WYLOWAY COUNTRY CLUB
GWINNETT COUNTY
GEORGIA

By

W. Wayne Frazier
Don M. Guscio

A TERMINAL PROBLEM PRESENTED
FOR DEGREE OF BACHELOR OF
LANDSCAPE ARCHITECTURE

Department of Landscape Architecture
University of Georgia
Athens, Georgia
June, 1965

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TABLE OF CONTENTS

Page i - List of Plates

Page ii - Introduction

Page 1 - Historical Sketch

Page 2 - Statement of the Problem

Page 5 - Analysis of the Problem

Page 7 - Presentation and Justification

LIST OF PLATES

I. Photographs of Site

II. Drawings

- A. Title Sheet
- B. Site Analysis
- C. Master Plan
- D. Detail Plan
- E. Grading Plan
- F. Staking Plan
- G. Planting Plan
- H. Horizontal and Vertical Alignment
- I. Horizontal and Vertical Alignment
- J. Construction Details
- K. Construction Details
- L. Perspectives

III. Photograph of the Model

INTRODUCTION

The site for Wyloway Country Club is located in the western end of Gwinnett Country and is only a twenty-minute drive from downtown Atlanta.

The idea for a country club evolved from John Frazier's leasing of the site to Mrs. Sally Owens, who has since boarded horses there. Horse owners in Atlanta and the surrounding areas have patronized Mrs. Owens' business. On weekends the owners with their families frequent the site and usually remain the entire day. It has been noticed that ~~our~~ this site, along with other organized stables, lacks the facilities to provide entertainment and relaxation for every age group.

From these observations it has become apparent that a country club centered around horses could be just as successful as present country clubs centered around golf. Thus, we have chosen to design the overall development of Wyloway Country Club as our Senior Terminal Problem.

HISTORICAL SHETCH

The property was originally owned in the early 19th century by W. T. Burns. After his death it was passed on to his son, P. K. Burns. Both of these men were owners of large numbers of slaves and at one time W. T. Burns owned more slaves than anyone else in Gwinnett County.

In the 18th century when the Cherokees occupied this land they traveled from the Appalachain Mountains down the Chattahoochee River on their way to the settlement which is now Augusta. They disembarked from the river at Norcross and traveled the Hightower Trail to Stone Mountain. This trail is presently the Dekalb-Gwinnett County Line. Traces of these Indians have been found on the site.

PROBLEM STATEMENT
FOR
SENIOR TERMINAL PROBLEM

A PRIVATE RIDING CLUB

Spring Quarter 1965

By: Wayne Frazier
Don Guscio

INTRODUCTION

With the unprecedented growth of Atlanta and surrounding areas the undeveloped land and open spaces are rapidly diminishing. The horse has long been a companion of man and at the present time it has risen to a status symbol. The residential lots of present day subdivisions are insufficient to support the needs and protection for a horse. Consequently, many people have begun to board their horses with established riding academies or stables in the rural areas near Atlanta.

The trend is for patrons to go to the stables and spend the entire day riding in the open spaces and bridle trails of the stables. By taking a survey of various establishments it has been found that all of them are lacking in adequate recreational facilities.

Through careful planning of such riding academy developments

a more successful layout could be created. By utilizing different types of recreational areas, a more interesting and flexible scheme can be developed to satisfy the desires of the clients' varied interests and needs.

PROBLEM

A private developing firm has purchased approximately 87 acres of farmland two miles east of the Northeast Expressway and 4 miles north of Tucker. It is an ideal location for a riding establishment and was purchased for this reason. The site has an elevation difference of 40-50 feet with the front being level to rolling terrain to the rear with a sharp drop of 30 feet to a creek which is 600 feet from the rear property line. The vegetation consists of coniferous and deciduous growth with rough underbrush in the lowlands around the creek area. It indludes a spring which is located in the front of the site that feeds into the main creek.

PROPOSED FACILITIES

(1) Stables (80 horses)

(2) Riding Ring (existing)

(3) Bridle Paths

(4) Covered Riding Arena

(5) Club House - Restaurant - Swimming Pool, Deck area - Recreation Room

(6) Tennis Courts (2)

(7) Lake

(8) Gun Club-Kennels-Skeet & Trap Range-Pistol Range

(9) Picnic Pavilion Area

(10) Archery Range

(11) Nature Trails

By incorporating these facilities on the site the problem is concerned with the organization and unification of the unrelated areas to each other as well as to the overall site.

The drawing will consist of:

a) Master Plan
b) Grading and Staking Plan
c) Detailed Area Plan
d) Planting Plan
e) Construction Details
f) Perspectives
g) Specifications
h) Model

ANALYSIS OF THE PROBLEM

In order to arrive at a logical solution in any design, the existing conditions and problems must be clearly designated by a careful and complete analysis of the problems. Every characteristic of the site must be exploited in order to insure a successful design. These characteristics include location, topography vegetation, land use, study of surrounding areas, future development expectancies, and other factors which have an effect upon the site.

The site is in Gwinnett County located four miles north of Tucker, Georgia, and two miles west of Lilburn, Georgia, approximately one mile and a half from the intersection of the Perimeter Highway (I-285) and the Northeast Expressway (I-85). The access road is unpaved for a distance of 200 yards between the site and the intersection of Rock Bridge Road. Three entrances lead off to the right of this access road, two of which are 200 feet apart and the third a half mile away. The site is ideally located for easy accessibility and convenience for the patrons.

The site, comprised of eighty-seven acres, is divided naturally into three sections by two creeks. These sections are referred to as the front, middle, and rear pastures. In

the front pasture the terrain varies from level areas near the creek, to gently rolling hills. The middle pasture has terracing and slightly steeper grades in some areas. The land drops off sharply to Pumpkin Creek in the back pasture and then gradually rises to the rear property line.

The vegetation consists of primarily short leaf and loblolly pine with numerous oaks, scattered hickories, poplars and dogwood. The back pasture has dense undergrowth near the creek areas. The pastures are planted with fescue and coastal bermuda.

Twenty-five percent of the entire site is devoted to pastureland. The front pasture includes two of the three stables and a riding ring. Because of this, ninety percent of the activity takes place in this area. The third stable, being separated from the other two by a distance of two thousand feet and dense pines, must be approached froma separate entrance. This area also includes a caretakers residence, barn, smoke house and farmland. The middle pasture is used occassionally for horseback riding and cattle grazing. Since undergrowth near the creek separating the middle and back pasture has become uncontrolable, the back pasture is seldom used.

The adjacent areas to the site are farmland with outlying areas now being developed into subdivisions.

Additional information pertaining to the site is included in the site analysis sheet of the drawings on page one.

PRESENTATION AND JUSTIFICATION

The final design is arrived by taking into consideration the factors sited in the analysis stage of design. By having recognized these factors, a logical design is formed which bears the proper relationship to the site.

One entrance road eliminated the three separate entrances. After careful study of the land form and natural tree lines, the alignment of the main road was established. A circular road was chosen because it best connects the separate areas.

Existing pastures were not interruped by the main road; yet areas were left open to create a variety of interesting views. Naturalistic planting edging the roadway makes the viewer feel that he is part of the landscape. In some instances, areas cleared enframe worthy views and add interest to the overall site. The main road brings one to his destination in the site and also provides the best circulation from one area to another. Offstreet parking is provided at necessary locations along the circular road. Large parking lots were avoided where feasible because of their unnatural appearance. Due to frequent maintenance required at the stables, the main road was located as close to these areas as practical design standards would allow. Service vehicles are provided for by separate service

leaving the main road open to good views. This holds true for all the architectural features on the site.

The polo field has been located on a relatively level area, screened by a natural pine woodland. This area was poorly drained and yet with a minimum amount of grading the polo field was made and the drainage problems were solved. A natural seating area is formed by the hillside on one side of the field. The existing cattle barn has been converted for storage of the polo equipment.

Bridle trails are located in the natural pine woodland adjacent the largest stable and the covered riding arena.

Picnic areas have been located in three advantageous sites incorporating the natural environment. One site is located on a point overlooking the lake. The second is centrally located on the site near the creek where natural protection and good views are abundant. The third is in natural pine woodland, being the most secluded of the three.

The boat house and dock are located in a natural, protective cove. During the months of boating inactivity, the boats will be stored in the boat house.

A private cottage has been incorporated in the design at the owners request. The location and accessibility of this cottage were carefully planned in order to afford maximum privacy.

The owners residence has been located in the front section of the site. It is ideally oriented on a gently rolling hillside, beneath some existing mixed pines and oaks. —

Good views to the East, South, and West complement this site.

Various activities have been provided for on the site. Camping and fishing have been located on the far side of the lake with limited access by boat or on foot. The design intent is to leave the camping and fishing areas natural and to separate the camper from the rest of the activities occuring on the site. Two tennis courts are adjacent to the clubhouse. A rifle range is located downhill from the tennis courts utilizing a steep slope for the target backstop. An archery range has been provided in the open area across the main road from the clubhouse. This was an ideal area because of the gently sloping land and natural wood line. The targets are located on the perimeter of the area, allowing all shooting to occur in an outward direction.

The design which is proposed best exemplifies the characteristics of the site and makes maximum use of the entire area. By decentralizing the horse activities and by the introduction of other various activities, the front section of the site has been relieved from overuse and concentration. Additional interest has been created by including into the design the lake and clubhouse area. The atmosphere at Wyloway Country Club should be one of leisure yet having excitement and entertainment for the members.

WYLOWAY COUNTRY CLUB

GWINNETT COUNTY, GEORGIA

SENIOR TERMINAL PROBLEM

PRESENTED BY

W. WAYNE FRAZIER

DON M. GUSCIO

WYLOWAY COUNTRY CLUB

GWINNETT COUNTY, GEORGIA

JOHN R. FRAZIER, OWNER

MASTER PLAN

SCALE 1" 100'

SHEET 2 OF 11

REVISIONS

CHECKED BY

TERMINAL PROBLEM

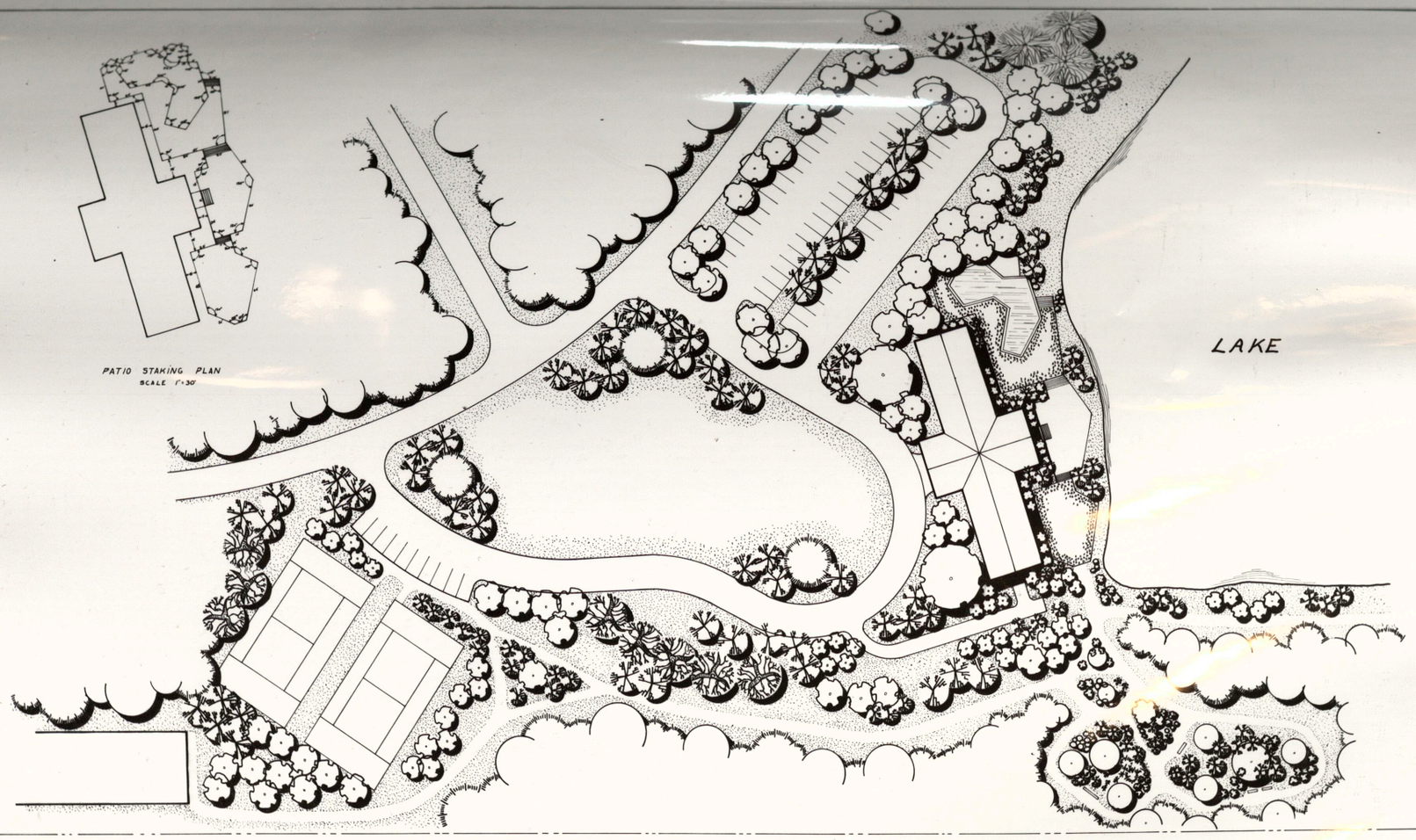
DESIGNED BY

W. HARRIS & FETTER

BOH M. DUECIO

JUNE 1963

PATIO STAKING PLAN
SCALE 1"=30'



