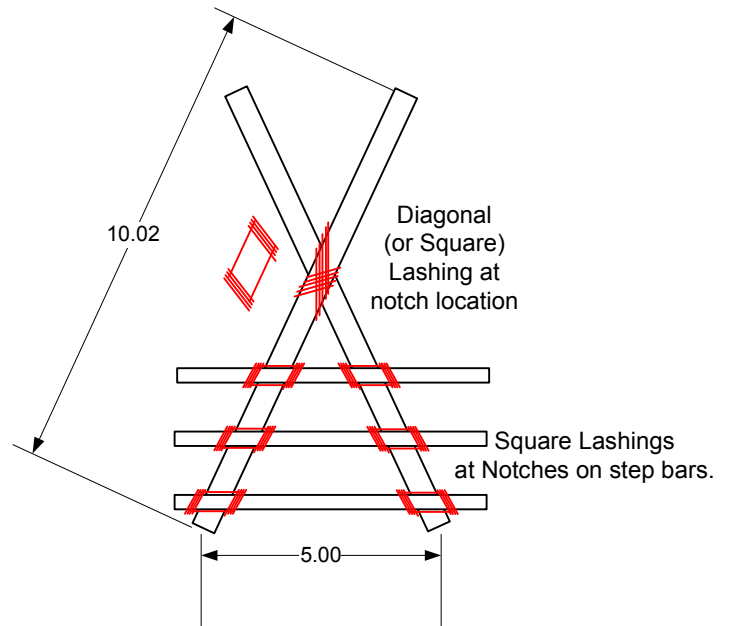


Troop 180 Bridge Assembly Procedure

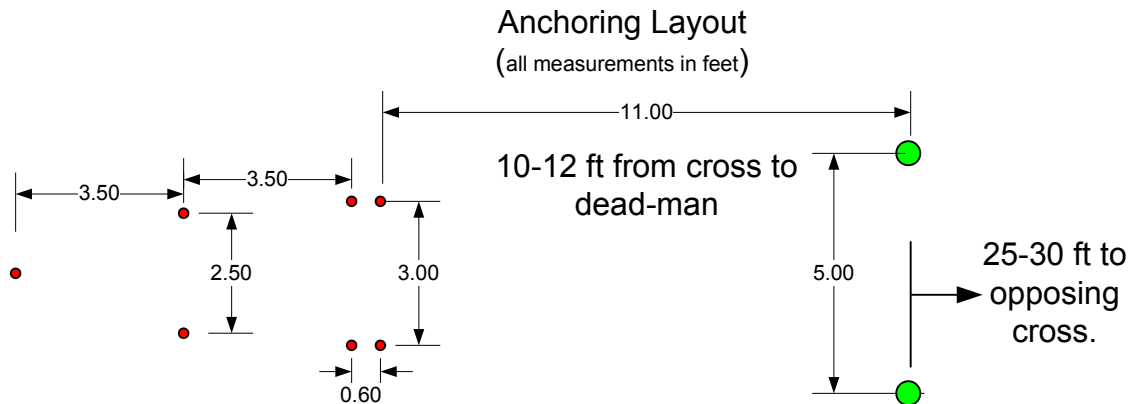
Draft 1.1
9/5/2008

Tools Needed:
Sledge Hammer
Shovel

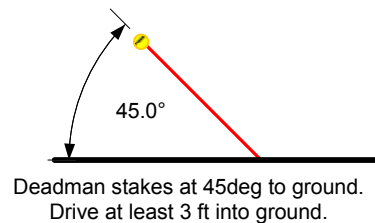
Step 1: Lash large crosses using Diagonal (or Square) lashings at the cross. Be consistent with the two crosses. Use square lashings on the step bars.



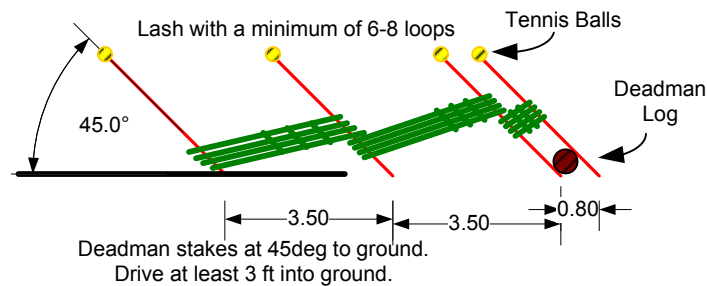
Step 2: Layout and mark ground to properly position the anchors and cross placement.



