

WHITE RIVER WATERSHED

## BEAVER LAKE

WHITE RIVER, ARKANSAS

DESIGN MEMORANDUM NO. 13-4

# UPDATED MASTER PLAN FOR DEVELOPMENT AND MANAGEMENT OF BEAVER LAKE



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
LITTLE ROCK, ARKANSAS

JULY 1975

008

ARMY-LITTLE ROCK, ARK.

16 MAR 1999

MEMORANDUM THRU Chief, Operations Division

FOR Operations Manager, Beaver PO

SUBJECT: Beaver Lake, Updated Master Plan, Design Memorandum  
No. 13-4, Supplement No. 23

1. References:

a. Memorandum, CESWL-RE-N, 20 August 1998, subject: Monte  
Ne Lease Request - Beaver Lake.

b. Memorandum, CESWL-ET-WP, 24 February 1999, subject:  
Report of Availability (ROA) - Part B including EA and FONSI,  
Monte Ne Historic Area, Beaver Lake.

2. Supplement No. 23 to the subject master plan is approved.  
The action redesignates 6.0 acres of Beaver Lake from  
Recreation - Low Density Use to Recreation Intensive Use. The  
area is available for leasing to Benton County, Arkansas, and  
includes all lands indicated on the enclosed plate 5.

Encl

THOMAS A. HOLDEN JR  
Colonel, Corps of Engineers  
District Engineer

Copy Furnished (w/encl):

CECW-ON

CESWD-ETO-R

Chief, Real Estate Division

Chief, General Engineering Section

Chief, Hydrology & Hydraulics Branch

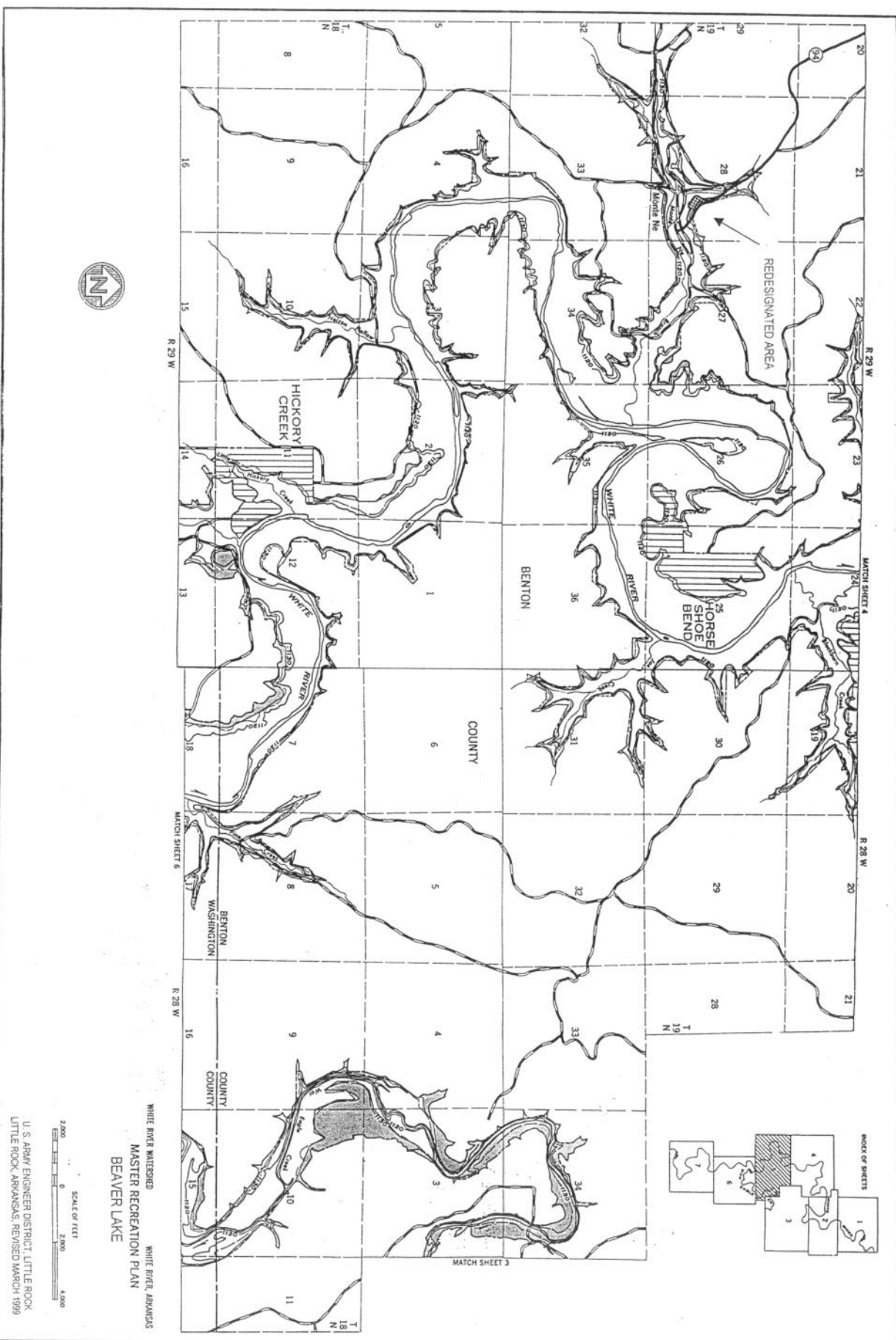
Chief, Environmental Analysis Branch

Chief, Geotechnical Branch

Beaver Lake Master Plan

Files

Log Book




CESWD-ETO-R (CESWL-CO-ON/30 Jul 96) (1130) 3d End  
Mr. McCauley/bet/7-2434  
SUBJECT: Beaver Lake, Updated Master Plan, D.M. No. 13-4,  
Supplement No. 22

CDR, U.S. Army Corps of Engineers, Southwestern Division, 1114  
Commerce St., Dallas, TX 75242-0216 08 NOV 1996

FOR Commander, Little Rock District, ATTN: CESWL-CO-ON

Approved.

2 Encls  
wd

  
PAUL D. ROBINSON, P.E.  
Director, Engineering and  
Technical Services Directorate



CESWL-CO-ON (CESWL-CO-ON/30 Jul 96) (1130) 2nd End Johnson/dr/5674  
SUBJECT: Beaver Lake, Updated Master Plan, D.M. No. 13-4,  
Supplement No. 22

CDR, U.S. Army Corps of Engineers, Little Rock District,  
P.O. Box 867, Little Rock, AR, 72203-0867 8 October 1996

FOR Commander, Southwestern Division, ATTN: CESWD-ETO-R

1. The reason for enlarging the leased area is to secure more water surface for commercial docks than now permitted and to open more water area for park user boat operation near the public boat launch ramp. Permitting the concessionaire more leased water area will provide an additional 300 linear feet of open water in the public park launch area. Possible use conflict between boaters and swimmers near the swim beach will be avoided by dispersing existing commercial docks. Although the proposed area is sizeable, it virtually cannot be planned for any other use. The delineated tract is within a park buffer and cannot be used for limited development under the shoreline management plan. However, the proposed area has been reduced from 20.40 to 11.17 acres and maps have been revised to reflect this change.

2. Docks indicated on the enclosed master plan sheet are primarily conceptual. They are actually positioned in the cove as shown on the enclosed photograph which was taken from north of the docks facing south. Note the existing conflict between the boat launch ramp and commercial docks. The previous reference to accessing the commercial lease area from outside the park area is withdrawn.

3. The proposed lease expansion is delineated on the master plan, but changes to land use maps will be performed later with your approval. We are changing our primary mapping medium to computer based from pen and ink. This process is slow in evolving and costly initially, but we feel that in-house labor savings are worth the delay in providing quality land use and master plan maps.

4. Approval of the revised proposal is recommended. My POC for this action is Jack Johnson, Natural Resources Management Section. He may be contacted by telephone at (501) 324-5674.

FOR THE COMMANDER:

2 Encls

*for Morris A. Leggett*

KEITH THONEN, P.E.  
Chief, Construction-Operations  
Division

Copy Furnished:  
Chief, Real Estate Division  
Ms. Karen Neisler, CESWL-RE-N

CESWD-ETO-R (CESWL-CO-ON/30 Jul 96) (1130) 1st End Mr. McCauley/  
jds/7-2434

SUBJECT: Beaver Lake, Updated Master Plan, D.M. No. 13-4,  
Supplement No. 22

CDR, U.S. Army Corps of Engineers, Southwestern Division,  
1114 Commerce Street, Dallas, TX 75242-0216 29 AUG 1996

FOR Commander, Little Rock District, ATTN: CESWL-CO-ON

The subject supplement is returned for additional information  
required by the following comments:

a. We are concerned that an excessive amount of shoreline  
and water is proposed for the lease expansion based on the  
concessionaires needs for future expansion. Historically, lease  
expansion areas have been limited to the amount of area actually  
required for immediate use. Please provide additional discussion  
and/or delineation to show proposed dock/mooring plans.

b. The proposed lease expansion area appears to encroach on  
the existing public launching ramp and beach area. The proposed  
dock plan furnished above should assure that proposed docks do  
not usurp public use of the shoreline or the cove. In this  
regard, it would appear that expansion should be limited to the  
west bank of the cove.

c. The proposed expansion requires reallocation of shoreline  
from "Recreation-Low Density Use" to "Recreation-Intensive Use".  
This should be delineated.

d. It is stated that access to a portion of the area is from  
outside the park. This access should be shown.

FOR THE COMMANDER:

Encl  
nc

  
PAUL D. ROBINSON, P.E.  
Director, Engineering and  
Technical Services Directorate



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

REPLY TO  
ATTENTION OF

CESWL-CO-ON (1130)

30 July 1996

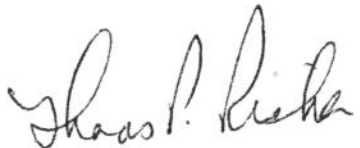
MEMORANDUM FOR Commander, Southwestern Division  
ATTN: CESWD-ETC-R

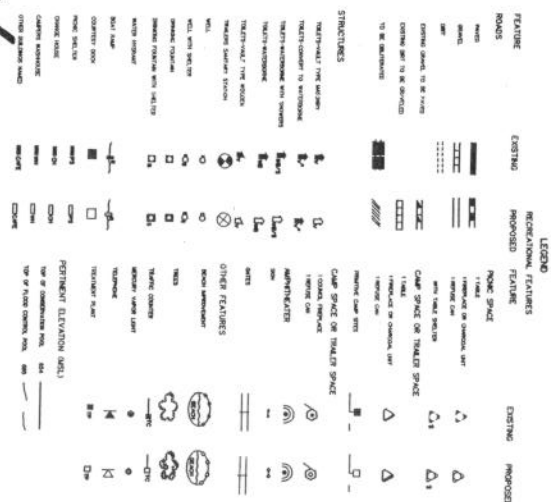
SUBJECT: Beaver Lake, Updated Master Plan, D. M. No. 13-4,  
Supplement No. 22

1. The purpose of this supplement is to designate a lease expansion area outside of War Eagle Park, as shown on the enclosed Plate 21. The concessionaire has requested permission to extend the existing lease boundary for future use. The requested area will permit the placement of additional commercial docks without conflicting with visitor shoreline uses. Access to a portion of the area is from outside the park and is contiguous to an existing commercial lease expansion area. A reallocation of 20.4 acres in two areas from operations, low intensity recreation to high intensity recreation is also requested.
2. War Eagle Park is designated as a class B+ park. The developed park consists of 26 camping units (18 reservable), restrooms and showers, boat launching ramp, swim beach, entrance complex, and sanitary dump station. Recreation visitor hours in FY 95 totaled 294,684 hours.
3. Approval of this master plan supplement is recommended.

FOR THE COMMANDER:

Encl (4 cys)

*for*   
KEITH THONEN, P.E.  
Chief, Construction-Operations  
Division



T. 16 N., R. 29 W., BENTON CO., ARK.

BEAVER LAKE  
WAR EAGLE  
PARK

RETRACTED MANUSCRIPT

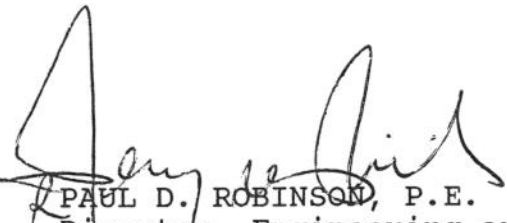
CESWD-ETO-R (CESWL-CO-ON/30 Jul 96) (1130) 1st End  
Mr. McCauley/jds/7-2434  
SUBJECT: Beaver Lake, Updated Master Plan, D.M. No. 13-4,  
Supplement No. 21

CDR, U.S. Army Corps of Engineers, Southwestern Division,  
1114 Commerce Street, Dallas, TX 75242-0216 9 AUG 1996

FOR Commander, Little Rock District, ATTN: CESWL-CO-ON

Approved.

Encl  
wd

  
PAUL D. ROBINSON, P.E.  
Director, Engineering and  
Technical Services Directorate



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

REPLY TO  
ATTENTION OF

CESWL-CO-ON (1130)

30 July 1996

MEMORANDUM FOR Commander, Southwestern Division  
ATTN: CESWD-ETC-R

SUBJECT: Beaver Lake, Updated Master Plan, D. M. No. 13-4,  
Supplement No. 21

1. The purpose of this supplement is to designate a lease expansion area outside of Rocky Branch Park, as shown on the enclosed Plate 16. The concessionaire has requested permission to extend the existing lease boundary for future use. The requested area will permit the placement of additional commercial docks without conflicting with visitor shoreline uses. Access to the area is from outside the park and from a parking area previously approved for lease expansion. A reallocation of 5.2 acres from operations, low intensity recreation to high intensity recreation is also requested.

2. Rocky Branch Park is designated as a B+ park. The developed park consists of 45 camping units (31 reservable), restrooms and showers, boat launching ramp, swim beach, and sanitary dump station. Recreation visitor hours in FY 95 totaled 738,797 hours.

3. Approval of this master plan supplement is recommended.

FOR THE COMMANDER:

Encl (4 cys)

*Keith Thonen*  
for KEITH THONEN, P.E.  
Chief, Construction-Operations  
Division





CESWD-CO-RP (CESWL-CO-L/7 Apr 92) 1st End Mr. McCauley/jw/7-2434  
SUBJECT: Beaver Lake, Master Plan, Supplement No. 20


DA, Southwestern Division, Corps of Engineers, 1114 Commerce  
Street, Dallas, Texas 75202

21 APR 1992  
FOR Commander, Little Rock District, ATTN: CESWL-CO-L

Approved.

FOR THE COMMANDER:

Encls  
wd

  
BARRY G. ROUGHT, P.E.  
Director, Directorate of  
Construction-Operations



C0



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

REPLY TO  
ATTENTION OF

CESWL-CO-L

7 April 1992

MEMORANDUM FOR Commander, Southwestern Division,  
ATTN: CESWD-OD-R

SUBJECT: Beaver Lake, Master Plan, Supplement No. 20

1. References:

a. Supplement No. 19 to the subject master plan dated 23 March 1990 and approval by CESWD-OD-R dated 5 April 1992.

b. Settlement Agreement dated 24 March 1992 between Robert R. Bauer and Joyce A. Bauer d/b/a Lost Bridge Marina and U.S. Army Corps of Engineers (encl 1).

2. On 24 March 1992 the Engineer Board of Contract Appeal began a hearing to settle a dispute between the parties listed in reference 1b. The dispute concerned a reduction in lease area, compensation for lost income due to major rehabilitation of recreation facilities in Lost Bridge Park, and increased construction costs for a proposed dry storage facility to be resited from the deleted lease area. Subject to the approval of Southwestern Division for revision of the subject master plan, an agreement was negotiated by the parties to increase the size of the proposed lease expansion area from the limits shown in Supplement No. 19 to that shown on the enclosed Plate 14 (encl 2). The agreement deletes a 0.9-acre tract from the lessee's lease area, defines the lease and future expansion areas, and provides for a reduction in rent for a 2-year period.

3. Increasing the size of the proposed lease expansion area will not impact future recreational development of Lost Bridge Park because the land is too steep. The land is, however, adequate for the proposed dry storage facility and service road.

4. Approval of this supplement implementing the referenced agreement is recommended.

FOR THE COMMANDER:

2 Encls (4 cys)

Ron

KEITH THONEN, P.E.  
Chief, Construction-Operations  
Division



CESWD-OD-R (CESWL-CO-L/23 Mar 90) (1130a) 1st End Mr. McCauley/  
pm/767-2434  
SUBJECT: Beaver Lake, Master Plan, Supplement No. 19

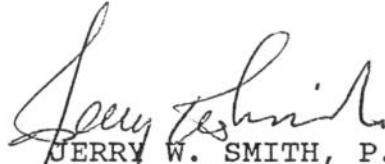
Commander, Southwestern Division, Corps of Engineers, 1114  
Commerce Street, Dallas, TX 75242-0216 5 APR 1990

FOR Commander, Little Rock District, ATTN: CESWL-CO-L

Approved.

FOR THE COMMANDER:

Encl  
wd

  
JERRY W. SMITH, P.E.  
Acting Chief  
Operations Division



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

CESWL-CO-L (1130)


23 March 1990

MEMORANDUM FOR Commander, Southwestern Division,  
ATTN: CESWD-OD-R

SUBJECT: Beaver Lake, Master Plan, Supplement No. 19

1. The purpose of this supplement is to modify the commercial concession lease at Lost Bridge Park by deleting 0.9 acre of existing leased area and adding 11 acres of lease expansion area. The area proposed for deletion includes three developed and highly used campsites, making the area unsuitable for commercial concession use. Short term use of the expansion area will be for individual buoy mooring of sailboats, houseboats, and other large watercraft. Long range plans include the addition of boat storage docks in the expansion area. When the demand warrants a permanent boat storage dock, the boat dock in Lease Area B will also be relocated to the lease expansion area. Lease Area B will then be recommended for deletion by a separate master plan supplement.
2. To prevent the commercial concession from totally occupying the cove, the expansion area will be limited to approximately one-half of the cove. This will leave adequate water area for fishermen in the remaining portion of the cove. Expansion of the lease area will not adversely impact future recreational development of the park because the adjacent land is too steep to be economically utilized.
3. Approval of this supplement is recommended.

Encl (4 cys)

  
CHARLES C. McCLOSKEY III  
Colonel, Corps of Engineers  
Commanding



CESWD-CO-RP (CESWL-CO-L/27 Sep 89) (1130a) 1st End Mr. McCauley/  
te/767-2434  
SUBJECT: Beaver Lake, Master Plan, Supplement No. 18

CDR, Southwestern Division, Corps of Engineers, 1114 Commerce Street,  
Dallas, TX 75242-0216 17 OCT 1989

FOR CDR, Little Rock District, ATTN: CESWL-CO-L

The subject supplement is approved subject to the following  
comment:

If any boat docks currently exist within the area presently  
zoned for private floating facilities, they should not be  
required to relocate their facility(ies).

FOR THE COMMANDER:

3 Encls  
wd all encls

CF (w/basic & encls):  
CECW-ON  
CESWD-PL-R  
CESWD-RE-M



GENE R. DRETKE, P.E.  
Acting Chief, Construction-  
Operations Division





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

CESWL-CO-L (1130)

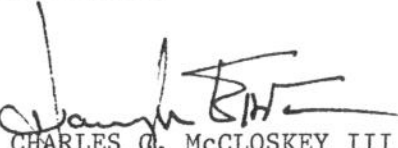
27 September 1989

MEMORANDUM FOR Commander, Southwestern Division, ATTN: CESWD-CO-R

SUBJECT: Beaver Lake, Master Plan, Supplement No. 18

1. This supplement proposes the reallocation of land within a 1/4 mile radius of the proposed water intake structure of the Madison County Water District. Reallocation will enable the Water District to satisfactorily assure compliance with land use restrictions imposed by the Arkansas Department of Health for acceptance of a raw water intake site. The restrictions imposed by the Arkansas Department of Health are outlined in a letter dated January 16, 1989, to the consulting engineer for the Water District, copy enclosed (Encl 1).
2. Reallocation of the land is from Operations: Recreation-Low Density Use and Natural Areas, to Project Operations: Water Supply Requirements as shown on the enclosed plate 5 (Encl 2). Also a 300' by 300' area in the northeast corner of Pine Top Future Park will be restricted to prevent intensive recreational development (See enclosed plate 24) (Encl 3). All of these lands will be available for appropriate day use activities such as hiking.
3. Water surface activities will be restricted within 300 feet of the proposed water supply intake. This restricted area will be marked by buoys installed and maintained by the Water District.
4. The lakeshore management plan will be revised by separate document to delete one area that is presently zoned to permit private floating facilities. No private floating facilities will be allowed within the 1/4 mile radius of the proposed water intake structure.
5. Approval of this supplement is recommended.

3 Encls (4 cys)

  
CHARLES Q. McCLOSKEY III  
Colonel, Corps of Engineers  
Commanding



BILL CLINTON  
GOVERNOR

## Arkansas DEPARTMENT OF HEALTH

4815 WEST MARKHAM STREET • LITTLE ROCK, ARKANSAS 72205  
TELEPHONE AC 501 661-2000

M. JOYCELYN ELDERS, M.D.  
DIRECTOR

January 16, 1989

Mr. Max Hall, P.E.  
Engineering Services, Inc.  
P.O. Box 282  
Springdale, Arkansas 72765

RE: Proposed Intake Site  
Madison County Water District  
88 E 932-1

Dear Mr. Hall:

The proposed intake locations for the Madison County project have been considered, and based on a site visit by Department personnel, the sites marked on the attached map appear suitable. However, our preference is for the westernmost site because of the probable better control of the immediate watershed.

The land-use agreement with the Corps should be similar to that for the Marion County project. All shoreline within a quarter-mile radius of the intake will need a 300-foot buffer. Use of this area will be limited to day use activities only, such as hiking. A 300-foot buoy line or markers will be necessary around the intake.

Outright ownership of the buffer beyond the Corps take line is the most desirable. Where this is not possible, easements from the property owners will be needed. Please advise as to your proposed action in this regard. We will require documentation of ownership or easements prior to approval of the site.

This project site will be located in a remote, rugged area. A good all-weather access road will be essential. An electrical power feed from two directions is preferred for the plant site. In lieu of a dual feed alternate power generation will be acceptable. Both of these necessities should be a part of your planning.

If you have questions or comments, we will be happy to discuss them with you. When submitting correspondence pertaining to this project, please include our reference number 88 E 932-1.

Sincerely,

Robert Hart, P.E., Chief Engineer  
Division of Engineering

RH:LG:JA:jp

enclosure

cc: Colonel Anthony Nida, U.S. Army Corps of Engineers, Little Rock (w/enc)  
Plan Review, Plumbing Section





NOTE: THIS AREA IS LOCATED IN SECTIONS 7 AND 18  
T. 19 N., R. 27 W., BENTON CO., ARK.

SCALE OF FEET

200 0 200 400

EXHIBIT TO SUPPLEMENT NO 18

PLATE 24



(ENCL. 2)

EXHIBIT TO SUPPLEMENT NO. 18 PLATE 5

CESWD-CO-R (CESWL-CO-L/8 Nov 88) (1130) 1st End King/te/7-2435  
SUBJECT: Beaver Lake, Master Plan Supplement No. 17


Commander, Southwestern Division, Corps of Engineers, 1114 Commerce  
Street, Dallas, Texas 75242-0216 23 DEC 1988

FOR: Commander, Little Rock District, ATTN: CESWL-CO-L

Approved.

