

The Rules of Collegiate Robotic Football AKA Mechatronic Football

This document sets forth the event layouts for a game of Collegiate Robotic Football as well as the various Combine Events. These layouts are subject to change in accordance with the evolution of the competition.

The Playing Field

1. The game will be played on a field 90' long and 46' wide, as shown in Figure 1 (94' by 46' is acceptable if playing on a conventional NCAA basketball court). End zones extend 12' past the goal lines for a total area needed of 48' x 114' (10' past the goal lines on a 94' field). From end to end, the playing field is divided laterally into three equal sections. For a game of 6-on-6, the length of the field is unchanged, but the width is reduced to 42'. Hash marks are spaced 5' apart on either side of the center line for spotting the ball. The center of the field is marked with an "X" for the referees' benefit. The place at which a PAT is attempted is at the 10' line. There shall be a buffer between the sidelines and any spectators of at least 5 feet, along with any appropriate barrier.
2. The goal posts are to be nine (9) feet tall (8 feet is acceptable when justified by transportation requirements), six (6) feet apart from each other, and with a cross bar that is three (3) feet above the ground. The goal posts are toward the back of each end zone.

Field Layouts

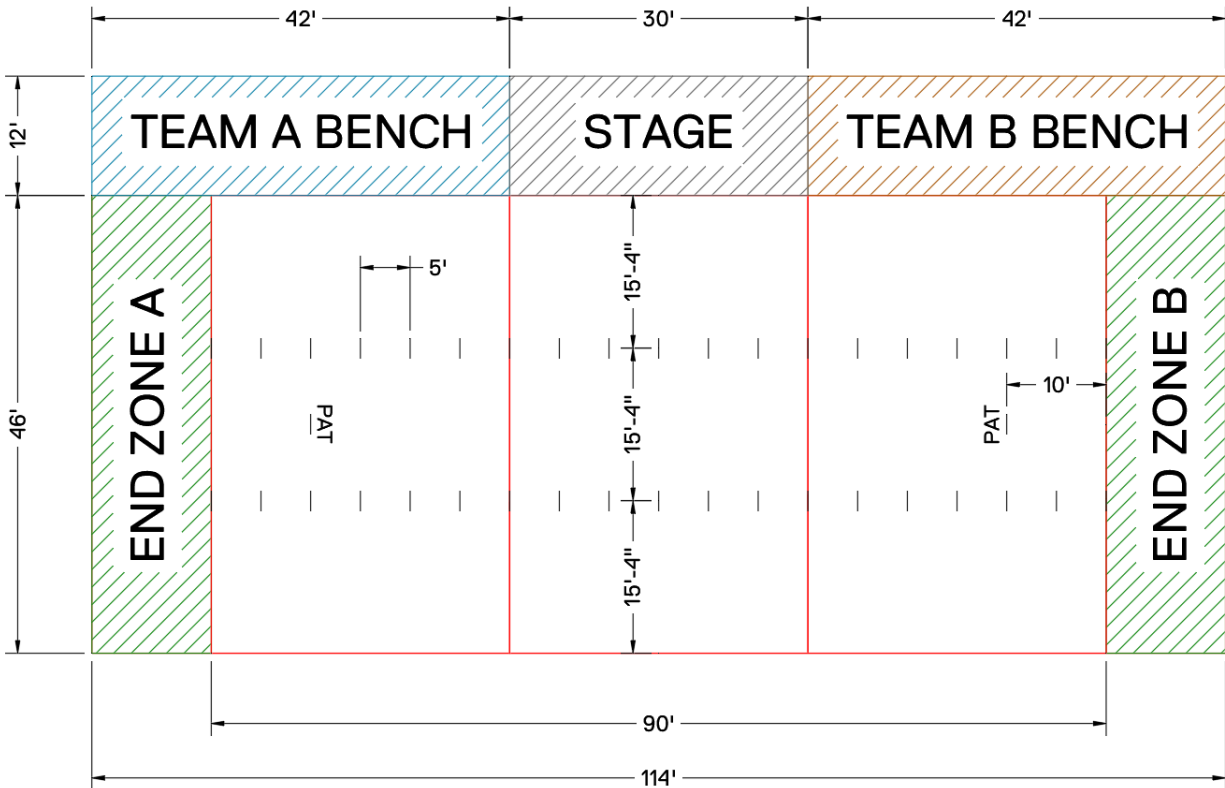


Figure 1a: 46' x 90' field. A brightly colored tape is used to line the field. The depth of the team benches and stage are approximate. The goal posts are placed at the back of the end zones.