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DESIGNED BY
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JUNE 1965

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GWINNETT COUNTY, GEORGIA

JOHN R. FRAZIER, OWNER

DETAIL PLAN

SCALE 1"=30'
SHEET 3 OF 11

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JUNE 1965

GRADING PLAN

SCALE 1"=100'
SHEET 4 OF 11

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NORTH
CAMPING & PICNIC AREA
BOAT HOUSE
FISH & BAIT SHOP
PICNIC AREA
SWIMMING POOL & BATH HOUSE
BEACH
CLUB HOUSE
CLUB GARDEN
TENNIS COURTS
PICNIC & RIFLE RANGE
CONCESSIONS
CONCESSIONS
CONCESSIONS

NOTES

SEE DETAIL PLAN FOR STAKING OF CLUBHOUSE AREA
ALL OFFSETTING ROADS HAVE 25' RADII ALL OFF STREET PARKING HAS 5' RADII, AND ALL SERVICE DRIVES HAVE 5' RADII. LOCATION OF TARGETS ON ARCHERY RANGE SUBJECT TO FIELD ADJUSTMENT. POLO FIELD SUBJECT TO FIELD ADJUSTMENT. BRIDLE PATHS TO BE LAID OUT BY ON SITE PLANNING. SEE DETAIL PLAN FOR STAKING OF PATIO

CURVE DATA

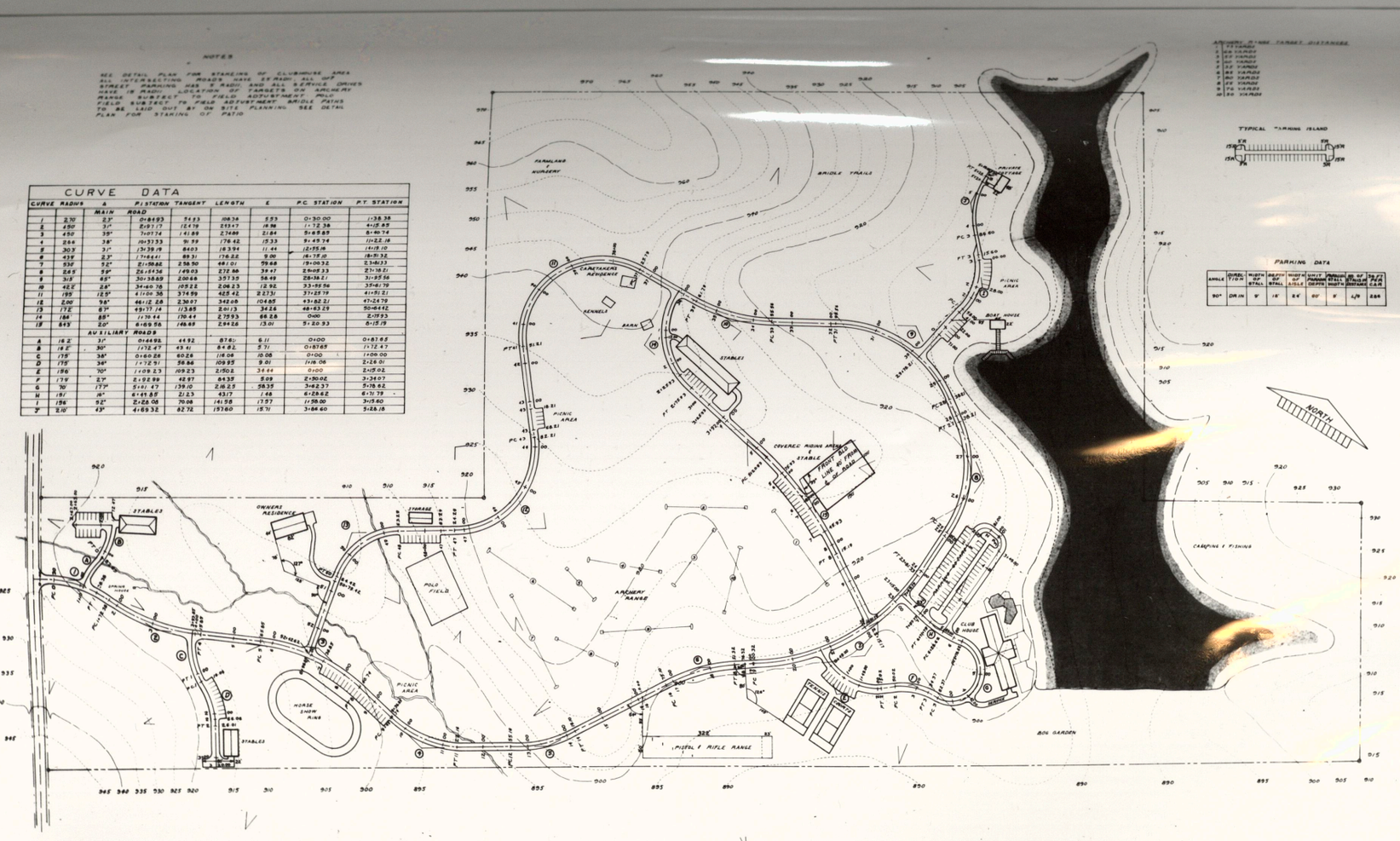
CURVE	RADIUS	Δ	P.I. STATION	TANGENT	LENGTH	E	P.C. STATION	P.T. STATION
		MAIN ROAD						
1	270	23°	0+84.93	54.93	108.36	5.53	0+30.00	1+38.38
2	450	31°	2+91.17	124.79	243.47	16.98	1+72.38	4+15.85
3	450	39°	7+07.74	141.89	274.89	21.84	5+65.85	8+40.74
4	286	38°	10+57.33	91.99	176.42	15.33	9+45.74	11+22.16
5	303	31°	13+39.19	84.03	163.94	11.44	12+55.16	14+19.10
6	438	23°	17+46.41	89.31	176.22	9.00	16+78.10	18+54.32
7	536	52°	21+58.82	258.50	486.01	59.68	19+00.32	23+86.33
8	265	59°	26+54.36	149.03	272.88	39.47	24+05.33	27+78.21
9	313	65°	30+34.89	200.66	357.35	58.48	28+34.23	31+91.58
10	425	28°	34+60.76	105.22	206.23	12.92	33+55.54	35+61.79
11	195	125°	41+00.36	374.99	425.42	212.34	37+25.19	41+51.21
12	200	98°	46+12.28	230.07	342.08	104.85	43+82.21	47+24.79
13	172	67°	49+77.14	113.85	201.13	34.26	48+63.29	50+64.42
14	184	88°	54+19.44	177.44	282.93	68.28	0+00	2+19.93
15	643	20°	61+69.56	146.49	294.26	13.01	5+20.93	8+15.19
		AUXILIARY ROADS						
A	162	31°	0+44.98	44.92	87.61	6.11	0+00	0+87.61
B	18 E	30°	1+72.47	43.41	84.82	5.71	0+87.65	1+72.47
C	175	38°	0+60.28	60.28	116.09	10.08	0+00	1+00.00
D	175	36°	1+72.91	58.86	109.95	9.01	1+13.06	2+26.01
E	186	70°	1+09.23	109.23	215.02	34.44	0+00	2+15.02
F	179	27°	2+02.99	42.87	84.39	5.09	2+80.02	3+34.07
G	70	179°	5+61.47	139.10	218.25	58.39	3+42.37	5+78.62
H	191	18°	6+41.85	21.23	43.17	1.46	6+28.62	6+71.79
I	156	52°	2+26.06	79.08	141.58	17.57	1+55.00	3+13.60
J	210	13°	4+59.32	32.72	157.80	12.71	3+84.60	5+28.18

ARCHERY RANGE TARGET DISTANCES
1 10 YARDS
2 15 YARDS
3 20 YARDS
4 25 YARDS
5 30 YARDS
6 35 YARDS
7 40 YARDS
8 45 YARDS
9 50 YARDS
10 55 YARDS
11 60 YARDS

TYPICAL PARKING ISLAND

PARKING DATA

ANGLE	ONE/TWO	WIDTH OF STALL	DEPTH OF STALL	WIDTH OF AISLE	UNIT PARKING DEPTH	PARKING STALL WIDTH	NO. OF STALLS/100 LF CURB	SQ. FT. PAVING PER CAR
90°	DR IN	9'	18'	24'	60'	9'	4/8	288



TERMINAL PROBLEM
DESIGNED BY
W. WAYNE FRAZIER
DON M. GUSCIO
JUNE 1963

WYLOWAY COUNTRY CLUB

GWINNETT COUNTY, GEORGIA

JOHN R. FRAZIER, OWNER

STAKING PLAN

SCALE 1"= 100'
SHEET 5 OF 11

REVISIONS

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NO	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	DA*	CULTURAL NOTES
			TREES				
39	A	CERCIS CANADENSIS	REDBUD	4'-6'	B&B	25'	PLANTED IN SPRING - SEE SPEC
116	B	CORNUS FLORIDA	FLOWERING DOGWOOD	4'-6'	B&B	25'	PLANTED IN SPRING - SEE SPEC
14	C	LIRIODENDRON TULIPIFERA	TULIPTREE	8'-10'	B&B	40'	PLANTED IN SPRING - SEE SPEC
2	D	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	8'-10'	B&B	-	PLANTED IN SPRING - SEE SPEC
29	E	PINUS STROBUS	WHITE PINE	6'-8'	B&B	40'	PLANTED IN SPRING - SEE SPEC
21	F	QUERCUS ALBA	WHITE OAK	6'-8'	B&B	40'	PLANTED IN SPRING - SEE SPEC
23	G	QUERCUS FALCATA	SOUTHERN RED OAK	6'-8'	B&B	40'	PLANTED IN SPRING - SEE SPEC
98	H	QUERCUS PALUSTRIS	PIN OAK	6'-8'	B&B	40'	PLANTED IN SPRING - SEE SPEC
18	I	SALIX BABILONICA	WEEPING WILLOW	6'-8'	B.R.	30'	PLANTED IN FALL - SEE SPEC
39	K	PRUNUS CAROLINA	CAROLINA LAUREL CHERRY	1'-5'	B&B	20'	PLANTED IN SPRING - SEE SPEC
			SHRUBS				
21	L	ILEX CORNUTA	CHINESE HOLLY	2'-3'	B&B		PLANTED IN SPRING SEE SPEC
43	M	OSMANTHUS FRAGRANS	TEA OLIVE	2'-3'	B&B		PLANTED IN SPRING SEE SPEC
78	N	RHODODENDRON CATAWBIENSE	CATAWBA RHODODENDRON	3'-4'	B&B		PLANTED IN SPRING SEE SPEC

