

intense traffic stress, even in high moisture situations. In addition, a 4 inch (100 mm) gravel or crushed stone drain bed within specific particle size range immediately under the 12 inch (300 mm) root zone profile is essential in most situations. The specific particle size distribution and profile construction specifications depend upon the (a) intensity of traffic, (b) rainfall intensity during the playing season, and (c) other non-sport event activities that are scheduled on the turfed playing field. As the intensity of traffic increases the need for a high-sand root zone and ultimately an interlocking mesh element stabilized root zone are increased. It should be emphasized that the materials selected for root zone construction should meet specifications in terms of both the physical and chemical characteristics.

TURFGRASS SELECTION

The turfgrass species and cultivar(s) selected should be adapted to the specific climate of the region and capable of sustaining the desired shoot density and growth rate at the mowing height and frequency anticipated for the particular type of sport. In addition, the turfgrass cultivar selected should have the capability of achieving the best possible growth under the climatic conditions during the season when play is scheduled. For example, selection of a cool-season turfgrass cultivar with the best possible ability to grow at suboptimum temperatures is important for sports played in the late-fall, winter, and early-spring periods.

IRRIGATION SYSTEM DESIGN

The stadium design may result in a differential shadow over the turfed field for a certain portion of the daytime period. This decreases the radiant energy load on the turf which in turn affects the rate of evapotranspiration and allied soil moisture dissipation. Consequently, it is important to design an irrigation system with zonal head design and controls that will allow selective irrigation of only selected portions of the field depending on the degree of shading.

CONSTRUCTION INSPECTION

It is essential that a knowledgeable on-site **Construction Inspector** be hired as an employee of the stadium owners to ensure that the construction specifications for the turfed field are met. This is particularly critical in terms of the particle size distribution and chemical properties of the root zone mix. The individual components of the mix must be a uniform and possess the specified particle size distribution. This dictates that each individual truck delivery must be monitored.

QUALIFIED TURFGRASS MANAGER

A significant amount of money can be invested in constructing an intensively used sport field. If properly designed it should perform for an indefinite period of time. However, employment of an improperly trained and/or inexperienced turf manager can lead to disastrous results and even failure of the turfed field. The high-sand root zones with interlocking mesh element construction can provide quality playing surfaces with more than 200 hours of use during a season of competition. This ever increasing intensity of use on sports fields and associated increased income, also justifies a budget that allows the employment of a formally trained, experienced, qualified agronomist to bring out the maximum potential of a properly constructed sports field.

UPCOMING JB VISITATIONS:

May 11 to 31 - England.

June 1 to 8 - Italy.

June 10 to 13 - Birmingham, Michigan.

June 19 to 25 - Oregon.

July 8 to 12 - Ohio.

Note: As of May 6 will move our summer office to: 6900 E. Kelenski Drive, Cedar, Michigan, 49621, USA; phone: 616-228-6328; Fax: 616-228-2848