



(Inset) Bradenton CC clubhouse. Diagram shows how riser connections were made with Transite heavy tapped couplings.

Low-Cost Irrigation Installation

How Bradenton CC maintenance crew followed the manual, and with aid of an expert, installed its course watering system

IRRIGATION pays for itself at Florida's beautiful Bradenton CC course, thanks to a do-it-yourself installation of Johns-Manville's Transite pipe.

A do-it-yourself installation has the advantage of providing experience and knowledge of a layout that will be of value when repairs are needed.

One of the most important things to be considered is the choice of pipe material. For ease of handling and speed of laying, for minimum friction loss and lack of corrosion, asbestos-cement pipe proved to be the answer at Bradenton. The installation cost of Transite was lower because the exclusive Ring-Tite coupling and long, lightweight lengths enabled a small crew to handle the pipe in a minimum of time.

Information for this article was supplied by Col. Frank Ward, former supt. of Bradenton CC.

First step in insuring a low-cost, efficient irrigation system is to plan it thoroughly. A large scale map of the course helps locate the water source, pumping equipment, existing lines and projected ones down to the last detail. If available, the course architect's map should be used, since it gives all the needed detail.

Check Water Source

Source of water should be checked. Cheapest sources are irrigation ditches, nearby lakes, reservoirs and streams if available nearby. City water, and deep wells are expensive, costing two to five dollars a foot.

The next important step is choosing a designer. Design will be of the utmost importance to the course supt. for years. The designer should insure such things as adequate pressure to far corners, looping to balance pressures, sufficient pump volume and similar essentials.

Handling and scheduling are important



At their July meeting, directors of the Southern California GCSA broke out in new jackets complete with the organization's emblem. The SCGCSEA emblem idea also has been carried over into decals that are available for members' cars and offices. A flag bearing the emblem, also was adopted at a recent meeting. Sporting the new haberdashery in the photo above are (front row, l to r): Fred Bove, Chuck Friday, Elmo Feliz, Zeke Avila, Rod Barker, Sr. (Second row): George Lamphear, Elmer Border, Rod Barker, Jr. and Harold Stallings.

to a speedy job. Unloading should be in a convenient spot to save time and labor when the pipe laying begins. String the pipe in the rough where it will be handy to the ditches.

Help Getting Started

Close and continuous supervision is essential at the start of the installation and for the first few days. One cannot be too exacting in the correct performance of each task so everything will be done properly throughout the job. During the early days of the installations at Bradenton, each employee was learning his job and needed instruction and supervision. Johns-Manville's instruction manual and an instructor loaned by the pipe div. made the installation and training of men easier. The instructor showed the Bradenton staff the correct ways to join pipe ends, to prepare waterways at tapped couplings and saved much time and trouble.

Among other things, the J-M instructor pointed out the importance of good bedding. A careful and conscientious workman was selected to handle this. As soon as he had accomplished the job, the pipe was laid and backfilling over the pipe was completed with a tractor and blade, packing the soil back into place thoroughly. While it is desirable to leave the

ditches open until pressure tests can be made, this is out of the question on a course in play. So, at Bradenton the testing was done at a time when play was certain to be light. One man was at the pump and the crew was placed so that each saw a part of the course. Pressure was built up to a higher point than normal. A by-pass valve near the pump, used for filling the reservoir from the well, was used to regulate pressure without locking in any sprinklers. As long as the pressure at the pump remained steady it was evident the system was tight.

Valve Locations

As the turf took hold over the ditches, valve locations were hard to see from a moving vehicle. Searching for these valves is a time waster. The problem was solved by placing ammonium nitrate in a three foot circle around the sprinkler locations. A double handful was sprinkled every month, making a darker green circle of grass that is easy to see.

At Bradenton it was found that if each step in the installation of an irrigation system is carefully planned the result is a course that serves better at lower cost. It provides members with greater enjoyment so they play more often, thereby increasing the use of all club facilities.