



DuBose Tells Story Behind Building of Houston CC

Latest Ideas in Construction Techniques and Plenty of Maintenance Knowhow Make New Southwest Course One of the Finest

By **BILL SHERMAN**

Lush is a word seldom used when describing Texas golf courses, but the 18 new holes at Houston CC is drawing raves from just about everyone who sees it. You have to look hard to find any threadbare spots on the fairways; the greens, in a word, are excellent. What they've done with Houston CC in less than three years is a kind of epic of course construction and maintenance.

Built at a cost of half a million dollars; to the design of Robert Trent Jones, the expanse of Gene Tift Bermuda sprawls over 165 semi-wooded acres of southwestern suburban Houston.

Jones' construction foreman was Scotty Tupper; the club professional is Dick Forester, pres. of the Texas section of the PGA. The real story of the planning and building of the course comes from L. W.



L. W. (Sonny) DuBose

(Sonny) DuBose, course supt. at the original Houston CC since Feb. 1, 1942. Talented, friendly Sonny DuBose is regarded as tops in a profession loaded with outstanding men. Here's his story:

- The golf course was really built over a period of 2½ years. If there has to be a starting it would be June 10, 1954. That was the day the Houston CC purchased 240 feet of Gene Tift grass and planted it in a specially prepared nursery. The nursery had been disced, floated and gassed with Dowfume MC2 — eight weeks later the patch was covered solid with bright green turf.

The following May work was started on the new property. Center lines were cleared on the fairways, work began on the nursery and the digging began on the well. The well was a deep one — 1,146 feet — and as soon as work was completed the first lines were connected to the practice fairway and five-acre nursery. The nursery work started immediately. It was disced about 12-15 times and floated



DuBose's workshop and home. 40 by 50 ft. workshop is all rigid steel construction, has bathing facilities for employees, latest in equipment. Home has 3 bedrooms, a den and is located 300 yards from workshop.



regularly. The planting was done with an H. L. Pray Sprigging Machine, double planting two rows at a time giving rows of 18 ins. rather than 36. The nursery was planted with 1,500 ft. of old stock.

The rest of the course was getting worked over, too. Trees were cleared, greens were shaped, drain tile was moved in and so was dirt. In fact there was a quarter of a million yds. of dirt, part of which was used to cover the tile to a depth of from 15 to 20 feet. That's one reason why there are no bridges on the course.

Setting the tile in was a good sized job. A dry lime marker was used to lay out lines for the ditching machine before the laterals could be cut. A herringbone design, 11-ins. wide, 11 ins. deep and 8 ft. apart, was used. When the laterals were cleared 4 ins. of $1\frac{1}{2}$ in. gravel was laid in followed by Orangeburg Tile in 10 ft. lengths. All in all 3,500 feet of drain tile.
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Spacious Houston CC clubhouse is one of the finest in the Southwest.



They take care of the kids, too. This is the children's recreation building.

Pro Dick Forester's place of business. Step off the front porch and you're on the first tee.



Tells Details in Building of Houston CC

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24 to 28 ins. went into the system. Four ins. of coarse gravel were added leaving a bed of gravel on both sides, bottom and top.

Over the top of the green sub-surface Houston CC builders laid in 4 ins. of coarse gravel covering an area of from 7,000 to 7,500 ft. Then came a layer of 2 to 3 ins. of a mix containing 1 part soil and 4 parts gravel. Both layers were dumped around the putting surface and uniformly spread with an OC 3 Oliver track-type tractor and dragged with a wooden float.

The seed bed material contained more than 1,500 yds. of peat, about 1,500 yds. of topsoil and 4,500 yds. of sharp sand with 1/4 in. rock left in. Ratio breaks into 3-1-1.

The topsoil contained about 60 per cent fine sand so that the actual mixture checked out to 82 per cent sand; 13 per cent silt and 5 percent clay. This mixture was put into a pile with a drag line. It was then put into a Royer grinder after it had been loaded into a tractor with a front-end loader. All the various layers were thoroughly mixed when it came through the grinder. It was stockpiled until spreading time.

Layers 12 to 13 inches thick were spread and packed. These were floated, the surface feather-edged and left with 9 to 10 ins. of seed bed.

When there was enough dirt on the fairways, it was disced and run over 2 or 3 times with a large grader blade, then floated with a 12x18 in. wood float.

We used about 400 lbs. of 0-20-10 before we started planting the fairways. The grass from the nursery had been mowed at one inch frequently before any was removed for planting; it was cut with a sharp hoe at surface level. No soil was removed.

Both fairways and tees were planted in 18 inch rows; the whole job being completed Aug. 1. It took just about an acre an hour in 36 inch rows with the Pray Sprigger and about half the time when double rows were planted.

The fairways came in well. When temperatures dropped to the freezing point the grass was smoothed with a wooden float. 10-5-5 Turf Special was used in fertilizing, being spread about 600 lbs. the first two times and about 1,000 lbs. the

last time which was right around the 1st of Nov. The turf was mowed at 3/4 in. last February and when the weather was warm, as often as three times a week.

There are bunkers around most all the greens. The sprigging machine wasn't used here as it's too hard to control on sloped surfaces. Grass was verticut for the greens and then dropped in little bunches 12 to 15 inches apart. The formation was staggered, a small handful of topsoil added and water applied. The bunkers became covered as quickly as the greens and not even a single plant was lost.

A word about the water should be added here. Al Crain of Texas Toro helped engineer and design the installation. Two pumps operate off the 1,146 ft. well; one 750; one 500. Cast-iron pipe leads in 10 ins. from the pump and reduces to 8, 6 and 4 ins. on the fairways, 16-in. casing is used.

The pipe is laid in a single row down the center of the fairway with Buckner 17 valves and 900 sprinklers. The nozzle is a 9/16th and covers a diameter of 210 ft. under 125 lbs. of pressure.

No Hoses Used for Watering

Greens and tees are fed with 1 1/4 inch copper pipe with 60 foot centers; the last run on the water line being a one inch copper. All valves on tees and greens are number 14 Buckner. No hoses are used to water greens, fairways or tees.

Before the planting was started, 400 lbs of 10-5-5 was added to the seed bed. Then we gassed the surface with 4-S Napalm which consisted of 2 parts water to 1 part Napalm. It was hosed on at a rate of a pint to every 100 sq ft. After that the surface was soaked thoroughly, sealing it and allowing the gas to make the kill. Two weeks later the Napalm had disappeared and the greens were ready for planting.

The first green was planted July 15 and work was finished in about 2 weeks. Grass was cut from nursery with a verticut that had every other blade removed from the reel, enabling uniform sprigs from 1 1/2 to 3 inches long to be planted. 800 to 900 sq. ft. were used for each planting, which is more than necessary.

Williams Top Dresser (from 5 to 7 yds. per green) was applied after sprigging, keeping the greens moist until grass began to grow. Ten days later the greensmower cut at 1/2 in.; in four weeks the Houston CC employees were mowing every day; within 8 weeks the greens were solid and mowed at 5/16.