IDEAS FROM TOMMY WHILLOCK, EAGLE HAVEN GOLF CLUB, NORFOLK, "The answer to the question of how to improve the putting surface on #1. green at Meadowbrook Country Club isn't simple, but this is what I would do. 1 .- Trees need thinning out around green for sunlight 2. Build temporary green in front of present green, Overseed with rye, Rye should be in good shape in Richmond until June 15th. 3 .- The green would take years to work into shape, aerifying and working sharp sand and peat into aerifier holes. The soil on the green is good, but all that is there is just soil - no sand or peat, just compaction roots of the present grass, which cannot grow, 4 .- The present green is setting up 10 feet high from fairway elevation. Some thought should be given to front entrance of green when under construction. Player hitting second shot into green cannot see any part of putting surface. Front edge should be dropped about one foot, this would also help surface drainage. 5 .- Remove and save the best truf left, if any. Plow up green to depth of 10 to 12 inches. Work 5 inches of sharp sand and 2 inches of peat or sawdust into seed bed. Spread at the rate of 50 pounds per 100 square feet- Wyanlotte Turface on surface of green. Work into soil top 2 inches. Cost per bag is \$2.37 - one ton \$73.65. Turface drains 4 times faster than sand and keeps moisture at root level. Soil test should be taken with balanced fertilizer at rate of 2 pounds nitrogen per 1,000 sq. ft. Level putting surface and put 328 Bermuda stolons into green. Right temperature for planting stolons is 70 degrees. Spread 328 all over green like hay at the rate of 10 bushels per 1,000 square feet. Gover stolons with 1/2" of uniform mixture of top dressing and roll and water. Keep surface of green damp for 7 to 10 days, then water every other day until grass takes over. Patrons should be able to play on green in about 6 weeks. 6. Club should go into the expense of sub-draining this green; (a) Remove top soil off to depth of 18 inches. (b) Dig down to 2 feet, ditches 6 inches wide about 5 feet app Drain each side of green to keep water from draining to front. Fill ditches with small gravel and put 5 inches of small gravel over sub part of green. Put top soil back on green and go through operation listed No.5 of this report on how to get a uniform mixture of soil for growing good grass for putting surface. Under this sub-drainage operation - uniform mixture of soil could be worked off the green and then placed back. "

FROM FORT RELVOIR, VIRGINIA. Tommy Doerer, a man who has had considerable experience with bermuda grass, made this suggestion : " There are 5 important steps to be used in preparing a Bermuda green. A. Soil Preparation, B. Surface Brainage, C. Sub-surface Drainage, D. Stolons, E. Watering. After viewing several greens at Meadowbrook I would like to suggest the following: 1. Disc or plow present green area to a depth of 4-6 ". Then add an equal part of sharp sand, into the furrows, along with about 10% - peat or humus. Work into the soil until thoroughly mixed. A spring tooth harrow from 4 directions would do the job well. Since the present soil seems to be acid, would suggest 50 pounds dolomitic lime per 1,000 square feet, worked into the soil, follow with 20 lbs per 1000 square feet - 10-6-4 55% Urea fertilizer, also worked into soil well. 2. Surface drainage to be in two directions, preferably three, approximately 2% grade. 3. Subsurface drainage to be 4" tile with 4-6" - 3/4" gravel underneath and around sides of tile. Tile to be spaced 1/2" apart with building paper covering the joints. Tile to be 10 to 12" below surface of green, herring boned, approximately 10 feet apart. Tile to run off greens into pits at end of tile, 3 to 40 deep, filled with 3/40 gravel to within 4" of ground surface, 4. Select certified 328 - stolons and broadcast over area at rate of 10 bushels to 1,000 square feet. Cover with a light topdressing, both ways, roll lightly, both ways, so that rhizones make contact with soil. 5. Finally, keep stolons watered for about 8 to 10 days or until they have started to take. Do not saturate soil, water often but very lightly, After these 5 operations, my opinion is, you will have complete coverage in about 8 weeks. Cut the new grass at a height of 5/8" for the first few cuttings, then reduce to 1/4". Maintain 1st year at 1/4". Since there is a 3-4 month (life) in vegetable dye, use dye the first year, do not overseed with any winter grass . The 2nd year, rye red top, bent - red fescue grasses could be used for winter play.