To

THE BOARD OF CONTROL

FEBY, 22nd, 1926.

The Golf Committee of the Board of Control of the Yale Athletic Association herewith submits its the report on the building of the Yale University Golf Course.

In February, 1923, Mrs. Ray Tompkins presented to the University the Griest Estate, now known as the Ray Tompkins Memorial, consisting of 700 acres of land immediately adjoining the Yale Athletic Field, to be used to encourage outdoor sperts among the undergraduates.

At its meeting on February 23rd, 1923, the Board of Control voted to use approximately 120 acres of the Ray Tompkins Memorial for a golf course, and to reserve sufficient land for a second course should the demand for it arise. The Board appointed a Golf Committee consisting of Geo. T. Adee '95, Chairman, M. N. Buckner '95, formerly Treasurer of the U. S. Golf Association, J. F. Byers '04, at that time President of the U. S. Golf Association, R. A. Gardner '12, at that time Vice-President of the U. S. Golf Association and twice National Champion, Jess W. Sweetser '246, at that time National Golf Champion, and John T. Blossom '14 graduate Director of Athletics, to prepare plans for building one course. Regular meetings of the Gelf Committee were called and held on the fellowing dates:

February 27th, 1923
May 24th
Octeber 8th,
November 1st,
November 24th
July 2nd,
9th
29th
August 3rd,
October 16th
January 16th, 1926.

The Chairman was in constant touch with the members of the Committee, all of whom inspected the course from time to time.

The Golf Committee was fortunate and privileged in having the advices and counsel of Mr. Charles Blair MacDonald in the preparation of its plans, din the design and laying out of the course. The late Mr. Seth J. Raynor was engaged as architect and builder.

The Committee put the entire 700 acres of the Memorial at the disposal of the architect, and asked him to lay out 2 outstanding championship golf courses. The architect and his Engineers spent the

summer of 1923 in surveying and studying the entire 700 acres, and in the fall completed his designs for both courses and his estimate of the cost of course number one.

At the meeting of the Board of Control held December 19th, 1923, the Golf Committee submitted a report embodying these designs and estimates together with a plan for financing Course No. 1. A copy of this report is attached hereto. It is already a part of the permanent record of the Board.

The Board approved the report, authorized the Athletic Association to execute such contracts as were approved by the folf Committee, and the University agreed to advance the necessary money to the Athletic Association, secured by its notes, prior to the receipt ofm sums pledged or to be pledged to the Athletic Association by graduate Patrons.

A contract was at once signed with the late Mr. Seth J. Raynor, to superintend the building of the course, at his usual fee of \$7500. Mr. Raynor recommended letting the contract for clearing trees, stumps, underbrush, loose rock, and plowing the land cleared to the lowest bidder, but that the balance of the work should be done by labor hired and supervised by Mr. Raynor and his superintendents in consultation with the Golf Committee and the Athletic Association. This recommendation was carried out.

The C. W. Blakeslee Company was the successful bidder on the clearing contract. 97.47 acres are cleared. Work was begun in January 1924, and the clearing completed late in July. From time to time later on five additional acres were cleared by our own labor, making a total of 102.47 acres actually cleared. Including water and swamp areas, where clearing was not necessary, a total of 110 acres is actually used for the course itself. Including uncleared acreage within the cleated confines, the total acreage used is about 120.

Mr. Raynor appointed Wm. P. Mugent superintendent of the golf course construction work in January 1924. On April 1st, 1924, R. M. Barton, Dartmouth 'O2 succeeded Nugent and remained in charge during the period of heavy construction. On March 1st, 1925 Wm. E. Perkins '17 S. an engineer who had worked on the course from March 1924 as foreman and assistant superintendent, became superintendent and still holds that position.

Heavy construction work began about April 1, 1924 with a force of 60 laborers. The Mumber of men employed varied from time to time, the greatest number employed at any one time being 150. Today it consists of Perkins and 3 men. This force, which worked continuously until the course was completed, was made up of local day laborers, of men from New Hampshire experienced in handling woods and rock, and during the summer vacations of many Yale and a few Partmouth students. The average pay was 50¢ per hour. Alexander Balfour, a specialist in making greens was made general foreman, Fitts, an experienced man in handling rock, fills and grading, Eastman, an experienced man in smoothing and fertilizing land, and Perkins, were the gang foremen, and Klump timekeeper.