FOR THE COMMANDER:

Encl wd

  
GENE R. DRETKE, P.E.  
Acting Chief, Construction-  
Operations Division

CF (w/basic & encls):  
CESW-ON  
CESWD-RE-M  
CESWD-PL-R



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

CESWL-CO-L (1130)

8 November 1988

MEMORANDUM FOR: Commander, Southwestern Division, ATTN: CESWD-CO-R

SUBJECT: Beaver Lake, Master Plan Supplement No. 17

1. PURPOSE. The purpose of this supplement is to revise site plans to show existing conditions, and changes that will increase fee collections, reflect current needs and provide for more efficient management activities. SRUF monies have increased to the point that updated plans are needed to insure wise investment. These plans will be used in preparing the SRUF program and rehabilitation efforts for the next several years.

2. JUSTIFICATION. Many sites need to be rehabilitated, sites relocated to areas of higher use, additional facilities provided, and separation of day use and camping facilities. Many of the sites are so unlevel that they create unsafe conditions when attempts are made to level trailers. Numerous turnouts were built for pickup campers and are too short to park trailer rigs; resulting in trailers parked partially in the circulation roads and the towing vehicle parked along the circulation roads. Several of the launch ramps lack adequate parking and are not only an inconvenience but also lead to hazardous parking conditions. The project has an overall high occupancy rate and relocation of facilities from low use areas to more preferred areas would yield an even higher rate of return.

3. DEMAND ANALYSIS. A typical Corps master plan demand analysis was made using the 1985 user survey and OBERS projections. The assumption is that as personal income increases, leisure time and discretionary funds increase and more time is spent at the lake. Historical visitation and total income in the zone of influence (ZOI) were plotted and a parallel relationship was found. The day use ZOI was defined as that zone from which 80 percent of the day use visitation originates. OBERS projections for the ZOI were applied to the personal income projections and the growth factor was then applied to experienced visitation to arrive at projected visitation. (note: OBERS projections are conservative. Projections made by the University of Arkansas show a 50 percent increase in growth over the OBERS projections.) The lake is located in Benton, Carroll and Washington counties. According to US Census data, two of these were in the top 20 percent growth counties in Arkansas from 1970-1980. Table 1 displays population, income and visitation.

CESWL-CO-L

SUBJECT: Beaver Lake, Master Plan Supplement No. 17

4. FEE COLLECTIONS. Fee collections have increased steadily over the past 10 years from \$121,000 in 1977 to \$315,300 in 1987.

5. FACILITY NEEDS. Facility needs are based on activity distribution which was taken from reported visitation, based on the 1985 user survey and facility standards contained in EM 1110-1-400. Table 2 displays activity participation rates and Table 3 displays the activity distribution by activity occasions. Table 4 displays the existing supply and the demand for facilities.

6. SITE CHANGES. See plates and cost estimates for site changes.

7. FUNDING PROGRAM. Funding will be divided among O&M, Code 710, and SRUF funds.

8. RECOMMENDATION. Approval of this supplement is recommended.

Encls (4 cys)



ANTHONY V. NIDA  
Colonel, Corps of Engineers  
Commanding

TABLE 1

# BEAVER LAKE VISITATION TRENDS

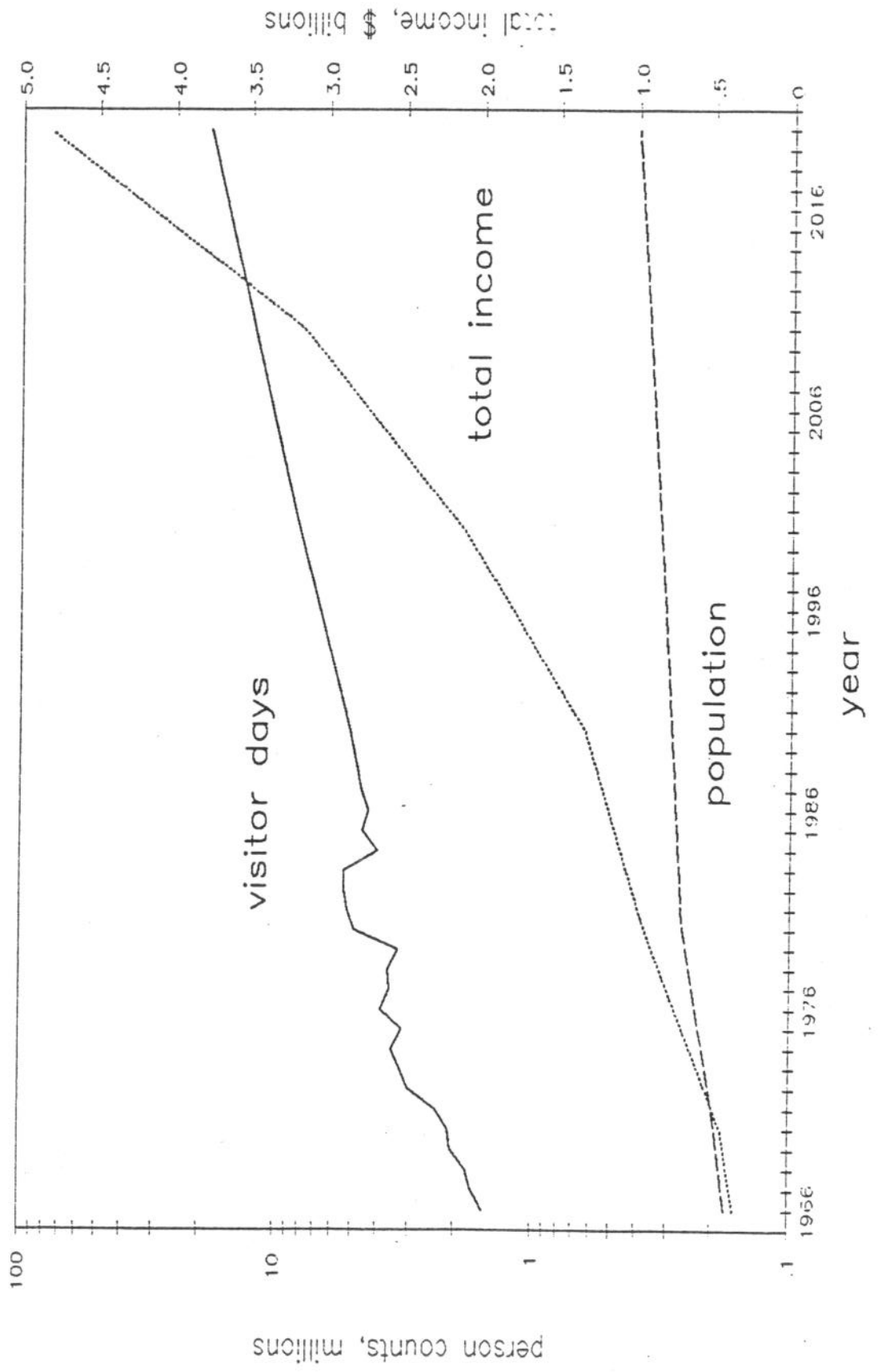


TABLE 2  
PARTICIPATION RATES

| Activity     | Average Summer<br>Weekend Day | Annual |
|--------------|-------------------------------|--------|
| Boating      | .18                           | .25    |
| Fishing      | .32                           | .47    |
| Water Skiing | .07                           | .08    |
| Swimming     | .41                           | .41    |
| Subtotal     | .98                           | 1.21   |
| Camping      | .19                           | .20    |
| Picnicking   | .25                           | .15    |
| Subtotal     | .44                           | .35    |
| Sightseeing  | .23                           | .39    |
| Total        | 1.65                          | 1.95   |

TABLE 3  
ACTIVITY OCCASIONS

| Activity     | Average Summer<br>Weekend Day | Annual  |
|--------------|-------------------------------|---------|
| Boating      | 7617                          | 355337  |
| Fishing      | 13681                         | 638211  |
| Water Skiing | 1057                          | 133144  |
| Swimming     | 17488                         | 815774  |
| Subtotal     | 39843                         | 1942466 |
| Camping      | 7974                          | 371981  |
| Picnicking   | 10426                         | 486348  |
| Subtotal     | 18400                         | 858329  |
| Sightseeing  | 9652                          | 450250  |
| Total        | 67895                         | 3251045 |

Source: 1987 Visitation Records

TABLE 4

FACILITIES REQUIRED TO SUPPORT THE ANTICIPATED  
AVERAGE SUMMER WEEKEND DAY USE OF BEAVER LAKE

| Facility                | 1988<br>Existing | 1980<br>Demand | 1990<br>Demand | 2000<br>Demand | 2010<br>Demand | 2020<br>Demand |
|-------------------------|------------------|----------------|----------------|----------------|----------------|----------------|
| Picnic Units            | 91               | 280            | 420            | 630            | 960            | 1450           |
| Camp Units              | 579              | 1230           | 1850           | 2780           | 4200           | 6340           |
| Change Shelters         | 6                | 10             | 14             | 22             | 32             | 49             |
| Restrooms               | 47               | 47             | 69             | 105            | 156            | 237            |
| Launching Ramps (Lanes) | 20               | 64             | 96             | 145            | 218            | 330            |
| Group Picnic Shelter    | 12               | 13             | 19             | 28             | 43             | 65             |



| DAM SITE                                       | UNIT COST |         | DEV. AREA A |        | DEV. AREA B |       | DEV. AREA C |         | DEV. AREA D |          | TOTALS |
|--|-----------|---------|-------------|--------|-------------|-------|-------------|---------|-------------|----------|--------|
|  | UNIT      | IN DOLL | QUANTIT     | COST   | QUANTIT     | COST  | QUANTITY    | COST    | QUANTIT     | COST     |        |
| A. CAMPING FACILITIES                          |           |         |             |        |             |       |             |         |             |          |        |
| 1) Rehab                                       | Each      | 1950    | 35          | 68250  | 0           | 0     | 0           | 0       | 0           | 0        | 68250  |
| 2) Relocate                                    | Each      | 1500    | 4           | 6000   | 0           | 0     | 0           | 0       | 0           | 0        | 6000   |
| 3) Convert to day use                          | Each      | 500     | 0           | 0      | 0           | 0     | 0           | 0       | 0           | 0        | 0      |
| 4) Additional sites                            | Each      | 6500    | 0           | 0      | 0           | 0     | 0           | 0       | 0           | 0        | 0      |
| B. DAY USE FACILITIES                          |           |         |             |        |             |       |             |         |             |          |        |
| 1) Beaches (Sand and water area)               | S.F.      | 2.75    | 0           | 0      | 0           | 0     | 0           | 0       | 0           | 0        | 0      |
| 2) Launch Ramp                                 | Lane      | 25000   | 0           | 0      | 0           | 0     | 0           | 0       | 0           | 0        | 0      |
| 3) Additional sites                            | Each      | 2650    | 0           | 0      | 10          | 26500 | 0           | 0       | 0           | 0        | 26500  |
| 4) Picnic Shelter (6-unit)                     | Each      | 20000   | 0           | 0      | 1           | 20000 | 1           | 20000   | 0           | 0        | 40000  |
| 5) Relocate picnic shelter                     | Each      | 5000    | 1           | 5000   | 0           | 0     | 0           | 0       | 0           | 0        | 5000   |
| C. ROADS AND PARKING                           |           |         |             |        |             |       |             |         |             |          |        |
| 1) Circulation roads (single and double lanes) | S.Y.      | 15      | 150         | 2250   | 0           | 0     | 0           | 0       | 0           | 0        | 2250   |
| 2) Deletion                                    | S.Y.      | 1.50    | 700         | 1050   | 0           | 0     | 0           | 0       | 0           | 0        | 1050   |
| 3) Turn-outs and pads                          | S.Y.      | 15      | 0           | 0      | 0           | 0     | 0           | 0       | 0           | 0        | 0      |
| 4) Additional parking                          | S.Y.      | 16      | 0           | 0      | 0           | 0     | 450         | 7200    | 0           | 0        | 7200   |
| D. BUILDINGS                                   |           |         |             |        |             |       |             |         |             |          |        |
| 1) Restrooms (Vault toilet-Masonry)            | Each      | 60000   | 0           | 0      | 0           | 0     | 0           | 0       | 2           | 120000   | 120000 |
| 2) Entrance stations (Minor entrance station)  | Each      | 75000   | 0           | 0      | 0           | 0     | 0           | 0       | 0           | 0        | 0      |
| E. OTHER                                       |           |         |             |        |             |       |             |         |             |          |        |
| 1) Signs                                       | Each      | 500     | 1           | 500    | 0           | 0     | 0           | 0       | 0           | 0        | 500    |
| 2) Landscaping                                 | Ac.       | 2150    | 1           | 2150   | 2           | 4300  | 1           | 2150    | 1           | 2150     | 10750  |
| Subtotal                                       |           |         |             | 85200  |             | 50800 |             | 29350   |             | 122150   | 287500 |
| Contingencies (15%)                            |           |         |             | 12780  |             | 7620  |             | 4402.50 |             | 18322.50 | 43125  |
| E & D (10%)                                    |           |         |             | 8520   |             | 5080  |             | 2935    |             | 12215    | 28750  |
| S & A (5%)                                     |           |         |             | 4260   |             | 2540  |             | 1467.50 |             | 6107.50  | 14375  |
| TOTAL  |           |         |             | 110760 |             | 66040 |             | 38155   |             | 158795   | 373750 |

| HICKORY CREEK                                     |      | UNIT  | UNIT COST  |          | DEV. AREA A |          | DEV. AREA B |          | DEV. AREA C |           | TOTALS |            |  |
|---|------|-------|------------|----------|-------------|----------|-------------|----------|-------------|-----------|--------|------------|--|
|   |      |       | IN DOLLARS | QUANTITY | COST        | QUANTITY | COST        | QUANTITY | COST        | QUANTITY  | COST   |            |  |
| A. CAMPING FACILITIES                             |      |       |            |          |             |          |             |          |             |           |        |            |  |
| 1) Rehab  | Each | 1950  |            | 0        | 0           | 5        | 9750        |          | 0           |           | 5      | 9,750.00   |  |
| 2) Relocate                                       | Each | 1500  |            | 0        | 0           | 0        | 0           |          | 0           |           | 0      | .00        |  |
| 3) Convert to day use                             | Each | 500   |            | 5        | 2500        | 0        | 0           |          | 0           |           | 5      | 2,500.00   |  |
| 4) Additional sites                               | Each | 6500  |            | 0        | 0           | 20       | 130000      |          | 10          | 65000     | 30     | 195,000.00 |  |
| B. DAY USE FACILITIES                             |      |       |            |          |             |          |             |          |             |           |        |            |  |
| 1) Beaches (Sand and water area)                  | S.F. | 2.75  |            | 0        | 0           | 0        | 0           |          | 0           |           | 0      | .00        |  |
| 2) Launch ramp                                    | Lane | 25000 |            | 1        | 25000       | 0        | 0           |          | 0           |           | 1      | 25,000.00  |  |
| 3) Additional sites                               | Each | 2650  |            | 15       | 39750       | 0        | 0           |          | 0           |           | 15     | 39,750.00  |  |
| C. ROADS AND PARKING                              |      |       |            |          |             |          |             |          |             |           |        |            |  |
| 1) Circulation roads (single and/or double lanes) | S.Y. | 15    |            | 0        | 0           | 0        | 0           |          | 0           |           | 0      | .00        |  |
| 2) Deletion                                       | S.Y. | 1.50  |            | 0        | 0           | 0        | 0           |          | 150         | 225       | 150    | 225.00     |  |
| 3) Turn-outs and pads                             | S.Y. | 15    |            | 0        | 0           | 0        | 0           |          | 0           |           | 0      | .00        |  |
| 4) Additional parking                             | S.Y. | 16    |            | 4500     | 72000       | 0        | 0           |          | 0           |           | 4500   | 72,000.00  |  |
| D. BUILDINGS                                      |      |       |            |          |             |          |             |          |             |           |        |            |  |
| 1) Restrooms (Vault toilet-Masonry)               | Each | 60000 |            | 0        | 0           | 0        | 0           |          | 0           |           | 0      | .00        |  |
| 2) Entrance stations (Minor entrance station)     | Each | 75000 |            | 0        | 0           | 1        | 75000       |          | 0           |           | 1      | 75,000.00  |  |
| 3) Trailer Sanitary Station                       | Each | 18000 |            | 0        | 0           | 1        | 18000       |          | 0           |           | 1      | 18,000.00  |  |
| 4) Remove entrance station                        | Each | 10000 |            | 0        | 0           | 0        | 0           |          | 1           | 10000     | 1      | 10,000.00  |  |
| E. OTHER  |      |       |            |          |             |          |             |          |             |           |        |            |  |
| 1) Signs  | Each | 500   |            | 0        | 0           | 2        | 1000        |          | 1           | 500       | 3      | 1,500.00   |  |
| 2) Landscaping                                    | Ac.  | 2150  |            | 2        | 4300        | 5        | 10750       |          | 1           | 2150      | 8      | 17,200.00  |  |
| Subtotal  |      |       |            |          | 143550      |          | 244500      |          |             | 77875     |        | 465,925.00 |  |
| Contingencies (15%)                               |      |       |            |          | 21532.50    |          | 36675       |          |             | 11681.25  |        | 69,889.00  |  |
| E & D (10%)                                       |      |       |            |          | 14355       |          | 24450       |          |             | 7787.50   |        | 46,593.00  |  |
| S & A (5%)  |      |       |            |          | 7177.50     |          | 1222.50     |          |             | 3893.75   |        | 2,330.00   |  |
| TOTAL   |      |       |            |          | 186615      |          | 306847.50   |          |             | 101237.50 |        | 584,737.00 |  |

| HORSESHOE BEND                                    |      | UNIT  | UNIT COST  |          | DEV. AREA A |          | DEV. AREA B |          | DEV. AREA C |          | TOTALS |  |
|---|------|-------|------------|----------|-------------|----------|-------------|----------|-------------|----------|--------|--|
|   |      |       | IN DOLLARS | QUANTITY | COST        | QUANTITY | COST        | QUANTITY | COST        | QUANTITY | COST   |  |
| A. CAMPING FACILITIES                             |      |       |            |          |             |          |             |          |             |          |        |  |
| 1) Rehab  | Each | 1950  | 36         | 70200    |             |          |             |          |             |          |        |  |
| 2) Relocate                                       | Each | 1500  | 0          | 0        | 68250       | 35       | 0           | 0        | 71          | 138450   |        |  |
| 3) Convert to day use                             | Each | 500   | 3          | 1500     | 3000        | 2        | 0           | 0        | 2           | 3000     |        |  |
| 4) Additional sites                               | Each | 6500  | 0          | 0        | 0           | 0        | 0           | 0        | 3           | 1500     |        |  |
| B. DAY USE FACILITIES                             |      |       |            |          |             |          |             |          |             |          |        |  |
| 1) Beaches (Sand and water area)                  | S.F. | 2.75  | 1000       | 2750     |             |          |             |          |             |          |        |  |
| 2) Launch Ramp                                    | Lane | 25000 | 1          | 25000    | 0           | 0        | 0           | 0        | 1000        | 2750     |        |  |
| 3) Additional sites                               | Each | 2650  | 5          | 13250    | 0           | 0        | 0           | 0        | 1           | 25000    |        |  |
| 4) Picnic Shelter (6-unit)                        | Each | 20000 | 1          | 20000    | 0           | 0        | 0           | 0        | 5           | 13250    |        |  |
| C. ROADS AND PARKING                              |      |       |            |          |             |          |             |          |             |          |        |  |
| 1) Circulation roads (single and/or double lanes) | S.Y. | 15    | 1950       | 29250    | 4500        | 300      | 0           | 0        | 2250        | 33750    |        |  |
| 2) Deletion                                       | S.Y. | 1.50  | 200        | 300      | 0           | 0        | 0           | 0        | 200         | 300      |        |  |
| 3) Turn-outs and pads                             | S.Y. | 15    | 0          | 0        | 0           | 0        | 0           | 0        | 0           | 0        |        |  |
| 4) Additional parking                             | S.Y. | 16    | 1260       | 20160    | 0           | 0        | 100         | 1600     | 1360        | 21760    |        |  |
| D. BUILDINGS                                      |      |       |            |          |             |          |             |          |             |          |        |  |
| 1) Restrooms (Vault toilet-Masonry)               | Each | 60000 | 0          | 0        | 60000       | 1        | 60000       | 1        | 2           | 120000   |        |  |
| 2) Entrance stations (Minor entrance station)     | Each | 75000 | 0          | 0        | 0           | 0        | 0           | 0        | 0           | 0        |        |  |
| E. OTHER  |      |       |            |          |             |          |             |          |             |          |        |  |
| 1) Signs  | Each | 500   | 2          | 1000     | 1000        | 2        | 0           | 0        | 4           | 2000     |        |  |
| 2) Landscaping                                    | Ac.  | 2150  | 5          | 10750    | 6450        | 3        | 2150        | 1        | 9           | 19350    |        |  |
| F. WATER SYSTEM                                   |      |       |            |          |             |          |             |          |             |          |        |  |
| 1) Water Well                                     | VLF  | 60    | 0          | 0        | 0           | 0        | 0           | 0        | 0           | 0        |        |  |
| 2) Hand Pump                                      | Each | 500   | 0          | 0        | 0           | 0        | 0           | 0        | 0           | 0        |        |  |
| 3) Electric Pump (5HP Submersible)                | Each | 6250  | 0          | 0        | 0           | 0        | 0           | 0        | 0           | 0        |        |  |
| 4) Water Line (2")                                | FT   | 6.17  | 0          | 0        | 0           | 0        | 0           | 0        | 0           | 0        |        |  |
| Subtotal  |      |       |            |          |             |          |             |          |             |          |        |  |
| Contingencies (15%)                               |      |       | 0          | 194160   | 143200      | 0        | 63750       | 0        | 0           | 401110   |        |  |
| E & D (10%)                                       |      |       | 0          | 29124    | 21480       | 0        | 9562.50     | 0        | 0           | 60166.50 |        |  |
| S & A (5%)  |      |       | 0          | 19416    | 14320       | 0        | 6375        | 0        | 0           | 40111    |        |  |
| TOTAL   |      |       | 0          | 9708     | 7160        | 0        | 3187.50     | 0        | 0           | 20055.50 |        |  |
|   |      |       |            | 252408   | 186160      |          | 82875       |          |             | 521443   |        |  |

