

is blessed with few, if any, natural features, water can be used to create visually appealing elements when none previously existed.

Designing of a water hazard into the golf course is a critical factor. As mentioned earlier, placement without regard to how the water will influence or affect play is careless or amateurish at best. Designing a water hazard which unfairly penalizes the golfer and offers no reward for daring shot-making is useless. To combine a strategic playability with the visual impact of a large lake within the context of a golf hole or as it may affect several holes is a memorable part of a course.

Water as a real hazard can overpower and demoralize. Holes of unforgiving demand, such as the tee shot on 15 at Pine Valley, do not represent modern golf course architecture. (But then was Pine Valley ever intended to represent anything but a one-of-a-kind superlative?)

The thoughtless positioning of water hazards immediately in front of the regular and women's tees frequently causes a needless slowdown in

play. Such situations are even seen on the public courses where the race track, race-them-through mentality is prevalent. Placement of water hazards to needlessly trap the mis-hit beginner's shot serves no purpose. Unless the location of the water significantly influences the strategy and playability of the hole, and influences the play of the better golfers, one should seriously ask why the water is where it is.

There are almost as many round, monotonous ponds and lakes as there are round bunkers and round greens on golf courses throughout the world. An artfully conceived outline shape will not alter the fact that your ball is in the lake; however, a flowing harmonious shape will certainly be more appealing to the eye. The design must strive to emulate nature; that is, the location and use of any water hazard must not appear contrived or forced. Harmony with the natural and indigenous environment of the individual site must be a primary objective of any golf course design effort.

As with all other components of the golf course design effort, careful

thought must be given to the safety aspects of using water hazards. Security fencing of individual water hazards is not often encountered or required. However, regard must be made to the attractive nuisance aspects as well as to the influence on misdirected golf balls. In some instances, a grove of trees will be far more desirable than a pond, purely for purposes of golfer safety.

Consider the methods of lake excavation, sealing and water circulation before problems arise. Adequate depth and an impervious lining seal are essential. Modern aquatic herbicides and aeration equipment can keep weed growth minimal. When used as part of the irrigation system reservoir, regular circulation of the water helps maintain water quality. A separate water circulation system within the pond lake may be necessary to insure adequate water movement. In general, the warmer the climate, the more closely attended must the lake be to minimize maintenance problems.

Continued on page 22

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Red Oaks: Diplomacy, Determination



Red Run Drain was enlarged in the mid-1960's due to a growing Southeastern Oakland County population.

There are many golf courses around the country that end up mostly underwater after a really bad storm, but Red Oaks Golf Course in Madison Hts., Mich., is just the opposite: it actually sits above the excess water.

How can that be true? The 9-hole golf course was actually built on top of a 62-million-gallon reservoir that is part of the Red Run drain system. During periods of heavy rain, the reservoir stores overflow storm water and sewage from 14 communities. The story of Red Oaks is one of political diplomacy, determination, and imaginative land use planning — and the result is a popular golf course where people once would never have dreamed they would find one.

A huge bathtub

When the water storage reservoir was constructed in the early 1970s, designers were not concerned about locating a recreational facility on the site. Their task was to plan a sophisticated underground system for storm water and sewage when the normal system was at capacity. Overflow from the original system had been causing pollution in Red Run and the Clinton River, which flows into Lake St. Clair.

"You could think of the reservoir



The open drain was replaced by a pollution control facility in the early '70's. Large concrete conduits are under construction and were covered following.

as a huge bathtub," explained an engineer for the Oakland County Drain Commission. "It fills up, but the water drains out when you pull the plug."

About the time the wastewater reservoir was completed, the Oakland County Parks and Recreation Commission began looking at the possibility of providing recreation in the Red Run area, one of the most populous sections of the county. The land over the Red Run Drain was considered, but there were numerous physical problems: the site was narrow, there were high-voltage lines to contend with, there was no useful vegetation and topsoil was unsuitable for planting. In addition, the site was bisected by a pedestrian walkway that connects a school with a subdivision on the other side.

Of greater concern were the potential political roadblocks. Approval of a park plan would be needed from local, state and federal officials. Support from adjoining property owners — who were concerned with noise, traffic and their privacy — would have to be enlisted.

