Have you got enough room?

PLANNING THE GOLF COURSE MAINTENANCE FACILITY

Remembering the pink curtains in the Teignmouth greenkeeping sheds last month, I had thought of discussing with you the other essential features of this important facility. Then came the latest issue of the USGA's Green Section Record and there was H. A. DeHay's excellent article on the same subject and supported by a great deal more research than I could ever hope to muster. So the best thing I can do is take the day off while you get on with it. Remember that America is a big place.

Facilities planning is not a new concept in architectural design. It was recognised as a contributing aspect in early architecture, but it developed as a major role during the Industrial Revolution. As industry became more competitive, new methods of increasing efficiency naturally developed. Using every square foot of space effectively became mandatory. The effectiveness of space planning became more and more apparent, and the process spilled over from industrial use to other facets of architecture and planning. Efficient use of space has become the primary objective in the design of buildings today.

I became interested in planning golf course facilities after a phone call from a golf course manager I had met not long before. He had a problem, and he invited me to visit his operation to see it for myself. It was taking 30 minutes or more to get equipment out of the building. It had been 20 years since I had been in a golf course maintenance building, but to my surprise, the building looked and smelled just like the one my father had.

Having grown up on a golf course I can recall some of the problems my father had operating within his facility. It had been 20 years since I had been in a golf course maintenance building, but to my surprise, the building looked and smelled just like the one my father had.

At first it appeared that nothing had changed - until some of the modern equipment came into view. It was difficult to determine in which direction some of this new machinery was intended to go, and I could tell only after I located a steering wheel and a seat. It was evident that new ideas had been moved into the design of golf course maintenance equipment. In contrast to this, I saw no evidence that any new technology had been applied to the design of the building.

After visiting many maintenance facilities and talking with golf course managers, it became clear that although the activities necessary to maintain a golf course were very much the same, no two facilities were even remotely alike.

This proved that new design and planning technology that had been developed through the last decades were not being used for golf course maintenance buildings. It is hard to believe that as long as golf courses have been around, the design of their facilities could be so neglected.

With new regulations and the right-to-know laws in effect today, plus the high cost of maintaining a golf course, owners can no longer overlook the importance of the maintenance facility. The idea that maintenance activities can be carried out in a barn hidden away out of sight, as they were in the old days, is courting serious problems and operational inefficiencies.

This lack of proper design undoubtedly reflects some of the old traditional attitudes. While tradition is a foundation of golf, it is nevertheless necessary to consider the modern needs and new issues facing today's maintenance operations. The cost of maintenance is a major consideration today. Although the manufacturers of equipment are addressing the problem, we still have the matter of efficiency at the golf course itself.

The majority of the maintenance facilities I have visited lack adequate space to perform the work. This is a major factor affecting the total operation. Since there are no published guidelines dealing with the space requirements for golf course maintenance operations, one can understand why facilities are so unlike one another.

Following the normal procedures of the facilities planning process, I conducted a space study of the various golf maintenance activities. A parking plan was developed. Equipment used each day was located for easy accessibility, and it could be driven from the building without moving other pieces of equipment. Equipment that wasn't used as often was located in secondary parking slots. Equipment used daily was located in less accessible slots. Equipment that wasn't used as often was located in less accessible slots.

The inside space necessary for maintenance activities. Equipment maintenance needs space to work and adequate lighting.
ADMISTRATION AND
SUPPORTING FACILITIES
For employees 1,600 sq. ft.
Equipment parking 3,200 sq. ft.
Chemical storage 800 sq. ft.
Repair shop and parts 1,600 sq. ft.
Cleaning bay 800 sq. ft.
Soil bins 800 sq. ft.

When the opportunity to design
and build a complete new facility
presents itself, the following
space requirements will provide a
guide for the size of the land area
necessary to operate a golf
course maintenance facility
effectively.

Building 8,800 sq. ft.
Fuel island/wash apron 1,720 sq. ft.
Hard surface apron . . 42,838 sq. ft.
Dumpster pad 375 sq. ft.
Soil mix apron 1,200 sq. ft.
Drives and
green space 4,992 sq. ft.

TOTAL LAND AREA:
235ft x 55ft 55,925 sq.ft.

Because efficiency is only
obtained by creating an orderly
traffic flow, it was necessary to
analyse the flow to and from the
facility. Many factors are
concerned, among them the
separation of employee vehicles
from other activities, visitors to
the facility, outside service
vehicles, and the maintenance
vehicles themselves.

Two operations at every golf
maintenance facility deserve
special study: fueling and washing
vehicles. Washing creates an
offensive environment, while
fueling is a major safety
consideration. Each operation
is usually conducted at a separate
location. They do, however, have
one aspect in common. Both
must be done to every piece of
equipment every time it is used.

Therefore, upon entering the
facility from the golf course, the
equipment is usually driven to two
separate locations. This can
create a complex traffic flow.
However, space will be saved and
efficiency increased if the two
activities are confined to one
general area. The combination
fuel island/wash apron should be
located directly in the traffic flow
between the golf course and the
building.

Designated parking spaces is
important, too. Employees' per-
performance in driving maintenance
vehicles is far more predictable
when the operator knows exactly
where they are to be parked. Past
studies show time is wasted when
an employee cannot find a place
to park his vehicle. While this
aspect of facilities planning may
appear at first to be minor, it
is one of the major contributing
factors to the order so necessary
to achieve efficient operations.

Planning of space and creating
a traffic flow for equipment
develops a sense of order that
carries over to other activities.
Order reflects an attitude of
management. Attention to see
that every activity has been
studied conveys to the employees
a sense of positive attitude will
prevail, and that the quality of the
job performance will increase
accordingly.

The maximum efficiency level
of any operation is achieved when
facilities planning technology is
applied. This aspect of any golf
course operation deserves further
exploration. It can significantly
affect golf course economics and
a successful future.

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