

WFTDA-REGULATION ROLLER DERBY TRACK LAYOUT GUIDE

Updated January 2018

For use with Appendix A: WFTDA Track Design and Specifications

THE BOUNDARIES OF THE WFTDA ROLLER DERBY TRACK

Length

108 feet (32.92 meters) with a 10-foot (3.05-meter) Outer Officiating Lane

98 feet (29.87 meters) with a 5-foot (1.52 meter) Outer Officiating Lane

Width

75 feet (22.86 meters) with a 10-foot (3.05-meter) Outer Officiating Lane

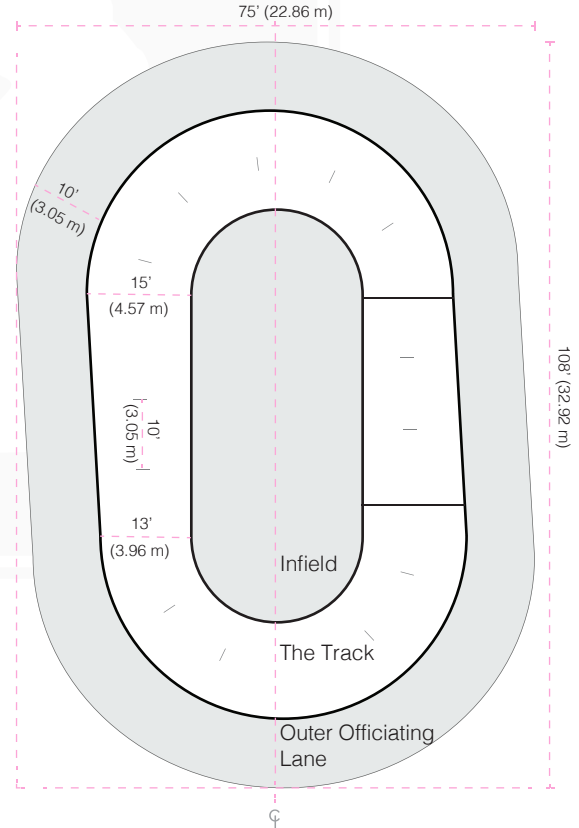
65 feet (19.81 meters) with a 5-foot (1.52-meter) Outer Officiating Lane

NOTE: 5-foot (1.52-meter) Outer Officiating Lane only permitted with an acceptable barrier. Consult the *WFTDA Risk Management Guidelines* for details regarding acceptable barriers.

- Placement of the Penalty Box and team benches must conform to the *WFTDA Risk Management Guidelines*. The Penalty Box may not be located closer than 15 feet (4.67 meters) to the Outer Track Line. Team Benches may be located in the Infield. If located outside the track layout, they also may not be located closer than 15 feet (4.67 meters) to the Outer Track Line.
- This document utilizes a standard 10-foot (3.05-meter) Outer Officiating Lane with the center track line parallel to the walls.

MATERIALS REQUIRED:

- **Rope** or raised boundary material
¼ inch- ½ inch (0.6 cm - 1.3 cm) diameter
Min. 385 feet (118 meters)
Must be secured and highly visible
- **Tape** to secure rope and make track markings
1 inch - 3 inches wide (2.6 - 7.5 cm)
Min. 500 feet (155 m) + extra for repair



1. LOCATING THE CENTER LINE AND CENTER POINT OF THE TRACK

This is the initial point of reference from which all other dimensions will be determined, so it is crucial to ensure there is enough space. This line runs the length of the track down the center; it is often easiest to make this line parallel with the walls of the hall, assuming that your venue is rectangular. There must be at least 37 feet 6 inches (11.43 meters) of space on either side of the center line.

Once you have found a suitable position for your center line, with 37 feet 6 inches (11.43 meters) on either side, lay down the tape measure to measure out 108 feet (32.92 meters) along the center line. The center point is exactly halfway along this measurement (54 feet [16.46 meters] from each end.