| Indian Creek                                      | UNIT | UNIT COST<br>IN DOLLARS | DEV. AREA A |       | DEV. AREA B |       | DEV. AREA C |      | TOTALS |       |
|---|------|-------------------------|-------------|-------|-------------|-------|-------------|------|--------|-------|
|   |      |                         | QUANTITY    | COST  | QUANTITY    | COST  | QUANTITY    | COST |        |       |
| A. CAMPING FACILITIES                             |      |                         |             |       |             |       |             |      |        |       |
| 1) Rehab  | Each | 1950                    | 10          | 19500 | 5           | 9750  | 0           | 0    | 15     | 29250 |
| 2) Relocate                                       | Each | 1500                    | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| 3) Convert to day use                             | Each | 500                     | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| 4) Additional sites                               | Each | 6500                    | 0           | 0     | 2           | 13000 | 0           | 0    | 2      | 13000 |
| B. DAY USE FACILITIES                             |      |                         |             |       |             |       |             |      |        |       |
| 1) Beaches (Sand and water area)                  | S.F. | 2.75                    | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| 2) Launch ramp                                    | Lane | 25000                   | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| 3) Additional sites                               | Each | 2650                    | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| C. ROADS AND PARKING                              |      |                         |             |       |             |       |             |      |        |       |
| 1) Circulation roads (single and/or double lanes) | S.Y. | 15                      | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| 2) Deletion                                       | S.Y. | 1.50                    | 200         | 300   | 0           | 0     | 0           | 0    | 200    | 300   |
| 3) Turn-outs and pads                             | S.Y. | 15                      | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| 4) Additional parking                             | S.Y. | 16                      | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| D. BUILDINGS                                      |      |                         |             |       |             |       |             |      |        |       |
| 1) Restrooms (Vault toilet-Masonry)               | Each | 60000                   | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| 2) Entrance stations (Minor entrance station)     | Each | 75000                   | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| E. OTHER  |      |                         |             |       |             |       |             |      |        |       |
| 1) Signs  | Each | 500                     | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| 2) Landscaping                                    | Ac.  | 2150                    | 2           | 4300  | 1           | 2150  | 0           | 0    | 3      | 6450  |
| 3) Gates  | Each | 750                     | 0           | 0     | 0           | 0     | 0           | 0    | 0      | 0     |
| Subtotal  |      |                         |             |       |             |       |             |      |        |       |
|   |      |                         |             | 24100 |             | 24900 |             | 0    |        | 49000 |
| Contingencies (15%)                               |      |                         |             | 3615  |             | 3735  |             | 0    |        | 7350  |
| E & D (10%)                                       |      |                         |             | 2410  |             | 2490  |             | 0    |        | 4900  |
| S & A (5%)  |      |                         |             | 1205  |             | 1245  |             | 0    |        | 2450  |
| TOTAL   |      |                         |             | 31330 |             | 32370 |             | 0    |        | 63700 |

| LOST BRIDGE                                       |      | UNIT  | UNIT COST<br>IN DOLLARS | DEV. AREA A |      | DEV. AREA B |      | DEV. AREA C |      | TOTALS   |
|---|------|-------|-------------------------|-------------|------|-------------|------|-------------|------|----------|
|   |      |       |                         | QUANTITY    | COST | QUANTITY    | COST | QUANTITY    | COST |          |
| A. CAMPING FACILITIES                             |      |       |                         |             |      |             |      |             |      |          |
| 1) Rehab  | Each | 1950  | 36                      | 70200       |      |             |      |             |      |          |
| 2) Relocate                                       | Each | 1500  | 4                       | 6000        | 3    | 5850        | 10   | 19500       | 49   | 95550    |
| 3) Convert to day use                             | Each | 500   | 6                       | 3000        | 0    | 0           | 0    | 0           | 4    | 6000     |
| 4) Additional sites                               | Each | 6500  | 24                      | 156000      | 0    | 0           | 0    | 0           | 6    | 3000     |
|   |      |       |                         |             |      |             |      |             | 24   | 156000   |
| B. DAY USE FACILITIES                             |      |       |                         |             |      |             |      |             |      |          |
| 1) Beaches (Sand and water area)                  | S.F. | 2.75  | 0                       | 0           | 0    | 0           | 0    | 0           | 0    | 0        |
| 2) Launch ramp                                    | Lane | 25000 | 0                       | 0           | 0    | 0           | 0    | 0           | 0    | 0        |
| 3) Additional sites                               | Each | 2650  | 0                       | 0           | 0    | 0           | 0    | 0           | 0    | 0        |
| 4) Relocate picnic shelter                        | Each | 5000  | 1                       | 5000        | 0    | 0           | 0    | 0           | 0    | 5000     |
| C. ROADS AND PARKING                              |      |       |                         |             |      |             |      |             |      |          |
| 1) Circulation roads (single and/or double lanes) | S.Y. | 15    | 1000                    | 15000       | 0    | 0           | 0    | 0           | 1000 | 15000    |
| 2) Deletion                                       | S.Y. | 1.50  | 800                     | 1200        | 0    | 0           | 0    | 0           | 800  | 1200     |
| 3) Turn-outs and pads                             | S.Y. | 15    | 0                       | 0           | 0    | 0           | 0    | 0           | 0    | 0        |
| 4) Additional parking                             | S.Y. | 16    | 340                     | 5440        | 0    | 0           | 0    | 0           | 340  | 5440     |
| D. BUILDINGS                                      |      |       |                         |             |      |             |      |             |      |          |
| 1) Restrooms (Vault toilet-Masonry)               | Each | 60000 | 1                       | 60000       | 0    | 0           | 0    | 0           | 1    | 60000    |
| 2) Entrance stations (Minor entrance station)     | Each | 75000 | 0                       | 0           | 0    | 0           | 0    | 0           | 0    | 0        |
| E. OTHER  |      |       |                         |             |      |             |      |             |      |          |
| 1) Signs  | Each | 500   | 2                       | 1000        | 0    | 0           | 0    | 0           | 2    | 1000     |
| 2) Landscaping                                    | Ac.  | 2150  | 5                       | 10750       | 1    | 2150        | 1    | 2150        | 7    | 15050    |
| 3) Gates  | Each | 750   | 1                       | 750         | 0    | 0           | 0    | 0           | 1    | 750      |
| Subtotal  |      |       |                         | 334340      |      | 8000        |      | 21650       |      | 363990   |
| Contingencies (15%)                               |      |       |                         | 50151       |      | 1200        |      | 3247.50     |      | 54598.50 |
| E & D (10%)                                       |      |       |                         | 33434       |      | 800         |      | 2165        |      | 36399    |
| S & A (5%)  |      |       |                         | 16717       |      | 400         |      | 1082.50     |      | 18199.50 |
| TOTAL   |      |       |                         | 434642      |      | 10400       |      | 28145       |      | 473187   |

| Rocky Branch                                      | UNIT COST |            | DEV. AREA A |       | DEV. AREA B |         | DEV. AREA C |      | TOTALS   |          |
|---|-----------|------------|-------------|-------|-------------|---------|-------------|------|----------|----------|
|   | UNIT      | IN DOLLARS | QUANTITY    | COST  | QUANTITY    | COST    | QUANTITY    | COST | QUANTITY | COST     |
| A. CAMPING FACILITIES                             |           |            |             |       |             |         |             |      |          |          |
| 1) Rehab  | Each      | 1950       | 30          | 58500 |             |         |             |      |          |          |
| 2) Relocate                                       | Each      | 1500       | 0           | 0     | 0           | 0       | 0           | 0    | 30       | 58500    |
| 3) Convert to day use                             | Each      | 500        | 0           | 0     | 3           | 1500    | 0           | 0    | 3        | 1500     |
| 4) Additional sites                               | Each      | 6500       | 0           | 0     | 0           | 0       | 0           | 0    | 0        | 0        |
| B. DAY USE FACILITIES                             |           |            |             |       |             |         |             |      |          |          |
| 1) Beaches (Sand and water area)                  | S.F.      | 2.75       | 0           | 0     | 0           | 0       | 0           | 0    | 0        | 0        |
| 2) Launch ramp                                    | Lane      | 25000      | 0           | 0     | 0           | 0       | 0           | 0    | 0        | 0        |
| 3) Additional sites                               | Each      | 2650       | 0           | 0     | 5           | 13250   | 0           | 0    | 5        | 13250    |
| C. ROADS AND PARKING                              |           |            |             |       |             |         |             |      |          |          |
| 1) Circulation roads (single and/or double lanes) | S.Y.      | 15         | 200         | 3000  | 50          | 750     | 0           | 0    | 250      | 3750     |
| 2) Deletion                                       | S.Y.      | 1.50       | 200         | 300   | 0           | 0       | 0           | 0    | 200      | 300      |
| 3) Turn-outs and pads                             | S.Y.      | 15         | 0           | 0     | 0           | 0       | 0           | 0    | 0        | 0        |
| 4) Additional parking                             | S.Y.      | 16         | 300         | 4800  | 300         | 4800    | 0           | 0    | 600      | 9600     |
| D. BUILDINGS                                      |           |            |             |       |             |         |             |      |          |          |
| 1) Restrooms (Vault toilet-Masonry)               | Each      | 60000      | 0           | 0     | 0           | 0       | 0           | 0    | 0        | 0        |
| 2) Entrance stations (Minor entrance station)     | Each      | 75000      | 0           | 0     | 0           | 0       | 0           | 0    | 0        | 0        |
| E. OTHER  |           |            |             |       |             |         |             |      |          |          |
| 1) Signs  | Each      | 500        | 0           | 0     | 0           | 0       | 0           | 0    | 0        | 0        |
| 2) Landscaping                                    | Ac.       | 2150       | 2           | 4300  | 1           | 2150    | 0           | 0    | 3        | 6450     |
| 3) Gates  | Each      | 750        | 0           | 0     | 2           | 1500    | 0           | 0    |          |          |
| Subtotal  |           |            |             | 70900 |             | 23950   |             | 0    |          | 94850    |
| Contingencies (15%)                               |           |            |             | 10635 |             | 3592.50 |             | 0    |          | 14227.50 |
| E & D (10%)                                       |           |            |             | 7090  |             | 2395    |             | 0    |          | 9485     |
| S & A (5%)  |           |            |             | 3545  |             | 1197.50 |             | 0    |          | 4742.50  |
| TOTAL   |           |            |             | 92170 |             | 31135   |             | 0    |          | 123305   |

| Rocky Branch                                      | UNIT | UNIT COST<br>IN DOLLARS | DEV. AREA A |        | DEV. AREA B |         | DEV. AREA C |      | TOTALS   |          |
|---|------|-------------------------|-------------|--------|-------------|---------|-------------|------|----------|----------|
|   |      |                         | QUANTITY    | COST   | QUANTITY    | COST    | QUANTITY    | COST | QUANTITY | COST     |
| A. CAMPING FACILITIES                             |      |                         |             |        |             |         |             |      |          |          |
| 1) Rehab  | Each | 1950                    | 30          | 58500  |             |         |             |      |          |          |
| 2) Relocate                                       | Each | 1500                    | 0           | 0      | 0           | 0       | 0           | 0    | 30       | 58500    |
| 3) Convert to day use                             | Each | 500                     | 0           | 0      |             | 1500    | 0           | 0    | 0        | 0        |
| 4) Additional sites                               | Each | 6500                    | 0           | 0      | 3           |         | 0           | 0    | 3        | 1500     |
|   |      |                         |             |        | 0           | 0       |             | 0    | 0        | 0        |
| B. DAY USE FACILITIES                             |      |                         |             |        |             |         |             |      |          |          |
| 1) Beaches (Sand and water area)                  | S.F. | 2.75                    | 0           | 0      | 0           | 0       | 0           | 0    | 0        | 0        |
| 2) Launch ramp                                    | Lane | 25000                   | 0           | 0      | 0           | 0       | 0           | 0    | 0        | 0        |
| 3) Additional sites                               | Each | 2650                    | 0           | 0      | 5           | 13250   | 0           | 0    | 5        | 13250    |
| C. ROADS AND PARKING                              |      |                         |             |        |             |         |             |      |          |          |
| 1) Circulation roads (single and/or double lanes) | S.Y. | 15                      | 200         | 3000   | 50          | 750     | 0           | 0    | 250      | 3750     |
| 2) Deletion                                       | S.Y. | 1.50                    | 200         | 300    | 0           | 0       | 0           | 0    | 200      | 300      |
| 3) Turn-outs and pads                             | S.Y. | 15                      | 0           | 0      | 0           | 0       | 0           | 0    | 0        | 0        |
| 4) Additional parking                             | S.Y. | 16                      | 1300        | 20800  | 300         | 4800    | 0           | 0    | 1600     | 25600    |
| D. BUILDINGS                                      |      |                         |             |        |             |         |             |      |          |          |
| 1) Restrooms (Vault toilet-Masonry)               | Each | 60000                   | 0           | 0      | 0           | 0       | 0           | 0    | 0        | 0        |
| 2) Entrance stations (Minor entrance station)     | Each | 75000                   | 0           | 0      | 0           | 0       | 0           | 0    | 0        | 0        |
| E. OTHER  |      |                         |             |        |             |         |             |      |          |          |
| 1) Signs  | Each | 500                     | 0           | 0      | 0           | 0       | 0           | 0    | 0        | 0        |
| 2) Landscaping                                    | Ac.  | 2150                    | 2           | 4300   | 1           | 2150    | 0           | 0    | 3        | 6450     |
| 3) Gates  | Each | 750                     | 0           | 0      | 2           | 1500    | 0           | 0    |          |          |
| Subtotal  |      |                         |             | 86900  |             | 23950   |             | 0    |          | 110850   |
| Contingencies (15%)                               |      |                         |             | 13035  |             | 3592.50 |             | 0    |          | 16627.50 |
| E & D (10%)                                       |      |                         |             | 8690   |             | 2395    |             | 0    |          | 11085    |
| S & A (5%)  |      |                         |             | 4345   |             | 1197.50 |             | 0    |          | 5542.50  |
| TOTAL   |      |                         |             | 112970 |             | 31135   |             | 0    |          | 144105   |

Oct 17,

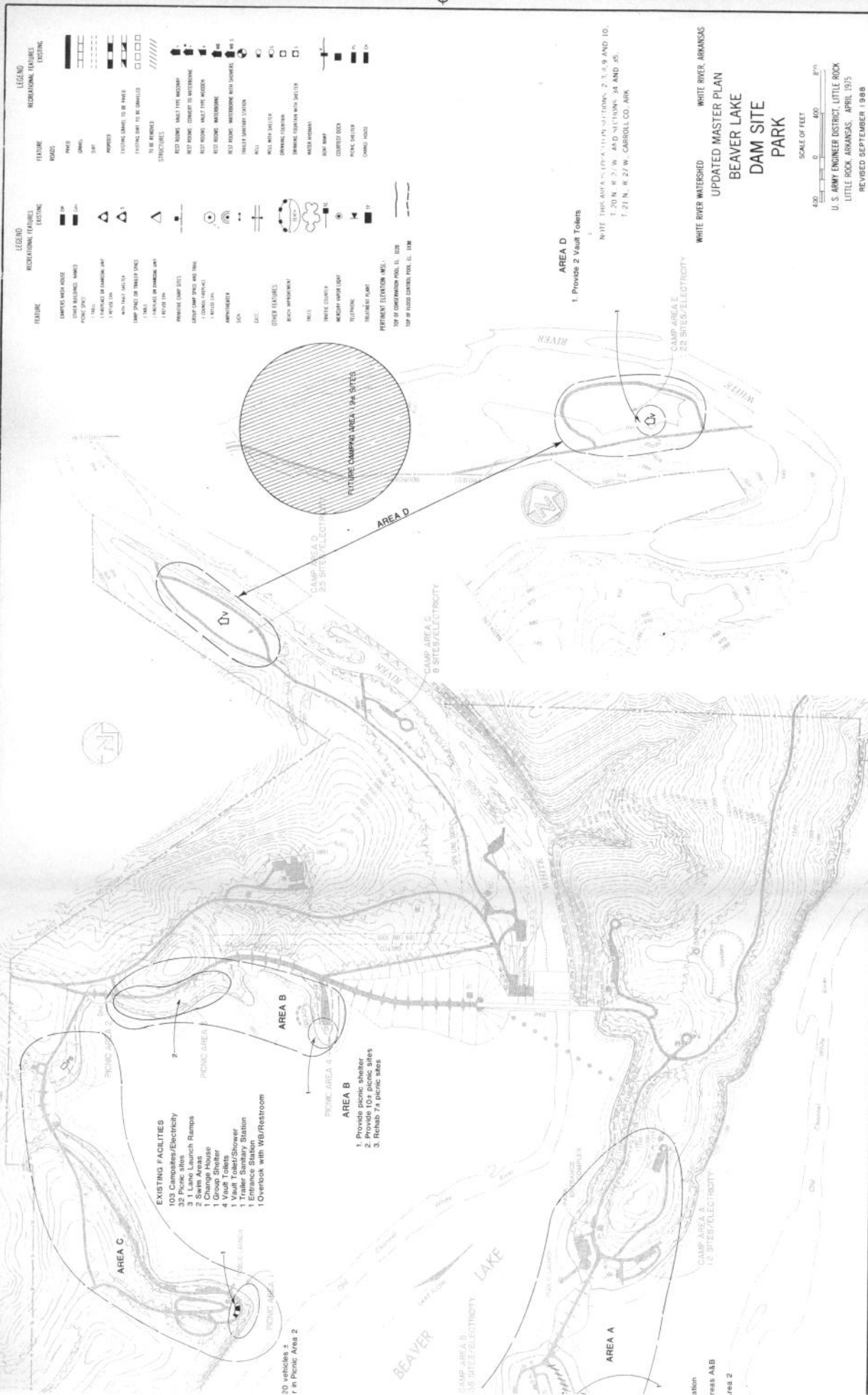
| Prairie Creek                                     | UNIT | UNIT COST<br>IN DOLLARS | DEV. AREA A |      | DEV. AREA B |          | DEV. AREA C |       | TOTALS   |          |   |
|---|------|-------------------------|-------------|------|-------------|----------|-------------|-------|----------|----------|---|
|   |      |                         | QUANTITY    | COST | QUANTITY    | COST     | QUANTITY    | COST  | QUANTITY | COST     |   |
| A. CAMPING FACILITIES                             |      |                         |             |      |             |          |             |       |          |          |   |
| 1) Rehab  | Each | 1950                    |             |      |             |          |             |       |          |          |   |
| 2) Relocate                                       | Each | 1500                    | 0           | 0    | 42          | 81900    | 0           | 0     | 42       | 81900    |   |
| 3) Convert to day use                             | Each | 500                     | 0           | 0    | 10          | 15000    | 0           | 0     | 10       | 15000    |   |
| 4) Additional sites                               | Each | 6500                    | 0           | 0    | 10          | 5000     | 0           | 0     | 10       | 5000     |   |
|   | Each |                         | 0           | 0    | 0           | 0        | 0           | 0     | 0        | 0        | 0 |
| B. DAY USE FACILITIES                             |      |                         |             |      |             |          |             |       |          |          |   |
| 1) Beaches (Sand and water area)                  | S.F. | 2.75                    | 0           | 0    | 0           | 0        | 0           | 0     | 0        | 0        | 0 |
| 2) Launch ramp                                    | Lane | 25000                   | 0           | 0    | 0           | 0        | 0           | 0     | 0        | 0        | 0 |
| 3) Additional sites                               | Each | 2650                    | 0           | 0    | 0           | 0        | 3           | 7950  | 3        | 7950     |   |
| 3) Picnic Shelter (6-Unit)                        | Each | 20000                   | 0           | 0    | 0           | 0        | 1           | 20000 | 1        | 20000    |   |
| C. ROADS AND PARKING                              |      |                         |             |      |             |          |             |       |          |          |   |
| 1) Circulation roads (single and/or double lanes) | S.Y. | 15                      | 100         | 1500 | 600         | 9000     | 0           | 0     | 700      | 10500    |   |
| 2) Deletion                                       | S.Y. | 1.50                    | 0           | 0    | 700         | 1050     | 200         | 300   | 900      | 1350     |   |
| 3) Turn-outs and pads                             | S.Y. | 15                      | 0           | 0    | 0           | 0        | 0           | 0     | 0        | 0        | 0 |
| 4) Additional parking                             | S.Y. | 16                      | 0           | 0    | 0           | 0        | 1740        | 27840 | 1740     | 27840    |   |
| D. BUILDINGS                                      |      |                         |             |      |             |          |             |       |          |          |   |
| 1) Restrooms (Vault toilet-Masonry)               | Each | 60000                   | 0           | 0    | 0           | 0        | 0           | 0     | 0        | 0        | 0 |
| 2) Entrance stations (Minor entrance station)     | Each | 75000                   | 0           | 0    | 0           | 0        | 0           | 0     | 0        | 0        | 0 |
| E. OTHER  |      |                         |             |      |             |          |             |       |          |          |   |
| 1) Signs  | Each | 500                     | 0           | 0    | 0           | 0        | 0           | 0     | 0        | 0        | 0 |
| 2) Landscaping                                    | Ac.  | 2150                    | 0           | 0    | 2           | 4300     | 1           | 2150  | 3        | 6450     |   |
| 3) Gates  | Each | 170                     | 2           | 340  | 2           | 680      | 0           | 0     | 4        | 1020     |   |
| Subtotal  |      |                         |             | 1840 |             | 116930   |             | 58240 |          | 177010   |   |
| Contingencies (15%)                               |      |                         |             | 276  |             | 17539.50 |             | 8736  |          | 26551.50 |   |
| E & D (10%)                                       |      |                         |             | 184  |             | 11693    |             | 5824  |          | 17701    |   |
| S & A (5%)  |      |                         |             | 92   |             | 5846.50  |             | 2912  |          | 8850.50  |   |
| TOTAL   |      |                         |             | 2392 |             | 152009   |             | 75712 |          | 230113   |   |



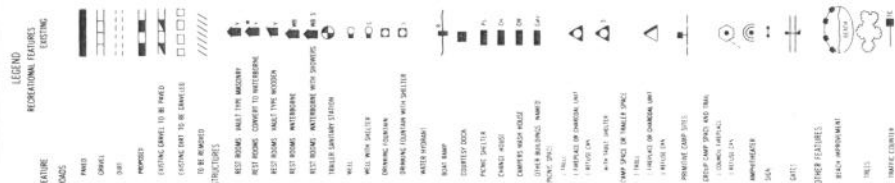
| STARKEY PARK                                      | UNIT | UNIT COST<br>IN DOLLARS | DEV. AREA A |       | DEV. AREA B |      | DEV. AREA C |      | TOTALS   |       |
|---|------|-------------------------|-------------|-------|-------------|------|-------------|------|----------|-------|
|   |      |                         | QUANTITY    | COST  | QUANTITY    | COST | QUANTITY    | COST | QUANTITY | COST  |
| A. CAMPING FACILITIES                             |      |                         |             |       |             |      |             |      |          |       |
| 1) Rehab  | Each | 1950                    | 7           | 13650 | 0           | 0    | 0           | 0    | 7        | 13650 |
| 2) Relocate                                       | Each | 1500                    | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 3) Convert to day use                             | Each | 500                     | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 4) Additional sites                               | Each | 6500                    | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| B. DAY USE FACILITIES                             |      |                         |             |       |             |      |             |      |          |       |
| 1) Beaches (Sand and water area)                  | S.F. | 2.75                    | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 2) Launch ramp                                    | Lane | 25000                   | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 3) Additional sites                               | Each | 2650                    | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| C. ROADS AND PARKING                              |      |                         |             |       |             |      |             |      |          |       |
| 1) Circulation roads (single and/or double lanes) | S.Y. | 15                      | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 2) Deletion                                       | S.Y. | 1.50                    | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 3) Turn-outs and pads                             | S.Y. | 15                      | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 4) Additional parking                             | S.Y. | 16                      | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| D. BUILDINGS                                      |      |                         |             |       |             |      |             |      |          |       |
| 1) Restrooms (Vault toilet-Masonry)               | Each | 60000                   | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 2) Entrance stations (Minor entrance station)     | Each | 75000                   | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 3) Trailer Sanitary Station                       | Each | 18000                   | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| E. OTHER  |      |                         |             |       |             |      |             |      |          |       |
| 1) Signs  | Each | 500                     | 0           | 0     | 0           | 0    | 0           | 0    | 0        | 0     |
| 2) Landscaping                                    | Ac.  | 2150                    | 1           | 2150  | 0           | 0    | 0           | 0    | 1        | 2150  |
| Subtotal  |      |                         |             | 15800 |             | 0    |             | 0    |          | 15800 |
| Contingencies (15%)                               |      |                         |             | 2370  |             | 0    |             | 0    |          | 2370  |
| E & D (10%)                                       |      |                         |             | 1580  |             | 0    |             | 0    |          | 1580  |
| S & A (5%)  |      |                         |             | 790   |             | 0    |             | 0    |          | 790   |
| TOTAL   |      |                         |             | 20540 |             | 0    |             | 0    |          | 20540 |

