for the golf course without the necessity of tedious expensive hours of rough grading."

It has been estimated that the sudden availability of this topsoil, free of charge except hauling and distributing, has saved \$7000 in grading costs and at the same time permitted the development of a more challenging golf course, through accentuation of contours. It also saved the Flood Control district many man hours needed in this emergency to clear the streets and catch basins in anticipation of a repeat performance.

The time table for the completion of the Eaton Canyon golf course has now been set forward many months and it is expected the course will be ready within a year. A driving range has already been developed on the site.

The estimated cost of building the course is \$90,000. With the bonanza of floodwashed topsoil, work schedule of installing the watering system was advanced.

Los Angeles County expects to obtain a net revenue of \$15,000 a year above the course operating expense.

Watering — Most Important Cultural Practice

The most important cultural practice as applied to golf greens is the proper maintenance of soil moisture.

The improper use of water by man has killed more grass than the combined loss by disease, insects and other natural causes.

The art of applying the correct amount of water, not too much or too little, requires close study of the physical structure of each green, constant supervision, and the most intelligent workmen available. A good waterman is the most valuable workman employed on a golf course and should receive a higher rate of pay than other golf course workmen.

The soil of a golf green should be moist, but not wet or soggy. If too much water is applied, there will be no air space in the soil and the grass will die from the lack of air.

Another cultural practice closely related to water management is cultivation. A moist soil plus traffic from players, caddies, workmen and equipment soon leads to compaction of the soil surface. Unless some means of cultivation is used to combat this condition, the air-water balance is soon destroyed.

Texas Turf Assn. Summary of Test Plot Showings

Mixture Study of Warm and Cool Season Grasses:

A. Perennial Ryegrass and Tall Fescue produce the quickest and most desirable winter cover.

B. Clovers produce a relatively thin cover the first year and require a very long change-over period.

C. The use of a cool season grass greatly delays the recovery of the warm season grass and also reduces the stands of the warm season grasses.

D. Bermuda is the most desirable warm season grass tested. It stood up well under heavy winter watering and withstood the competition of the cool season grasses and legumes.

E. The stand of K. R. Bluestem is so greatly reduced by the cool season grass that it would be impractical to use this grass in a combination of warm and cool season grasses.

F. The January issue will carry results concerning the cool season grasses' ability to re-establish themselves in the fall.

Grass Introduction Study:

A. Three Bermuda grasses, T-47, T-8 and U-3 show promise as being useful under irrigated and dry-land conditions.

B. T-47 and T-8 produce a dense turf the first year where U-8 may take two years.

C. T-35A produces a very good turf under heavy irrigation but is susceptible to gray lead mold with limited irrigation.

D. Perennial Ryegrass, Tall Fescue and Buffalo have not produced a satisfactory year around turf for this section.

E. K. R. Bluestem produces a satisfactory turf under irrigation for rough areas where a smooth even turf is not necessary.

Bent Grass Putting Green Test

A. The quickest coverage was produced from seeded bents, Seaside and Polycross.

B. Several bents (C-1, C-52, C-115) seem to be more vigorous and hardy and recover more quickly from damage than the common Seaside normally used in this area.

Fertilizer Factorial

In the Fall of 1952 it was reported that the 8-12-8 ratio seemed to produce the better turf under both irrigated and non-irrigated conditions. This conclusion seems to be bearing true again this summer under irrigated conditions. Under non-irrigated conditions there is a marked effect from the higher rates of nitrogen.

-Texas Turf Assn. and Turf News