

# \$61,000 Drainage Job Pays Beverly Big Dividends

By **HERB GRAFFIS**

Beverly CC, one of the three private courses within the city limits of Chicago, last year invested \$61,000 in installing a drainage system that possibly gives this excellent course the most complete and modern drainage job constructed at any golf plant. A mile of 18 in. tile, and 6 in., 8 in. and 12 in. laterals was used in the job. Seven months were required for the work, from the beginning of the construction planning until the turf grew over the drainage system so well there was no evidence of excavating.

At any club \$61,000 is a lot of money. Beverly's membership is typical of the financial status of first class metropolitan district clubs. Many of the Beverly members are high ranking businessmen in Chicago. They are proud of the course, which is one of the tough tests of golf in the district and was site of the 1931 National Amateur which was won by Francis Ouimet. The medalists' score of 148 on that course was the highest in the Amateur since 1923.

But what made Beverly spend \$61,000 was that the old haphazard drainage system, like that at many another older fine layout, was seriously inadequate. Holes

were out of play for two or three weeks at a time. Water staying on the course usually made spring fertilizing impossible. Seldom was it possible to cut fairways before the first few days of July. Greens maintenance was handicapped and made expensive by the overall inadequacy of the drainage system.

With a superb layout architecturally, a budget that was hopefully approved for all efforts to overcome the basic difficulty of poor drainage without getting into the ground and doing the job right, and an active membership complaining when the course was out of play or in poor condition, the situation reached the point where further delay on a major drainage installation wasn't acceptable.

Dr. W. D. Mahoney, green chmn. when the decision for modernizing Beverly's drainage was made; his successor, H. V. Douglas who saw the job through, and Robt. M. Williams, course supt., were given complete responsibility for getting the work done right.

## Expert Work Was Economy

The first step was to engage Consoer, Townsend and Associates, consulting engineers. The Beverly job wasn't only a



This is the way north section of Beverly's course looked in late winter prior to drainage installation. Water often stayed in spots until June.



Main drain down 11th fairway. At close of 1949 season no signs of this major operation in digging were evident on the Beverly course.

job that involved drainage to get and keep turf in golf playing condition but called for fitting the system into the City of Chicago drainage facilities. Even those only generally acquainted with the drainage problem of the low-lying areas around Chicago know that expert engineering is required to get excess water out of the way.

Williams says the 6% fee of the consulting drainage engineers was the cheapest part of the whole valuable job. The engineers planned the complete job, provided detail and general inspection down to checking every tile to grade and kept in constant contact with the contractor, James Doherty Co. Williams is a very practical turf manager and has the high respect of his colleagues in greenkeeping. He expresses the opinion that no greenkeeper can undertake as a sideline to his many other duties, the planning and supervision of the sort of a big drainage job many older courses now need.

#### Job Detailed in 73 Pages

Williams can show to doubters the 73 typewritten pages of instructions and contract specifications and the bond which

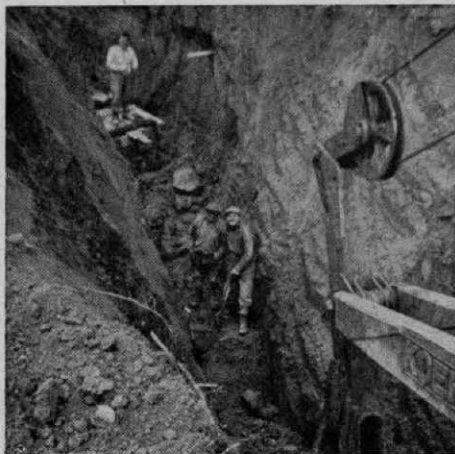
covers performance of the job, as indications that the magnitude and details of the drainage job are too much to be regarded as a sideline by club officials or superintendents.

In the Beverly job concrete bell and spigot pipe is used. Main line joints are closed. Lateral line joints are open except when close to trees where asphalt is used to keep out tree roots.

Plans set 75 manholes and catch basins in the rough to get surface drainage. These were located to have minimum possible interference with play and maintenance. Depth of the system installed ranged from 22 feet for the main drainage tile at its deepest to 3 to 5 ft. deep for laterals.

All lateral ditches were filled with rock to within 12 inches of the surface. Specifications and inspection prevented any backfill with frozen ground. Result of this care was that there was no sinking of the backfill. Within a year there was no sign of scars on the fairways although the drainage excavations crossed the fairways 40 times.

Maps of the work are on file in the



Deepest excavation on Beverly job was 22 ft.



Tiling at 9th hole after line was completed.



The 11th fairway, a year after drainage was installed. Turf is excellent and hole is playable right after heavy spring rains.

club safe and in Williams' office, as well as at the engineers and at the contractors. Usually the location of drainage tile on an older golf course is determined only by exploration when serious defects in drainage are obvious.