Oct 17,

| War Eagle   | UNIT | UNIT COST<br>IN DOLLARS | DEV. AREA A |          | DEV. AREA B |      | DEV. AREA C |      | TOTALS   |
|---|------|-------------------------|-------------|----------|-------------|------|-------------|------|----------|
|   |      |                         | QUANTITY    | COST     | QUANTITY    | COST | QUANTITY    | COST |          |
| A. CAMPING FACILITIES                             |      |                         |             |          |             |      |             |      |          |
| 1) Rehab  | Each | 1950                    | 25          | 48750    | 0           | 0    | 0           | 25   | 48750    |
| 2) Relocate                                       | Each | 1500                    | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| 3) Convert to day use                             | Each | 500                     | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| 4) Additional sites                               | Each | 6500                    | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| B. DAY USE FACILITIES                             |      |                         |             |          |             |      |             |      |          |
| 1) Beaches (Sand and water area)                  | S.F. | 2.75                    | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| 2) Launch ramp                                    | Lane | 25000                   | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| 3) Additional sites                               | Each | 2650                    | 5           | 13250    | 0           | 0    | 0           | 5    | 13250    |
| C. ROADS AND PARKING                              |      |                         |             |          |             |      |             |      |          |
| 1) Circulation roads (single and/or double lanes) | S.Y. | 15                      | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| 2) Deletion                                       | S.Y. | 1.50                    | 800         | 1200     | 0           | 0    | 0           | 800  | 1200     |
| 3) Turn-outs and pads                             | S.Y. | 15                      | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| 4) Additional parking                             | S.Y. | 16                      | 450         | 7200     | 0           | 0    | 0           | 450  | 7200     |
| D. BUILDINGS                                      |      |                         |             |          |             |      |             |      |          |
| 1) Restrooms (Vault toilet-Masonry)               | Each | 60000                   | 1           | 60000    | 0           | 0    | 0           | 1    | 60000    |
| 2) Entrance stations (Minor entrance station)     | Each | 75000                   | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| E. OTHER  |      |                         |             |          |             |      |             |      |          |
| 1) Signs  | Each | 500                     | 2           | 1000     | 0           | 0    | 0           | 2    | 1000     |
| 2) Landscaping                                    | Ac.  | 2150                    | 1           | 2150     | 0           | 0    | 0           | 1    | 2150     |
| 3) Gates  | Each | 750                     | 0           | 0        | 0           | 0    | 0           | 0    | 0        |
| Subtotal  |      |                         |             | 133550   |             | 0    |             |      | 133550   |
| Contingencies (15%)                               |      |                         |             | 20032.50 |             | 0    |             |      | 20032.50 |
| E & D (10%)                                       |      |                         |             | 13355    |             | 0    |             |      | 13355    |
| S & A (5%)  |      |                         |             | 6677.50  |             | 0    |             |      | 6677.50  |
| TOTAL   |      |                         |             | 173615   |             | 0    |             |      | 173615   |



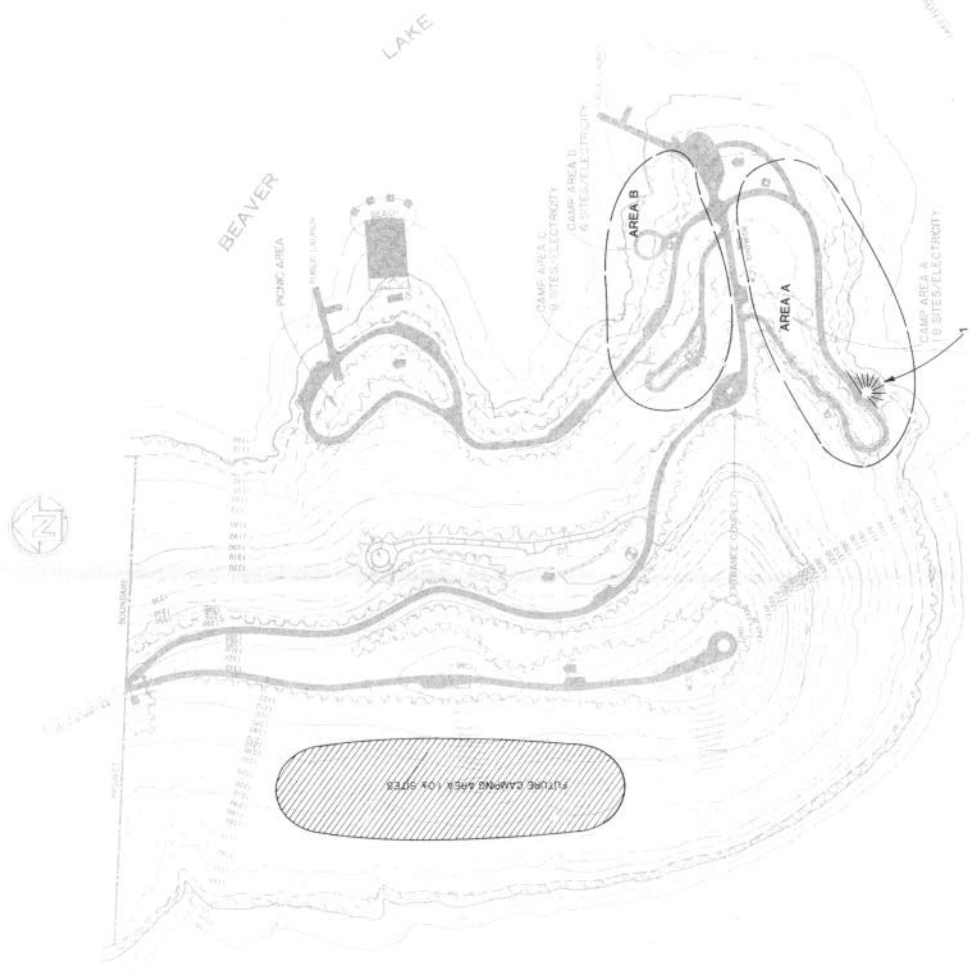
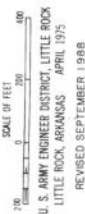




WHITE RIVER WATERSHED      WHITE RIVER, ARKANSAS  
 UPDATED MASTER PLAN  
 BEAVER LAKE  
 INDIAN CREEK  
 PARK

NOTE: THIS AREA IS LOCATED IN SECTION 7,  
T. 20 N., R. 27 W. BENTON CO. ARK.

PLATE 13

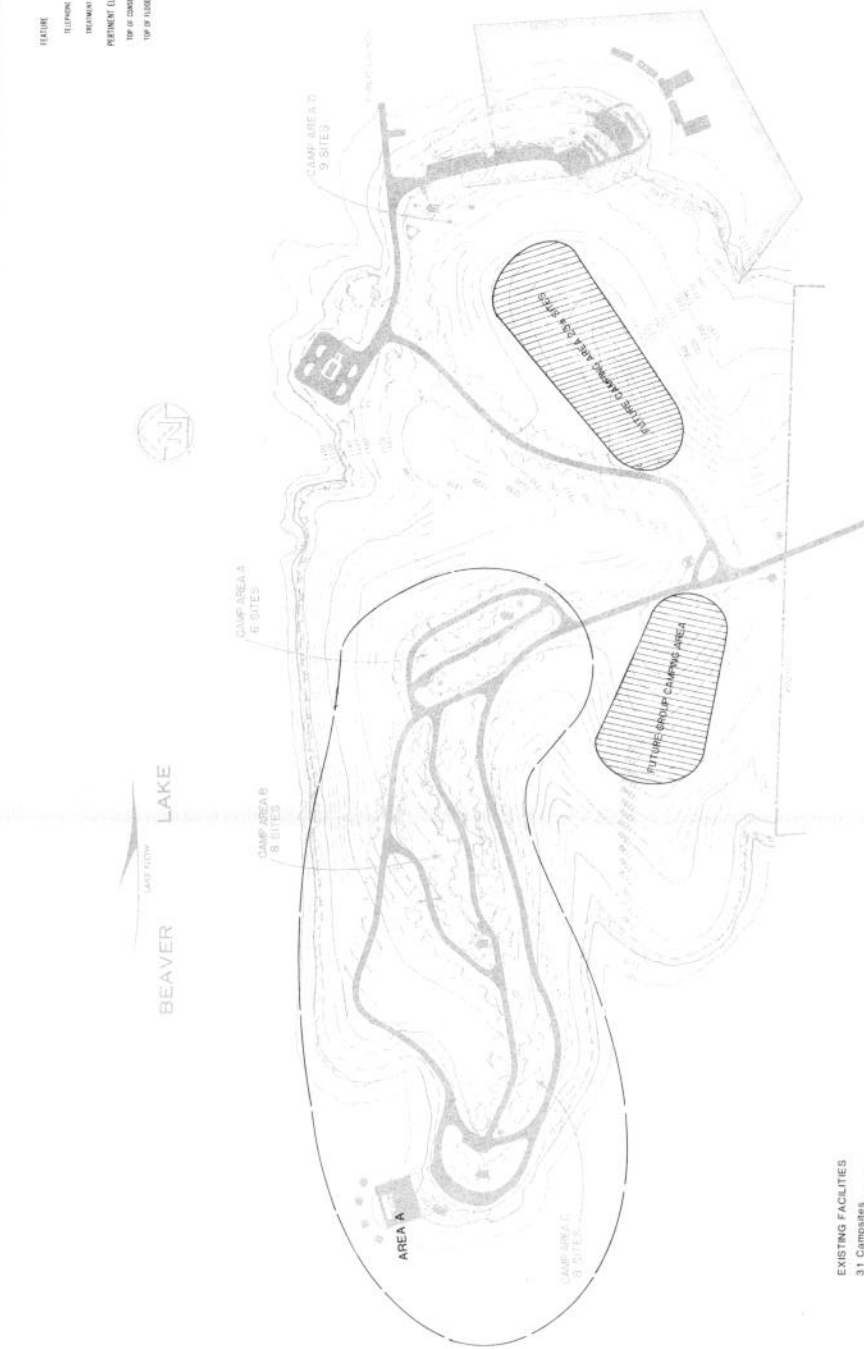


**EXISTING FACILITIES**

|    |                          |
|----|--------------------------|
| 33 | Campsites/Electricity    |
| 3  | Picnic sites             |
| 2  | Lane Launch Ramps        |
| 1  | Swim Beach               |
| 1  | Change House             |
| 1  | Showers Facility         |
| 4  | Vault Toilets            |
| 1  | Trailer Sanitary Station |
| 1  | Entrance Station         |

- AREA B
1. Delete road segment
  2. Rehab 10± camp sites





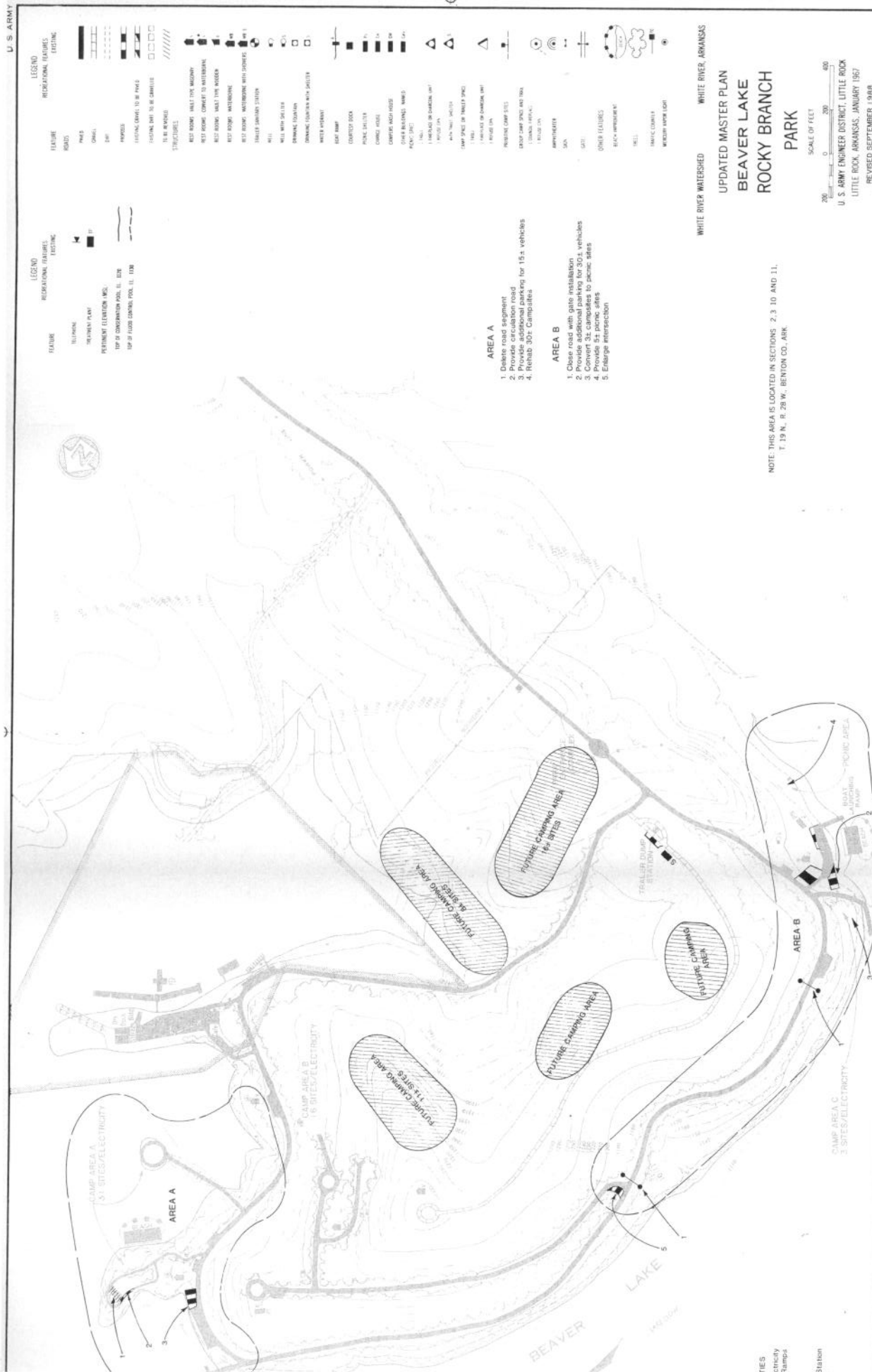
WHITE RIVER WATERSHED  
\* WHITE RIVER, ARKANSAS  
UPDATED MASTER PLAN  
BEAVER LAKE  
STARKEY  
PARK

NOTE: THIS AREA IS LOCATED IN SECTION 20  
T. 20 N., R. 27 W. BENTON CO., ARK.

SCALE OF FEET  
200 0 200 400

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, APRIL 1975  
REVISED SEPTEMBER 1988







- LEGEND**
- RECREATIONAL FEATURES**
- EXISTING**
- TELEPHONE
- TREATMENT PLANT
- PERMITTED ELEVATION (FEET)
- TOP OF CONSTRUCTION POOL (L. 11. 11. 11)
- TOP OF FLOOD CONTROL POOL (L. 11. 11. 11)

**AREA A**

1. Delete road segment
2. Provide circulation road
3. Provide parking for 15+ vehicles
4. Rehab 30% Campsites

**AREA B**

1. Close road with gate installation
2. Provide additional parking for 30+ vehicles
3. Convert 24% picnic sites
4. Provide 5% picnic sites
5. Enlarge intersection

NOTE: THIS AREA IS LOCATED IN SECTIONS 2, 3, 10 AND 11,  
T. 19 N., R. 28 W., BENTON CO., ARK.

- EXISTING FACILITIES**
- 50 Campsites/Electricity
  - 2 1 Lane Launch Ramps
  - 2 Boat Launches
  - 4 Youth Shelters
  - 2 Group Shelters
  - 1 Trailer Sanitary Station
  - 1 Entrance Station



WHITE RIVER

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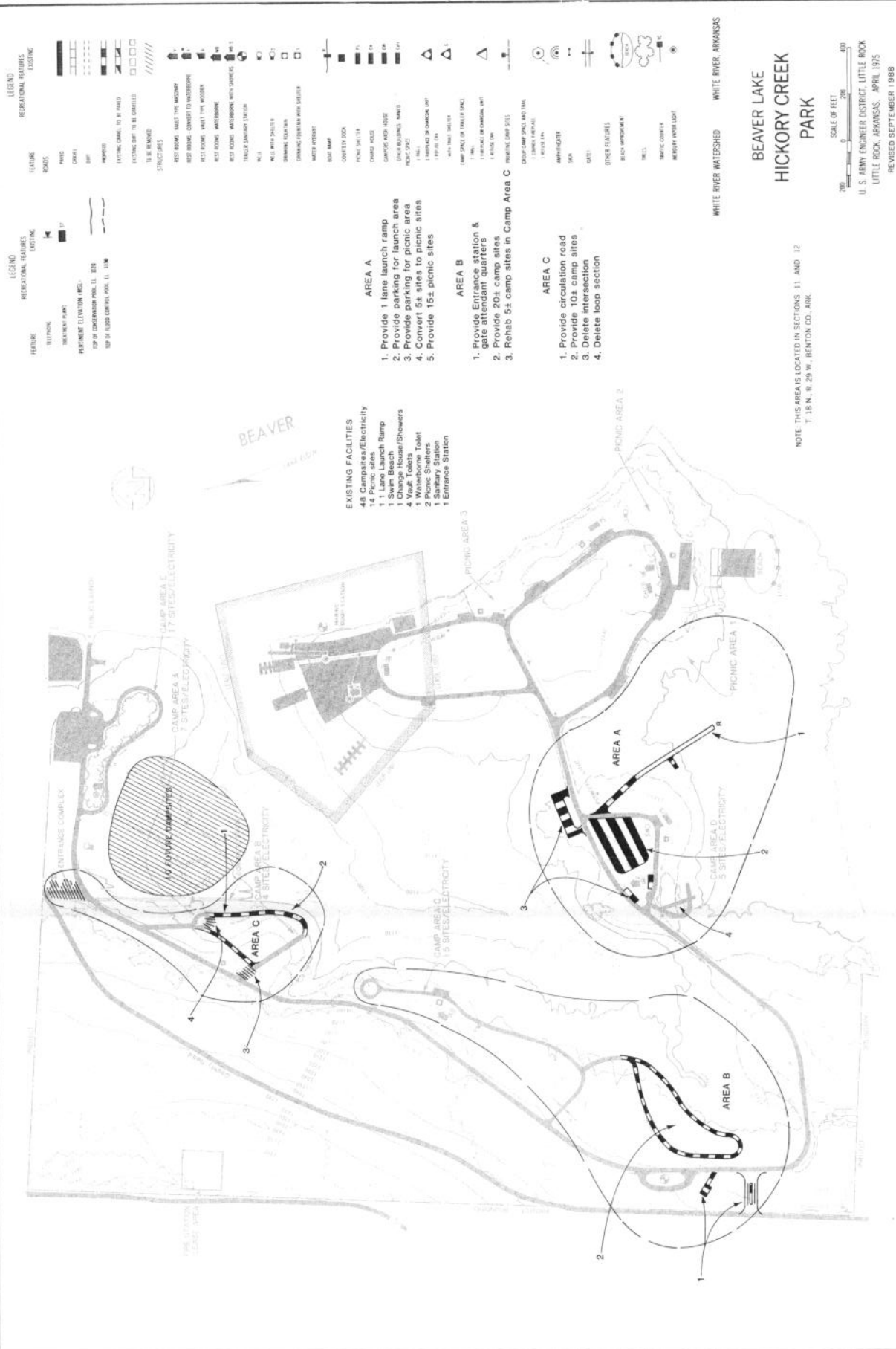
200

U.S.

117









CESWD-CO-RP (CESWL-CO-L/22 Apr 88) (1130) 1st End McCauley/da/72434  
SUBJECT: Beaver Lake, Master Plan, Supplement No. 16

Commander, Southwestern Division, Corps of Engineers, 1114 Commerce  
Street, Dallas, TX 75242-0216 3 MAY 1988

FOR: Commander, Little Rock District, ATTN: CESWL-CO-L

Approved.

FOR THE COMMANDER:

2 Encls  
all encls wd

*for James D. Harrison*  
GENE R. DRETKE  
Acting Chief, Construction-  
Operations Division

CF (w/basic & encls):  
CECW-ON



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

22 APR 1988


CESWL-CO-L (420)

MEMORANDUM FOR: Commander, Southwestern Division, ATTN: CESWD-CO-R

SUBJECT: Beaver Lake, Master Plan, Supplement No. 16

1. The purpose of this supplement is to revise the park development plans for Horseshoe Bend Park and Hickory Creek Park. These revisions will improve management of these parks by providing separation of day use from camping activities.
2. The Horseshoe Bend Park site plan was revised to reflect the proposed layout of the day use area within the former marina concession site. This is a refinement of the development plan which was approved in Supplement No. 13. The locations of the proposed swimming beach, group picnic shelter, and boat launching ramp were adjusted to better fit site conditions.
3. The Hickory Creek Park site plan was revised to relocate the entrance complex. All visitors would enter the park at one location. Campers would be directed to the left to camping areas, and day use visitors would be directed to the right to day use areas. A one-lane boat launching ramp and parking lot would be constructed in the day use area in lieu of the proposed launching lane addition at the existing ramp.
4. Approval of this supplement is recommended.

2 Encls (4 cys)

  
LTC, CE  
ANTHONY V. NIDA  
Colonel, Corps of Engineers  
Commanding









SWDCO-RP (SWLCO-L/2 Mar 87) 1st End  
SUBJECT: Beaver Lake, Updated Master Plan, D.M. No. 13-4,  
Supplement No. 15

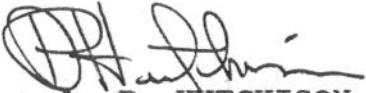
DA, Southwestern Division, Corps of Engineers, 1114 Commerce  
Street, Dallas, TX 75242-0216 12 MAR 1987

TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved.

