

A Redevelopment and Improvement Study

for

**Hard Labor Creek State Park
Morgan County, Georgia**

by **Mr. Dodson Barker, Superintendent Hard Labor Creek
State Park.**

Charles M. Hudson, III.

**Mr. Donald B. Fiedler - University of Georgia,
Department of Landscape Architecture.**

Robert M. Tramontano

**- for information and material con-
cerning Hard Labor Creek State Park.**

**A Thesis Presented for the
Degree of Bachelor of Landscape Architecture**

Department of Landscape Architecture

University of Georgia

Athens, Georgia

June, 1965

**H.B. Owens Resource Center
School of Environmental Design
Caldwell Hall
University of Georgia**

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9. Restaurant and Arboretum Planting Plan
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We have chosen Hard Labor Creek Park as a specific case and have presented a development and expansion study directly concerned with the recreational aspects of the park. By more than doubling the camping, picnicking, and parking facilities and adding a new lake with additional types of recreational facilities - we hope to obtain a supply to meet the demand. We also hope to obtain a greater diversity through the addition of other facilities now lacking at the park.

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3. Lake Brasley Bay - Use Area
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INTRODUCTION

Each year outdoor living becomes increasingly more popular with the American public. Thus greater emphasis is being placed on our system of National and State Parks. Overcrowded camping, swimming, and picnicking facilities in these parks, keep the park authorities working to provide more and more space. Expansion of these facilities is the keynote of park redevelopment today.

The State of Georgia is indeed fortunate in having a large and strategically located system of state parks. Unfortunately many of these parks do not have sufficient facilities to meet the increasing demands of the large crowds of people who visit them each year. Such is the case with Hard Labor Creek State Park in Morgan County, Georgia. Primarily designed for camping, swimming, and picnicking, the park at present is in need of expansion and improvement.

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We have chosen Hard Labor Creek Park as a specific case and have presented a redevelopment and expansion study directly concerned with the recreational aspects of the park. By more than doubling the camping, picnicking, and parking facilities and adding a new lake with additional types of recreational facilities - we hope to obtain a supply to meet the demand. We also hope to obtain greater diversity through the addition of other facilities now lacking at the park.

Realizing the basic fact that parks are designed primarily to fit man into natural surroundings, we have worked out a solution, which we think least disturbs the existing natural features of the park. The man-made structures - roads, campsites, buildings, etc. should be placed in the least intruding manner and should not be so bold and outstanding as to deprive the park of its natural features.

In a project such as this one must also take into consideration the existing structures and present layout of the park. Many of these features were left undisturbed where it was not feasible to remove or relocate them.

Assuming the roles of landscape architects, we maintained certain aesthetic standards and knowledgeable facts relevant to the development of a workable design. These facts encompass such considerations as circulation, existing topography, orientation, and plant materials. Thus the final achievement will be a functional, aesthetic design - preserving the natural resources and presenting the public with a place of rest and recreation.

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PROBLEM STATEMENT

Hard Labor Creek State Park, containing 5805.75 acres of
 land, is located in Morgan County, Georgia, approximately six
 miles from Madison, Georgia and fifty miles from Atlanta, Georgia.

The current layout of the park includes two lakes, Lake
 Brantley and Lake Rutledge. Around Lake Brantley are located
 facilities for swimming and picnicking. There is a bath house and
 six mobile homes for overnight use. Also in this area of the park
 are a limited number of tent-camp sites. Around Lake Rutledge are
 three group-camps with sufficient sleeping and dining facilities for
 long camping periods. Essentially - this is the current situation
 at Hard Labor Creek.

At the present time there are not enough camp-sites, picnic
 areas, and recreational facilities for the large numbers of visitors.
 In the near future when the Georgia Interstate Highway system passes
 within 4 miles of the Park the present and existing facilities will
 be absolutely inadequate, thus making further development of the Park
 a necessity.

A revised general development plan of the park should be pre-
 pared - showing the complete layout of the entire 5805 acres. From
 this plan two main areas of concern could then be studied and re-
 designed. These would be the day-use area around Lake Brantley and
 a new recreational area around Twin Shoals Lake (a third lake which
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areas. There is an old grist mill on the site which can be res-

tored and made into a restaurant - a much needed addition to the

current facilities. Also, a golf course could be included in

the plans for the park. The camping facilities should be expanded

and improved also.

We have outlined the following improvements for the park:

I. Lake Brantley Day - Use Area (Existing)

A. Additional campsites

B. Additional Parking

C. Overnight Cabin Sites

D. Amphitheatre

E. Expanded Picnic Areas

F. More Adequate Comfort Station

G. Boat Dock and Fishing Site

II. Twin Shoals Lake Area (Proposed)

A. Restored Old Mill

B. Restaurant and Picnicking Facilities

C. Parking Areas

D. Tennis Courts

E. Arboretum and Natural Garden

F. Boating and Fishing Facilities

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III. General Improvements.

1. Entrance Sign Proposed
2. Addition of New Roads
3. Guide to Park Areas Sign
4. Inclusion of a Third Lake

With Rutledge, Georgia, only a mile or so away, there are great possibilities for this town to prosper as visitors and campers travel to and from the Park. The road that connects Rutledge to the Park should be made more attractive.

One needs to get a feeling of being in the park as he rides along the connecting road and this is something that is not felt at present. The entrance to the Park itself could be re-designed and re-planted to present a more appealing picture to the visitors.

As can be seen, there are various possibilities for improvement of Hard Labor Creek State Park. With a steady increase in the number of visitors, there is no reason why many of these possibilities could not be realized.

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JUSTIFICATION

Hard Labor Creek State Park is located off U. S. 278 and Interstate 20 approximately 6 miles from Madison, Georgia (a town with about 3000 population). In addition to being used as a place of recreation for the people of Madison - it also attracts visitors from many surrounding towns and cities including Atlanta (50 miles west). The number of visitors to the park during the peak periods, May 1 to August 31, ranges from 11,000 to 26,000 per month. The existing facilities at the park are entirely inadequate to support such an influx of people.

After studying attendance records for the park - which covered a period of five years - we reached the conclusion that present facilities could definitely be expanded and in some cases - doubled. The campsites, for instance, are one of the most popular features of the park. At present, they are cramped too close together and there is a very limited number of them for the space which is available. They could easily be spread out over twice the area they now occupy and could be doubled in number.

Additional picnic sites and restaurant facilities are definitely needed. The many visitors who bring their lunches have to fight for a table and those who do not bring food have to interrupt their activities to ride into Madison for lunch.

There are no existing facilities for tennis, boating, nature trails and gardens, outdoor meetings, etc., or cabins for overnight use. We feel that all of these are essential to a park which attracts

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Bearing in mind - attendance, existing facilities, proximity to large urban areas, and demands for greater diversity from the park manager and from visitors - we feel the redevelopment of Hard Labor Creek is well justified.

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RECOMMENDATIONS FOR PLANTING AND CONSTRUCTION WORK

PLANTING WORK

I. General -

A. All labor, materials, equipment, and appliances necessary for the planting of major and minor plants as shown on Planting Plan for Restaurant and Arboretum will be carried out by the State Parks Service of Georgia.

