Planning a Half-Mile Track

Simplified rules and tips on laying out a regulation course

**THE MINIMUM** acreage required for building a half-mile track is approximately 17.5 acres, compared to 27 acres for a five-eighths-mile track and 55 acres for a mile track. This includes the outer embankment but does not include land for buildings, parking, a road encircling the track, and other needs.

It is recommended that the homestretch be at least 80 feet wide and the backstretch 75 feet wide. It is advisable to provide extra width on the first turn for the starting gate to pull out of the way.

Follow this simple procedure for laying out the track:
Draw two lines, both 600 feet in length, exactly parallel and 452.37 feet apart. To ensure the lines are parallel, square the corners as shown by the dotted lines in the diagram below. For the turns, drive a stake exactly midway between the ends of the parallel lines. Attach a wire 226.183 feet long. This is the radius of the turn. Move the wire in a half-circle, placing stakes at various intervals so that the turn is completed when the wire reaches the opposite end of the parallel line. This measurement will give you the exact placement of the pylons. The track will measure one-half mile as required when the measurement is taken three feet out on the track from the pylons.

Place the finish line at least 200 feet from the start of the first turn. The eighth pole will be 660 feet from this point, and the quarter 1,320 feet. Place the eighth poles and quarter poles at least six feet inside the pylons.

The turns should be banked one inch for every foot in
track width. This rise should not be abrupt. One the first turn, begin about 25 feet past the wire and shape the rise gradually so that at least one-third of the banking process has been accomplished by the time you reach the start of the turn. Failure to blend the stretch into the turn in this manner is one of the most serious errors in shaping a track.

Continue to bank the turn from the beginning of the radius until you have accomplished the maximum embankment half-way around the turn. Shape each turn in this manner, blending the stretch into the turn. On a 75-foot track, the outer embankment will be 6.25 feet (6 feet 3 inches) higher than the inside of the track.

For drainage purposes, a ditch several feet deep should be constructed just inside the pylons. Keep the shoulders smooth so that water will run off evenly and cause minimum erosion. On stretches, it’s advisable to have a smaller drainage ditch on the outside as well. The stretches are constructed with the crown one foot higher than the inside down at the pylons. This crown is located approximately three-quarters of the distance from the pylons so that three-quarters of the drainage is to the inside of the track, and one-quarter to the outside.

### 10 Tips on Track Plans

1. Build the grandstand at an angle and back from the track so that the spectators seated in the stands will be facing partially up the stretch.

2. Place the grandstand so that spectators won’t be facing the sun in the afternoon and early evening.

3. The judges’ stand and photo finish booth should be placed on top of the grandstand. The officials will have an unobstructed view of all parts of the track, and will be out of the way of the spectators and any platform construction you may want to make in the infield.

4. If the judges’ stand is to be in the infield, place it at least 25 feet back from the pylons to give the judges a better angle to view the horses, and build it at least 10 feet high.

5. Build the judges’ stand large enough so that all officials and the announcer can work without getting in one another’s way. Provide desk room or a work bench for said officials.

6. Place the barns on sloping ground, away from the grandstand and parking area, where there will be good drainage.

7. A paddock is required where extended pari-mutuel betting is conducted. (If possible, place your paddock around the turn or on the backstretch so that it won’t encroach on your grandstand, spectators and parking area.)

8. Build the grandstand with consideration of the view and any additional sections or a possible club house to be built at a future date.

9. Place your office buildings where you will enjoy greatest efficiency in relation to the grandstand, track, stables and other departments.

10. Visit and study a modern plant before you start building.