

CESWL-OP

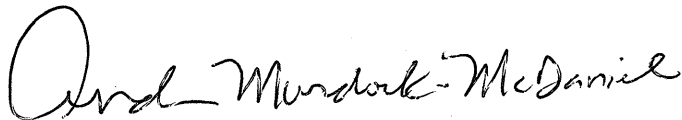
1 March 2011

MEMORANDUM FOR Operations Project Manager, Pine Bluff Project Office

SUBJECT: Master Plan Supplement No. 6, Arkansas Post Water Trail, Moore Bayou Park, Pine Bluff Project Office

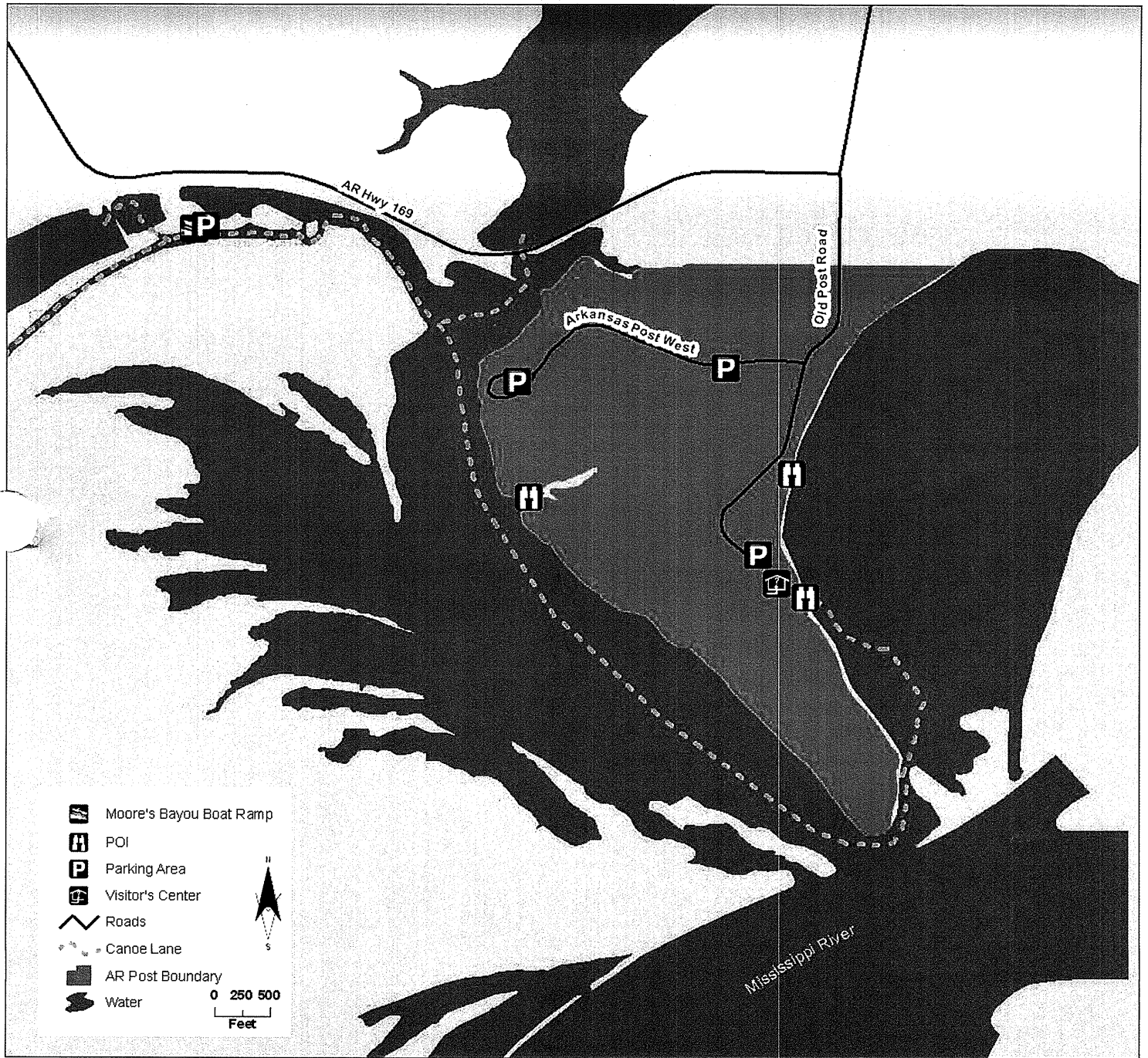
1. The purpose of this supplement is to revise the plan to develop an 11- mile water trail utilizing waters and lands within the boundaries of the Arkansas Post Field Office, Moore Bayou and Post Bayou. These changes will not interfere with other planned and designed park facilities in Moore Bayou Park. An Arc-view map is enclosed which shows the course layout.

2. Approved.



Andrea L. Murdock-McDaniel  
Chief, Operations Division

Encl





CESWD-ETC-R (CESWL-CO-L/14 Mar 95) 1st End Mr. McCauley/jw/  
7-2434

SUBJECT: Supplement No. 5, Updated Master Plan Design Memorandum  
No. 8, Arkansas River, Arkansas, Norrell Lock and Dam, Locks and  
Dams Nos. 2, 3, 4, and 5 and David D. Terry Lock and Dam

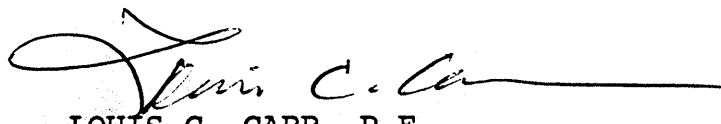
CDR, U.S. Army Corps of Engineers, Southwestern Division,  
1114 Commerce Street, Dallas, TX 75242 24 MAR 1995

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

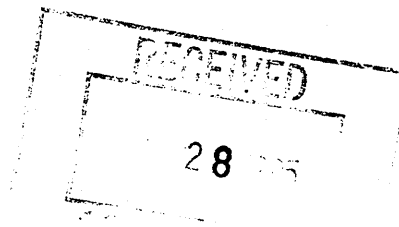
The subject supplement is approved.

FOR THE COMMANDER:

Encl  
wd

  
LOUIS C. CARR, P.E.  
Acting Chief, Construction-  
Operations Division

CF (w/basic & encl):  
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

CESWL-CO-L (1130)

14 March 1995

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

SUBJECT: Supplement No. 5, Updated Master Plan Design Memorandum  
No. 8, Arkansas River, Arkansas, Norrell Lock and Dam, Locks and  
Dams Nos. 2, 3, 4, and 5 and David D. Terry Lock and Dam

1. The purpose of this supplement is to indicate the location of a proposed entrance area for Wilbur D. Mills Park. The new park was relocated by the Arkansas Electric Cooperative Corporation and opened to the public on 12 August 1994. The collection of day use fees has created the need for an entrance area with a gatehouse.
2. The new facilities in the relocated park have also increased camping in this park. A gatehouse is needed for gate attendants to collect the camping and day use fees. This addition will increase fee collections which can help finance normal O&M activities.
3. Approval of this supplement is recommended.

FOR THE COMMANDER:

Encl (4 cys)

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

CESWD-CO-RP (CESWL-CO-L/4 May 94) 1st End Mr. McCauley/jw/7-2434

SUBJECT: Supplement No. 4, Updated Master Plan Design Memorandum No. 8, Arkansas River, Arkansas Norrell Lock and Dam, Locks and Dams Nos. 2, 3, 4, and 5, David D. Terry Lock and Dam

CDR, U.S. Army Corps of Engineers, Southwestern Division,  
1114 Commerce St., Dallas, TX 75242

**17 MAY 1994**

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

Approved.

FOR THE COMMANDER:

*William B. McCauley*

VICKI G. DIXON

*For* Acting Chief, Recreation-  
Resources and Regulatory  
Division

Directorate of Construction-  
Operations



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)

4 May 1994

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

SUBJECT: Supplement No. 4, Updated Master Plan Design  
Memorandum No. 8, Arkansas River, Arkansas Norrell Lock and  
Dam, Locks and Dams Nos. 2, 3, 4, and 5, David D. Terry Lock  
and Dam

1. The purpose of this supplement is to redesignate a portion of Pendleton Bend Park (plate 8A of Supplement No. 3) to Wilbur D. Mills Park.
2. The new designation will separate the park area on the right descending bank at Wilbur D. Mills Dam from Pendleton Bend Park. The new Wilbur D. Mills Park is scheduled to be relocated by Arkansas Electric Cooperative Commission in conjunction with construction of a new hydroelectric generating station. A master plan supplement will be submitted at the completion of the park relocation and the new name change will be included with that supplement.
3. Approval of this supplement is recommended.

FOR THE COMMANDER:

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

SWDCO-RP (SWLCO-L/21 Nov 86) 1st End  
SUBJECT: Supplement No. 3, Updated Master Plan Design  
Memorandum No. 8, Arkansas River, Arkansas, Norrell  
Lock and Dam, Locks and Dams Nos. 2, 3, 4, and 5 and  
David D. Terry Lock and Dam

DA, Southwestern Division, Corps of Engineers, 1114 Commerce  
Street, Dallas, TX 75242-0216 17 DEC 1986

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

Approved.

FOR THE COMMANDER:

16 Encls  
wd all encls

*for* *A. P. Hutchison*  
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

21 November 1986

SUBJECT: Supplement No. 3, Updated Master Plan Design Memorandum No. 8,  
Arkansas River, Arkansas, Norrell Lock and Dam, Locks and Dams  
Nos. 2, 3, 4, and 5 and David D. Terry Lock and Dam

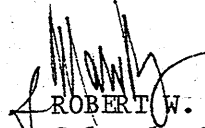
Commander, Southwestern Division

ATTN: SWDCO-R

1. The purpose of this supplement is to update the enclosed site plans to indicate existing recreational development. The site plans were last revised in December 1975 when the master plan was completely updated.

2. Approval of this supplement is recommended.

16 Encls (9 cys)

 LTC CE  
ROBERT W. WHITEHEAD  
Colonel, Corps of Engineers  
Commanding



SWDPL-R (SWLED-PV 6 Sep 77) 1st Ind

SUBJECT: Arkansas River, Arkansas, Locks and Dams Norrell, Nos. 2, 3, 4, 5 and David D. Terry; Design Memorandum No. 8, Updated Master Recreation Plan for Navigation Pool Development and Management, Supplement No. 2

DA, Southwestern Division, Corps of Engineers, Main Tower Building,  
1200 Main Street, Dallas, TX 75202 2 NOVEMBER 1977

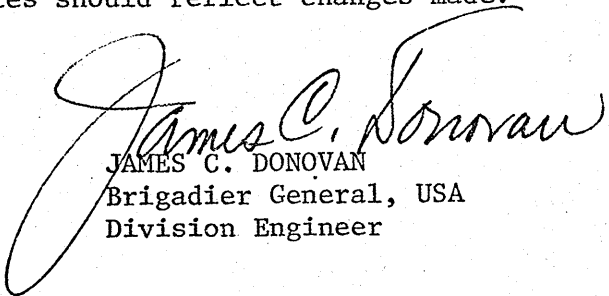
TO: District Engineer, Little Rock

1. Supplement No. 2 is not approved for the following reason:

While the McClellan-Kerr Arkansas River Navigation System has remained "open" (for budgetary purposes) to accomplish work on the Conway Water Supply, these public use areas became operational in 1969 and were basically completed at that time except for a few support facilities needed for refinement. Facilities have been provided to satisfy the anticipated "initial" visitation in accordance with current regulations. We can not concur in any action designed to take advantage of the project remaining "open" so that additional facilities may be built with construction general funds.

2. For use in future submittals, existing boat launching ramps may be widened or lengthened using special recreation use fee funds. Approval of supplements or revisions to the master plan is not required for minor modifications (such as these) to existing facilities; however, whenever master plans are updated, plates should reflect changes made.

2 Incl  
Dupe cy ea incl wd

  
JAMES C. DONOVAN  
Brigadier General, USA  
Division Engineer



DEPARTMENT OF THE ARMY  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
POST OFFICE BOX 367  
LITTLE ROCK, ARKANSAS 72203

REPLY TO  
ATTENTION OF:

SWLED-PV

6 September 1977

SUBJECT: Arkansas River, Arkansas, Locks and Dams Norrell, Nos. 2, 3, 4, 5, and David D. Terry; Design Memorandum No. 8, Updated Master Recreation Plan for Navigation Pool Development and Management, Supplement No. 2

Division Engineer, Southwestern

1. The purpose of this supplement is to provide one additional boat launching lane at Merrisach Lake and Pendleton Bend Parks in the initial recreational development program. Both ramps can be justified based on the recorded visitation and the design load criteria given in EM 1110-2-400, Appendix A dated 1 September 1971. Additional boat ramp parking will not be required. See revised Plates Nos. 5 and 8 inclosed.

RECORDED VISITATION

<u>Year</u>	<u>Pendleton Bend*</u>	<u>Merrisach Lake</u>
1973	51,200	73,300
1974	101,900	110,100
1975	99,500	59,100
1976	90,600	182,300

\*Visitation to that portion of Pendleton Bend Park which is shown on Plate 8.

2. Mayor Billy Free, Dumas, has recently requested us to provide an additional boat launching ramp at Pendleton Bend Park. As noted in paragraph 9.03c of the master plan, additional boat launching facilities have been requested in the past in pool 2. However, no cost sharing participants have been located.

3. The Pendleton Marina, located approximately 2 miles upstream of Pendleton Bend Park, has recently changed ownership. The new owner charges a fee for launching privileges at his double lane boat ramp. Therefore, many fishermen who previously launched their boats free at this marina now go to Pendleton Bend Park to launch.

SWLED-PV

6 September 1977

SUBJECT: Arkansas River, Arkansas, Locks and Dams Norrell, Nos. 2, 3, 4, 5, and David D. Terry; Design Memorandum No. 8, Updated Master Recreation Plan for Navigation Pool Development and Management, Supplement No. 2

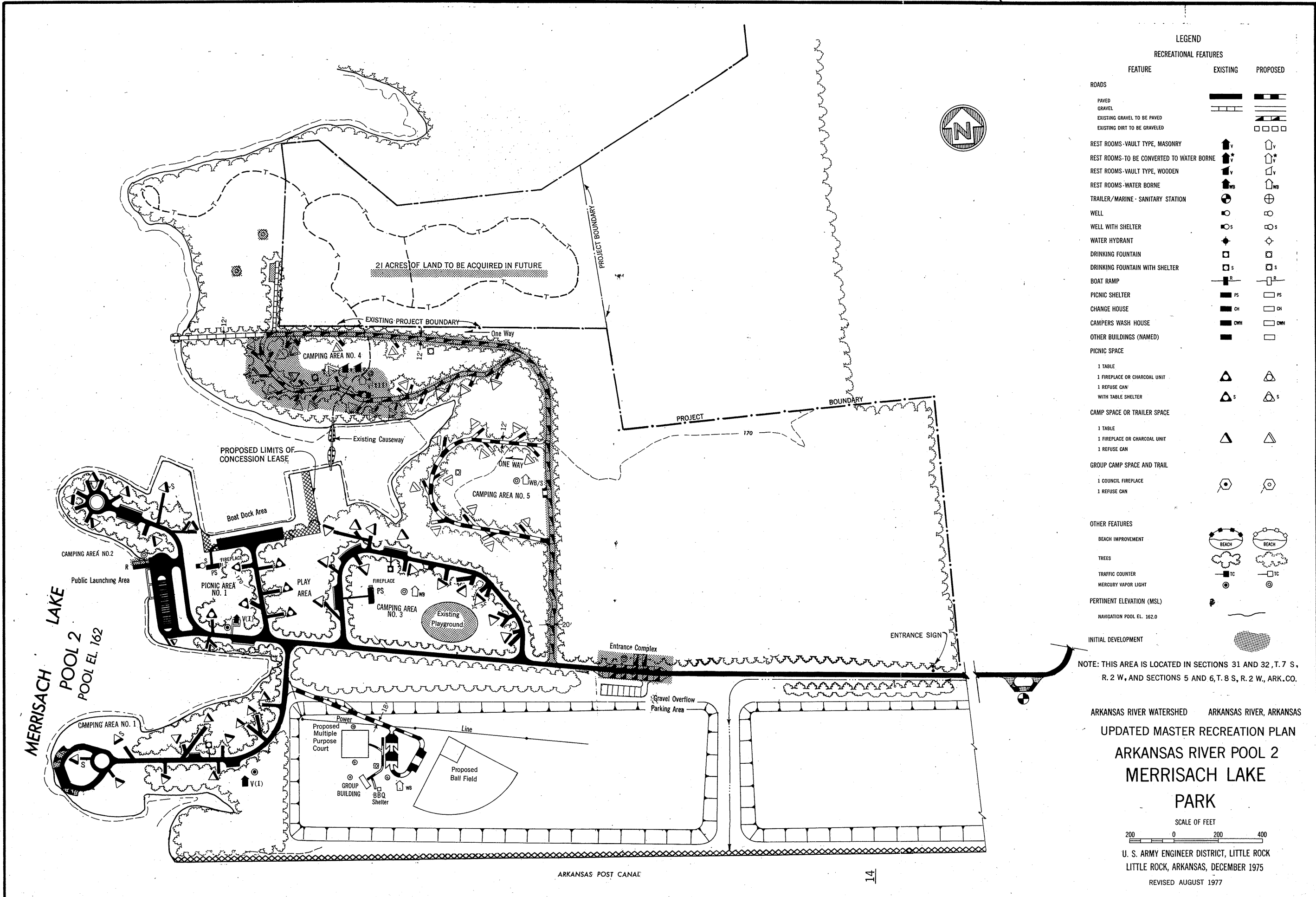
4. The proposed ramp at Pendleton Bend Park would be 18 feet wide and 57 feet long. It would require a 20- by 140-foot paved lane for access and would cost approximately \$13,500. The proposed ramp at Merrisach Lake Park would be 18 feet wide and 75 feet long and would cost approximately \$6,800. The two ramps would be constructed in FY 78 contingent upon the availability of Account 14, Construction General Funds. An increase in the project cost estimate will not be required.

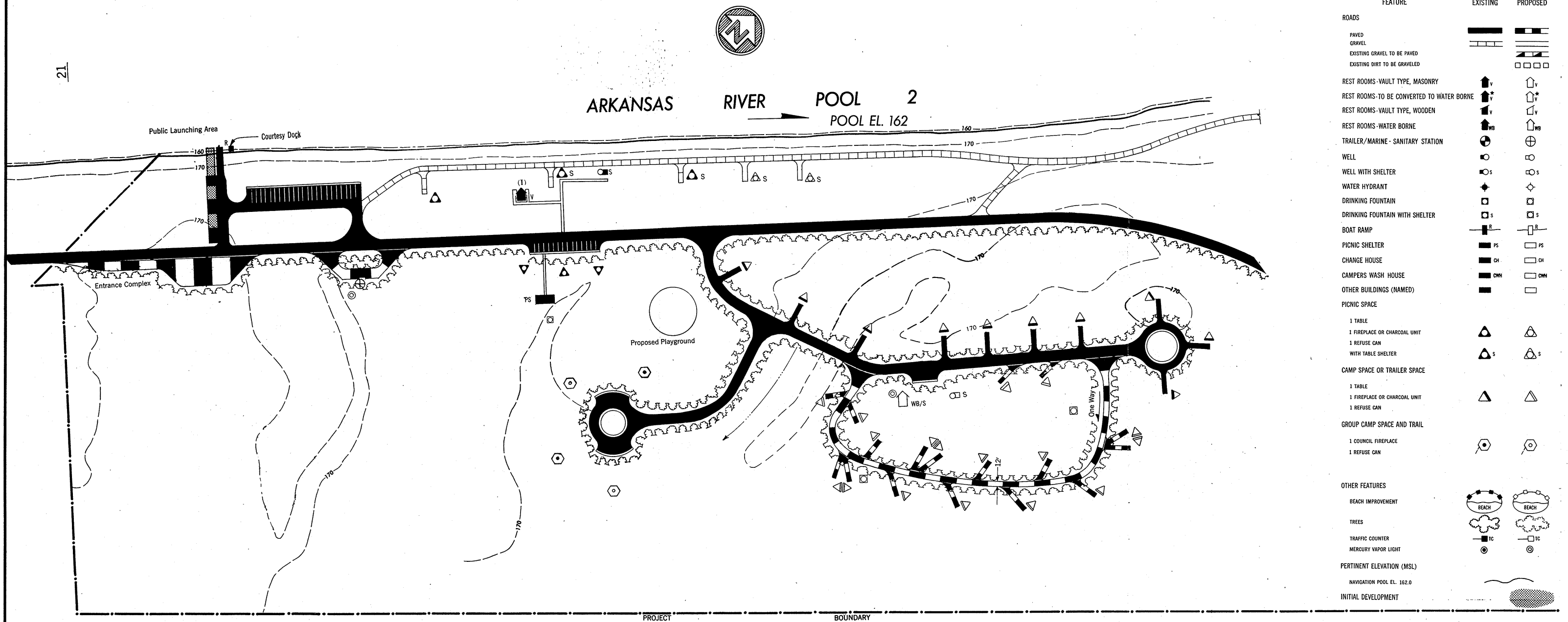
5. Approval is recommended.



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

2 Incl (9 cys)  
as





NOTE: THIS AREA IS LOCATED IN SECTIONS 13 23, AND 24,  
T. 8 S., R. 3 W., AND SECTIONS 18, 19, 20, 29 AND 30,  
T. 8 S. R. 2 W., DESHA CO. AND ARKANSAS CO.

ARKANSAS RIVER WATERSHED ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER POOL 2  
PENDLETON BEND  
PARK

SCALE OF FEET  
100 0 100 200

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

SHEET 1 OF 2

REVISED AUGUST 1977

DI ATC Q

SWDPL-R (SWLED-PV 18 Mar 77) 3d Ind

SUBJECT: Arkansas River, Arkansas - McClellan-Kerr Arkansas River  
Navigation System, Locks and Dams Norrell, Nos. 2, 3, 4 and 5  
and David D. Terry, Design Memorandum No. 8, Updated Master  
Recreation Plan for Navigation Pool Development and Management,  
Supplement No. 1

DA, Southwestern Division, Corps of Engineers, Main Tower Building,  
1200 Main Street, Dallas, TX 75202 24 JUNE 1977

TO: District Engineer, Little Rock

In view of commitments made prior to leasing for work which has not been  
accomplished, no objections are offered to preparing the area to minimal  
acceptable standards, subject to the availability of funds.

FOR THE DIVISION ENGINEER:



NOLAN C. RHODES  
Colonel, CE  
Deputy Division Engineer

wd incl

CF:

HQDA (DAEN-CWO-R) w/cy basic,  
1st & 2d Ind & incl (3 cy)





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

REPLY TO  
ATTENTION OF:

SWLED-PV

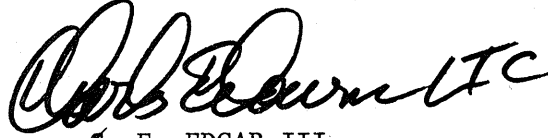
18 March 1977

SUBJECT: Arkansas River, Arkansas - McClellan-Kerr Arkansas River  
Navigation System, Locks and Dams Norrell, Nos. 2, 3, 4 and 5  
and David D. Terry, Design Memorandum No. 8, Updated Master  
Recreation Plan for Navigation Pool Development and Management,  
Supplement No. 1

Division Engineer, Southwestern

1. This supplement provides for remedial landscaping work in the vicinity of the handicapped fishing platform, fishing berm, and parking area at Murray Damsite Park recently leased to the city of Little Rock. Although it was not originally intended for lease to the city, the fishing platform, berm, and parking area were included in the lease area to reduce our operation and maintenance costs. This area is presently in an unimproved condition, and city officials have complained about its appearance and problems associated with maintaining the area. We consider that it is the Corps' responsibility to repair this area so that it can be operated and maintained by the city.
2. We propose to repair the area by turfing, planting trees, and constructing steps and traffic barriers as shown in inclosure 1. These measures will enable the city to operate and maintain the area and will reduce the possibility of this portion of the park area being returned to the Corps for operation and maintenance. Estimated direct construction cost for the work is \$22,000.
3. Expeditious approval of this supplement is recommended so that the planting work can begin during the upcoming spring planting season.

1 Incl (7 cy)  
as

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

SWDPI-R (SWLED-PV 10 Feb 76) 3d Ind

SUBJECT: Arkansas River, Arkansas, Locks and Dams Norrell, Nos. 2, 3, 4 and 5, and David D. Terry; Design Memorandum No. 8, Update Master Recreation Plan for Navigation Pool Development and Management

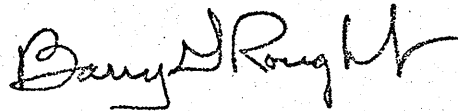
DA, Southwestern Division, Corps of Engineers, Main Tower Building,  
1200 Main Street, Dallas, Texas 75202

3 AUG 1976

TO: District Engineer, Little Rock

The master plan for Locks and Dams Norrell, Nos. 2, 3, 4 and 5 and David D. Terry is approved subject to comments in the previous indorsements.

FOR THE DIVISION ENGINEER:



BARRY G. ROUGHT  
Chief, Planning Division

CF:  
HQDA (DAEN-CWO-R) (dupe)

DAEN-CWO-R (10 Feb 76) 2d Ind

SUBJECT: Arkansas River, Arkansas, Locks and Dams Norrell, Nos. 2, 3, 4 and 5, and David D. Terry; Design Memorandum No. 8, Updated Master Recreation Plan for Navigation Pool Development and Management

DA, Office of the Chief of Engineers, Washington, D.C. 20314

26 Jul 76

TO: Division Engineer, Southwestern  
ATTN: SWDPL-R

The Master Plan for Locks and Dams Norrell, Nos. 2, 3, 4 and 5 and David D. Terry, is approved subject to Division comments and the following additional comments:

a. Page 7-6, Para. 7.06b(4) and Plates 7 and 7A. It appears from viewing Plate 7A that the "Existing Gravel Road To Private Boat Dock" is the only access to this "private commercial dock" area which causes all traffic to the dock area to pass thru the entire length of the park. This traffic is using roads maintained by the Corps to gain access to a private area. If accurate accounting of visitation is to be recorded via the traffic counter located on this road, traffic should be restricted to that actually using the park. This traffic will also detract from the recreational experience of the visitor to the park. It also appears again from viewing Plate 7A that access to the private dock area existed at one time just East of the easterly project boundary line and consideration should be given to re-establishing this access.

b. Page 7-9, Para. 7.06b(15) and Plates 19 and 19A. This area has the same problem of "Existing Road To Private Development" that exists in paragraph a above. From viewing Plate 19A there appears to exist the same potential to provide access to the "private development" in this case prior to the "Entrance Complex" shown on Plate 19, thus reducing the traffic volume within the developed area of the site.

c. General. Scientific nomenclature should be used in association with common names when referred to flora and fauna to relieve the confusion associated with colloquialism.

FOR THE CHIEF OF ENGINEERS:

wd all incl

  
GEORGE BRAZIER

Chief, Construction-Operations Division  
Directorate of Civil Works

SWDPL-R (SWLED-PV 10 Feb 76) 1st Ind

SUBJECT: Arkansas River, Arkansas, Locks and Dams Norrell, Nos. 2, 3, 4, and 5, and David D. Terry; Design Memorandum No. 8, Updated Master Recreation Plan for Navigation Pool Development and Management

DA, Southwestern Division, Corps of Engineers, Main Tower Building,  
1200 Main Street, Dallas, Texas 75202 20 APR 1976

TO: HQDA (DAEN-CWO-R) WASH DC 20314

Subject master plan is forwarded recommending approval subject to the following comments which should be considered and incorporated in the plan, as appropriate, prior to implementing the development or action involved:

a. Paragraph 1.04. Considering the emphasis on the protection of the environment, aesthetics and public health relevant to Corps recreational activities, it is recommended that the following additional public laws and EO's be addressed:

- (1) Federal Water Pollution Control Act Amendments of 1972 (PL 92-500)
- (2) Safe Drinking Water Act (PL 93-523)
- (3) Federal Insecticide, Fungicide and Rodenticide Act (PL 92-516)
- (4) Solid Waste Disposal Act (PL 89-272)
- (5) Executive Order 11752; Prevention, Control and Abatement of Environmental Pollution at Federal Facilities.

b. Tables 5-6 through 5-9. Swimming is identified as a recreational activity which conflicts with discussions in paragraph 4.03d and 5.06d. This should be reconciled.

c. Paragraph 5.06e. This discussion should indicate that the domestic and solid wastes generated at Corps public use areas will be treated and/or disposed to comply with Federal/State requirements.

d. Paragraph 6.02. EPA, Region VI, should also be considered as an interested Federal agency since it has responsibilities regarding lake water quality, safe drinking water, domestic and solid wastes.

e. Paragraph 7.02d. The acreages of the wildlife areas should be furnished.

f. Table 9-3. Proposed all purpose courts, ball fields, barbeque shelters, and the group building should not be proposed for Corps management since they are high maintenance items and/or require unusual or extra special supervision.

20 APR 1976

SWDPL-R (SWLED-PV 10 Feb 76) 1st Ind

SUBJECT: Arkansas River, Arkansas, Locks and Dams Norrell, Nos. 2, 3, 4, and 5, and David D. Terry; Design Memorandum No. 8, Updated Master Recreation Plan for Navigation Pool Development and Management

g. Paragraph 10.02a. A statement is made that the federal owned lands are not suitable for intensive forest management. The rationale for this statement is not apparent and should be added.

h. Paragraph 10.02, General. Table 9-3 reflects plans to reforest 232 acres at a cost of \$1,100/acre. Discussion in this paragraph should be revised to describe this work. Also, in this regard, the estimated cost per acre for reforestation is considered excessive and should be restudied.

i. Paragraph 10.04. The plan is not clear as to which lands are to be managed by the Arkansas Game and Fish Commission and those to be managed by the Corps for wildlife. These should be delineated and discussed, including concept plans for management.

j. Plate 6. It is recommended that the riverside road remain gravelled rather than paved to minimize losses should riverbank caving continue to progress.

FOR THE DIVISION ENGINEER:

1 Incl  
4 cy wd

BARRY G. ROUGHT  
Chief, Planning Division

CF:

SWLED-PV







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

REPLY TO  
ATTENTION OF

SWLED-PV

10 February 1976

SUBJECT: Arkansas River, Arkansas, Locks and Dams Norrell, Nos. 2, 3, 4, and 5, and David D. Terry; Design Memorandum No. 8, Updated Master Recreation Plan for Navigation Pool Development and Management

Division Engineer, Southwestern

Design Memorandum No. 8, Updated Master Recreation Plan for Locks and Dams Norrell, Nos. 2, 3, 4, and 5, and David D. Terry is submitted for approval.