FOR THE COMMANDER:

Encl wd

  
A. P. HUTCHISON  
Chief, Construction-  
Operations

CF (w/basic & encl):  
DAEN-CWO-R (5 cys)



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

02 MAR 1987

SWLCO-L

SUBJECT: Beaver Lake, Updated Master Plan, D.M. No. 13-4, Supplement No. 15

Commander, Southwestern Division  
ATTN: SWDCO-R

1. The purpose of this supplement is to change land use classification of approximately 0.04 acre of land currently designated as recreation-intensive use to recreation-low density use. The location of the subject area is shown on the enclosed master plan plate 21, War Eagle Park.
2. The Nob Hill Volunteer Fire Department has requested to lease the 40' X 40' area for the purpose of constructing a fire station to house one truck. The building will be approximately 16' X 28' and is located approximately 400' north of the War Eagle Park entrance. The fire truck at this location will provide protection to local residents approximately 5 miles distant from the Nob Hill Station. The proposed location will also facilitate fire protection for these residents during periods of snow and ice. The Government will also benefit from increased fire protection of its lands within this area, including War Eagle Park.
3. No detrimental effect to project operations or adverse environmental impact will result from the proposed construction. We recommend approval of this supplement and the lease of the subject lands to the Nob Hill Volunteer Fire Department. We will ask that the lease will state that no future expansion of the lease will be permitted.

Encl (9 cys)

*Robert W. Whitehead*  
ROBERT W. WHITEHEAD  
Colonel, Corps of Engineers  
Commanding



SWDCO-RP (SWLCO-L/22 Sep 86) 1st End  
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4,  
Supplement No. 14

DA, Southwestern Division, Corps of Engineers, 1114 Commerce  
Street, Dallas, TX 75242-0216 6 OCT 1986

TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved.

FOR THE COMMANDER:

Encl wd



A. P. HUTCHISON  
Chief, Construction-  
Operations

CF (w/basic & encl):  
DAEN-CWO-R (5 cys)



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

REPLY TO  
ATTENTION OF

SWLCO-L

22 September 1986

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4,  
Supplement No. 14

Commander, Southwestern Division  
ATTN: SWDCO-R

1. The purpose of this supplement is to indicate the expansion of the commercial concession lease, Lost Bridge Marina, by adding a 2-acre area across the cove from the existing lease. The 350-foot-long expansion area as shown on the enclosed Plate 14 is needed for a sailboat and pontoon boat dock. Since there will be no access to the proposed dock, customers will be ferried to and from the main dock.
2. The concessionaire is requesting that the remaining space in the existing lease be reserved for a future houseboat dock because of the wind protection offered at this site. Upon completion of the houseboat dock, the existing lease area will be completely utilized.
3. Expansion of the concession appears justified, since the sailboat and pontoon dock will not significantly impact this undeveloped portion of Lost Bridge Park. Approval of this supplement is recommended.

FOR THE COMMANDER:

Encl (9 cys)

*Edward O Fryar*  
EDWARD O. FRYAR  
Executive Assistant

SWDCO-RP (SWLCO-L/17 Apr 86) 1st End  
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4,  
Supplement No. 13

DA, Southwestern Division, Corps of Engineers, 1114 Commerce  
Street, Dallas, TX 75242-0216 7 MAY 1986

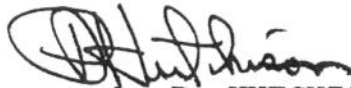
TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved, subject to the following comments:

Care should be exercised in siting the additional parking  
facilities to minimize environmental damage.

FOR THE COMMANDER:

Encl wd



A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF (w/basic & encl):  
DAEN-CWO-R (5 cys)



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

REPLY TO  
ATTENTION OF

SWLCO-L

17 APR 1986

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement  
No. 13

Commander, Southwestern Division  
ATTN: SWDCO-R

1. The purpose of this supplement is to show the proposed relocation site of the commercial concession lease at Horseshoe Bend Park.
2. The present lease area is not a suitable location to adequately serve the increased number of boat dock customers. When the lake is at elevation 1127, the boat dock parking area is completely inundated, leaving the marina without parking facilities. It is not economically feasible to raise or enlarge the parking area because of the topography of the site. In addition, the lease area cannot be reasonably expanded due to the limited amount of water area available.
3. To alleviate the situation, the concessionaire requested authority in 1985 to relocate his operations to an area of the lake near the town of Monte Ne. Local opposition from nearby residents of Monte Ne developed after the proposed relocation was publicized; however, after several months of discussions with the residents, the concessionaire ceased attempts to resolve the objections. Instead, he proposed an alternate location for the boat dock within the limits of Horseshoe Bend Park as shown on Plate 19.
4. The requested 14-acre lease area contains 15 campsites, a water well, paved road and parking area, and a vault restroom. This area is the least used in the park, and use is generally limited to periods during overflow situations. The remote location and heavy vegetation make the area undesirable for most campers. For the concessionaire, however, advantages of this site include the ability to be operational at all lake levels, protection for the docks during severe weather, and adequate land and water area for future expansion.
5. Supplement No. 7 to this master plan proposed a development plan that would ultimately separate day-use and camping in Horseshoe Bend Park. The existing lease area with its large paved parking area and launching ramp would be an ideal day-use area. This, in turn, would eliminate much of the parking and boat launching problems encountered elsewhere in the park, and it would also eliminate the need for a new boat launching ramp to serve day-use visitors.



17 APR 1986


SWLCO-L

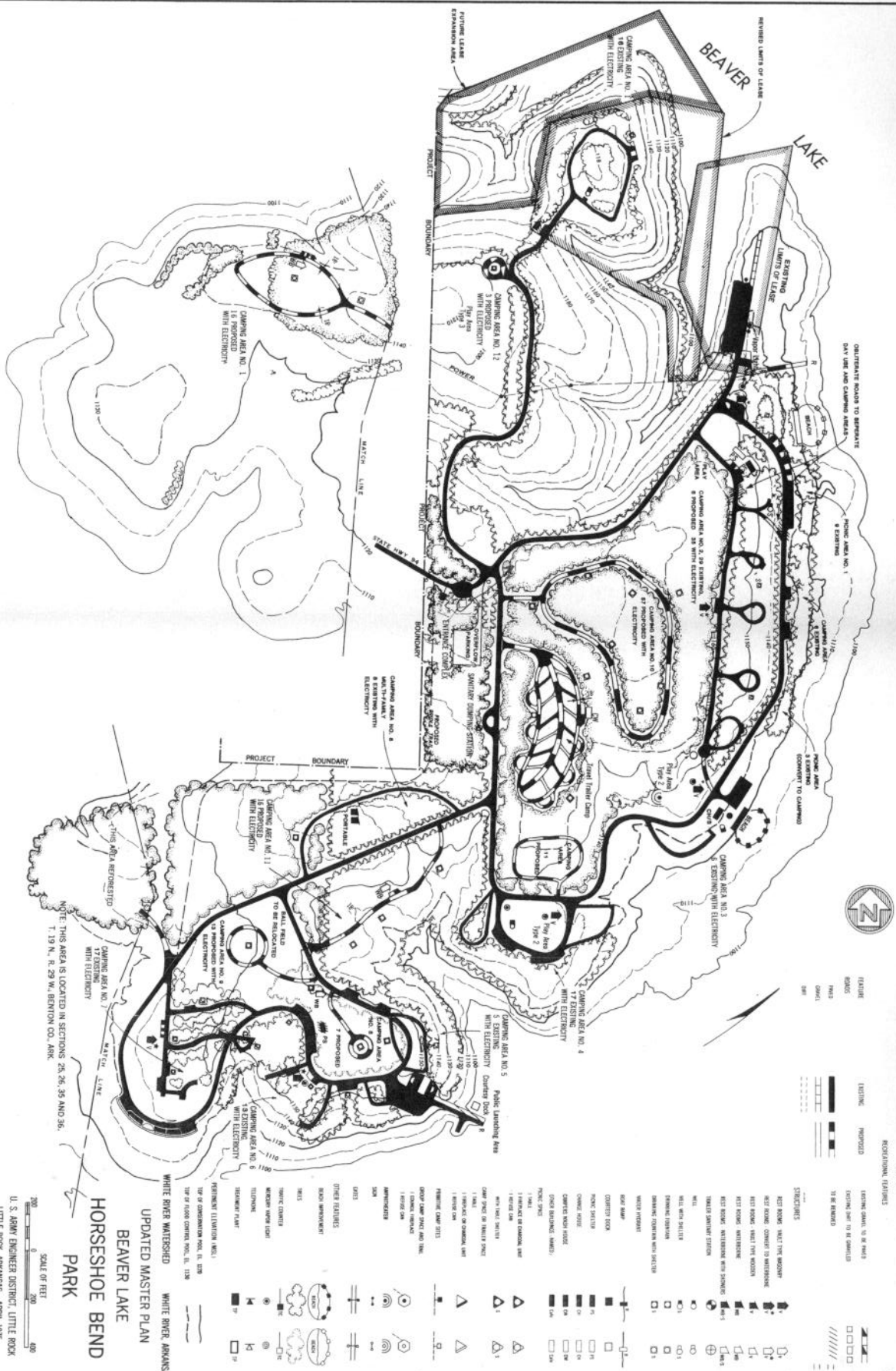
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement  
No. 13

6. The concessionaire would be responsible for providing any additional parking facilities and utilities needed in the new lease area, and he would also operate and maintain the existing restroom. The well serves the entire park, so the Corps of Engineers would retain operation and maintenance responsibilities. The existing campsites would be relocated to another area of the park closer to the water to increase use fee collections without an increase in O&M costs.

7. Approval of this supplement is recommended.

Encl (9 cys)

  
ROBERT W. WHITEHEAD  
Colonel, Corps of Engineers  
Commanding



SWDCO-RP (SWLCO-L/10 Feb 86) 1st End  
SUBJECT: Supplement No. 12, Updated Master Plan Design  
Memorandum No. 13-4, Beaver Lake

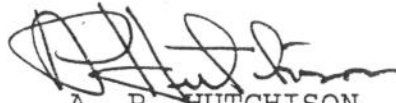
DA, Southwestern Division, Corps of Engineers, 1114 Commerce  
Street, Dallas, TX 75242-0216 19 FEB 1986

TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved.

FOR THE COMMANDER:

9 Encls  
wd all encls



A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF (w/basic & encls):  
DAEN-CWO-R (5 cys)



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

SWLCO-L



10 FEB 1986

SUBJECT: Supplement No. 12, Updated Master Plan Design Memorandum No. 13-4,  
Beaver Lake

Commander, Southwestern Division  
ATTN: SWDCO-RR

1. The purpose of this supplement is to update the park site plans to reflect existing recreation facilities and minor site plan revisions. The site plans were last revised in 1975 when the master plan was completely updated.
2. Approval of this supplement is recommended.

9 Encls (9 cys)

  
ROBERT W. WHITEHEAD  
Colonel, Corps of Engineers  
Commanding  




[illegible]

2





WHITE RIVER WATERBED WHITE RIVER, ARKANSAS

UPDATED MASTER PLAN  
BEAVER LAKE  
INDIAN CREEK  
PARK

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS      APRIL 1975

RECEIVED DECEMBER 1980

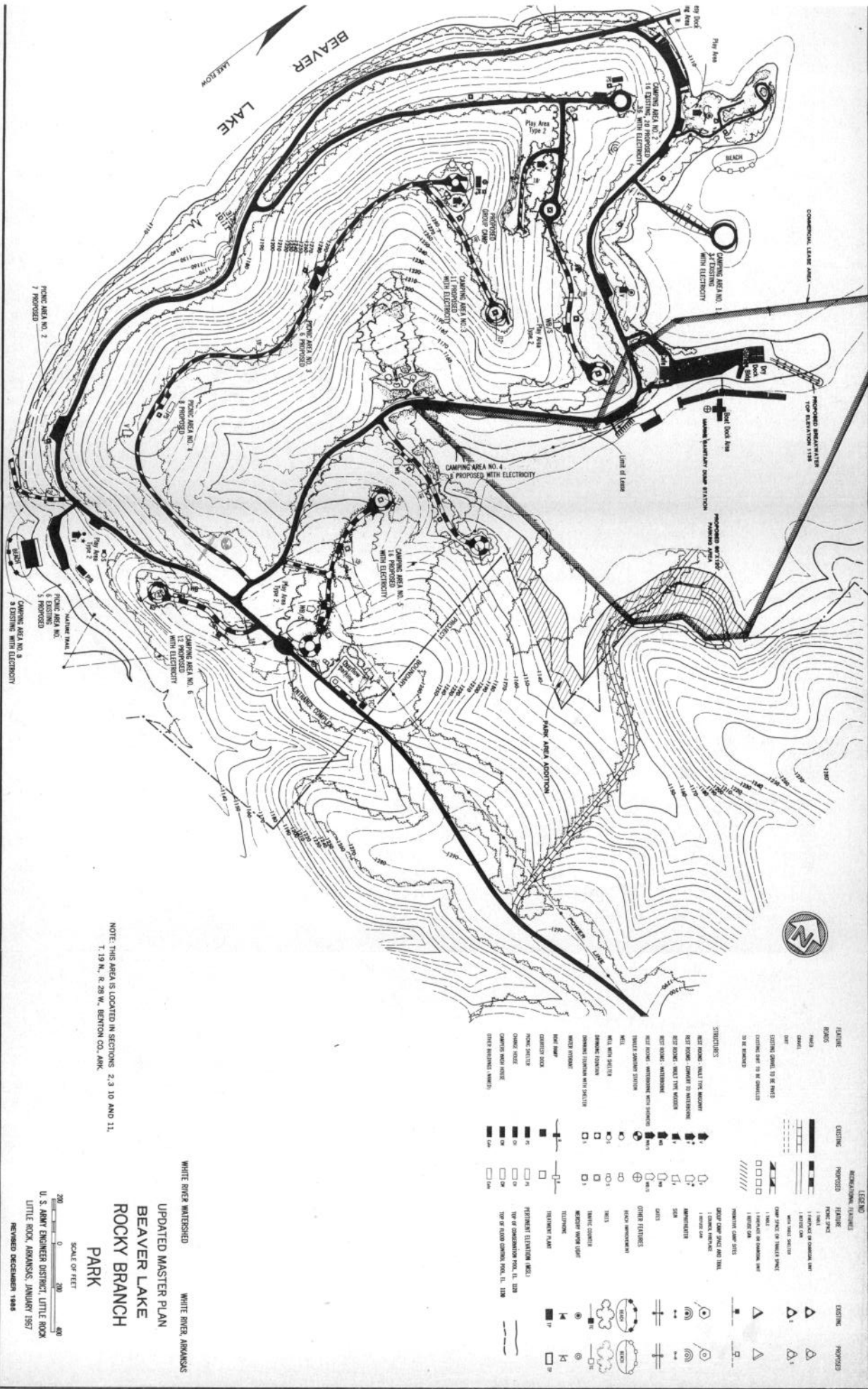
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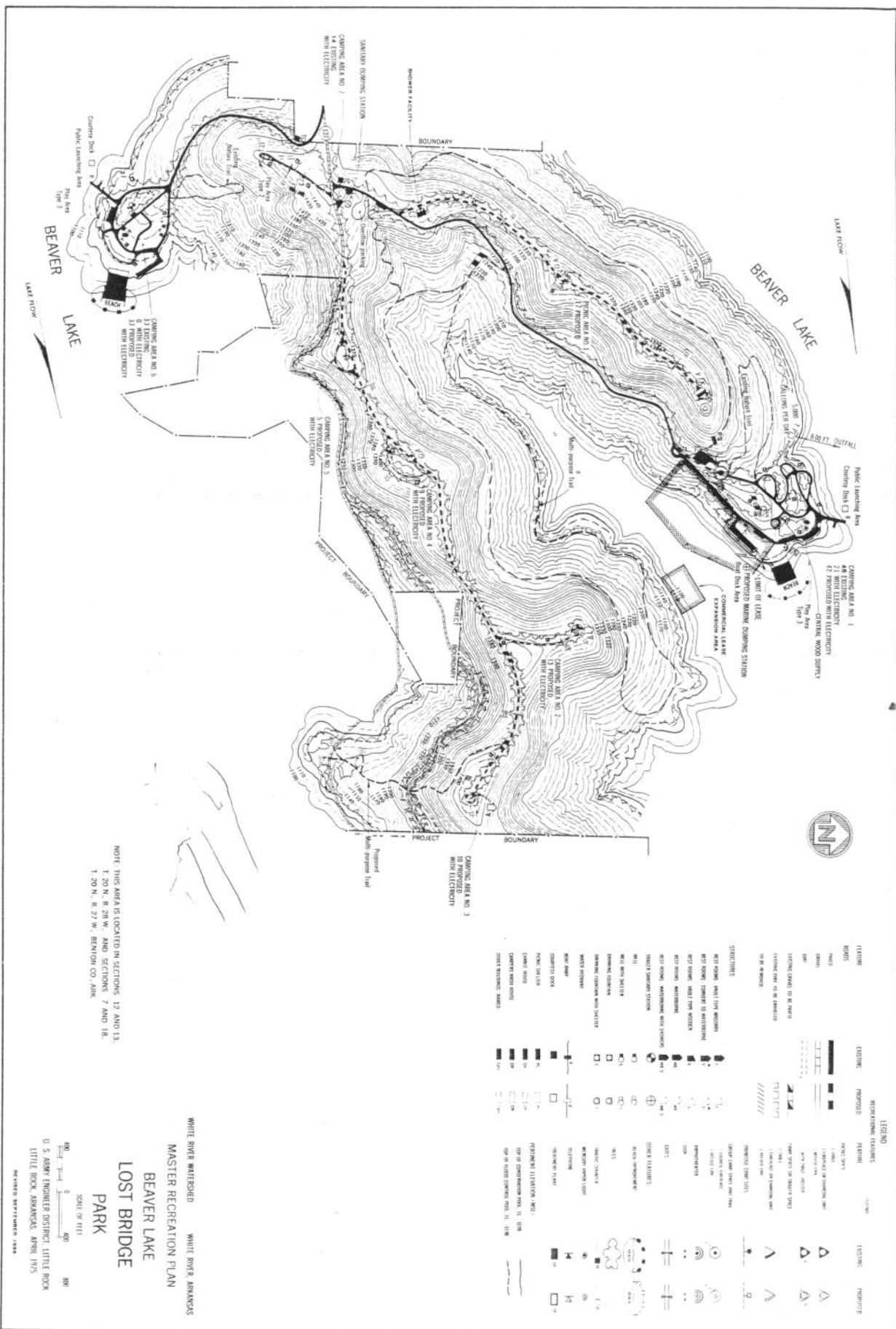