Several greens were rebuilt as part of the overall plan of drainage improvement. As in many other older courses Beverly greens were built according to the best construction practice at the time of installation but years of heavy traffic and faulty drainage eventually put the greens in condition that couldn't be corrected by surface work.

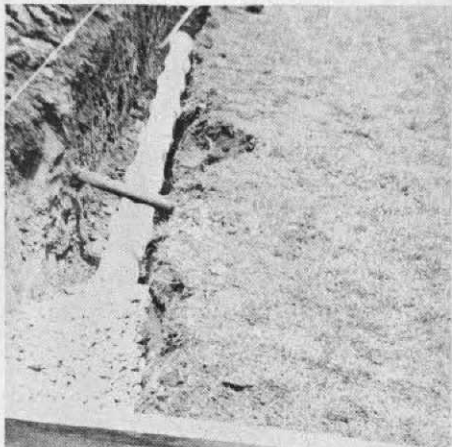
#### Results Are Pleasing

Already the direct returns on the drainage system investment have made it a sound deal financially for the club. The \$2500 spent in pumping water from a pond at the 12th hole which was an expense every wet spring has been eliminated. This pond would overflow and flood 5 acres and a heavy night rain would even submerge the portable pump. In another area 10,000 to 20,000 sq. ft. of turf was lost by flooding and poor drainage every few years. On the north part of the

course standing water kept holes out of play for weeks and maintenance work couldn't be done until the summer was far advanced. Due to poor drainage a good part of maintenance work that should have had value for years actually was only a somewhat desperate temporary measure.

The increased length of the playing season produced by the drainage improvement was reflected in clubhouse volume and pro department business. Charley Penna, Beverly pro, and his staff are on 12 month contracts. Most of the club's members live in the neighborhood. Penna gives lessons in a net in the clubhouse, during the winter except when he's on his vacation. He and his staff also do an extraordinarily fine job of reconditioning members' playing equipment during the winter as part of the pro shop service.

Penna says the drainage improvement has given members probably 25% greater value for their cost of membership in providing more playing days, better turf for playing and walking, and great encouragement with some roll on the ball before midsummer instead of having shots



Stone backfill was put in as drain line was laid.



Lateral line after stone backfill; ready for topsoil.



View on north section of Beverly course summer after drainage job was completed. Members got weeks more play from drained course, and better turf.

drop and bury on holes that are long enough to call for the full distance of carry and roll.

Williams and Penna constitute one of those greenkeeper-pro teams that gladden the hearts of club officials and members. They are highly competent businessmen in their respective departments and coordinate their work closely for the benefit of the club. They look at their work as being primarily that of giving the club member the greatest possible definite return on money invested in membership and dues. The two of them collaborated in organizing and conducting the annual joint meeting and tournament of the Chicago district's pros and greenkeepers.

### Al Watrous Wins PGA Senior Title

Al Watrous, Birmingham Hills CC, demonstrated age cannot wither his infinite variety of shots when he took the PGA Seniors' championship at Dunedin (Fla.) PGA National GC with 70-72. Al, just 50 last year and eligible as a maiden in the tournament of the pro patriarchs, headed the 99 entrants who were divided into four age classes. Bill Jelliffe of Denver, 74-71—145, was second in the junior class of the seniors.

As usual there was splendid golf and some surprises at the ages of the contestants who look and play a lot younger than vital statistics reveal.

Eddie Williams, Louisville, with 72-78—150, won in the 60 to 65 year group by nosing out Mike Brady by a stroke.

In the 55 to 60 year class, Jack Williams of New Haven led with 76-75—151, beating Alex Watson, 76-76—152, by a photo finish.

Jock Hutchison, now a youthful 66, got 75-72—147, to be head man in the 65 and older classification. How some of these sprightly ancients still can whop that ball! Bertie Way with mileage of 77 years on him played 9 holes like a juvenile and then withdrew to give the boys a chance.

A variety of team events enlivened the program over the par 71 course that Alex Cunningham has in fine condition after last autumn's storm damage. When you can have that layout in satisfactory shape, with critical experts being the customers, you've really done a job.

Bill Gordon, Tam O'Shanter, Chicago, was elected president of the PGA Seniors; Joe Donato of Norwich, Conn., first vp; Eddie Williams of Louisville, second vp, and John Manion of St. Louis, sec.-treas. Willie Ogg was chmn., Arrangements committee of the Seniors' week and Al MacDonald, Publicity chmn. Mrs. Ernest Newnham, Portland, Me., is pres., Women's Auxiliary of the PGA Seniors; Mrs. Dave Oglvie, Cleveland, vp; Mrs. Frank Butler, Wolfeboro, N.H., treas.; Mrs. Ernest Anderson, Dunedin, Honorary Pres.; Mrs. Wilson Crain, chmn., Women's committee.

There was jubilation and singing in heathery burrs at the annual banquet. Among the many delightful reunions of the boys were those with George Low, now 75, and up and around again after a change to winter oil.