*DA - DISTANCE APART

NORTH
STABLES
OVERNIGHT CAMPING
PICNIC AREA
HORSE SHOW RING
PISTOL & RIFLE RANGE
BOX GARDEN
CAMPING & FISHING
PICNIC AREA
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HORIZONTAL & VERTICAL ALIGNMENT
SCALE AS NOTED
SHEET 8 OF 11
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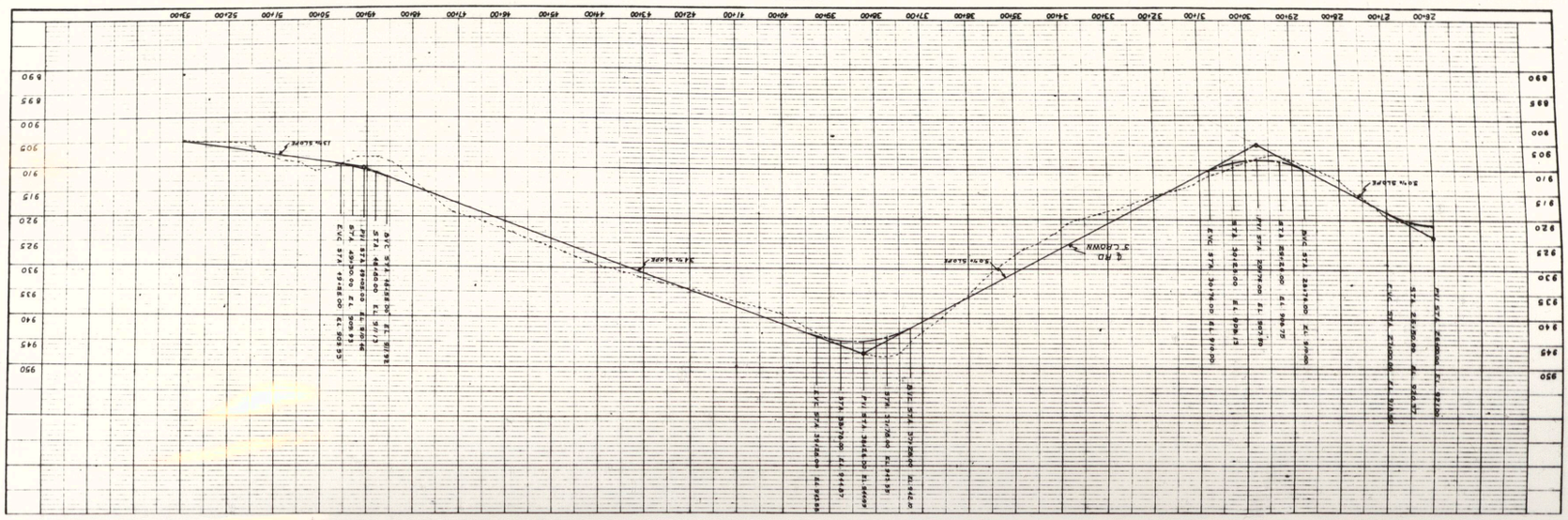
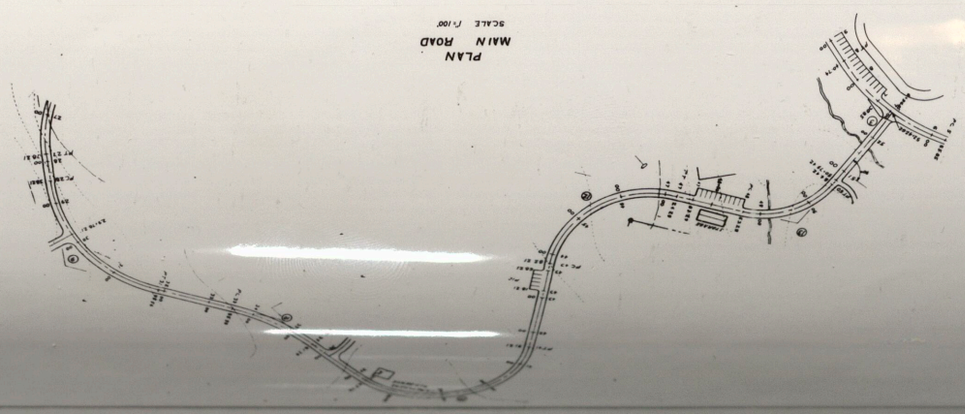
PROFILE
MAIN ROAD
VERTICAL SCALE 1"= 10'-00" HORIZONTAL SCALE 1"= 100'-00"



PLAN
MAIN ROAD
SCALE 1"=100'



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GWINNETT COUNTY, GEORGIA
JOHN R. FRAZIER, OWNER

HORIZONTAL & VERTICAL ALIGNMENT
SCALE AS NOTED
SHEET 7 OF 11

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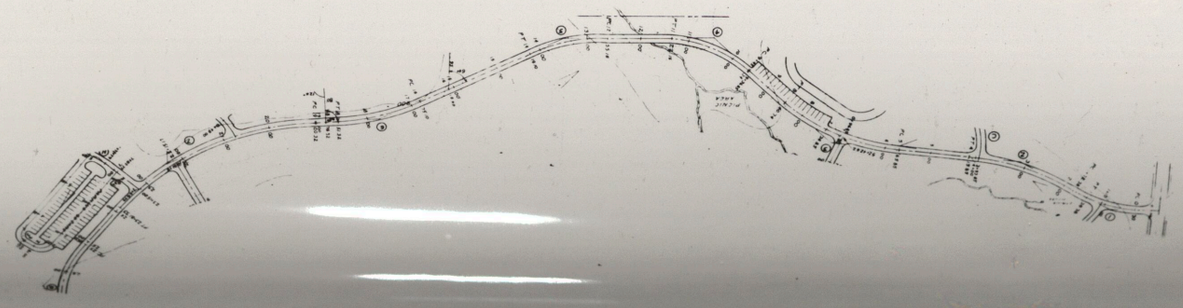
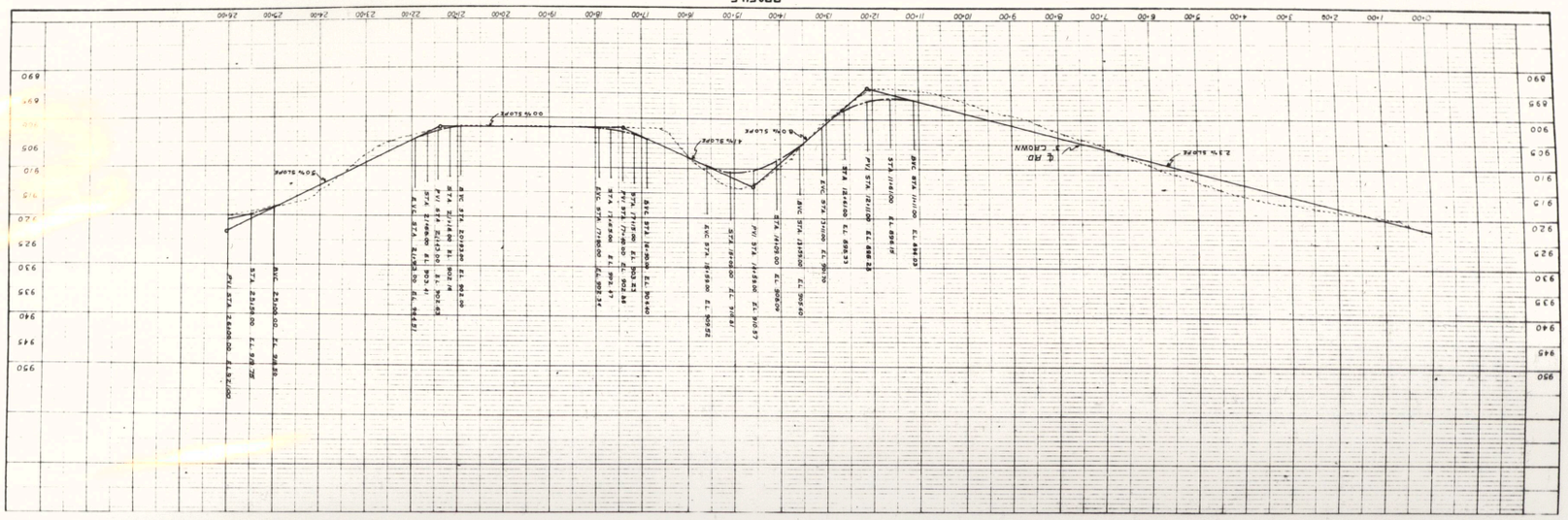
PLAN
MAIN ROAD
SCALE 1"=100'



PROFILE
MAIN ROAD
VERTICAL SCALE 1"=10'-00" HORIZONTAL SCALE 1"=100'-00"



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HORIZONTAL & VERTICAL ALIGNMENT
SCALE AS NOTED
SHEET 3 of 3

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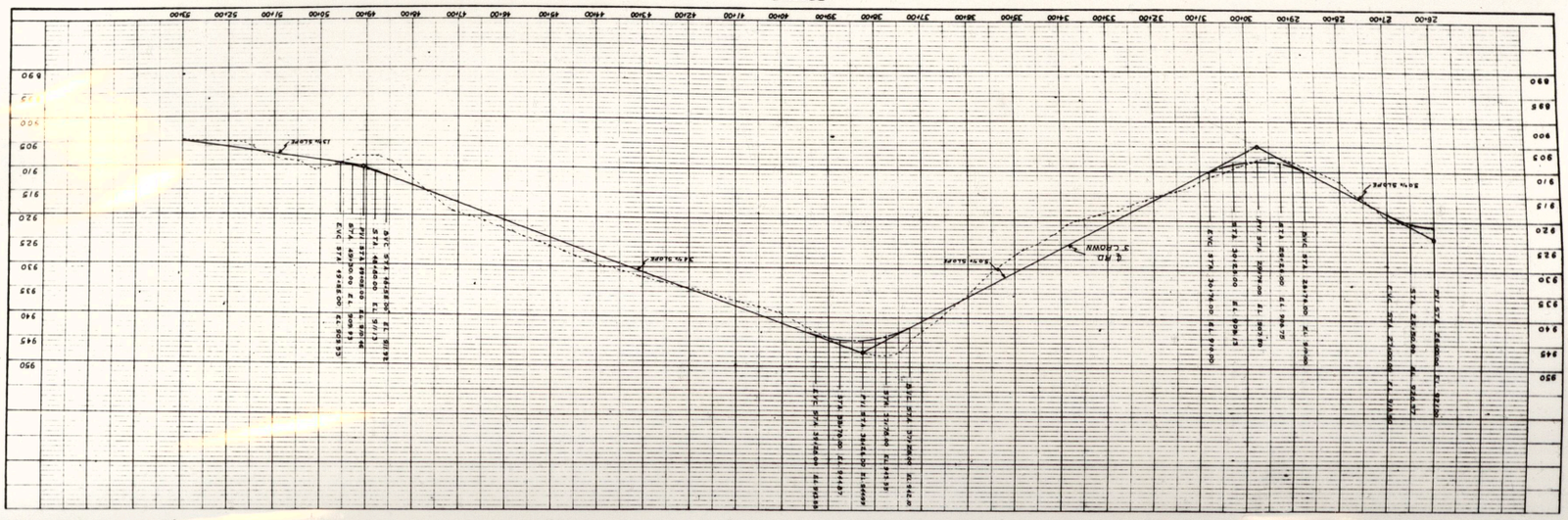
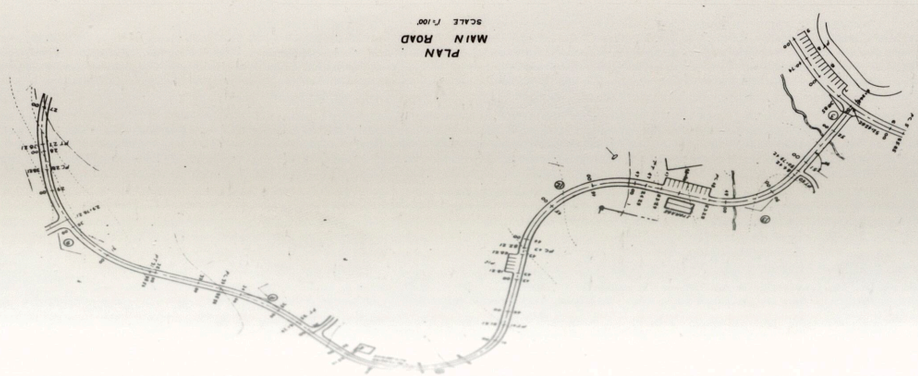
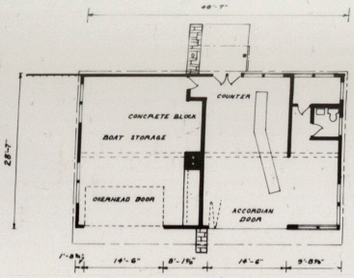
PROFILE
MAIN ROAD

VERTICAL SCALE 1" = 10'-00" HORIZONTAL SCALE 1" = 100'-00"

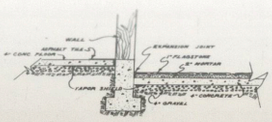


PLAN
MAIN ROAD
SCALE 1"=100'

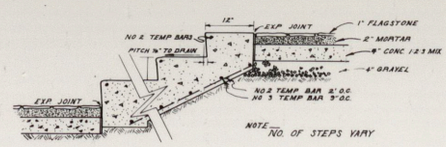




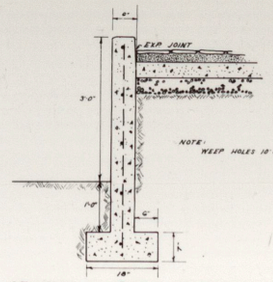
PLAN



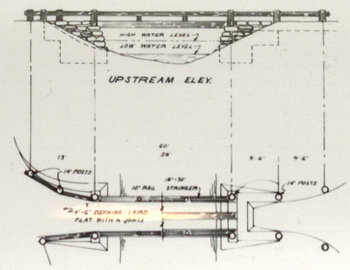
JUNCTURE OF PATIO WITH CLUBHOUSE FLOOR
SCALE ½"=1'-0"



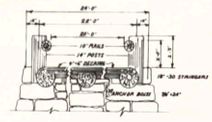
SECTION THROUGH TYPICAL PATIO STEPS
SCALE 1"=1'-0"



SECTION OF PATIO RETAINING WALL
SCALE 1"=1'-0"