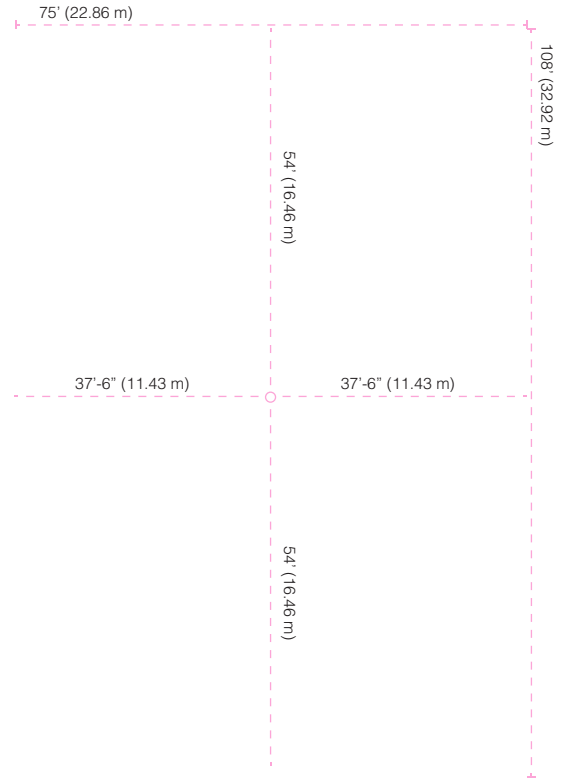


Fig. 1 - Playing area indicated by a basic rectangle measuring 108 feet by 75 feet (32.92 meters by 22.86 meters), with the center line plotted along the length of the rectangle and 54 feet (16.46 meters) indicated on either side of it.

2. MARKING THE INSIDE ARCS

From the center point, measure 17 feet 6 inches (5.33 meters) along the center line in both directions and mark these inside arc points. They are the points used to measure the inside arcs. This can be done with a piece of rope or chain measuring 12 feet 6 inches (3.81 meters), or the tape measure.

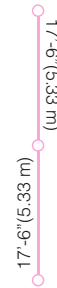


Fig. 2 - As Fig. 1 but with the center line plotted and the 17 feet 6 inches (5.33 meters) measurements along the center line from the center point indicated.

Holding one end of the measuring rope at the inside arc point, use a piece of chalk (or some other means of marking a line) held at the other end of the rope to draw a semicircle, and repeat at the other inside arc point.

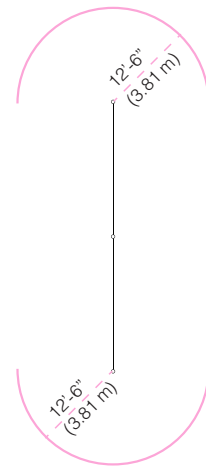


Fig. 3 - As Fig. 2, but with the inside arc points plotted, and the inside arcs drawn in, with the inside arc measurement of 12 feet 6 inches (3.81 meters) indicated.

3. MARKING THE OUTSIDE ARCS

The outside arcs are offset from the inside arcs so that when skating in a counterclockwise direction, the track is wider at the exit of the turns than at the entrance of the turns. The arc point for the outside arcs, therefore, must be offset from the inside ones.

These outside arc points are located 1 foot (0.30 meter) from each inside arc point, perpendicular to the center line, to the left of the inside arc point as seen from the center point. Once these outside arc points have been plotted, you will need another piece of measuring rope that measures 26 feet 6 inches (8.08 meters).

One end of this outside arc rope is held at the outside arc point; use a piece of chalk held at the other end of the rope to draw a semicircle. Repeat at the other outside arc point.

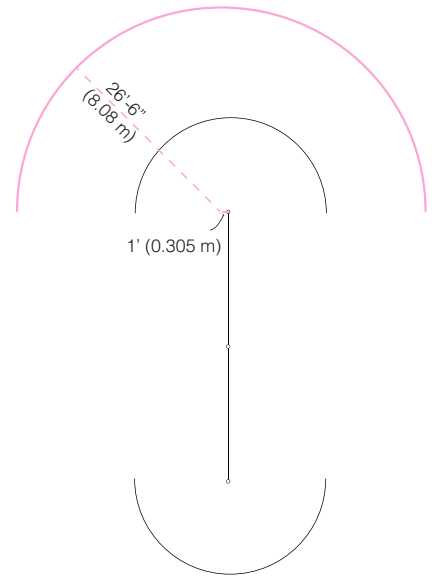


Fig. 4 - As Fig. 3, but with the outside arc points plotted and the 1-foot (0.30-meter) distance from the center line/inside arc points indicated, and the outside arcs drawn in, with the outside arc measurement of 26 feet 6 inches (8.08 meters) indicated.