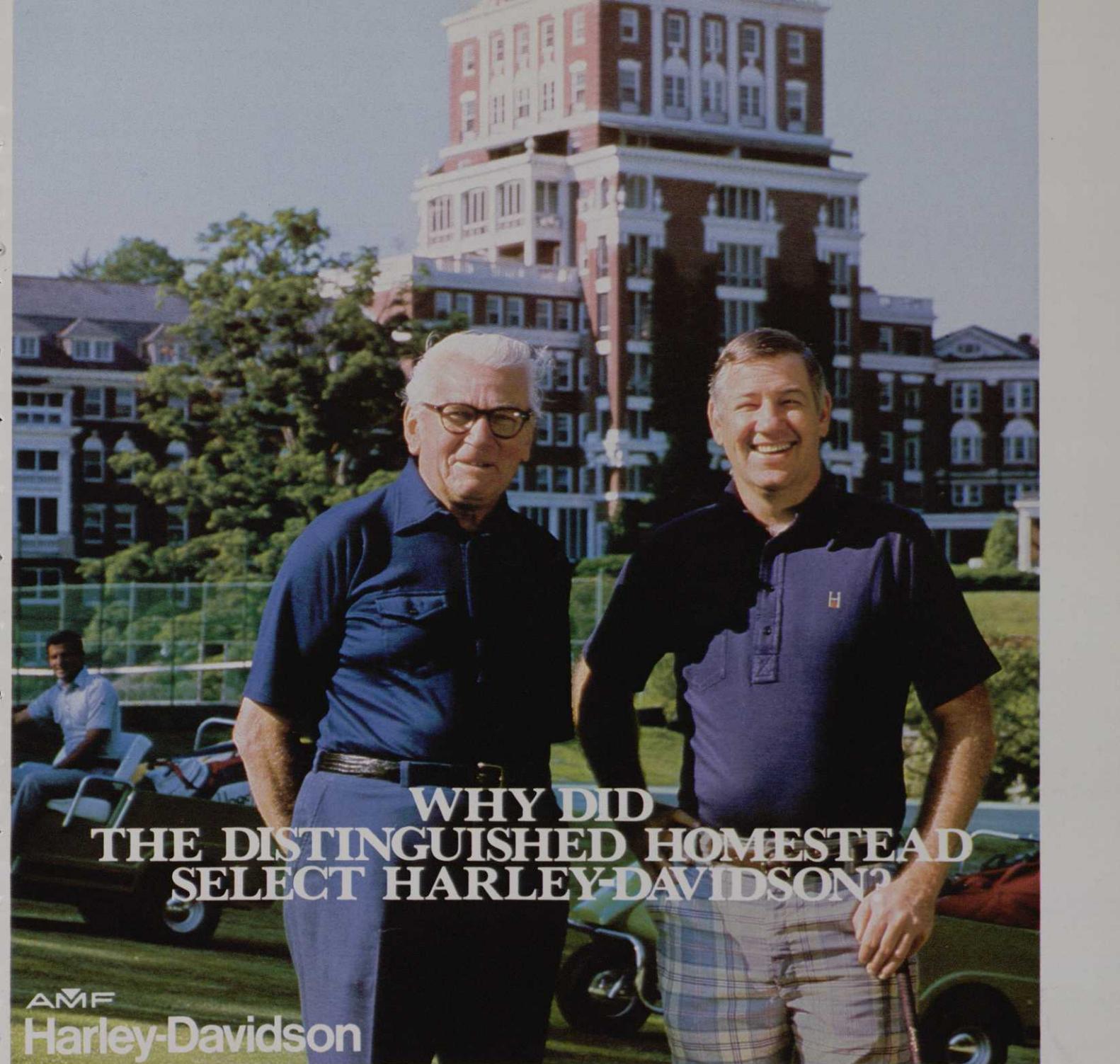
A 1974 study by the Michigan Department of Natural Resources found that Red Run was not suitable for a state or regional park, but state planners recommended that the county consider use of the land for a local park. Before any further progress could be made, approval was needed from the Red Run Inter-County Drainage Board as well as from the U.S. Army Corps of Engineers. Oakland County Drain Commissioner George Kuhn, a member of the parks commission, also insisted on written assurances of cooperation from all communities in the drainage district.

And a junk heap, too

In late 1974, Vilican-Leman and Associates, a planning firm familiar with the needs of the 14 communities involved, was hired to research possible uses for the Red Run site. They recommended a golf course as "the only feasible development of a county-wide nature."

Recommended was an executive-length 9-hole layout that would permit use of every club in the golfer's bag and would be especially suitable for the average golfer, sharpening his game without requiring the time needed to play a longer course.