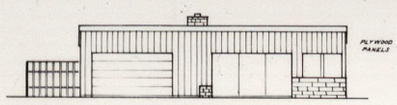


PLAN

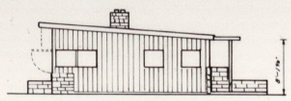


SECTION

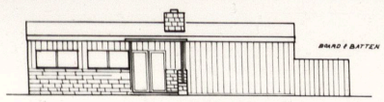
YEHICULAR BRIDGE
NO SCALE



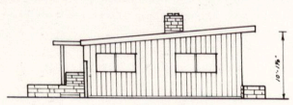
FRONT ELEVATION



RIGHT END ELEVATION

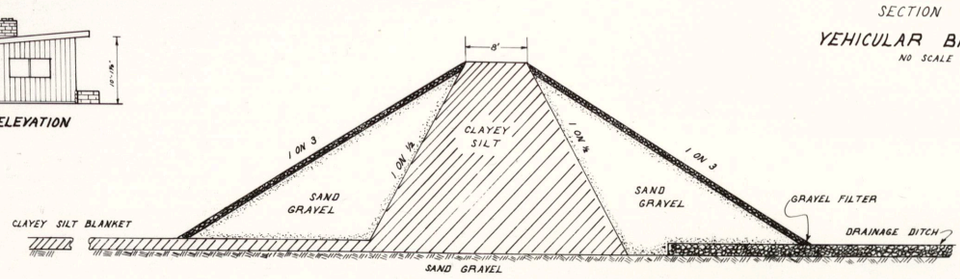


REAR ELEVATION



LEFT END ELEVATION

BOATHOUSE
NO SCALE



EARTH DAM SECTION
NO SCALE

TERMINAL PROBLEM DESIGNED BY W. WAYNE FRAZIER DON M. GUSCIO JUNE 1963	**WYLOWAY COUNTRY CLUB** GWINNETT COUNTY, GEORGIA JOHN R. FRAZIER, OWNER	**CONSTRUCTION DETAILS** SCALE AS INDICATED SHEET 10 OF 11 REVISIONS CHECKED BY

TERMINAL PROBLEM

DESIGNED BY
W. WAYNE FRAZIER
DON M. DUSCIO
JUNE 1965

WYLOWAY COUNTRY CLUB

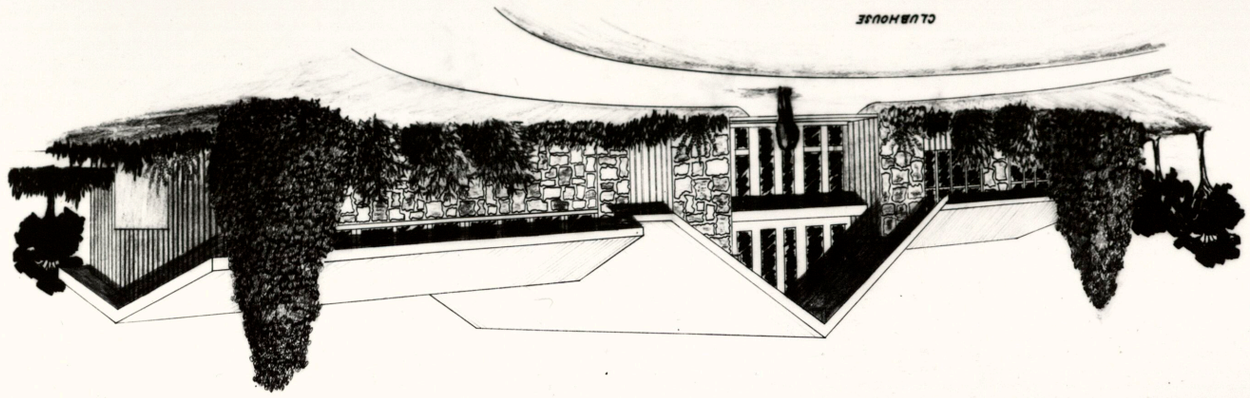
GWINNETT COUNTY, GEORGIA

JOHN R. FRAZIER, OWNER

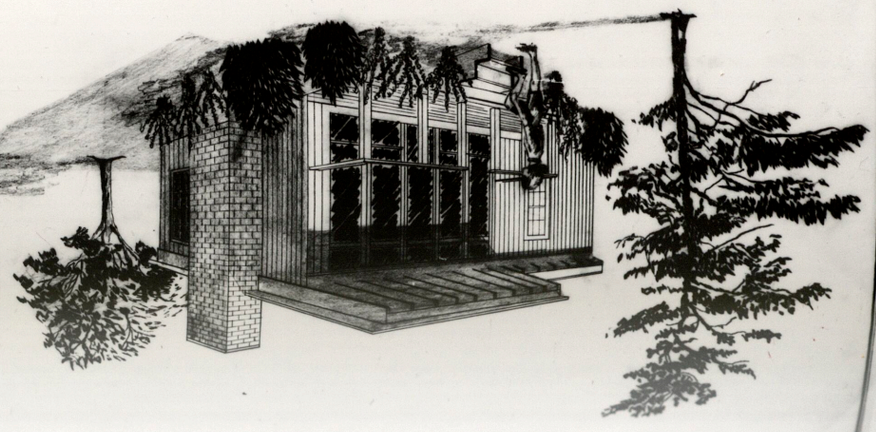
PERSPECTIVES

REVISIONS | SHEET No. 1 | CHECKED BY

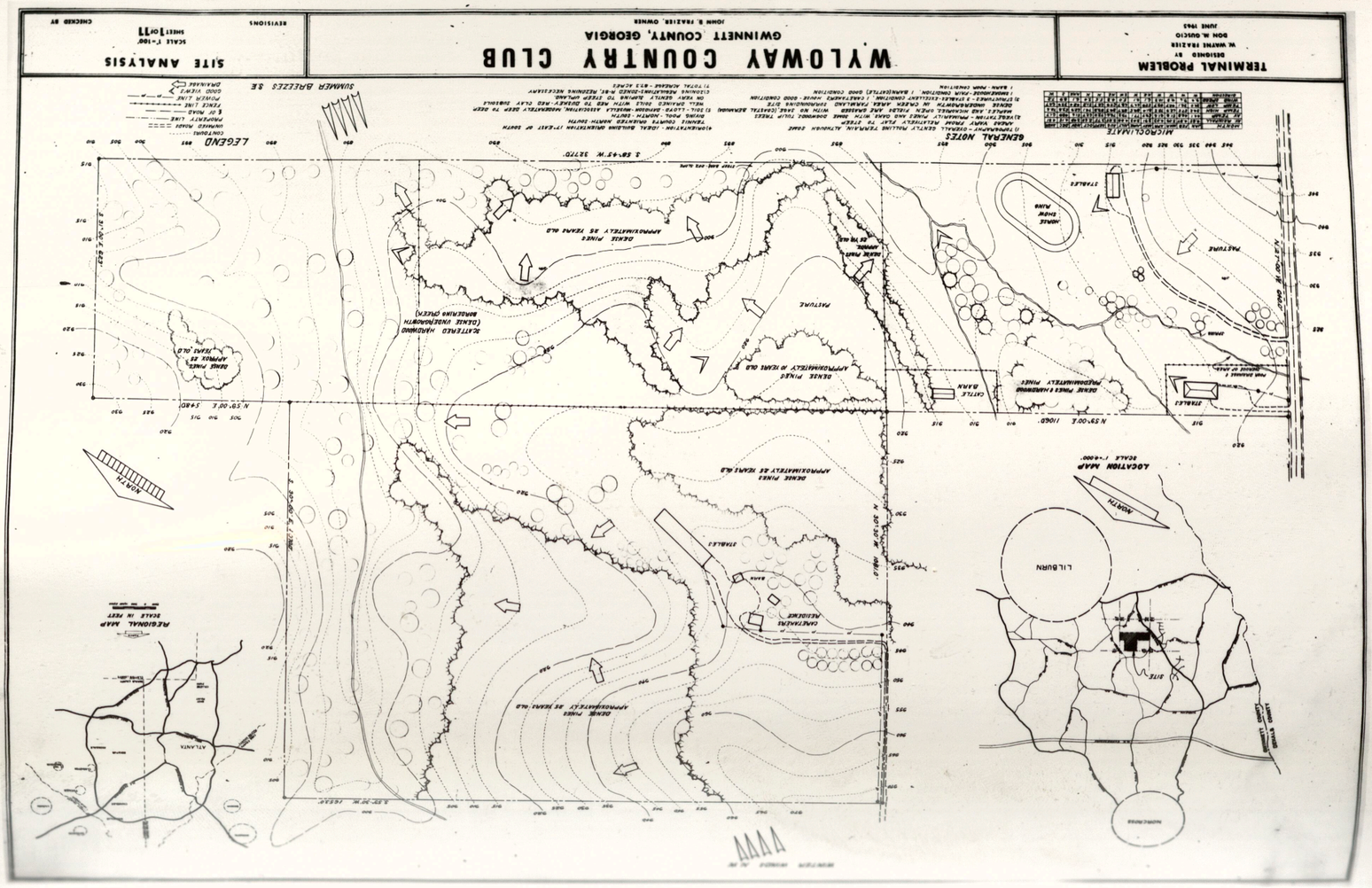
CLUBHOUSE



COTTAGE



VIEW FROM ROAD


TERMINAL PROBLEM
DESIGNED BY
W. WAYNE FRAZIER
DON M. DOESCHER
JUNE 1963
WYLOWAY COUNTRY CLUB
GWINNETT COUNTY, GEORGIA
JOHN B. FRAZIER, OWNER
SITE ANALYSIS
SCALE 1"=100'
SHEET 3 OF 17
REVISIONS
CHECKED BY
LEGEND
GENERAL NOTES
LOCATION MAP
SCALE 1"=6000'
REGIONAL MAP
SCALE IN FEET
NORTH
SCALE 1"=100'
LILBURN
ATLANTA
STABLES
CATTLE BARN
PASTURE
HORSE SHOW RING
CANTALENE ACADEMY
SITE
SUMMER BREEZES SE

INVITATION FOR BIDS

Black and Frazier, Inc. Builders and Developers will receive bids for the construction and installation of plant materials at Wyloway Country Club, Gwinnett County, Georgia, until 10:00 A.M. Eastern Standard time on the 1st day of September, 1965, at the office of Black and Frazier, Inc., 2500 River Oak Drive, Decatur, Georgia, at which time and place all Bids will be publicly opened and read aloud.

Sealed Bids are invited upon the several items and quantities as follows: Earthwork, construction of concrete retaining walls, steps, patio, lake, construction of paved areas (roads, parking areas, walks), supplying and installing plant materials.

Contract Documents, including Drawings and Specifications, are on file at the office of the Landscape Architect, 2500 River Oak Drive, Decatur, Georgia.

Copies of the Contract Documents may be obtained at the office of Black and Frazier, Inc. on payment of $20.00 for each set of Documents so obtained. Said sum is refundable upon return of all Documents in good condition not later than seven (7) days following opening of Bids. Plans may be examined without cost.

A certified check or bank draft, payable to Black and Frazier, Inc. or a satisfactory Bid Bond executed by the Bidder and an acceptable surety, in an amount equal to five (5%) percent of the total Base Bid shall be submitted with each bid as a guaranty that if the Proposal is accepted the Bidder will execute the Contract and file acceptable Performance and Labor and Material Payment Bonds within ten (10) days after award of the Contract.

John R. Frazier hereinafter called the Owner, reserves the right to reject any and all Proposals and waive any formality or technicality in any Proposal in the interest of the

Owner.

Bids may be held by the Owner for a period not to exceed thirty (30) days from the date of Bids for the purpose of reviewing the Bids and investigating the qualifications of the Bidders, prior to awarding the Contract.

INSTRUCTIONS TO BIDDERS

1. Proposal Form:

These Contract Documents include a complete set of bidding and contract forms which are for the convenience of the bidders and are not to be detached, filled out, or executed. Separate copies of Bid Forms are furnished for that purpose. These must be enclosed and sealed in an envelope which states on the outside: Sealed Bid for Wyloway Country Club, Gwinnett County, Georgia.

2. Interpretations and Addenda:

No oral interpretation will be made to any bidder as to the meaning of the specifications and drawings. Interpretations, if made, shall be written in the form of an addendum and sent to all bidders to whom specifications have been issued.

3. Examination of the Site:

Each bidder shall visit the site of the proposed work to fully acquaint himself with the conditions and difficulties attending the performance of the Contract. No additional compensation nor relief from any obligations of the Contract will be granted because of a lack of knowledge of the site or the conditions under which the work will be accomplished.

4. Time:

Proposals will be received at the office of Black & Frazier, 2500 River Oak Drive, Decatur, Georgia, until 10:00 AM, Eastern Standard Time, September 1, 1965. No bids shall be permitted to be withdrawn after the time set for bid opening.

5. Opening Bids:

All bids received prior to the opening time shall be

securely kept until the day and the hour above stated at which time all bids will be publicly opened and read. No bids will be received after the above stated time.

6. Right to Reject Bids:

The Owner reserves the right to accept any part, or all of any bid, and to refect any and all or parts of any and all bids. Any proposal which contains items not specified, or which does not complete all the items schedule for bid, shall be considered informal and shall be rejected on this basis.

7. Signature and Legibility:

The prices for work and the names, addresses and signatures of the Bidders shall be clearly and legible written. Signatures shall be signed in the space provided and in compliance with all legal requirements.

8. Bid Guarantee:

Each proposal must be accompanied by a certified check, bank draft, or bid bond in an amount equal to five percent of the amount of the bid. This guarantee shall be executed in favor of and guarantee to the Owner that the bidder will execute the Agreement and furnish the Performance and Labor and Material bonds as required by the Contract Documents.

The aforesaid guaranty deposits of unsuccessful Bidders will be returned as soon as practical after the opening of the Bids.

