



Topsoil hauled from Los Angeles County check dams is distributed over Eaton Canyon course site, saving \$7000 in construction material costs, speeding job and providing interesting undulations. Rocks from the check dam loads are picked out by hand.

Flood-washed Topsoil Saves \$7000, Speeds Course

By VERNE WICKHAM

EVERY CLOUD has a silver lining" became more than a figure of speech to officials of the Los Angeles County Department of Parks and Recreation recently when flood waters brought thousands of yards of silt and topsoil tumbling down from the mountains.

They are now spreading more than 37,888 cu. yds. of that topsoil over flat bottom-land and grading it for tees and greens and rolling fairways for a new golf course.

For several months the Eaton Canyon



Crane digs soil washed into check dam by floods and loads it into trucks operating on 24-hour schedule. Soil is hauled to Eaton Canyon course and the check dams are cleaned to be in condition for control of future floods.

golf course development plans have been ready and waiting development. Early this year money was budgeted and preliminary maps prepared. The golf course crew were planning to get started before the end of the present fiscal year—then came the floods.

The Eaton Canyon property lies at the foot of the Sierra Madre range of mountains — in the very shadow of the Eaton Canyon dam. Nearby mountains, which form a scenic backdrop for the course, were denuded by a December forest fire and about a month later heavy rains brought debris, soil, rocks and charcoal tumbling down into city streets and flood control check dams. This excess dirt had to be moved and moved fast and so dump trucks moving around the clock moved it to the golf course site where tractors and skip-loaders piled it and smoothed it into tees, greens and rolling fairways.

"It was very much like adding frosting to a cake," explained Paul Gruendyke, superintendent of the county's department of parks and recreation. "The more frosting the better the cake and in this case the more soil the better the golf course. We were prepared to do considerable heavy grading to achieve the same effect but this flood control emergency project has saved us untold hours of labor and lots of money. It has almost over night provided contours

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 flood-washed 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.

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