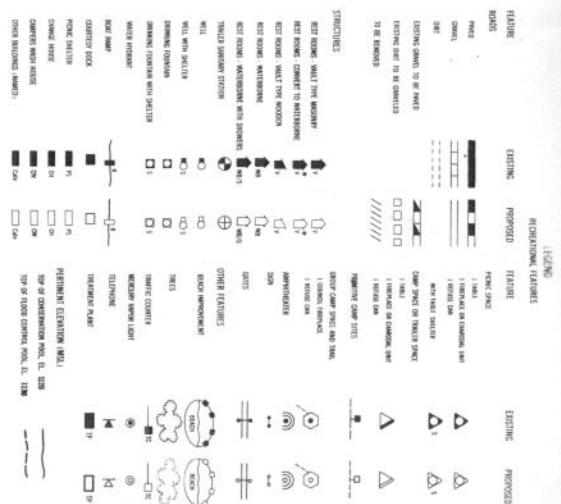
PLATE 15



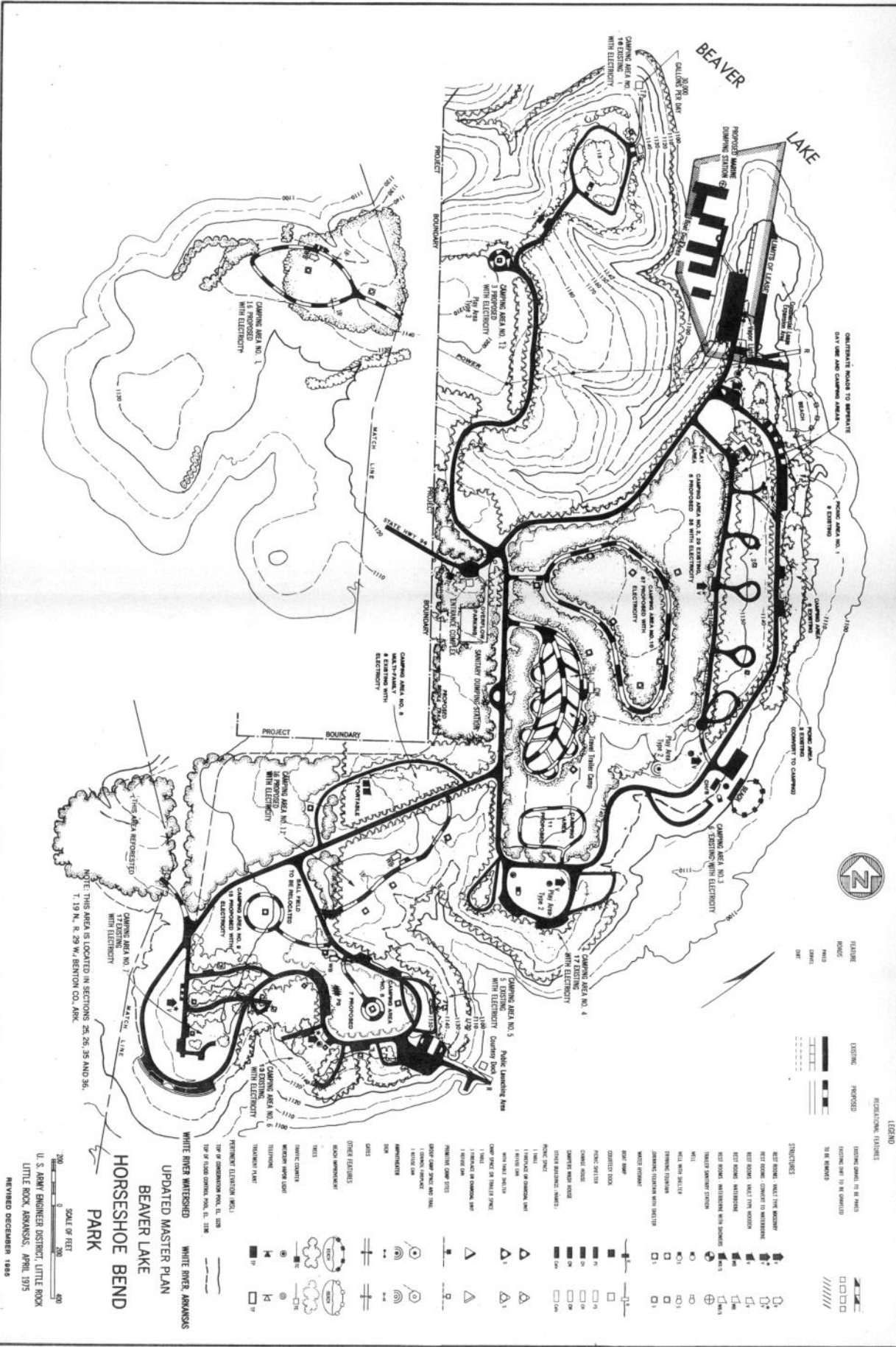


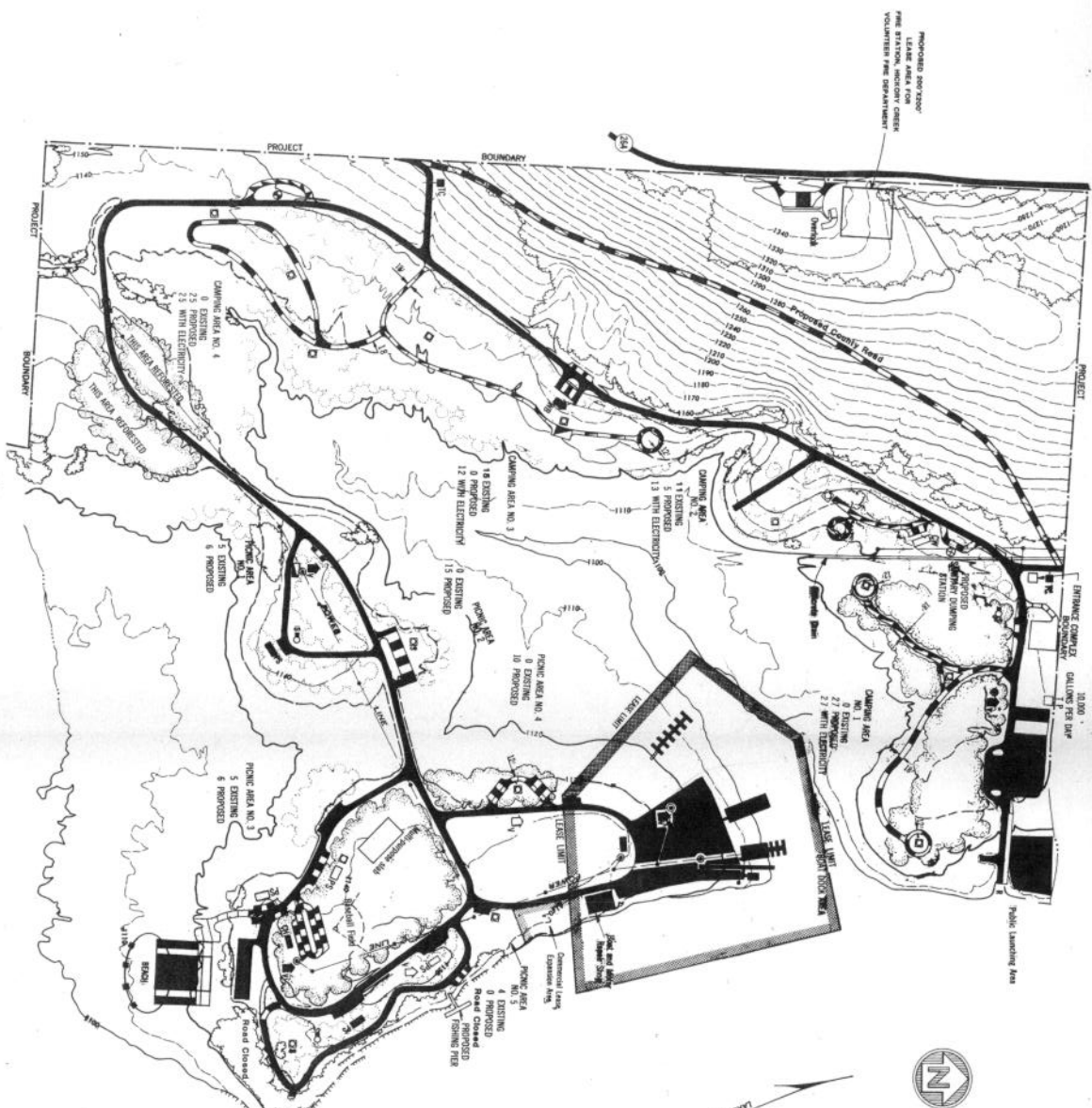






U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, JANUARY 1967





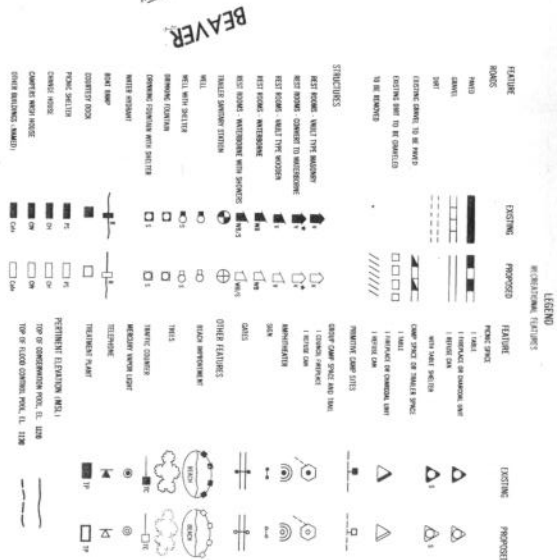
NOTE: THIS AREA IS LOCATED IN SECTIONS 11 AND 12  
T. 18 N., R. 29 W., BENTON CO., ARK.

BEAVER LAKE  
HICKORY CREEK  
PARK

WHITE RIVER WATERSHED WHITE RIVER, ARKANSAS

SCALE OF FEET  
0 100 200 300 400 500 600 700 800 900 1000

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, APRIL 1975  
REVISED DECEMBER 1986





NOTE: THIS AREA IS LOCATED IN SECTION 24  
T. 18 N., R. 29 W., BENTON CO., ARK.

BEAVER LAKE  
WAR EAGLE

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, APRIL 1975



SWDCO-RP (SWLCO-L/23 Dec 85) 1st End  
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement  
No. 11

DA, Southwestern Division, Corps of Engineers, 1114 Commerce Street,  
Dallas, TX 75242-0216

13 JAN 1986


TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved, subject to the following comment:

If costs provided in the approved FY 86 SRUF program do not reflect accurate estimates for the work currently proposed, a revision to the SRUF program should be submitted.

FOR THE COMMANDER:

3 Encls  
wd all encls

  
A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF (w/basic & encls):  
DAEN-CWO-R (5 cys)



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

REPLY TO  
ATTENTION OF

23 DEC 1985


SWLCO-L

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4,  
Supplement No. 11

Commander, Southwestern Division  
ATTN: SWDCO-R

1. The purpose of this supplement is to identify the proposed locations of freestanding shower buildings at Dam Site, Rocky Branch, and War Eagle Parks on Beaver Lake. Shower additions to existing vault restrooms at these parks were approved for construction with FY 86 Special Recreation Use Fee (SRUF) Funds. Because of steep, rocky terrain and a shallow layer of soil, it has been determined that construction of a septic tank and disposal field in these locations is not feasible. The proposed locations of the separate shower facilities are level, and these sites have adequate, suitable soil for a septic tank and disposal field.
2. The proposed sites as shown on the enclosed plates 12, 16, and 21 are centrally located with suitable space and soil conditions. It is proposed to purchase prefabricated buildings with FY 86 SRUF Funds.
3. Approval of this supplement is recommended.

3 Encls (9 cys)

  
ROBERT W. WHITEHEAD  
Colonel, Corps of Engineers  
Commanding



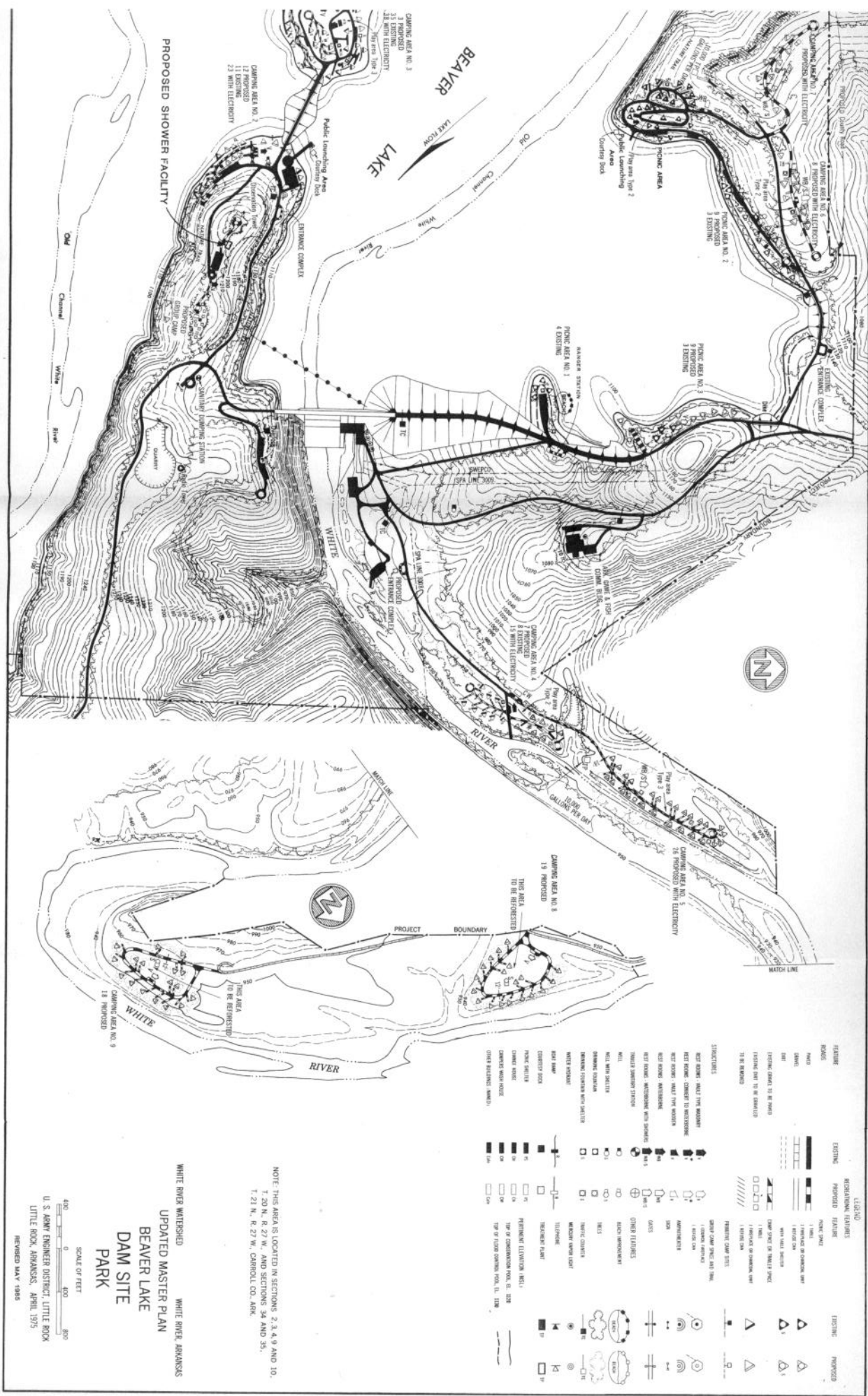


EXHIBIT 1 TO SUPPLEMENT NO. 11 PLATE 12

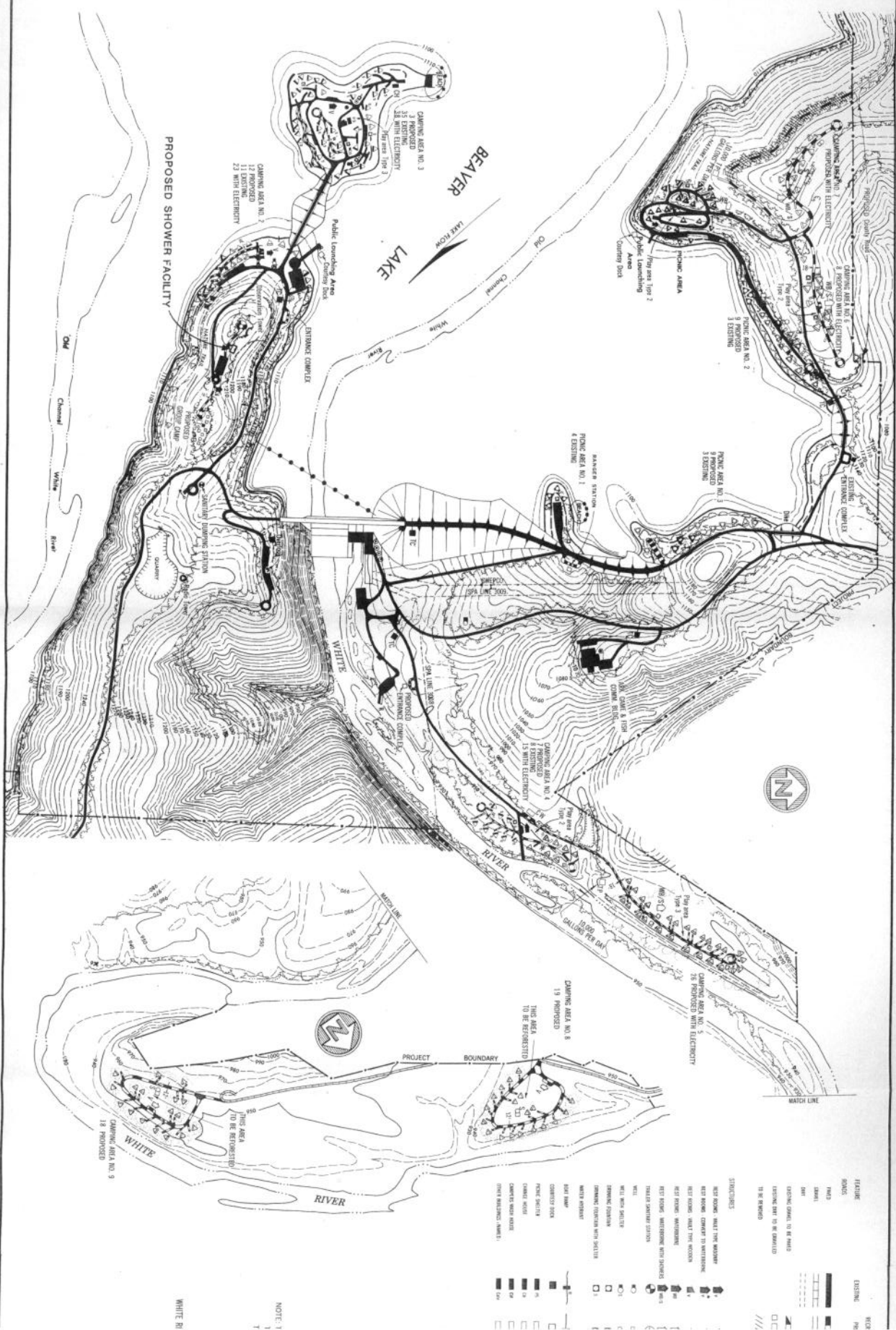
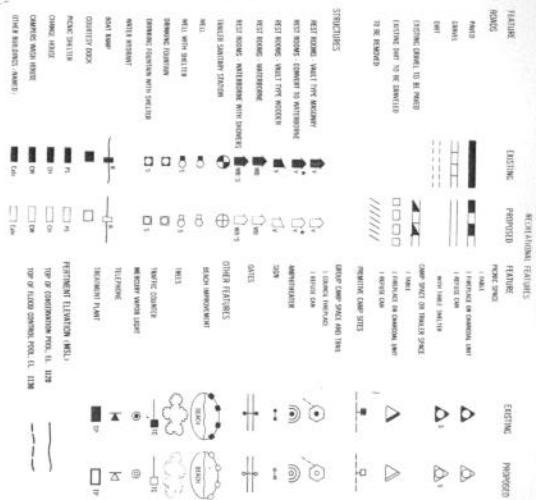


EXHIBIT 2 TO SUPPLEMENT NO. 14

EXHIBIT 1 T1



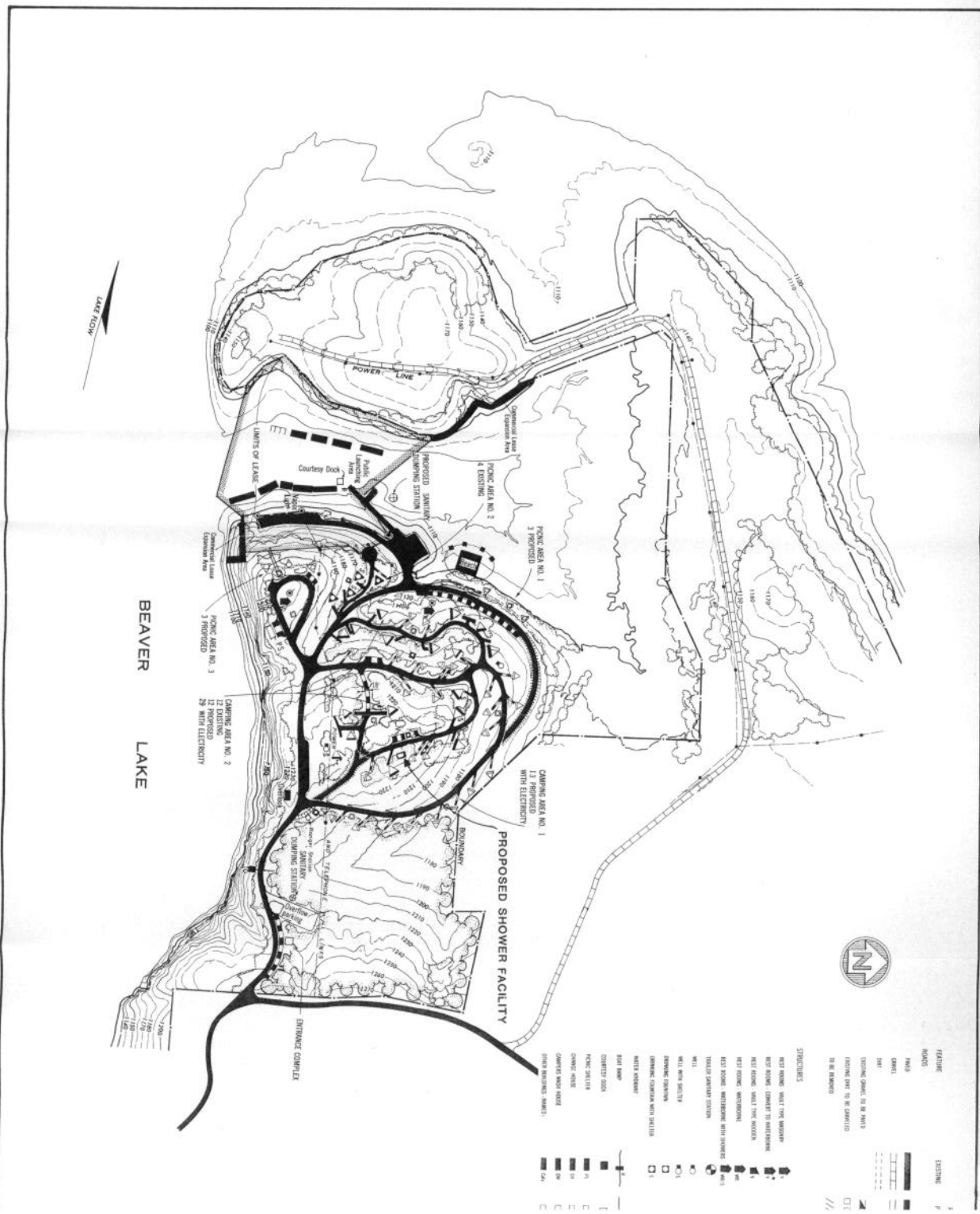
WHITE RIVER WATERSHED      WHITE RIVER, ARKANSAS

UPDATED MASTER PLAN  
BEAVER LAKE  
ROCKY BRANCH  
PARK

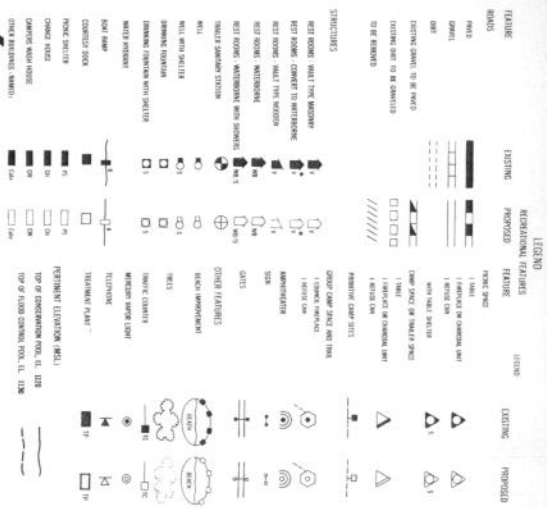
PLATE 16











WHITE RIVER WATERSHED      WHITE RIVER, ARKANSAS  
 UPDATED MASTER PLAN  
 BEAVER LAKE  
 WAR EAGLE

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, APRIL 1975

SWDCO-RP (SWLCO-L/4 Oct 85) 1st End  
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4,  
Supplement No. 10

DA, Southwestern Division, Corps of Engineers, 1114 Commerce Street,  
Dallas, TX 75242-0216 24 OCTOBER 1985

TO: Commander, Little Rock District, ATTN: SWLCO-L

The proposed site is on the tip of a peninsula which is highly visible. Of particular concern is what this facility will look like when viewed from the water. The proposed facility is approved; however, the following stipulations are recommended to minimize the strong visual impact of this facility:

a. The form of the facility in general is too hard line or geometric. The long levee tangent of approximately 1,600 feet should be changed to a curvilinear alignment.

b. The top and toe of the levee should be gently rounded. The degree of slope of the levee sides should be varied.

c. The top of the levee should be overbuilt in places to simulate a natural land form.

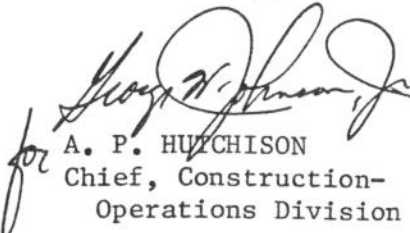
d. Trees and shrubs should be planted along the outside edge of the facility. These plantings should be grouped to have a natural appearance with the objective to break up the strong line and form of the levee.

e. Fencing of this facility should be avoided unless it is required by the Arkansas Game and Fish Commission.

FOR THE COMMANDER:

Encl wd

CF (w/basic & encl):  
DAEN-CWO-R (5 cys)

  
for A. P. HUTCHISON  
Chief, Construction-  
Operations Division



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

SWLCO-L


4 October 1985

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4,  
Supplement No. 10

Commander, Southwestern Division  
ATTN: SWDCO-R

1. The purpose of this supplement is to reallocate approximately 50 acres of the Blackburn Creek future park area from Operations Recreation - High Density, to Operations - Wildlife Management. Blackburn Creek is a future park area that is currently being used only for fishing access and for primitive camping. The land is located in Section 24, T19N, R29W, Benton County, Arkansas. Reallocation of the land is necessary to allow the Arkansas Game and Fish Commission to build and operate a nursery pond to augment the extant fish population of Beaver Lake.
2. The Arkansas Game and Fish Commission has requested a long-term lease for the proposed site. No other area proximate to Beaver Lake has been located that has the necessary combination of location, terrain, and soil characteristics required for construction of a nursery pond. Fish raised in the nursery pond will be released into Beaver Lake when they have attained a size conducive to their survival in the lake. One or more nursery ponds were recommended by the U.S. Fish and Wildlife Service and by the Arkansas Game and Fish Commission in their respective comments to the project master plans in 1974.
3. Placement and operation of a nursery pond will alter the future development plans of the park that were developed in 1974. These plans were formulated prior to the requirement for cost-sharing required by Public Law 89-72. These plans are subject to revision to better meet the current needs of the recreational public.
4. We recommend approval of the supplement to make the area available for lease. We propose to stipulate in the lease that (1) future expansion of the lease area will not be permitted, (2) the Arkansas Game and Fish Commission will be required to fence and plant screening between their operations area and the remainder of the park, and (3) that their operation of a nursery pond will not interfere with primitive camping or fishing access in the remainder of the park area. In order to protect the resources in the area, the Beaver Resident Office will arrange for the marking and sale of merchantable timber within the area of the proposed lease site prior to construction.

