

## **PERMA BASIN INSTALLATION SPECIFICATIONS**

**1.0 General:** As a part of the golf course construction or renovation, select drainage components shall be installed in accordance with the following Specifications, Details, and/or Drawings. Perma Basin drain basins as manufactured and supplied by The Turf Drainage Company of America (TDA) of New Orleans, Louisiana (800-999-2794) shall be the drain basin product utilized. All work described in these Specifications shall be completed by the Contractor.

**1.1 Selection of Basin Model:** Perma Basins are available in 2 models a B model that has a molded plastic bottom that connects to a storm drainage riser pipe, and a plain model that sets directly on the subgrade and connects through the sidewall. Selection of which type to be used is based on the height of the Perma Basin that is specified, and the depth of the storm drain pipe it is designated to tie into. Both models shall be installed in a 36" diameter excavated hole and backfilled with an approved sand, generally being a material with minimal silt and clay with a saturated hydraulic conductivity rate of 0+'' per hour. The sand shall be compacted both mechanically and hydraulically to 6" below grade. The top 6" should be filled with a mix that has moisture retention of 15-18% and then sod should be placed around the basin.

**1.2 Installation of Perma Basin:** B model Perma Basins shall be installed by setting the basin on top of the storm system riser pipe with the nipple inserted inside the riser. The geotextile sleeve that hangs from the bottom of the Perma Basin shall then be secured around the riser with tape to insure that the connection shall be free of any voids. Plain model Perma Basins shall be set on a 12"x12" concrete stone on compacted ground. The exit storm pipe shall be extended through the geotextile side sleeve by clipping an appropriately sized hole in the side wall of the wire wall that surrounds the basin. The sleeve connection shall be secured with tape. In the case of both models, the top of the basin shall be set just below the adjacent surrounding grade to insure that surface water enters through the grate and into the basin. Incoming drainage lines (seepage or surface water) shall be extended into the Perma Basin through the side sleeve and secured properly with tape to prevent contamination or failure of the drainage site.