1 Incl (7cys)  
as

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



**ARKANSAS RIVER, ARKANSAS  
McCLELLAN - KERR ARKANSAS RIVER  
NAVIGATION SYSTEM**

**LOCKS AND DAMS NORRELL, NOS. 2,  
3, 4 AND 5 AND DAVID D. TERRY**

**DESIGN MEMORANDUM NO. 8**

**UPDATED MASTER RECREATION PLAN  
FOR NAVIGATION POOL DEVELOPMENT  
AND MANAGEMENT**



**U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
CORPS OF ENGINEERS  
LITTLE ROCK, ARKANSAS  
JANUARY 1976**

**013**

**ARMY-LITTLE ROCK, ARK.**

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS

NORRELL LOCK AND DAM

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
1	Access and Service Facilities (Locks and Dams Nos. 1 and 2) Revision	25 May 62 30 Nov 62	15 Aug 62 8 Feb 63
2	General	27 Jun 62	31 Oct 62
3	Real Estate Supplement No. 1 (Revised) Real Estate for Detour Roads Supplement No. 2, Real Estate for Work Area	29 Aug 62 4 Oct 63 24 Oct 63	18 Dec 62 16 Jan 64 29 Oct 63
4-1	Culvert-Valve Operating Machinery and Hydraulic Controls for Low-Lift Locks	13 Dec 62	20 Mar 63
4-2	Lock and Dam	17 Dec 62	28 Mar 63
4-3	Interlock Communications System - Radio and Telephone Revised	16 Oct 63 16 Oct 64	7 Dec 64 7 Dec 64
5	Construction Materials (Locks and Dams Nos. 1 and 2)	14 Mar 63	15 May 63
7	Master Plan (Locks and Dams Nos. 1, 2, 3, and 4) Supplement No. 1, Deferred Construction of Recreational Facilities Supplement No. 2, Site Layout and Access Road to Ste. Marie Public Use Area Supplement No. 3, Complete Master Plan Revision Supplement No. 4, Change Boyd Point Park to "Initial" and Sheppard Island to "Future" Supplement No. 5, Launching Ramp at Right Bank Notrebes Bend Park Supplement No. 6, Rising Star, Trulock, and Merrisach Parks Typical Park Entrance Concept Plan for Little Rock District Parks Electrical Outlets for Campsites - Arkansas River Parks	30 Apr 65 4 Aug 67 6 Mar 68 2 Mar 72 15 Feb 73 29 Oct 73 28 Feb 74 18 Mar 74 29 Aug 74 Jan 76	21 Apr 66 22 Aug 67 7 Jun 68 23 Aug 73 Disapproved 30 Mar 73 5 Dec 73 19 Jun 74 10 May 74 17 Sep 74
8	Updated Master Plan (Norrell Lock and Dam, Locks and Dams Nos. 2, 3, 4, and 5 and David D. Terry Lock and Dam)	Jan 76	
10 (PDM)	Preliminary Master Plan (Supplement No. 1)	22 Aug 62	26 Oct 62

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

LOCK AND DAM NO. 2

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
1	General	21 Dec 62	17 Apr 63
	Supplement No. 2, Fish and Wildlife	1 Jul 63	28 Jan 64
	Real Estate		
Ltr Rpt	Access Roads and Bridge Approach	24 May 63	30 Jul 63
2-1	Dam Site, Work Area, Access Roads, Navigation Canal, and Morgan Point Cutoff	10 Dec 63	21 Jan 64
	Supplement No. 1, Land for Construction Material Storage	4 Sep 64	16 Sep 64
	Supplement No. 2, Spoil Area	15 Jun 66	2 Sep 66
2-2	Navigation Pool	10 Sep 64	18 Dec 64
	Supplement No. 1 - Navigational Base Line Markers	7 Mar 70	
2-3	Dredging, Pools 2-5 and David D. Terry Lake	7 Oct 66	31 Mar 67
3	Navigation Lock	19 Mar 63	18 Jun 63
4	Dam	8 Oct 63	24 Dec 63
	Supplement No. 1, Additional Overflow Embankment Protection	10 Apr 68	27 Aug 68
5	Plans for Extreme HW Maintenance	26 Jun 63	16 Sep 63
6	Cathodic Protection for Lock Facilities	7 May 63	w/h
	Relocations		
7-1	Arkansas State Highway 169	17 Jun 64	15 Jul 64
	Supplement No. 1, Realignment of Road to Arkansas Post	12 Mar 65	2 Apr 65
7-2	Arkansas County Roads	28 Oct 63	21 Jan 64
8	Corrosive Characteristics of Arkansas River Water and Recommended Protective Measures for Hydraulic Structures (Locks and Dams Nos. 1-13)	21 Jan 64	9 Apr 64
	Supplement No. 1	15 Jul 64	28 Aug 64
9	Bayou Meto Flood Gate Protection	25 Jun 65	30 Jul 65
10	Channels and Canals (Dredging, Pools 2-5 and David D. Terry Lake)	15 Mar 66	26 Jul 66
10 (PDM)	Preliminary Master Plan (Supplement No. 2)(Locks and Dams Nos. 2, 3, & 4)	11 Apr 63	17 Feb 64
11	Reservoir Clearing, Pool 2	7 Jun 65	9 Sep 65
12	Widening Morgan Point Cutoff Pilot Channel	3 Jun 66	20 Jul 66

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

LOCK AND DAM NO. 2

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
Reference Design Memorandums			
1 (L&D 1)	Access and Service Facilities (Locks and Dams Nos. 1 and 2)	25 May 62	15 Aug 62
5 (L&D 1)	Construction Materials (Locks and Dams Nos. 1 and 2)	14 Mar 63	15 May 63
7 (L&D 1)	Master Plan (Locks and Dams Nos. 1, 2, 3, and 4)	30 Apr 65	21 Apr 66
8 (L&D 1)	Updated Master Plan (Norrell Lock and Dam, Locks and Dams Nos. 2, 3, 4, 5, and David D. Terry Lock and Dam	Jan 76	

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

LOCK AND DAM NO. 3

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
1	General	30 Apr 63	8 Jul 63
	Supplement No. 1, Not Submitted		
	Supplement No. 2, Groundwater Effects	2 Mar 65	12 Apr 65
	Supplement No. 3, Provisions for Future Highway Crossing	8 Jun 64	3 Aug 64
	Supplement No. 4 (Info on Seepage)	4 Mar 70	
2	Access and Service Facilities	28 Feb 63	13 May 63
	Real Estate		
3-1	Dam Site, Work Area, and Access Roads	9 Aug 63	11 Oct 63
	Supplement No. 1, Land for Borrow Area	6 Dec 63	20 Dec 63
	Supplement No. 2, Additional Land for Borrow Area	8 Nov 65	23 Nov 65
3-2	Navigation Pool	4 Dec 64	26 Feb 65
	Supplement No. 1, Sign and Arrival Post Sites	24 Sep 68	18 Oct 68
4	Construction Materials (Locks and Dams Nos. 3, 4, and 5)	6 Sep 63	28 Oct 63
5	Lock	28 Aug 63	2 Dec 63
6	Dam	10 Dec 63	10 Feb 64
7	Clearing (Locks and Dams Nos. 3, 4, 5, and David D. Terry Lake)	31 Jan 66	23 Mar 66

Reference Design Memorandums

2-3 (L&D 2)	Dredging, Pools 2-5 and David D. Terry Lake (Real Estate)	7 Oct 66	31 Mar 67
7 (L&D 1)	Master Plan (Locks and Dams Nos. 1, 2, 3, and 4)	30 Apr 65	21 Apr 66
8 (L&D 1)	Updated Master Plan (Norrell Lock and Dam, Lock and Dam Nos. 2, 3, 4, 5, and David D. Terry Lock and Dam)	Jan 76	
10 (L&D 2)	Channels and Canals (Dredging Pools 2-5 and David D. Terry Lake)	15 Mar 66	26 Jul 66
10 (PDM)	Preliminary Master Plan (Supplement No. 2) (Locks and Dams Nos. 2, 3, and 4)	11 Apr 63	17 Feb 64



PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

LOCK AND DAM NO. 4

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
1	Boyd Point Cutoff Supplement No. 2 (PDM No. 10), Master Plan	21 Mar 63 11 Apr 63	15 Oct 63 24 Mar 64
2	General Supplement No. 1, Provisions for Future Highway Crossing Supplement No. 2, St. Louis South- western Lines Gravity Yard	16 Jul 63 6 Apr 64 29 Jul 66	26 Sep 63 14 May 64 19 Aug 66
3	Access and Service Facilities Supplement No. 1, Resident Office	18 Jul 63 23 Oct 63	8 Oct 63 8 Jan 64
4	Lock	15 Jan 64	27 Apr 64
Relocations			
5-1	St. Louis Southwestern Railroad Bridge, Rob Roy, Navigation Aids	5 Mar 65	18 May 65
5-1A	St. Louis Southwestern Railroad and Western Union Telegraph Lines, Rob Roy Bridge Supplement No. 1, Traffic during Construction	10 Jun 66 8 Aug 66	1 Sep 66 1 Sep 66
5-2	U.S. Highway 79 Bridge	29 Jul 66	14 Oct 66
5-3	Lake Pine Bluff	3 Nov 66	10 Mar 67
5-4B	St. Louis Southwestern Railroad and Western Union Telegraph Line, Plum Bayou Bridge	30 Mar 65	29 Apr 65
Real Estate			
6-1	Lock and Dam Site, Work Area, and Access Roads Supplement No. 1, Borrow Area Supplement No. 2, Real Estate, Marine Terminals	17 Oct 63 2 Jul 64 1 Mar 67	5 Feb 64 26 Aug 64 3 Apr 67
6-2	Navigation Pool	8 Jan 65	27 Apr 65
7	Dam	7 May 64	27 Jul 64
8	Harding Drain, Pine Bluff, Arkansas	24 Mar 65	22 Apr 65
9	Harding Drain Relocation, Pine Bluff Arkansas	29 Apr 65	27 May 65
10	Harding Drain, Real Estate	19 Nov 65	12 Jan 65
Ltr rpt	Pine Bluff Outfall Sewer, Relocation	14 Aug 64	19 Nov 65

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

LOCK AND DAM NO. 4 (con.)

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
Ltr Rpt	Plum Bayou Diversion	12 Nov 64	9 Mar 65
11 (Part 1)	Alteration to Drainage Structures Pools 4, 5, and David D. Terry	3 Nov 67	1 Mar 68
(Part 2)	Drainage Structures Alteration Pools 7, 8, and 9	12 Apr 68	16 Jul 68
Reference Design Memorandums			
2-3(L&D 2)	Dredging, Pools 2-5 and David D. Terry Lake (Real Estate)	7 Oct 66	31 Mar 67
4 (L&D 3)	Construction Materials (Locks and Dams Nos. 3, 4, and 5)	6 Sep 63	28 Oct 63
7 (L&D 1)	Master Plan (Locks and Dams Nos. 1, 2, 3, and 4)	30 Apr 65	21 Apr 66
8 (L&D 1)	Updated Master Plan (Norrell Lock and Dam, Locks and Dams Nos. 2, 3, 4, 5, and David D. Terry Lock and Dam)	Jan 76	
7 (L&D 3)	Clearing Locks and Dams Nos. 3, 4, 5 and David D. Terry Lake)	31 Jan 66	23 Mar 66
10 (L&D 2)	Channels and Canals, Dredging, Pools 2-5 and David D. Terry Lake	15 Mar 66	26 Jul 66
10 (PDM)	Preliminary Master Plan (Supplement No. 2) (Locks and Dams Nos. 2, 3, and 4)	11 Apr 63	17 Feb 64

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

LOCK AND DAM NO. 5

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
1	General	6 Jan 74	27 Apr 64
	Supplement No. 1, Modification of Lock and Dam Design and Alinement	30 Mar 64	13 May 64
2	Access and Service Facilities	6 Nov 63	27 Feb 64
	Supplement No. 1, Access Road Profile	26 Mar 64	30 Apr 64
	Supplement No. 2, Protection of Arkansas Louisiana Gas Pipe Line	17 Nov 64	24 Nov 64
3	Lock	27 Aug 64	10 Dec 64
	Supplement No. 1, Construction Sequence	14 Oct 64	10 Dec 64
	Real Estate		
4-1	Dam Site, Work Area, and Access Roads	7 Jan 64	1 Apr 64
4-2	Pool Area	31 Mar 65	8 Jul 65
	Supplement No. 2	24 Jan 68	27 Mar 68
5	Dam	9 Sep 64	30 Nov 64
	Supplement No. 1, Construction Sequence	14 Oct 64	10 Dec 64
6	Master Plan (Locks and Dams Nos. 5 and 7 and David D. Terry Lake)	10 Nov 66	21 Aug 67
	Supplement No. 1, Overlook Facility, Lock and Dam No. 7	2 Mar 67	21 Apr 67
	Supplement No. 3, Willow Beach Public Use Area	31 May 68	17 Jun 68
	Supplement No. 4, David D. Terry Dam Site Public Use Area	22 Aug 69	
	Supplement No. 5, Maumelle Public Use Area	Rev 23 Jan 70	18 Nov 70
		16 Jul 70	Disapproved 26 Mar 71
	Supplement No. 6, Complete Master Plan Revision	5 May 72	
		Rev 19 Apr 73	16 May 73
		Rev 1 May 74	24 May 74
	Supplement No. 7, Dam Site 5 Park	4 Oct 72	22 Feb 73
	Supplement No. 8, Maumelle Park	18 Jun 73	11 Jul 73
	Supplement No. 9, Murray Dam Site Park	22 Jun 73	11 Jul 73
	Supplement No. 10, Tar Camp Park	13 Mar 74	10 May 74
	Typical Park Entrance Concept Plan for Little Rock District Parks	18 Mar 74	10 May 74
	Electrical Outlets for Campsites - Arkansas River Parks	29 Aug 74	17 Sep 74
	Appendix E, Project Safety Plan	18 Oct 73	14 Feb 74
8	Remedial Drainage, Upper Plum Bayou Leveed Area	28 Oct 65	27 Jan 66
10 (PDM)	Preliminary Master Plan, Supplement No. 3 (Locks and Dams Nos. 5, 6, and 7)	5 Mar 64	4 Jan 65

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

LOCK AND DAM NO. 5

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
Reference Design Memorandums			
2-3 (L&D 2)	Dredging, Pools 2-5 and David D. Terry Lake (Real Estate)	7 Oct 66	31 Mar 67
4 (L&D 3)	Construction Materials (Locks and Dams Nos. 3, 4, and 5)	6 Sep 63	28 Oct 63
7 (L&D 3)	Clearing (Locks and Dams Nos. 3, 4, 5, and David D. Terry Lake)	31 Jan 66	23 Mar 66
10 (L&D 2)	Channels and Canals (Dredging, Pools 2-5 and David D. Terry Lake)	15 Mar 66	26 Jul 66
8 (L&D 1)	Updated Master Plan (Norrell Lock and Dam, Locks and Dams 2, 3, 4, 5 and David D. Terry Lock and Dam)	Jan 76	

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

DAVID D. TERRY LOCK AND DAM

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
1	General	10 Dec 63	22 Apr 64
	Supplement No. 1, Pool Elevations and Pertinent Data	31 Jul 64	5 Oct 64
2	Access and Service Facilities	2 Dec 63	27 Feb 64
3	Construction Materials (David D. Terry Lock and Dam and Lock and Dam No. 7)	8 Nov 63	10 Jan 64
	Real Estate		
4-1	Dam Site, Work Areas, and Access Roads	10 Dec 63	21 Apr 64
	Supplement No. 1, Materials and Storage Area	21 May 64	27 Jul 64
	Supplement No. 2, Additional Borrow Area	22 Apr 66	13 Jul 66
4-2	Navigation Pool	10 Sep 65	21 Dec 65
	Supplement No. 1, Land Acquisition for Clearing Banks of Fourche Creek	8 Dec 66	10 Jan 67
5	Lock	24 Jul 64	26 Oct 64
6	Dam	29 Jul 64	23 Oct 64
Ltr rpt	Additional Studies of Soils Under Dam	22 Oct 64	30 Oct 64
	Relocations		
7-1A	Rock Island Bridge at Little Rock	15 Mar 67	27 Apr 67
	Supplement No. 1, Stress Sheets, Specifications, and Criteria for Rock Island Railroad Bridge	16 Oct 67	1 Nov 67
7-1C	Missouri Pacific Railroad Junction Bridge	13 Aug 65	5 Nov 65
	Supplement No. 1, Bridge Automation	19 May 66	8 Aug 66
	Supplement No. 2, Shoofly for Junction and Baring Cross Bridges	6 Sep 66	27 Oct 66
7-1D	Main Street, Broadway, and U.S. Highway 64 Bridges	14 Sep 66	12 Dec 66
	Supplement No. 1, Relocation and Extension of Main St. and Bwy. Brs.	29 Dec 67	21 Mar 68
	Supplement No. 2, U.S. Hwy. 64 Bridge	3 Apr 68	16 Aug 68
7-1F	Missouri Pacific Railroad Company and Western Union Telegraph Lines - Baring Cross Bridge	15 Aug 66	21 Nov 66
	Supplement No. 1, Stress Sheets, Specs, etc., Baring Cross Br.	24 Jan 68	14 Feb 68
7-1G	Interstate 30 Highway Bridge Pier Protection	26 Jul 67	31 Aug 67
7-2D	Arkansas Power and Light Company, Power Lines	31 Aug 64	2 Nov 64
	Supplement No. 1, Revised Relocation Plan	25 Aug 67	31 Aug 67

PREVIOUSLY ISSUED AND CURRENTLY SCHEDULED DESIGN MEMORANDUMS (con.)

DAVID D. TERRY LOCK AND DAM

<u>Memo No.</u>	<u>Subject</u>	<u>Date submitted or scheduled</u>	<u>Date approved</u>
Reference Design Memorandums			
2-3 (L&D 2)	Dredging, Pools 2-5 and David D. Terry Lake (Real Estate)	7 Oct 66	31 Mar 67
6 (L&D 5)	Master Plan, Recreation for Pools 5 and 7, David D. Terry Lake	10 Nov 66	21 Aug 67
6 (L&D 5)	Supplement No. 1, Overlook Facility at Lock and Dam No. 7	2 Mar 67	21 Apr 67
7 (L&D 3)	Clearing (Locks and Dams Nos. 3, 4, 5, and David D. Terry Lake)	31 Jan 66	23 Mar 66
10 (L&D 2)	Channels and Canals (Dredging, Pools 2-5 and David D. Terry Lake)	15 Mar 66	26 Jul 66
10 (PDM)	Preliminary Master Plan, Supplement No. 3 (Locks and Dams Nos. 5, 6, and 7)	5 Mar 64	4 Jan 65
8 (L&D 1)	Updated Master Plan (Norrell Lock and Dam, Locks and Dams Nos. 2, 3, 4, 5 and David D. Terry Lock and Dam)	Jan 76	

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Appendix B - Forest Management Plan	Mar 1976	
Appendix C - Fire Protection Plan	Mar 1974 *	Mar 1974
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Appendix E - Project Safety Plan	Feb 1974 *	Feb 1974

\* Includes only Locks and Dams Norrell, 2, 3, and 4.

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## SECTION I

### INTRODUCTION

1.01. Project authorization. Locks and Dams Nos. 1, 2, 3, 4, 5, and 6 were authorized by the River and Harbor Act of 24 July 1946 for navigation, as part of a comprehensive plan for navigation, flood control, and hydroelectric power generation. This Act approved the multiple-purpose plan recommended in the report to the Chief of Engineers dated 20 September 1945 and letter of the Chief of Engineers dated 19 March 1946. The report and letter are contained in House Document No. 758, Seventy-ninth Congress, second session. The Arkansas River project has been named the McClellan-Kerr Arkansas River Navigation System, honoring Senators John L. McClellan from Arkansas and Robert S. Kerr from Oklahoma. Lock and Dam No. 1 has been renamed Norrell Lock and Dam in honor of Congressman William F. Norrell. Lock and Dam No. 6 has been renamed David D. Terry Lock and Dam in honor of U.S. Representative David D. Terry.

1.02. Project purposes. The subject projects are major navigation units in the McClellan-Kerr Arkansas River Navigation System. Additional benefits, other than navigation, are derived through use of the impounded waters and shoreline for recreation, soil conservation, and fish and wildlife management.

1.03. Purpose of master plan. The master plan describes in detail how all project lands, waters, forests, and other resources will be conserved, enhanced, developed, managed and used in the public interest. The physical plan of development includes land and water use and facilities development.

1.04. Application of Public Laws and Executive Orders.

a. General. Section 4 of the Flood Control Act approved 22 December 1944 (58 Stat 889); Section 4 of the Flood Control Act of 1946 (60 Stat 642); Section 209 of the Flood Control Act of 1954 approved 3 September 1954, as further amended by Section 207 of the Flood Control Act of 1962, as further amended by Section 2 of the Land and Water Conservation Fund Act of 1965; and Section 210 of the Rivers and Harbors Flood Control Act of 1968 authorized the Chief of Engineers, under supervision of the Secretary of the Army, to provide for recreational development and use of the lakes under his control.

b. Public Law 89-72. While initial recreational development is being accomplished at 100% Federal cost, further development requires implementation of the policy established by the Secretary of the Army in coordination with the Office of Management and Budget as outlined in EC 11-2-119 dated 30 May 1975, Recreational Development at Completed Projects. The policy states that a non-Federal body must agree to furnish not less than 50 percent of the cost of incremental development and further agree to operate, maintain, and provide replacement of the park development. Also it provides for 100 percent Federal expenditures only for urgently needed sanitary facilities. Section 9.03 outlines the present cost sharing program.

c. Public Law 93-303. This law was enacted on 7 June 1974. It provides for the collection of fees at camping areas and classifies the camping areas by availability of facilities into Classes A, B, C, and D. Also, at each Corps lake where camping is permitted, at least one primitive campground will be provided where no fee will be charged.

## SECTION II

### PROJECT DESCRIPTION

2.01. Location. The navigation pools covered by this design memorandum are located in the State of Arkansas and extend from the center of the State at Little Rock southeasterly through Pine Bluff and thence easterly to the Arkansas-Mississippi State line. The project passes through or is bordered by Pulaski, Jefferson, Lincoln, Arkansas, and Desha Counties. See Plate 1.

2.02. General description. The project area includes the portion of the McClellan-Kerr Arkansas River Navigation System from navigation mile 125.0 at Murray Lock and Dam to navigation mile 0 at the mouth of the White River. Included in this project area is mile 0 to mile 10 on the White River and the Arkansas Post navigation canal from mile 10 on the White River to navigation mile 19 on the Arkansas River. The river valley is relatively low and flat and consists of alluvial soils. The area adjacent to the river is marshy and intermittently wooded, varying from dense growths of hardwood timber to willow growths and open fields. Oxbow lakes occur quite extensively due to river course changes in past years. Borrow pits are also common as a result of levee construction. The major land use is agricultural and the only major cities are Little Rock, North Little Rock, and Pine Bluff.

#### 2.03. Basin hydrologic and climate summary.

a. General. During low flow periods the Arkansas River is a slow moving semiclear stream. It quickly becomes turbid during each rise, and the velocity increases rapidly during high flows. Completion of these locks and dams and other upstream reservoirs has reduced the turbidity of the water. During high flows they do not have significant effect on velocities. However, during periods of low flow the increased depths resulting from the locks and dams have reduced average velocities to values less than would occur under preproject conditions in some areas of the pools. The reduction of these velocities creates more desirable pool conditions for water-related recreational use. Tributaries are short in length with streambeds of silt. These tributaries drain farm lands, and the runoff adds to the turbidity problem.

b. Pool fluctuation. The elevation of the tailwater downstream from each dam varies from a flat pool elevation at zero discharge up to the flood elevations shown in Table 2-1. Tailwater fluctuations are frequent because the tailwater elevation is sensitive to small changes in discharge. When large floods occur, the spillway gates on the dams are completely opened and the water surface may be higher than the navigation pool elevation for the entire length of the pools.

c. Climate. The climate is moderate with an average annual temperature of about 62 degrees Fahrenheit. Severe cold weather during winter months and high temperatures in the summer are experienced over short periods of time. The average annual rainfall is about 50 to 52 inches. Snowfall is light and remains on the ground for short durations.

2.04. Project structures. Table 2-2 contains a summary of pertinent data on Norrell Lock and Dam, Locks and Dams Nos 2, 3, 4, and 5, and David D. Terry Lock and Dam, respectively. River miles shown are navigation miles. All elevations shown are feet above mean sea level.



TABLE 2-1

ESTIMATED FLOOD ELEVATIONS  
ARKANSAS RIVER

Public use area	Regulated flood frequency (years)	Flow c.f.s.	Elevation*(1)	
			Upstream	Downstream
Wild Goose Bayou			157.2	(2)
	5		158.1	
	10		162.0	
	50		168.5	
Merrisach Lake			166.0	(3)
	5	295,000	166.8	
	10	335,000	167.8	
	50	430,000	169.8	
Notrebes Bend			160.8	(3)
	5	295,000	164.0	
	10	335,000	164.8	
	50	430,000	166.5	
Morgan Point			160.6	(3)
	5	295,000	163.8	
	10	335,000	164.6	
	50	430,000	166.3	
Moore Bayou			166.2	(3)
	5	295,000	167.2	
	10	335,000	168.2	
	50	430,000	170.4	
Pendleton Bend			166.6	(3)
	5	295,000	167.9	
	10	335,000	169.0	
	50	430,000	171.3	
Big Bayou Meto			171.6	(3)
	5	295,000	174.1	
	10	335,000	175.3	
	50	430,000	178.0	
Little Bayou Meto			178.1	(3)
	5	295,000	183.8	
	10	335,000	185.3	
	50	430,000	188.2	
Huffs Island			181.6	(3)
	5	295,000	186.3	
	10	335,000	187.8	
	50	430,000	190.9	
Rising Star			185.3	(3)
	5	295,000	192.4	
	10	335,000	193.8	
	50	430,000	196.6	

(1) \* Revised 26 December 1974

(2) Elevation equaled or exceeded 2 percent of time, 1937-1959

(3) Elevation of regulated discharge equaled or exceeded 2 percent of time, 1923-1957

TABLE 2-1 (con.)

ESTIMATED FLOOD ELEVATIONS  
ARKANSAS RIVER

Public use area	Regulated flood frequency (years)	Flow c.f.s.	Elevation* (1)	
			Upstream	Downstream
Trulock				191.4 (3)
	5	295,000		197.4
	10	335,000		198.8
	50	430,000		201.7
Sheppard Island				194.7 (3)
	5	295,000		200.9
	10	335,000		202.4
	50	430,000		205.6
Ste. Marie				200.0 (3)
	5	295,000		206.7
	10	335,000		208.1
	50	430,000		210.9
Boyd Point				200.0 (3)
	5	295,000		206.7
	10	335,000		208.1
	50	430,000		210.9
Dam Site 5			214.4 (3)	214.0 (3)
	5	295,000	219.9	218.9
	10	335,000	221.6	220.6
	50	430,000	225.0	224.0
Tar Camp				216.8 (3)
	5	295,000		222.1
	10	335,000		224.0
	50	430,000		227.3
Brodie				217.0 (3)
	5	295,000		222.3
	10	335,000		224.2
	50	430,000		227.5
Wrightsville				226.0 (3)
	5	295,000		229.0
	10	335,000		230.5
	50	430,000		233.6
David D. Terry Dam Site			233.0 (3)	232.0 (3)
	5	295,000	235.8	234.6
	10	335,000	237.2	236.1
	50	430,000	240.3	239.0

(1) \* Revised 26 December 1974

(3) Elevation of regulated discharge equalled or exceeded 2 percent of time, 1923-1957

TABLE 2-1 (con.)

ESTIMATED FLOOD ELEVATIONS  
ARKANSAS RIVER

Public use area	Regulated flood frequency (years)	Flow c.f.s.	Elevation* (1)	
			Upstream	Downstream
Willow Beach			234.5	(3)
	5	295,000	237.2	
	10	335,000	238.6	
	50	430,000	241.6	
Burns Park			244.3	(3)
	5	295,000	250.8	
	10	335,000	252.8	
	50	430,000	256.9	
Murray Dam Site			246.3	(3)
	5	295,000	251.9	
	10	335,000	253.8	
	50	430,000	258.0	

(1) \* Revised 26 December 1974

(3) Elevation of regulated discharge equalled or exceeded 2 percent of time, 1923-1957

TABLE 2-2

PERTINENT DATA

NORRELL LOCK AND DAM  
(LOCK AND DAM NO. 1)

Dam:

Location of dam, miles along navigation channel above mouth of White River	10.3
Type	Concrete gravity weir with navigation lock

Spillway:

Type	Ungated overflow concrete weir
Top width, feet	5
Total length, feet	277
Elevations, feet, m.s.l.	
Crest	142
Base	135
Top of retaining wall	145

Lock:

Lock chamber, clear dimensions, feet	110 x 600
Elevations, feet, m.s.l.	
Upper miter sill	126
Lower miter sill	97
Top of lock, guard, and guide walls	156
Lower navigation pool (minimum White River elev)	112
Normal (maximum) lift, feet	30

Entrance Canal:

Location of canal entrance above mouth of White River, miles	9.8
Bottom width, feet	600
Bottom elevation, feet, m.s.l.	100

Canal:

Length of canal to Lock No. 2, miles	3
Normal depth, feet	12
Bottom width, feet	300
Elevation of top of navigation pool, feet, m.s.l.	142
Storage capacity at top of navigation pool, acre-feet	1,510
Area of water surface at top of navigation pool, acres	140
Length of shoreline at top of navigation pool, miles	6

Revised July 1974

TABLE 2-2 (con.)

## PERTINENT DATA, LOCK AND DAM NO. 2

Dam:

Location, 1943 Arkansas River milepost	40.5
Type	Concrete gravity with earth embankments on the abutments
Length of nonoverflow embankment and access road, left bank, ft	32,000
Length of nonoverflow embankment, right bank, feet	3,773
Length of overflow embankment, right bank, feet	5,180
Elevations, feet, m.s.l.	
Top of nonoverflow embankment, left bank	180
Top of nonoverflow embankment, right bank	180
Top of overflow embankment, right bank	164 to 172

Spillway:

Type	Flat crest with tainter gates
Gross length, feet (including one end pier)	1,120
Number of tainter gates	16
Size of gates, height x width, feet	30 x 60
Elevations, feet, m.s.l.	
Crest	134
Top of gates, closed	164
Gate lip, fully open	180

Lock:

Location, miles along navigation channel above mouth of White River	13.4
Lock chamber, clear dimensions, feet	110 x 600
Elevations, feet, m.s.l.	
Upper miter sill	144
Lower miter sill	128
Top of lock, chamber walls	174
Top of upper gate bay walls	179
Lower navigation pool	142
Normal (maximum) lift, feet	20

Canal:

Location of canal entrance into Arkansas River, navigation river mile	19
Length of canal from Lock No. 2 to Arkansas River, miles	5.8
Bottom width, feet	300
Side slopes	1 on 3
Bottom elevation, feet, m.s.l.	150

Pool:

Drainage area, square miles	160,533
Elevation of top of navigation pool, feet, m.s.l.	162
Storage capacity at top of navigation pool, acre-feet	110,080
Area of lake surface at top of navigation pool, acres	10,600
Length of shoreline at top of navigation pool, miles	96

Revised July 1974

TABLE 2-2 (con.)

PERTINENT DATA

LOCK AND DAM NO. 3

Dam:

Location, Navigation Mile	50.2
Type Concrete gravity with navigation lock on left bank and earth embankments on the abutments	
Length of overflow embankment, left bank, feet	3,870
Length of overflow embankment, right bank, feet	980
Elevations, feet, m.s.l.	
Top of overflow embankment, left bank	192
Top of overflow embankment, right bank	183 to 185

Spillway:

Type	Flat crest with tainter gates
Gross length, feet (including one end pier)	1,260
Number of tainter gates	18
Size of gates, height x width, feet	25 x 60
Elevations, feet, m.s.l.	
Crest	158
Top of gates, closed	183
Gate lip, fully open	207

Lock:

Lock chamber, clear dimension, feet	110 x 600
Elevations, feet, m.s.l.	
Upper miter sill	164
Lower miter sill	148
Top of lock, guard and guide walls	194
Lower navigation pool	162
Design lift, feet	20

Pool:

Drainage area square miles	159,018
Elevation of top of navigation pool, feet, m.s.l.	182
Storage capacity at top of navigation pool, acre-feet	46,400
Area of lake surface at top of navigation pool, acres	3,670
Length of shoreline at top of navigation pool, miles	36

TABLE 2-2 (con.)

## PERTINENT DATA

## LOCK AND DAM NO. 4

Dam:

Location, Navigation Mile	66.0
Type	Concrete gravity with navigation lock on right bank and earth embankments on the abutments
Length of overflow embankment, left bank, feet	3,805
Length of overflow embankment, right bank, feet	750
Elevations, feet, m.s.l.	
Top of overflow embankment, left bank	197 to 199
Top of overflow embankment, right bank	205 to 214

Spillway:

Type	Flat crest with tainter gates
Gross length, feet (including one end pier)	1,190
Gates number and size, height x width, feet	9 - 28 x 60
	8 - 23 x 60
Elevations, feet, m.s.l.	
Crests	169 and 174
Top of gates, closed	197
Gate lip, fully open	217

Lock:

Lock chamber, clear dimension, feet	110 x 600
Elevations, feet, m.s.l.	
Upper miter sill	178
Lower miter sill	168
Top of lock, guard, and guide walls	206
Lower navigation pool	182
Design lift, feet	14

Pool:

Drainage area square miles	158,777
Elevation of top of navigation pool, feet above m.s.l.	196
Storage capacity at top of navigation pool, acre-feet	70,400
Area of lake surface at top of navigation pool, acres	5,680
Length of shoreline at top of navigation pool, miles	58

TABLE 2-2 (con.)

PERTINENT DATA

LOCK AND DAM NO. 5

Dam:

Location, Navigation Mile	86.3
Type	Concrete gravity with navigation lock on left bank and earth embankments on the abutments
Length of overflow embankment, left bank, feet	5,780
Length of overflow embankment, right bank, feet	625
Elevations, feet, m.s.l.	
Top of overflow embankment, left bank	223
Top of overflow embankment, right bank	223

Spillway:

Type	Flat crest with tainter gates
Gross length, feet (including one end pier)	1,050
Number of tainter gates	15
Size of gates, height x width, feet	31 x 60
Elevations, feet, m.s.l.	
Crest	183
Top of gates, closed	214
Gate lip, fully open	242

Lock:

Lock chamber, clear dimension, feet	110 x 600
Elevations, feet, m.s.l.	
Upper miter sill	195
Lower miter sill	182
Top of lock, guard, and guide walls	225
Lower navigation pool	196
Design lift, feet	17

Pool:

Drainage area square miles	158,678
Elevation of top of navigation pool, feet above m.s.l.	213
Storage capacity at top of navigation pool, acre-feet	61,300
Area of lake surface at top of navigation pool, acres	6,680
Length of shoreline at top of navigation pool, miles	50



TABLE 2-2 (con.)

## PERTINENT DATA

DAVID D. TERRY LOCK AND DAM  
(LOCK AND DAM NO. 6)Dam:

Location, Navigation Mile	108.1
Type	Concrete gravity with navigation lock on left bank and earth embankments on the abutments
Length of left overflow embankment, feet	4,850
Length of right overflow embankment, feet	2,850
Elevations, feet, m.s.l.	
Top of overflow embankment, left bank	241
Top of overflow embankment, right bank	236

Spillway:

Type	Flat crest with tainter gates
Gross length, feet (including one end pier)	1,190
Number of tainter gates	17
Size of gates, height x width, feet	27 x 60
Elevations, feet, m.s.l.	
Crest	206
Top of gates, closed	233
Gate lip, fully open	252

Lock:

Lock chamber, clear dimension, feet	110 x 600
Elevations, feet, m.s.l.	
Upper miter sill	213
Lower miter sill	199
Top of lock, guard, and guide walls	243
Lower navigation pool	213
Design lift, feet	18

Pool:

Drainage area square miles	158,429
Elevation of top of navigation pool, feet above m.s.l.	231
Storage capacity at top of navigation pool, acre-feet	49,500
Area of lake surface at top of navigation pool, acres	4,710
Length of shoreline at top of navigation pool, miles	43

2.05. Pool operation. The navigation pools are operated as a series of pools with the water levels at the dams regulated to maintain the specified navigation pool elevations. Discharge releases through the dam spillways are coordinated with the Hydraulics Branch in the District Office. Close coordination between individual lock and dam operators is required to maintain the specified pool elevations. The navigation channel is maintained to provide 9 feet depth and 250 feet width in all pools, and 9 feet depth and 300 feet width in the Arkansas Post Canal.

SECTION III  
PROJECT STATUS

3.01. Project development and operation chronology.

a. Locks and dams. The dates of construction of the locks and dams are as follows:

<u>Name</u>	<u>Date started</u>	<u>Date completed</u>
Norrell Lock and Dam	November 1963	June 1967
Lock No. 2	September 1964	April 1967
Dam No. 2	June 1964	August 1966
Lock and Dam No. 3	June 1964	January 1969
Lock and Dam No. 4	November 1964	April 1969
Lock and Dam No. 5	March 1965	February 1969
D.D.T.	January 1965	July 1968

b. Recreational facilities. The following 14 parks were partially developed and first became operational in 1969: Wild Goose Bayou, Merrisach Lake, Morgan Point, Pendleton Bend, Moore Bayou, Big Bayou Meto, Little Bayou Meto, Notrebes Bend, Trulock, Rising Star, Ste. Marie, Tar Camp, Wrightsville, and Burns Park. Additional facilities have been constructed at each of these parks.

3.02. Project development under way. Presently there are seven new parks under construction which are scheduled to be completed by early 1976. These parks are Huffs Island, Sheppard Island, Dam Site 5, Dam Site David D. Terry East and West, Murray Dam Site, and Willow Beach. Also major improvements are being made at Notrebes Bend Park and additional picnic sites, campsites, and other miscellaneous facilities are being constructed at practically all parks in the project.

3.03. Scheduled project development. Additional miscellaneous recreational facilities are scheduled to be constructed beginning in October 1977 at several of the parks. These facilities include picnic sites, campsites, roads, parking, etc., and these items are identified on the plates and cost estimates. Also, entrance complexes, additional campgrounds, and trailer sanitary stations will be constructed at Tar Camp and Merrisach Lake Parks. All of the above construction should be completed in 1981. Boyd Point Park is tentatively scheduled for development in FY 1976 under a cost sharing agreement with the city of Pine Bluff. See Section 9.03 for additional details on this development. No additional development is scheduled beyond these items, since all further development is subject to cost sharing.

## SECTION IV

### RECREATIONAL AND ENVIRONMENTAL RESOURCES AND FACTORS INFLUENCING RECREATIONAL DEVELOPMENT

#### 4.01. Geological resources.

a. Soils and geological formations. The sites for Norrell Lock and Dam and Locks and Dams Nos. 2, 3, 4, 5 and David D. Terry Lock and Dam, and the Arkansas Post Canal are located in the Gulf Coastal Plain physiographic province. Gulf Coastal Plain deposits were laid down by the Mississippi, Arkansas, White and other streams traversing the area subsequent to melting of the continental glaciers. The deposits are divided into two major classifications: (1) Quaternary terrace and (2) Recent alluvium. In general, the soils in both of these divisions grade from sand and gravel at their contact with the marine clay and sands to the underlying tertiary formations, to heterogeneous deposits of sand, silt, and clay at the ground surface. The Quaternary terraces were formed prior to deposition of the recent alluvium and are higher topographically and often more firm due to their greater age. The surface deposits of the recent alluvium have been divided into point bars, natural levees, back swamps, and channel fills. Additional data on soil associations will be discussed in the Forest Management Plan.

b. Special problems. The alluvial deposits are subject to rapid erosion during high river stages. Extensive bank stabilization measures have been taken to develop and maintain the alignment of the river channel.

c. Effects on recreational development. The alluvial soils promote rapid vegetative growth, drain rapidly, and should withstand heavy recreational use. Soil types generally do not require special treatments for construction of roads, foundations, etc. However, launching ramps require special stone protection to prevent river current erosion of the adjacent soil.