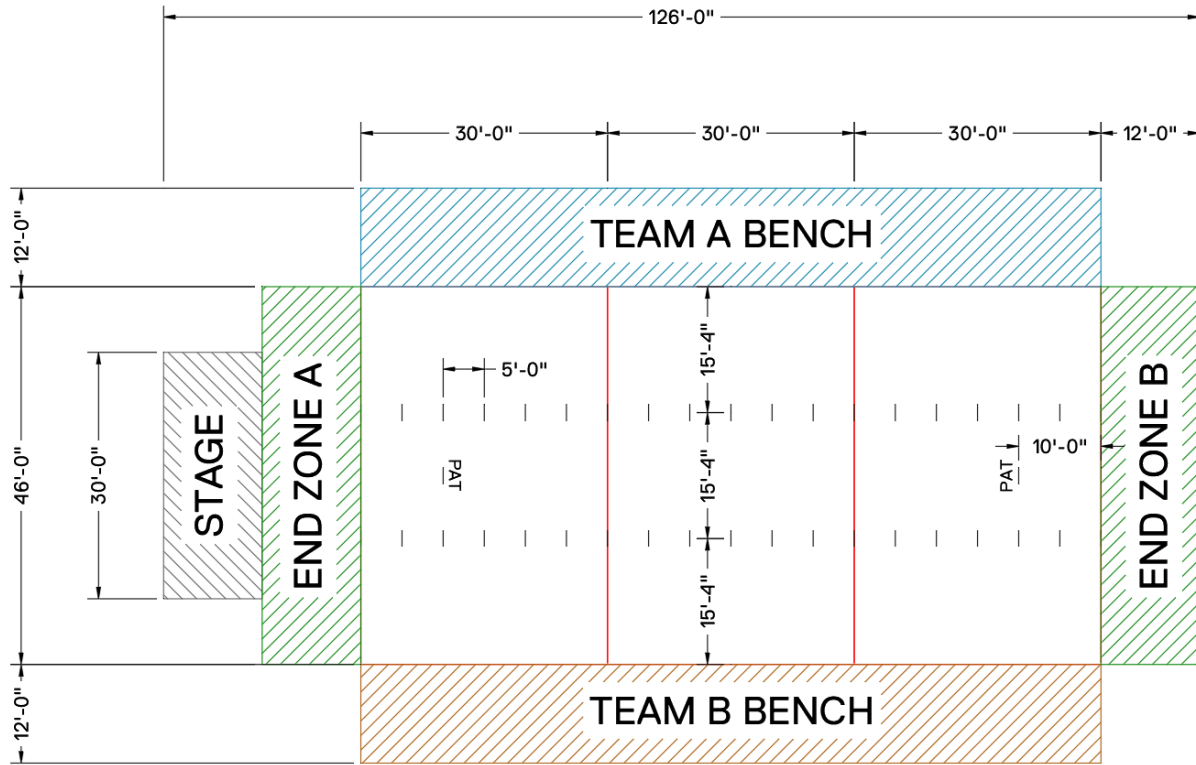


Figure 1b: Alternate 46' x 90' field. A brightly colored tape is used to line the field. The depth of the team benches and stage are approximate. The goal posts are placed at the back of the end zones.