9. Execution of Contract and Delivery of Bonds:

The successful Bidder shall within ..... days after notice that his proposal has been accepted enter into a contract and deliver to the Owner a Performance Bond issued by an approved surety company satisfactory to the Owner in an amount equal to the total prise Bid.

10. Special Conditions:

Time for Completion:
a) The Contractor shall state in the bid form the number of days required for him to complete the project.
Insurance:

a) The successful contractor shall not commence work until the following insurances have been obtained, approved and certificates delivered to the Owner.
b) Workman's Compensation Insurance
c) Public Liability Insurance shall be furnished in amounts of $100,000/300,000, and Property Damage Insurance in amounts of $50,000.
d) Before final payment is made, the Contractor will provide an affidavit stating all costs for labor and materials have been paid, and that the Owner is imdemnified against any lien.

BID FORM

Name of Project.....

Location.....

Gentlemen:

Pursuant to and in compliance with the advertisement for bids dated..... 19....., and Instructions to Bidders and other documents related thereto, the undersigned, having familiarized.....self/selves with the existing conditions on the site and the conditions under which the work is to be done, hereby proposes to furnish all labor, materials, equipment, and services to perform all specified work for the Site Improvement on the above named project in strict accordance with the Contract Documents and all addenda issued thereto at the price(s) set forth on the accompanying bid form sheets attached hereto.

If written notice of acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within ..... days after the opening of bids, or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver a contract in the form specified and furnish the required bonds within ..... days after the perscribed forms are presented to him for signature.

Security in the sum of.....($.....) Dollars in the form of....., is submitted herewith in accordance with the Instructions to Bidders.

The bidder is a corporation/a partnership/an individual and the name of every person interested in this bid is as follows:
.....

Notice of acceptance of this Bid shall be mailed to the undersigned at the following address:

By.....
Title.....

By.....
Title.....
Address.....
.....
Phone No. .....

BID FORM - UNIT PRICE BID

Total Bid Price.....($.....) Dollars

All of the work shall be installed realy for the Owner to use within..... (.....) calendar days, weather permitting, after notice to proceed.

It is understood that the itemized quantities herein listed are not guaranteed as to accuracy but are to be used for the purpose of comparing bids. Bid comparisons will be made on the basis of total amounts derived from the unit prices bid at the quantities herein shown. The final amount to be paid the Contractor for the work shall be the sum of the actual quantities of installed work at the unit prices bid.

ITEM	QUANTITY	UNIT PRICE	AMOUNT

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we.....
....., as Principal, hereinafter called the Principal, and the....., of .....
..... a corporation duly organized under the laws of the State of ....., as Surety, hereinafter called the Surety, are held and firmly bound unto.....
..... as Obligee, hereinafter called the Owner, in the amount of...
.....Dollars ($.....), for the payment of which amount and truly to be made the Principal and the Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for.....
.....

NOW, THEREFORE, if the Owner shall accept the bid of the Principal and the Principal shall enter into a Contract with the Owner in accordance with the terms of said bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof or in the event of the failure of the Principal to enter such contract and give such bond or bonds, if the Principal shall pay to the Owner the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation

shall be null and void, otherwise to remain in full force and effect.

SIGNED AND SEALED this..... day of ..... A.D.19....

In the presence of:

.....
Witness

.....(Seal)
Principal

.....
Title

.....(Seal)
Surety

.....
Title

.....
Witness

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that .....

as Principal, hereinafter called the Contractor, and .....

.....

as Surety, hereinafter called the Surety, are held and firmly bound unto.....

.....

as Obligee, hereafter called the Owner, in the sum of .....

..... Dollars ($.....) for the payment whereof the Contractor and the Surety bind themselves, their heirs, successors, administrators, executors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Contractor has by written agreement dated .....

....., 19..... entered into a Contract with Owner for .....

in accordance with drawings and specifications prepared by

.....

which agreement, hereinafter referred to as the Contract, is by reference made a part of this bond as if fully set forth herein.

NOW, THEREFORE, THE CONDITONS OF THIS OBLIGATION are such that, if the Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, and:

1. Whenever the Contractor shall be, and so declared by the Owner, in default under the Contract, the Owner

having performed the Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

a. Complete the Contract in accordance with its terms and conditions, or

b. Obtain a bid or bids for submission to the Owner for completing the Contract in accordance with its terms and conditions, and upon determination by the Owner and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

2. The Surety hereby waives notice of any alteration or extension of time made by the Owner.

3. Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

4. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors or Owner.

SIGNED AND SEALED this.....of.....A.D. 19....

In the presence of:

.....(Seal)
Principal

.....
Title

.....(Seal)
Surety

.....
Title

.....
Witness

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that .....

as Principal, hereinafter called the Contractor, and .....

..... as Surety, hereinafter called the

Surety, are held and firmly bound unto.....
as Obligee, hereinafter called the Owner, for the use and
benefit of claimants as hereinbelow defined, in the amount

of ..... Dollars ($.....), for the pay-
ment whereof the Contractor and the Surety bind themselves,
their heirs, executors, administrators, successors and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the Contractor has by written agreement dated .....

....., 19..... entered into a contract with Owner

for .....

in accordance with drawings and specifictions prepared by ..

.....

which contract is by reference made a part hereof, and is

hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that
if the Contractor shall promptly make payment to all claimants
as hereinafter defined, for all labor and material used or
reasonably required for use in the performance of the Contract
then this obligation shall be void; otherwise it shall remain
in full force and effect, subject, however, to the following
conditons:

a. A claimant is defined as one having a direct contract
with the Contractor or with a subcontractor of the Contractor
for labor, material, or both, used or reasonably required for
use in the performance of the Contract, labor and material

being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.

b. The above named Contractor and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, and have execution thereon. The Owner shall not be liable for the payment of any cost or expenses of any such suit.

c. No suit or action shall be commenced hereunder by any claimant,

1. Unless claimant, other than one having a direct contract with the Contractor, shall have given written notice to any two of the following: The Contractor, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Contractor, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

2. After the expiration of one (1) year following the date on which Contractor ceases work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

3. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.

d. The amount of this bond shall be reduced by and to the extent of any payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens

which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

SIGNED AND SEALED this..... day of .....A.D. 19....

In presence of:

.....(Seal)
Contractor

.....
Witness

.....
Title

.....(Seal)
Surety

.....
Witness

.....
Title

GENERAL CONDITIONS

Art. I. Definitions

(a) Contract - A written agreement executed between the Owner and the successful Bidder, covering the performance of work and the furnishing of labor, equipment and materials, by which the Contractor is bound to perform the work and furnish the labor, equipment and materials, and by which the Owner is obligated to compensate him therefore at the mutually established rate or price. The Contract shall include the invitation for bids, instructions to Bidders, Proposal Contract form and Contract Bond, These Specifications, all Special Provisions, all Plans and Notice to Proceed, also any written Change Orders and Supplemental Agreements that are required to complete the consturction of work in an acceptable manner including authorized extensions, thereof, all of which constitute one insturment.

(b) Contract Bond - The approved form of security, executed by the Contractor and his surety or sureties, guaranteeing complete execution of the Contract and all Supplemental Agreements pertaining thereto.

(c) Equipment - All machinery, equipment and livestock, together with the necessary supplies for upkeep and maintenance and also tools and apparatus necessary for the proper construction and acceptable completion of the work.

(d) Plans - The official approved plans, profiles, typical cross sections, working drawings and supplimental drawings, or exact reproduction thereof which show the location, character, dimensions, and details of the work to be done, and which are to be considered part of the Contract supplimentary to these specification and which are identified as such.

(e) Profile Grade - The trace of a vertical plane intersecting the top surface of the proposed wearing surface, along the longitudinal section of the roadbed.

(f) Specifications - The general term comprising all directions, provisions and requirements contained herein, together with such as may be added or adopted as Supplemental Specifications.

(g) Subcontractor - Any individual partnership, firm or corporation undertaking the construction of a part of the work under the terms of the Contract, by virtue of an agreement with the Contractor, who, prior to such undertaking, receives the consent of the Surety and the approval of the Owner.

(h) Work - Work shall be understood to mean the furnishing of all labor, materials, equipment, and other incidentals necessary to the completion of the project and the carrying out of all duties and obligations imposed by the Contract.

Art. II. Intent of Contract

The intent of the Contract is to prescribe a complete work of improvement which the Contractor undertakes to do, in full compliance with the Plans, Specifications, Special Provisions, Proposal and Contract. The Contractor shall perform all work in accordance with the lines, grades, typical cross sections dimensions, and other data shown on the plans or as modified by the written orders, including the furnishing of all materials, implements, machinery, equipment, tools, supplies, transportation, labor, and all other things necessary to the satisfactory prosecution and completion of the Contract.

Art. III. Special Provisions

Conditions not covered by the Plans or these Specifications shall be known as Special Provisions and attached to the Proposal Form, and shall be considered a part of these Specifications the same as though contained fully herein. Special Provisions shall govern over Specifications, Supplimental Specifications and Plans. Also, it should be understood that Plans govern over Specifications and Supplimental Specifications.

Art. IV. Execution of Contract

The Contract shall be signed by the successful bidder and returned, together with the Contract Bond and Payment Bond within ten (10) days after the Owner forewards the Contract. If the Contract is not executed by the Owner within twenty (20) days after receiving properly executed Contracts, Contract Bonds, and Payment Bonds from the Contractor, he shall have the right to withdraw his bid from the Contractor, without penalty. No Contract shall be considered as effective until it has been executed by all of the parties thereto. It shall be further understood and agreed that all Specifications as well as Special Provisions attached

to the Proposal Form used in submitting bids, and all approved drawings are parts of the Contract and shall be considered in full force and effect even though not included in and/or attached to the separate form used in actual exectuion of the Contract.

Art. V. Shop Plans and Working Drawings

The approved plans will be supplimented by such working drawings as are necessary to adequately control the work. It is mutually agreed that all authorized alterations effecting the requirements and information given on the approved plans shall be in writing and approved by the Landscape Architect. When at any time reference is made to the Plans, the interpretation shall be the Plans as affected by all authorized alterations then in effect.

Art. VI. Copies Furnished

Unless otherwise provided in the Contract Documents, the Landscape Architect will furnish to the Contractor, free of charge, all copies of drawings and Specifications necessary for the execution of the work.

Art. VII. Drawings and Specifications on the Work

The Contractor will keep one copy of Drawings and Specifications on the work, in good order, available to the Landscape Architect.

Art. VIII. Ownership of Drawings

The drawings and Specifications furnished by the Landscape Architect are his property. They are not to be used on other work and are to be returned to him on request, at the completion of the work.

Art. IX. Materials, Appliances, Employees

Unless otherwise stipulated, the Contractor will provide and pay for, all materials, labor, water, tools, equipment, light, power, transportation and other facilities necessary for the execution and completion of the work.

Art. X. Protection of Work and Property

The Contractor will maintain adequate protection of all his work from damage and will protect the Owner's property from

injury or loss arising in connection with the Contract. He will make good any such damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by agents or employees of the Owner. He will adequately protect adjacent property as provided for by law.

The Contractor will take all necessary precautions for the safety of employees on the work, and will comply with all applicable provisions of Federal, State and Municipal safety laws to prevent accident, injury to person on, about, or adjacent to the premises where the work is being performed. He will erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of workmen and the public.

Art. XI. Inspection of Work

All materials and each part or detail of the work shall be subject at all times to inspection by the Landscape Architect or his authorized representative, and the Contractor will be held strictly to the Contract and allowable tolerances and regard to quantity of materials, workmanship and the diligent execution of the Contract. The Landscape Architect or his representative shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

Art. XII. Superintendence: Supervision

The Contractor will keep on his work, during its progress, a competent superintendent, satisfactory to the Landscape Architect.

The Contractor will give efficient supervision to the work, using his best skill and attetion. He will carefully study and compare all drawings and Specifications, and will at once report to the Landscape Architect any error, inconsistancy or omission which he may discover, but he will not be held responsible for their existence or discovery.

Art. XIII. Additional Work

The Contractor shall perform such increased quantity of any contract item as the Landscape Architect may deem necessary to properly complete the Contract, and shall

receive in full payment for such increases workthe prices in the Proposal or by Supplimental Agreement (s) when such Supplimental Agreement (s) is (are) properly agreed to and executed.

Art. XIV. Extra Work

When required alterations require work for which no quantity and price have been included in the Proposal, such work shall be done at a price agreed upon previously in writting by the Contractor and the Landscape Architect, or where such parties cannot be satisfactorily agreed upon by both parties, or where such agreement is impracticable, the Landscape Architect may, in writing, order the work be done in a force account basis, to be paid for in one of the following methods:

(a) By estimate and acceptance in a lump sum.
(b) By unit price named in the Contract or subsequently agreed upon.

(c) By cost and percentage or by cost and fixed fee.

Art. XV. Claims for Extra Cost

If the Contractor claims that any instructions by drawings or otherwise involves extra cost under this Contract, he will give the Landscape Architect written notice thereof within a reasonable time after such instructions, and in any event before proceeding to execute the work, except in emergency endangering life or property, and the procedure will then be as provided as for changes in the work.

