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Report and Construction Notes Covering the Building of a Nine Hole Golf Course for the University of Idaho.

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Putting Greens

There is nothing quite so vital in Golf Course Construction as the proper placing and moulding of the putting greens,--each green should be built with a particular shot in mind. Its size, contours, bunkering and opening should be considered in relation to that shot.

In all green building the soundest of principles should be followed avoiding all freakishness and keeping as far as is possible to easy and natural lines; in other words, even when we have to alter the face of nature itself let the finished product be such that it appears as if it were part of the natural landscape.

This principle applies to all phases of Golf Course Construction. The green should include in its final make-up; proper placement, fine building and contouring, proper drainage and good soil conditions to carry a lasting turf.

Notes on Construction

No. 1 Green

Using the center of green as grade, cut down right side of green using material to build up left side and left approach. Mound at left should blend in well with the green. Place grass hollow on right side near front to keep water from green, and leave natural mound at rear of green.

No. 2 Green

Using the center of green as grade, cut down right rear and side using material for building up left side. There should be also a grass hollow and mound on left side and approach.

No. 3 Green

No. 3 green is situated on rise in the ground. In building this green, cut down the left side and front using material for the slope walking up to the green. Take rear of as grade. The contour work on both sides of the green should blend into the green, and the outside contours into the fairway. Make slope up to green an easy natural grade.

No. 4 Green

This green should be large and well open in front to shot. The finished rear and left side will run into slope of hill. Using center as grade, cut away left side and build up right side and mound.

No. 5 Green

This green is located in a fine setting. When finished it should present a punch-bowl effect. In building this green use center as grade, fill in low area. With material from approach on left side alter the course of the present natural water-way bringing same in front of new green in the form of a grassy hollow.

No. 6 Green

Cut down right side and build up left side and approach until it balances with the other side. Build large grassy hollow on left side approach to the green. Leave natural contours at rear of green. Cut in hollow at rear of green.

No. 7 Green

This green is located on the hill, and when finished should blend entirely with its natural surroundings--every part of the outsides should have long easy lines. To the rear of the green is a grass hollow to carry water off the hill-side. To build this green use five yards in front of center as grade. Cut in hill and level off using material for the front, sides and slope up to the green.

No. 8 Green

The present natural features combined in the location of this green should be preserved in their entirety. Grade off irregular spots. Make fine grass hollow to left and rear. Some fine tree planting near this green will add much to the green.

No. 9 Green

To build this green cut all around top side of green preserving the rounded formation. Use material to level off green area in front using center of green as grade.

Added Construction Notes

In building all Putting Greens, remove the top layer of soil from the green before starting cut and fill. After the green is built and contoured check up on the sub-soil drainage. If tiling is found necessary, it should be done at this time. In any case the usual practice is to incorporatedsome well rotted manure and sharp cinders into the sub-soil in order to areate and build up into a suitable physical condition. The putting green should then be gone over and made to all appearances to look like the finished green, after which the original top-soil is returned. This top-soil should be again treated with whatever form of organic matter and coarse sand found necessary to put it into fine condition. The green is finished by putting on about one inch of screened compost generally made up of two part soil, one part sand, and one part screened manure.

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Tees

A good teeing system adds greatly to the use and attractiveness of a Golf Course. Tees should be roomy and large enough to permit frequent changes of tee markers. They should be sown with a mixture of sturdy grasses containing Chewing's Fescue which provides a tough turf. All tees should be so built that as far as possible they can be cut with a tractor. As a general rule they should not be less in area than 40x30 ft.

Notes on Construction

No. 1 Tee
Level off rear of tee using material for the front slope.

No. 2 Tee
Cut into mound using material on both sides, the finished tee will appear as a depression between two mounds.

No. 3 Tee
Level off rear of tee to front into long easy grade.

No. 4 Tee
Cut down front and left side of tee, and level front and right side. This tee should appear to blend right into the fairway.

No. 5 Tee
Cut down rear and left side and make long slope to front of tee.

No. 6 Tee
Cut down rear and left side using material for right side and front.

No. 7 Tee
Level off rear of this tee to appear as large natural tee.

No. 8 Tee
Cut down rear and left side using material for slope in front of tee.

No. 9 Tee
Cut down rear and right side using material for left and front.

Fairways

It will not be necessary to do any trapping in the fairways as the course abounds in natural divisions and undulations which lend a natural feature to each hole. The players will find it much easier to stay on their own particular fairway. A system of tree planting will add much to the beauty of the course. Placed at stragetic points the trees will add to the natural division of each fairway, and afford protection between greens and tees.

There are a few low places running through the valley land. These can be readily filled from nearby points and brought up to a good drainage level. It would be advisable to put in porous tile at those points where low spots cross the fairways and cover with good soil.

In cultivating for a seed bed very little work is necessary. The usual methods are to cultivate with harrowing and fining down until a good seed bed is assured. A roller or cultipacker can be used to advantage both before and after seeding to firm up the soil.

Material used in Putting Greens

Putting Green areas average 5000 sq. ft.

Material		Approximate Cost	
100 yards	well rotted screened manure	$100.00	
60 "	coarse sand	120.00	
50 "	cinders	50.00	
250 lbs.	Creeping Bent @ 70¢ per lb.	175.00	
200 "	Chewing's Fescue @ 45¢ " "	90.00	
300 "	Sulphate of Ammonia @ $7.50	22.50	
		Total	$557.50.

Material for Fairways, Tees and Rough
Subject to approval of your own Agronomist

35 acres of fairway mixture sown at the rate of 125 lbs. per acre.

Blue Grass 50%, Creeping Bent 10%, Red Top 15%, and Chewing's Fescue 25%.

Amounts in Pounds

1000 lb.	Chewing's Fescue	@ 45¢	per	lb.	$450.00	
450 "	Creeping Bent	" 60¢	"	"	270.00	
700 "	Red Top	" 21¢	"	"	147.00	
2225 "	Blue Grass	" 19¢	"	"	422.75	
1400 "	" " for Rough	" 19¢	"	"	266.00	
					Total	$1,555.75.

Respectfully submitted,

Francis L. James.

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