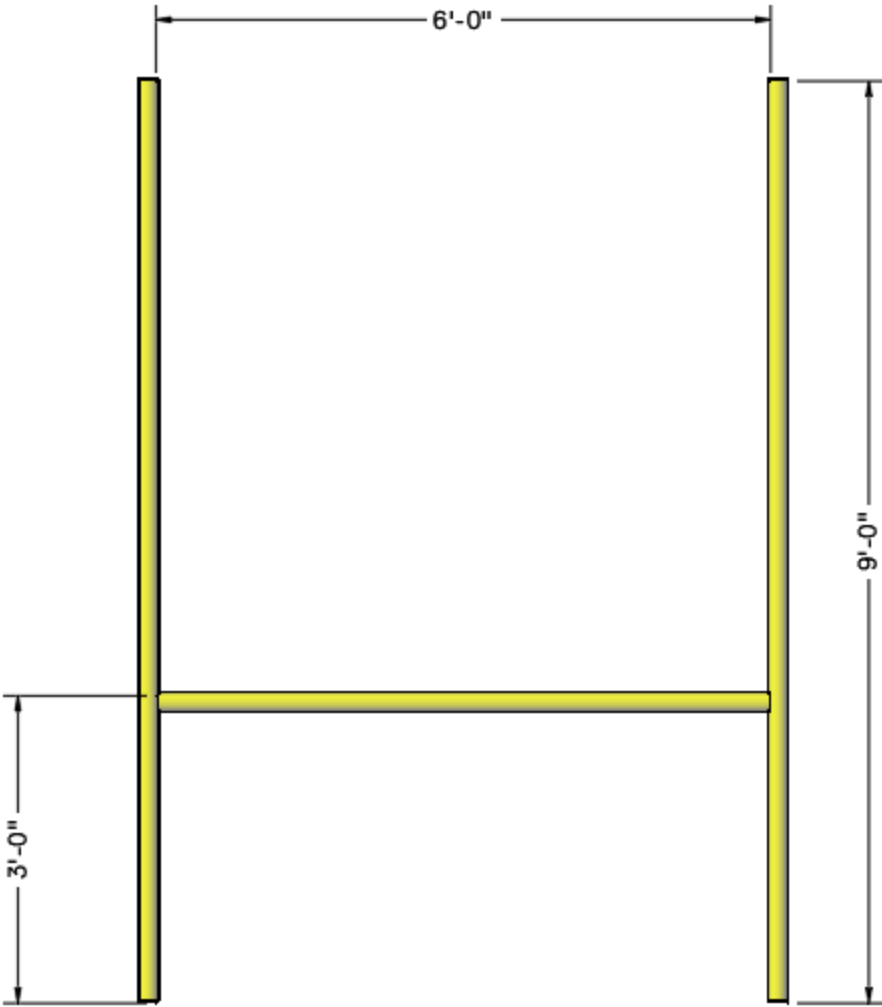


Figure 2: Goalpost Dimensions. Any pipe or tubing can be used that stays standing and meets the dimensions as shown above.