Art. XVI. Correction of work before final Payment

If the Contractor does not remove from the premises all work condemned by the Landscape Architect as failing to conform to the Contract within a reasonable time, fixed by written notice, the Owner may remove it and may store the material at the expense of the Contractor. If the Contractor does not pay the expenses of such removal within ten (10) days time thereafter the Owner may, upon ten (10) days notice, sell such materials at auction or at private sale and shall account for the net proceeds thereof, after deducting all the cost and expenses that should have been borne by the Contractor.

Art. XVIII. The Owner's Right to do Work

If the Contractor should neglect ot prosecute the work or fail to perform any provisions of this Contract, the Owner, after three (3) days written notice to the Contractor, may without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment then, or thereafter due the Contractor, provided, however, that the Landscape Architect approve such action and the amount charged to the Contractor.

Art. XIX. Owner's Right to Terminate Contract

If the Contractor should be adjudged a bankrupt, orif he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistantly or repeatedly refuse or should fail to provide enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to subcontractors or for materials or labor, or persistantly disregard laws, ordinances, or the instructions of the Landscape Architect, or otherwise be guilty of a substantial violation of any provision of the Contract, the the Owner, upon the certificate of the Landscape Architect that judice to any other right or remedy and after giving the Contractor seven (7) days written notice, terminate the employment of the tools and appliances thereon and furnish the work by whatever method he may deem expedient. In such case the Contractor will not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract prive shall exceed the expense of finishing the work including compensation for additional managerial and administrative services, such excess will be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor will pay the difference to the Owner. The expense incurred by the Owner has herein provided, and the damage incurred through the Contractor's default, will be certified by the Landscape Architect.

Art. XX. Contractor's Right to Stop work or Terminate Contract

If the work should be stopped under the order of any court, or under public authority, for aperiod of three months, through no act or fault of the Contractor or of anyone employed by him, or if the Landscape Architect should fail to issue any

certificate for payment within seven (7) days after it is due, or if the Owner should fail to pay the Contractor within seven (7) days after its maturity and presentation, any sum certified by the Landscape Architect or awarded by arbitrators, then the Contractor may, upon seven (7) days written notice to the Owner and the Landscape Architect, stop work or terminate this Contract and recover from the Owner payment for all work executed and any loss sustained upon any plant or materials and reasonable profit and damages.

Art. XXI. Applications for Payment

The Contractor will submit to the Landscape Architect an application for each payment, and, if required, receipts or other vouchers, showing his payments to subcontractors as required by article XXXI.

If payments are made on valuation of work done, such application will be submitted at least ten days before each payment falls due, and, if required, the Contractor will, before the first application, submit to the Landscape Architect a schedule of values of the various parts of the work, including quantities, aggregating the total sum of the divided so as to facilitate payments to subcontractors in accordance with article XXXI (e), made out in such form as the Landscape Architect and the Contractor may agree upon, as the Architect may direct. This schedule, when approved by the Landscape Architect, will be used as a basis for certificates of payment, unless it be found to be in error. In applying for payments, the Contractor will submit a statement based upon this schedule, and, if required, itemized in such form and supported by such evidence as the Landscape Architect may direct, showing his right to the payment claimed.

If payments are made on account of materials delivered and suitable stored at the site, but not incorporated in the work, they will, if required by the Landscape Architect, be conditional upon submission by the Contract of bills of sale or such other procedure as will establish the Owner's title to such material or otherwise adequately protect the Owner's interest.

Art. XXII. Certificates of Payment

If the Contractor has made application as above, the

Landscape Architect will, not later than the date when each payment falls due, issue to the Contractor a certificate for such amount as he decides to be properly due, or state in writing his reasons for withholding a certificate.

No certificate issued nor payment made to the Contractor, nor partial or entire use or occupancy of the work by the Owner, will be an acceptance of any work or materials not in accordance with this contract. The making and acceptance of the final payment will constitute a waiver of all claims by the Owner, other than those arising from unsettled liens, from faulty work appearing after final payment or from requirement of the specifications, and of all claims by the Contractor, except those previously made and still unsettled.

Should the Owner fail to pay the sum named in any certificate of the Landscape Architect or in any award by arbitration, upon demand when due, the Contractor will receive, in addition to the sum named in the certificate, interest thereon at the legal rate in force at the place of building.

Art. XXIII. Payments Withheld

The Landscape Architect may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate to such extent as may be necessary to protect the Owner from loss on account of:

(a) Defective work not remedied.
(b) Claims filed or reasonable evidence indicating filing of claims.
(c) Failure of the Contractor to make payments properly to subcontractors or for material or labor.
(d) A reasonable doubt that the contract can be completed for the balance then unpaid.
(e) Damage to another Contractor.

When the above grounds are removed, payment will be made for amounts withheld because of them.

Art. XXIV. Contractor's Liability Insurance

The Contractor will maintain such insurance as will protect him from claims under workmen's compensation acts

and from claims for damages because of bodily injury, including death, which may arise from and during operations under this Contract, whether such operations be by himself or by any subcontractor or anyone directly or indirectly employed by either of them. This insurance will be written for not less than any limits of liability specified as part of this contract.

Art. XXV. Owner's Liability Insurance

The Owner will be responsible for and at his option may maintain such insurance as will protect him from his contingent liability to others for damages because of bodily injury, including death, which may arise from operations under this contract, and any other liability for damages which the Contractor is required to insure under any provision of this contract.

Art. XXVI. Fire Insurance

The Owner will effect and maintain fire insurance on all structures on property that the work of this contract is to be done to 100 per cent of the insurable value, including items of materials connected therewith whether in or adjacent to the structure insured, materials in place or to be used as part of the permanent construction including surplus materials in place or to be used as part of the work, and such structures, miscellaneous materials and supplies incident to the work. The loss, if any, is to be made adjustable with and payable to the Owner as Trustee for the insured as their interests may appear, except in such cases as may require payment of all or proportion of said insurance to be made to a mortgagee as his interests may appear.

The Contractor and all subcontractors shall be named or designated in such capacity as insured jointly with the Owner in all policies. If the Owner fails to effect or maintain insurance as above and so notifies the contractor, the Contractor may insure his own interest and that of the subcontractors and charge the cost thereof to the Owner.

Art. XXVII. Guarantee Bonds

The Owner will have the right, prior to the signing of the Contract, to require the Contractor to furnish bond covering

the faithful performance of the Contract and the payment of all obligations arising thereunder, in such form as the Owner may prescribe and with sureties as he may approve. If such bond is required by instructions by the Contractor; if subsequent thereto, it will be paid by the Owner.

Art. XXVIII. Responsibility for Damage Claims

The Contractor shall indemnify and save harmless the Owner or all of his representatives from all suits, actions, or claims of any character brought on account of any injury or damages sustained by any person or property in consequence of any neglect in and safeguarding the work or through the use of unacceptable materials in the construction of the improvement, or an account of any act or ommission by said Contractor, or as a result of faulty, or inadequate or improper temporary drainage during construction, or on account of the use of misuse, storage or handling of explosives, or on account of any claims or amounts recovered for any infringement, or patent, trademark or copyright, or from any claims or amounts arising or recovered under the Workmen's Compensation Laws, or any other law, by-law, ordinance, order or decree. The Contractor shall be responsible for all damage or injury to property of any character during the prosecution of the work resulting from any act, omission, neglect, or misconduct, in the manner of method of executing said work satisfactorily or due to the non-execution of said work or at any time due to defective work or materials and said responsibility shall continue until the improvement shall have been completed and accepted.

Claims for damages will be made in writing to the party liable within a reasonable time of the first observance of such damage and not later than the time of final payment, except as expressly stipulated otherwise in the case of faulty work or materials, and will be adjusted by agreement or arbitrations.

Art. XXIX. Liens

Neither the final payment nor any part of the retained percentage will become due until the Contractor, if required, will deliver to the Owner a complete release of all liens arising out of this Contract, or receipts in

full lieu thereof, and, if required in either case, an affidavit that so far as he has knowledge or information the releases and receipts include all the labor and materials for which a lien could be filled; but the Contractor may, if any subcontractor refuses to finish a release or receipt in full, furnish a bond satisfactory to the Owner to indemnify him against any lien. If any lien remain unsatisfied after all payments are made, the Contractor will refund to the Owner all money that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

Art. XXX. Assignment

Neither party to the Contract will assign the Contract or sublet it as a whole without the written consent of the other, nor will the Contractor assign any money due or to become due to him here-under, without the previous written consent of the Owner.

Art. XXXI. Mutual Responsibility of Contractors

Should the Contractor cause damage to any separate contractor on the work the Contractor agrees, to settle with such contractor by agreement or arbitration, if he will so settle; If such separate contractors sue the Owner on account of any damage alleged to have been so sustained, the Owner will notify the Contractor, who will defend such proceedings at the Owner's expense, and, if any judgement against the Owner arise therefrom, the Contractor will pay or satisfy it and pay all costs incurred by the Owner.

Art. XXXII. Separate Contracts

The Owner reserves the right to let other contracts in connection with this work. The Contractor will afford other contractors reasonable opportunity for introduction and storage of their materials and the execution of their work, and will properly connect and coordinate his work with theirs.

Art. XXXIII. Subcontractors

The Contractor will as soon as practicable after the

execution of the contract, notify the Landscape Architect in writing of the names of subcontractors proposed for the principal parts of the work and for such others as the Landscape Architect may direct and will employ any that the Landscape Architect may within a reasonable time object to as incompetent or unfit.

If the Contractor has submitted before execution of the contract a list of subcontractors and the change of any name on such a list is required in writing by the Owner after such execution, the contract price will be increased or diminished by the difference in cost occasioned by such changes.

The Landscape Architect will, on request, furnish to any subcontractor, wherever practicable, evidence of the amounts certified on his account.

The Contractor agrees that he is as fully responsible to the Owner for the acts of his subcontractors and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

Nothing contained in the contract document will create any contractual reaction between any subcontractor and the Owner.

Art. XXXIV. Relations of Contractor and Subcontractor

The Contractor agrees to bind every Subcontractor and every Subcontractor agrees to be bound by the terms of the Agreement, the General Conditions, the Drawings, and Specifications as far as applicable to his work, including the following provisions of this article.

The Subcontractor agrees---

(a) To be bound to the Contractor by the terms of the agreement, General Conditions, Drawings, and Specifications, and to assume toward him all the obligations and responsibilities that he assumes toward the Owner.
(b) To submit to the Contractor applications for payment in such reasonable time as to enable the Contractor to apply for payment under Art. XXI of General Conditions.

(c) To make claims for extras to the Contractor in the manner provided in the General Conditions for like claims by the Contractor upon the Owner, except that the time for making claims for extra cost is one week.

The Contractor agrees---

(d) To be bound to the Subcontractor by all the obligations that the Owner assumes to the Contractor under the Agreement, General Conditions, Drawings, Specifications and by all the provisions thereof affording remedies to the Contractor from the Owner.
(e) To pay the Subcontractor, upon the payment of certificates, if issued under the schedule of values in Art. XXI of the General Conditions, the amount allowed to the Contractor on account of the Subcontractor's work to the extent of the Subcontractor's interest therein.
(f) To pay the Subcontractor, upon the payment of certificates, if issued otherwise than as in (e), so that at all times his total payments will be as large in proportion of the value of the work done by him as the total amount certified to the Contractor is to the value of the work done by him.
(g) To pay the Subcontractor on demand for his work or materials as far as executed and fixed in place, less the retained percentage, at the time the certificate is issued.
(h) To pay the Subcontractor to such extent as may be provided by the Contract Documents or the subcontract, if either of these provides for earlier or larger payments than the above.
(i) To pay the subcontractor a just share of any fire insurance money received by him, the Contractor.
(j) To make no demand for liquidated damages or penalty for delay in any sum in excess of such amount as may be specified in the contract.
(k) That no claim for services rendered or materials furnished by the Contractor to the subcontractor will be valid unless written notice thereof is given by the Contractor to the Subcontractor during the first ten days of the calendar month following that in which the claim originated.
(k) To give the Subcontractor an opportunity to be present and to give evidence in any arbitration involving his right.
(m) To name as arbitrator as provided for in the General Conditions the person nominated by the Subcontractor, if

the sole cause of dispute is the work, materials, rights, or responsibilities of the Subcontractor.

The Contractor and Subcontractor agree---

(n) In the matter of arbitration, their rights and obligations and all procedure will be analogous to those set forth in this contract. Nothing in this article will create any obligation on the part of the Owner to pay or to see to the payment of any sums to any subcontractor.

Art. XXXV. Landscape Architect's Status

He is the agent of the Owner as provided in the Contract Documents.

The Landscape Architect will side neither with the Owner nor with the Contractor, but will use his power under the contract to enforce its faithful performance by both.

Art. XXXVI. Landscape Architect's Decisions

The Architect will, within a reasonable time, make decisions on all claims of the Owner or Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the Contract Documents.

Art. XXXVII. Arbitration

All disputes, claims, or questions subject to arbitration under this contract will be submitted to arbitration in accordance with the provisions, then obtaining, of the Standard Form of Arbitration Procedure of the American Institute of Architects.