Following public hearings, the parks commission committed itself in



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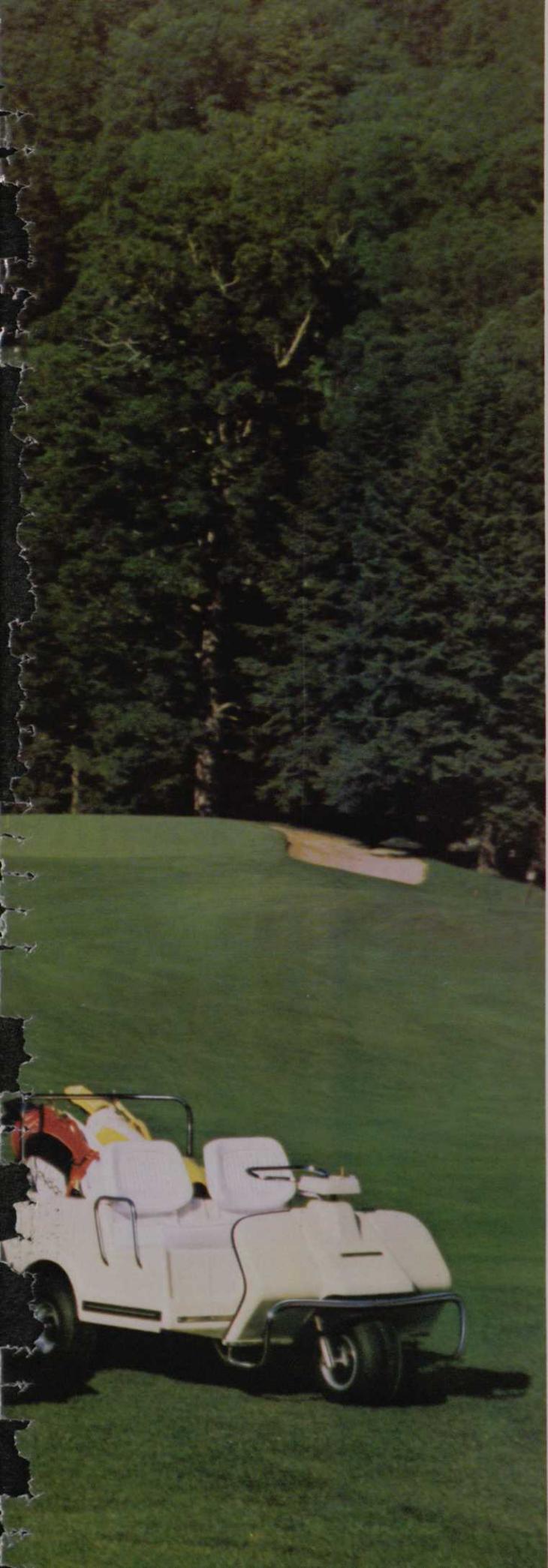
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Above: Red Run was little more than a barren field after the pollution control facility was covered. Right: Outlines of fairways and greens could be seen in mid-1977. The water hazard at green number two also serves as a reservoir. Below: Red Oaks as it appeared in summer of 1978. Turf coverage would not be adequate for another two years. Park officials were predicting heavy use because of location.



June 1975 to building the course and hired the architectural firm of Bills/Childs Associates of Pontiac, Mich. The architects suggested a course designed in two sections and connected by a sloped underpass so that the pedestrian walkway would not interfere with play. Holes were laid side-by-side due to the narrowness of the property.

It was obvious, however, that the narrow, zigzag strip of land owned by the Red Run Drainage Board and the county would sharply limit the size of the course unless additional land could be acquired. Three small parcels were purchased from neighboring businessmen, and the Southeast Oakland County Incinerator Authority agreed to lease 19 acres to the parks commission.

Number eight green, the highest point on the Red Oaks course, now lies on top of what used to be a gigantic junk heap, a carryover from the time when the site was used as a refuse dump. In other areas, chunks of metal, concrete, and other debris hampered construction of the course. They had been used as fill to cover the drain.

Despite these obstacles, construction progressed rapidly. Over 250,000 cubic yards of soil were trucked in to smooth out rough spots and provide a suitable base for seeding. Fill dirt used to cover the rubble left from installation of the wastewater retention system was hauled from an excavation site 4 miles away. Topsoil application was minimal.

The course was seeded with a mixture of Baron and Nugget Kentucky bluegrasses in the fall of 1977, with some reseeding done the following spring. Five hundred newly planted trees — primarily evergreens, maple, oak, flowering crab, and ash — provide a barrier between tees and greens and help to define fairways. They also serve as a backdrop for greens and as a partial barrier between the course and adjoining properties.

The finished course boasts ten bunkers and a major water hazard that also serves as an irrigation pond. The pond is filled from a well at the course. Power lines intrude over the course at one spot, but they do not interfere with play. Despite the narrowness of the course, there is adequate fairway space for wayward shots.