Step 3: Drive anchoring stakes into ground at 45 degree angle to a depth of at least 3 feet at marked locations. (red dots in step 2 drawing.) Cap each stake with a tennis ball. Dig shallow 4-5 inch diameter divots into ground at cross locations (green dot in step 2 drawing).

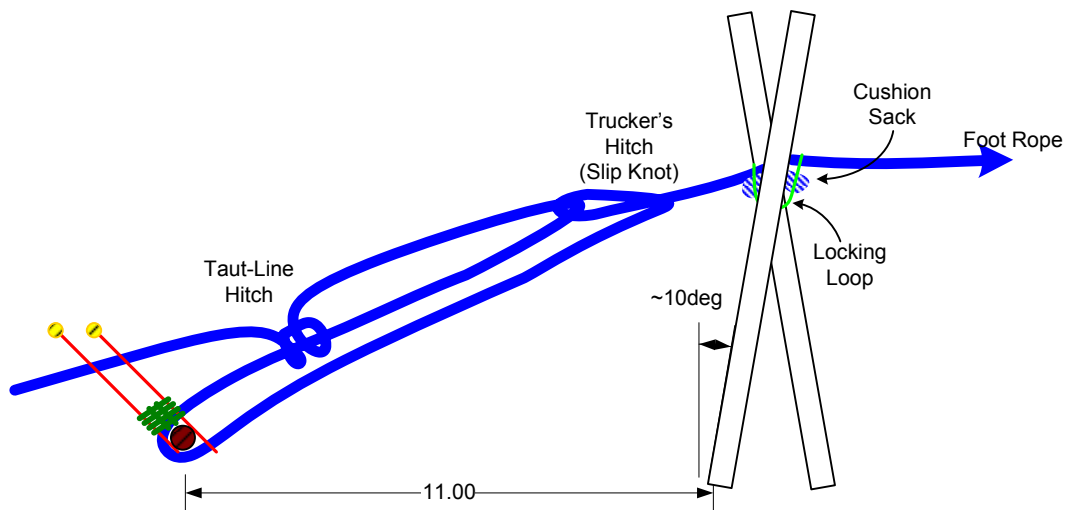


Step 4: Insert the deadman logs between the first set of tie down stakes (Spaced 8" apart). Lash the stakes back as shown below.



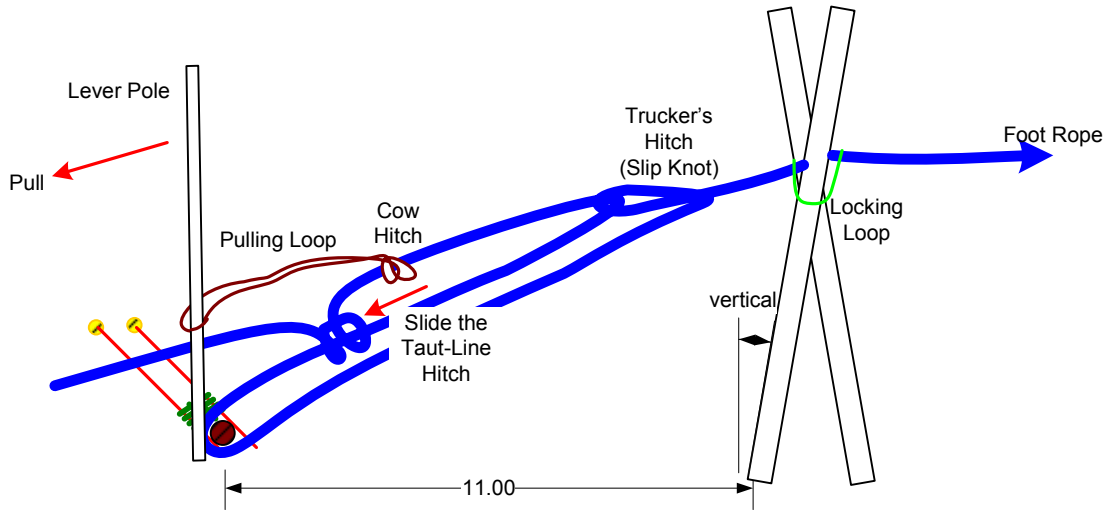
Step 5: Lay out the main crosses with the tops facing each other and the bases in the divots cut in the ground in step 3. Lay largest rope over cross centers and draw the ends under the dead man logs. Center the Long Splice in the rope on the bridge. Lay the handrail lines over the tops of the crosses in the notches in the logs and tie them loosely into place. Place the cloth sacks in the crotch of the main crosses to pad the Foot Rope.