#### 4.02. Cultural resources.

a. General. The enactment of Public Law 93-291 in May 1974, the Archeological Preservation Act, authorized Federal agencies to submit a separate line item on a budget submission for culture resource consideration. This act allows up to one percent of project funds to be allocated for identification and management of cultural resources. Consideration is being given to have training sessions on identifying and managing the cultural resources in the Little Rock District. This training will be for lake managers in the field as well as selected employees of the District Office. Upon completion of an inventory, a plan will be developed to insure the protection and management of this nonrenewable resource.

b. Archaeological resources.

(1) Inventory. The archeological resources of the Arkansas River have often been ignored in the evolutionary development of the river as an important transportation system. Early inhabitants of the United States most often located on or near rivers due to the existing transportation system the river offered as well as the abundance of wildlife and fertile croplands. Not only has man's actions destroyed archeological sites, but the meandering nature of the river in its natural state has cut through sites and destroyed part of the resource. An archeological survey of the Arkansas River conducted in 1968 by the University of Arkansas Museum located only one site that would be endangered by the Arkansas River Navigation Project, in pools 1 through 6. This site, named Greer Mound Site, is in the Brodie Bend area and had been partially destroyed by stream erosion. The Corps constructed a cutoff in this area and large scale cutting of the bank was halted. There is, however, some continued deterioration of this site due to erosion by the pool.

(2) Plans for protection, and preservation. The survey conducted in 1968 by the University of Arkansas did not locate any sites in public use areas or any other areas controlled by the Corps. Funds have been requested to continue the program of archeological resource identification and protection on the Arkansas River. Decisions concerning archeological sites identified by permit actions will be coordinated with the archeologist, the Arkansas Archeological Survey, and the State Historic Preservation Office.

(3) Effects on recreational development. Present and future public use areas have been surveyed and no archeological resources were identified. Field personnel are encouraged to be alert for possible archeological resources and to report any findings to District personnel so that proper consideration will be given these resources. Particular attention will be given to areas having construction activities.

c. Historical resources.

(1) Inventory. Executive Order 11593 signed on 13 May 1971 sets out a policy for the Federal Government to provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation. As a result of this order, the Little Rock District Corps of Engineers has made an inventory of archeological and historic sites along the Arkansas River in Arkansas. Descriptions of some of the sites follows:

(a) Civil War Trenches. These trenches are located near the entrance of Arkansas Post Canal to the Arkansas River near navigation mile 19. They are part of Confederate Fort Hindman, defended by southern troops and established to block Union troops and supply movements between the Arkansas and Mississippi Rivers. The fort surrendered on 11 January 1863. Part of Fort Hindman caved into the river during the 1937 flood, but

three or more sections of the original trenches still remain near Arkansas Post. For the most part, the trenches have been altered only by years of exposure and being slowly filled with dirt, brush, and vegetation through natural processes. This site has been researched by the Arkansas State University. At the present time, the Arkansas Historic Preservation Officer has withheld recommendations until the State Review Board has had more time to investigate the site. The site has not been nominated to the National Register of Historic Sites.

(b) Arkansas Post National Memorial. The Arkansas Post National Memorial consists of 220.6 acres of land in Arkansas County, 8 miles southwest of Gillett on Arkansas Highway 169. Established in 1686 by Henri de Tonti, Arkansas Post was the first settlement of white men in the lower Mississippi Valley and later Louisiana Territory. While the post changed locations several times and may not have been operated continuously, it became a thriving village after the establishment of the John Law Colony in 1720. Arkansas Post is the State's only battle site which dates during the American Revolutionary War period. In 1783 a force of a hundred Englishmen and Chickasaw Indians, led by James Colbert, crossed the Mississippi and attacked Arkansas Post, then under Spanish command. The invaders seized the village but were beaten back when they tried to storm the fort. When the Spanish and their Quapaw allies counterattacked, the British withdrew down the Arkansas River. Evidences of late 18th Century structures of Spanish origin have been uncovered. The Civil War trenches mentioned previously are part of Fort Hindman and the defense of Arkansas Post. Part of Fort Hindman caved into the river during the 1937 flood. The Corps of Engineers placed riprap around the river bank of Arkansas Post during construction of the Arkansas Post Canal to help prevent further damage. The National Park Service operates Arkansas Post National Memorial, and has plans for additional interpretive facilities. A 20- by 20-foot replica of a portion of the Spanish Fort San Carlos III is proposed for construction prior to July 1976 as part of a bicentennial observance. Also proposed for construction in the near future are: (1) an 800 square foot visitor center, (2) interpretative exhibits, (3) trails, (4) sewer system, (5) a boat slip connecting with the river, and (6) a duplex for housing permanent park personnel. This site is listed in the National Register of Historic Places.

(c) Little Rock Monument. This is a monumented rock on the south bank of the Arkansas River at the foot of Rock Street near the abutment of the Junction bridge of the Missouri Pacific Railroad at Little Rock, Arkansas. It was the first rock outcrop found by Bernard de La Harpe, the explorer, as he pressed up the river in 1722. The landmark was named "La Petite Roche" (The Little Rock) to differentiate it from the rock bluff farther upstream on the north. This provided the origin for naming the city of Little Rock, Arkansas. The "Little Rocks" were officially mentioned by name in an 1805 letter to the Secretary of War, and in 1818 the Little Rock was used as a reference point for a survey of Indian lands.

The rock rises about 18 feet above the river and contains a bronze plaque. During alteration of the bridge for the river navigation project the downstream protection pier was omitted to prevent damage to the rock. River revetments were constructed upstream and downstream of the rock for navigation, and fill was placed landward of the revetments to provide the city of Little Rock some additional land for park development. The city of Little Rock is planning an elaborate park at the site of the monument. This site is listed in the National Register of Historic Places.

(d) Boyd's Point Levee. One other historical site, Boyd's Point Levee, was nominated for inclusion on the National Register of Historic Places but was disapproved. It is located to the north of Boyd Point Park. This levee was one of the first constructed by the Corps of Engineers on the Arkansas River. It is approximately 2.5 miles long, ten feet high, and has a ten-foot wide crown. It was constructed about the year 1908 to keep the river from leaving the Pine Bluff landing. On 2 December 1908 during an early winter flood, a local group dynamited the levee in a successful effort to save the Jefferson County Courthouse and the Jefferson Hotel. The area through which the levee runs has recently been purchased by the City of Pine Bluff to be used for a park. The city plans to utilize the levee as a hiking and bicycle trail.

(2) Plans for protection and preservation. Since none of the sites in the National Register of Historic Places are on Government property, no further action is being taken by the Corps to protect or preserve them.

(3) Effects on recreational development. There will be no effect on recreational development by the inventoried sites.

#### 4.03. Environmental resources.

a. Topography. The entire project area is flat river bottom land with local relief generally less than 100 feet. Elevations range from 100 feet near Norrell Lock and Dam to 250 feet near Little Rock. Most park sites are generally flat to mildly undulating and are subject to inundation during high river stages. Recreational development is hindered due to flooding of low lying areas. In many instances restrooms have been placed on mounds to reduce the frequency of inundation.

b. Vegetation. The vegetation on the project area varies from bottomland hardwoods and bald cypress on the wettest sites to the pine-oak-hickory types on the highest and best drained sites. It is estimated that 75 percent of the species of trees indigenous to the state are found on project lands. A large portion of the river valley is currently used for agriculture, with major products being rice, cotton, and soybeans. The parks generally have sufficient vegetation for shade. However, extensive reforestation will be required at the dam site parks to enhance their recreational potential. Underbrush has been cleared within the developed portions of the parks.

c. Scenic qualities. The Arkansas River is lined with sand beaches and an abundance of vegetation. During the summer recreation season the river offers miles of pleasure boating and sightseeing. The locks and dams attract thousands of visitors each year. Observation platforms have been constructed at each of the navigation locks to afford land visitors the opportunity to view the structure itself and boats locking through. Lock visitor centers are programmed for each lock in future construction programs to replace the existing observation platforms. The one at Murray Lock is presently under construction. Also pleasure boaters are offered a unique river view of the locks and dams and the various highway and railroad bridges which cross the river.

d. Water quality. The water quality of the Arkansas River has been improved as a result of the project. Much of the silt settles out in the reservoirs in Oklahoma and in Ozark and Dardanelle in Arkansas, and the salt concentrations have been reduced or diluted through flow regulation. According to the studies conducted in 1972 and 1973 by the Arkansas Department of Pollution Control and Ecology, the Arkansas River downstream of Murray Lock and Dam at Little Rock is placed in a "B" classification. This rating means that it is suitable for all beneficial uses except primary contact recreation. Most of the pollution of the river in this reach results from agricultural runoff containing clays and silt. Municipal sewage from the cities of Little Rock and Pine Bluff and sewage effluent from the paper mill at Pine Bluff are other sources of pollution (1). Recreational development is restricted due to its "B" classification. Swimming facilities will not be provided until water quality improves and meets the Arkansas State Health Department Standards.

e. Fish and wildlife.

(1) Fish. The fishery resources of the many channel scar lakes and wooded flood plains of the lower Arkansas River downstream from Pine Bluff, Arkansas, are probably the most important recreational resources of the general area. Utilization of these resources has, in the past, been severely limited by lack of suitable access. The recreational fishery of the stream in its undeveloped state was insignificant. The commercial fishery was somewhat more stable. Upon completion of the upstream components of the navigation system, the water became less turbid. The fishery was benefited by this reduced turbidity and by increased water levels and

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(1) Water Pollution Control Survey of the Arkansas River Basin, July 1974, Volumes I and II, by the Arkansas Department of Pollution Control and Ecology, Water Division.



increased minimum flows. The increased water levels created a substantial acreage of highly desirable fishery habitat, particularly in Pool 2. Substantial fisheries have developed immediately downstream from all locks and dams. The various species of catfish, white bass, and sauger are especially prevalent in the dam tailwater areas. In the pools the dominant sport fish species are largemouth bass, crappie, white bass, catfish and the recently introduced striped bass. The Arkansas Game and Fish Commission, as the agency responsible for propagation and management of the State's fish and wildlife resources, has stocked numbers of native game fish since the navigation pools were completed. In addition, stocks of the striped bass, not native to Arkansas, have been added to stimulate the fishery.

(2) Commercial fishery. The commercial fishery of the McClellan-Kerr Arkansas River Navigation System has steadily increased in size and value since project completion. Numbers of commercial fishermen have increased from 279 in 1966; to 794 in 1972; to 1,305 in 1974. The number of pieces of gear used by these fishermen increased from 2,567 in 1966 to 5,268 in 1974. The number of boats utilized by these fishermen in 1966 was 280, while 1,305 boats were recorded in 1974. The pounds of fish caught have been recorded in Table 4-1, while the value of these fish can be found in Table 4-2.

(3) Wildlife. Deer, turkey, squirrels, furbearing animals, and waterfowl, in particular, are inhabitants of the wooded portions of the basin. Some minor losses of wildlife habitat have occurred, primarily where the manmade canal crossed the White River National Wildlife Refuge. The loss of waterfowl habitat was mitigated by construction of levees, gates, and appurtenant works on the Refuge to provide proper water management for green tree reservoirs. This was in response to U.S. Fish and Wildlife Service recommendations. The fauna of the Arkansas River Basin is readily divided into two parts. The lower, more heavily wooded portion of the basin is inhabited by those animals present in the original flood plain forest. The upper portion, with gallery forest alongside the river and farmlands rapidly encroaching, is inhabited by those of the disturbed farm-lot and levee system habitat.

(4) Preservation and enhancement. The construction of cut-offs at several points has benefited fish and wildlife to some extent. The fishery habitat in the cut-off bendway is improved as the sediment load is excluded, except during high flows. The islands thus formed by construction of the cut-offs offer some seclusion to the more mobile game animals such as deer, raccoon, bear, and various species of game and nongame birds as well.

(5) Summary. Improved access to the project area and the provision of facilities and developments at project expense has greatly facilitated use of project lands and waters. With increased use, a more efficient and

heavier harvest of fish and wildlife resources has occurred. Net benefits from project construction have been realized by the increased fishery and improved access. The sport fishery has not been recorded, but such indicators as fishing license sales and Corps visitation figures show an increase in sport fishing similar to the increase in commercial fishery since completion of the project. The number of organized fishing tournaments has steadily increased.

TABLE 4-1

COMMERCIAL FISH CATCH ON THE ARKANSAS RIVER\*

SPECIES	POUNDS REPORTED		
	1966	1972	1974
Bowfin	-	10,400	12,300
Buffalo	863,400	1,700,000	2,278,335
Carp	271,000	168,700	251,900
Catfish	337,300	1,626,000	1,554,800
Gar	57,200	53,200	144,300
Paddlefish	8,600	77,100	58,100
Carp sucker	60,800	33,200	57,600
Drum	53,000	72,500	469,500
Suckers	10,000	45,100	31,500
Turtles	3,500	7,000	11,800
Total	1,664,800	3,793,200	4,870,135

\*Information gained from report furnished by the Arkansas Game and Fish Commission, Commercial Fishery Industry Survey, for the entire length of river in Arkansas.

TABLE 4-2

VALUE OF COMMERCIAL FISH CATCH, ARKANSAS RIVER

SPECIES	Value (Dollars)		
	1966	1972	1974
Bowfin	-	520	2,091
Buffalo	129,510	289,000	789,630
Carp	13,550	8,435	42,823
Catfish	118,055	569,100	1,026,168
Gar	5,720	2,660	33,189
Paddlefish	1,720	13,107	29,050
Carp sucker	3,040	5,644	23,364
Drum	7,950	12,325	154,935
Suckers	500	2,255	11,025
Turtles	350	490	4,950
Total	\$280,395	\$903,539	\$2,126,225

#### 4.04. Recreational resources.

a. Recreational development by the Corps of Engineers. There are 21 parks in Pools 1 through 6 which will provide water access, picnicking, and camping activities. The status of these parks is given in Section III. Also, there are eight Corps of Engineers projects offering similar recreational opportunities within 65 air miles of the project. A tabulation of 1974 visitation to these competing projects is shown in Table 4-3. The recreation areas on the Arkansas River Pools 7, 8, and 9 are in the initial construction development stage. Pool 7 parks became operational in August 1975. Pools 8 and 9 parks should be operational by the summer of 1976. These parks should have large increases in visitation for the next couple of years.

TABLE 4-3

#### RELATED CORPS OF ENGINEERS PROJECTS

Project	Air miles from Pools 1 - 6	Visitation in 1974
Arkansas River Pool 7	1	402,400
Arkansas River Pool 8	20	134,300
Arkansas River Pool 9	35	136,700
Greers Ferry	60	3,423,600
Ouachita	60	2,231,000
Nimrod	60	493,500
DeGray	60	1,527,000
Dardanelle	65	2,325,700

Future recreational development of the parks in the project will be influenced by visitation and development of recreation facilities at the above mentioned projects.

b. Related recreational or scientific areas by others. (1) Marinas. There are seven privately owned and operated marinas on this reach of the river which offer public services. A few of these marinas offer only limited services, while others offer launching, fuel, repair, and other sundries. These marinas are located at navigation miles 22.7 R, 2 at 71.2 R, 75.4 L, 116.9 R, 118.0 R, 118.0 R, and 118.4 L (L indicates the left bank and R indicates the right bank as viewed looking downstream). (2) Lakes. Other projects offering similar recreation facilities within 65 air miles of the project are: Lake Catherine and Lake Chicot State Parks and Lake Hamilton. Also, Lake Conway and Lake Maumelle are located near Little Rock and provide fishing and boating activities. (3) City parks. The City of North Little Rock has extensive recreational developments within its 1,575-acre Burns Park. Included in this development are group picnic shelters, picnic sites, camp sites, tennis courts, miniature golf, baseball fields, amusement rides, animal zoo, golf course, playground equipment, and trails. The City of Little Rock has plans to construct a six mile long continuous riverfront park from the Rebsamen Park golf course through Murray Dam Site Park up to the 1300-acre Pinnacle Mountain State Park adjacent to Navigation Pool 7.

A variety of recreational facilities will be constructed including camping, hiking, picnicking, bicycle trails, etc., in this 1,600 acre "River Mountain Park." This project is a part of a balanced development concept, "River 90," prepared by Riverfront Development Corporation and by participating firms of the Arkansas Chapter of the American Institute of Architects. "River 90" balances business, residential, park, and recreational development for the Arkansas River from Pinnacle Mountain thru Little Rock to the Little Rock Port, a distance of almost 20 miles. (4) Hunting. The White River National Wildlife Refuge and the Trusten Holder Wildlife Management Area adjacent to Norrell Lock and Dam and the Bayou Meto Wildlife Management Area north of Lock and Dam No. 3 offer hunting and wildlife viewing opportunities.

c. Arkansas Natural Area Plan (1). The Arkansas Department of Planning has prepared a plan for preserving some of the natural areas of each of the natural divisions of the state. The plan is a technical appendix to the Arkansas Statewide Comprehensive Outdoor Recreation Plan of 1974. It discusses the criteria for selection of areas to be preserved, inventory of sites, acquisition, management, and implementation. If carried out, this plan will assure preservation of natural areas for the enjoyment of future generations. Seven of these areas are located within the counties which are included in the project zone of influence. They are briefly discussed in the priority listed in the plan as follows.

(1) West Gulf Coastal Plain Division. Grant County, Site 1. This is a 38 acre site of nature second-growth pine forest. It is habitat for the rare Red-cockaded Woodpecker and a Tickseed, a plant which formerly was known only from Bradley County. The site is important for conservation, nature study, and hunting. In 1971 this area was set aside as a sanctuary for the Red-cockaded Woodpecker.

(2) Mississippi Alluvial Plain Division.

(a) Pulaski County, Site 1. This site is a 1200 acre Bald Cypress swamp which is in a broad coastal plain depression as opposed to a channel scar or oxbow. Approximately 200 acres of the area is open water which is covered in summer with tall sedge and waterlilies. No evidence of logging is present.

(b) Arkansas County, Site 1. This 40-acre site is a high quality remnant of Grand Prairie Grassland, one of only two surviving in Arkansas County. It has a lush growth of grass and an abundance of spring flowers. Big Bluestem, Little Bluestem and Indian Grass are dominant.

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(1) Arkansas Natural Area Plan, State of Arkansas, Arkansas Department of Planning, December 1974.

(c) Desha County, Site 1. This tract of 1,880 acres is original bottomland forest located in the flood plain of the lower White River and is subject to backwater flooding from the Mississippi River. It is estimated that the average age of the overstory is around 200 years with some of the huge cypresses exceeding 500 years in age.

(d) Jefferson County, Site 1. The prominent feature of this 120-acre parcel of land is a 20 acre cypress-fringed channel scar lake. The lake shoreline is relatively natural bottomland hardwood forest. The water regimen of the lake is essentially natural, and therefore the lake would be of high educational value. The lake is in danger of possible destruction through residential development.

(e) Lonoke County, Site 1 and Prairie County, Site 10. The area is one of the few remnants of the Grand Prairie which has not been plowed and placed in cultivation. It is located along a highway/railroad right-of-way for a distance of about 14 miles. Approximately 150 to 175 acres of this area is in natural vegetation. It has tremendous educational value.

(f) Pulaski County, Site 2. This site is a 350 acre cypress-fringed oxbow lake which is an old channel of the Arkansas River. It possesses a moderate degree of naturalness, but it ranks high in scenic and recreational values. A major highway runs adjacent to it.

#### 4.05. Population of the counties in which the project lies (1).

a. Total population. The population of this area was analyzed by two regions of seven counties each. Region 1 is in the vicinity of Pools 4, 5, and 6 and consists of Faulkner, White, Pulaski, Saline, Lonoke, Prairie, and Grant Counties. Region 2 is in the vicinity of Pools 1, 2, and 3 and consists of Dallas, Jefferson, Cleveland, Arkansas, Lincoln, Desha, and Drew Counties. Region 1 had a population of 372,344 in 1960 and 440,330 in 1970 for a gain of 18.3 percent. Region 2 had a population of 172,624 in 1960 and 172,134 in 1970 for a loss of less than 1 percent. The average number of persons per household varied from 2.98 in White County to 3.43 in Lincoln County. Pulaski County had a 1970 population of 287,189, the largest of any county in Region 1. Jefferson County is the most populated county in Region 2. It had 85,329 people in 1970 which was a 4.9 percent gain over the 1960's population. It was the only county in Region 2 that recorded a gain in population between 1960 and 1970.

b. Minorities. The population of Region 1 in 1970 consisted of approximately 84 percent white, 16 percent Negro, and less than 1 percent

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(1) Source: 1970 Census of population, Volume 1 - Characteristics of the Population, Part 5 - Arkansas, U.S. Department of Commerce.

of other races. The population of Region 2 in 1970 consisted of approximately 63 percent white, 37 percent Negro, and less than 1 percent of other races. Other races present in both regions are Indian, Japanese, Chinese, Filipino, and others. Pulaski County in Region 1 is 20 percent Negro, and it has 82 percent of all the Negro population of Region 1. Jefferson County in Region 2 is 40 percent Negro, and it has 55 percent of all the Negro population of Region 2.

c. Age groups. The populations of Regions 1 and 2 are very similar with regard to age groups, therefore, the following averages represent both regions.

<u>Age group (years)</u>	<u>Percent of total 1970 population</u>
0 to 9	19
10 to 19	20
20 to 34	20
35 to 49	16
50 to 64	15
65 and over	10

d. Occupations. The people of both Regions 1 and 2 are engaged in a multitude of occupations. The counties which have larger cities are quite different than the rural-type counties with regard to occupations. The following table represents the mixture of occupations found in two metropolitan counties and two rural or farming oriented counties. Region 1 counties are basically the metropolitan type, while Region 2 counties are basically the rural type with the exception of Jefferson County.

e. Major industries. The major industries of the Little Rock-North Little Rock Standard Metropolitan Statistical Area are listed in order of greatest employment as follows: wholesale and retail trade; manufacturing, transportation, communications, and other public utilities; professional and related services; construction; public administration; finance, insurance, and real estate; business and repair services; personal services; agriculture, forestry, and fisheries; mining; and entertainment and recreation services. In lesser populated areas, such as Arkansas County in Region 2, the major industries are: agriculture, forestry, and fisheries; manufacturing; wholesale and retail trade; professional and related services; personal services; construction; transportation, communications, and other public utilities; finance, insurance, and real estate; public administration; business and repair services; and entertainment and recreation services. New industrial development has occurred as a result of navigation on the Arkansas River. As of March 1974, there were 26 river terminals in operation between navigation miles 20.0 and 122.0. These terminals provide barge and boat services, and loading and unloading facilities for such commodities as

TABLE 4-4

OCCUPATIONS, PERCENT OF TOTAL EMPLOYED  
16 YEARS AND OVER

Occupation	Metropolitan counties		Rural counties	
	Pulaski	Jefferson	Lonoke	Arkansas
Professional and technical	15.3	12.6	7.6	7.8
Managers and administrators	10.1	9.1	6.8	9.3
Sales workers & clerical	28.1	20.8	14.4	17.8
Craftsmen	13.2	13.6	13.9	11.7
Operatives	15.6	18.4	22.7	14.8
Laborers	3.8	5.3	5.0	5.6
Farmers	1.0	5.2	17.6	19.5
Service workers	10.9	11.1	9.4	8.7
Private household workers	2.3	3.7	2.5	5.0

grain, bulk liquids, lumber, paper, steel, sand and gravel, bauxite, and petroleum products. Seven of these terminals have railroad connections, and several have dry storage facilities(1). Industrial development on the river has produced more jobs and brought new families to the adjacent counties.

f. Per capita personal income. The 1969 per capita personal income varies considerably from the low of \$1,500 in Lincoln County to the high of \$2,811 in Pulaski County. Table 4-5 lists the per capita personal income and the percent of all families with income less than the poverty level for each county in Regions 1 and 2. The people of Region 2 near Pools 1, 2, and 3 generally have a smaller per capita personal income and a larger percentage of families with income less than the poverty level than the people of Region 1.

TABLE 4-5

INCOME

County	Per capita personal income, 1969	Percent of families with income less than poverty level
<u>Pools 4, 5, 6 - Region 1</u>		
Faulkner	\$2,086	16.1
White	1,979	24.3
Pulaski	2,811	13.7
Saline	2,391	11.2
Lonoke	1,941	26.1
Prairie	1,764	28.4
Grant	2,205	15.2
<u>Pools 1, 2, 3 - Region 2</u>		
Dallas	\$1,952	24.5
Jefferson	2,189	23.0
Cleveland	1,558	32.1
Arkansas	2,207	23.0
Lincoln	1,500	36.6
Desha	1,833	33.9
Drew	1,882	26.8

(1) Source: Navigation Charts, McClellan-Kerr Arkansas River Navigation System, March 1974, U.S. Army Engineer Districts, Little Rock and Tulsa, Corps of Engineers.



g. Effects on recreational development. Recreational development will be proportioned throughout the project based on the needs of the people and the total population. Since approximately 72 percent of the people live in the counties in Region 1, approximately 72 percent of the facilities will be provided in Pools 4, 5, and 6. The Negro minority makes up a significant proportion (37 percent) of the entire population of Region 2. Also the per capita personal income is low in Region 2. Therefore, recreation facilities in Pools 1, 2, and 3 will primarily be planned for free use. Camping areas will be developed to permit charging only the minimum fee in most cases. Merrisach Lake Park in Pool 2 will be the exception, since it attracts campers from farther distances and has sustained relatively large annual visitation. Industrial development on the river has produced more jobs and brought new families to the adjacent counties. The population of these counties should continue to grow and recreational development will have to be expanded to meet the needs of the people.

#### 4.06. Accessibility.

a. Major highway access routes. U.S. Highway 65 parallels the right bank of the Arkansas River from Little Rock through Pine Bluff to Dumas and then veers south to the southeast corner of Arkansas. It is a major north-south artery connecting southeast Missouri with northeast Louisiana, and it passes through five counties in the project zone of influence. U.S. Highway 79 crosses the Arkansas River at Pine Bluff. It is a major traffic artery connecting West Memphis with northwest Louisiana. It traverses through parts of five counties in the project zone of influence. U.S. Highway 167 is a major north-south artery which extends from southcentral Missouri through Little Rock to northcentral Louisiana. It passes through part of seven counties in the project zone of influence. U.S. Highway 270 connects Pine Bluff with westcentral Arkansas. It passes through two counties in the project area and connects with U.S. Highway 167, 79, and 65. Interstate Highway 30 parallels U.S. Highway 67 from Texarkana in southwest Arkansas through Little Rock to Searcy. Then U.S. Highway 67 continues northeast to the northeast corner of Arkansas. This route passes through four counties in the project area and crosses the Arkansas River at Little Rock in the middle of David D. Terry Lake. Interstate 40 traverses westward from Memphis through North Little Rock to Van Buren and then into Oklahoma. It passes through four counties in the project area and intersects with I-30 in North Little Rock. All of the above-mentioned highways are relatively straight and in good condition. The speed limit on all these highways is currently 55 m.p.h. A new four-lane highway is planned for connecting Little Rock to Pine Bluff and work has begun on a portion of this highway. Numerous other paved State highways provide convenient access in each county. The major access route for the north or left bank of the Arkansas River is State Highway 130 between Little Rock and England, then State Highway 15 to

Sherrill, then State Highway 88 to Reydell, and then State Highways 11, 276, and 1 to Pendleton in Pool 2. All State highways have a 55 m.p.h. speed limit and are in fair condition. Many of the parks are accessible by traveling from the paved State highways by way of a few miles of graveled county roads in fair to poor condition. A few of the parks are accessible by paved county roads which are kept in fair condition.

b. Commercial transportation. Two commercial airports serve the project area. A large airport at Little Rock serves several jet airlines and smaller charter services. The airport at Pine Bluff serves small commuter and private aircraft only. Several buslines offer passenger and charter service at Little Rock and Pine Bluff. Their routes generally follow the major U.S. and State Highways. Connections are available at most of the small towns along these routes. Railroad passenger service by Amtrak is available at Little Rock. The line runs from St. Louis, Missouri, into northeast Arkansas. It generally parallels U.S. Highway 67 as it crosses Arkansas in a southwest direction through Little Rock and Texarkana. From Texarkana the line continues through Texas into Mexico.

c. Effects on recreational development. The U.S. and State highways are adequate to serve the public needs for transportation to the general vicinity of the river. However, additional improvements of the county road systems are needed to the park sites. Paving of the graveled county roads would increase public use of the parks. The commercial transportation systems do not directly affect the recreational use of the project since the majority of the visitors live within 50 miles of the river.

#### 4.07. Effect of pool regulation on public use.

a. Park lands. The majority of the parks are subject to frequent flooding of a portion of the park land. Restroom facilities are sited either on the natural high ground above the 10-year flood or on artificial mounds to reduce maintenance cost to these structures. However, picnic and camp facilities are located at natural elevations, generally near the water, and are subject to more frequent flooding.

b. Concession Leases. At the present time there are no concessionaires located within the parks. The privately owned marinas mentioned in Section 4.04b are subject to damage by high river flows, swift currents, waves and wakes from passing boats and barges. Most marinas have been situated to reduce the impact of these damaging forces.

#### c. Water areas.

(1) River. The river is generally conducive to recreational use during most of the year. However, boaters must exercise caution to avoid

floating debris, underwater obstructions, and other hazards. The U.S. Coast Guard maintains the system of navigation aids consisting of lights, daymarks, mile boards, and buoys to properly mark the navigation channel. Pleasure boaters are advised to stay in the navigation channel. During high flows of 70,000 c.f.s. or above, the Corps of Engineers issues river warnings to encourage boaters to stay off the river. At these flows river currents are swift, debris is heavy, and channel buoys are under water in many areas.

(2) Downstream of dam. Fishing is excellent immediately downstream of the dams during most of the year. However, during high flows fishing is generally poor in the swift currents. Boating is dangerous in this area and therefore the Arkansas Game and Fish Commission has established regulations which prohibit boating within 300 feet of all the dams.

4.08. Availability of funds for construction of recreation facilities. The current policy requires cost sharing any future recreational development. Details of the requirements of Public Law 89-72 and our current program of development are given in Section 9.03. This policy will hinder further development especially in the poorer less populated counties in the vicinity of Pools 1, 2, and 3.

## SECTION V

### RECREATION FACILITY REQUIREMENTS

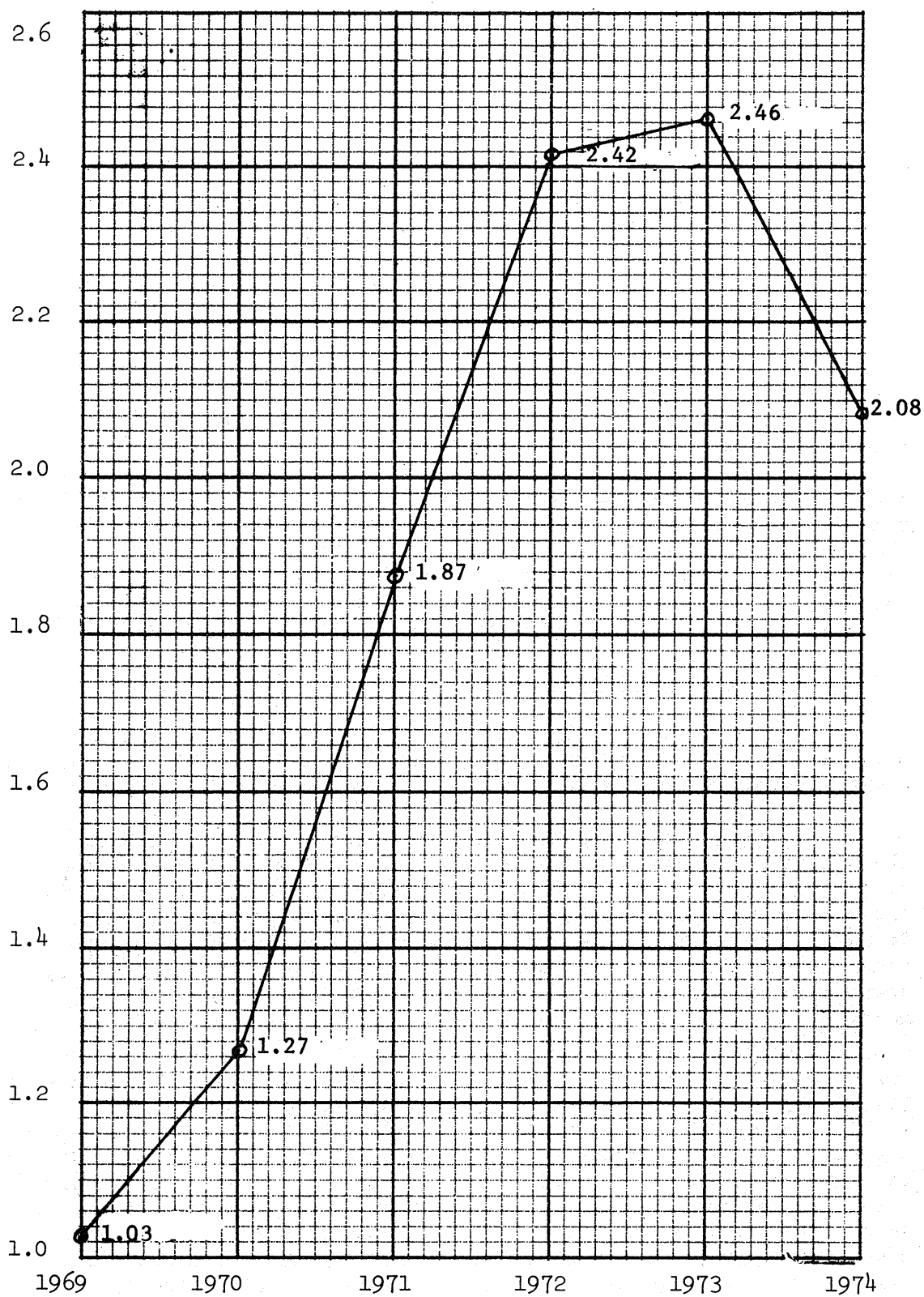
5.01. Zone of influence. Recreational use surveys were conducted in 1969 and 1971 at Dam No. 2 and Merrisach Lake Park in Pool 2 and at Ste. Marie Park in Pool 4. These surveys indicate that approximately 80 to 83 percent of the visitors reside within 50 highway miles of the project. However, many visitors came from such metropolitan cities as Memphis, Tennessee; Dallas and Fort Worth, Texas; Shreveport, Monroe, and New Orleans, Louisiana; and Jackson, Mississippi. The zone of influence of the remaining pools is estimated to be 50 miles also. Plate 1 in Section 12 identifies the 14 counties and the regional resources within the zone of influence.

5.02. Visitation record. Visitation to the project has doubled during the first 5 years of operation. Table 5-1 lists the visitation record of the project by lock and dam, and the following graph displays the visitation growth. Since several parks are presently being completed, visitation should increase significantly during 1975 and 1976. This holds true especially in Pools 5 and 6 where four new park areas are now being developed.