Combine Event Layouts

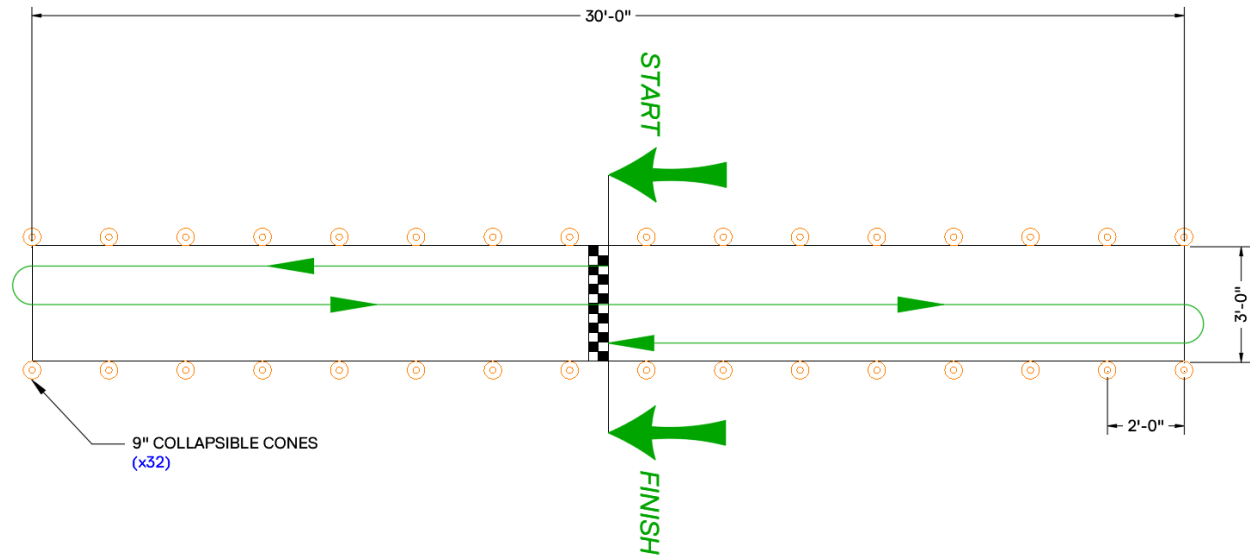


Figure 3: Shuttle Run. Green represents the path that the robot must travel. An example of acceptable orange cones can be found [here](#). (*Start/Finish line can be simple tape, does not need to be checkered.*)

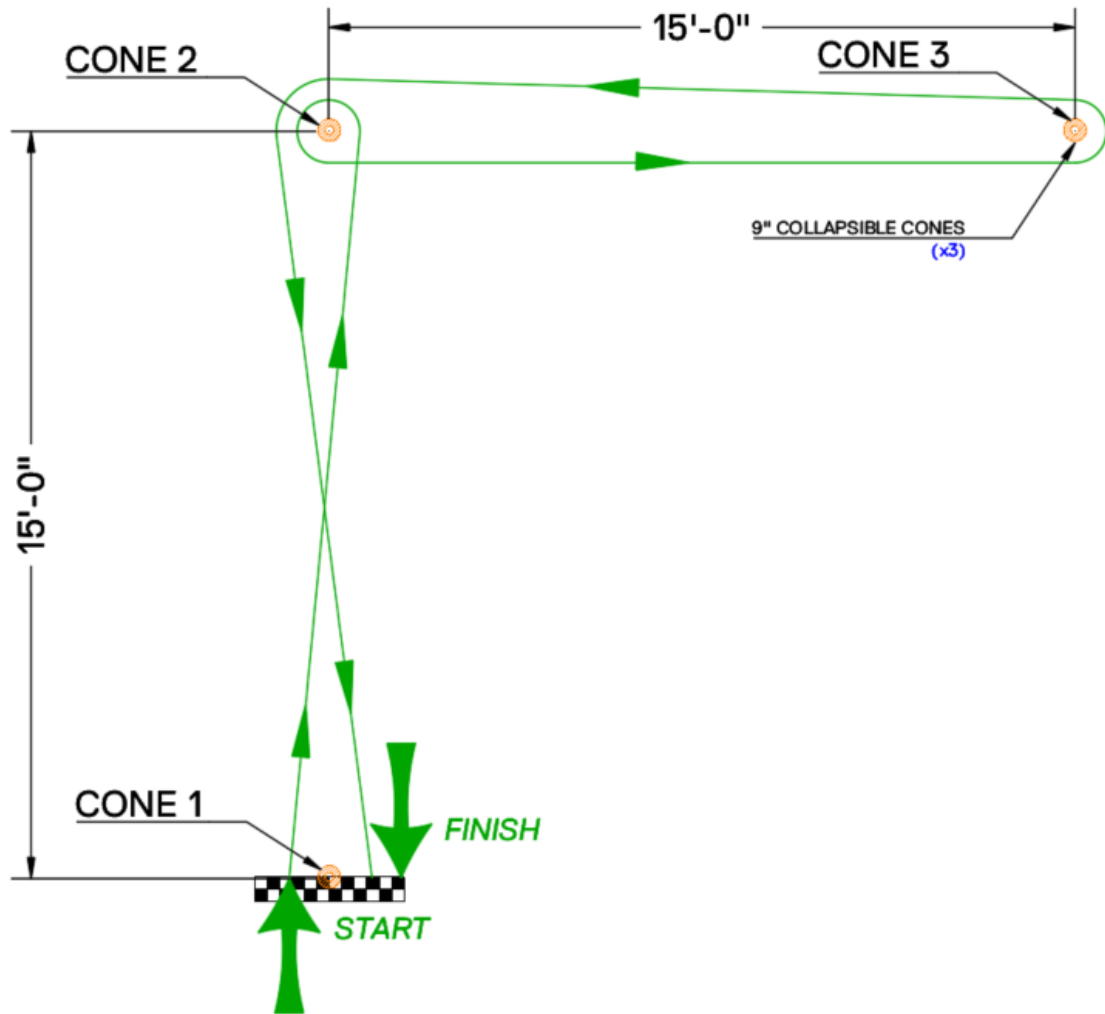


Figure 4: Three-Cone Drill. Green represents the path that the robot must travel. An example of acceptable orange cones can be found [here](#). (Start/Finish line can be simple tape, does not need to be checkered.)