Step 6: Lift the crosses into a near vertical position (tilted about 10 degrees toward the center of the bridge) and tie the "Foot" rope to the deadman logs as shown below. Working both ends of the bridge at the same time, pull the rope as tight as possible and tie off with Taut-Line Hitch.

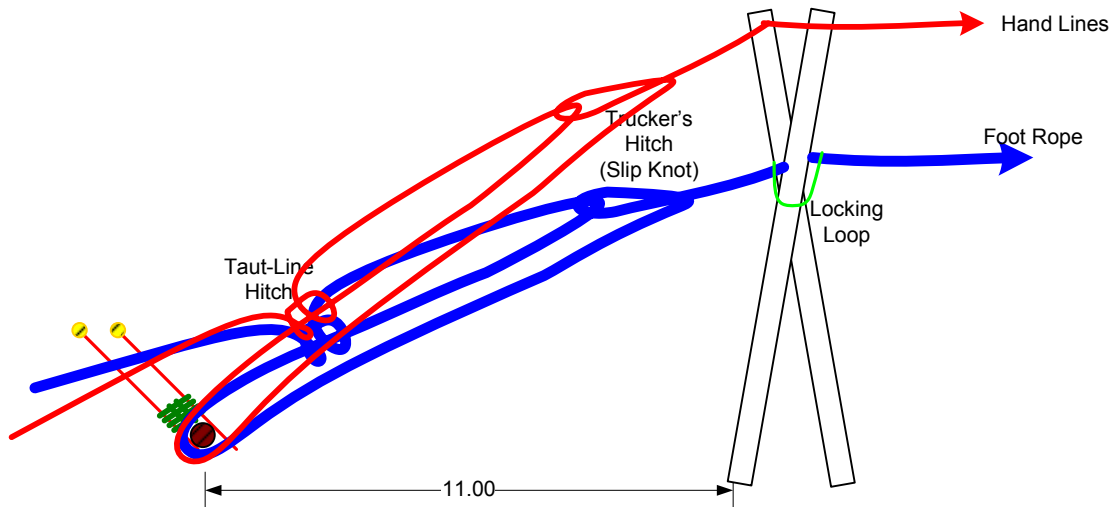


Step 7: Adjust the crosses to bring them near vertical (still tilting slightly toward center) and tie a locking loop of smaller rope over the foot line and under the cross to lock the cross in position.

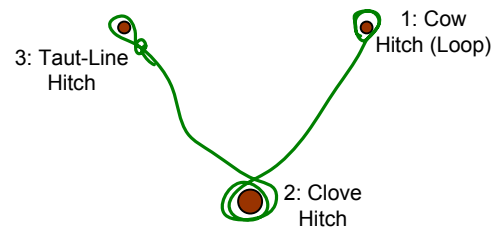
Step 8: To further tension the main foot rope use a lever and a pulling line as shown below. Pulling on the lever will tension the rope and allow the taut-line hitch to be slid down on the main foot rope. If necessary, loosen the locking loop and reposition the cross to maintain a near vertical cross then tighten the locking loop again.



Step 9: Tension the hand rail lines using the same line configuration as used on the Foot Rope. It should not be necessary to use the lever pole to tension the hand rails appropriately.



Step 10: Tie hand rail loops around *Hand Lines* around *Foot Rope* and back up to the other *Hand Lines*. Maintain light tension on these lines, nobody should be on the bridge while these are tied in. Tie one every foot approximately (26 total.).



Step 11: Climb up on the bridge and give it a good test with a couple boys to provide the lines and opportunity to stretch. Let them bounce a bit and then re-tension if necessary. Climbers should climb up and down the step bars on the crosses and not up the ropes where the tensioning knots are.