## A WORD OF CAUTION

It will be recalled by some superintendents that when plastic PVC pipe began being used in golf course water distribution systems some 20 years ago, it gave considerable trouble by joints pulling apart and pin hole leaks appearing in the wall of the pipe. This all happened even when the pipe was "snaked" in the trench to allow for pipe movement due to temperature changes. In some instances the trench was not back filled until the cool of the evening, the idea being to bring the pipe material to a minimum of contraction due to a reduction in temperature. Despite all of these precautions there were some colossal plastic pipe failures and this type of pipe was outlawed for several years on Chicago golf courses; however, numerous investigations eventually proved that the trouble did not lie with the pipe, instead it was traced to the method in which the pipe was installed.

It should be borne in mind that PVC pipe has a thermal expansion, or contraction, of 2" per 100 ft. per 50 degree F change in temperature. This indicates that if a 50 degree F temperature change takes place in 1000 ft. of PVC pipe in the winter time, this length of pipe would be 20 inches shorter. This contraction makes the pipe pull apart or stretch the walls so they become weakened and produce pin hole leaks.

In those early days the PVC pipe was fabricated with solvent welded joints and no provision was made for pipe movement due to temperature changes. Today's method of installation is to fabricate the pipe in 20 ft. lengths with push-on joints, each joint acts as an expansion joint, this has eliminated the troubles we encountered in former years.

In view of all of the above, I am apprehensive of some recent construction methods where the plastic pipe is being pulled into the fairways. In order to do this the pipe must be fabricated with solvent weld joints for the modern push-on joint cannot be used. In other words, no provision is being made for movement due to temperature changes. ARE WE HEADING BACK FOR THE SAME TROUBLE WE RAN INTO 20 YEARS AGO BY PERMITTING PIPE TO BE PULLED INTO THE FAIRWAYS?

C. E. [Scotty] Stewart





August 16 Meeting - Carriage Green C.C. August 23 - Illinois Turfgrass Golf Day -

Indian Lakes C.C.

September 13 G.C.S.A.A. 50th Anniversary, also September 14-15 - G.C.S.A.A. annual golf tournament at Sylvania C.C. Sept. - Joint Meeting - Wis. Supts. - McHenry C.C. October 4 Meeting - Butler National G.C.

November Annual Meeting -

December Meeting - Butterfield C.C.