II. Work Included -

A. The work should include the following:

1. Excavating for all tree shrub and ground cover pits and beds.
2. Furnishing and preparing of topsoil for backfilling of all shrub trees and ground cover pits and beds.
3. Furnishing and incorporating fertilizer and peat.
4. Furnishing and planting trees and plants as shown on planting plan.
5. Furnishing and spreading topsoil, as needed beyond that furnished on site.
6. Mulching. Staking, Guying and Wrapping according to Planting Plan.
7. Replacements of unsatisfactory plant material.
8. Installation of lawn area.

III. The following recommendations are made concerning the planting work:

A. Inspection of Plant Material

1. Plants purchased by the state from nursery stock - should be inspected and approved at place of growth

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or upon delivery for quality, size, variety, and health.

B. Fertilizers and Conditioners -

1. Fertilizer for trees, shrubs and lawn area should be complete and should bear manufacturer's guaranteed statement of analysis and should meet the following recommended requirements:

(Six) 6% Nitrogen
(Twelve) 12% Super Phosphate
(Twelve) 12% Potash

2. Fertilizer will be purchased by the State Parks Service.
3. Commercial fertilizer should be thoroughly incorporated with topsoil and loam plantings mixture at the rate of three (3) lbs. per inch caliper of tree (approximately three shovels per tree).
4. Fertilizer should be applied on lawn areas at the rates that follow:
 - (a) Six (6), Twelve (12), Twelve (12) fertilizer should be applied at the rate of thirty (30) pounds per thousand (1000) square feet.
 - (b) Ammonium Nitrate should be applied at the rate of three (3) pounds per thousand (1000) square feet every six (6) weeks during the growing season.
5. Provisions should be made for weather-proof storage space for fertilizer until its use.
6. The maintenance crew should use a fine mist when watering.
7. These recommendations are based on warm season plantings. Adjustments should be made for earlier and later plantings, temperature and rainfall variations.
8. Peat moss should be domestic, incorporated into soil planting mixture to sufficient quantity to provide a friable planting mixture.
9. Agriculture limestone, dolomitic limestone recommended, should be incorporated into the fifty soil mixture for lawn area at the rate of fifty (50) pounds per thousand (1000) square feet.

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10. Mixture to be used in plantings shall consist of 50% clean topsoil and 50% clay loam. 50% of clay loam will consist of clay. To this mixture add prescribed amounts of peat moss and fertilizer.

C. SPRIG LAWN INSTALLATION

1. Pennington Green General Lawn Mixture should be installed by using the broadcasting method.
2. The rate of application should be five (5) bushels of chopped planting material per thousand (1000) square feet.
3. The soil should be disturbed by discing.
4. Lime and fertilizer should be applied and mixed into soil before planting aforementioned.

D. WATERING

1. The maintenance crew or superintendent should not allow freshly planted grass to go more than two (2) hours without applying water after planting.
2. They should make three (3) light waterings per day at the rate one-eighth (1/8) inch per day.
3. If soil is dry at planting time they should apply one-half (1/2) of water the first day.
4. After a period of four (4) days the frequency of applications of water may be cut in half. As the grass gets established the irrigation frequency can again be reduced, but the amount of water per application should be increased.

E. RECOMMENDATION OF PLANT GROWTH

1. All plants should be typical of their species or variety and should have a normal habit of growth.
2. All plants and plant material should be guaranteed by the nursery to be true to name and size, and in vigorous growing condition. All plant material should be guaranteed for at least one year after acceptance. Plants should be typical of those defined in planting plan for maximum effectiveness.

EXCAVATION, HANDLING AND PLANTING OPERATIONS

1. All plants should be handled so that roots are adequately protected at all times. During shipment they should be protected by tarpaulin or other suitable covering. All balled and burlapped plants which cannot be planted immediately upon delivery should be set on the ground and be well protected with soil.
2. All trees should be planted as shown on the plan according to the standards of the Georgia State Nurserymen's Association.
3. No planting should be done during unfavorable weather conditions.

PREPARATION OF TOPSOIL FOR PLANT PITS AND BEDS

1. Topsoil for planting pits and beds, except ericaceous plants should be prepared by mixing with peat moss in the proportions of one (1) of peat moss in the mixture to seven (7) of topsoil by volume. The mixture should be thoroughly blended before use.
2. Topsoil for beds of ericaceous plants should be prepared by mixing topsoil with peat moss in the proportion of one (1) of peat to five (5) parts topsoil by volume, thoroughly mixed.

MULCHING

1. A 2" mulch of peat should be applied on all planting beds, tree pits and shrub pits after planting.
2. All evergreens, broadleaved evergreens, ground cover plants and ericaceous material should be mulched to a depth of 2" with a mixture consisting of 50% leaf mold, and 50% peat moss. A portion of this should be scratched into the top 1 1/2" of soil.

PLANTING SEASON

1. Planting of plant materials should be done during the season or seasons which are normal for such work as determined by weather conditions and by accepted practice in the locality.

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J. STAKING, GUYING, WRAPPING

1. All trees over 3" caliper should be guyed by wire guys encased in water hose at the trunk. Guys should be securely staked or anchored or otherwise secured in an approved manner. All wire should be pliable iron of ga. shown on guying sketches.
2. Stakes for supporting trees should be of sound wood of uniform size, capable of standing in ground at least two years. They should be at least 2" actual dimension and not less than 8' in length, unless otherwise specified.
3. Stakes should be placed a minimum of 12" from the trunk of the tree, taking care to clear the roots. They should be driven into the ground to the depth shown.
4. Wrapping material should be first quality burlap or water-proofed crepe paper not less than 6" or more than 10" in width, and of suitable length.
5. The trunks of all trees of three inch caliper or greater should be wrapped, and the material securely tied at top and bottom, and at two foot intervals. Bandaging should start at base, and cover the entire surface of the trunk to the first branches.
6. All guying, staking and wrapping, should be done immediately after planting. All plants should stand plump after guying and staking.

K. MAINTENANCE OF PLANT MATERIAL

1. Areas around trees should be kept cultivated, free of weeds and grass, and properly watered. Replacement should be done as soon as dead material appears. If any tree, shrub or plant bed settles more than three (3) inches below the established grade, it should be raised to the proper level, and not merely filled with additional topsoil.

L. REPLACEMENTS

1. Any trees, shrubs or vines not found to be in a healthy growing condition at any time should be removed from the site and replaced, as soon as weather and seasonal conditions permit.
2. Plant replacements shall be the same kind and size as specified in the itemized plant list, all replacements shall be furnished, planted, and mulched as recommended.

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DIVISION PL - 2 CONSTRUCTION WORK

I. GENERAL:

All work refers to drawings titled Construction Drawings and Details.

II. WORK INCLUDED:

- A. Work included shall be the furnishing of equipment, labor, materials, and appliances necessary for the construction of benches, boat bridges, cabins, docks, tennis courts, decks, picnic tables and shelters, diving loat, and entrance signs as shown on construction detail drawings.
- B. Materials used will be as noted on drawings and will be provided by the State Parks Service or purchased by the State.