Art. XXXVIII. Cash Allowances

The Contractor will include in the contract sum all allowance named in the Contract Documents and will cause the work so covered to be done by such contractors and for such sums as the Architect may direct, the contract sum being adjusted in conformity therewith.

The Contractor will not be required to employ for any such work persons against whom he has a reasonable objection.

Art. XXXIX. Use of Premises

The Contractor will confine his apparatus, the storage of materials, and the operations of his workmen to the limits indicated by law, ordinances, permits, or directions of the Landscape Architect and will not unreasonably encumber the premises with his materials.

Art. XXXX. Final Cleaning Up

Upon completion of the work specified in the Contract, and before final payment will be made, the construction area and all other adjoining areas, other than those owned and/or controlled by him, occupied by the Contractor during the construction of said contract shall be cleaned of all surplus and discarded materials, false work, rubbish and temporary structures and buildings; that were placed thereon by the Contractor, and left in a neat and presentable condition. Borrow pits and spoil areas shall be treated as elsewhere herein provided.

EARTHWORK

(1) General

(a) Work under this division is indicated on the drawings entitled "Grading Plan", "Staking Plan", "Horizontal and Verticle Alignment and Construction Details." Landscape Architects, Athens, Georgia. W. Wayne Frazier and Don M. Gusclo.

(b) Each Bidder will familiarize himself with the Contract Documents and shall visit the site of proposed work to aquaint himself with the existing conditions pertinent to the execution of all work described herein.

(c) Should the Bidder find a discrepancy of omission in the Specifications, or should he be in doubt as to the meaning of any portion of them, he shall then notify the Landscape Architect who shall then instruct all bidders in the matter by an Addendum.

(d) This Contractor shall guard and protect against damage to existing work. Any work, already completed, that is disturbed or in any way damaged or changed, shall be replaced to original condition, or as shown on the drawings.

(2) Clearing and Grubbing

(a) This item shall consist of clearing and grubbing areas as described below and in conformity with the Plans.

(b) Clearing is defined as the clearing of areas of trees, shrubs, brush, down timber, rotten wood rubbish and any other vegetation, as well as the removal of fences and incidental structures.

(c) Grubbing is defined as removing from the ground all stump roots and stubs, brush, organic materials and debris. When indicated such materials as leaf mould or ther organic materials above the surface of the ground and suitable for use as mulch or as topsoil, shall be salvaged and stockpiled.

(d) Limits of clearing shall be out of construction limits. All other areas within the "Limit of Work" shall be

cleaned of all rubbish and fallen wood. All standing stumps and dead trees shall be cut off flush with the ground. The Landscape Architect has the right ot designate trees and other growth to leave standing and when such is done, the Contractor shall conform to such direction.

(e) Limits of grubbing are hereby defined to include construction area (out to out excavation or embankment, as the case may be.)

(f) Removal materials derived from clearing and grubbing shall be salvaged and /or disposed of as subsequently set forth.

(3) Roadway Excavation

(a) Description:

1) Roadway excavation shall in general consist of excavation and grading for roadways and their appurtenances to lines and grades indicated on the Plans. Unsuitable and excess materials in any excavation shall be disposed of by being removed from the limits of the work or to such locations as approved by the Landscape Architect.

2) Roadway excavation shall include the following:
   (a) Within the boundary faces of the typical cross section (s) indicated on the Plans, including ditches within the cut section.
   (b) Topsoil to be salvaged within the limits of the road.
   (c) Excavation for stream and channal changed.

(b) Construction Methods

1) All suitable material removed from the excavation shall be used as far as parcticable in the formation of embankment, subgrade, shoulder, slopes, backfill for structures and at such other places as directed.

2) Boulders and excavated rock shall be broken and reduced in size so as to be acceptable for use in embankments and in other specified areas.

3) All earth slopes shall be formed in lines conforming to the plans.

4) All boulders and ledge rock encountered in the roadbed, shall be removed within ditch lines.

5) All spaces created by removal of rock, or unsuitable material, shall be backfilled to the lines and grades indicated on the Plans.

4) Embankment

(a) This item shall consist of the formation and compaction of earch shoulders in conformity with the lines and grades shown on the Plans and in accordance with these Specifications.

(b) Earth shoulders shall be composed of suitable materials from roadway or structure excavation, supplimanted by suitable material, if directed from borrow excavation.

(c) Construction methods

1) Earth shoulders shall be formed and compacted as soon as possible after the surfacing item is complete.

2) Any damage to the surfacing or pavement by reason of carelessness or negligence on the part of the Contractor shall be repaired to the satisfaction of the Landscape Architect.

3) The entire shoulder area shall be uniformly and thoroughly compacted by rolling with a tandem, or three-wheel or pneumatic tire roller.

4) The weight of any roller used for this operation shall be such that the shoulder shall be thoroughly compacted; however the weight shall not exceed that required for the adjacent surface of pavement. The areas to be shaped and compacted shall include all shoulder areas shaped to the specific cross-slope. The construction of the shoulders shall conform to the typical cross section of improvement shown on the Plans of the proposed work.

CONSTRUCTION WORK

1) General

a) Work under this division is indicated on drawings entitled "Grading Plan", "Staking Plan", "Horizontal and Vertical Alignment", and "Construction Details", prepared by Landscape Architects, Athens, Georgia, W. Wayne Frazier and Dom M. Gusclo.

b) Each Bidder will familiarize himself with the Contract Documents and shall visit the site of proposed work to aquaint himself with the existing conditions pertinent to the execution of all work described herein.

c) Should the Bidder find a discrepancy or omission in the Specifications, or should he be in doubt as to the meaning of any portion of them, he shall then notify the Landscape Architect who shall then instruct all Bidders in the matter by an Addendum.

d) This Contractor shall protect, and guard against damage to existing work. Any work already completed, that is disturbed or in any way damaged or changed, shall be replaced to original condition, or as shown on the drawings.

2) Work Included

a) The work covered by this specification consists of furnishing labor and materials, equipment appliances necessary for establishing finished grade, concrete retaining walls, steps, construction of paved areas, as shown on drawings and schedules as specified herein including but not limited to the following:

1) Furnishing cement, stone, sand, water, reinforcement rods, formwork, and all other necessary materials for the construction of the retaining walls.

2) Furnishing cement, stone, sand, water, steel reinforcement rods, formwork and all other necessary materials for the construction of the concrete step

3) Establishing base for paved areas.

4) Furnishing materials used in base.

5) Furnishing mixtures for roads and walks.

3) Concrete

(a) All cement shall be Portland Cement and shall meet the requirements of the latest standard specifications of the American Society of Testing Materials. It shall be dry and in its original container.

(b) Water used in mixing concrete shall be free from acids alkalies, oils, salts, organic matter or any deleterious substances which would impair the strength of the concrete. Water containing not more than one percent (1%) of chlorides by weight will be acceptable for curing concrete.

(c) Fine aggregate shall consist of clean, washed sane, ninety-five percent (95%) which shall pass through a number four (4) seive. Not less than fifty percent (50%) shall be retained in a number thirty (30) seive, and not more than five percent (5%) shall pass a 100 mesh seive.

(d) Coarse aggregate may be either crushed stone, gravel, crushed slag or combinations thereof.

1) Crushed stone shall consist of particles of clean hard, tough, durable rock free from adherent coating.

2) Gravel shall be composed of hard, durable particles of clean stone and shall be free from an excess of thin, or elongated pieces, frozen lumps, vegetable or other deleterious matter.

3) Crushed slag shall be air-cool, blase furnace slag weighing not less than 70 lbs. per cu. ft. dry. rodded, when produced to a number six (6) size and shall consist of angular fragment, reasonably uniform in density and quality, and reasonably free from thin, elongated or glassy pieces, dirt or other objectionable matter and coatings of any character that would indicate an unstable product.

4) Coarse aggregate shall consist of number one (1)

and number two (2) size particles, provided that not more than fifty percent (50%) or less than thirty percent (30%) shall be of number one (1) size or more than seventy percent (70%) or less than fifty percent (50%) shall be of number two (2) size.

(e) All concrete shall have an ultimate compressive strength of three thousand (3,000) pounds per square inch at the end of twenty-eight (28) days.

4) Reinforcement Steel

(a) All rods for concrete reinforcement shall be of performed rods, rolled of new brilliant steel conforming to the specifications of the American Society for Testing Materials.

(b) Wire mesh for reinforcement shall be composed of cold drawn steel wires in accordance with the specifications of the American Society of Testing Materials. It shall be furnished in flat sheets of the dimensions, spacing and wire sizes specified on the plans.

5) Masonry Work

Masonry units shall be laid in the best manner, well bonded with corners true and laid in a full bed of mortar with joints shulshed full. Care must be taken during the coarse of the work to keep free from injurious strains. After completion of masonry work, all exposed work shall be washed down and left clean, and in every way acceptable to the Owner.

6) Paving - Bituminous

a) Work under this section is bituminous paving of sites shown on drawings; including drives, parking, service areas, etc.

The base course must be of proper shape and cross section. The base must be clean and free from loose soil and foreign matter, prime with Tarmac "P" at rate of 2/10 to 3/10 per square yard. Spread 1"-3/8" crushed aggregate to depth of 5" over half width to road.

Apply Tarmac P-6 over full width of road at rate of 8/10 to 9/10 gallon per square yard, if stone or gravel is used and 1.0 to 1.0 gallons per square yard if slag is used. When aggregate is spread to depth of 5" on half the width of road, double the application of Tarmac mix with power grader or multiple blade maintainer.

When mix begins to stiffen spread and level to grade and uniform cross sections over full width of road. Roll with power roller weighing not less than ten (10) tons.

Choke surface uniformly with 3/8" - No. 8 or No. 16 aggregate in sufficient quantity (approximately 15-25 pounds per square yard) to fill voids in mix. Evenly distribute aggregate over surface by means of broom drag. Continue rolling mix until it is well keyed and presents a uniform surface.

Apply second application of Tarmac P-C at rate of 3/10 to 4/10 gallons per square yard. Spread uniformly 3/8"- No. 8 or No. 16 crushed aggregate in sufficient quantity to absorb any excess Tarmac. Roll surface and open to traffic.

After wearning surface has been thoroughly compacted, preferably after a period of 60 days, apply seal coat of Tarmac No. 4 at rate of 2/10 to 3/10 gallons per square yard. Uniformly cover with 10-15 pounds per Square yard of 3/8" - No. 8 or No. 4 aggregate. Roll surface and if necessary add cover material to absorb any excess tarmac which shows through during rolling.

LAWNS AND PLANTING

1) Scope

This section includes: furnishing all materials and labor necessary for preparation of final subgrades in lawn and planting areas; root protecti on, finished grading, soil treatment; lawn construction; planting of trees, shrubs, and vines; protection, maintenance, guarantee, and replacement of lawn and plants; and related items required to complete the work indicated on the drawings and specified except for:

1. Protection of existing trees and shrubs.
2. Protection, pruning, and repair of existing trees and shrubs to remain, and tree removal.
3. Shipping and storing of existing topsoil for reuse.
4. Restrictions regarding materials used for fill.
5. Rough grading of subsoil to a point approximately three inches below finished grade established for lawn and planting areas.

2) Materials

A) Topsoil: If this quantity of stored topsoil is inadequate, sufficient additional topsoil shall be furnished. Topsoil furnished shall be a natural fertile, friable soil possessing characteristics of representative productive soils in the vicinity. It shall be obtained from naturally well-drained areas. It shall not be excessively acid or alkaline nor contain toxic substances which may be harmful to plant growth. Topsoil shall be without a mixture of subsoil and shall be cleaned and reasonably free from clay lumps, stones, stumps, roots or similar substances two inches of more in diameter, debris or other objects which might be a hindrance to planting operations.

B) Manure

Shall be well-rotted, unleached stable or cattle manure reasonably free from shavings, sawdust or refuse and

shall not contain any harmful materials.

C) Lime

Shall be ground limestone containing not less than 85 percent of total carbonates and shall be ground to such a finess that 50% will pass through a 100 mesh sieve and 90% will pass through a 20 mesh sieve. Coarser material will be accepted, provided the specified rates of application are increased proportionately on the basis of quantities passing the 100 mesh sieve.

D) Commerical Fertilizers

Shall be 5-10-5 formula - Swift's, and shall conform to the applisble state fertilizer laws. It shall be uniform in compesition, dry and feee folwing and shall be delivered to the site in the original, unopened containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer which becomes caked or other wise damaged, making it unsuitable for use, will not be accepted.

E) Peat Moss

Shall be brown; acid reaction about 4 to 5 p^{h}; low in content of weedy material and freecof mineral matter harmful to plant life, water absorbing capacity of 1100 to 1900%; mosture content 30%, natural shredded or granulated.

F) Water

Water used in this work shall be furnished by the client. Hose and other watering ewuipment required for the work shall be furnished by the contractor.

G) Materials for Staking, Guying, and Wrapping

Stakes: Stakes for supporting trees shall be 2½ inches square or bound by 8 feet, sound wood and creosoted their entire length.

Wire: For guys or for fastening trees to stakes shall be no. 12 guage, pliable, galvanized iron.

Flags: To be fashened to guys shall be of sound wood about ½ x 3 x k2" with a 3/8 hole centered 1½" from end, or 1 x ½ x 12" sheet metal with corners clipped and punhhed both ends and painted white.

