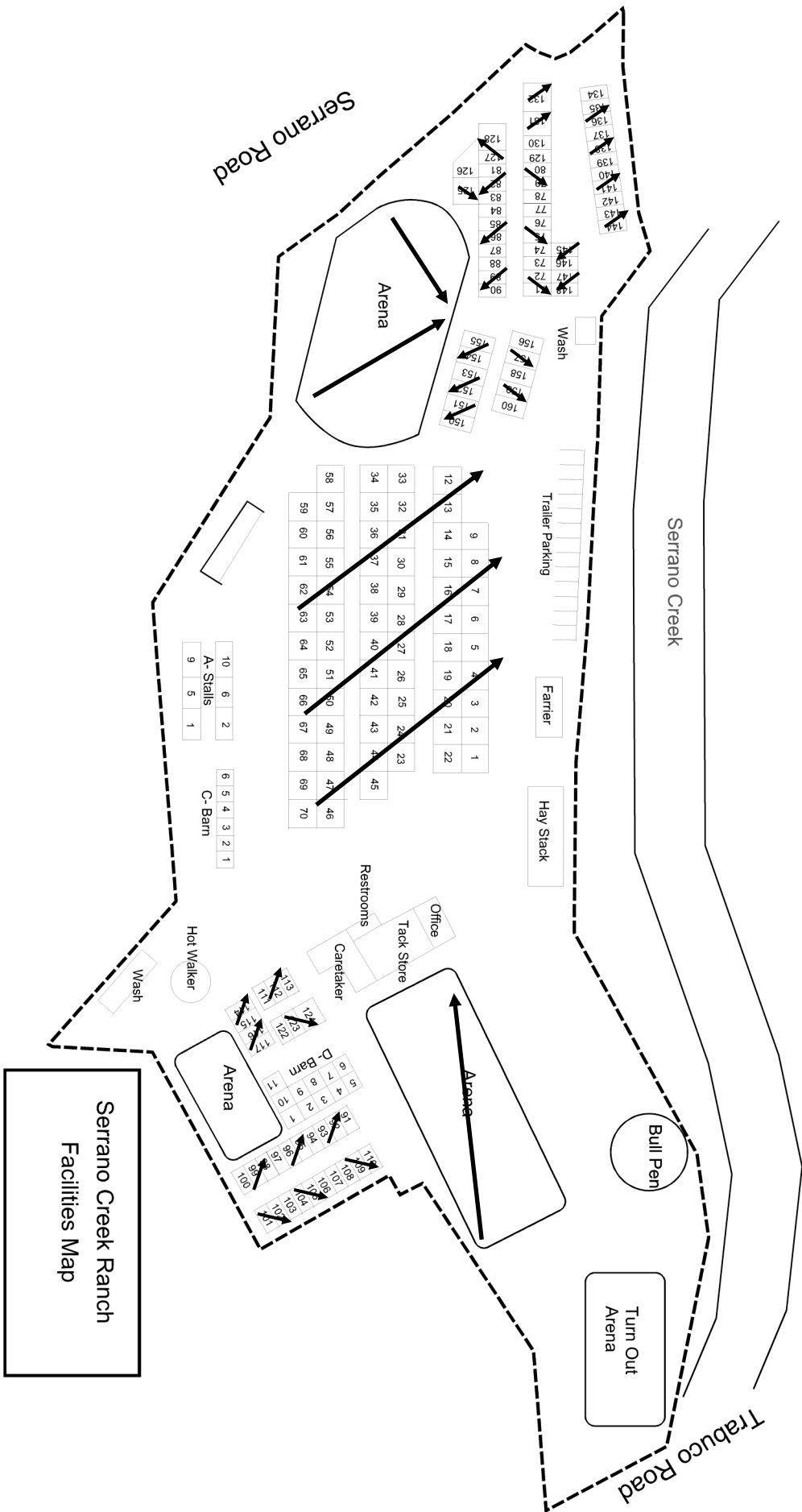


Figure 1

Serrano Creek Ranch