III. THE FOLLOWING RECOMMENDATIONS ARE MADE:

A. Road and Tent Site Construction -

All work will be done by the Georgia State Highway Department according to all standards and qualifications set by the Department and following the layout established on drawings listed as Staking Plan and Vertical Alignment Sheets.

- B. It is recommended that the parking lots and roads inside the park be asphalt and be laid according to the Asphalt Institute Specifications, - College Park, Maryland.

C. CONCRETE

1. All cement should be Portland cement and should be dry and in its original container.
2. Fine aggregate should consist of clean washed sand, ninety-five (95) percent which will pass through a number four (4) seive. Not less than fifty (50) percent should be retained on a number thirty (30) seive, and not more than five (5) percent should pass a one hundred (100) mesh seive.

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III. THE FOLLOWING RECOMMENDATIONS ARE MADE:

A. Road and Tent Site Construction -

All work will be done by the Georgia State Highway Department according to all standards and qualifications set by the Department and following the layout established on drawings listed as Stake Plan and Vertical Alignment Sheets.

B. It is recommended that the parking lots and roads inside the park be asphalt and be laid according to the Asphalt Institute Specifications, - College Park, Maryland.

C. CONCRETE

1. All cement should be Portland cement and should be dry and in its original container.

2. Fine aggregate should consist of clean washed sand, ninety-five (95) percent which will pass through a number four (4) sieve. Not less than fifty (50) percent should be retained on a number thirty (30) sieve, and not more than five (5) percent should pass a one hundred (100) mesh sieve.

3. All water used should be clean filtered drinking water containing no alkalines, acids, vegetable matter or other chemicals objectionable to concrete.

4. All concrete should have an ultimate compressive strength of three thousand (3000) pounds per square inch at the end of twenty-eight (28) days.

D. REINFORCED STEEL

1. All rods for concrete reinforcement should be performed rods, rolled or new brillet steel, conforming to the specifications of the American Society for Testing Materials.

E. MASONRY WORK

1. All bricks used should be new, sound and hard, burned throughout, and of uniform size and quality.

2. Masonry units should be laid in the best manner, well bonded with the joints and corners true and laid in a full bed of mortar with joints slushed full. Care must be taken during the course of work to keep this work free from injurious strains. After completion of masonry work, all exposed work should be washed down.

3. All stone should be native stone when available, and laid according to specification and detail drawings.

F. EARTH WORK

1. The Highway Department should excavate or fill, as the case may be, to grades as shown on the vertical alignment drawings.

2. Excavation for walks, walls, and footings should be cut full size as shown on the detail drawings.

G. PAVED AREAS (OTHER THAN ROADS)

1. The Highway Department should install Asphalt walks, tennis courts, and parking lots according to the Asphalt Institute Specifications 1(SS-1) Asphalt Institute, College Park, Maryland.

3. All water used should be clean filtered drinking water containing no alkalis, acids, vegetable matter or other chemicals objectionable to concrete.

4. All concrete should have an ultimate compressive strength of three thousand (3000) pounds per square inch at the end of twenty-eight (28) days.

REINFORCED STEEL

1. All rods for concrete reinforcement should be per-
formed rods, rolled or new drilled steel, conforming
to the specifications of the American Society for
Testing Materials.

MASONRY WORK

1. All bricks used should be new, sound and hard, burned
throughout, and of uniform size and quality.

2. Masonry units should be laid in the best manner, well
bonded with the joints and corners true and laid in
a full bed of mortar with joints finished full. Care
must be taken during the course of work to keep this
work free from injurious strains. After completion
of masonry work, all exposed work should be washed
down.

3. All stone should be native stone when available, and
laid according to specification and detail drawings.

EARTH WORK

1. The Highway Department should excavate or fill, as
the case may be, to grades as shown on the vertical
alignment drawings.

2. Excavation for walks, walls, and footings should be
cut full size as shown on the detail drawings.

PAVED AREAS (OTHER THAN ROADS)

1. The Highway Department should install Asphalt walks,
curbs, and parking lots according to the
Asphalt Institute Specifications (MS-1) Asphalt
Institute, College Park, Maryland.

H. Restaurant and Old Mill -

1. Restoration of Old Mill and construction of the
Restaurant is only a site plan recommendation.
No suggestions are made as to actual construction
methods. Both should be studied and analyzed for
costs, etc. by a contractor and final decision made
by State Parks Service. The General Layout of this
area is presented, however.

I. Park Accessories (Tables, Shelters, Grills, etc.)

1. Specific detail drawings are presented and it is
recommended that the designs should be followed as
shown on these drawings.

1. Restoration of Old Mill and construction of the Restaurant is only a site plan recommendation. No suggestions are made as to actual construction methods. Both should be studied and analyzed for costs, etc. by a contractor and final decision made by State Parks Service. The General layout of this area is presented, however.

2. Park Accessories (Tables, Benches, Grills, etc.)

3. Specific detail drawings are presented and it is recommended that the designs should be followed as shown on these drawings.