5.03. Present recreational use.

a. Source of data. The data source for determining present recreational use are the surveys mentioned in Section 5.01 and observations and traffic counter readings made by the Pine Bluff Resident Office field personnel.

b. Planning base. On most lake projects in the Little Rock District the planning base is the average summer weekend day for the months of June, July, and August. However, on the Arkansas River visitation in 1974 was greater in May than in July. Also visitation in Pools 1, 2, and 5 was greater in April than in July. Therefore, the planning base for the Arkansas River is the average summer weekend day visitation for the four highest visitation months during the period April through August. The average month for this period contains 4.4 weeks. The average weekly visitation is computed by dividing the average monthly visitation by 4.4. Since approximately 60 percent of the visitors visit the project on the weekend, the average weekend day visitation is computed by multiplying the average weekly visitation by 60 percent and dividing by 2. The average weekend day visitation was computed for Locks and Dams Nos. 1, 2, and 3 and for Locks and Dams Nos. 4, 5, and 6 because the project extends 125 navigation miles and the zone of influence is only 50 miles. Further these computations were performed first for 1974 in order to account for the most recent visitor distribution by parks and activities. The actual 1973 annual visitation was used as the planning base since it is a more typical visitation year as shown on the following graph. The computed average summer weekend day visitation for the 1973 base year for Locks and Dams Nos. 1, 2, and 3 is 7,840 and for Locks and Dams Nos. 4, 5, and 6 is 14,960.



CALENDAR YEAR  
RECORD OF VISITATION

TABLE NO. 5-1

## RECORD OF VISITATION

Project	1969	1970	1971	1972	1973	1974
Norrell Lock & Dam	79,400	66,300	107,700	166,100	54,300	74,800
Lock and Dam No. 2	323,800	359,900	511,900	618,500	547,300	568,300
Lock and Dam No. 3	93,500	155,300	172,000	227,300	190,600	186,000
Subtotal	496,700	581,500	791,600	1,011,800	792,200	829,100
Lock and Dam No. 4	205,900	223,900	467,900	579,200	688,600	593,800
Lock and Dam No. 5	91,000	171,000	211,000	275,700	342,700	259,300
David D. Terry Lock and Dam	233,000	289,000	403,000	550,400	638,900	398,100
Subtotal	529,900	683,900	1,081,900	1,405,300	1,670,200	1,251,200
Total	1,026,600	1,265,400	1,873,500	2,417,100	2,462,400	2,080,300

NOTE: The drop in visitation during 1974 was a result of frequent high river stages which restricted pleasure boat activity.

c. Participation rates. Participation rates used to determine present recreational use are based entirely on estimates made by project personnel through visual observations. No recent detailed surveys have been made on the project. The following summer and annual participation rates have been used to determine recreational activities in all pools.

TABLE 5-2

PARTICIPATION RATES

<u>Activity</u>	<u>Summer</u>	<u>Annual</u>
Boating	.12	.12
Fishing	.33	.33
Picnicking	.04	.02
Camping	.03	.02
Sightseeing	.53	.44
Hunting	0	.01
Other	.03	.02
Skiing	.03	.02
Swimming	<u>.03</u>	<u>.02</u>
Total	1.14	1.00

d. Activity occasions. An activity occasion is defined as participation of one person in a given recreation activity during any portion of one day. One person may generate several activity occasions in a day. For example, a person may participate in picnicking, fishing, and sightseeing in one day. Therefore, that person generated three activity occasions at the project that day, and facilities should be provided for this person to enjoy these activities. The activity occasions generated on a summer weekend day are computed by multiplying the summer weekend day visitation by the summer participation rates for each activity. Likewise, the annual activity occasions are computed by multiplying the annual visitation by the annual participation rates. The 1973 average summer weekend day and annual activity occasions for Locks and Dams Nos. 1, 2, and 3 and 4, 5, and 6 are given in Table 5-3.

5.04. Projected recreational use.

a. Basis for estimating future use. The following assumptions were made in projecting future use.

(1) The frequency of recreational use is proportional to population and personal income. This correlation has been proven to be relatively reliable and conservative at older projects within the Little Rock District.

TABLE 5-3

## 1973 ACTIVITY OCCASIONS

Activity	Summer weekend day			Annual		
	L&D 1, 2, & 3	L&D 4, 5, & 6	L&D 1, 2, & 3	L&D 4, 5, & 6		
Boating	940	1,800	95,060	200,420		
Fishing	2,590	4,940	261,430	551,170		
Picnicking	310	600	15,840	33,400		
Camping	240	450	15,840	33,400		
Sightseeing	4,160	7,930	348,570	734,890		
Hunting	0	0	7,920	16,700		
Other	240	450	15,840	33,400		
Skiing	240	450	15,840	33,400		
Swimming	240	450	15,840	33,400		
Total	8,960	17,070	792,180	1,670,180		



(2) Project visitation is proportional to the population residing within the zone of influence.

(3) The major percentage of visitors will continue to be generated from the zone of influence.

b. Population and income projections. Population and income projections were derived from the following sources:

(1) 1970 Census of Population. Volume 1 - Characteristics of the Population, Part 5 - Arkansas, U.S. Department of Commerce.

(2) OBERS Projections, Economic Activity in the United States.

The projected population and per capita personal income of the 14 counties in the zone of influence were multiplied to determine the total personal income. Since 1973 is the base year for the visitation projection, it is also the base year for the total personal income projection. The 1973 total personal income is divided into the projected total personal income to determine the rate of change from the base year. This rate of change is called the multiplier, and it is used to determine the projected visitation. Table 5-4 lists the projected population, per capita personal income, total personal income, and the multipliers.

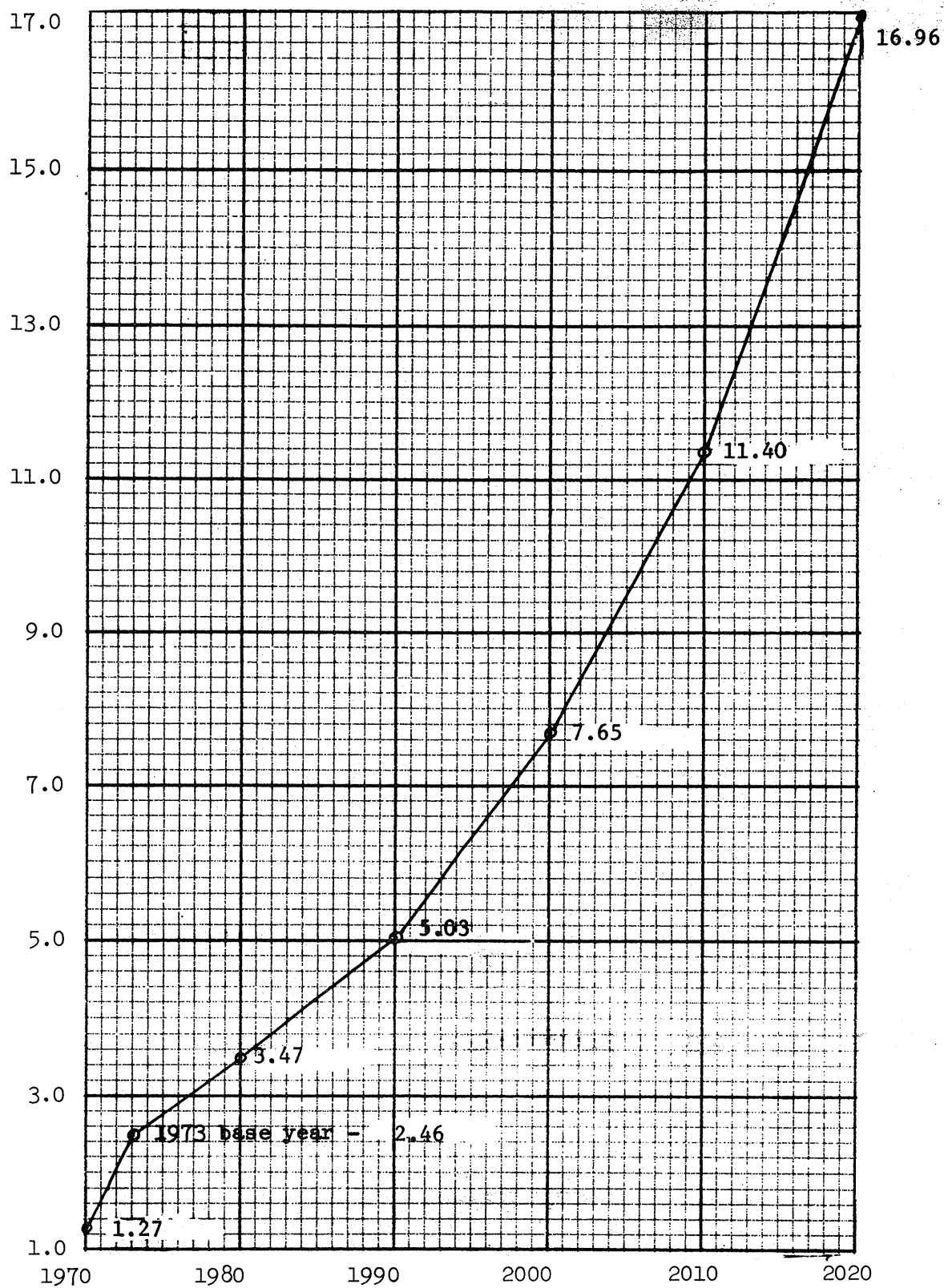
TABLE 5-4  
POPULATION AND INCOME PROJECTIONS  
14 COUNTY ZONE OF INFLUENCE  
(1970 DOLLARS)

Year	Population	Per capita personal income	Total personal income (\$1,000,000)	Multiplier
1970	612,464	\$3,208	\$1,964.8	0.846
1973	636,000	3,650	2,321.4	1.000
1980	689,200	4,745	3,270.3	1.409
1990	771,700	6,140	4,738.2	2.041
2000	873,100	8,255	7,207.4	3.105
2010	990,300	10,850	10,744.8	4.629
2020	1,126,000	14,200	15,989.2	6.888

c. Projected activity occasions. The projected visitation to each of the lock and dam projects is given in Table 5-5. Also, the graph on page 5-6A presents the projected visitation for the entire project.

PROJECTED VISITATION - L&D's Nos. 1 thru 6

(Millions)



CALENDAR YEAR  
PROJECTED VISITATION

The projected activity occasions generated by the visitors on the normal summer weekend day are given in Tables 5-6 and 5-7 for Locks and Dams Nos. 1, 2, and 3, and 4, 5, and 6, respectively. These activity occasions are the basis for determining recreation facility requirements in Section 5.07. The projected annual activity occasions generated by the visitors are given in Tables 5-8 and 5-9 for Locks and Dams Nos. 1, 2, and 3 and 4, 5, and 6, respectively. These projections indicate the magnitude of recreational activity which is anticipated at the project.

TABLE 5-6

PROJECTED ACTIVITY OCCASIONS  
 AVERAGE SUMMER WEEKEND DAY  
 AREA NO. 1 - LOCKS AND DAMS NOS. 1, 2, AND 3

	1973	1980	1990	2000	2010	2020
Projection factor	1.000	1.409	2.041	3.105	4.629	6.888
Average weekend day visitation:	7,840	11,050	16,000	24,340	36,290	54,000
Boating (.12)	940	1,330	1,920	2,920	4,350	6,480
Fishing (.33)	2,590	3,650	5,280	8,030	11,980	17,820
Picnicking (.04)	310	440	640	970	1,450	2,160
Camping (.03)	240	330	480	730	1,090	1,620
Sightseeing (.53)	4,160	5,860	8,480	12,900	19,230	28,620
Hunting (.00)	0	0	0	0	0	0
Other (.03)	240	330	480	730	1,090	1,620
Skiing (.03)	240	330	480	730	1,090	1,620
Swimming (.03)	240	330	480	730	1,090	1,620
Total (1.14)	8,960	12,600	18,240	27,740	41,370	61,560

TABLE 5-7

PROJECTED ACTIVITY OCCASIONS  
 AVERAGE SUMMER WEEKEND DAY  
 AREA NO. 2 - LOCKS AND DAMS NOS. 4, 5, AND 6

	1973	1980	1990	2000	2010	2020
Projection factor	1.000	1.409	2.041	3.105	4.629	6.888
Average weekend day visitation:	14,960	21,080	30,530	46,450	69,250	103,040
Boating (.12)	1,800	2,530	3,660	5,570	8,310	12,360
Fishing (.33)	4,940	6,960	10,070	15,330	22,850	34,000
Picnicking (.04)	600	840	1,220	1,860	2,770	4,120
Camping (.03)	450	630	920	1,390	2,080	3,090
Sightseeing (.53)	7,930	11,170	16,180	24,620	36,700	54,610
Hunting (.00)	0	0	0	0	0	0
Other (.03)	450	630	920	1,390	2,080	3,090
Skiing (.03)	450	630	920	1,390	2,080	3,090
Swimming (.03)	450	630	920	1,390	2,080	3,090
Total (1.14)	17,070	24,020	34,810	52,940	78,950	117,450

TABLE 5-8

PROJECTED ANNUAL ACTIVITY OCCASIONS  
AREA NO. 1 - LOCKS AND DAMS NOS. 1, 2, AND 3

	1973	1980	1990	2000	2010	2020
Annual visitation	792,200	1,117,000	1,617,000	2,460,000	3,666,000	5,457,000
Boating (.12)	95,060	134,040	194,040	295,200	439,920	654,840
Fishing (.33)	261,430	368,610	533,610	811,800	1,209,780	1,800,810
Picnicking (.02)	15,840	22,340	32,340	49,200	73,320	109,140
Camping (.02)	15,840	22,340	32,340	49,200	73,320	109,140
Sightseeing (.44)	348,570	491,480	711,480	1,082,400	1,613,040	2,401,080
Hunting (.01)	7,920	11,170	16,170	24,600	36,660	54,570
Other (.02)	15,840	22,340	32,340	49,200	73,320	109,140
Skiing (.02)	15,840	22,340	32,340	49,200	73,320	109,140
Swimming (.02)	15,840	22,340	32,340	49,200	73,320	109,140
Total (1.00)	792,180	1,117,000	1,617,000	2,460,000	3,666,000	5,457,000

TABLE 5-9

PROJECTED ANNUAL ACTIVITY OCCASIONS  
AREA NO. 2 - LOCKS AND DAMS NOS. 4, 5, AND 6

	1973	1980	1990	2000	2010	2020
Annual visitation :	1,670,200 :	2,353,000 :	3,408,000 :	5,186,000 :	7,732,000 :	11,505,000 :
Boating (.12) :	200,420 :	282,360 :	408,960 :	622,320 :	927,840 :	1,380,600 :
Fishing (.33) :	551,170 :	776,490 :	1,124,640 :	1,711,380 :	2,551,560 :	3,796,650 :
Picnicking (.02) :	33,400 :	47,060 :	68,160 :	103,720 :	154,640 :	230,100 :
Camping (.02) :	33,400 :	47,060 :	68,160 :	103,720 :	154,640 :	230,100 :
Sightseeing (.44) :	734,890 :	1,035,320 :	1,499,520 :	2,281,840 :	3,402,080 :	5,062,200 :
Hunting (.01) :	16,700 :	23,530 :	34,080 :	51,860 :	77,320 :	115,050 :
Other (.02) :	33,400 :	47,060 :	68,160 :	103,720 :	154,640 :	230,100 :
Skiing (.02) :	33,400 :	47,060 :	68,160 :	103,720 :	154,640 :	230,100 :
Swimming (.02) :	33,400 :	47,060 :	68,160 :	103,720 :	154,640 :	230,100 :
Total (1.00) :	1,670,180 :	2,353,000 :	3,408,000 :	5,186,000 :	7,732,000 :	11,505,000 :

5.05. Comparison of projections.

Arkansas Statewide Comprehensive Outdoor Recreation Plan for 1974.

The 14 counties in the project zone of influence lie mainly in Arkansas Planning Districts Nos. 6 and 8. Also one county lies in District No. 2 and one county lies in District No. 7. Recreational needs of the project area as stated in the Arkansas SCORP were determined by adding the county needs of the 14 counties and the minimum additional region needs of Districts Nos. 6 and 8. These recreational needs are shown in Table 5-10 for each of the recreational activities of the project. The need for additional recreational activities is evident for all categories. Needs are defined as unsatisfied demands.

5.06. Facility load and other design criteria.

a. General. The following criteria are applicable to overall facility development planned.

(1) EM 1110-2-400 dated 1 September 1971, Recreation Planning and Design Criteria.

(2) ER 1110-2-400 dated 1 February 1971, Design of Recreation Sites, Areas, and Facilities.

(3) ER 1120-2-400 dated 1 November 1971, Recreation Resources Planning.

(4) ER 1130-2-400 dated 28 May 1971, Recreation Resources Management of Civil Works Water Resource Projects.

(5) ER 1165-2-400 dated 3 August 1970, Recreational Planning, Development, and Management Policies.

(6) ER 1130-2-406 dated 13 December 1974, Lakeshore Management at Civil Works Projects.

(7) Public Law 93-303, enacted 7 June 1974, which provides for collection of user fees at parks.

(8) Park Practice Design Manual of the National Park Service.

b. Picnic units. One picnic unit will be provided for each 10 picnickers on an average summer weekend day. The picnic unit will consist of a concrete picnic table, grill or fireplace, and trash receptacle. Adequate vehicular parking will be provided for each picnic unit. A table canopy may be provided where shade is not available. Wooden picnic tables will be provided during peak summer use such as on National holidays. One group type picnic shelter will be provided for each 225 picnickers per average summer weekend day.



TABLE 5-10

RECREATION NEEDS AS STATED  
IN THE 1974 ARKANSAS SCORP (14 COUNTIES)

Activity	Unit	1975	1980	1985	1990
Boating, sailing, skiing	:Acres of water	: 2,797	: 2,929	: 3,346	: 3,865
Fishing	:Acres of water	: 16,046	: 18,997	: 24,135	: 29,560
Picnicking	:Sites	: 2,913	: 3,303	: 3,822	: 4,396
Tent camping	:Sites	: 4,417	: 4,802	: 5,132	: 5,515
Trailer (RV) camping	:Sites	: 199	: 226	: 259	: 295
Hunting	:Acres of : habitat	: 142,862	: 151,298	: 167,151	: 186,447
Swimming	:Square feet of : water area	: 648,163	: 716,057	: 817,708	: 936,791

c. Camping units. One camp unit will be provided for each five individual campers on an average summer weekend day. The camp unit will be similar to a picnic unit except paved parking may be provided for one or two vehicles and/or a recreation vehicle. Also, a tent pad will be provided for campsites designated for tent camping.

d. Swimming beach. Swimming in the Arkansas River is not approved by the Arkansas State Health Department, therefore, no swimming facilities have been provided.

e. Sanitary facilities. One waterborne restroom will be provided for each 250 camping activity occasions or one vault restroom will be provided for each 50 camping activity occasions. Also, one vault or waterborne restroom will be provided for every 2,500 other activity occasions on a normal summer weekend day. Restrooms will be constructed using Little Rock District standard designs. The masonry vault type I restroom is approximately 11 feet by 25 feet, with exterior of split-face concrete masonry units, and it has a nearly flat concrete roof with two skylights and a wind driven turbine ventilator. The women's side has two toilet stools, and the men's side has two toilet stools and a urinal. The masonry vault type II restroom is identical in appearance to the type I, but it has been equipped with wastewater plumbing to facilitate future conversion to a waterborne restroom. The masonry vault type III restroom is approximately 14 feet by 28 feet, with exterior of split-face concrete masonry units, and it has a wood framed pitched roof with asphalt shingles. This restroom has two toilet stools in the women's side and two toilet stools and a urinal in the men's side. It has a concrete porch which is designed for future conversion to shower rooms. Also it is equipped with electrical lighting and has wastewater plumbing for future conversion to a waterborne restroom. The masonry waterborne restroom is approximately 12 feet by 31 feet, and is similar in appearance to the vault type I or II restrooms. The women's side has two water closets, a lavatory, and mirror. The men's side has one water closet, a lavatory, a urinal, and a mirror. The masonry waterborne restroom with showers is approximately 17 feet by 33 feet. It is similar to the masonry waterborne restroom, and has two showers in each side. Trailer sanitary disposal stations will be provided at parks having a significant number of camp sites.

f. Launching ramps. In accordance with EM 1110-2-400, dated 1 September 1971, 1 launching lane should be provided for each 40,000 annual visitors or at any one area having 40 boat launchings per normal weekend day. Since the parks are relatively small in size and are located at close intervals in most pools, the proposed number of launching ramps are considered adequate for balanced park development.

g. Roads and parking areas. All major park circulation roads and parking areas will be designed to closely follow the existing ground surface, and clearing will be limited to the minimum necessary for safety. They will be surfaced with asphaltic concrete. Park roads and parking areas which are anticipated to be used on a limited or infrequent basis will be hard-surfaced gravel.

5.07. Facility requirements.

a. Facilities required to serve the base year use. The facility design load criteria in Section 5.06 were applied to the activity occasions shown in Section 5.03 to determine the facilities required during the base year 1973.

b. Facilities required to serve the future use. The facility design load criteria in Section 5.06 were applied to the projected activity occasions shown in Section 5.04 to determine the future facility requirements. Tables 5-11 and 5-12 list the facility requirements for Locks and Dams Nos. 1, 2, and 3 and Locks and Dams Nos. 4, 5, and 6, respectively.

c. Determination of optimum use. Optimum use is defined as that level of use which can be accommodated without degradation of the project resources. The development plan proposed in this master plan should accommodate the recreational uses of the project until approximately the year 2010. At that time additional parks would be required to continue to meet the recreational demand.

5.08. Availability of water and project lands to accommodate recreational activities.

a. Water. At top of navigation pool, there are 31,480 acres of water surface area available in the six navigation pools which cover a distance of approximately 125 navigation miles. According to the 1974 Arkansas Statewide Comprehensive Outdoor Recreation Plan, a stream or river will support 600 fishing activity occasions per year per mile. Also, a reservoir or lake will support 60 to 90 boating activity occasions per year, per acre, and 18 fishing activity occasions per year per acre. Since the Arkansas River is controlled as a series of pools, the lake criteria should be used in determining its boating capacity. However, we estimate that the highly productive fishery on the Arkansas River will yield 44 pounds per acre. Assuming 1.5 pounds of fish caught per activity occasion we estimate that the river will support 29 fishing activity occasions per year per acre. Thus the optimum annual fishing activity occasions equals 31,480 by 29 or 912,920. Also, it would support 31,480 by 75 or 2,361,000 boating activity occasions per year. Thus, from Tables 5-8 and 5-9, it can be seen that fishing pressure will reach optimum about 1984 and optimum boating use is estimated not to occur until after the year 2020.

TABLE 5-11

## FACILITY REQUIREMENTS

AREA NO. 1 - LOCKS AND DAMS NOS. 1, 2, AND 3

	1973	1980	1990	2000	2010	2020(2)	Proposed Initial(3)	Total
Group picnic shelters	1	2	3	4	6	10	6	6
Picnic units	31	44	64	97	145	216	76	142
Camp units	48	66	96	146	218	324	139	270
Launching lanes	20	28	40	62	92	136	15	16
(1) Rest rooms (vault type)								
Camping	5	7	10	15	22	32		
Other	4	5	7	11	16	24		
Total restrooms	9	12	17	26	38	56	15	36

(1) Restroom requirements are computed in terms of the number of vault type restrooms since most park sites are small and do not warrant waterborne restrooms.

(2) Initial = existing development and proposed initial through FY 78.

(3) Total = all development shown in this master plan.

TABLE 5-12

## FACILITY REQUIREMENTS

AREA NO. 2 - LOCKS AND DAMS NOS. 4, 5, AND 6

	1973	1980	1990	2000	2010	2020	Proposed Initial	Total
Group picnic shelters	3	4	5	8	12	18	15	24
Picnic units	60	84	122	186	277	412	132	299
Camp units	90	126	184	278	416	618	98	430
Launching lanes	42	59	85	130	193	288	23	27
(1) Restrooms (vault type)								
Camping	9	13	18	28	42	62		
Other	7	9	14	21	31	46		
Total restrooms	16	22	32	49	73	108	15	46

- (1) Restroom requirements are computed in terms of the number of vault type restrooms since most park sites are small and do not warrant waterborne restrooms.
- (2) Initial = existing development and proposed initial through FY 78.
- (3) Total = all development shown in this master plan.

b. Project lands. There are 3,526 acres of land available within the parks for recreational activities. These lands are adequate for meeting the estimated recreational demand through the year 2010. The proposed land acquisition at Merrisach Park is needed to preserve the character of the park, to act as a buffer zone between the park campground and the adjacent farmland, and for construction of a nature trail for the enjoyment of park visitors.

## SECTION VI

### COORDINATION WITH OTHER AGENCIES

6.01. Initial coordination. The original master plan was coordinated with all interested local, State, and Federal agencies. Included were the Fish and Wildlife Service, National Park Service, Arkansas Game and Fish Commission, Arkansas State Highway Department, Arkansas State Health Department and the city officials of Little Rock and North Little Rock.

6.02. Subsequent coordination.

a. North Little Rock. The city of North Little Rock, in a letter dated June 3, 1966, expressed their desire for the development of Burns Park. The park is now operated and maintained by the city.

b. Little Rock. The city of Little Rock also expressed their desire for the development of Murray Dam Site Park in their letter dated August 22, 1966. The construction plans were fully coordinated with the city of Little Rock. Construction is nearing completion and the park will soon be turned over to the city for operation and maintenance. The visitor center and overlook at Murray Dam Site is complete and is operated and maintained by the city. The displays within the visitor center are maintained by the District.

c. Pine Bluff. In July 1973, the Mayors of Dumas, Pine Bluff, Little Rock, and North Little Rock were contacted to determine whether they would be receptive to cost sharing the development of additional recreational facilities in their vicinity. The Mayor of Pine Bluff was the only one who was receptive to the proposal. Subsequent coordination has resulted in the planned cost sharing development of Boyd Point Park in FY 76. A copy of the letter of intent from the city of Pine Bluff is included in Section 6.03. Further, on 14 October 1975 a meeting was held in Pine Bluff with the Citizens Advisory Committee of Pine Bluff to discuss the background, coordination steps, and current status of the Boyd Point Park cost sharing agreement.

d. Arkansas Wildlife Federation. On 11 October 1975, a Little Rock District representative spoke to the Arkansas Wildlife Federation during their annual meeting to discuss the need for a land use plan for the Arkansas River Valley and to describe the shoreline management concept which had been sent to the Governor of Arkansas for review and comments. The status of the updating of this master plan was discussed and their participation in the planning process was solicited.

6.03. Correspondence. Upon beginning the updating of this master plan, letters were mailed to interested local, State, and Federal agencies requesting their comments and recommendations. The following form letters were mailed to the agencies listed. Replies have been received from several of the agencies and are included herein. All replies have been reviewed and considered in preparation of this master plan.



# ***CITY OF PINE BLUFF, ARKANSAS***

## ***OFFICE OF THE MAYOR***

24 July, 1974

AUSTIN T. FRANKS  
Mayor

Mr. D. R. Rippey  
Chief, Engineering Division  
Little Rock District  
Corps of Engineers  
P. O. Box 867  
Little Rock, Arkansas

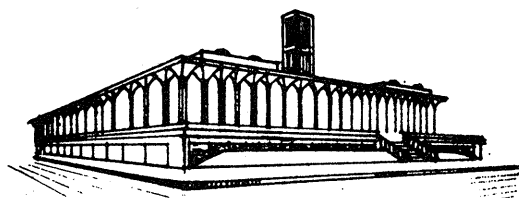
Re: Boyd's Point Park

Dear Mr. Rippey:

We acknowledge receipt of your letter of June 25, 1974 describing the proposed recreation project at Boyd's Point on the slack water harbor here in Pine Bluff, and it is our desire to participate in this development on a cost - sharing basis with the Federal Government by providing \$265,000.00 which represents 50 per cent of the total cost. We understand that the total cost of such project has been presently estimated to be \$530,000.00.

Understanding that this is merely an estimate subject to change, it is our present intention to contribute the following:

- a. The City will operate, maintain, and make replacements of facilities as necessary. The current estimate of the amount of the annual expense is
- b. The City of Pine Bluff intends to participate in this project by helping to construct the access road and have these costs applied to the cost of the project as an in kind service. It is our understanding that the City will be required to spend up to 50 per cent of the total cost of the entire development. Also as part of the City's participation we will furnish the right of way for the access road. We understand that the design and plans for construction of the access road are subject to the approval of the Corps of Engineers and that all facilities must be vested in the Federal Government.



6-3

Mr. D. R. Rippey

24 July, 1974

Page 2

Further we understand that the executing of this letter of intent does not obligate the Federal Government in any way to approve the recreation development or fund it.

Sincerely,



Austin T. Franks

Mayor

ATF:ve



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

REPLY TO  
ATTENTION OF:

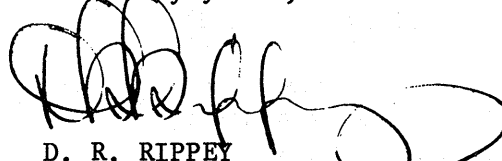
SWLED-PV

18 July 1975

Our Environmental Resources Section is presently updating the Master Plans for Recreational Development and Management of Arkansas River Navigation Pools 1-6, and for Navigation Pools 7, 8, 9, and 13. These comprehensive plans will be used as guides in all recreational development, maintenance, and administration of Corps of Engineers project lands and resources.

Please review the inclosed project information folders and furnish any comments which you feel would affect these plans at your earliest convenience.

Sincerely yours,

  
D. R. RIPPEY  
Chief, Engineering Division

1 Incl  
As stated

List for letter SWLED-PV dated 18 Jul 75 transmitting project information folders on navigation pools 1-6 and 7, 8, 9, and 13

Honorable Dale Shelton  
County Judge, Arkansas County  
De Witt, Arkansas 72042

Honorable Walter Kaylor  
County Judge, Crawford County  
Van Buren, Arkansas 72956

Honorable Thomas W. Scott  
County Judge, Conway, County  
Morrilton, Arkansas 72110

Honorable Bonnie Zook  
County Judge, Desha County  
Arkansas City, Arkansas 71630

Honorable Jesse Carter  
County Judge, Faulkner County  
Conway, Arkansas 72032

Honorable Nickey Gilsinger  
County Judge, Franklin County  
Ozark, Arkansas 72949

Honorable Joe T. Henslee  
County Judge, Jefferson County  
Pine Bluff, Arkansas 71601

Honorable C. O. Blackard  
County Judge, Johnson County  
Clarksville, Arkansas 72830

Honorable Charles Green  
County Judge, Lincoln County  
Star City, Arkansas 71667

Honorable Buster Tritt  
County Judge, Logan County  
Paris, Arkansas 72855

Honorable Malvin U. Brand  
County Judge, Perry County  
Perryville, Arkansas 72126

Honorable Ermil Grant  
County Judge, Pope County  
Russellville, Arkansas 72801

Honorable B. Frank Mackey  
County Judge, Pulaski County  
Pulaski County Courthouse  
Little Rock, Arkansas 72201

Honorable Glenn Thames  
County Judge, Sebastian County  
Fort Smith, Arkansas 72901

Honorable Robert Hodges  
County Judge, Yell County  
Danville, Arkansas 72833

Honorable Billy Free  
Mayor of Dumas  
Dumas, Arkansas 71639

Honorable Austin Franks  
Mayor of Pine Bluff  
Pine Bluff, Arkansas 71601

Honorable Carleton E. McMullin  
City Manager  
City of Little Rock  
Little Rock, Arkansas 72201

Honorable Edward Powell  
Mayor of North Little Rock 72114  
North Little Rock, Arkansas ~~72201~~

Honorable Walter Dunaway  
Mayor of Conway  
Conway, Arkansas 72032

Honorable Thomas H. Hickey  
Mayor of Morrilton  
Morrilton, Arkansas ~~72368~~ 72110

Honorable Ray Riley  
Mayor of Fort Smith  
Fort Smith, Arkansas 72901

Honorable Allen Ray Toothaker  
Mayor of Van Buren  
Van Buren, Arkansas 72956



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

REPLY TO  
ATTENTION OF:

SWLED-PV

18 July 1975

Our Environmental Resources Section is presently updating the Master Plans for Recreational Development and Management of Arkansas River Navigation Pools 1-6, and for Navigation Pools 7, 8, 9, and 13. These comprehensive plans will be used as guides in all recreational development, maintenance, and administration of Corps of Engineers project lands and resources.

Please review the inclosed master plans and project information folders and furnish any comments which you feel would affect these plans at your earliest convenience.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "D. R. Rippey", is written over the typed name and title.

D. R. RIPPEY  
Chief, Engineering Division

2 Incl  
As stated

List for letter SWLED-PV dated 18 Jul 75 transmitting plans for updating master plans for recreational development and management of Arkansas River navigation pools 1-6 and 7, 8, 9, and 13 and project information folders.

Mr. Joseph Rumburg, Regional Director  
United States Department of the Interior  
National Park Service  
Southwest Region  
P. O. Box 728  
Santa Fe, New Mexico 87501

Mr. Kenneth E. Black, Regional Director  
U.S. Fish and Wildlife Service  
17 Executive Park Drive, N.E.  
Atlanta, Georgia 30323

Mr. Sidney Weitzman, Area Director  
U.S. Forest Service  
1720 Peachtree Road, N.W.  
Atlanta, Georgia 30309

Mr. Charles T. Crow, Director  
Arkansas Department of Planning  
400 Train Station Square  
Little Rock, Arkansas 72202

Mr. Charles R. McGimsey III  
Director, Coordinating Office  
University of Arkansas Museum  
Fayetteville, Arkansas 72701

Mr. William E. Henderson, Director  
Department of Parks and Tourism  
149 State Capitol Building  
Little Rock, Arkansas 72201

Mr. Andrew Hulsey, Director  
Arkansas Game and Fish Commission  
Game and Fish Commission Building  
Little Rock, Arkansas 72201

Mr. G. T. Kellogg, P.E., Director and Chief Engineer  
Arkansas State Department of Health  
4815 West Markham Street  
Little Rock, Arkansas 72205

Mr. S. Ladd Davies, Director  
Pollution Control and Ecology  
8001 National Drive  
Little Rock, Arkansas 72209

Mr. William Gresham  
State Forester  
Arkansas Forestry Commission  
3821 West Roosevelt Road  
Little Rock, Arkansas 72204

Mr. Lon Hardin, Director  
Western Arkansas Planning and  
Development District, Ind.  
510 North Greenwood Avenue  
Fort Smith, Arkansas 72901

Mr. Don Fulenwider, Director  
West Central Arkansas Planning and  
Development District  
P. O. Box 773  
Hot Springs, Arkansas 71901

Mr. W. O. Dunaway, Director  
Central Arkansas EDD P.O. Box 187  
Lonoke, Arkansas 72086

Mr. Paul D. Bates, Director  
Southeast Arkansas Planning and  
Development District  
P. O. Box 6806  
Pine Bluff, Arkansas 71601



DEPARTMENT OF COMMERCE  
ARKANSAS FORESTRY COMMISSION

P. O. BOX 4523 ASHER STATION  
LITTLE ROCK, ARKANSAS 72204

July 25, 1975

B. G. GRESHAM  
State Forester  
Phone 501-371-1732

DONALD V. ALLEN  
Director of Commerce  
Phone 501-371-2231

COMMISSION MEMBERS

W. S. FOX, CHAIRMAN  
Pine Bluff

PETER D. JOERS  
Hot Springs

JOHN W. ELROD  
Rison

P. C. WOOD  
Pangburn

KENNETH SMITH  
Mulberry

CHARLES R. BLACK, JR.  
Corning

BERYL ANTHONY  
El Dorado

DALE RODGERS  
Mena

J. A. RODMAN  
Melbourne

Mr. D. R. Rippey  
Chief, Engineering Division  
Corps of Engineers  
P. O. Box 867  
Little Rock, Arkansas 72203

Dear Mr. Rippey:

The Forestry Commission deals with the forest resources of Arkansas and in so doing it deals with recreation only in secondary ways, or not at all. Therefore, we have no comments to make on those areas which are presently developed or are being developed, except to say that we agree with the decision of selecting water tolerant trees for the areas which may be inundated for lengthy periods of time.