Rapid development

The Oakland County Parks Commission owns and operates four golf courses. As chief of golf course opera-

tions, Michael Thibodeau is, in effect, the superintendent for all four, but day-to-day operations at each course have been delegated to a foreman. Foreman at Red Oaks is Larry Gee.

Thibodeau has been with Oakland County since 1971, when he joined the parks commission as a greenskeeper at White Lake Oaks. Prior to that, he was golf superintendent at Bogie Lake County Club in Union Lake, Mich. He notes that because of the newness of the Red Oaks course, it is not quite up to the standards of the county's other facilities, but that as the turf and vegetation mature, this course will be their equal.

Red Oaks has already proven its popularity, averaging 200 golfers a day last summer. Many players are juniors and senior citizens, for whom special rates are available. Regular green fees at Red Oaks are \$3.00 for 9 holes and

\$3.25 for 18 on weekdays, \$3.50 and \$3.75 on weekends and holidays for Oakland County residents; for non-residents, fees are \$5.00/\$5.50 weekdays and \$5.50/\$6.00 weekends and holidays. There is also a twilight rate of \$2.00 for unlimited play after 7:00 p.m. weeknights.

Thibodeau notes that these rates are comparable with the few other 9-hole public courses in the area. He also predicts that Red Oaks will eventually outdraw the other county-operated courses.

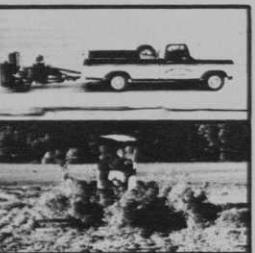
"Most of the golfers I've talked with are pleased with the course," he said. "They like the layout, and they say the course is a real challenge."

Development of the site hasn't stopped with the opening of the golf course. A 25-tee driving range is under construction across the street. □

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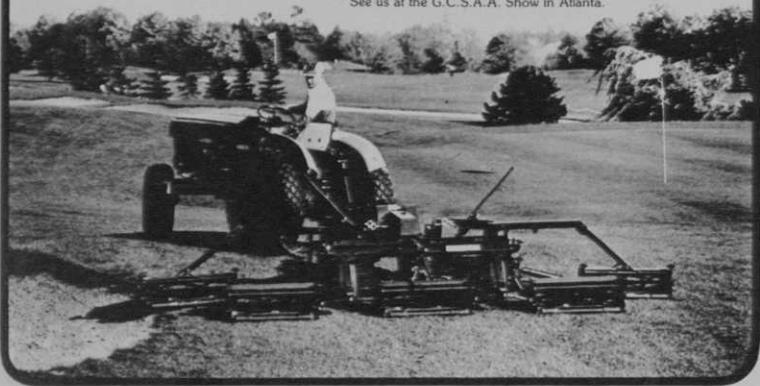


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Blue Ash

Continued from page 6
preserved in permanent, public ownership represents a significant conservation of natural resources; certainly land is a finite resource, and that which has existed in open space is rapidly giving way to development. The program has represented a closing of the gap which previously existed in the community in unmet recreational opportunities, by providing for an outstanding golf course and a nature area for relaxing and picnicking. Finally the program provides a prime example of public/private cooperation which is mutually beneficial and which can serve as a model for future co-ventures.

The golf course

The course has the look and feel of a fine country club. Golf Course Superintendent Charles Engster, who was hired before construction began because of his previous course building background, saw to it that every detail of the Golf Architects plan was followed.

Charlie literally lived on the job but very few times was he ever in an adversary situation with Mr. Charles Layton, job superintendent for Salyer's Golf Course Construction. Actually the harmony and communications established between the contractor and the superintendent permitted the job to progress despite very adverse weather conditions. "All I had to do was to mention areas that I thought were deficient and he saw to their completion."

The golf course superintendent was important as another inspector, for the course stretches for a mile in length as it traverses 150 acres of widely varying soil types, vegetative cover, topography and rock conditions. "We had a few unforeseen problems as does any project" states Engster, "but we just got together with the Architects and Layton to develop a workable solution."

The golf course is a par 72 with a middle yardage of 6211 that can be stretched to 6643 yards from the back tees to as short as 5125 yards from the front tees. Bill Mayer, formerly of nearby Kenwood Country Club, is now Head Pro at the Blue Ash golf course, and looked forward to the July opening. "We had some erosion over winter caused by excessive rains so we decided to let the course mature until mid-summer" says Mayer, "but when the course opens it should be enjoyable for every class of golfer. From the back tees it is as tough as any course in Southern Ohio and from the front tees it will provide the same enjoyment to the less accomplished player. □