Restaurant and Old Mill --

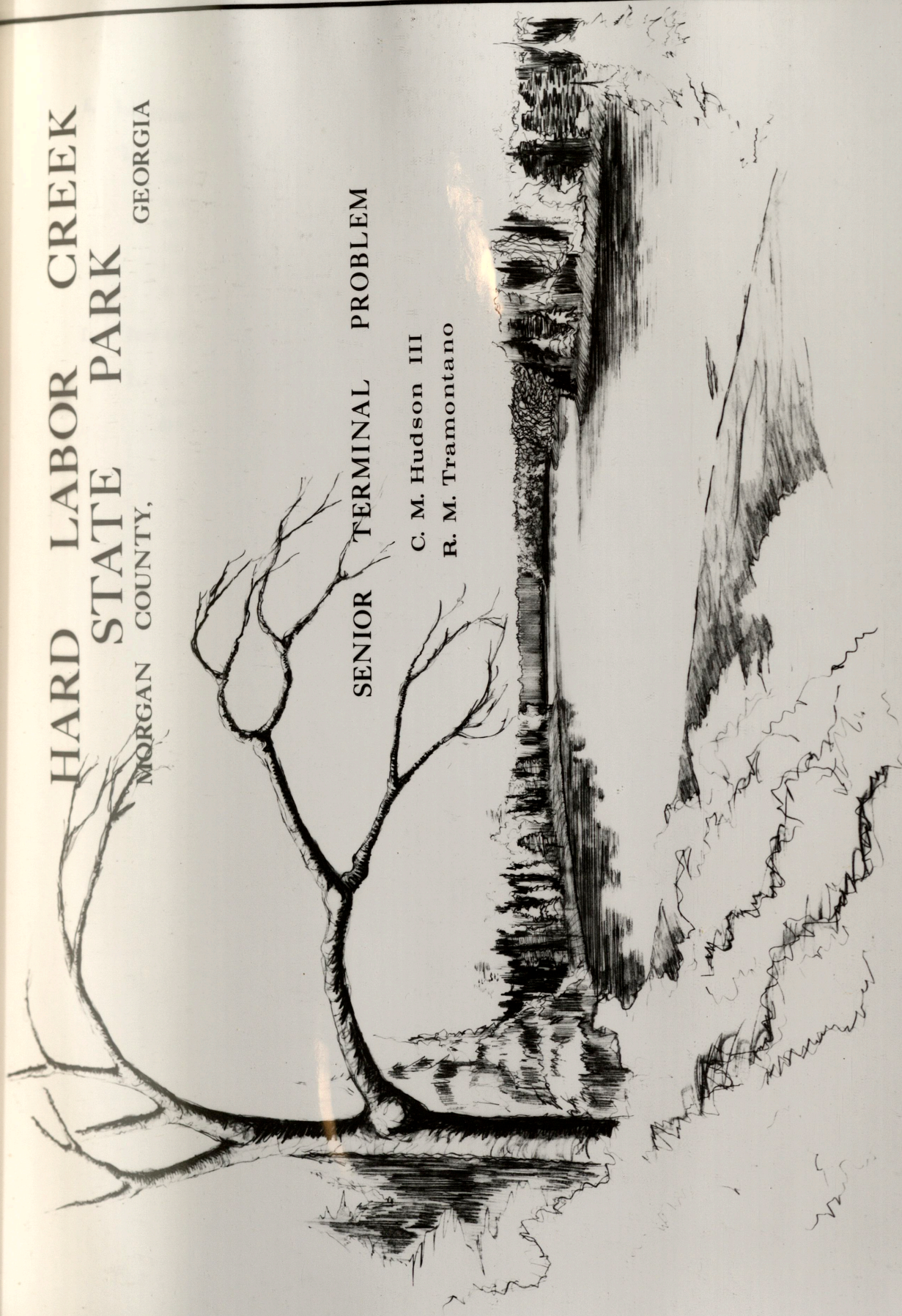
HARD LABOR CREEK STATE PARK

MORGAN COUNTY,

GEORGIA

SENIOR TERMINAL PROBLEM

C. M. Hudson III
R. M. Tramontano





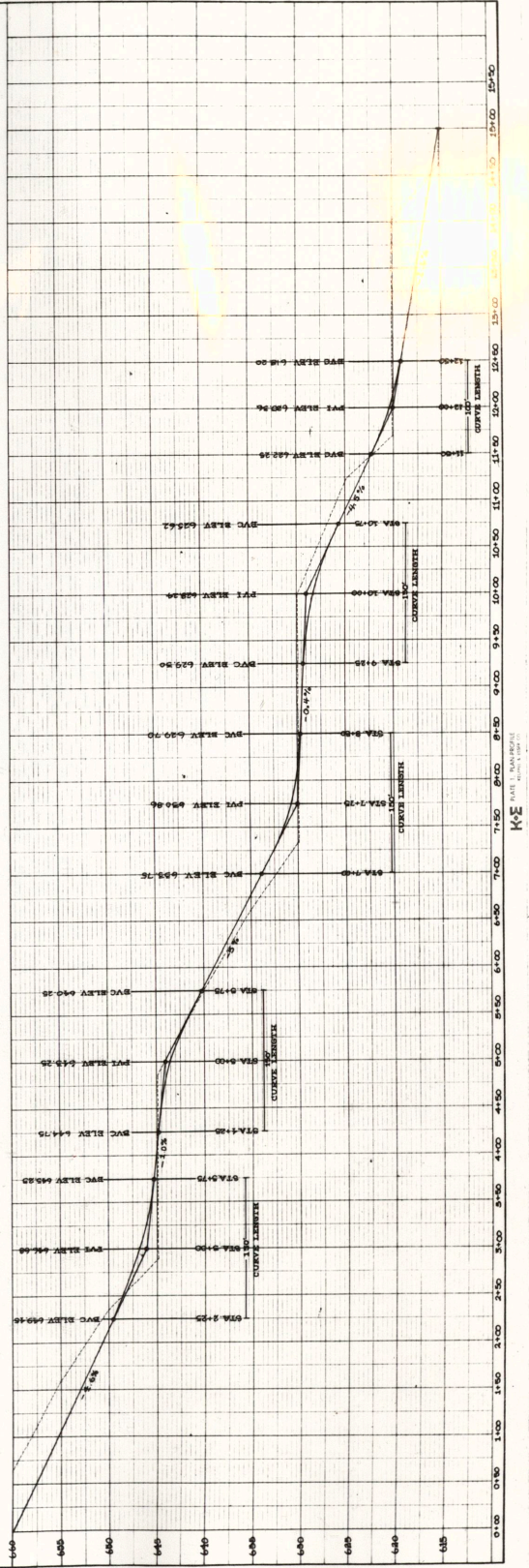
HARD LABOR CREEK STATE PARK
MORGAN COUNTY, GEORGIA

LAKE BRANTLEY DAY USE AREA			
PROJECT NO.	DATE	SCALE	BY
158	1/15	1" = 100'	J. H. HARRIS
REVISIONS	DATE	BY	REASON
1	1/15	J. H. HARRIS	FINAL PLAN
SHEET			2 OF 12