Encl (9 cys)

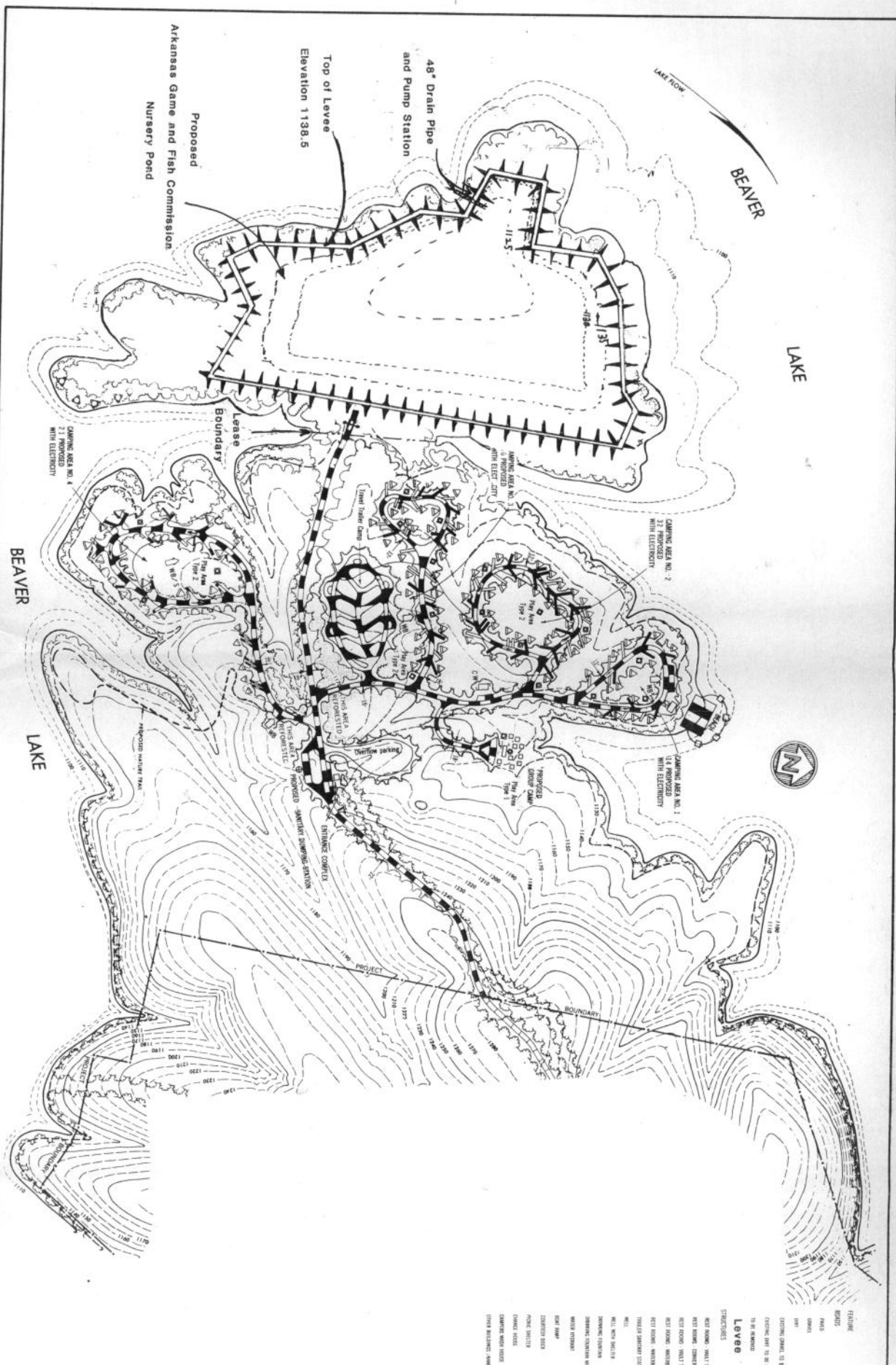
  
ROBERT W. WHITEHEAD  
Colonel, Corps of Engineers  
Commanding  
H



NOTE: THIS AREA IS LOCATED IN SECTION 24  
T. 19 N., R. 29 W., BENTON CO., ARK.

EXHIBIT TO SUPPLEMENT No. 10

PLATE 27



SWDCO-R (SWLCO-L/27 Jun 85) 1st End  
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement  
No. 9

DA, Southwestern Division, Corps of Engineers, 1114 Commerce Street,  
Dallas, TX 75242-0216

3 JULY 1985

TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved.

FOR THE COMMANDER:

Encl wd



A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF (w/basic & encl):  
DAEN-CWO-R (5 cys)





DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

REPLY TO  
ATTENTION OF

SWLCO-L

27 June 1985

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement  
No. 9


Commander, Southwestern Division  
ATTN: SWDCO-R

1. The purpose of this supplement is to show the proposed locations of freestanding shower buildings at Indian Creek and Lost Bridge Parks on Beaver Lake. Shower additions to existing vault restrooms at these parks were approved for construction with Fiscal Year 1985 Special Recreation Use Fee (SRUF) Funds. Because of steep, rocky terrain and a thin layer of soil, it has been determined that construction of a septic tank and disposal field in these locations is not practicable. The proposed locations of the separate shower facilities are level and have adequate, suitable soil for a septic tank and disposal field.

2. The proposed sites as shown on the enclosed Plates 13 and 14 are centrally located with adequate land for a disposal field. The only suitable site in Lost Bridge Park is on top of a hill near the gatehouse in an area designated for future development. The site is visible from the gatehouse for surveillance purposes. It also can be easily blocked during the winter months.

3. It is proposed to purchase prefabricated buildings with FY 85 SRUF funds, so it is recommended that review of this supplement be expedited.

2 Encls (9 cys)  
As stated

  
ROBERT W. WHITEHEAD  
Colonel, Corps of Engineers  
District Engineer





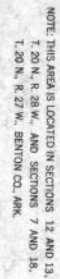
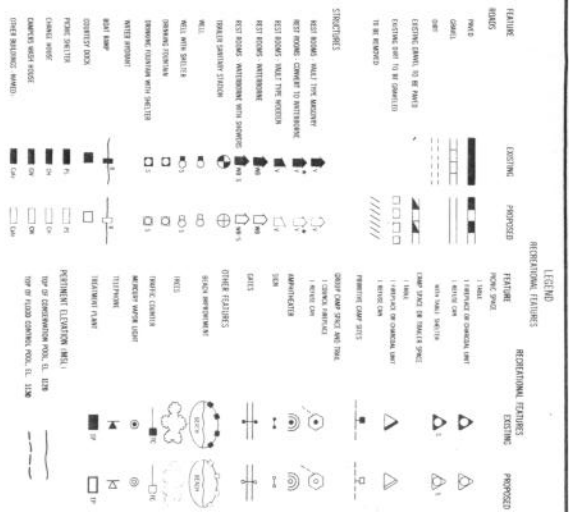


EXHIBIT 2 TO SUPPLEMENT NO.9 PLATE 14



WHITE RIVER WATERBEDDED WHITE RIVER, ARKANSAS

UPDATED MASTER PLAN

BEAVER LAKE

INDIAN CREEK

PARK

200 0 200 400  
SCALE OF FEET

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS APRIL 1975

REVISED JUNE 1985


SWDCO-RP (SWLCO-L/5 Jun 85) 1st End  
SUBJECT: Supplement No. 8, Updated Master Plan Design Memorandum  
No. 13-4, Beaver Lake 18 JUNE 1985

DA, Southwestern Division, Corps of Engineers, 1114 Commerce Street,  
Dallas, TX 75242-0216

TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved.

FOR THE COMMANDER:



A. P. HUTCHISON  
Chief, Construction-  
Operations Division

Encl wd

CF (w/basic & encl):  
DAEN-CWO-R (5 cys)



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

05 JUN 1985

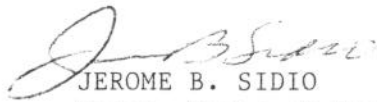
SWLCO-L

SUBJECT: Supplement No. 8, Updated Master Plan Design Memorandum No. 13-4,  
Beaver Lake

Commander, Southwestern Division  
ATTN: SWDCO-R

1. Reference SWDR 1125-2-3 dated 1 July 1977, subject: Approval Authority for Additions and Betterments.
2. The purpose of this supplement is to present a plan for the addition of a swim beach in Dam Site Park. The day use and camping areas have been separated in the park, and the only swim beach is located in a camping area. The addition of a swim beach in the day use area would not generate additional revenues (directly), but it would reduce the traffic and noise in the camping area. The reduction of traffic and noise in the camping area would improve its appeal and would enhance additional visitation and revenues.
3. The estimated cost of developing the swim beach is \$2,500. The cost of operating and maintaining the new beach would probably be offset by reduced operational costs and problems in the camping area. If approved, \$2,500 of the FY 85 SRUF funds for "cleanup" would be transferred and used for construction of the swim beach. The enclosed Plate 12 indicates the proposed addition.
4. Approval of this supplement is recommended.

1 Encl (9 cys)  
As stated

  
JEROME B. SIDIO  
Major, Corps of Engineers  
Acting District Engineer







SWDCO-RP (SWLCO-L/21 May 85) 1st End  
SUBJECT: Supplement No. 7, Master Plan Design Memorandum No. 134,  
Beaver Lake

DA, Southwestern Division, Corps of Engineers, 1114 Commerce Street,  
Dallas, TX 75242-0216 14 JUNE 1985

TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved, subject to the following comments:

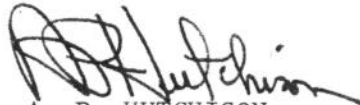
a. Normally, we do not approve additional facilities unless they enhance the fee program. However, after discussions with district personnel, we agree that the separation of day use and camping is needed for management improvement and that there is no other feasible alternative.

b. While we realize that the master plan layout provided on plate 19 is symbolic in nature, the proposed boat launching ramp complex appears to be located within the existing limits of lease for the marina. It should be separated from the lease area to avoid conflicts with the concessionaire.

c. Consideration should be given to relocating the entrance complex to eliminate the need for day users and marina customers to be detained as they enter the park.

FOR THE COMMANDER:

2 Encls  
wd all encls

  
A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF (w/basic & encl):  
DAEN-CWO-R (5 cys)





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

21 MAY 1985

SWLCO-L

SUBJECT: Supplement No. 7, Master Plan Design Memorandum No. 13-4, Beaver Lake

Commander, Southwestern Division  
ATTN: SWDCO-RR

1. References:

a. Letter SWLCO-L dated 18 April 1985, subject: Utilization of Special Recreation Use Fees (SRUF) Funds - FY 86 Program.


b. SWDR 1125-2-3 dated 1 July 1977, subject: Approval Authority for Additions and Betterments.

2. The purpose of this supplement is to illustrate planned development and changes of Horseshoe Bend Park to separate day use and camping. The proposed work includes the construction of a launching ramp and parking lot for day users, the construction of 300 feet of road, the addition of a swimming beach and parking lot for day users, and the relocation of a picnic shelter and play area. The location of three proposed camping areas, a proposed picnic area, and the proposed swimming beach have been changed on the site plan. Construction of the launching ramp and road are included in the FY 86 SRUF program as stated in reference 1a. The other items will be included in the FY 87 SRUF program.

3. Horseshoe Bend Park presently has 115 campsites, 9 picnic sites, 7 vault restrooms, 2 group picnic shelters, a marina, and a boat launching ramp. The annual visitation for 1981 through 1984 varied between 222,000 and 409,000 while the number of campers per year varied between 86,000 and 119,000. Fee collections increased from \$41,500 in FY 81 to \$69,300 in FY 84. The park is located approximately 7 miles from Rogers, Arkansas, and approximately 23 miles from Fayetteville, Arkansas. Separation of the day use and camping areas would improve the quality of the park and enhance visitation which would increase fee collections. Relocation of the group picnic shelter could increase its use by 50 percent and increase reservation fees \$500 per year (30-year average). The estimated cost of the proposed work is \$26,500 and is itemized on the enclosed economic analysis which demonstrates that this proposal is cost effective. The enclosed plate 19 indicates the proposed changes and improvements.

4. Approval of this supplement is recommended.

2 Encls (9 cys)  
As stated

  
ROBERT W. WHITEHEAD  
Colonel, Corps of Engineers  
Commanding

## ECONOMIC ANALYSIS

### Capital Investment

|  |              |
|--|--------------|
| 1. Construct launching ramp.                       | \$5,000      |
| 2. Construct road segments for camping area No. 2. | 7,500        |
| 3. Construct parking lot for launching ramp.       | 4,000        |
| 4. Develop swimming beach.                         | 3,000        |
| 5. Construct parking lot for swimming beach.       | 3,000        |
| 6. Relocate picnic shelter.                        | 2,500        |
| 7. Relocate play area.                             | <u>1,500</u> |
| TOTAL  | \$26,500     |

### Annual Costs Resulting From Development

|   |              |
|---|--------------|
| 1. Amortized cost of capital investment for 30 years at<br>8 3/8 percent interest (First cost X .09199) | \$2,440      |
| 2. Increased O&M of added facilities  | <u>1,500</u> |
| TOTAL   | \$3,940      |

### Added Annual Revenues Anticipated (30-year average)

|  |            |
|--|------------|
| 1. Income from increased visitation (plus 5 percent) | \$3,500    |
| 2. Group Shelter reservation fees                    | <u>500</u> |
| TOTAL  | \$4,000    |

Net Annual Benefits = \$4,000 - \$3,940 = \$60

### Expenditure Schedule

| <u>Type Funds</u> | <u>FY 86</u> | <u>FY 87</u> | <u>Total</u> |
|-------------------|--------------|--------------|--------------|
| SRUF              | \$12,500     | \$14,000     | \$26,500     |



SWDCO-RP (SWLCO-L 15 Oct 84) 1st End  
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement  
No. 6

DA, Southwestern Division, Corps of Engineers, 1114 Commerce Street,  
Dallas, TX 75242-0216

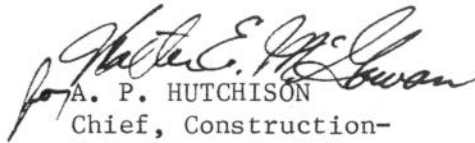
9 NOV 1984

TO: Commander, Little Rock District, ATTN: SWLCO-L ✓

Approved.

FOR THE COMMANDER:

wd all encl

  
A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF: w/encl  
DAEN-CWO-R (5 cys)



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203-0867

SWLCO-L

15 October 1984

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement No. 6

Commander, Southwestern Division  
ATTN: SWDCO-R

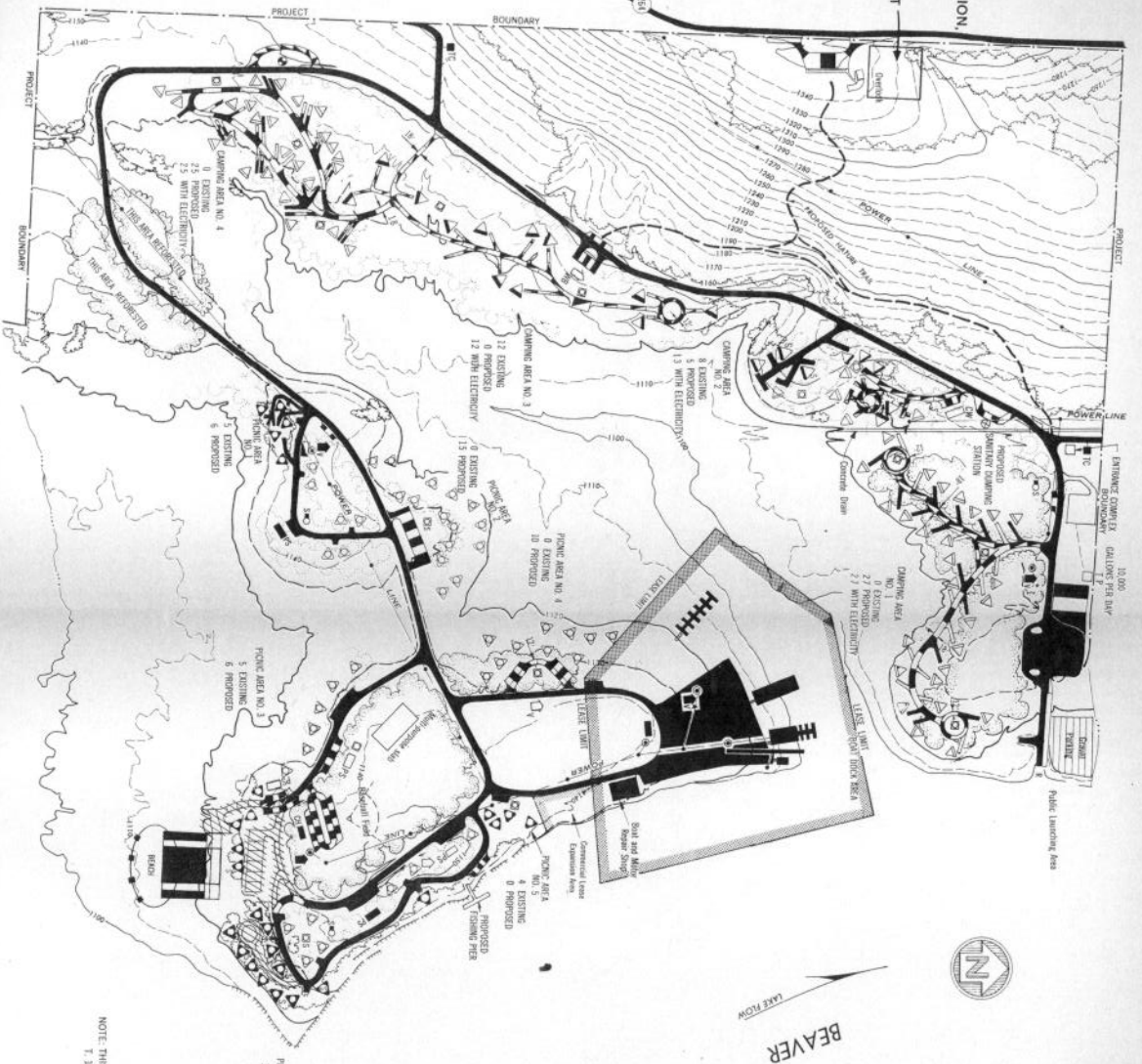
1. The purpose of this supplement is to designate a 200' X 200' area within Hickory Creek Park available for leasing to the Hickory Creek Volunteer Fire Department for a fire station. The site is located within an undeveloped portion of the park as shown on the inclosed revised park site plan. The fire station will not affect the planned development of the park. A vegetative screen will be established to separate the fire station and the future overlook structure prior to construction of the overlook.
2. The Hickory Creek Volunteer Fire Department has requested a long-term lease of the proposed site. The fire station will provide fire protection service for residents of this vicinity as well as Government lands and facilities within Hickory Creek Park. The volunteer fire department has been operating since April 1980 at a temporary station provided by the owners of Hickory Creek Mobile Home Park, which is located at the entrance of Hickory Creek Park. Their present location is inadequate for a permanent fire station. After an exhaustive search for a suitable site and much coordination with our Beaver Lake Resident Manager, the volunteer fire department requested that a lease be granted for the proposed site on Highway 264.
3. We recommend approval of the supplement to make the area available for lease. We propose to stipulate in the lease agreement that (1) future expansion of the lease area will not be permitted, and (2) the fire department will be required to plant screening between their structure and our proposed overlook. In order to protect the resources in the area, the Beaver Resident Office personnel will stake and clear the area of the proposed lease site.

FOR THE COMMANDER:

1 Incl (9 cys)  
as

*for James R. Follett*  
J. S. COOK, P.E.  
Chief, Construction-Operations  
Division

PROPOSED  
200'x200' LEASE  
AREA FOR FIRE STATION,  
HICKORY CREEK  
VOLUNTEER  
FIRE DEPARTMENT



BEAVER  
LAKE FLOW

| EXISTING | PROPOSED | LEGEND |
|----------|----------|--------|
| ROADS    | ROADS    | ROADS  |
| POWER    | POWER    | POWER  |
| WATER    | WATER    | WATER  |
| ...      | ...      | ...    |

NOTE: THIS AREA IS LOCATED IN SECTIONS 11 AND 12  
T. 18N. R. 29W. DEWITT CO. ARK.

BEAVER LAKE  
HICKORY CREEK  
PARK  
WHITE RIVER WATERSHED  
WHITE RIVER, ARKANSAS

EXHIBIT 1 TO SUPPLEMENT NO. 6  
PLATE 20

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK,  
ARKANSAS, APRIL 1975  
REVISED OCTOBER 1984

SWDCO-RP (13 Sep 84) 1st Ind  
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4,  
Supplement No. 5

DA, Southwestern Division, Corps of Engineers, 1114 Commerce Street,  
Dallas, TX 75242-0216

1 OCT 1984

TO: Commander, Little Rock District, ATTN: SWLCO-L

Approved.

FOR THE COMMANDER:

wd all incl



A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF: w/basic & incl  
DAEN-CWO-R (5 cys)





DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203

REPLY TO  
ATTENTION OF:

SWLCO-L

13 September 1984

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement No. 5

Commander, Southwestern Division  
ATTN: SWDCO-R

1. The purpose of this supplement is to reallocate 3.8 acres of land from operations: recreation-low density use and 2.2 acres of land from operations: natural area to operations: recreation-intensive use. The land is located in Sections 2 and 11, T19N, R28W, Benton County, Arkansas. Reallocation of the land is necessary to permit the expansion of the lease limits requested by Rocky Branch Marina. The inclosed Plates 4 and 5 have been revised to show the desired land use allocation changes. Plate 16 has been revised to enlarge the Rocky Branch Park boundary along the northwesterly shoreline, and to add a lease expansion area for the marina operations.