We would like to make a brief comment on areas such as Fletcher Bend and Brodie public use areas. Areas such as these which cover fairly large acreages could be used to provide jobs for local timber harvestors while the area is waiting for development. This would also generate some monies for the Corps. By using some type of selective harvesting system, the timber can be improved both for lumber and for recreation. The timber is improved for recreation, because the remaining stand is much more healthy and less likely to be of danger to recreationists who are using the area.

Thank you for the opportunity to comment on your master plans which you sent us. We hope that our brief comments will be of value in updating these plans.

Sincerely,

B. G. Gresham  
State Forester

By: James E. Grant  
Administrative Assistant

JEG:mw

COMMISSIONERS

ANDREW H. HULSEY, Director

JOE D. SCOTT  
CHAIRMAN  
NASHVILLE

RALPH B. GRIFFIN  
VICE CHAIRMAN  
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MICHAEL F. MAHONY  
EL DORADO

WM F. WRIGHT  
NORTH LITTLE ROCK

DR. P. M. JOHNSTON  
FAYETTEVILLE



# Arkansas

## *Game and Fish Commission*

LITTLE ROCK, ARKANSAS 72201



August 4, 1975

Mr. D. R. Rippey  
Chief, Engineering Division  
Department of the Army  
Little Rock District Corps of Engineers  
Post Office Box 867  
Little Rock, Arkansas 72203

RE: SWLED-PV

Dear Mr. Rippey:

Reference is made to your letter dated July 18, 1975, requesting that the Master Plans for Recreational Development and Management of Arkansas River Navigational Pools 1-9, and 13, be reviewed and comments furnished.

Following are our comments:

1. We believe that the policy of granting agricultural and grazing leases as an interim use on these projects is not in the best public interest.

Cattle grazing and hay harvest are not compatible with wildlife or recreational uses as cattle compete directly with wildlife for food and cover. Cattle also are carriers or transmitters of ticks and tick borne diseases, which are detrimental to wildlife populations and bothersome to people using the areas.

We believe a better interim use would be management for small game species. This would benefit more people and provide more recreational uses.

2. The wildlife areas which have been agreed upon by Corps personnel and the Arkansas Game and Fish Commission should preempt the installation of boat docks or other commercial enterprises.



Mr. D. R. Rippey

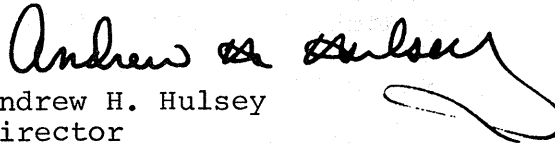
(2)

August 4, 1975

3. We note that on Corps Projects planting of trees is often necessary after completion of construction. If only minimum numbers of trees are removed during construction, this expensive procedure would not be needed. Also, mature established trees which could be left are more beneficial to wildlife than newly planted trees.
4. The Arkansas Game and Fish Commission would be receptive to entering into Cooperative Farming Agreements on suitable lands in the vicinity of Navigational Pool No. 2, such as we now have in the areas near Merrisach Lake.

The opportunity to review your Master Plans at this early date is appreciated.

Very truly yours,

  
Andrew H. Hulsey  
Director

AHH:LJ:gs

cc: U. S. Fish & Wildlife Service, Vicksburg  
U. S. Fish & Wildlife Service, Little Rock

WESTERN ARKANSAS PLANNING AND DEVELOPMENT DISTRICT, INC.

510 NORTH GREENWOOD AVENUE  
FORT SMITH, ARKANSAS 72901  
785-2651

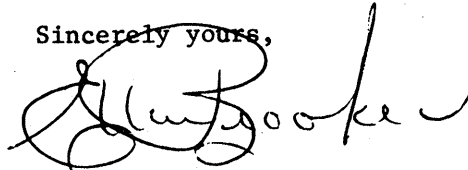
August 14, 1975

Mr. D. R. Rippey, Chief  
Department of the Army  
Little Rock District, Corps of Engineers  
P. O. Box 867  
Little Rock, Arkansas 72203

Dear Mr. Rippey:

We are in receipt of the updated Master Plans for the Recreational Development and Management of Arkansas River Navigation Pools 1-6, 7, 8, 9, and 13 and are reviewing the revisions as requested. We do not have however, a copy of the original Arkansas River Navigation Master Plan and would appreciate having the text mailed to us at your earliest convenience.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Ellen Brooker", written in dark ink.

Ellen Brooker  
Planning Technician

EB:bb



## WEST CENTRAL ARKANSAS PLANNING AND DEVELOPMENT DISTRICT, INC.

Municipal Building  
Suite 108

P. O. Box 1558  
500 Building

A/C 501 624 - 2508  
A/C 501 968 - 4746

Hot Springs, Arkansas 71901  
Russellville, Arkansas 72801

August 19, 1975

Mr. D. R. Rippey, Chief  
Engineering Division  
Department of the Army  
Little Rock District, Corps of Engineers  
Box 867  
Little Rock, Arkansas 72203

Re: Update Master Plans for Recreational Develop-  
ment & Management of Arkansas River Navigation  
Pools 1-6, 7, 8, 9, 13

Dear Mr. Rippey:

The West Central Arkansas Planning and Development District, as regional clearinghouse, notified local jurisdictions affected by the above-referenced project. The District has received no comments.

Although the District does not wish to comment we do wish to thank you for the opportunity to review the project.

Sincerely,

Don Fulenwider  
Executive Director

DF/NW/se

NOT USED



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

409 Merchants National Bank Building  
Vicksburg, Mississippi 39180  
September 2, 1975

Mr. D. R. Rippey  
Chief, Engineering Division  
U. S. Army Corps of Engineers  
P. O. Box 867  
Little Rock, Arkansas 72203

ATTN: SWLED-PW

Dear Sir:

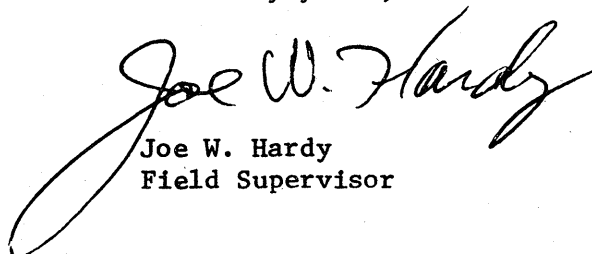
Reference is made to your letter of July 18, 1975, requesting review and comments on the Master Plans for Recreational Development of Arkansas River Navigation Pools 1-6, and for Navigation Pools 7, 8, 9, and 13. Our comments, all of a general nature, are as follows:

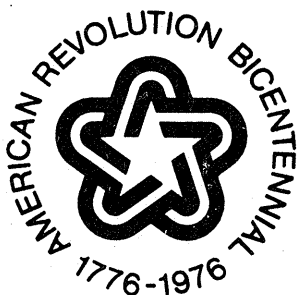
We believe that the project lands currently under an interim lease for agricultural and grazing purposes could better serve the public interest if made available to the Arkansas Game and Fish Commission for management purposes.

On the Ste. Marie PVA, consideration should be given to one wide boat ramp rather than two narrow ramps. This could be accomplished by removing the Courtesy Dock and paving between existing ramps. We recommend that all ramps should be at least three vehicle widths.

It would also appear appropriate to include the Arkansas River Shoreline Management Plan which was developed jointly by this Service, the Corps of Engineers, and the Arkansas Game and Fish Commission as an integral part of your Master Plan for that part of the Arkansas River System covered by the Little Rock District Corps of Engineers. Such action would insure a more orderly growth for all interests utilizing the system.

Sincerely yours,

  
Joe W. Hardy  
Field Supervisor



UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
Southeastern Area, State and Private Forestry  
Atlanta, Georgia 30309

September 15, 1975

Mr. D. R. Rippey  
Chief, Engineering Division  
Department Of The Army  
Little Rock District, Corps Of Engineers  
Little Rock, Arkansas 72203



Dear Mr. Rippey:

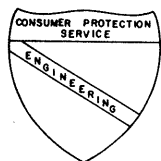
The Master Plans and project information folders for Recreation Development and Management of Arkansas River Navigation Pools 1-6, and for Navigation Pools 7,8,9 and 13 have been reviewed by Forest Service resource specialists, Southeastern Area - State and Private Forestry. These documents disclose no significant project impacts on the management and use of forest lands and resources in the project areas involved. Consequently, we have no comments or suggestions to contribute.

Thank you for the opportunity to review and comment on the drafts of the above named Master Plans.

Sincerely,

ROBERT K. DODSON  
Area Environmental Coordinator

ARKANSAS STATE DEPARTMENT OF HEALTH  
4815 WEST MARKHAM STREET  
LITTLE ROCK



September 16, 1975

United States Army Corps of Engineers  
Little Rock District  
P. O. Box 867  
Little Rock, Arkansas 72203

Attn: Mr. D. R. Rippey, Chief  
Engineering Division

Re: Master Plans for Recreational  
Development and Management of  
Arkansas River  
Navigation Pools 1-9 and 13  
76 E 48

Dear Mr. Rippey:

We have reviewed the above referenced material and we have no specific comments at this time.

Detailed plans and specifications for each development should be submitted for review and approval by this Bureau. They should include water supply facilities, sanitary sewage and solid waste disposal facilities, swimming beaches, and vector control programs.

The master plans are being retained in file for future reference.

Yours truly,

A handwritten signature in cursive script that reads 'T. A. Skinner'.

T. A. Skinner, P.E., Director  
Division of Engineering

TAS:BK:JJ0:HRS:WAE:lk

cc: Vector Control



## ARKANSAS DEPARTMENT OF PARKS & TOURISM

149 State Capitol

Little Rock, Arkansas 72201

Telephone (501) 371-1511

David Pryor  
Governor

William E. Henderson  
Director

Jack E. Miller  
Director of State Parks

Lou Oberste  
Travel Director

Dr. John L. Ferguson  
Director - History Division

September 25, 1975

Mr. D. R. Rippey  
Chief, Engineering Division  
Little Rock District  
Corps of Engineers  
P. O. Box 867  
Little Rock, Arkansas 72203

Dear Mr. Rippey:

Reference your letter concerning the Master Plans for Recreational Development and Management of Arkansas River Navigation Pools 1-6, and Pools 7, 8, 9, and 13.

These plans were reviewed by our State Parks Division for proposed development and maintenance in all sites plus preservation of the resource in pertinent historic sites. The Department of Parks and Tourism has no objections or comments to the plans as they now exist.

Thank you for the opportunity to review this project.

Sincerely,

William E. Henderson

WEH/vs



## SECTION VII

### PHYSICAL PLAN OF DEVELOPMENT

7.01. General description of plan. Navigation pools Norrell, 2, 3, 4, 5, and David D. Terry form a 125 mile segment of the McClellan-Kerr Arkansas River Navigation System. Recreational development will not conflict with the operation of the project for navigation. Development of the navigation pools for public use is confined principally to the areas shown on Plates 2 and 3, "Project Recreation Areas." There is available for public use in these areas about 3,526 acres of land above the top of the respective navigation pools. Approximately 1,681 acres have been acquired solely for public use. Full consideration and preference is given to Federal, State, and local governmental agencies for the use of areas suitable for recreational purposes on Government-owned land. This plan is subject to modification at the time any of these agencies desire to participate in the construction, maintenance, management, and operation of recreational facilities.

7.02. Allocation of lands. Acquisition of land in fee title and by flowage easements is substantially complete. Only such lands as are required for project operation, public park and recreational use, and access were acquired. Areas above the top of navigation pool were acquired specifically for project purposes or for public use and recreational development. Table 7-1 summarizes all the project lands that have been acquired as of 30 June 1975.

a. Project operations. These lands were acquired and allocated to provide for safe, efficient operation of the project for those authorized purposes other than recreation and fish and wildlife. In all cases this will include, but is not limited to, the land on which project operational structures are located. Approximately 10,776 acres are included in this classification.

3526  
14312

b. Operations: Recreation-intensive use. These lands were acquired for project operations and allocated for use as developed parks for intensive recreational activities by the visiting public, including areas for concessions and quasi-public development. No agricultural uses are permitted on these lands except on an interim basis. Table 7-2 lists the park acreages.

c. Operations: Recreation - low density use. These lands were acquired for project operations and allocated for low density recreation activities by the visiting public. One area of 195 acres located near the junction of the Arkansas Post Canal and navigation pool 2 is allocated for group use such as Boy Scouts or similar organizations. Access to the area is from the paved access road

TABLE 7-1

PROJECT LANDS  
(acres)

30 June 1975

	Fee Lands	Easement Lands
Entrance Channel	874.75	295.80
Norrell Lock and Dam (No.1)	207.35	-
Lock and Dam No. 2	7,412.99	13,812.22
Lock and Dam No. 3	427.90	2,110.73
Lock and Dam No. 4	1,179.25	3,743.21
Lock and Dam No. 5	1,261.70	3,746.33
David D. Terry L&D (No.6)	<u>1,323.20</u>	<u>1,171.33</u>
Total	12,687.14	24,879.62

Note: Quantities shown include lands acquired for bank stabilization.

TABLE 7-2

## LANDS ALLOCATED FOR RECREATION INTENSIVE USE

Site	Lands Available for Public Use (Acre)		
	Project Requirements	Solely for Public Use	Estimated Total Available
Wild Goose Bayou	10	0	10
Merrisach	44	58	102
Notrebes Bend	14	19	33
Morgan Point	0	137	137
Pendleton Bend	1,062	61	1,123
Moore's Bayou	7	0	7
Big Bayou Meto	0	13	13
Little Bayou Meto	0	12	12
Huff's Island	71	0	71
Rising Star	0	91	91
Trulock	0	41	41
Sheppard Island	4	56	60
Ste. Marie	0	59	59
Boyd Point (Future)	0	182	182
Dam Site 5	175	48	223 - 197 26
Tar Camp	179	44	223
Brodie (Future)	110	237	347
Wrightsville	0	144	144
Dam Site West-D.D.T.	30	127	157
Dam Site East-D.D.T.	10	35	45
Willow Beach	100	243	343
Burns Park	0	24	24
Murray Dam Site	29	50	79 166
Total	1,845	1,681	3,526

182  
347  
529

195  
35  
230

between Lock No. 2 and Dam No. 2. The site is located on a low sandy ridge bordering pool 2 and is shown on Plate 2. Another recreation - low density use area is located immediately upstream of Tar Camp Park in Pool No. 5. This 35-acre site has previously been leased for grazing and hay production. The area will be reforested initially by planting tree seedlings by the Boy Scouts as part of Arbor Day activities. After this initial planting, the area will be allowed to revegetate naturally. This site will be used for nature studies, hiking, and primitive camping. It also will serve as a buffer zone for the adjacent Tar Camp Park.

d. Operations: Wildlife Management. These lands were acquired for project operations and allocated as habitat for fish and wildlife. They may also be used for low density recreational activities. All wildlife management lands are located in the vicinity of Dam No. 2 with the exception of one area surrounding the Arkansas-White Closure Structure on the White River, and one island created by the Hensley Bar Cutoff in Pool 4. These areas will be open for in-season hunting.

7-03. Construction in water areas and along shoreline. The water areas and shoreline of the navigation pools are controlled through a permit program. All plans and proposals which involve use of the navigation pools will be subject to review. All navigation interests and other interested parties will be informed, as required by law, by means of a public notice, of such proposals and will be given the opportunity to object to the work before a permit is issued. All applications for permits will be accepted in accordance with the Corps of Engineers Pamphlet "Permits for Work in Navigable Waters," and other current guidelines.

7.04. Interim use. Brodie Park is planned for future development. Pending development of it and other areas, interim use for agricultural and grazing purposes is made by appropriate outgrant. Nine lease plots comprising 596 acres have been made available for leasing. Interest for use of these lands is primarily with the adjoining landowner. Land usage is in accordance with approved soil and water conservation practices to maintain a desirable vegetative cover, minimize erosion, and encourage wildlife. The management requirements include fire protection, seeding, and limitations on grazing use to maintain an optimum vegetative cover.

7.05. Project operation structures. The Pine Bluff Resident Office is located on the Lock and Dam No. 4 access road east of Pine Bluff. The Resident Engineer and his staff are located in this office and are responsible for all the field level operation and maintenance functions concerning pools 1 through 6. The Arkansas Post Preventative Maintenance Office, located near Lock No. 2, is used as a headquarters for personnel responsible for park maintenance in pools 1 and 2.

#### 7.06. Recreational development.

a. General. Twenty-one parks have been partially developed along this portion of the river at the locations indicated on Plates 2 and 3. Boyd Point Park is scheduled for partial development in 1976 under a cost sharing agreement with the city of Pine Bluff and Brodie Park is reserved for future development.

#### b. Developed parks.

(1) Wild Goose Bayou - (Plate 4). This park is located in the southern portion of the White River National Wildlife Refuge at the confluence of the White River and the Arkansas Post Canal. It is accessible by way of a 9 mile access road, south of Tichnor, Arkansas. The 10-acre area is developed for day use. A commercial dock is being considered here for future development due to anticipated public demand and limited public access. Facilities proposed include a sales and service dock for transit customers and a limited boat and motor rental service.

(2) Merrisach Lake (Plate 5). Access to this area is by an 8 mile hard surfaced road south from Tichnor, Arkansas. It contains 102 acres and is developed for both day and overnight use. The area is located on the east side of Merrisach Lake adjacent to the Arkansas Post Canal, and it provides good access for fishing. Moderately heavy woods cover most of the area. It is flat, but drainage does not seem to be a significant problem. A commercial concession is proposed to provide sales, rentals, and other services to sportsmen. *Merrisach Lake covers about 1200 Ac.*

(a) The proposed group use building will be made available for all different types of group gatherings on a reservation basis. Nearby communities and cities do not have facilities such as this. Visitation to Merrisach Park was 110,100 in 1974 and 73,300 in 1973. The building will be approximately 30 feet by 60 feet and similar to the Park Practice Design, Plate 540 B, dated November 1966, dining hall for an organized camp. The following deviations from the standard design are proposed: (1) omit one of the two fireplaces, (2) omit the kitchen, (3) add a storage room at one end for folding tables, chairs, and games, (4) add a serving counter for pot-luck dinners, (5) the window openings will be screened and have functional shutters, and (6) add an attic exhaust fan for summer ventilation. The building will have rough sawn cedar exterior siding, native stone fireplace, asphalt shingles to match existing picnic shelters, concrete floor, paneled interior walls, and exposed truss ceiling. The storage room will be equipped with 12 6-foot folding tables, 90 folding chairs, 2 ping-pong tables and assorted games. A large sheltered barbeque pit similar to Park Practice Design, Plate 992 B, dated July 1974, is proposed adjacent to the group use building. This design will be modified to harmonize with the group building.

(b) A 21-acre expansion of the park is proposed along the northern park boundary for the purpose of retaining the existing wooded buffer zone now in private ownership. It is anticipated that this wooded land will be cleared in the near future for farming or other development. This area will be used for hiking, nature study, and limited group camping.

(3) Notrebes Bend (Plate 6). This 33-acre area is located at Dam No. 2 on the left bank. Access is by a 7-mile hard-surfaced road from the Tichnor-Nady road at Lock No. 2. The area is partially wooded below the dam and is developed for both camping and fishing access. Visitation to this park is heavy due to the excellent fishing downstream of the dam.

(4) Morgan Point (Plate 7). This 137-acre area has been developed for both overnight and day use. It is fairly flat and for the most part densely wooded making excellent possibilities for expansion. This is the only access point located on the old expanse of the river along Medford and Fletcher Bends below Dam No. 2. Access to the area is provided by a gravel road along the levee about 5 miles south from the Pendleton-Notrebes Bend road. There is a private commercial boat dock immediately adjacent to the park providing sales, service, and rental.

(5) Pendleton Bend (Plate 8). This park has been expanded from the previous master plan to facilitate more efficient operation and management of the project lands. It consists of two developed areas separated by a large undeveloped tract of land. The first developed area, consisting of 61 acres, was formerly known as Pendleton Bend. It offers fishing access, day use, and camping activities, including group camping. The second developed area is at Dam No. 2 on the right bank, and consists of approximately 89 acres. It currently offers fishing access and picnicking, and will have campsites in the future. The large undeveloped portion of the park contains approximately 973 acres of flat open fields and some wooded forest. This area is presently licensed to the Arkansas Game and Fish Commission for wildlife management. However, it is proposed that the license for this area be revoked for the following reasons. Numerous conflicts have occurred between hunters, who enter from government land onto privately owned land, and the landowners. This land is of poor quality and is not suitable for any farming operation compatible with wildlife management. Greater utilization of the land will result through making it available for many different recreational activities. This large site will be used for nature study, hiking, horseback riding, primitive camping, and for short term group use. A part of this area may be utilized in the future for other recreational activities which require large land areas, such as motorcycle trails, dune-buggies, etc. All requirements of ER 1130-2-405 dated 17 January 1974 will be satisfied prior to development of any ORV trails.

(6) Moore Bayou (Plate 9). This 7-acre area is accessible from State Highway 169 near the Arkansas Post National Monument. It is located on Moore Bayou and provides for day use, camping, and boating and fishing access. Fishing benches have been provided for the handicapped and elderly. The area is lightly wooded and flat.

(7) Big Bayou Meto (Plate 10). This small sparsely wooded area, containing only 13 acres, is developed for day use and boating and fishing access. It is located about 14 miles above Dam 2 and is accessible by gravel road about 4 miles west of State Highway 1, about 2 miles south of Gillett.

(8) Little Bayou Meto (Plate 10). This area is about 12 acres in size, located in the Old Mud Lake Bend about 26 miles upstream of Dam No. 2. It is about 2 miles south on a hard surfaced road from Reydel. The lightly wooded area provides camping, boating and fishing access, and picnicking.

(9) Huff's Island (Plate 11). Located at Lock and Dam No. 3 on the south bank, this area is developed for day use and camping. Future development plans include additional overnight campsites. The land along the river in this 71-acre area is flat, and about 10 feet above navigation pool level. Access into this area is by 7 miles of State and county roads from State Highway 65 at Grady.

(10) Rising Star (Plate 12). This area is located about 4 miles above Lock and Dam No. 3. It is accessible by 4 miles of hard surfaced road from U.S. Highway 65 northeast from Linwood. The 91-acre area is very flat with the western half moderately wooded and the eastern half mostly clear of timber with some trees planted at picnic sites. The public is provided with both day use and camping facilities here with the camp units in the wooded portion. There is also a launch ramp and a playground.

(11) Trulock (Plate 13). Located about 10 miles above Lock and Dam No. 3 on the south bank, this 41-acre area is accessible by a 3-mile hard surfaced road north from U.S. Highway 65 at Noble Lake. The area provides day use, camping, and boating and fishing access. It is flat and moderately wooded with most of the facilities in the wooded area. There is also an open play area at the east end of the area.

(12) Sheppard Island (Plate 14). This 60-acre site is located on the left bank immediately downstream from Lock and Dam No. 4. Boating access and day use facilities are provided to facilitate the harvest of fish concentrated downstream of the structure. The area is accessible from U.S. Highway 79 by 3.5 miles of paved county road, 2-1/2 miles of gravel road, and a paved road constructed on the overflow portion of Dam No. 4. The area will have only minimum development initially.

(13) Ste. Marie (Plate 15). This 59-acre site is located on the right bank of Lake Langhofer near Pine Bluff, Arkansas. This lake is an old bendway of the Arkansas River which was formed by the construction of Boyd Point Cutoff. The area is a flat, open field which has recently been planted with trees to enhance the area for recreational pursuits. Day use facilities are provided for picnicking, water access, and play courts. Access to the area is via State Highway 81, by a county road, and by a road through the Jefferson County Port Terminal.

(14) Dam Site 5 (Plate 17). Located both up and downstream of Dam No. 5 on the west bank, this 223-acre area is developed mostly for day use with a few overnight campsites. It is moderately wooded along a ridge which rises sharply toward the back of the area. Most of the area which lies below the ridge is open and will need to be reforested. This site is accessible by 4.5 miles of gravel road east from U.S. Highway 65 just north of Jefferson.

(15) Tar Camp (Plate 19). Three and a half miles above Lock and Dam No. 5 on the west bank, this 223-acre area is conducive to both overnight camping and day use. It is about 6 miles west from Redfield on a hard surfaced county road. This area is equipped with camping and picnic facilities, group picnic shelter, and a waterborne restroom with showers. It also has a nature trail with a large wooden foot bridge crossing Tar Camp Creek. Tar Camp Creek flows into the north side of the area, winds around, and flows out the east end. The entire area is flat and moderately wooded. Brodie bendway is near this area and provides excellent fishing and waterfowl hunting. Visitation exceeded 133,000 during 1973.

(16) Wrightsville (Plate 20). This 144-acre area offers camping and day use. The developed portion of the area is long and narrow with the picnic sites in a cleared area along the water's edge. Most of the remaining undeveloped area is lightly wooded and is well suited for future development. Located about 15 miles upstream from Lock and Dam No. 5 on the west bank, it is accessible by a 1 mile paved and 3.5 mile gravel road east from State Highway 365 about 5 miles south of Wrightsville. There is good fishing available in adjacent waters.

(17) Dam Site West - David D. Terry (Plate 21). Located on the right bank, this heavily wooded 157-acre area is designed for camping and day use. It is close to Little Rock and is accessible by way of a hard surfaced county road through College Station and about a 1/2 mile right-of-way. This is one of the most popular areas for fishing on the river in the Little Rock area, thus causing the large number of day use visitation. Most of the bank fishing is done directly downstream of the dam. The area is flat and wooded upstream of the dam and flat and open on the downstream end. Initial development includes a launch ramp and several campsites upstream and a few picnic sites downstream.



(18) Dam Site East - David D. Terry (Plate 22). This area is located on the left bank at the dam and contains approximately 45 acres. It is 6 miles south of State Highway 130 about 1/2 mile east of Baucum on hard surfaced county road. It is initially planned for day use to accommodate a large visitation generated by heavy fishing activity. Picnic facilities have been included on the downstream side of the area and launching and parking facilities on the upstream side. The area is flat and open with a few willows and sycamores growing along the shoreline. Some nursery stock trees have been planted to enhance recreation use. The visiting public can view the locking operations from an observation platform on the esplanade of the lock. A future lock visitor center is programed for construction to replace the observation platform.

(19) Willow Beach (Plate 23). This large area, 343 acres in size, is accessible by 1/2 mile of hard surfaced road off the Baucum - David D. Terry Lock and Dam road. It has topography conducive to any type of picnic or camp oriented activity. Due to its close proximity to the North Little Rock area, the good fishing, the pleasing natural landscape, and large size, the area should receive a large visitation. Initial development includes both picnic and overnight camping sites as well as a boat launch facility. Some planting of flood tolerant trees will be required along the shoreline around the park facilities. A fishing pier for the physically handicapped, a multi-purpose court, a ball field and playground equipment are proposed for completion of initial development.

(20) Burns Park (Plate 24). This area is located adjacent to Burns Park, a large municipal park which is operated by the city of North Little Rock. It is at the mouths of White Oak and Shillcutt Bayous and is accessible through the adjacent 27 hole golf course from Interstate 40. It contains approximately 24 acres paralleling the shoreline in a narrow strip with a boat launching ramp and large parking lot on the east end. A road with some adjacent parking runs the length of the area. No picnic facilities have been initially planned due to the close proximity of such facilities within the adjacent city park. The city of North Little Rock has been granted a license to operate and maintain this area.

(21) Murray Dam Site (Plate 25). This area, approximately <sup>166</sup>79 acres in size, is located immediately downstream of Murray Lock and Dam on the right bank. This long narrow area gradually widens as it runs eastward along the river. It will initially include eight group picnic shelters, a large number of picnic sites, multiple launching facilities with courtesy piers, waterborne restroom facilities, five large parking areas, fishing dock for the handicapped, and an overlook and information center. Access to the area is off State Highway 10 by way of the Murray Lock and Dam access road past the Rebsamen Park Golf Course, which is owned and

operated by the city of Little Rock. The city of Little Rock will be granted a license to operate and maintain the park facilities upon completion of the initial development. However, District personnel will maintain the display in the overlook structure. A new lock visitor center is presently being constructed to permit visitors to view boats locking through.

c. Future parks.

(1) Boyd Point (Plate 16). This area is located on the tip of the point of an island severed from the river by the construction of a pilot channel near Pine Bluff, Arkansas. Since this area is timbered and has sandy beaches, it has excellent potential for recreational development. Development is proposed for FY 76 under a cost sharing agreement with the city of Pine Bluff. Picnicking and day use facilities will be provided initially. The City of Pine Bluff will assume operation and maintenance of this park.

(2) Brodie (Plate 18). This area is located on an island which was created when the Brodie Bend Cutoff was constructed. The park is accessible from England, Arkansas, by 4 miles of paved road and 10 miles of gravel road. The proposed access road will cross a rock overflow embankment at the upstream end of Brodie Bend. The area is relatively flat and most of it is in timber. Extensive picnicking and camping facilities are planned for this large 347 acre park.

## SECTION VIII

### BENEFITS AND ECONOMIC VALUE OF THE PROJECT

8.01. General. Justification for the recreational development of the navigation pools created by Locks and Dams Norrell, 2, 3, 4, 5, and David D. Terry is based on the need for facilities to provide for the pleasure, relaxation, health, and safety of the using public. The Arkansas River has long been well-known for its fish and wildlife potential, but limited public access has prevented efficient harvest of these resources. The planned recreational development will supply excellent access which will enhance and increase the benefits realized from the fish and wildlife resources of the area.

8.02. Recreational benefits. During 1973 an estimated 2,462,400 people visited these navigation pools for recreational purposes. Based upon standards for the evaluation of recreational benefits contained in Supplement No. 1, Senate Document No. 97, 87th Congress, June 1964, the estimated value of an average recreation day to the navigation pools is \$0.50. Application of this unit value to the 1973 visitation estimate yields a gross recreational benefit of \$1,231,200.

8.03. Collateral benefits of the project. During the 10-year period, 1964-1974, economic benefits of over 75 million dollars have been produced by this project in Arkansas. Areas in which benefits have been gained are shown in Table 8-1. The average annual tonnage transported on the section of the river from the mouth to Fort Smith during the 10-year period, 1964-1974, was about 3,302,788 tons. Tonnage transported on the project in 1974 was 6,060,353 tons. There is usually a pronounced increase in values of land, property, and sales in the surrounding area of a newly constructed project. Business and services catering to the tourist and sportsman can become a major source of income to nearby communities. Other economic values include increases in land taxes, revenue to governmental agencies from the sale of hunting and fishing licenses, and in tax revenue from gasoline used in recreational travel. The introduction of navigation has promoted industrial development which in turn has enhanced the economic growth of the region.

TABLE 8-1

COLLATERAL BENEFITS(1)

---

Savings in transportation . . . . .	\$40,470,000
Power value . . . . .	14,838,900
Flood control benefits . . . . .	6,602,600
Water supply . . . . .	828,900
Channel stabilization . . . . .	6,575,000
Fish and wildlife . . . . .	312,000
Recreation . . . . .	2,297,000
Redevelopment . . . . .	<u>3,355,800</u>
Total . . . . .	75,280,200

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(1) Source: Water Resources Development in Arkansas, 1975,  
U.S. Army Corps of Engineers

## SECTION IX

### EXPENDITURES AND COST ESTIMATES

9.01. General. The following paragraphs and tables are presented to facilitate review of expenditures for existing recreation facilities and estimates of costs for development of proposed facilities.

9.02. Allocations and expenditures of funds.

Construction General Funds. As of 30 June 1975, a total of \$5,772,000 has been expended for construction of recreation facilities in Pools 1 thru David D. Terry including Murray Dam Site Park. Table 9-1 lists the expenditures thru FY 75 of Construction General, Account 14 funds for recreation facilities for each of the navigation locks and dams. Also included in this table are scheduled expenditures for FY 76 and FY 76 transition quarter. Subject to the availability of funds, additional amounts are scheduled for completion of initial recreational development by FY 81.

9.03. Cost sharing - Public Law 89-72.

a. General. In accordance with EC 11-2-119 dated 30 May 1975, after completion of initial recreational facilities as discussed above in paragraph 9.02, all further development requires 50-50 cost sharing with a non-Federal public agency. Urgently needed sanitary facilities, needed to meet requirements of applicable State and Federal laws, could be constructed without cost sharing. There are no urgently needed sanitary facilities at this time or within the near future.

b. Boyd Point Park - cost sharing. The City of Pine Bluff has signed a letter of intent to cost share the partial development of Boyd Point Park as shown on Plate 16. This park is scheduled to begin construction during FY 77 at a total estimated cost of \$726,000. The Government will design, award a contract, and construct facilities valued at 50 percent of the total cost of the recreational development. The City will contribute its share by performing work valued at 50 percent of the total cost of the recreational development.

c. Other cost sharing attempts. Additional public launching facilities have been requested in the vicinity immediately downstream of Lock and Dam No. 3 and at the Pendleton Marina in Pool 2. Several possible launching ramp sites were investigated near Lock and Dam No. 3.

TABLE 9-1

ALLOCATION AND EXPENDITURES OF FUNDS (INITIAL DEVELOPMENT)  
CONSTRUCTION GENERAL, ACCOUNT 14 (\$1,000)

Lock and Dam	Cost thru	Scheduled	Expenditures
	FY 75	FY 76	FY 76 TQ
Norrell	\$108	\$0	\$0
No. 2	1,052	279	0
No. 3	745	123	0
No. 4	456	143	0
No. 5	711	41	0
David D. Terry	1,195	130	0
Murray (Murray Dam Site Park)	1,505	615	0
Total	5,772	1,331	0

Source of Data: Estimates of Annual Appropriation Requirements for  
Civil Functions of the Corps of Engineers, FY 77, for  
Continuing Construction, McClellan-Kerr Arkansas River  
Navigation System, Locks and Dams, dated 14 January 1976.

All sites were found to be prohibitive due to the expense of construction. A cost sharing participant could not be found for this expensive project. Possibly this project will appear more feasible and a cost sharing participant found at a later date. The proposed launching ramp facilities at Pendleton Marina were requested by the Dumas Bass Club. The marina owner offered to donate the necessary land for the ramp and parking. However, the Dumas Bass Club was unsuccessful in obtaining the remainder of the required 50 percent matching funds. No other cost sharing proposals have been received as of 31 July 1975.