The weekly pay rolls were 0.K.ed by the foremen, timekeeper, and superintendent, and paid by the Athletic Association. Mr. Raynor inspected the construction work from time to time. Under this organization the course was constructed, an actual wilderness turned into smooth lawns in a little less than two years.

Of the 102 acres cleared 28 were swamps, 43 ledge and rocky. After clearing it was possible to plow only 20 acres, and after removing boulders 11 more. Practially 75% of the cleared area was ledge and swamp, necessitating blasting, filling draining and recovering with sanely earth and humus to make grass growing soil. The surface covering of leaf mold and black earth was very shallow, averinging only about 1 inch, and underneath was red clay and gravel.

In breaking ledges 10101 pounds (20202 sticks) of dynamite were used, and 7247 feet or 1.37 miles of holes drilled. A total of 33256 cubic yards of rock was moved and 85294 cubic yards of soil. Length of haul of rocks varied from 10 to 1000 yards, of soil 100 wards to 1.25 miles. All the rock cleared was used elsewhere on the course to make the necessary fills. 16000 cubic yards of muck from the swamps was spread on the figureres. Drainage involved 16889 feet (3.2 miles) of ditches dug, averaging 3 feet in depth and 2 feet in width. cabin office, 3 bunk houses, a cook-house, storehouse and pump house were built and are teday in good condition. A well ditched dirt and gravel road 24 feet wide with 16 feet surface, crowned 3 feet was built from boundary fence to first tee, 3/4 of a mile. Rock fill was necessary in 3 places. 4 miles of 18 foot service roads with 9 foot surface, within the course Further work is necessary on the entrance road. Mr. Woodcock has been authorized to negotiate with Mr. J. Louis Reed, who owns the property between Fountain St. and the Ray Tompkins Memorial on the North East with the object of improving the readway leading to the Memorial from Fountain Street. Mr. Woodcock reports that if the Athletic Assos ciation will make a contribution toward this improvement, work on it will be started this spring.

Mr. Samuel Worthington, of the Worthington Pump Company examined and tested the property as to its own water resources. and reported sufficient water to far more than care for the golf course needs. He recommended a well or wells at the source of supply. Professors Gregory, Longwell, and Seward of the Geological & Mechanical Engineering Department of the Sheffield Scientific School made a geological survey, which confirmed the Worthington report and determined the course of flow of water and resemmended a dug well 25 by 25 feet near the boundary of the Memorial on the North and close to the ice pond. Their recommendations as to the location of well and type of pumping machinery and engines were adopted. The course therefore has its own water supply and will not have to pay for water used. Our own water is pumped from this well by a 25 horse power Diesel Engine operating Twin Rumsey Triplex Pumps to a 75000 gallen tank located on the highest hill of the Memorial, elevation 375 feet, back of #7 green, and pipes to carry the water by a gravity system to the greens and fairways of the course. A total of 35000 feet of pipe varying from 1" to 8" have been laid.

2850 tons of manure and 190 tons of limestone have been spread on the course and harrowed in. 916 bushels of seed have been planted on the greens and fairways.

The greens are seeded with German Bent and New Zealand fescue. The fairways and tees with New Zealand fescue and Rhode Island Bent. Sheep fescue was sown on many of the batters and some of the rough. The first seeding of practically all the fairways and greens was done in the early fall of 1924.

The course will be in a fair condition for play in the summer of 1926. The greens will be in splendid condition, but the fairways will be a bit rough and it will probably be necessary to play winter rules on some holes. Any new golf course requires two or more years after construction is finished to round into smooth playing condition, and the Yale Golf Course will be no exception.