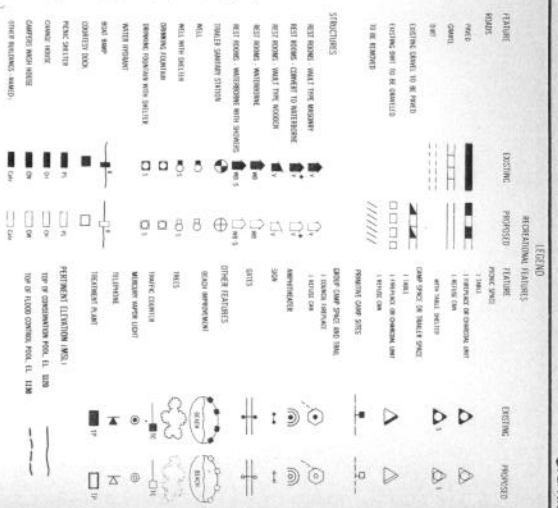
2. The concessionaire at Rocky Branch Marina has requested permission to expand his marina to provide more boat storage. The existing lease area is being fully utilized. The concessionaire has a waiting list containing about 50 customers who desire a boat dock space at his marina. He has submitted plans to relocate three existing boat docks and construct two new boat docks. This will increase his boat storage capacity by 34. Also, he proposes to construct an earthen breakwater as shown on Plate 16 to provide wind and wave protection for the existing docks. A permit request for the breakwater is being processed at this time. Fill material will be obtained from the shallow point north of the breakwater. This shallow area will be excavated down to elevation 1113 feet m.s.l., thereby eliminating a boating hazard.

3. We recommend approval of the lease expansion area for the marina concession as outlined in this supplement. The marina expansion is justified, and the proposed location of the marina facilities is in the best interest of the park development plan.

FOR THE COMMANDER:

3 Incl (9 cys)  
as

*for James R. Follett*  
T. S. COOK, P.E.  
Chief, Construction-Operations  
Division

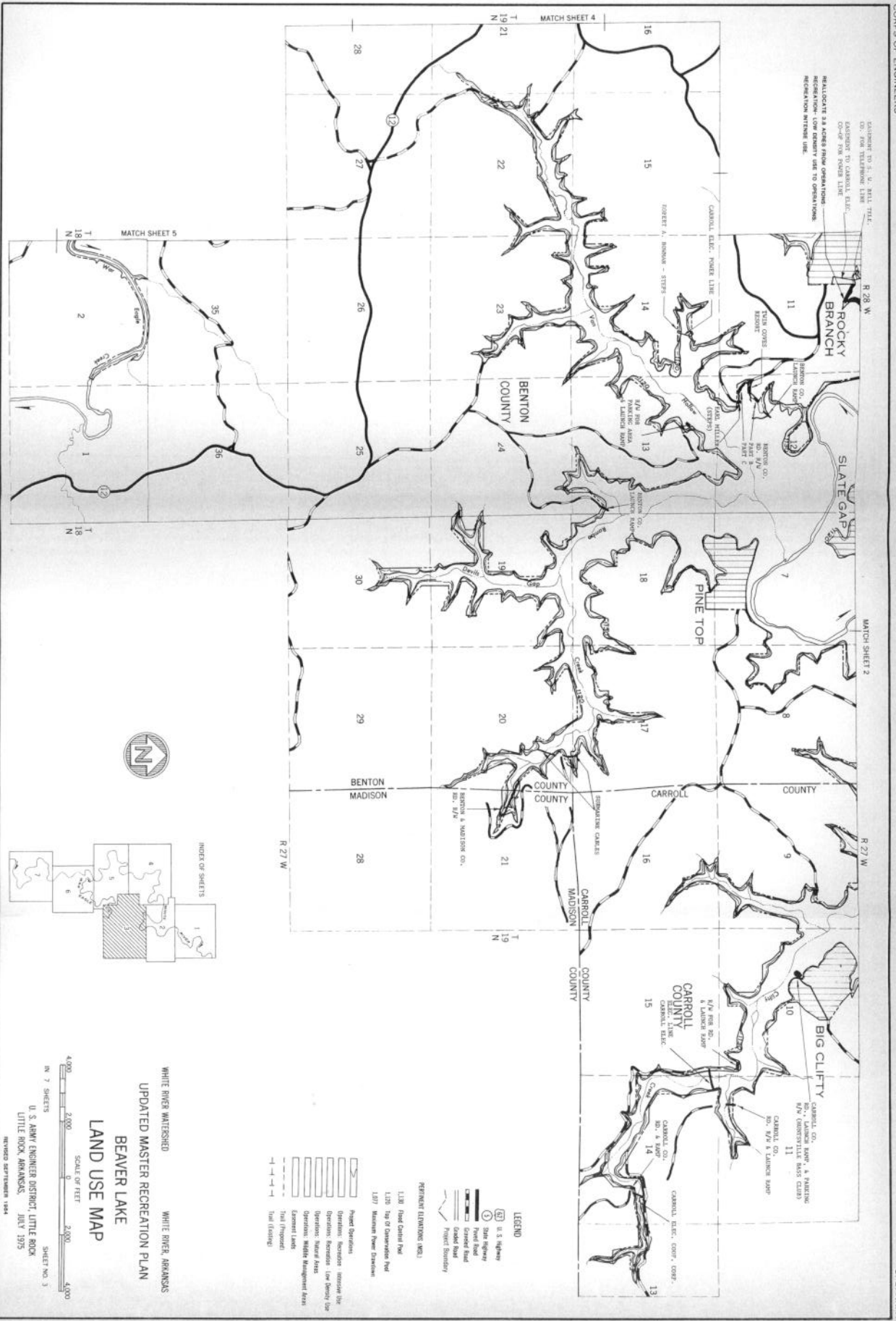


RIVER WATERSHED  
WHITE RIVER, ABAMASKS

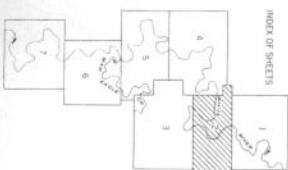
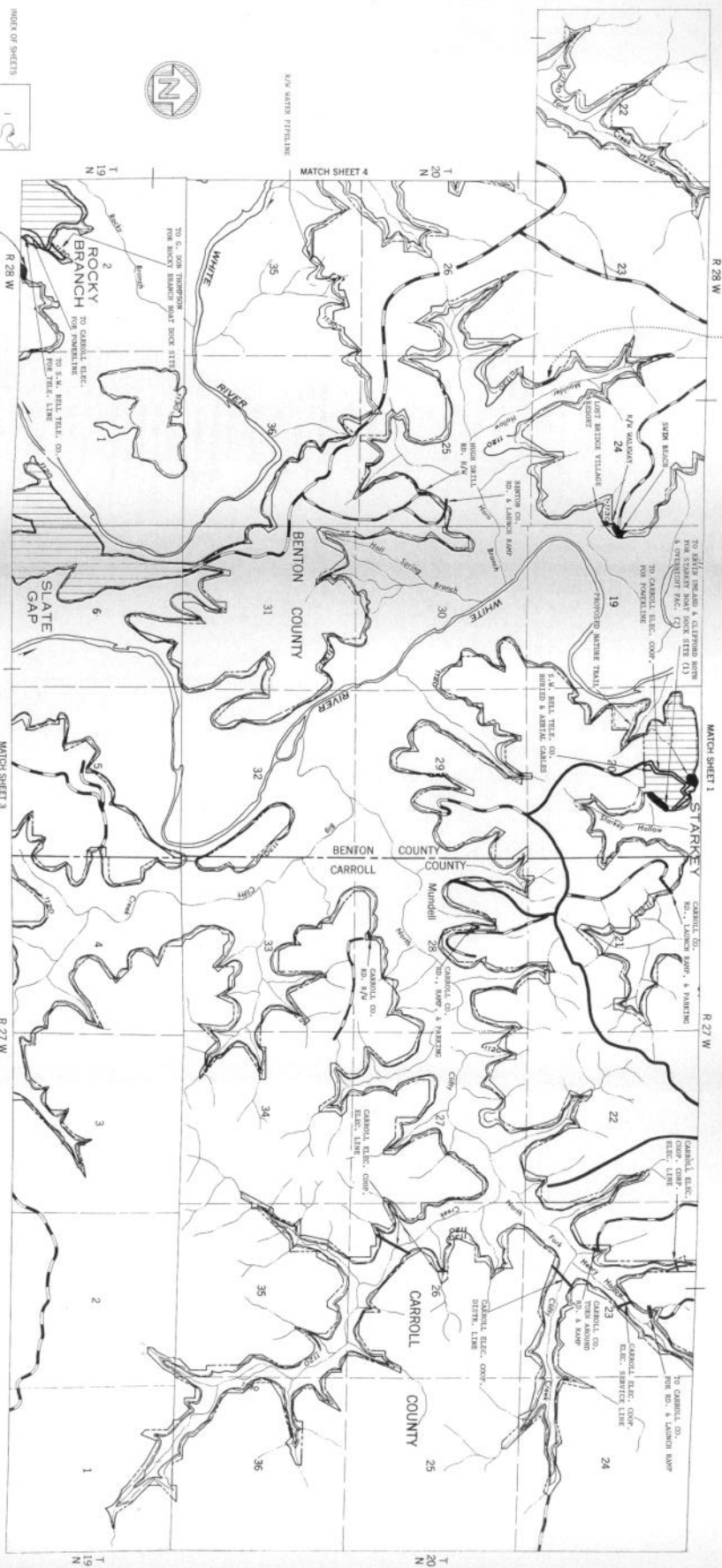
UPDATED MASTER PLAN  
BEAVER LAKE  
ROCKY BRANCH  
PARK

U.S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, JANUARY 1967

INCHES SEPTEMBER 1964



INDICATE LAND USE FROM  
AERIAL PHOTOGRAPHY TO  
APPROX. 100 FEET x 200 FEET



INDICATE LAND USE FROM  
AERIAL PHOTOGRAPHY TO  
APPROX. 100 FEET x 200 FEET

- LEGEND**
- State Highway
  - County Road
  - Private Road
  - County Boundary
  - State Boundary
  - Water
  - Marsh
  - Swamp
  - Forest
  - Open Land
  - Barren Land
  - Water
  - Marsh
  - Swamp
  - Forest
  - Open Land
  - Barren Land

WHITE RIVER WATERSHED  
BEAVER LAKE  
LAND USE MAP  
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS JULY 1975  
SHEET NO. 2  
SCALE OF FEET  
0 2000 4000  
IN 7 SHEETS  
DRAWN BY: [Name]  
CHECKED BY: [Name]  
APPROVED BY: [Name]

SWDCO-RP (SWLCO-L 4 Nov 80) 1st Ind  
SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement No. 4

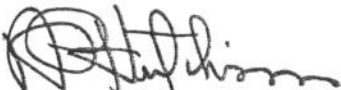
DA, Southwestern Division, Corps of Engineers, Main Tower Building,  
1200 Main Street, Dallas, TX 75202 25 NOV 1980

TO: District Engineer, Little Rock, ATTN: SWLCO-L

Subject supplement is approved.

FOR THE DIVISION ENGINEER:

wd all incl

  
A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF: w/basic & incl  
HQDA(DAEN-CWO-R) (quint)



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203

SWLCO-L

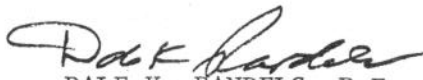
4 November 1980

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement No. 4

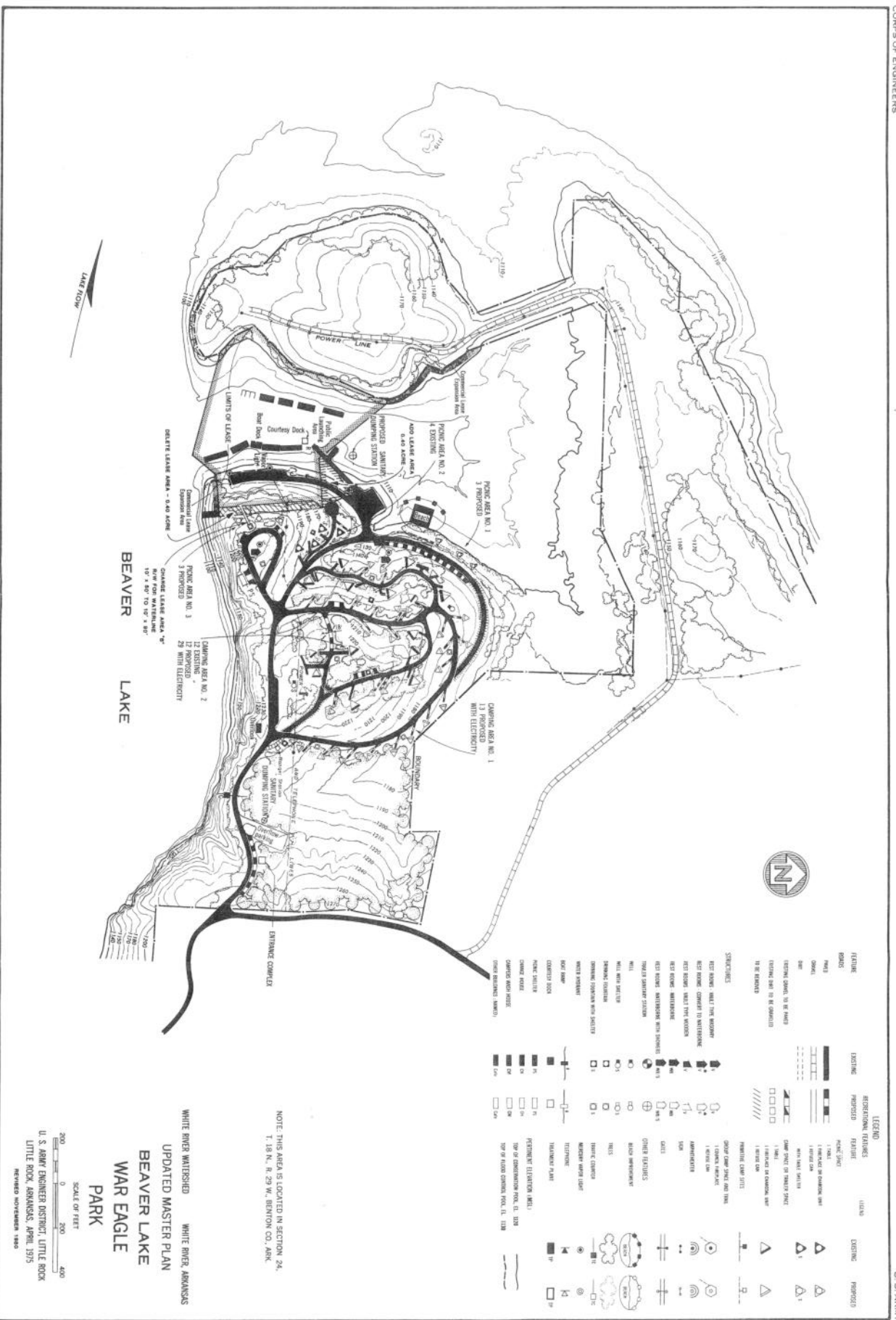
Division Engineer, Southwestern  
ATTN: SWDCO-R

1. The purpose of this supplement is to revise the limits of the commercial concession lease in War Eagle Park to provide additional parking for boat dock customers. The concessionaire has requested an exchange of 0.40 acre of the present lease area for 0.40 acre of land located adjacent to the present lease area. Revision of the lease area, as requested, will not conflict with the planned development of the park.
2. Parking is extremely limited at the boat dock. The concessionaire is being required to relocate his docks currently located on the west side of the cove to the east side of the cove since his access to the west side has been jeopardized by private ownership of the access road. This will further increase the demand for parking. The concessionaire proposes to remove a shale bank and fill a narrow depression, producing an additional twenty parking spaces. This will double his existing parking capacity with minimal disturbance of the park resources.
3. The exchange of land will not adversely affect the recreational development of the park but will provide needed parking space for the boat dock customers. Therefore, approval of this supplement is recommended.

1 Incl (9 cys)  
as

  
DALE K. RANDELS, P.E.  
Colonel, Corps of Engineers  
District Engineer







SWDCO-RP (SWLCO-L 17 Jun 80) 1st Ind

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement No. 3

DA, Southwestern Division, Corps of Engineers, Main Tower Building,  
1200 Main Street, Dallas, TX 75202

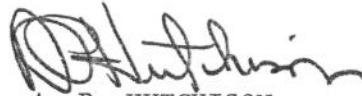
8 JUL 1980

TO: District Engineer, Little Rock

Supplement No. 3 to DM No. 13-4, Beaver Lake Master Plan, is approved.

FOR THE DIVISION ENGINEER:

wd incl



A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF: w/cy basic & incl  
HQDA(DAEN-CWO-R) (quint)



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 867  
LITTLE ROCK, ARKANSAS 72203

REPLY TO  
ATTENTION OF:

SWLCO-L

17 June 1980

SUBJECT: Beaver Lake Master Plan, Design Memorandum No. 13-4, Supplement No. 3

Division Engineer, Southwestern


1. The purpose of this supplement is to reallocate 0.83 acre of land above the top of conservation pool from operations recreation - low density use to operations recreation - intensive use. The land is located in Section 24, T20N, R28W, Benton County, Arkansas, as shown on the inclosed Plate 4. Reallocation of the land is necessary to permit the leasing and development of project lands for recreational purposes.
2. On 28 August 1979 Mr. Jerry Havens, president of the Beaver Lake Sailing Club, submitted a letter to the Resident Engineer, Beaver Lake, requesting a lease on Government land adjacent to the 5.03-acre tract owned by their club. The leased land is needed for construction of a boat launching ramp and access to sailboat docks to be located offshore. All other planned facilities will be located on the club's property and include the following items: access road, parking, boat trailer storage, picnic shelter, restroom facilities, camping area, and clubhouse. Through subsequent correspondence the sailing club has furnished a drawing of the proposed facilities, a schedule of development, an activity program for a one-year period, a statement on the club's financial and managerial capability, and justification statements concerning their club's requirements which cannot be met at an existing marina.
3. Three existing marinas at Rocky Branch, Starkey, and Lost Bridge Parks offer limited mooring facilities for sailboats, namely mooring buoys. Each of these marina operators initially objected to the establishment of the proposed sailboat mooring facilities. However, in a meeting in the Beaver Resident Office on 25 March 1980, the marina operators withdrew their objections to the proposal provided we would not permit the sale of oil, gas, and other items on the Government property that would be competitive with their business.
4. The proposed sailboat facilities would be located on lands which are presently approved for boat docks in the Lakeshore Management Plan.

SWLCO-L  
Division Engineer, Southwestern

17 June 1980

5. In our opinion, the Beaver Lake Sailing Club has satisfied all requirements of ER 1120-2-400 dated 1 November 71. Approval is recommended to reallocate the land and make it available for leasing for recreational purposes.

1 Incl (9 cys)  
as

  
DALE K. RANDELS, P.E.  
Colonel, Corps of Engineers  
District Engineer

SWDCO-RR (SWLED-PV 3 May 78) 1st Ind  
SUBJECT: Beaver Lake, White River, Arkansas, Design Memorandum No. 13-4,  
Updated Master Plan for Development and Management of Beaver  
Lake, Supplement No. 2

DA, Southwestern Division, Corps of Engineers, Main Tower Building,  
1200 Main Street, Dallas, TX 75202


24 MAY 1978

TO: District Engineer, Little Rock, ATTN: SWLED-PV

Approved.

FOR THE DIVISION ENGINEER:

wd all incl

  
A. P. HUTCHISON  
Chief, Construction-  
Operations Division

CF: w/cy basic & incl  
HQDA(DAEN-CWO-R) (quint)

SWLED-PV

21 April 1977

SUBJECT: Beaver Lake, White River, Arkansas Design Memorandum No. 13-4,  
Updated Master Plan for Development and Management - Supplement  
No. 1

Division Engineer, Southwestern

1. References:

a. Letter SWLPS dated 10 February 1977 with subsequent indorsements, subject: Contract No. DACW03-77-C-0003 Between the United States of America and the Carroll-Boone Water District for Water Storage Space in Beaver Lake, which furnished the contract to OCE for approval.

b. Letter SWLRE-A dated 11 February 1977 with subsequent indorsements, subject: Beaver Lake - Proposed Easement Grant Under Provisions of Contract No. DACW03-77-C-0003, Between the United States of America and the Carroll-Boone Water District for Water Storage Space and Related Purposes, which furnished the necessary easement to SWD for approval and execution.

2. This supplement proposes the reallocation of approximately one-half mile of shoreline. Reallocation will enable the Carroll-Boone Water District to satisfactorily assure compliance with land use restrictions imposed by the Arkansas State Department of Health for acceptance of a raw-water intake site. The restrictions imposed by the Arkansas State Department of Health are outlined in a letter dated 12 November 1971 to the consulting engineer for the Water District, copy of which is inclosed.

3. Proposed reallocation involves that portion of fee-owned lands located in the NE $\frac{1}{4}$ , NE $\frac{1}{4}$  of Section 15 and all lands in Section 10, R. 27 W., T. 20 N., other than park lands as shown on the inclosed exhibit. Reallocation is from Operations: Recreation - Low Density Use and Operations: Natural Areas to Operations: Water Supply Requirements. These lands will be available for appropriate public use in their natural state. Public use considered appropriate consists of such activities as ecological workshops, birdwatching, and other nature study activities that do not require supporting land based facilities. That shoreline in the Dam Site Park within one-half mile of the proposed water supply intake requires no reallocation since there is no planned or existing development in this portion of the park.

SWLED-PV


21 April 1977

SUBJECT: Beaver Lake, White River, Arkansas Design Memorandum No. 13-4,  
Updated Master Plan for Development and Management - Supplement  
No. 1

4. Water surface activities will be restricted within 300 feet of the proposed water supply intake. This restricted area will be marked by buoys installed and maintained by the Boone-Carroll Water District.

5. Approval is recommended.

2 Incl  
as (7cys)

  
for C. E. EDGAR III  
Colonel, Corps of Engineers  
District Engineer

ARKANSAS STATE DEPARTMENT OF HEALTH  
LITTLE ROCK

ENVIRONMENTAL ENGINEERING

November 12, 1971

In Reply Refer To

McGoodwin, Williams & Yates, Inc.  
Consulting Engineers  
909 Rolling Hills Drive  
Fayetteville, Arkansas 72701

Gentlemen:

On November 10, 1971, this office made an on-site inspection of the proposed water intake site to serve the Carroll County Water District. The site is located in the general vicinity of "Rolloff Bluff". Adjacent to the site toward the dam is land owned by the Corps of Engineers, whereas the other proposed land area is reported to be privately owned.

The site is acceptable to this office under the following conditions:

1. The District shall own and control all land between the black top road and the lake from one-half mile up lake from the intake structure to the Corps of Engineers property down lake below the intake site.
2. The Corps property should be designated as a Wildlife and Bird Sanctuary to preclude encroachment on the proposed site, as well as to make the best use of the very steep terrain.
3. The District shall buoy and maintain said buoys a distance of 300 feet into the lake along the property owned and controlled by the District. All water activities are to be prohibited in this restricted area.
4. The District shall convert all land not needed for water pumping, water treatment, water storage or pipelines to a Wild Life and Bird Sanctuary to preclude adverse usage which may in the future be detrimental to water quality.

If the Carroll County Water District is agreeable to all the foregoing points, and the Engineers of the District feel that a cooperative agreement can be reached with the Corps of Engineers, the Carroll County Water District should immediately initiate the necessary procedures to acquire the property which we included in our Sanitary Survey of the site.

Should you have any questions, please advise.

Very truly yours,

BUREAU OF ENVIRONMENTAL ENGINEERING

Resident Engineer, Beaver

1971 NOV 12 PM 2:14



THIS MAP WAS PREPARED FOR THE ARMY ENGINEER DISTRICT, LITTLE ROCK, ARKANSAS, BY THE ARMY ENGINEER DISTRICT, LITTLE ROCK, ARKANSAS, JULY 1975.