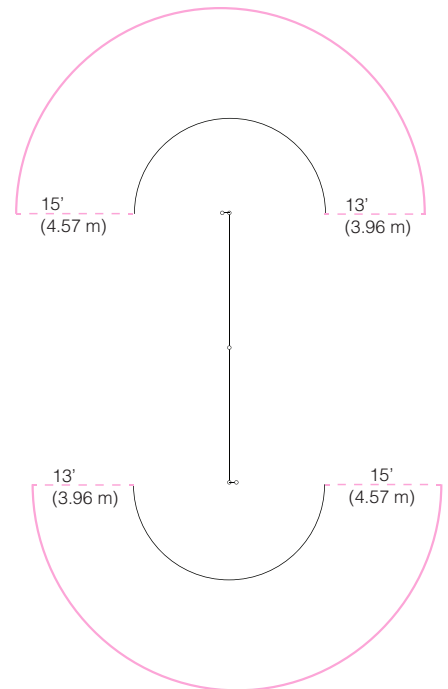


Fig. 4a - As Fig. 4, but with both sets of arcs drawn in, and the track width measurements of 13 feet (3.96 meters) across the entrance to the turns, and 15 feet (4.57 meters) across the exit of the turns.

4. DRAWING IN THE STRAIGHTAWAYS

Draw straight lines from the ends of one inside arc to the opposite ends of the other inside arc and the same with the outside arcs. This will give you the straightaways and the shape of the track should be complete. Before moving on, check that the offset is correct: From the perspective of a person skating round the track in a counterclockwise direction, the turns should be wider at the exit than at the entrance. The track should be 13 feet (3.96 meters) wide at the entrance to the turns, and 15 feet (4.57 meters) wide at the exit of the turns.

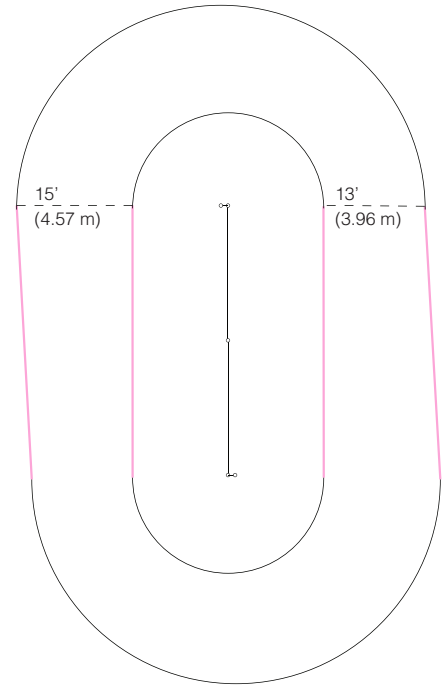


Fig. 5 - As Fig. 4, but with the straightaways connected and the offset indicated.

These steps will have drawn the outline of the track; on top of these lines, rope should be laid directly over the lines and securely covered with tape.

MARKING THE TRACK

The track must have Pivot and Jammer lines demarcated. The lines must be marked across the track, touching both the inside & outside boundaries.

Smaller 10-foot (3.05-meter) marks may be used on the track to assist with determining the Engagement Zone and pack definition. These lines are typically 1-2 feet across (30 - 60 cm), and centered 5 feet-3 inches (1.6 meters) from the inside track boundary.

1. MARKING THE PIVOT AND JAMMER LINES

On one straightaway, place tape from the inside boundary to the outside boundary in a line perpendicular to the center line at the point from which the inside arc was measured (at the narrowest point of the straightaway just before it enters the turn). This is the Pivot Line.

From the Pivot Line, measure along the inside boundary of the straightaway and center markers 5 feet-3 inches (1.6 meters) from the inside of the track track at 10 feet (3.05 meters) and 20 feet (6.1 meters). At 30 feet (9.15 meters) from the Pivot Line, another line is marked with tape from the inside boundary to the outside boundary, perpendicular to the center line. This is the Jammer Line.