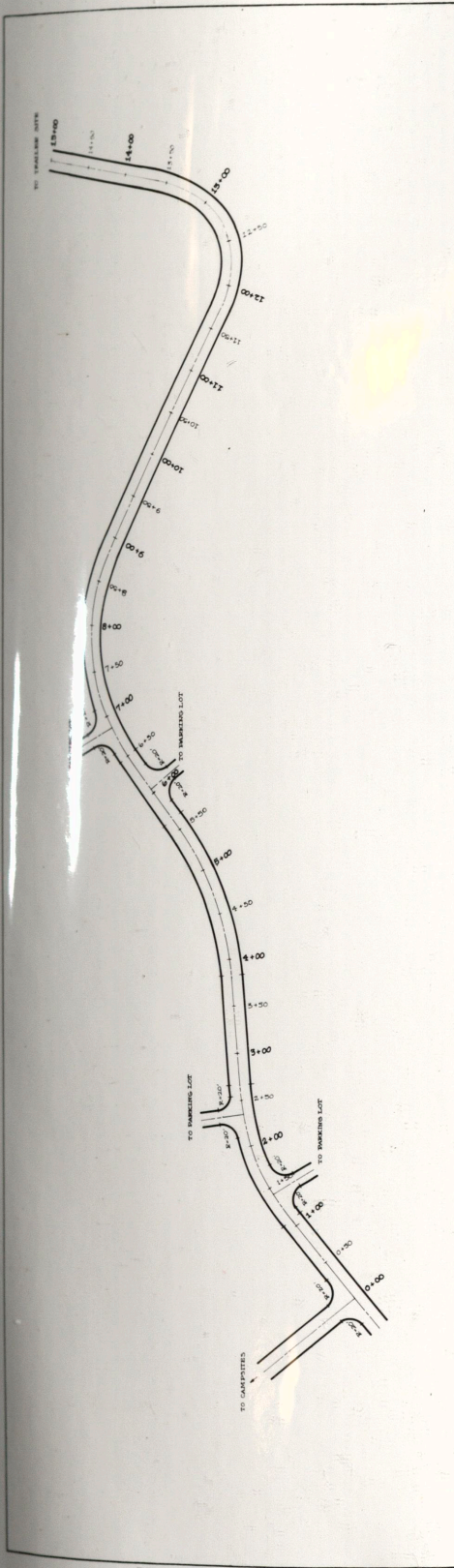


HARD LABOR CREEK STATE PARK
MORGAN COUNTY, GEORGIA

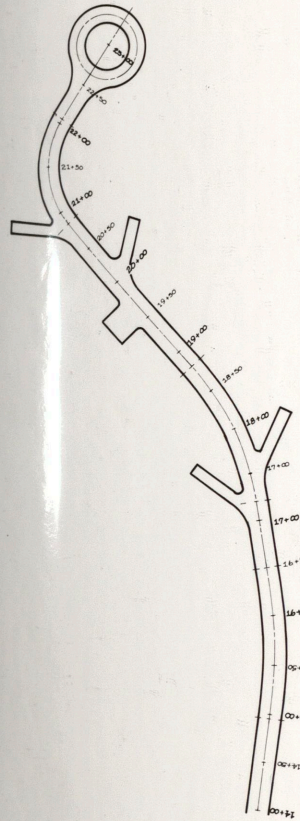
LAKE BRANTLEY DAY-USE AREA			
TERMINAL PROBLEM	UNIV. OF GEORGIA	SCALE 1" = 400'	DATE JAN. 1, 1961
DESIGNED BY	CHARLES W. HIGDON, III	LAR 115	PLAN
STAKING	PLAN	REVISIONS	SHEET 3 OF 12



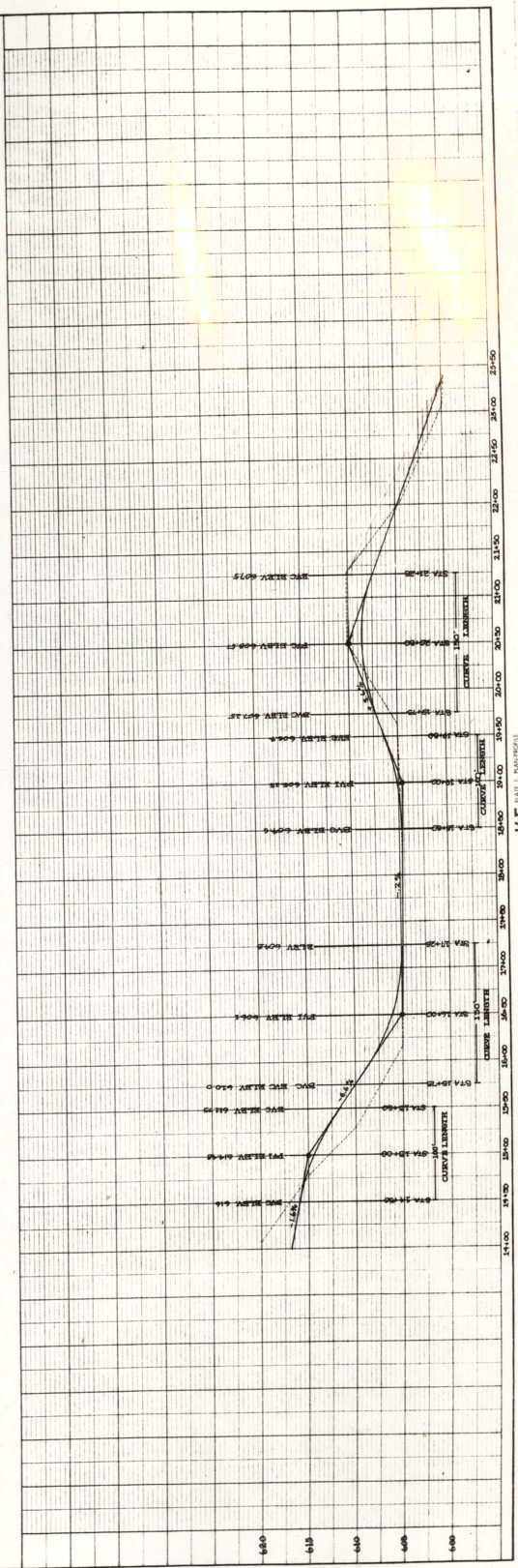
PROFILE



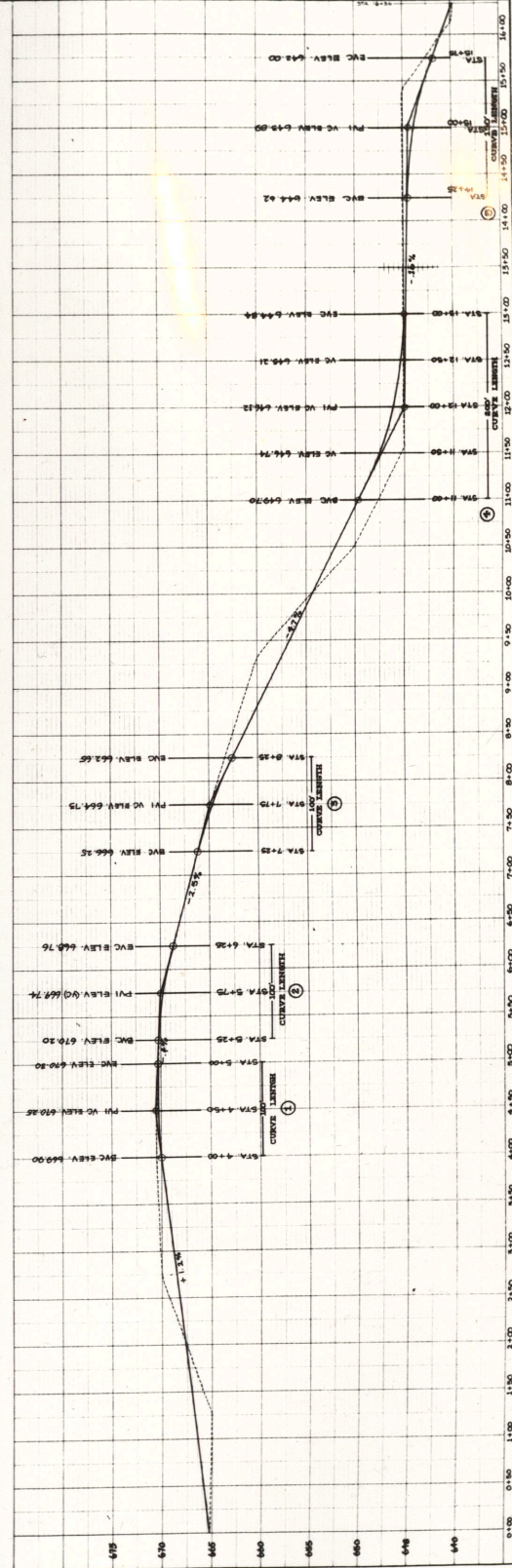
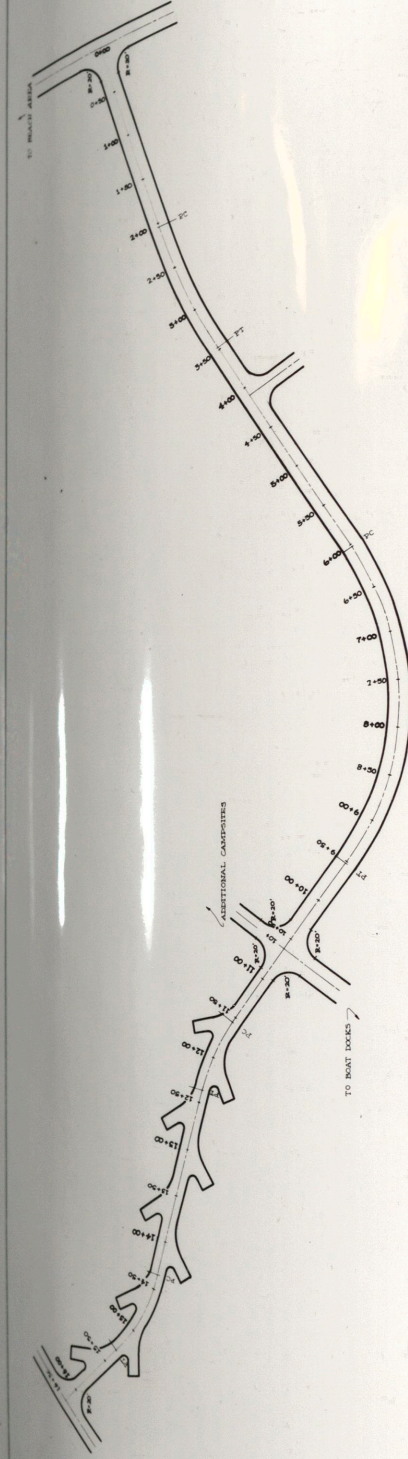
PLAN