A table of distances of the holes of the course follows:

No.	Long		Reg.		Short		Description	Carrie	3 Bo	Bogie	
	Aga	bar	Yds	par	Aga	par	•			opean) Kole)	
	45.4	4	399	4	379	4	Road-Dunchbayl l	.35 yds.	water	5	
1.	410	4	349	4	338	į.	Natural Cape type		•	4	
2.	365	4	370	4	310	4	Double Punchbewl		Ħ	4	
3.	380	5	426	4	284	4	Road	132 "	n	5	
4.	440	3	131	3	117	3	Horseshoe, Island			3	
5.	135	3 4	342	4	318	4	Natural			4	
6.	350	4	34 8	4	323	4	Natural			4	
7.	368	4	409	4	372	4	Cape-Redan			5	
8.	415	3	210	3	190	3	Biarrit	163 "	11	4_	
9.	225	35	2984	34	2631	34					
•	3088	33	<i>2</i> 30-3	J 1		•-	**				
	4.05	4	373	4	342	4	Aprox	160 "	ravine	4	
10.	405	4	370	4	295	4	2 shot Rev.Redan	ļ		5	
11.	425	4	340	4	340	4	Alpa		adKnoll	4	
12.	406	3	190	3	190	3	Redan			3	
13.	190 372	4	335	4	320	4	Natural			4	
14.	374 188	3	170	3	135	3	Eden			3	
15. 16.		5	420	4	410	4	Natural			5	
17.	425	4	415	4	415	4	Plateau	119 "	to ridge	5	
	608		510		470	5	Netural			<u>6</u> 39	
TO.	3464	<u>5</u> 36	3073	<u>5</u> 35	2917					. 39	
	- 3464	50	5010		- · · ·						
					5548	69				77	

Note: All distances of carries above are from the center of the Long tee. To get the correst carries from Regular and Short tees subtract from the carry given the difference in distance between the Long tee and the tee in question.

Perkins is building a temporary time House, log cabin style, estimated cost \$5000. Mr. Blossom is completing arrangements with the Taft Hotel for a Club Room in the hotel free of charge for Patrons, Founders and Members of the course, and in addition for preference in engaging rooms. Guests of the Taft belonging to any organized golf club to have the privilege of using the course from June 20 to Sept.15th each year upon payment of a greens fee of \$5.00 per day.

In June, 1924, after the clearing had been practically completed and \$90,000. spent in cutting, filling up thousands of holes caused by uprooting trees with stump pullers, blasting rock ledges and recovering with loam, it was for the first time possible to visualize the course and to see the tremendous difficulties to be overcome. In view of this situation the Committee asked Mr. Raynor for a second estimate of the total cost. Mr. Raynor's estimate of June 13th, 1924 was \$25,500., including an item of \$20,000. for contingencies. After studying this report the Committee felt satisfied the total cost would be very close to their estimates, and the work went on. Heaviest and most costly work was done between June and October 1924. In the fall of 1924 it became evident that the cost would greatly exceed the estimates, but as a very large amount of money had already been spent and some 2/3 of the work of construction completed, the Committee felt the only course more was to continue construction work and complete the course.

The Committee felt justified in authorizing expenditure in excess of the original estimates because the golf course is the first step in opening up the Ray Tompkins Memorial and because they believed an organized intensive campaign among Yale's 28,000 graduates would result in obtaining 400 or more Patrons if necessary. By January 1st, 1925 the Committee had signed up 44 Patrons by personal interviews and without an organized campaign. They began planning a campaign by which all Yale graduates interested in golf would be personally approached and The Committee knew personal solicitation was the asked to become Patrons. only way any large number of Patrons could be obtained, as there is never any real response to circulars or even personal letters. However, while the details of this campaign were being worked out the Golf Committee for the first time became aware of the plans of the University for the Endowment Fund Drive and at once laid their plans before the University authorities.

The University believed the proposed golf campaign would materially interfere with the Endowment Fund Drive, and therefore at the request of the University the intensive golf campaign of personal solicitation was abandoned. The Committee unanimously concurred in the wisdon of this decision, but desires to call attention to the fact that the decision deprived them of the one and only effective means of carrying out their plan of financing the course.