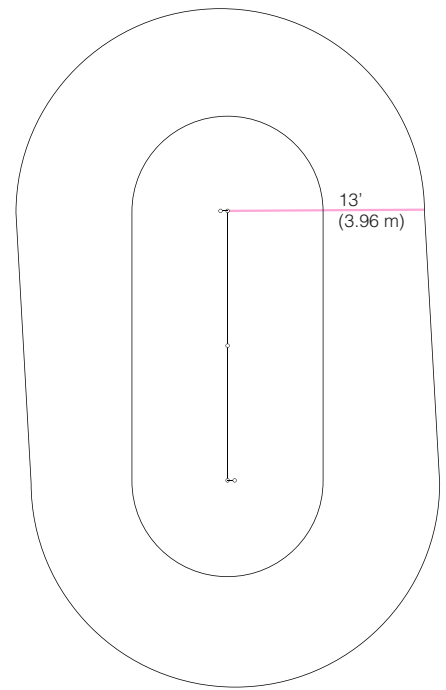


Fig. 6 - Track outline, with the center line and inside arc points illustrated, and the Pivot Line drawn in.

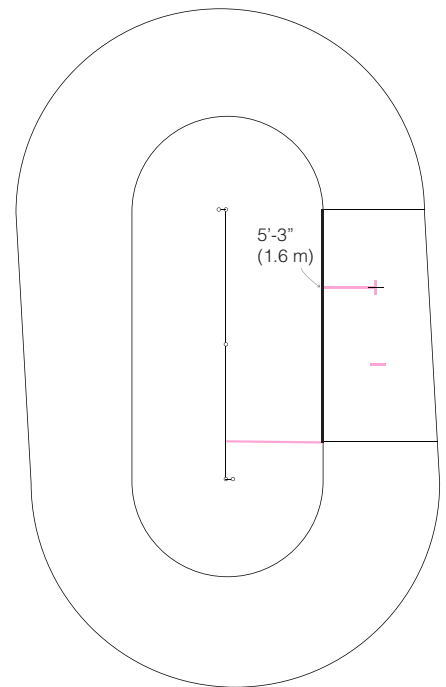


Fig. 7 - As Fig. 6, but with the relevant 10-foot/3.05-meter markers drawn in the middle of the track along the straightaway and the Jammer Line drawn in.

2. PLACING 10-FOOT (3.05-METER) MARKERS ON THE OPPOSITE STRAIGHTAWAY

The next stage is to put the 10-foot markings on the opposite straightaway. Plot the first mark (labelled A on Figure 8) perpendicular to the center line at the other inside arc point so it is at the narrowest point of the straightaway opposite the Pivot and Jammer Lines.

Measure along the inside boundary of the straightaway and center markers 5'-3" (1.6 m) from the inside of the track at 10 feet (or 3.05 meters), 20 feet (6.1 meters), and 30 feet (9.15 meters) along the straightaway from the first marker (A).

3. PLACING 10-FOOT (3.05-METER) MARKERS ON THE FIRST CURVE

From the initial point (labelled B in Fig 9) where the Pivot Line meets the inside boundary, measure a straight line in a counterclockwise direction that intersects the inside boundary 7 feet ½ inch (84.5 inches; or 2.15 meters) from point B. This measurement is direct from one point to another, and should not be measured following the curve of the inside boundary.

Make a small mark on the inside boundary at this intersection point (labelled C in Fig 9) — this will be a guide for later. Then, from point C, measure counterclockwise another 7 feet ½ inch (84.5 inches; or 2.15 meters) in a direct line to where it intersects the inside boundary. Make another mark by the inside boundary at this point (D). Repeat this measurement three times more to give you points E, F, and G.

The final segment from G to the markers on the straightaway will measure slightly more than 7 feet ½ inch (84.5 inches; or 2.15 meters).

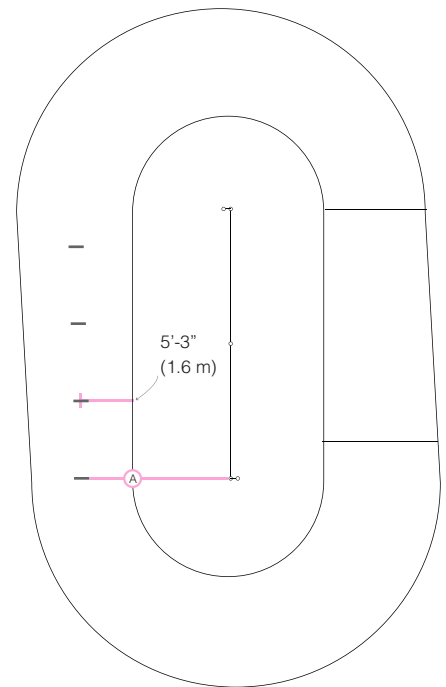


Fig. 8 - As Fig. 7, but with the opposite straightaway's markers drawn in, and an 'A' label attached to the marker perpendicular to the inside arc point opposite to the one from which the Pivot Line was drawn.