9.04. Future recreational development cost.

a. General. The estimated cost of development of the proposed recreational facilities shown on Plates 4 through 25 are summarized in the following tables. These estimates are based on July 1975 price levels.

b. Tables of estimated cost of additional recreational facilities. The estimated total cost of construction for the proposed recreational facilities is \$8,884,000. A summary of estimated cost of additional development by parks is shown in Table 9-2. A summary of estimated cost for additional development by facilities planned is shown in Table 9-3. Detailed cost estimates for additional recreational facilities in each park are shown in Tables 9-4 through 9-26. Proposed facilities are itemized for two stages of development. The items identified as "initial" are proposed for construction through FY 81 subject to the availability of funds. The items identified as "future" are proposed for construction at an undetermined date and are subject to cost sharing.

9.05. Annual operation and maintenance cost. A summary of the operation and maintenance costs for recreational facilities and the cost of real estate management services are given in Table 9-27.

TABLE 9-2

ESTIMATED COST OF ADDITIONAL RECREATIONAL FACILITIES  
MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM

Reference Table	Park Name	Estimated Cost	
		Initial	Future
9-4	Wild Goose Bayou	\$0	\$ 60,050
9-5	Merrisach Lake	291,600	243,100
9-6	Notrebes Bend	72,800	111,350
9-7	Morgan Point	0	288,400
9-8	Pendleton Bend	0	444,100
9-9	Moore Bayou	0	8,000
9-10	Big Bayou Meto	0	25,200
9-11	Little Bayou Meto	0	20,700
9-12	Huff's Island	0	153,850
9-13	Rising Star	8,000	145,450
9-14	Trulock	44,000	204,150
9-15	Sheppard Island	0	127,750
9-16	Ste. Marie	0	360,900
9-17	Boyd Point	*600,000	567,850
9-18	Dam Site 5	41,300	422,650
9-19	Brodie	0	1,289,850
9-20	Tar Camp	248,450	256,650
9-21	Wrightsville	0	683,400
9-22	Dam Site West - D.D.T.	0	247,500
9-23	Dam Site East - D.D.T.	0	52,300
9-24	Willow Beach	125,450	513,650
9-25	Burns Park	0	0
9-26	Murray Dam Site	0	0
Total direct cost		1,431,600	6,226,850
Engineering and design		143,400	622,650
Supervision and administration		86,000	373,500
TOTAL		1,661,000	7,223,000
GRAND TOTAL		\$8,884,000	

\*Subject to cost sharing with the City of Pine Bluff.



TABLE 9-3

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## SUMMARY

Acres			See Plate				
Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00	5,555	1,400	18,200	1,885	23,050
(2) Flexible pavement	do	18.50	126,095	18,230	543,450	65,408	1,273,200
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50	3,240	2,500	18,750	300	2,250
(2) Flexible pavement	do	11.25	7,620	1,350	15,200	13,685	147,550
Parking areas							
a. Gravel to be paved	SY	6.25	4,864	2,146	7,500	1,684	10,550
b. Flexible pavement	do	8.50	153,038	3,745	33,200	27,321	232,250
Launching lanes, concrete	EA	27,000	35	3	82,000	5	135,000
Courtesy docks	do	6,500	10	1	6,500	2	13,000
Restroom, masonry							
a. Vault	do	17,000	13	1	22,000	10	170,000
b. Vault-convertible type	do	25,000	7	2	50,000	2	50,000
c. Vault-convert to waterborne	do	25,000	0	0	0	12	300,000
d. Waterborne	do	35,000	7	0	0	17	595,000
e. Waterborne with showers	do	42,000	1	0	0	11	462,000
f. Washhouse	do	43,000	0	0	0	0	0
Sewage collection system	Sum Job		1	0	0	0	0
Water distribution system	Sum Job		10	3	42,900	15	246,000
Water well	EA	8,000	16	1	8,000	11	88,000
Picnic unit	do	1,500	192	16	23,500	233	349,500
Camp unit (includes parking spur)	do	2,500	174	59	147,500	458	1,145,000
Table canopies	do	1,600	56	3	4,800	74	118,400
Electrical distribution & hookups	Sum Job		0	6	65,800	12	143,500
Group camp	EA	2,100	2	4	8,400	16	33,600
Group picnic shelters	do	13,000	21	*	8,000	9	117,000
Amphitheaters	do	3,300	0	0	0	0	0
Overlook shelters	do	9,000	1	1	9,000	0	0
Sanitary disposal stations							
a. Marine	do	11,000	0	0	0	0	0
b. Travel trailer	do	5,500	3	Pave 2	4,000	7	38,500
Mercury vapor lights	do	525	34	13	6,850	57	29,900
Entrance complex	Sum Job		3	Improve 2	25,000	5	105,000
Trails							
a. Project	mile	21,000	0	0	0	0	0
b. Park circulation	mile	17,000	0.64	0.98	16,650	0.80	13,600
c. Trail shelters	EA	2,000	0	0	0	0	0
Playground equipment	Sum Job		4	4	13,000	11	35,500
All-purpose court, double	EA	20,000	2	3	50,000	1	20,000
Reforestation	acre	1,100	0	0	0	231.9	255,100
Site preparation	Sum Job		0	5	71,300	13	44,300
Landscaping and Beautification	acre	2,700	0	11.4	30,700	7.7	20,900
Boat tie-up	EA	8,000	1	0	0	0	0
Footbridge	EA	10,000	1	0	0	0	0
Fishing platform	EA	8,000	1	2	21,000	0	0
Bicycle Trail	mile	30,000	1.41	0	0	0	0
Group building	Sum Job		0	1	50,000	0	0
Ball field	EA	9,200	1	2	18,400	1	9,200
Barbeque shelter	EA	10,000	0	1	10,000	0	0
Benches	EA	150	4	0	0	0	0
TOTAL					\$1,431,600		\$6,226,850

\*4 Fireplaces

TABLE 9-4

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## WILD GOOSE BAYOU PARK

Acres 10

See Plate 4

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00	3,500			300	5,550
(2) Flexible pavement	do	18.50					
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25	37,710			4,222	35,900
b. Flexible pavement	do	8.50					
Launching lanes, concrete	EA	27,000	2				
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000					
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000	1				
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job		1				
Water well	EA	8,000	1				
Picnic unit	do	1,500	3			6	9,000
Camp unit (includes parking spur)	do	2,500					
Table canopies	do	1,600	3			6	9,600
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525					
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100					
Site preparation	Sum Job						
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$60,050
					July 1975 Price Levels		

TABLE 9-5

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## MERRISACH LAKE PARK

Acres 102

See Plate 5

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00	1,720	1,400	18,200		
(2) Flexible pavement	do	18.50	10,300	1,030	19,050		
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50	2,500	2,500	18,750		
(2) Flexible pavement	do	11.25				1,300	14,600
Parking areas							
a. Gravel to be paved	SY	6.25	1,489	556	3,500		
b. Flexible pavement	do	8.50	8,935	1,055	8,950	220	1,900
Launching lanes, concrete	EA	27,000	1			1	27,000
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000	2				
b. Vault-convertible type	do	25,000		1	25,000		
c. Vault-convert to waterborne	do	25,000				1	25,000
d. Waterborne	do	35,000				2	70,000
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job		1	1	6,500	1	9,000
Water well	EA	8,000	1				
Picnic unit	do	1,500	6				
Camp unit (includes parking spur)	do	2,500	33	12	30,000	18	45,000
Table canopies	do	1,600	3				
Electrical distribution & hookups (42 campsites)	Sum Job			1	21,000	1	6,000
Group camp	EA	2,100		2	4,200		
Group picnic shelters	do	13,000	2	*	4,000		
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500	1	Paving	2,000		
Mercury vapor lights	do	525	2	3	1,600	5	2,600
Entrance complex	Sum Job		1	Improve	15,000		
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000		0.98	16,650		
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job		1	1	3,000		
All-purpose court, double	EA	20,000		1	20,000		
Reforestation	acre	1,100					
Site preparation	Sum Job			1	2,000		
Landscaping and Beautification	acre	2,700		1.1	3,000		
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
Group building	Sum Job			1	50,000		
Ball field	EA	9,200		1	9,200		
Barbeque shelter	EA	10,000		1	10,000		

TOTAL

\$291,600

\$243,100

\*4 Fireplaces

9-7

July 1975 Price Levels

TABLE 9-6

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

NOTREBES BEND PARK

Acres 33

See Plate 6

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00	935			935	12,150
(2) Flexible pavement	do	18.50	1,100	1,340	24,800		
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50	300			300	2,250
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25		1,590	*4,000		
b. Flexible pavement	do	8.50	3,768			110	950
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000					
b. Vault-convertible type	do	25,000	1			1	25,000
c. Vault-convert to waterborne	do	25,000				2	50,000
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job					1	15,000
Water well	EA	8,000	1				
Picnic unit	do	1,500					
Camp unit (includes parking spur)	do	2,500	11	15	37,500		
Table canopies	do	1,600					
Electrical distribution & hookups (26 campsites)	Sum Job			1	6,500	1	5,500
Group camp	EA	2,100					
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525	1			1	500
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100					
Site preparation	Sum Job						
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					\$72,800		\$111,350

\* 3-inch thick gravel parking area proposed, \$2.50 per sq yd.

July 1975 Price Levels

TABLE 9-7

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## MORGAN POINT PARK

Acres 137

See Plate 7

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	5,800			2,300	42,550
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	4,580			822	7,000
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000				2	70,000
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job					1	26,800
Water well	EA	8,000	1			1	8,000
Picnic unit	do	1,500	6			2	3,000
Camp unit (includes parking spur)	do	2,500	10			22	55,000
Table canopies	do	1,600					
Electrical distribution & hookups (24 campsites)	Sum Job					1	12,000
Group camp	EA	2,100				4	8,400
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500				1	5,500
Mercury vapor lights	do	525				6	3,150
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job					1	3,000
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100					
Site preparation	Sum Job					1	2,000
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL				0			\$288,400

July 1975 Price Levels

TABLE 9-8

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

## McClellan-Kerr Arkansas River Navigation System

## PENDLETON BEND PARK

Acres 1,123

See Plate 8 and 8A

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00	2,100				
(2) Flexible pavement	do	18.50	5,700			1,503	27,800
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25				3,400	38,250
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	9,100			65	550
Launching lanes, concrete	EA	27,000	3				
Courtesy docks	do	6,500	1				
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000	1				
c. Vault-convert to waterborne	do	25,000				1	25,000
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000				2	84,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job					2	34,000
Water distribution system	Sum Job					2	16,000
Water well	EA	8,000	2			2	3,000
Picnic unit	do	1,500	18			51	127,500
Camp unit (includes parking spur)	do	2,500	10			2	3,200
Table canopies	do	1,600	12				
Electrical distribution & hookups (54 campsites)	Sum Job					1	27,000
Group camp	EA	2,100	2			2	4,200
Group picnic shelters	do	13,000	1				
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000				1	5,500
b. Travel trailer	do	5,500				4	2,100
Mercury vapor lights	do	525	2			1	40,000
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000				1	3,000
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				1	3,000
Site preparation	Sum Job						
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL				0			\$444,100

July 1975 Price Levels

TABLE 9-9

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## MOORE BAYOU PARK

Acres 7

See Plate 9

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	1,550				
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	1,045				
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500	1				
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job						
Water well	EA	8,000	1				
Picnic unit	do	1,500	3			3	4,500
Camp unit (includes parking spur)	do	2,500	4				
Table canopies	do	1,600				2	3,200
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525					
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100					
Site preparation	Sum Job					1	300
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
Benches	EA	150	4				
TOTAL					0		\$8,000

July 1975 Price Levels

TABLE 9-10

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## BIG BAYOU METO PARK

Acres 13

See Plate 10

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00	190				
(2) Flexible pavement	do	18.50	1,060				
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	1,000				
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job						
Water well	EA	8,000	1				
Picnic unit	do	1,500	3			15	22,500
Camp unit (includes parking spur)	do	2,500					
Table canopies	do	1,600					
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525					
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100					
Site preparation	Sum Job					1.0	2,700
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$25,200

July 1975 Price Levels



TABLE 9-11

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## LITTLE BAYOU METO PARK

Acres 12

See Plate 10

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	2,850				
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25	110				
b. Flexible pavement	do	8.50	510				
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job						
Water well	EA	8,000	1				
Picnic unit	do	1,500	5			2	3,000
Camp unit (includes parking spur)	do	2,500	6			4	10,000
Table canopies	do	1,600					
Electrical distribution & hookups	Sum Job					1	5,000
Group camp	EA	2,100					
Group picnic shelters	do	13,000	1				
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525	2				
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100					
Site preparation	Sum Job						
Landscaping and Beautification	acre	2,700				1.0	2,700
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$20,700

July 1975 Price Levels

TABLE 9-12

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

HUFFS ISLAND PARK

Acres 71

See Plate 11

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	9,100			1,600	29,600
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	1,290			110	950
Launching lanes, concrete	EA	27,000					
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000				1	25,000
d. Waterborne	do	35,000				1	35,000
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job					1	20,000
Water well	EA	8,000	1				
Picnic unit	do	1,500	6				
Camp unit (includes parking spur)	do	2,500	4			12	30,000
Table canopies	do	1,600	2				
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525				2	1,050
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job					1	3,500
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				6.1	6,750
Site preparation	Sum Job					1	2,000
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$153,850

July 1975 Price Levels

TABLE 9-13

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## RISING STAR PARK

Acres 91

See Plate 12

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00	610				
(2) Flexible pavement	do	18.50	4,700			1,875	34,700
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25				310	3,500
Parking areas							
a. Gravel to be paved	SY	6.25	1,805				
b. Flexible pavement	do	8.50	2,780			422	3,600
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500	1				
Restroom, masonry							
a. Vault	do	17,000					
b. Vault-convertible type	do	25,000	1			1	25,000
c. Vault-convert to waterborne	do	25,000				2	50,000
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job		1			*	4,200
Water well	EA	8,000					
Picnic unit	do	1,500	9			8	12,000
Camp unit (includes parking spur)	do	2,500	19			1	2,500
Table canopies	do	1,600	2				
Electrical distribution & hookups (20 campsites)	Sum Job			1	8,000	1	1,000
Group camp	EA	2,100					
Group picnic shelters	do	13,000	1				
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500				1	5,500
Mercury vapor lights	do	525	2			2	1,050
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job		1				
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				2.2	2,400
Site preparation	Sum Job						
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
Ball field	EA	9,200					
TOTAL					\$8,000		\$145,450

\*Municipal water supply system.

TABLE 9-14

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## TRULOCK PARK

Acres 41

See Plate 13

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 18 feet wide access and circulation							
(1) Gravel to be paved	LF	11.50					
(2) Flexible pavement	do	16.50	3,200			350	5,800
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25	3,100			925	10,400
Parking areas							
a. Gravel to be paved	SY	6.25	750			750	4,700
b. Flexible pavement	do	8.50	3,470			755	6,400
Launching lanes, concrete	EA	27,000	2				
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000					
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000	1			1	35,000
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job		1				
Water well	EA	8,000					
Picnic unit	do	1,500	7			12	18,000
Camp unit (includes parking spur)	do	2,500	15			13	32,500
Table canopies	do	1,600	2				
Electrical distribution & hookups (28 campsites)	Sum Job			1	4,000	1	10,000
Group camp	EA	2,100					
Group picnic shelters	do	13,000	1				
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525	2			3	1,600
Entrance complex	Sum Job						5,000
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job		1			1	3,000
All-purpose court, double	EA	20,000				1	20,000
Reforestation	acre	1,100				0.5	550
Site preparation (Dredge fill)	Sum Job			1	40,000		9,200
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
Ball field	EA	9,200		1			
TOTAL					\$44,000		\$204,150

July 1975 Price Levels

TABLE 9-15

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## SHEPPARD ISLAND PARK

Acres 60

See Plate 14

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	11,370			1,200	22,200
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25				1,000	11,250
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	3,700			844	7,150
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000	1			1	17,000
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job						
Water well	EA	8,000	1				
Picnic unit	do	1,500	10			16	24,000
Camp unit (includes parking spur)	do	2,500				10	25,000
Table canopies	do	1,600	3			9	14,400
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525					
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				2.5	2,750
Site preparation	Sum Job					1	4,000
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$127,750

July 1975 Price Levels

TABLE 9-16

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

STE. MARIE PARK

Acres 59

See Plate 15

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	6,300			4,450	82,300
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25	1,540				
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	11,830			670	5,700
Launching lanes, concrete	EA	27,000	3				
Courtesy docks	do	6,500	1				
Restroom, masonry							
a. Vault	do	17,000					
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000	2			1	35,000
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job		1			1	11,000
Water well	EA	8,000					
Picnic unit	do	1,500	22			4	6,000
Camp unit (includes parking spur)	do	2,500				34	85,000
Table canopies	do	1,600				4	6,400
Electrical distribution & hookups (25 campsites)	Sum Job					1	13,000
Group camp	EA	2,100				6	12,600
Group picnic shelters	do	13,000	2				
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500				1	5,500
Mercury vapor lights	do	525	2			5	2,600
Entrance complex	Sum Job					1	20,000
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job					1	3,000
All-purpose court, double	EA	20,000	2				
Reforestation	acre	1,100				21.0	23,100
Site preparation	Sum Job					1	5,000
Landscaping and Beautification	acre	2,700				1.0	2,700
Boat tie-up	EA	8,000	1				
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$360,900

July 1975 Price Levels

TABLE 9-17

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## BOYD POINT PARK

Proposed Cost Sharing with City of Pine Bluff

Acres 182

See Plate 16

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial (1)		Future (2)	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50		14,260	*470,000	9,500	175,750
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50		1,130	11,000	1,824	15,500
Launching lanes, concrete	EA	27,000		1	28,000		
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000		1	22,000		
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000				3	105,000
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job			1	29,000	1	36,000
Water well	EA	8,000		1	8,000		
Picnic unit	do	1,500		7	10,000	21	31,500
Camp unit (includes parking spur)	do	2,500				41	102,500
Table canopies	do	1,600				7	11,200
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000				2	26,000
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500				1	5,500
Mercury vapor lights	do	525				7	3,700
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				5.0	5,500
Site preparation	Sum Job			1	19,300	1	5,000
Landscaping and Beautification	acre	2,700		1.0	2,700	1.0	2,700
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					\$600,000		\$567,850

\*Includes extensive clearing, grubbing, turfing, and ROW acquisition.

- (1) The cost of initial proposed facilities is based on the estimate prepared and shown on Exhibit A to the cost sharing contract.
- (2) The cost of future proposed facilities is based on July 1975 price levels.

TABLE 9-18

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## DAM SITE 5 PARK

Acres 223

See Plate 17

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	5,870			3,000	55,500
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25				1,700	12,750
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	825			847	7,200
Launching lanes, concrete	EA	27,000					
Courtesy docks	do	6,500					
Restroom, masonry							
a. Vault	do	17,000					
b. Vault-convertible type	do	25,000	1				
c. Vault-convert to waterborne	do	25,000				1	25,000
d. Waterborne	do	35,000				2	70,000
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job					1	24,400
Water well	EA	8,000	1				
Picnic unit	do	1,500	12			4	6,000
Camp unit (includes parking spur)	do	2,500	3	9	22,500	37	92,500
Table canopies	do	1,600	5	3	4,800	3	4,800
Electrical distribution						1	18,000
& hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000	1				
Amphitheaters	do	3,300					
Overlook shelters	do	9,000		1	9,000		
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525				4	2,100
Entrance complex	Sum Job					1	20,000
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000				0.80	13,600
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				21.0	23,100
Site preparation	Sum Job			1	5,000	1	3,000
Landscaping and Beautification	acre	2,700				1.0	2,700
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					\$41,300		\$422,650

July 1975 Price Levels



TABLE 9-19

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

BRODIE PARK  
FUTURE

Acres 347

See Plate 18

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50				23,900	*524,150
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25				2,800	31,500
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50				7,544	64,100
Launching lanes, concrete	EA	27,000				2	54,000
Courtesy docks	do	6,500				1	6,500
Restroom, masonry							
a. Vault	do	17,000				8	136,000
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job						
Water well	EA	8,000				6	48,000
Picnic unit	do	1,500				57	85,500
Camp unit (includes parking spur)	do	2,500				86	215,000
Table canopies	do	1,600				33	52,800
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000				3	39,000
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500				1	5,500
Mercury vapor lights	do	525					
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job					2	8,000
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				4.0	4,400
Site preparation	Sum Job					1	10,000
Landscaping and Beautification	acre	2,700				2.0	5,400
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL				0			\$1,289,850

July 1975 Price Levels

\*Cost includes \$82,000 for repairing and raising the stone fill dike on the access road and providing delineator post.

TABLE 9-20

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

## McClellan-Kerr Arkansas River Navigation System

## TAR CAMP PARK

Acres 223

See Plate 19

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	11,600	1,600	29,600	1,100	20,350
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50	440				
(2) Flexible pavement	do	11.25		1,350	15,200		
Parking areas							
a. Gravel to be paved	SY	6.25	710			710	4,450
b. Flexible pavement	do	8.50	5,990	1,560	13,250	2,351	20,000
Launching lanes, concrete	EA	27,000	1	1	27,000	1	27,000
Courtesy docks	do	6,500	1				
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000		1	25,000		
c. Vault-convert to waterborne	do	25,000				1	25,000
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job		1		7,400	1	3,200
Water well	EA	8,000	1				
Picnic unit	do	1,500	9	9	13,500	3	4,500
Camp unit (includes parking spur)	do	2,500	13	23	57,500	32	80,000
Table canopies	do	1,600					
Electrical distribution & hookups (51 campsites)	Sum Job			1	14,200	1	10,000
Group camp	EA	2,100		2	4,200		
Group picnic shelters	do	13,000	2			1	13,000
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500	1	Pave	2,000		
Mercury vapor lights	do	525	1	4	2,100	6	3,150
Entrance complex	Sum Job		1	Improve	10,000		
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000	0.64				
c. Trail shelters	EA	2,000	1	1	2,500	1	3,000
Playground equipment	Sum Job						
All-purpose court, double	EA	10,000		1	10,000		
Reforestation	acre	1,100		1	5,000	1	1,000
Site preparation	Sum Job						
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000	1				
Fishing platform with walkway	EA	10,000		1	10,000		
Bicycle Trail	mile	30,000					
TOTAL					\$248,450		\$256,650

July 1975 Price Levels

TABLE 9-21

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## WRIGHTSVILLE PARK

Acres 144

See Plate 20

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	6,290			8,540	158,000
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	3,980			1,424	12,100
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500	1				
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000				3	105,000
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job		1			1	28,600
Water well	EA	8,000	1			1	8,000
Picnic unit	do	1,500	7			30	45,000
Camp unit (includes parking spur)	do	2,500	8			58	145,000
Table canopies	do	1,600	1			3	4,800
Electrical distribution & hookups (50 campsites)	Sum Job					1	25,000
Group camp	EA	2,100				4	8,400
Group picnic shelters	do	13,000				3	39,000
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500				1	5,500
Mercury vapor lights	do	525				4	2,100
Entrance complex	Sum Job					1	20,000
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job					3	9,000
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				19.0	20,900
Site preparation	Sum Job					1	5,000
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$683,400

July 1975 Price Levels

TABLE 9-22

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

## McClellan-Kerr Arkansas River Navigation System

DAVID D. TERRY  
DAM SITE WEST PARK

Acres 157

See Plate 21

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	8,600			2,490	46,050
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25					
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	4,100			720	6,100
Launching lanes, concrete	EA	27,000	1			1	27,000
Courtesy docks	do	6,500				1	6,500
Restroom, masonry							
a. Vault	do	17,000				1	17,000
b. Vault-convertible type	do	25,000	1				
c. Vault-convert to waterborne	do	25,000				1	25,000
d. Waterborne	do	35,000				1	35,000
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job					1	15,600
Water well	EA	8,000	1			1	8,000
Picnic unit	do	1,500	6			13	19,500
Camp unit (includes parking spur)	do	2,500	6			15	37,500
Table canopies	do	1,600	3				
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525				2	1,050
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				2.0	2,200
Site preparation	Sum Job					1	1,000
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$247,500

July 1975 Price Levels

TABLE 9-23

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

DAVID D. TERRY LAKE  
DAM SITE EAST PARK

Acres 45

See Plate 22

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 18 feet wide access and circulation							
(1) Gravel to be paved	LF	11.50				950	10,900
(2) Flexible pavement	do	16.50	2,035				
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25	310				
Parking areas							
a. Gravel to be paved	SY	6.25				224	1,400
b. Flexible pavement	do	8.50	4,105			177	1,500
Launching lanes, concrete	EA	27,000	1				
Courtesy docks	do	6,500	1				
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000					
c. Vault-convert to waterborne	do	25,000					
d. Waterborne	do	35,000					
e. Waterborne with showers	do	42,000					
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job					*1	5,000
Water well	EA	8,000					
Picnic unit	do	1,500	10			10	15,000
Camp unit (includes parking spur)	do	2,500	4			5	8,000
Table canopies	do	1,600					
Electrical distribution & hookups	Sum Job						
Group camp	EA	2,100					
Group picnic shelters	do	13,000					
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500					
Mercury vapor lights	do	525				2	1,050
Entrance complex	Sum Job						
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job						
All-purpose court, double	EA	20,000					
Reforestation	acre	1,100				8.6	9,450
Site preparation	Sum Job						
Landscaping and Beautification	acre	2,700					
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	8,000					
Bicycle Trail	mile	30,000					
TOTAL					0		\$52,300

July 1975 Price Levels

\*Connect to lock water supply system

TABLE 9-24

## DETAILED ESTIMATE OF COST FOR ADDITIONAL RECREATIONAL FACILITIES

McClellan-Kerr Arkansas River Navigation System

## WILLOW BEACH PARK

Acres 343

See Plate 23

Item	Unit	Unit Cost	Existing Facilities FY 75 Quantity	Proposed Facilities			
				Initial		Future	
				Quantity	Cost	Quantity	Cost
Roads							
a. 20 feet wide access and circulation							
(1) Gravel to be paved	LF	13.00					
(2) Flexible pavement	do	18.50	14,490			3,300	42,900
b. 12 feet wide one way							
(1) Gravel to be paved	do	7.50					
(2) Flexible pavement	do	11.25				2,250	25,300
Parking areas							
a. Gravel to be paved	SY	6.25					
b. Flexible pavement	do	8.50	4,390			4,194	35,650
Launching lanes, concrete	EA	27,000	1	1	27,000		
Courtesy docks	do	6,500		1	6,500		
Restroom, masonry							
a. Vault	do	17,000	1				
b. Vault-convertible type	do	25,000	2				
c. Vault-convert to waterborne	do	25,000				2	50,000
d. Waterborne	do	35,000				1	35,000
e. Waterborne with showers	do	42,000				1	42,000
f. Washhouse	do	43,000					
Sewage collection system	Sum Job						
Water distribution system	Sum Job		1			1	13,200
Water well	EA	8,000	1				
Picnic unit	do	1,500	15			25	37,500
Camp unit (includes parking spur)	do	2,500	32			24	60,000
Table canopies	do	1,600					
Electrical distribution & hookups (42 campsites)	Sum Job			1	12,100	1	11,000
Group camp	EA	2,100					
Group picnic shelters	do	13,000	2	*	4,000		
Amphitheaters	do	3,300					
Overlook shelters	do	9,000					
Sanitary disposal stations							
a. Marine	do	11,000					
b. Travel trailer	do	5,500	1				
Mercury vapor lights	do	525		6	3,150	4	2,100
Entrance complex	Sum Job		1				
Trails							
a. Project	mile	21,000					
b. Park circulation	mile	17,000					
c. Trail shelters	EA	2,000					
Playground equipment	Sum Job			2	7,500		
All-purpose court, double	EA	20,000		1	20,000		
Reforestation	acre	1,100				140.0	154,000
Site preparation	Sum Job					1	3,000
Landscaping and Beautification	acre	2,700		9.3	25,000	0.7	2,000
Boat tie-up	EA	8,000					
Footbridge	EA	10,000					
Fishing platform	EA	11,000		1	11,000		
Bicycle Trail	mile	30,000					
Ball field	EA	9,200		1	9,200		
TOTAL					\$125,450		\$513,650

\*2 Fireplaces

## SECTION XI

### CONCLUSIONS AND RECOMMENDATIONS

11.01. Conclusions. The master plan for recreational development and management presented herein is flexible enough to absorb any changes resulting from changes in visitation and recreational activities at the project. The total facility development proposed in this plan is adequate to serve the estimated recreational demand to approximately the year 2010.

11.02. Recommendation. It is recommended that this master plan be approved in order to provide for the orderly development and management of recreational resources in Locks and Dams Norrell, 2, 3, 4, 5, and David D. Terry.

SECTION XII

PLATES





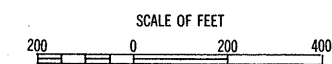
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ARKANSAS RIVER WATERSHED . . . ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

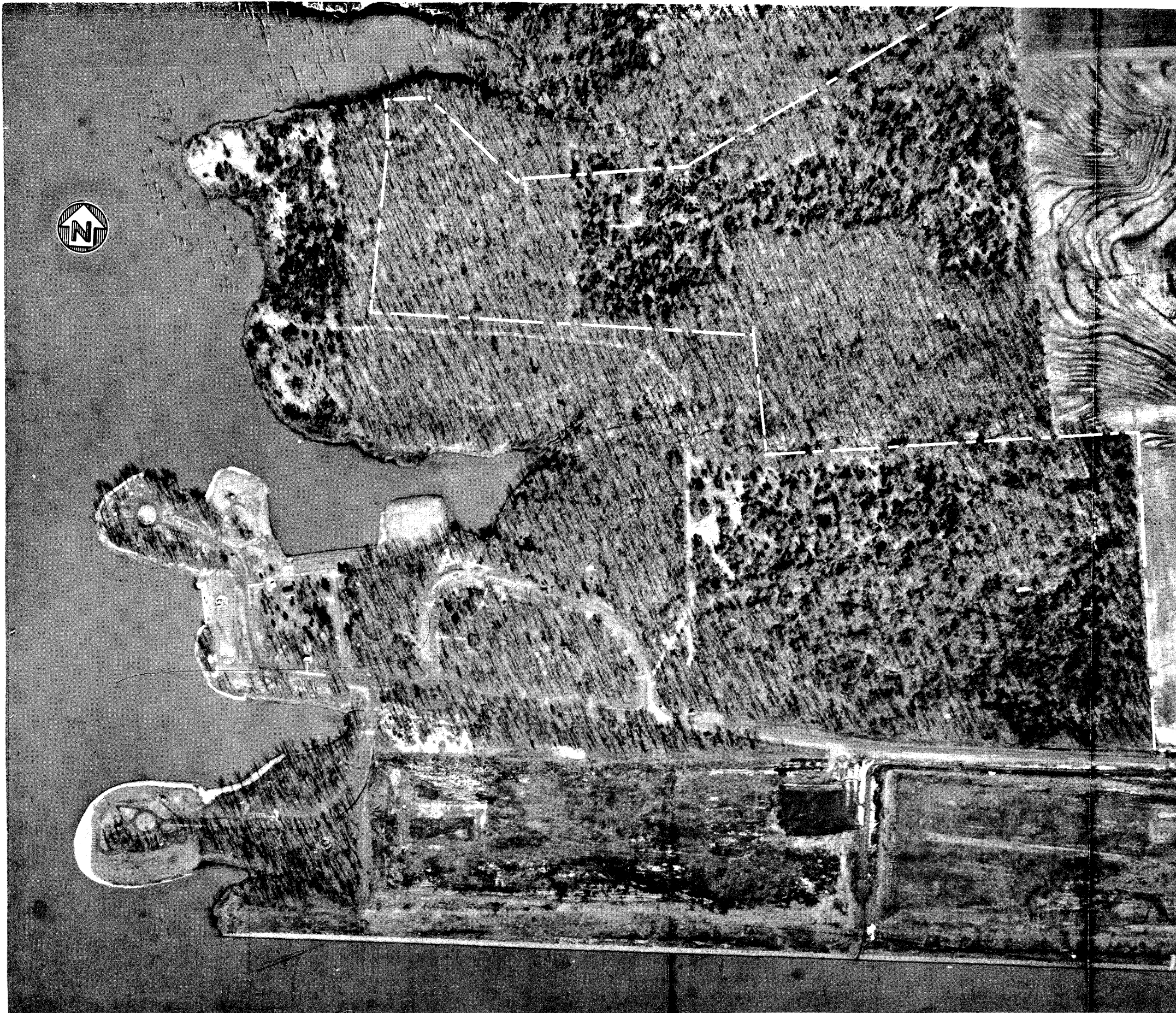
ARKANSAS RIVER

WILD GOOSE BAYOU



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UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
MERRISACH LAKE

SCALE OF FEET  
200 0 200 400

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LITTLE ROCK, ARKANSAS, SEPTEMBER 1975





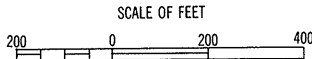
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UPDATED MASTER RECREATION PLAN

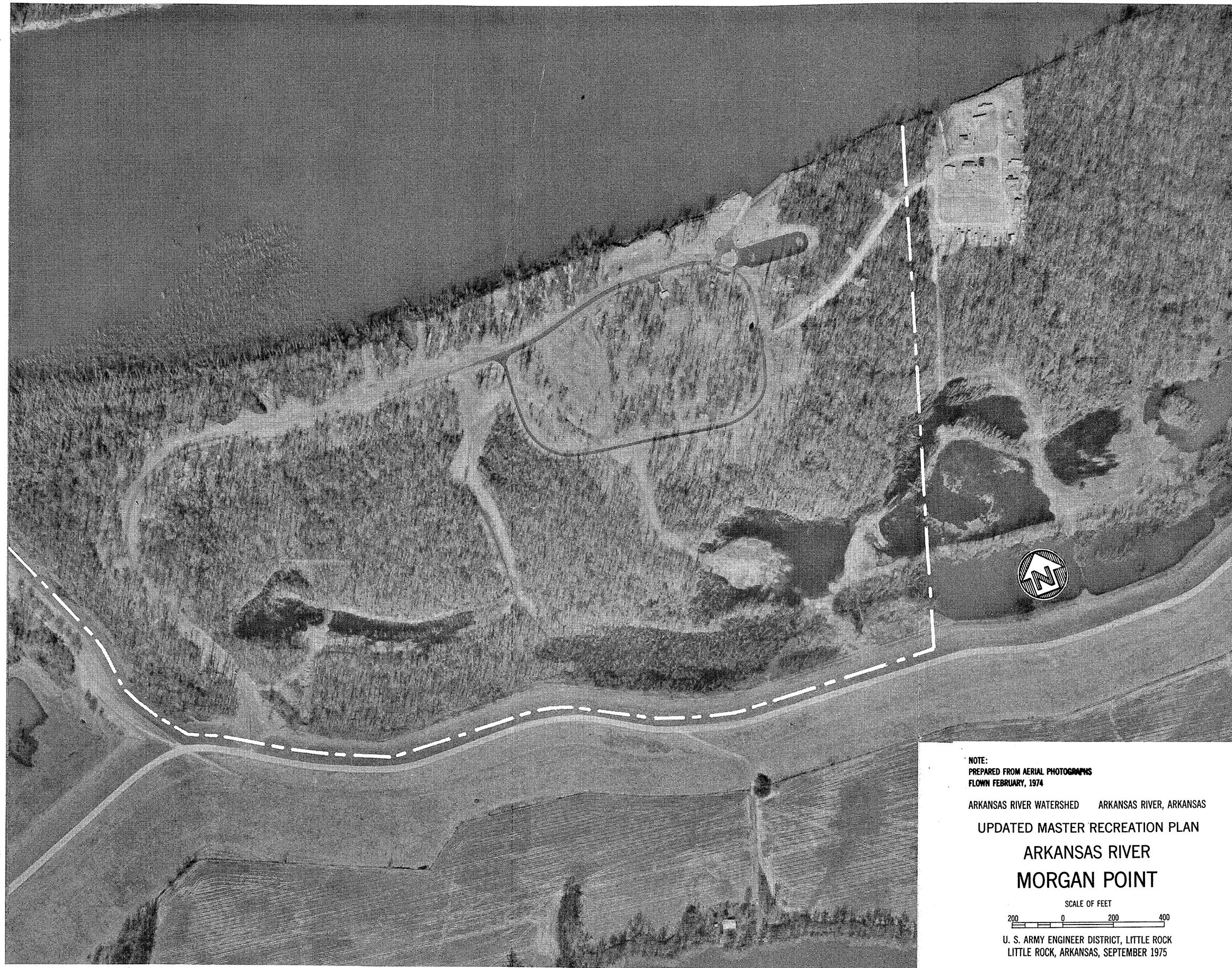
ARKANSAS RIVER

NOTREBES BEND



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LITTLE ROCK, ARKANSAS, SEPTEMBER 1975