PLAN

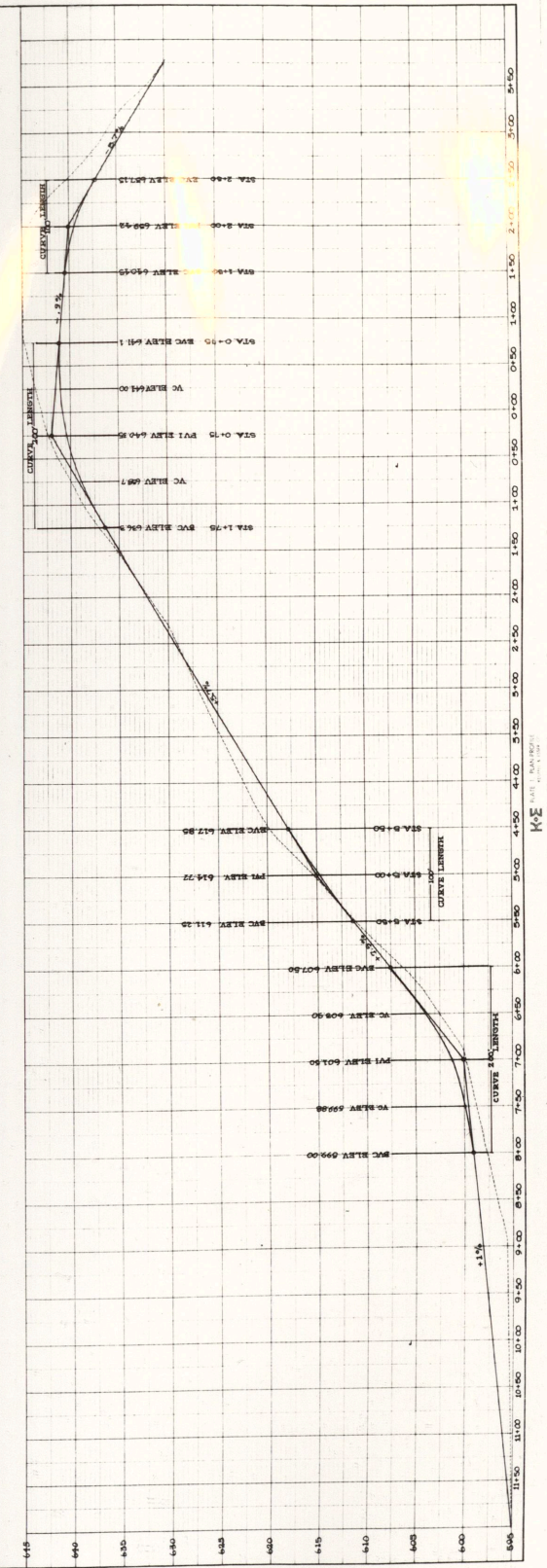
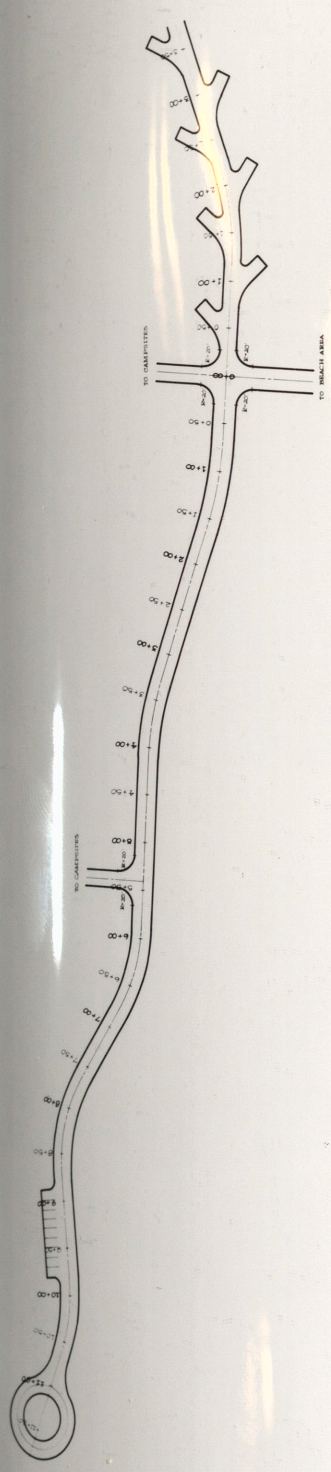


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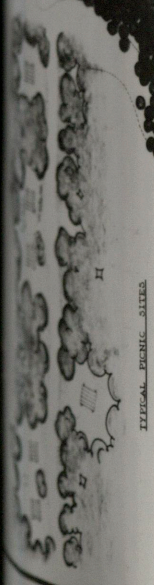
HARD LABOR CREEK STATE PARK MORGAN COUNTY, GEORGIA

L. E. BRANTLEY	
DAY-USE AREA	
PROJECT: HARD LABOR CREEK STATE PARK	DATE: 10/1/81
DESIGNED BY: L. E. BRANTLEY	SCALE: 1" = 40'
CHECKED BY: J. E. BRANTLEY	DATE: 10/1/81
VERTICAL ROAD ALIGNMENT	
SHEET 6 OF 12	