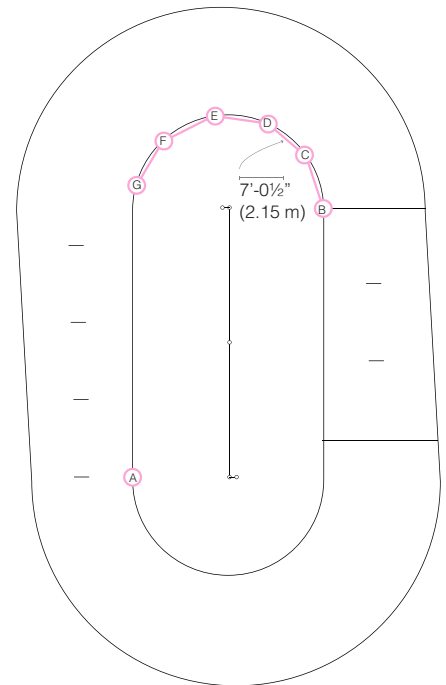


Fig. 9 - As Fig. 8, but with the point where the Pivot Line meets the inside boundary labelled as B, then a straight-line measurement of 7 feet ½ inch (84.5 inches; or 2.15 meters) across the inside boundary to point C, then the same measurement from C to D, D to E, E to F, and F to G in a counterclockwise direction along the curve of the inside boundary.

One person should stand on the inside arc point, holding a piece of string (rope, chain, or measuring tape would also work), with another person on the outside boundary holding the other end of the string taut. This string is used as a radius to indicate where the 10-foot (3.05-meter) markers are located in the middle of the track.

The person on the outside boundary moves so the string lines up with the small marks on the inside boundary; then, a 1-2 foot (0.30-0.60 meter) tape marker is centered along the string, at 5 foot-3 inches (1.6 meters) from the inside of the track

4. PLACING 10-FOOT (OR 3.05-METER) MARKERS ON THE SECOND CURVE

Repeat step 3 starting from point A.

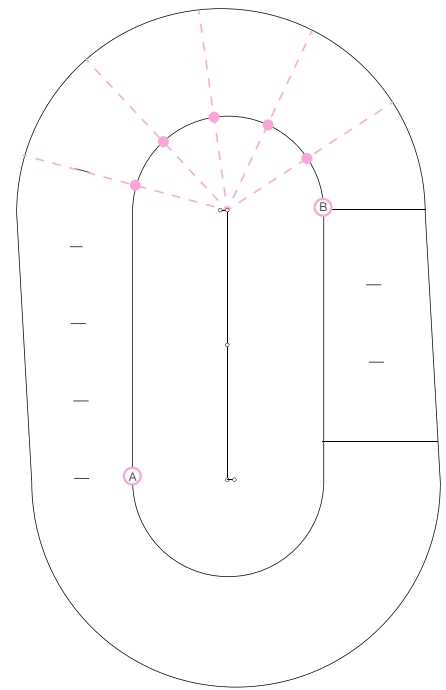


Fig. 10 - As Fig. 9, but with dotted radial lines stretching from the inside arc point to the outside boundary through the various lettered points B to G.

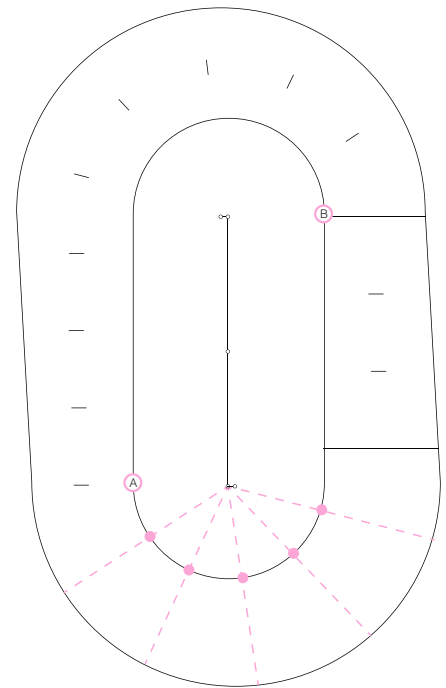


Fig. 11 - As Fig. 10, dotted radial lines completing the remaining track markings