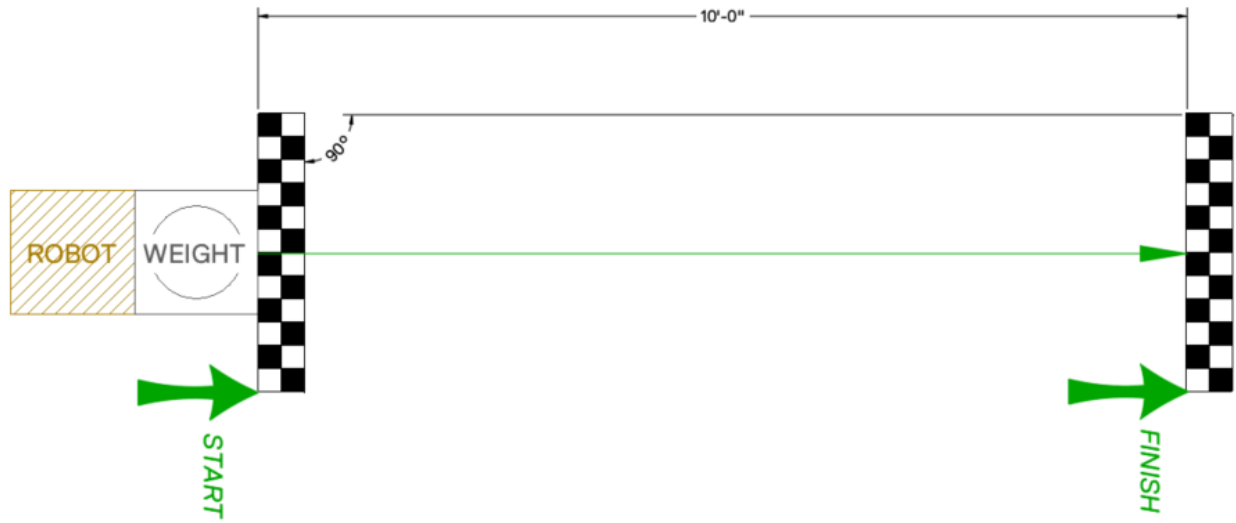


Figure 5: Strength Test. Green represents the optimal path that the robot can travel. (Start/Finish line can be simple tape, does not need to be checkered.)

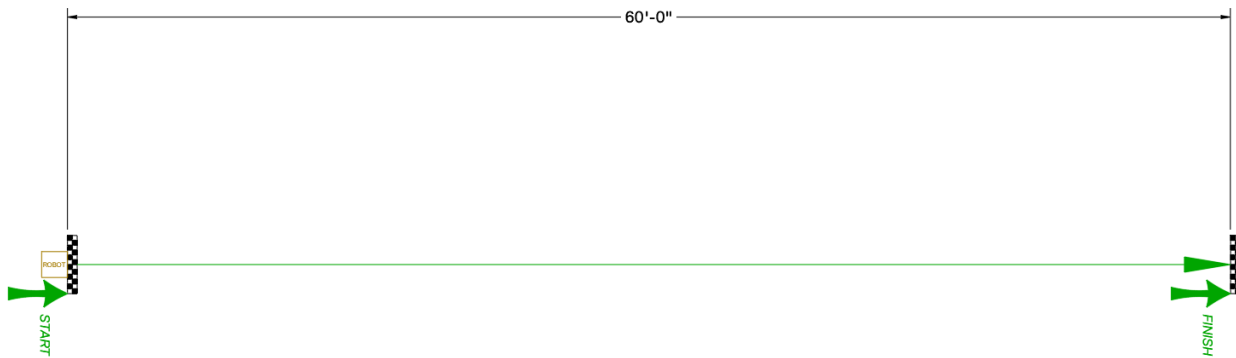


Figure 6: Speed Test. Green represents the optimal path that the robot can travel. (Start/Finish line can be simple tape, does not need to be checkered.)