PLAN

PROFILE



HARD LABOR CREEK STATE PARK

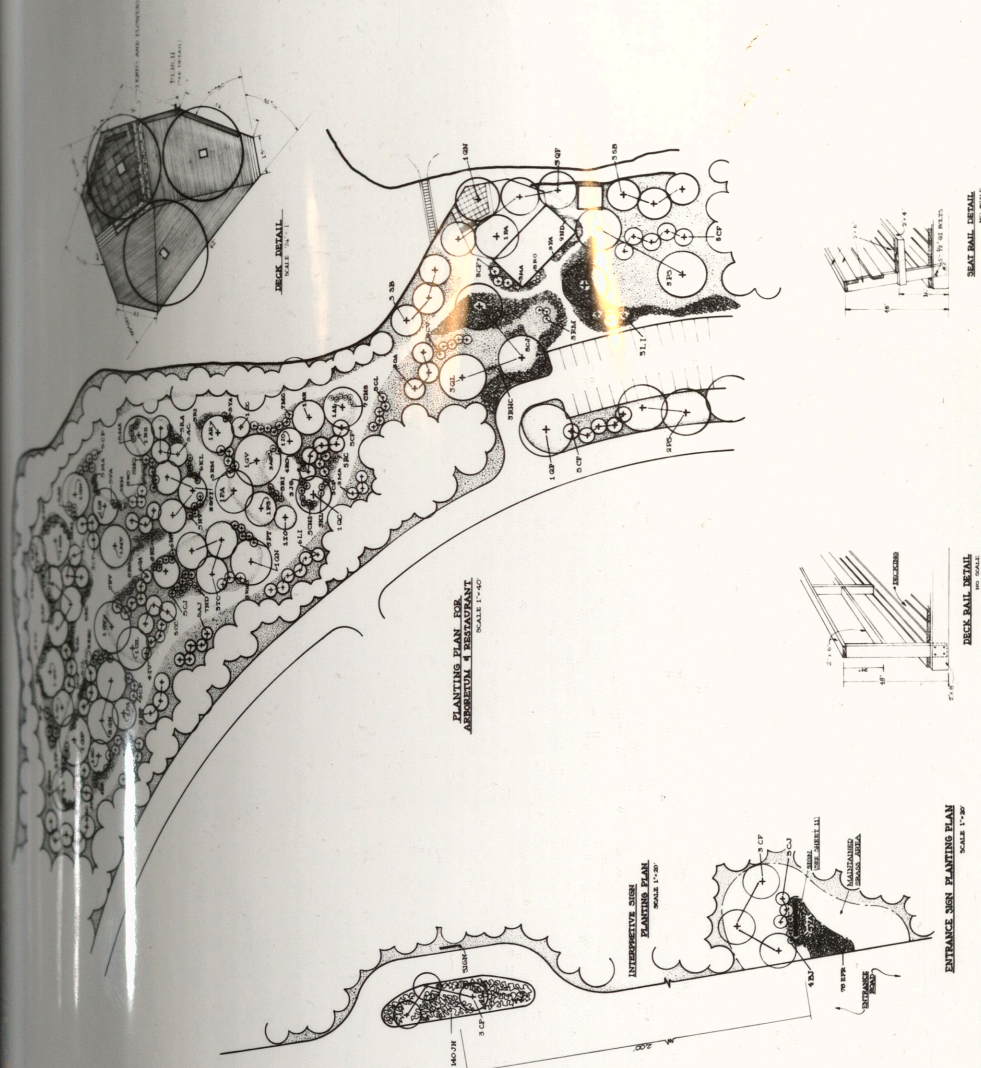
TWIN SHOALS LAKE DAY USE AREA	
CIVIL ENGINE PROBLEM	
UNIV. OF GEORGIA	
SECTION 1	SCALE 1" = 100'
DATE: JUNE 1, 1963	LAR 335
CHARLES M. HUDSON III	
MASTER PLAN	
REVISIONS	SHEET 8 OF 12

HARD LABOR CREEK STATE PARK MORGAN COUNTY, GEORGIA

RESTAURANT & ARBORETUM
DAY-USE AREA

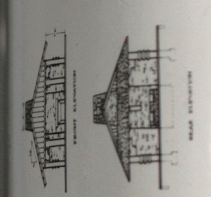
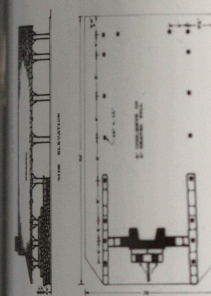
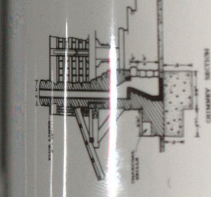
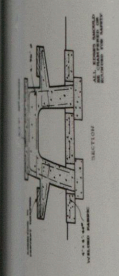
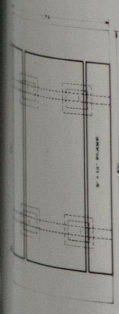
UNIVERSITY OF GEORGIA
LAP 111
DATE: JUNE 1, 1961

PLANTING PLAN
SHEET 1

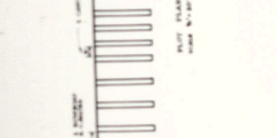
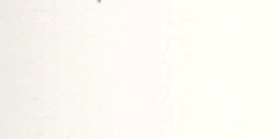
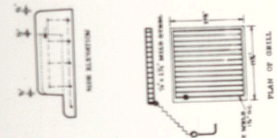
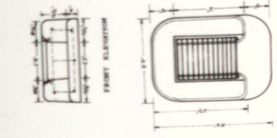
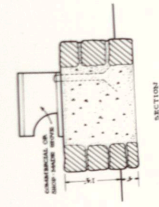
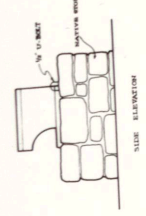
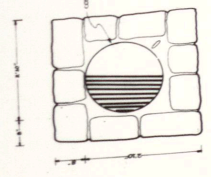


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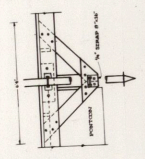
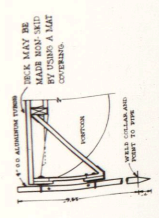
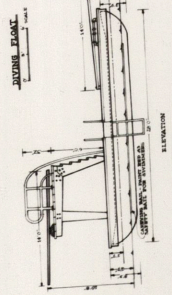
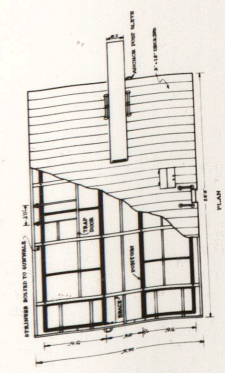
Notes: 1. All plants are to be planted in the ground.