Facilities Map

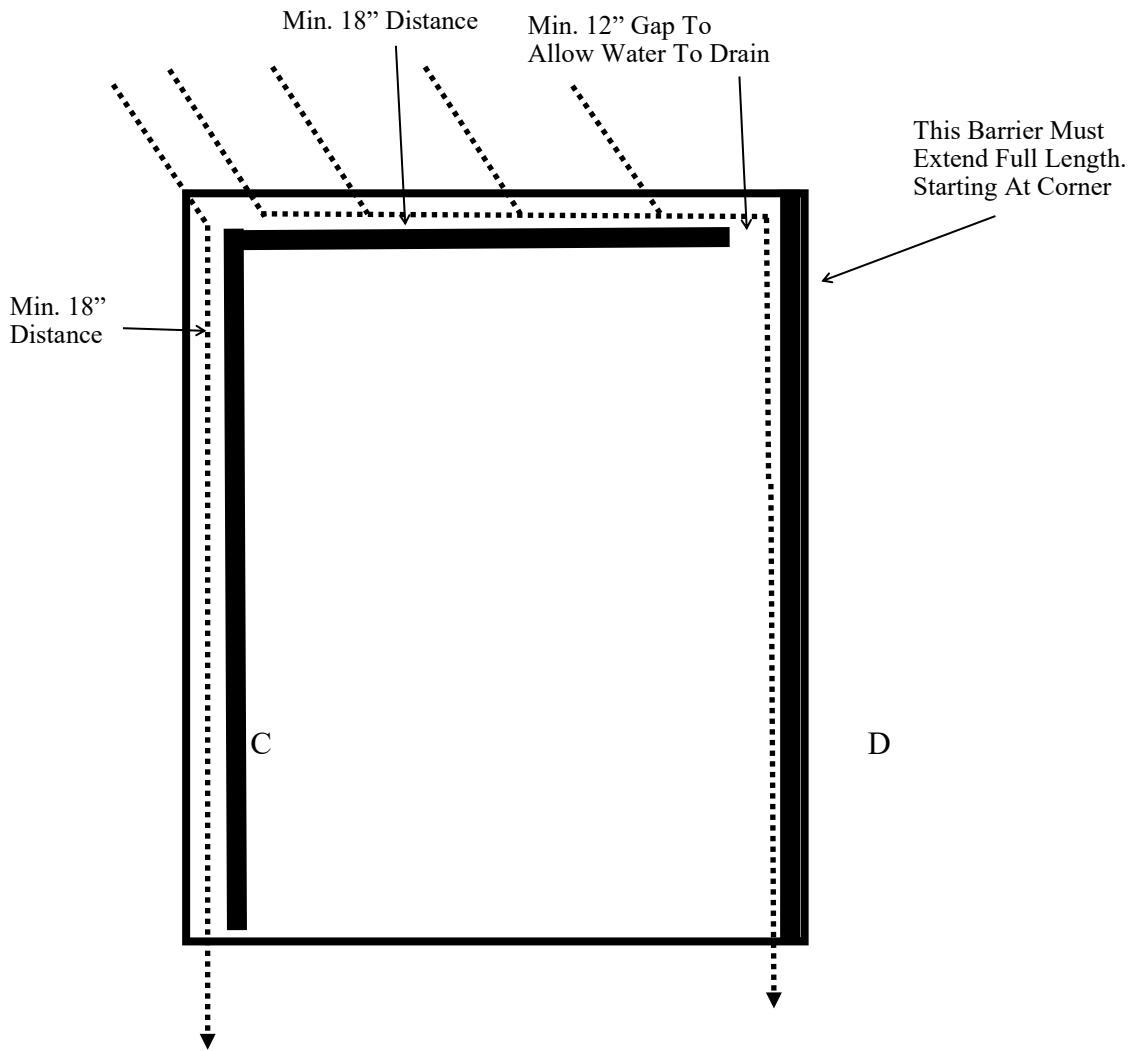


Figure 4