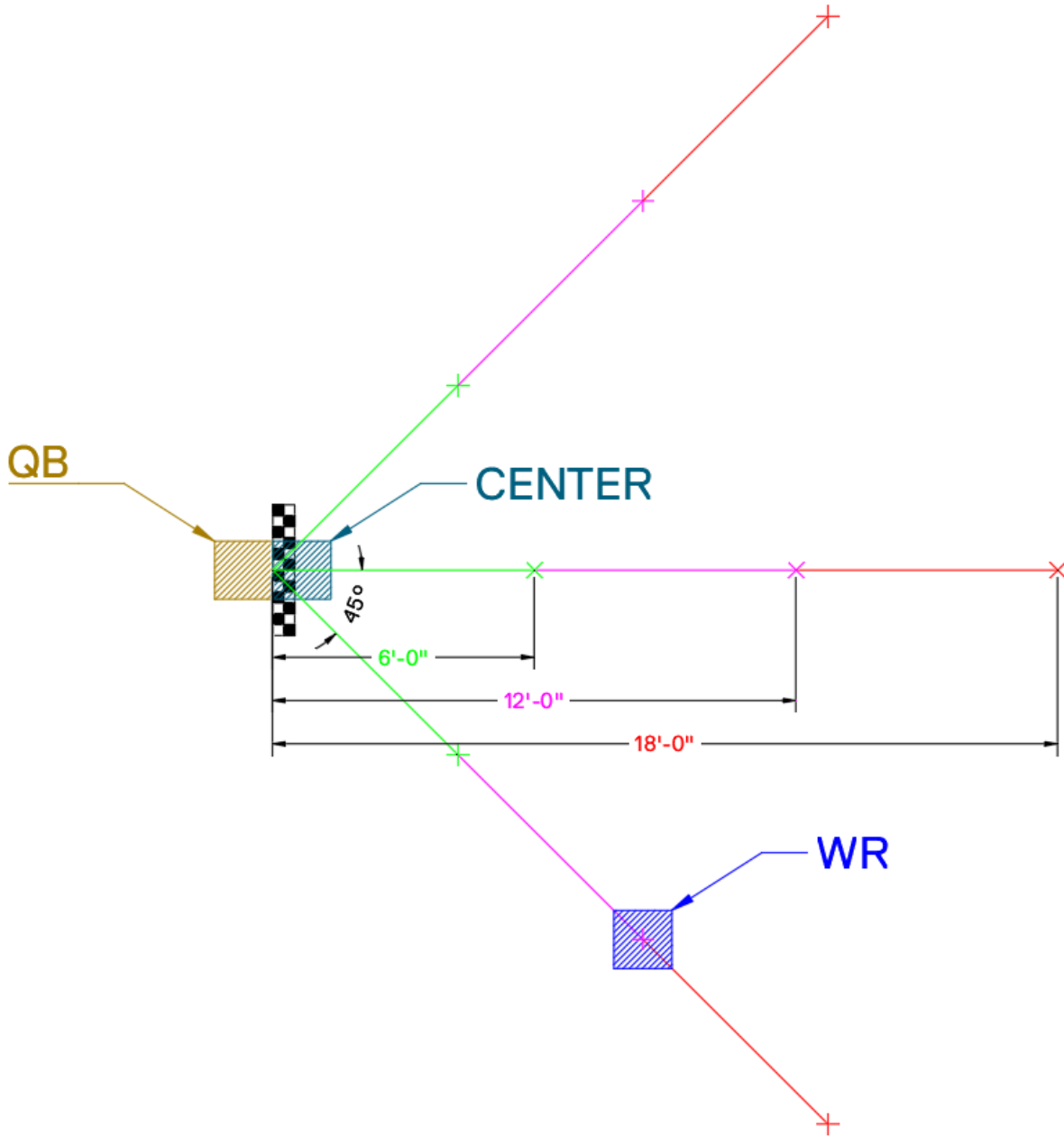


Figure 7: QB Accuracy Test. All lines are on 45°, and all X's are on 6', 12', and 18'. (Start/Finish line can be simple tape, does not need to be checkered.)