Hose: To encase guy wires or wires used for fastening trees to stake shall be new or used, 2-ply reinforced rubber garden hose.

Wrapping Materials For tree trunks shall be standard burlap heavy crepe paper or other material suitable in strips of six to ten inches wide.

H) Plant Materials

Plant List: A list of plants required under this contract conform to those given in Standardized Plant Names prepared by the American Joint Committee on Horticultural Nomenclature. Names of varieties not included therein conforms generally with the names accepted in the Nursery trade.

Quality and Size: Plants shall have a havit of growth that is normal for the species and shall be sound, healthy, vigorous, and free from insect yosts, plant diseases and injuries. All plants shall equal or exceed the measurements specified in the Plant List, which are minimum acceptable sizes. They shall be measured before pruning, with branches in normal position. Any necessary prunning, with branches in normal position shall be done at time of planting. Requirements for the measurement, branching, grading, quality, bailing and burlapping of plants in the plant List generally follow the code of standards currently recommended by the American Association of Nurserymen, Inc. in the American Standard for Nursery Stook.

I) Type of Protection to Roots

Balled and Burlapped Plants: Plants designated B&B in the Plant List shall be balled and burlapped. They shall be dug with firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Balls shall be firmly wrapped with burlap or similar material and bound with twine, cord or wire mesh, where necessary to prevent breaking or cracking of the ball during the planting process.

Bare Root Plants: Plants designated B R in the Plant list shall be dug and the earth removed without injury to the

fibrous root system necessary for the full recovery of the plant. Roots shall be wrapped in wet straw, moss or other suitable material for packing immediately after they are dug, for protection until delivery.

Protection After Delivery: The balls of H & B plants which cannot be planted immediately on delivery shall be covered with moist soil or mulch, or other protection from drying winds and sun. Barerooted plants shall be planted or heeled in immediately upon delivery. All plants shall be watered as necessary until planted.

Plants: The contractor shall be responsible for all certificates or inspection of plant materials that may be required by Federal, State or other authorities to accompany shipments of plants. Inspection of plants to be balled and burlapped will be made at the place of growth. All plants must be inspected and approved before they are planted. Inspection and approval by the Landscape Architect of plants at the place of growth or upon delivery shall be for quality, size and variety only and shall not in any way impair the right of rejection for failure to meet other requirements during the progress of thework.

J) Construction Methods

Time of Planting: When other divisions of the work have progressed sufficiently, the contractor shall be notified in writing by the Clarke County Board of Education to commence work of lawns and planting, including placing of topsoil to finish grade. Thereafter, planting operations shall be conducted under favorable weather conditions during the next specified season.

Existing Trees: Temporary structures shall be erected for the protection of existing trees during construction required in leaving the site, excavating and grading.

Fertilizing Existing Trees: Existing trees shall be fertilized at the beginning of their growing season with 5 - 10 - 5 formula commercial fertilizer applied at the rate of 3 lbs. per inch of the trunk diameter. The fertilizer shall be spread on top of the ground within the area of the spread of the branches.

Spraying: Infected existing trees shall be sprayed to prevent the spread of disease and insect pests to new plantings. Materials and methods used shall not cause injury to persons or structures.

Prunning and Repairs: Upon completion of the work this contractor will have pruned and repaired any and all injuries to proposed and existing trees and shrubs. The amount of pruning shall be limited to the minimum necessary to remove undesirable branches to compensate for loss of roots or due to injury on the job.

Construction Below Ground or Overhead: It is not contemplated that planting shall be done where the depths of soil over underground construction, obstruction, or rock is insufficient to accommodate the roots or where pockets in the rock or impervious soil will require drainage. Where such situations are encountered in excavation of planting areas and where the rock cannot be broken and removed by hand methods in the course of digging plant pits of the usual size, and where plants and trees to be planted are found to be under overhead wires or for the planting may be designed by the Landscape Architect.

Thinning of Existing Trees: A qualified person shall mark with a white cloth flag, white paint or other easily distinguishable marking any existing tree which he deems necessary to remove in order to facilitate development of the remaining trees. The stumps of eradicated trees shall be removed to a depth of six inches below the existing soil level. All debris resulting from this operation shall be removed from the site by the contractor.

K) New Planting

Layout: New planting shall be located where shown on the plans except where obstructions below ground or overhead are encountered or where changes have been made in construction. Necessary adjustments shall be approved by the Landscape Architect. No planting, except ground cover and vines shall be placed closer than two feet to pavement or structures.

Planting Pits: Circular pits with vertical sides shall be excavated for all plants except for hedge plants and plants specifically designated on the plans to be planted beds. Diameter of pits for trees and shrubs shall be at

least eighteen inches greater than the diameter of the ball or spread of roots. The depth of pits for trees shrubs, and ground cover shall be enough to accommodate the ball or roots when the plant is set to finish grade. Nine inches of topsoil shall be allowed for in the bottom of the pit for shrubs and trees.

Setting Plants: All plants shall be centered and set on nine inches of compacted topsoil or prepared soil to such depth that finished grade level after settlement will be the same as that at which the plant was grown. All broken or frayed roots shall be cut off closely. Topsoil or prepared soil shall be placed and compacted carefully to avoid injury to roots and to fill all voids. When the hole is nearly filled, add water as necessary, and allow it to soak away.

L) Guying, Staking, and Wrapping Trees

General: Trees shall be supported immediately after planting. All trees six inches and over in trunk diameter shall be guyed and wrapped. Smaller trees shall be staked. Wires shall be encased in hose to prevent direct contact with the bark of the trees and shall be placed around the trunk in a single loop. Wires shall be tightened and kept taut by twisting the strands together.

Guying: Guying shall be done with three guys spaced equally about the tree. Each guy shall consist of two strands of wire attached to the trunk at an angle of about 60°, at about 2/5 of the height of the tree and anchored at the ground to notched stakes which have been driven into the ground at an angle away from the tree. The stakes shall be driven 3/4 of their length in the ground. A wood or metal flag shall be secured to each guy a few inches above the ground.

Staking: Stakes shall be equally spaced about the tree and shall be driven vertically into the ground to a depth of three feet in such a manner as not to injure the ball or roots. Trees shall be fastened to each stake at a height of about five feet by means of two strands of wire. Stakes shall be uniform in height and placed according to the diameter of the tree trunk as follows:

1 - three to six inches - three stakes.

2.- two to three inches - two stakes.

3.- two inches or less - one stake.

Wrapping: Promptly after planting, the trunk of all trees designated to be wrapped shall be wrapped spirally from the ground-line to the height of the first branch. All wrapping shall be neat and snug and the material shall be held in place by a suitable cord.

Mulching: All plants shall be mulched with a three inch layer of well-rotted manure within three days after planting. This mulch shall entirely cover the area of the planting pit, bed or saucer around the plant.

Lawns: All areas not required to be developed otherwise shall be seeded. If construction is completed at a time out of season for fescue grass, all areas not required to be developed otherwise shall be seeded to Italian rye grass at the rate of five pounds per one thousand square feet.

Preparation of Subgrade: The subsoil shall be graded and uniformly compacted so that it will be parallel to the proposed finished grade.

Subgrade: Subgrades shall be loosened and mixed to a depth of three to four inches and all stones over two inches in size, sticks and rubbish removed. No heavy objects except lawn rollers shall be moved over lawns after the subgrade soil has been prepared, unless the ground is again graded and loosened as specified above, before topsoil is spread.

Finished Grading, Lawn Areas: After the subgrade is prepared, topsoil shall be spread evenly thereon and lightly compacted. No top-soil shall be spread in a frozen or muddy condition.

M) Seeding of Lawns

Sowing of Seed: Immediately before any seed is to be sown, the ground shall be scarified as necessary and shall be raked until the surface is smooth, friable and of uniformly fine texture. Lawn seed shall be seeded evenly with a mechanical spreader at the rate of three pounds per one thousand square feet of area, lightly raked, rolled with a three hundred pound roller, and

watered with a fine spray. The method of seeding may be varied at the discretion of the contractor on his own responsibility to establish a smooth, uniformly grassed lawn.

Lime: Lime shall be applied at the rate of thirty pounds per one thousand square feet to the lawn areas being prepared for planting.

Fertilizing: Commercial fertilizer shall be applied at the rate of fifty pounds per one thousand five hundred square feet to the lawn areas being prepared for planting. Fertilizer may be applied with the seed.

N) Repairs to the Lawn or Replacements of Plants

Repairs necessary during the maintanance period due to removal, loss or damage resulting from normal use, vandalism or acts made on order of the Landscape Architect and will be at the expense of the Owners.

O) Inspection for Acceptance

Inspection: The work of lawns and planting, to determine completion of contract work, exclusive of the possible replacement of plants, will be inspected by the Landscape Architect at the conclusion of the maintenance period upon written notice requesting such inspection submitted by the contractor at least ten days prior to the anticipated date. The condition of lawns will be noted and it will be determined by the Landscape Architect whether maintenance shall continue in any part.

Acceptance: As soon as all work has been completed the contractor shall give written notice of completion of work. Within ten days of receipt of notice of completion of the work the Landscape Architect shall inspect the work. Any defects in the work shall be rectified by the contractor before final acceptance.

P) Plant Guarantee and Replacement

Guarantee: Plants shall be guaranteed for the duration of one full growing season after planting, and shall be alive and in satisfactory growth at the end of the Guaranty period.

Replacements: At the end of the guaranty period, inspection will be made by the Landscape Architect upon written notice requesting such inspection by the contractor at least ten days before the anticipated date; any plant required under this contract that is dead or not in satisfactory growth, as determined by the Landscape Architect, shall be removed from the site. These, and any plants missing due to the negligence of the contractor, shall be replaced as soon as conditions permit, but during the normal planting season.

Materials and Operations: All replacements shall be plants of the same kind and size as specified in the Plant List. They shall be furnished and planted as specified under New Planting. The cost shall be borne by the contractor, except for possible replacements resulting from removal, loss or damage due to occupancy of the project in any part, vandalism or acts of neglect on the part of others.

Cost of Plant Replacement: A sum sufficient to cover the estimated cost of possible replacements, including materials and labor, will be retained by the Clarke County Board of Education and paid the contractor only after all replacements have been made and approved.

APPENDIX

COST ESTIMATE
FOR
WYLOWAY COUNTRY CLUB

Computed by: Wayne Frazier
Checked by: Don Guscio

PLANT MATERIALS

QUANTITY	BOTANICAL AND COMMON NAMES	SIZE	*UNIT PRICE	SUB-TOTAL
TREES				
37	Cercis Canadensis Redbud	4'-6'	$10.00	$ 370.00
116	Cornus Florida Flowering Dogwood	4'-6'	10.00	1160.00
14	Liriopemprou Tulipiflora Tuliptree	8'-10'	20.00	280.00
2	Magnolia Grandiflora Southern Magnolia	8'-10'	20.00	40.00
29	Pinus Strobus White Pine	6'-8'	16.00	464.00
23	Quercus Falcata Southern Red Oak	6'-8'	14.00	322.00
45	Quercus Palustris Pin Oak	6'-8'	14.00	630.00
18	Salix Babylonica Weeping Willow	6'-8'	16.00	288.00
39	Prunus Carolina Carolina Laurel Cherry	4'-6'	12.00	468.00
SHRUBS				
21	Ilex Cornuta Chinese Holly	2'-3'	8.00	168.00
23	Osmanthus Fragrens Tea Olive	2'-3'	10.00	230.00
79	Rhododendrom Catawbiense Catawba Rhododendrom	3'-4'	7.00	553.00
			TOTAL	$4973.00

*This is the installed price with one (1) year guarentee on all plants.

EARTHWORK

QUANTITY	ITEM	UNIT PRICE	SUB-TOTALS	GRAND TOTALS
25 Acres	General clearing & grubbing	$300.00 Acre	$7,500.00	
4,971 cu. yd.	Earth cut & fill	.70 cu.yd.	1,610.00	
977 cu. yd.	Topsoil strip & replace	1.00 cu.yd.	977.00	
				$10,087.00

LANDSCAPE CONSTRUCTION

QUANTITY	ITEM	UNIT PRICE	SUB-TOTALS	GRAND TOTALS
CONCRETE				
210 Lin. Ft.	Retaining walls	$ 5.00 Lin. Ft.	$1,050.00	
288 Lin. Ft.	Steps	1.00 Lin. Ft.	288.00	
FLAGSTONE				
4600 Sq. Ft.		1.00 Sq. Ft.	4,600.00	$ 5,338.00

ASPHALT PAVEMENT

QUANTITY	ITEM	UNIT PRICE	SUB-TOTALS	GRAND TOTALS
141,732 Sq. Ft.	Entrance Road & Parking area	$ .28 Sq. Ft.	$39,684.46	
7,629 Sq. Ft.	Pedestrian walks	$ .25 Sq. Ft.	1,907.25	$41,592.21

ITEM	TOTALS	GRAND TOTALS
1. Planting	$ 4,973.00	
2. Earthwork	10,087.00	
3. Landscape Construction	5,338.00	
4. Asphalt Pavement	41,592.21	
		$61,990.21

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