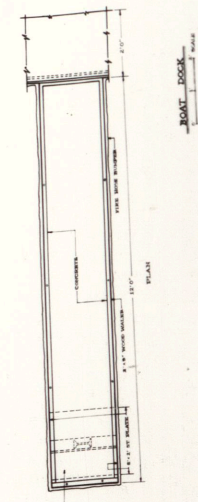
CONCRETE CURB



CONCRETE CURB



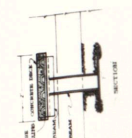
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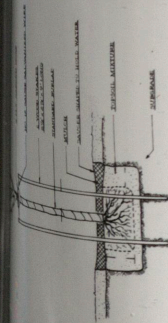
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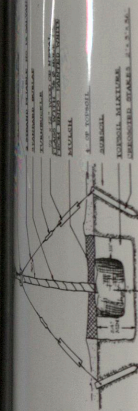
CONCRETE CURB



CONCRETE CURB



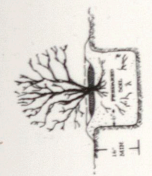
STUMP OF TREE (SECTION)
1/8" = 1'-0"



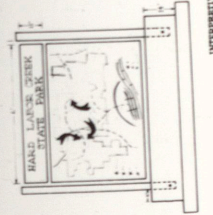
TREE STUMP OF TREE
1/8" = 1'-0"



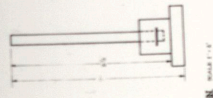
BALLED AND BURLAPED STUMP
1/8" = 1'-0"



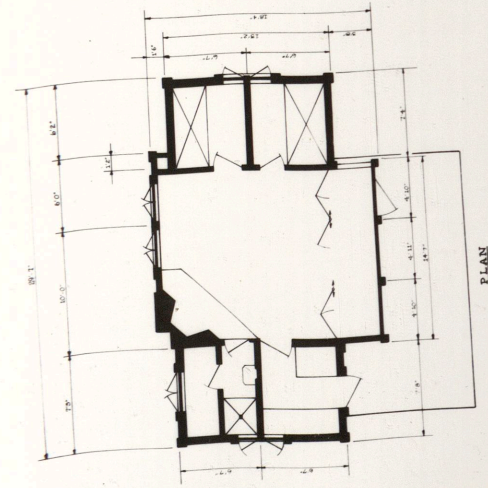
BARE ROOT STUMP
1/8" = 1'-0"



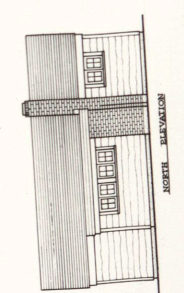
INTERPRETIVE SIGN
1/8" = 1'-0"



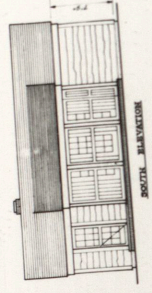
INTERPRETIVE SIGN
1/8" = 1'-0"



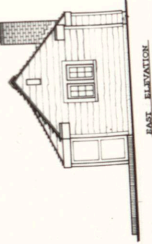
PLAN



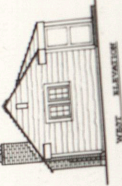
OVERNIGHT CABIN



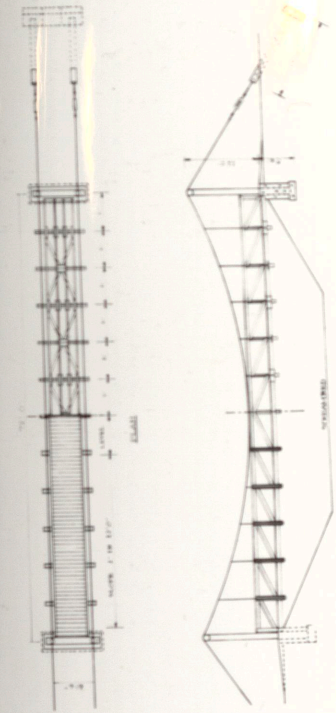
SOUTH ELEVATION



EAST ELEVATION

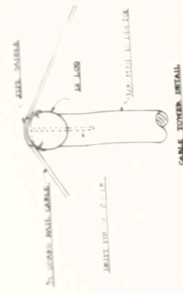


WEST ELEVATION

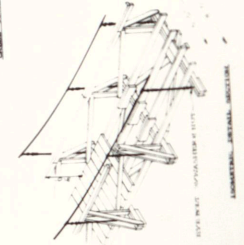


SUSPENSION FOOT BRIDGE

SUSPENSION FOOT BRIDGE



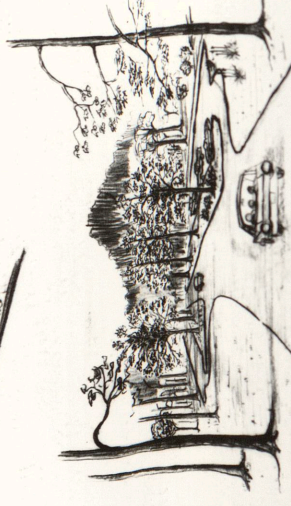
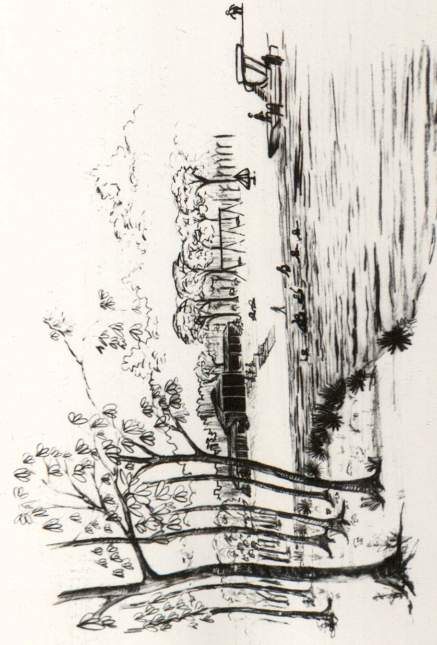
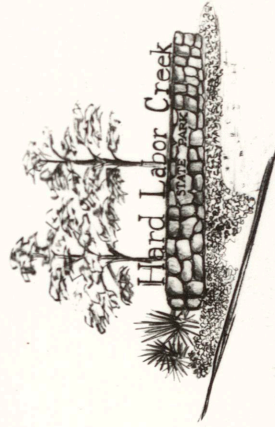
CABLE TOWER DETAIL



CABLE TOWER DETAIL

PARK FACILITIES			
STRUCTURAL PROJECT NO.	138	139	140
DATE OF PROJECT	1958	1958	1958
DATE OF DRAWING	1958	1958	1958
CONSTRUCTION DETAIL			
SHEET			11 OF 12

HARD LABOR CREEK STATE PARK
GEORGIA
MORGAN COUNTY.



HARD LABOR CREEK STATE PARK
MORGAN COUNTY, GEORGIA

PERSPECTIVE		SKETCHES	
DATE	12-10-12	BY	12-10-12
PROJECT	12-10-12	DATE	12-10-12
NO.	12-10-12	DATE	12-10-12
NO.	12-10-12	DATE	12-10-12
NO.	12-10-12	DATE	12-10-12