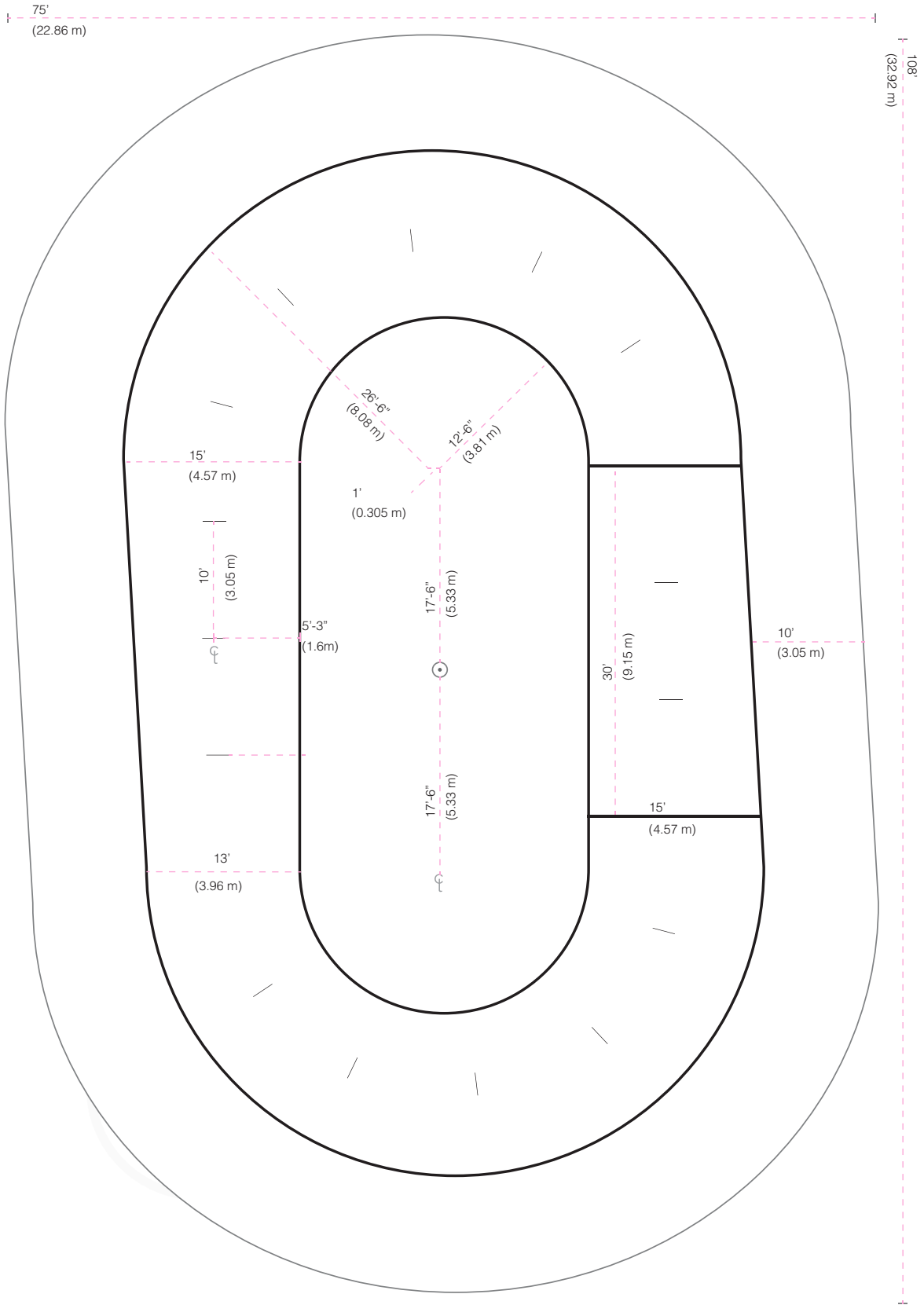


Fig. 12 - WFTDA Track Layout