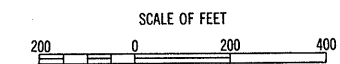
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UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER

MORGAN POINT



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





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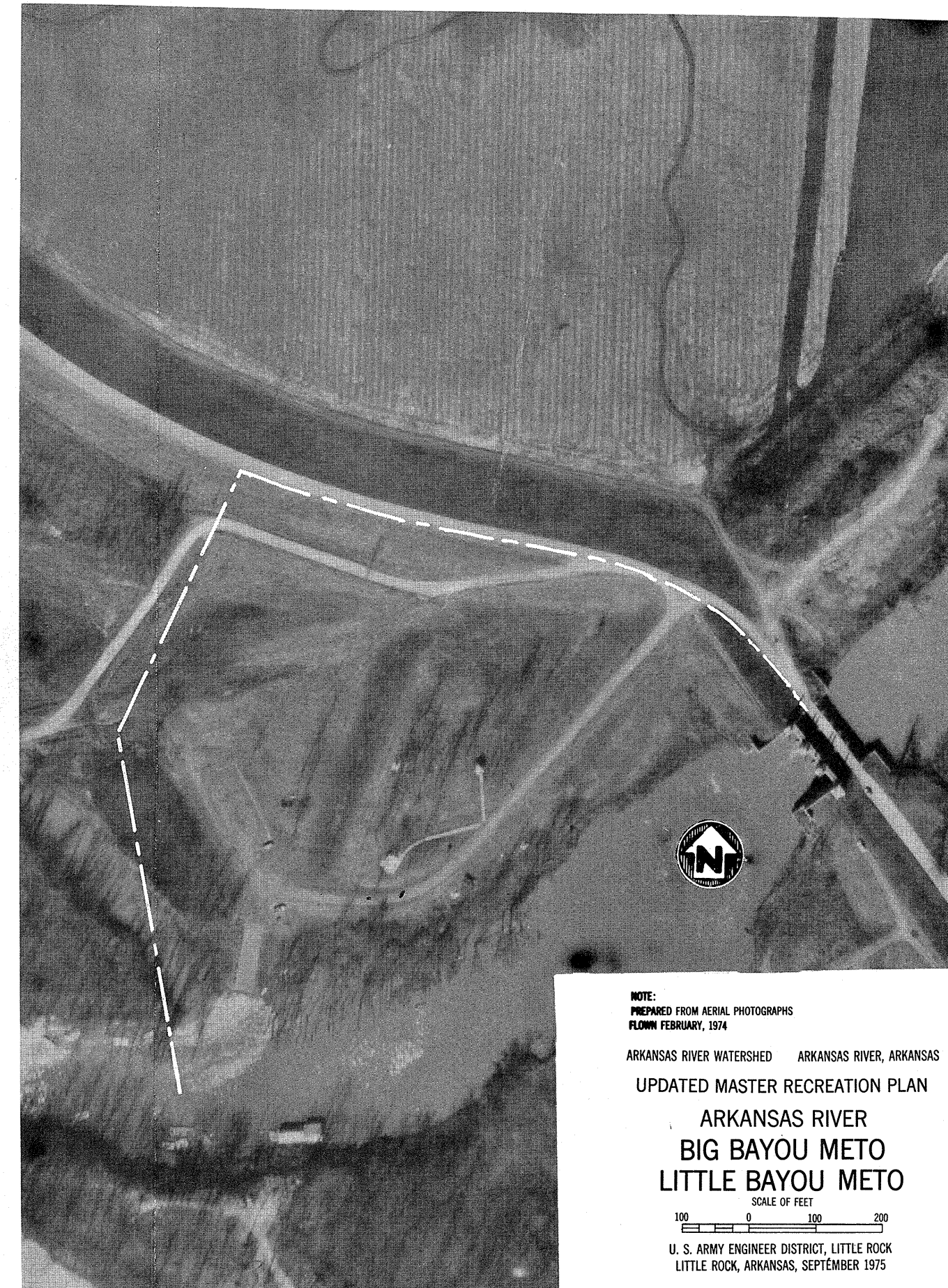
ARKANSAS RIVER WATERSHED . ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
MOORE BAYOU

SCALE OF FEET  
100 0 100 200

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









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ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
HUFF'S ISLAND

SCALE OF FEET  
200    0    200    400

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





NOTE:  
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ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

# ARKANSAS RIVER RISING STAR

SCALE OF FEET



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



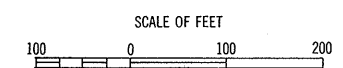


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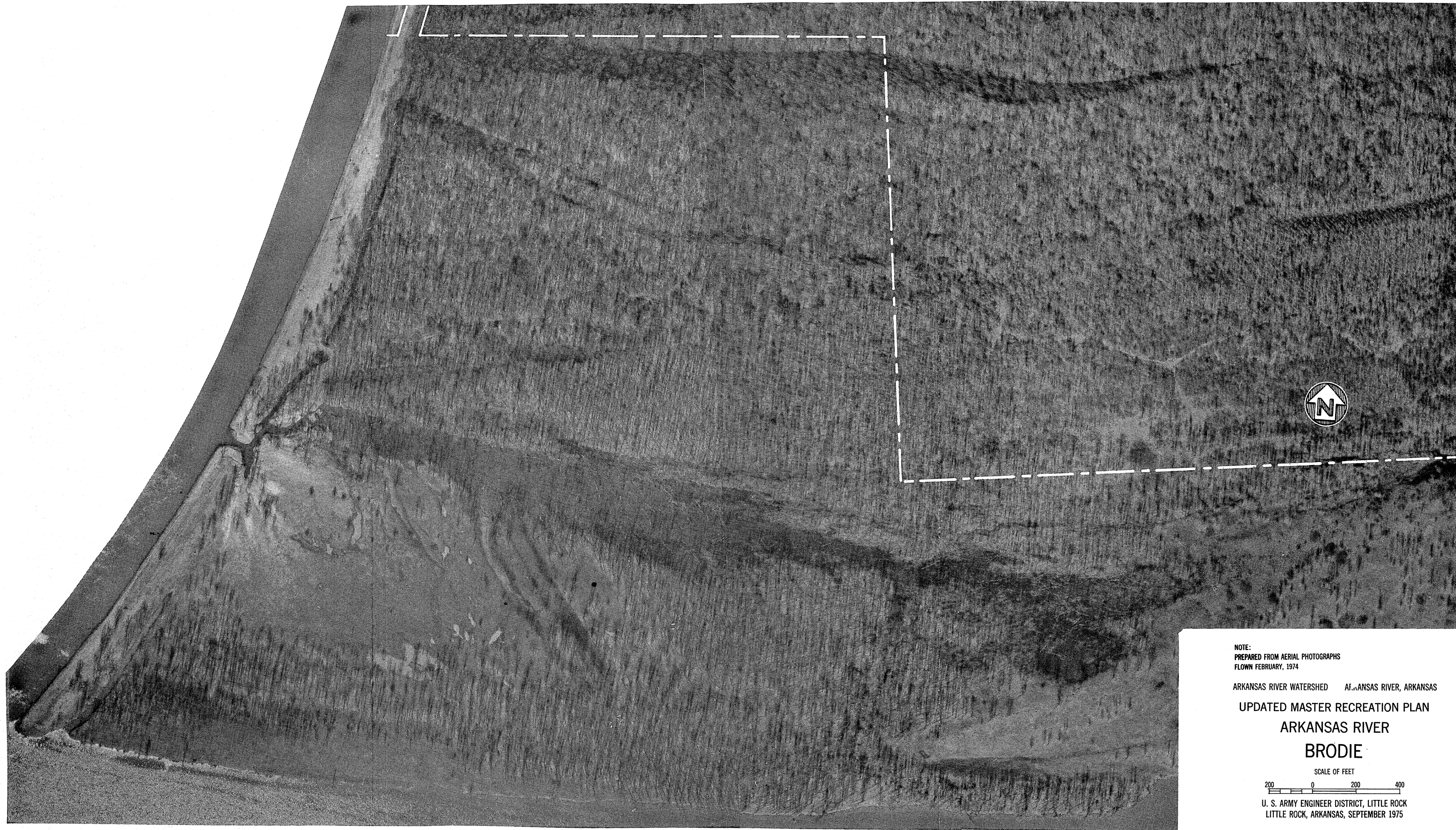
UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
TRULOCK



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





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ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
BRODIE

SCALE OF FEET  
200 0 200 400

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





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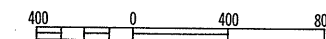
ARKANSAS RIVER WATERSHED      ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER

DAM SITE 5

SCALE OF FEET



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

PLATE 17A



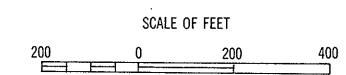


NOTE:  
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FLOWN SEPTEMBER, 1974

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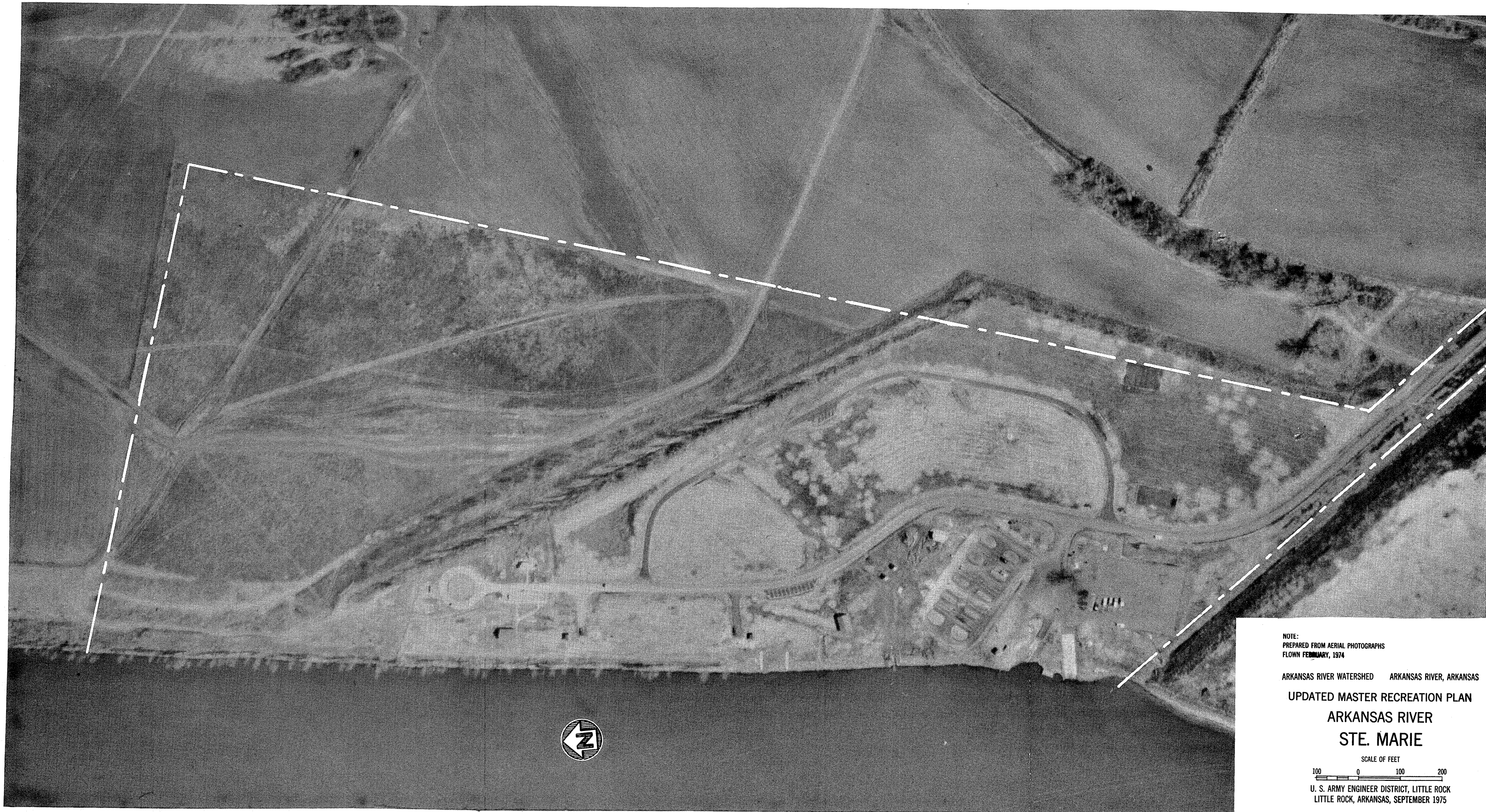
UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
BOYD POINT



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





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UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER

STE. MARIE

SCALE OF FEET  
100    0    100    200

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





NOTE:  
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UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
TAR CAMP

SCALE OF FEET  
200    0    200    400

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





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UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
WRIGHTSVILLE

SCALE OF FEET  
200 0 200 400

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





NOTE:  
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ARKANSAS RIVER WATERSHED      ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
DAM SITE WEST  
DAVID D. TERRY

SCALE OF FEET  
200 0 200 400

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





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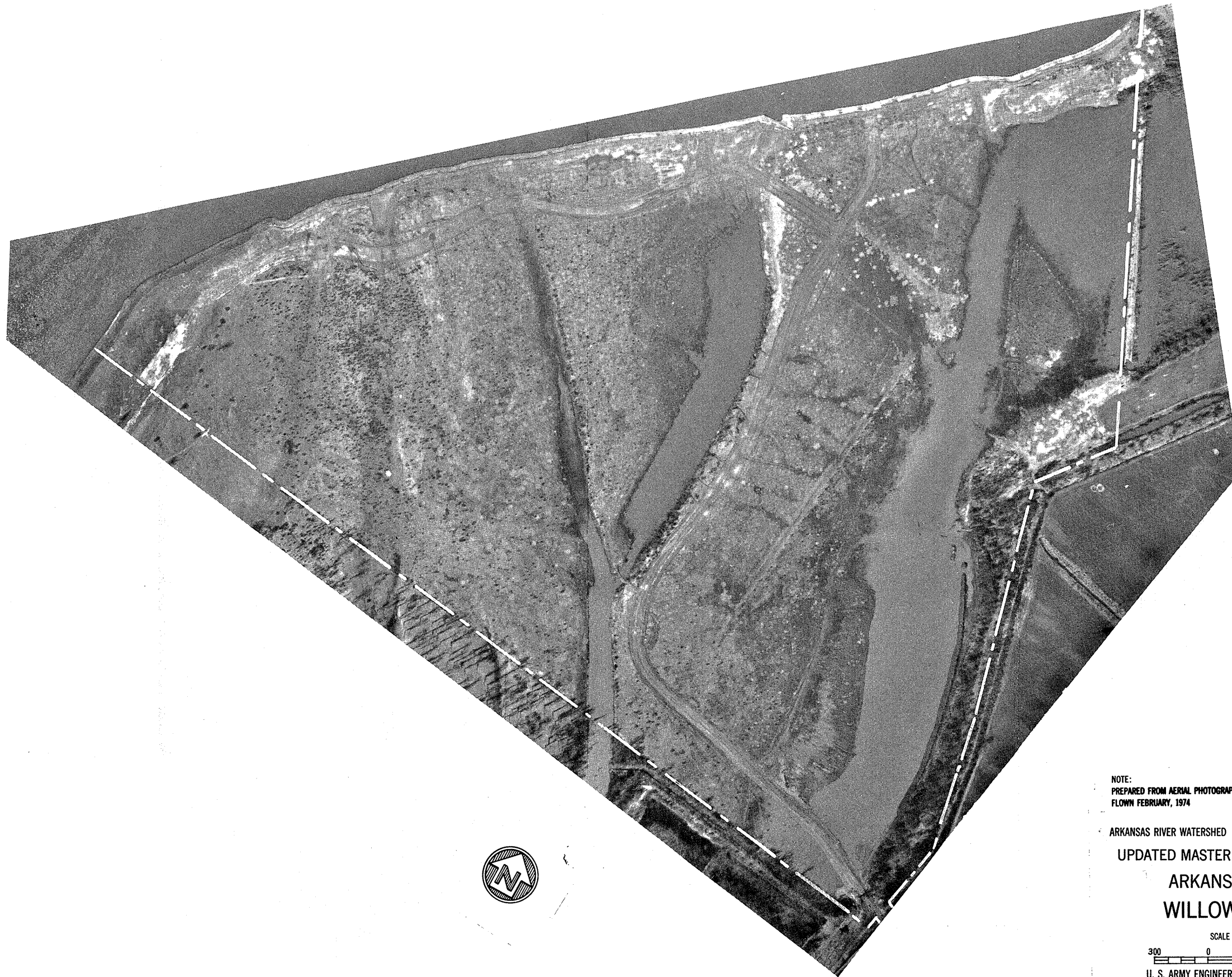
ARKANSAS RIVER WATERSHED      ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
DAM SITE EAST  
DAVID D. TERRY

SCALE OF FEET  
200 0 200 400  
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, SEPTEMBER 1975





NOTE:  
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UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
WILLOW BEACH

SCALE OF FEET  
300    0    300    600

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





NOTE:  
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ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER

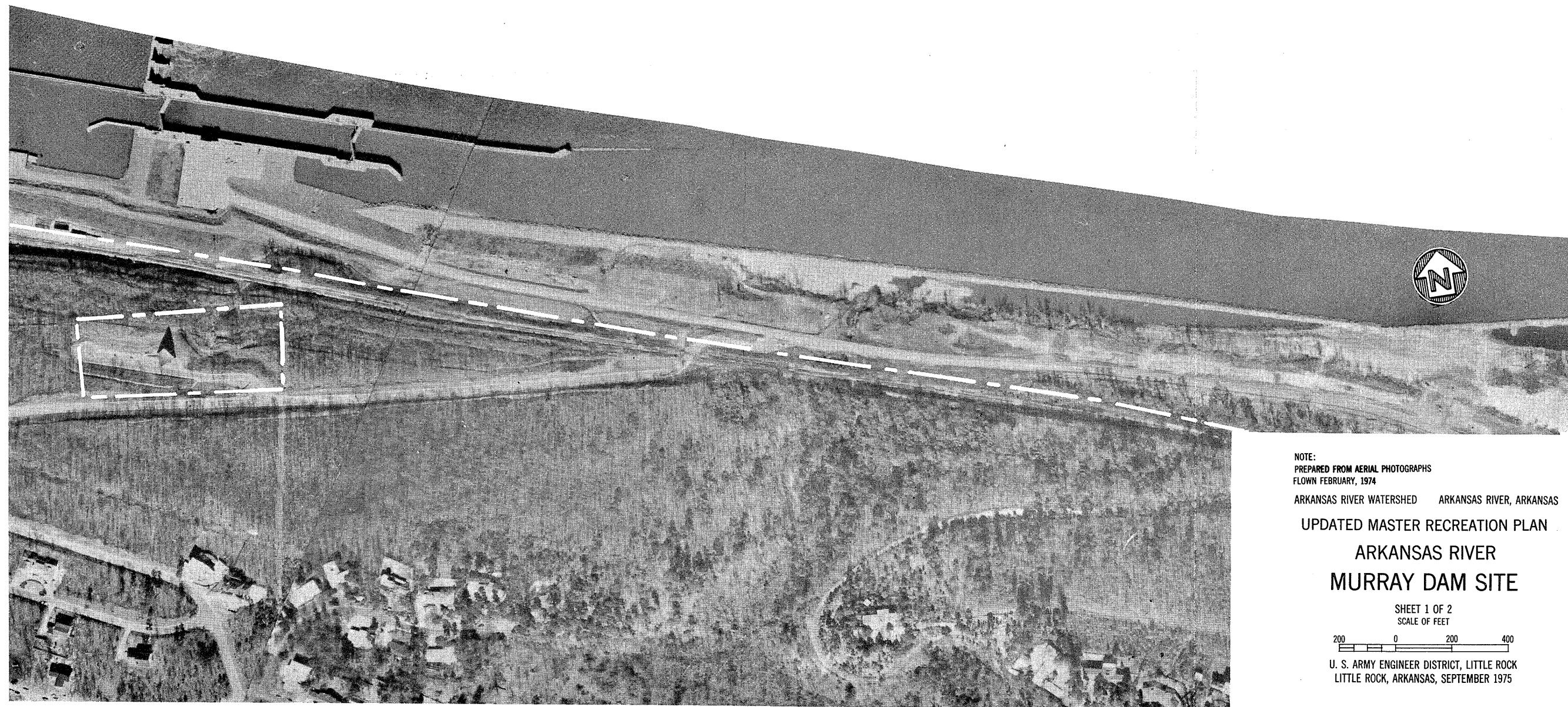
BURNS PARK

SCALE OF FEET

100 0 100 200

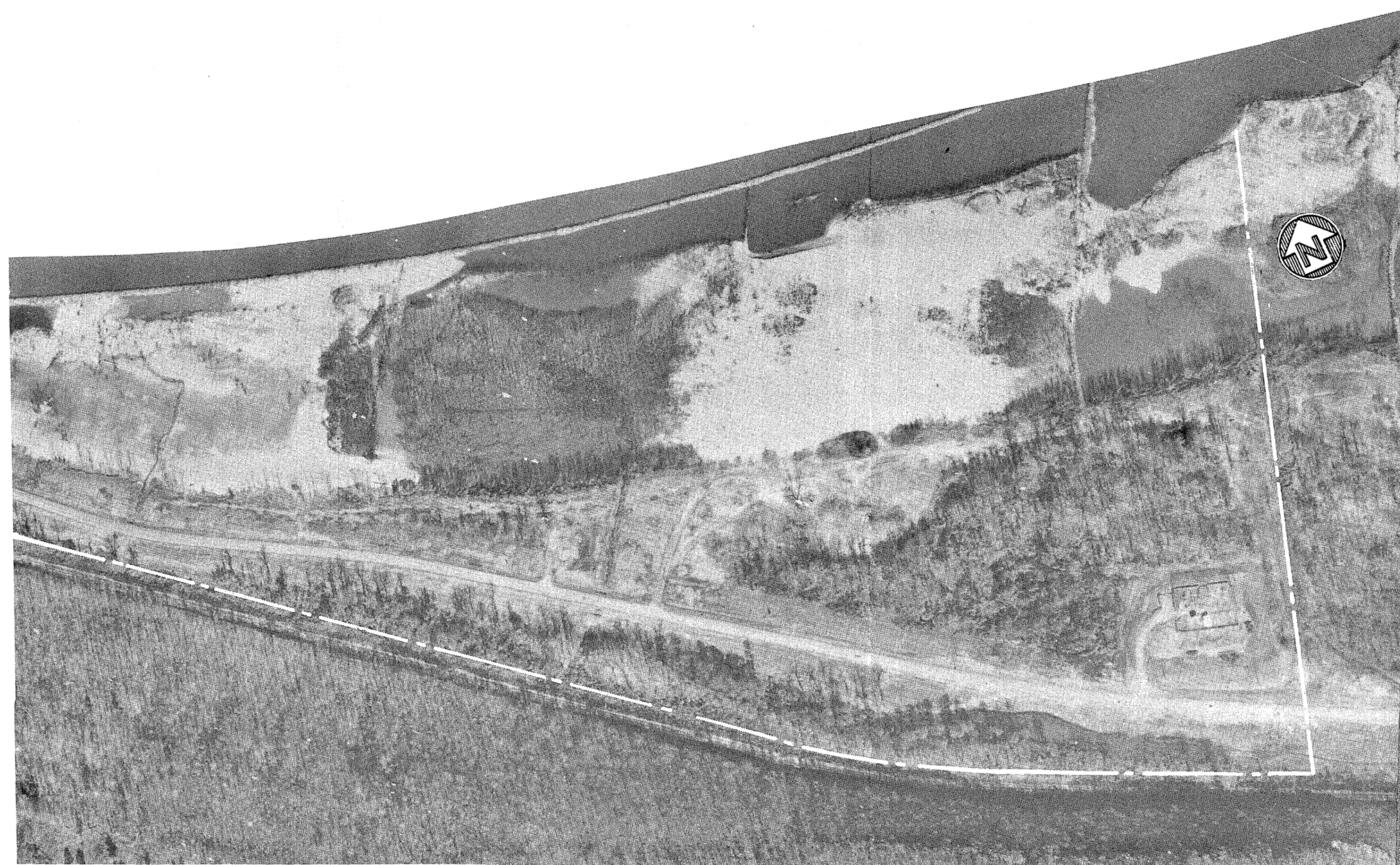
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, SEPTEMBER 1975





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ARKANSAS RIVER WATERSHED      ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
MURRAY DAM SITE  
SHEET 1 OF 2  
SCALE OF FEET  
200      0      200      400  
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, SEPTEMBER 1975





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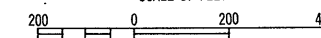
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UPDATED MASTER RECREATION PLAN

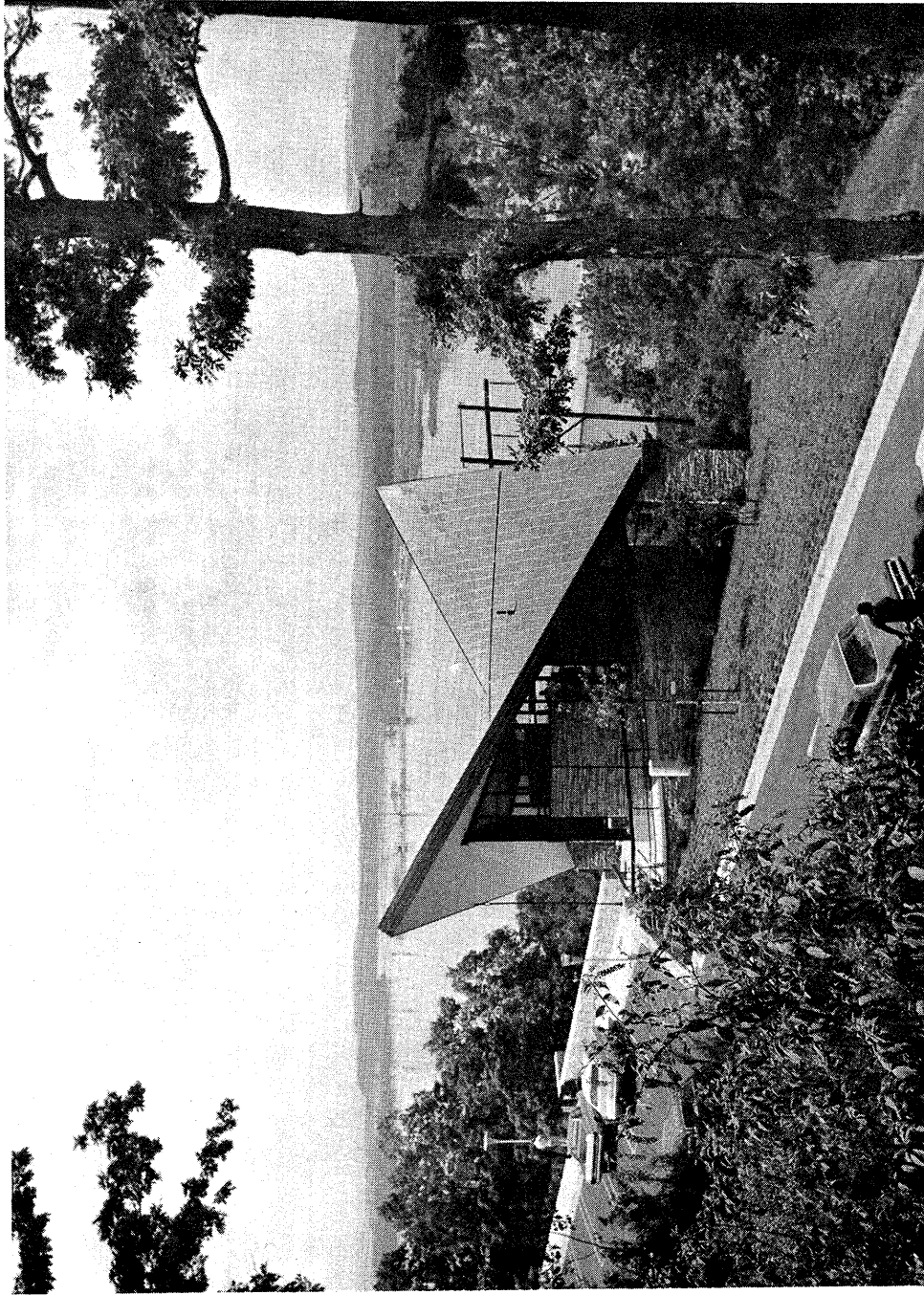
ARKANSAS RIVER

MURRAY DAM SITE

SHEET 2 OF 2  
SCALE OF FEET

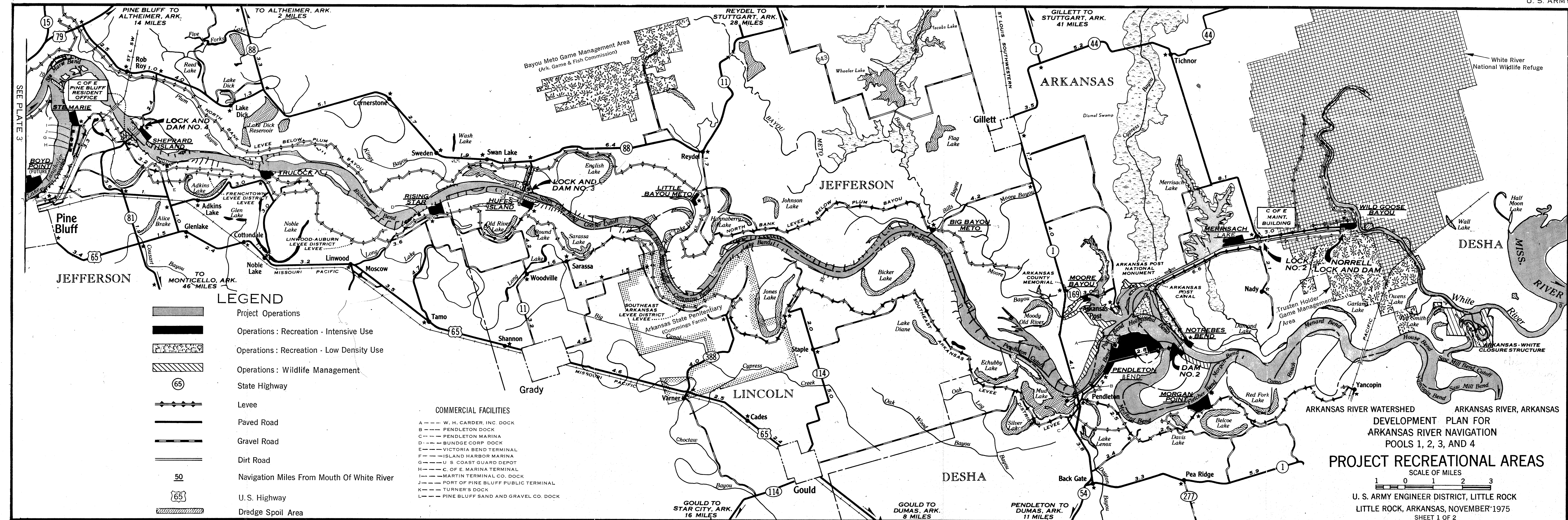


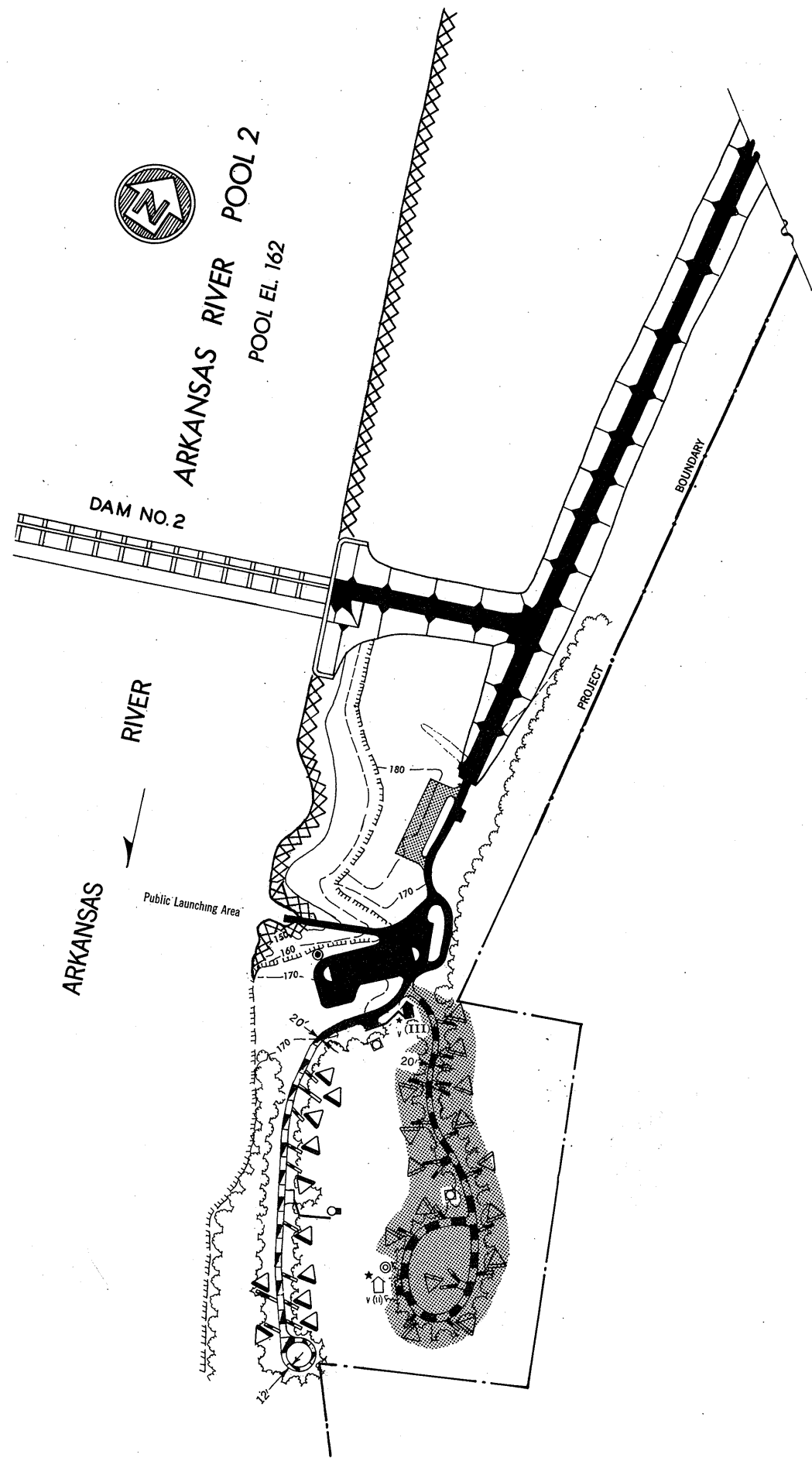
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, SEPTEMBER 1975



*Murray Dam Site Overlook*







NOTE: THIS AREA IS LOCATED IN SECTION  
20, T. 8 S., R. 3 W., DESHA CO.

LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS-VULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
WATER LINE - EL. VARIES		
INITIAL DEVELOPMENT		

ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

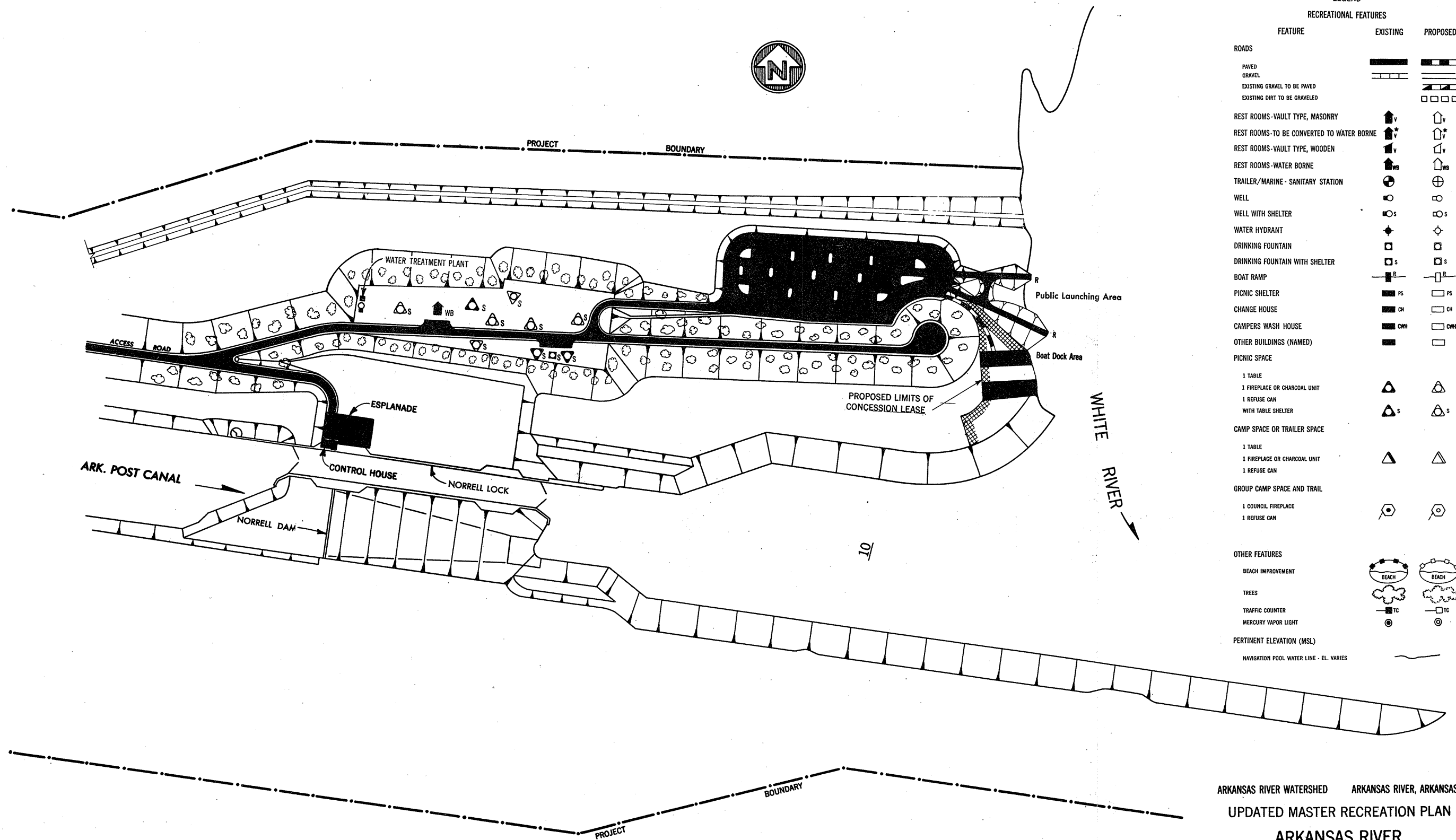
UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
NOTREBES BEND  
PARK

SCALE OF FEET  
200    0    200    400

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





NOTE: THIS AREA IS LOCATED IN SECTION 1,  
T. 8 S., R. 2 W., ARKANSAS CO., ARK.

ARKANSAS RIVER WATERSHED ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

# ARKANSAS RIVER WILD GOOSE BAYOU PARK

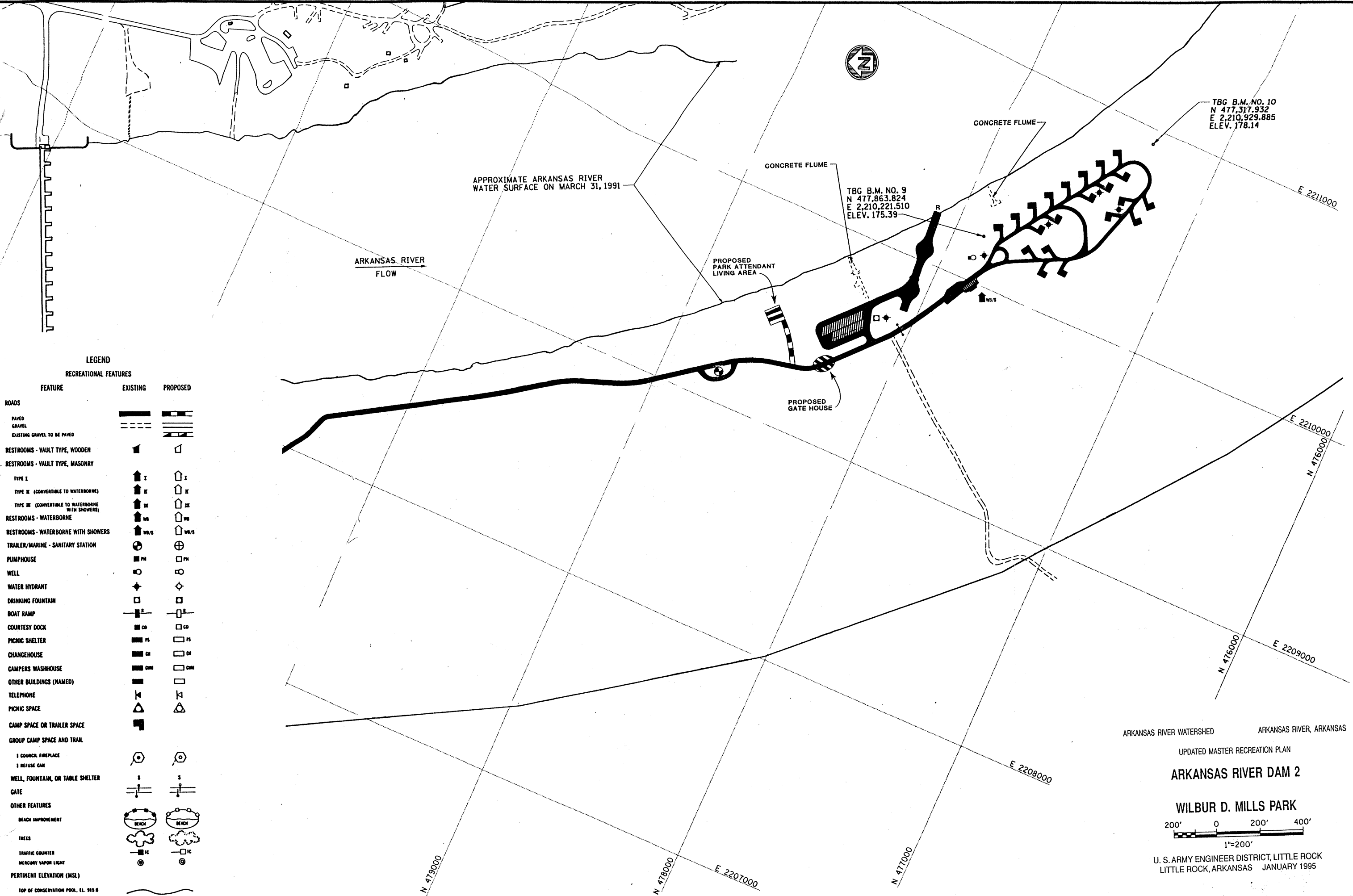
SCALE OF FEET  
200 0 200 400

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

## LEGEND

### RECREATIONAL FEATURES

FEATURE	EXISTING	PROPOSED
<b>ROADS</b>		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
<b>PICNIC SPACE</b>		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
<b>CAMP SPACE OR TRAILER SPACE</b>		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
<b>GROUP CAMP SPACE AND TRAIL</b>		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
<b>OTHER FEATURES</b>		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
<b>PERTINENT ELEVATION (MSL)</b>		
NAVIGATION POOL WATER LINE - EL. VARIES		



LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
RESTROOMS - VAULT TYPE, WOODEN		
TYPE I		
TYPE II (CONVERTIBLE TO WATERBORNE)		
TYPE III (CONVERTIBLE TO WATERBORNE WITH SHOWERS)		
RESTROOMS - WATERBORNE		
RESTROOMS - WATERBORNE WITH SHOWERS		
TRAILER/MARINE - SANITARY STATION		
PUMPHOUSE		
WELL		
WATER HYDRANT		
DRINKING FOUNTAIN		
BOAT RAMP		
COURTESY DOCK		
PICNIC SHELTER		
CHANGEHOUSE		
CAMPERS WASHHOUSE		
OTHER BUILDINGS (NAMED)		
TELEPHONE		
PICNIC SPACE		
CAMP SPACE OR TRAILER SPACE		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
WELL, FOUNTAIN, OR TABLE SHELTER		
GATE		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
TOP OF CONSERVATION POOL, EL. 915.0		
TOP OF FLOOD CONTROL POOL, EL. 931.0		



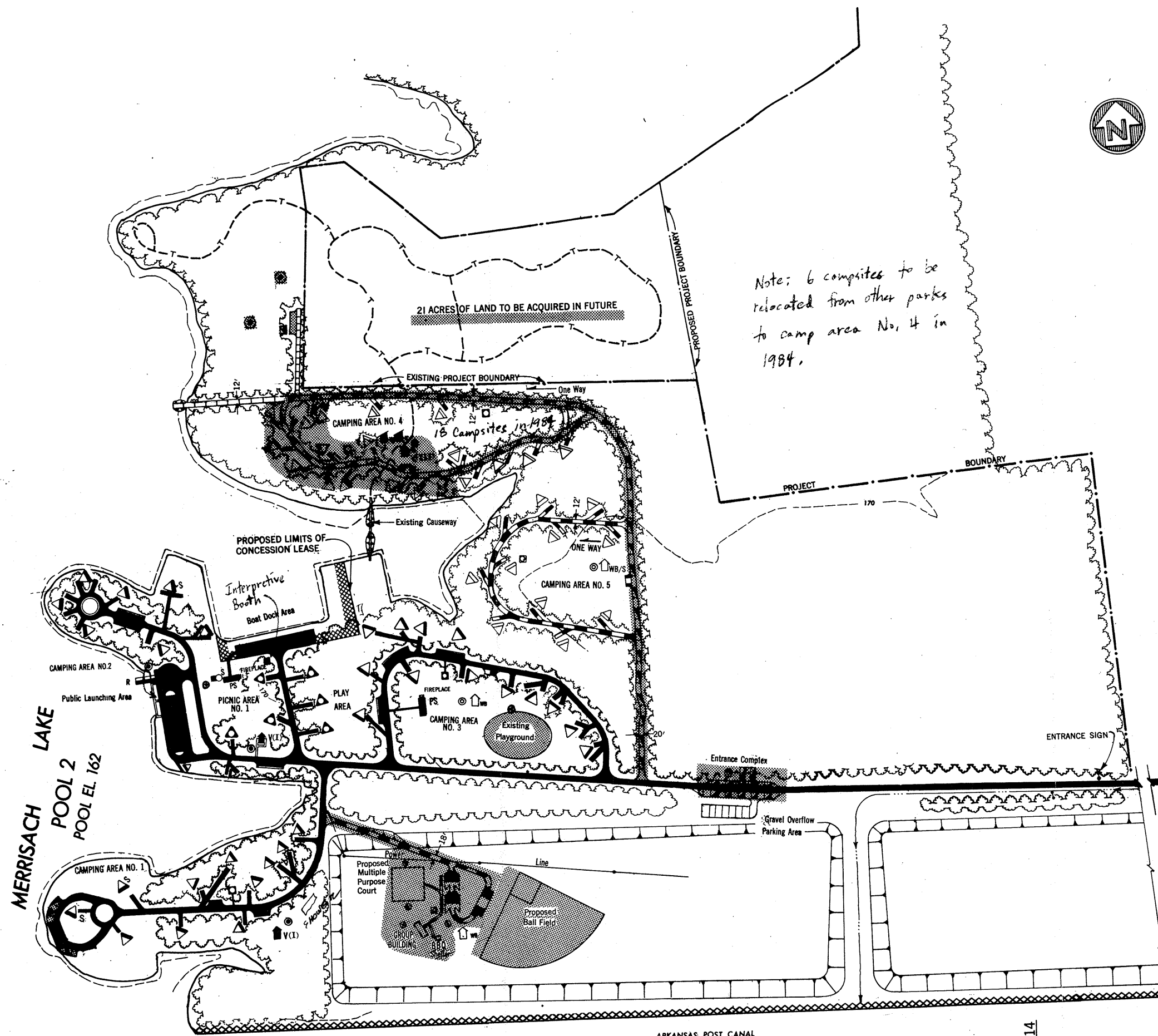
NOTE: THIS AREA IS LOCATED IN SECTIONS 31 AND 32, T.7 S,  
R. 2 W, AND SECTIONS 5 AND 6, T.8 S, R. 2 W., ARK.CO.

SCALE OF FEET

200 0 200 400

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

REVISÉ NOVEMBER 1986



LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS-VULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 162.0		
INITIAL DEVELOPMENT		

NOTE: THIS AREA IS LOCATED IN SECTIONS 31 AND 32, T.7 S., R. 2 W., AND SECTIONS 5 AND 6, T.8 S., R. 2 W., ARK. CO.

ARKANSAS RIVER WATERSHED ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER POOL 2

MERRISACH LAKE

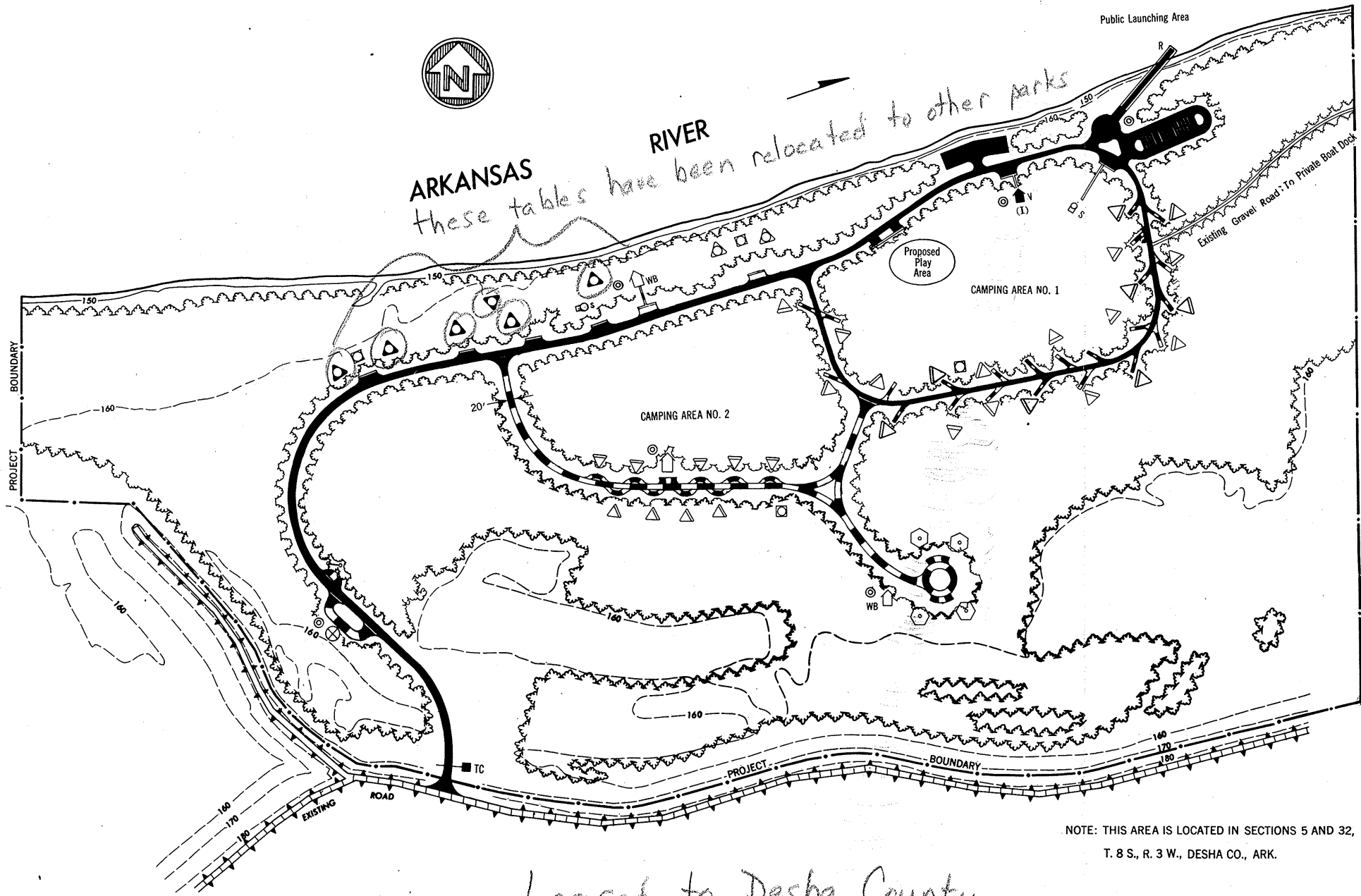
PARK

SCALE OF FEET

200 0 200 400

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK

LITTLE ROCK, ARKANSAS, DECEMBER 1975



ARKANSAS RIVER

*these tables have been relocated to other parks*

*Leased to Desha County*

NOTE: THIS AREA IS LOCATED IN SECTIONS 5 AND 32,  
T. 8 S., R. 3 W., DESHA CO., ARK.

NOTE:  
Currently operated by Desha County.  
All tables have been removed. Restroom  
closed. Canopy removed from well.

LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS-VULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
WATER LINE - EL. VARIES		

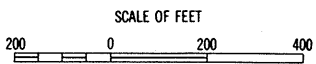
ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER

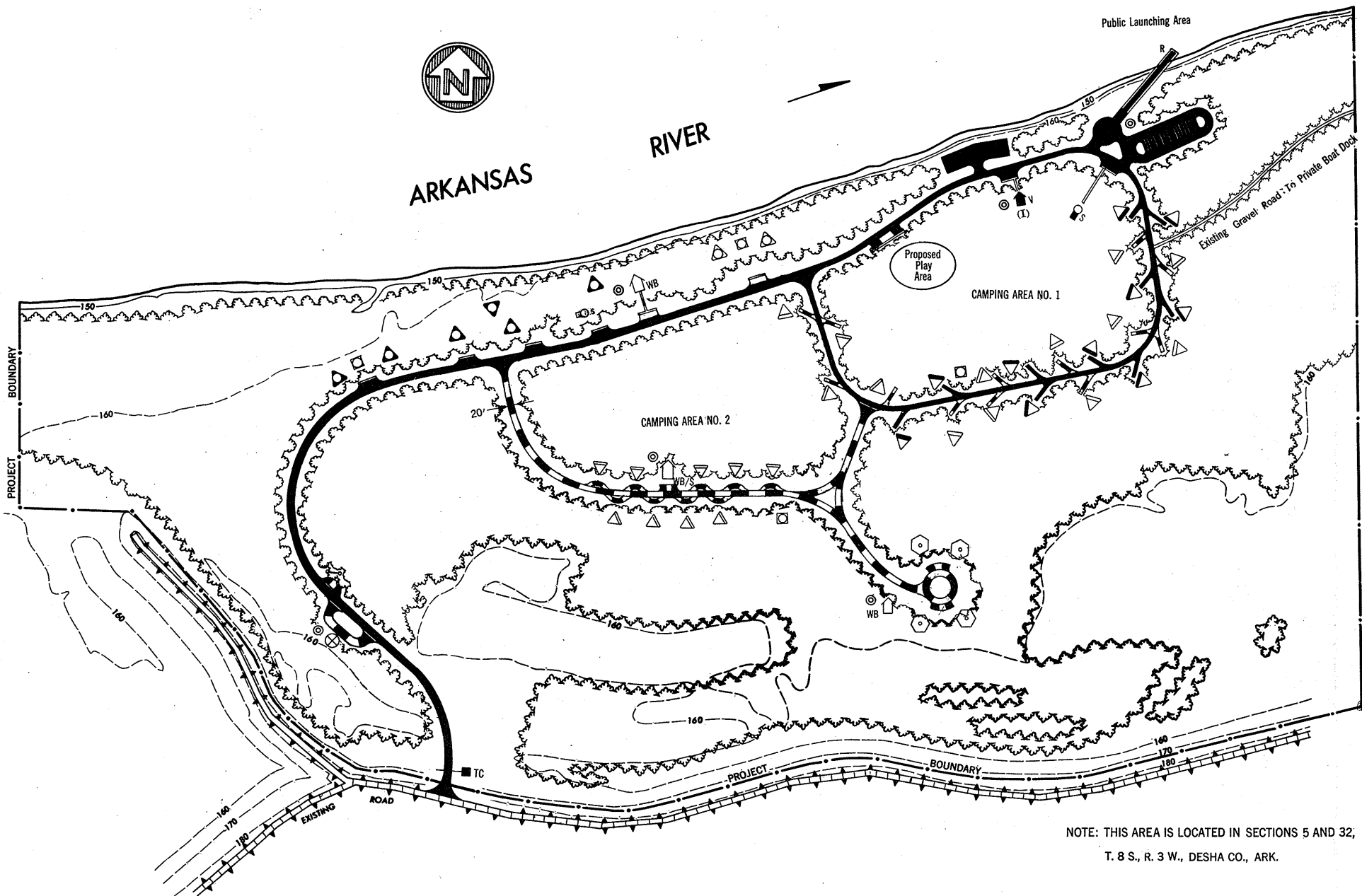
MORGAN POINT

PARK



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

REVISED NOVEMBER 1988



NOTE: THIS AREA IS LOCATED IN SECTIONS 5 AND 32,  
T. 8 S., R. 3 W., DESHA CO., ARK.

LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
<b>ROADS</b>		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
<b>REST ROOMS</b>		
REST ROOMS-VAULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VAULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
<b>WELLS</b>		
WELL		
WELL WITH SHELTER		
<b>WATER HYDRANTS</b>		
WATER HYDRANT		
<b>DRINKING FOUNTAINS</b>		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
<b>BOAT RAMP</b>		
BOAT RAMP		
<b>PICNIC SHELTERS</b>		
PICNIC SHELTER		
<b>CHANGE HOUSES</b>		
CHANGE HOUSE		
<b>CAMPERS WASH HOUSES</b>		
CAMPERS WASH HOUSE		
<b>OTHER BUILDINGS (NAMED)</b>		
OTHER BUILDINGS (NAMED)		
<b>PICNIC SPACE</b>		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
<b>CAMP SPACE OR TRAILER SPACE</b>		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
<b>GROUP CAMP SPACE AND TRAIL</b>		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
<b>OTHER FEATURES</b>		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
<b>PERTINENT ELEVATION (MSL)</b>		
WATER LINE - EL. VARIES		

ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER

MORGAN POINT

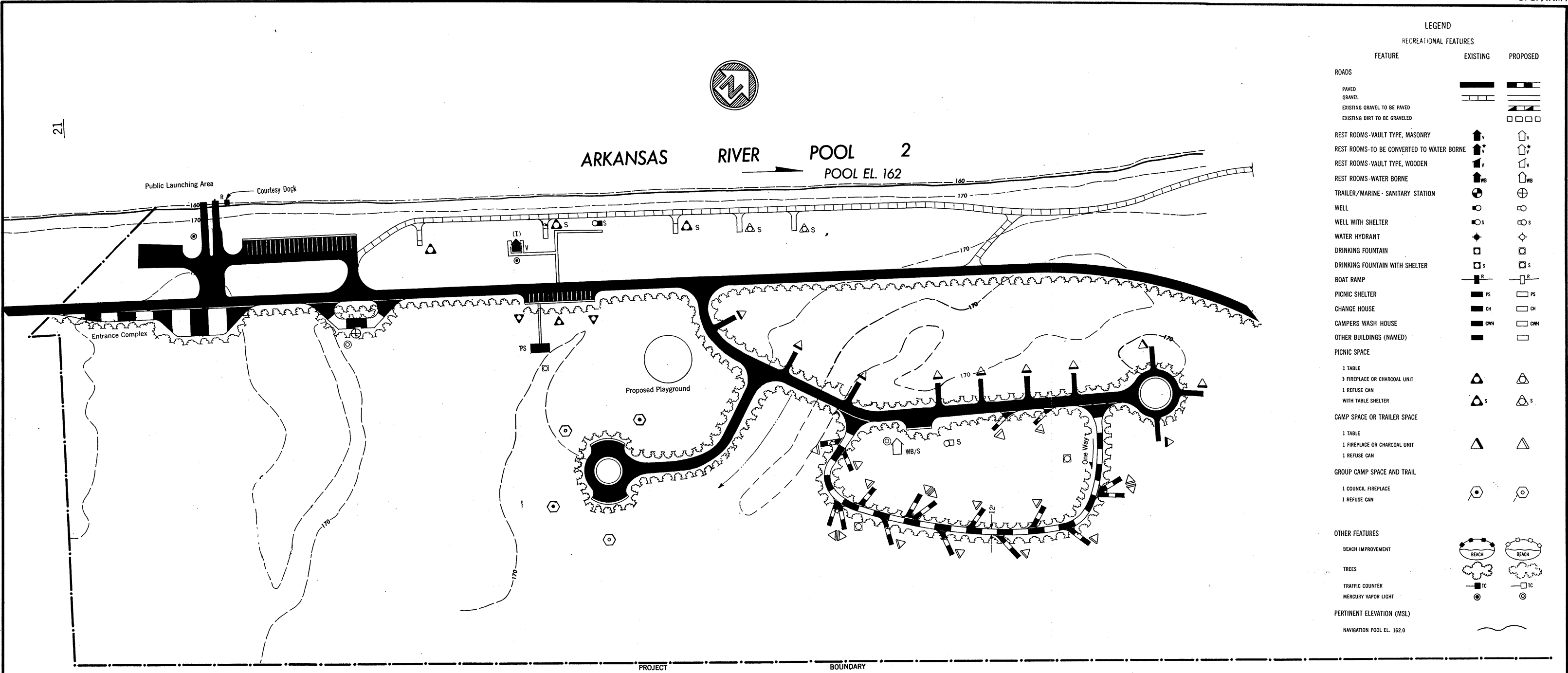
PARK

SCALE OF FEET

200    0    200    400

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK

LITTLE ROCK, ARKANSAS, DECEMBER 1975



NOTE: THIS AREA IS LOCATED IN SECTIONS 13 23, AND 24,  
T. 8 S., R. 3 W., AND SECTIONS 18, 19, 20, 29 AND 30,  
T. 8 S. R. 2 W., DESHA CO. AND ARKANSAS CO.

ARKANSAS RIVER WATERSHED ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER POOL 2

PENDLETON BEND

PARK

SCALE OF FEET

100 0 100 200

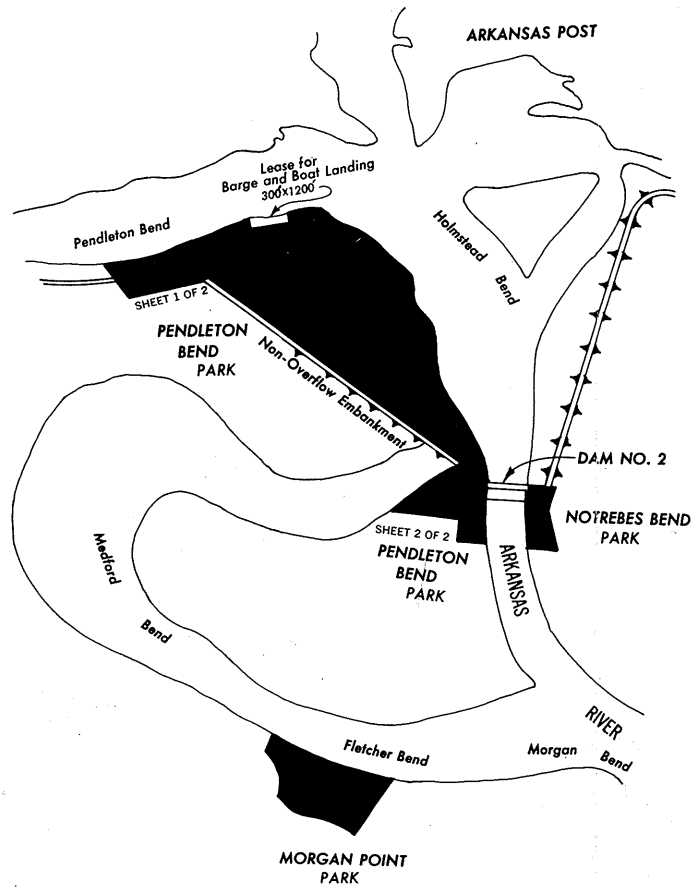
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK

LITTLE ROCK, ARKANSAS, DECEMBER 1975

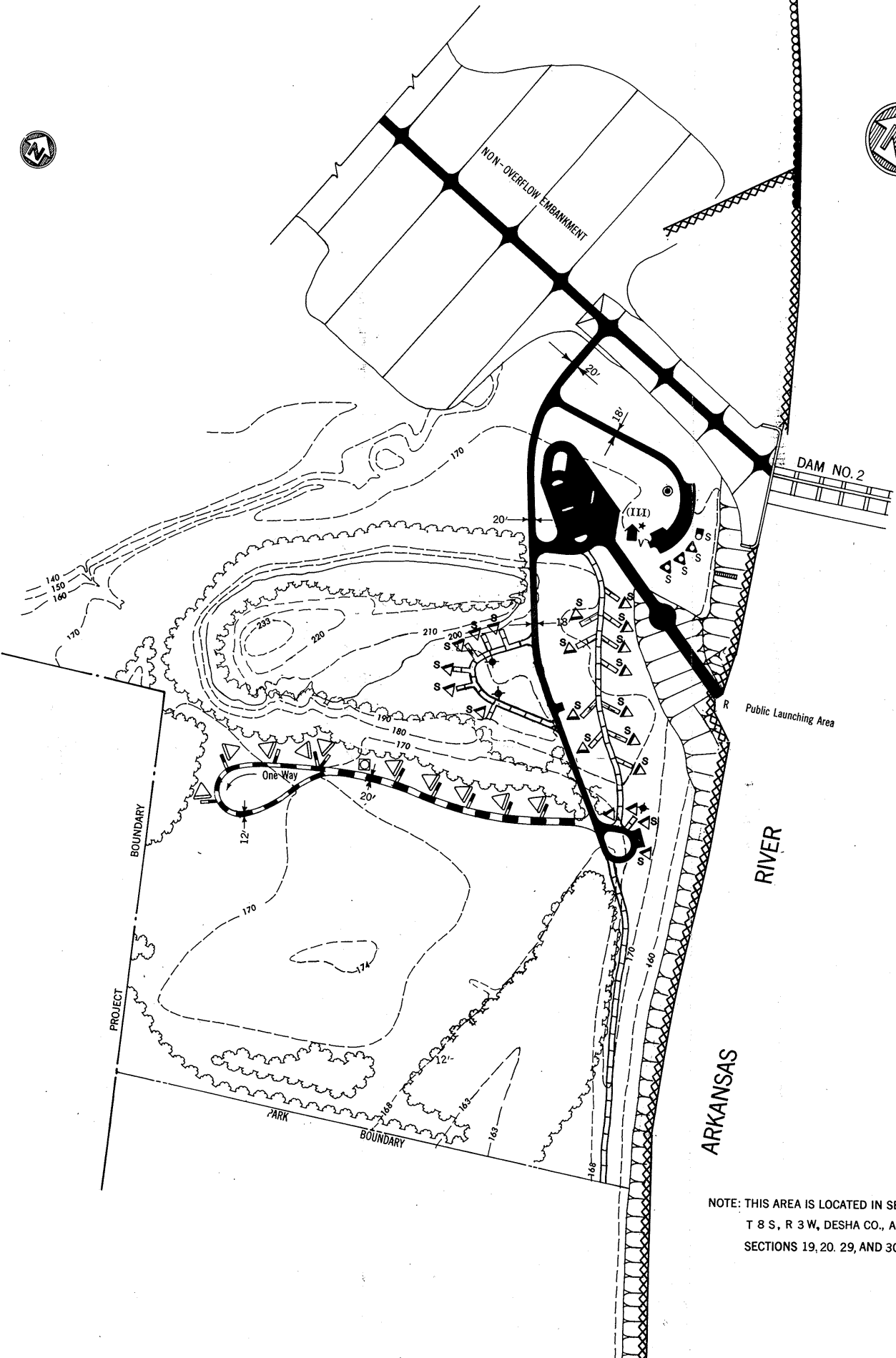
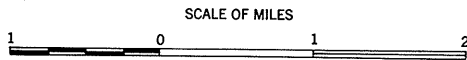
SHEET 1 OF 2

REVISED NOVEMBER 1986





AREA MAP



NOTE: THIS AREA IS LOCATED IN SECTIONS 13, 23, AND 24, T 8 S., R 3 W., DESHA CO., AND ARKANSAS CO., AND SECTIONS 19, 20, 29, AND 30, T. 8 S., R. 2 W., DESHA CO.

LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		

ARKANSAS RIVER WATERSHED ARKANSAS RIVER, ARKANSAS

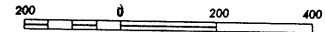
UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER POOL 2

PENDLETON BEND

PARK

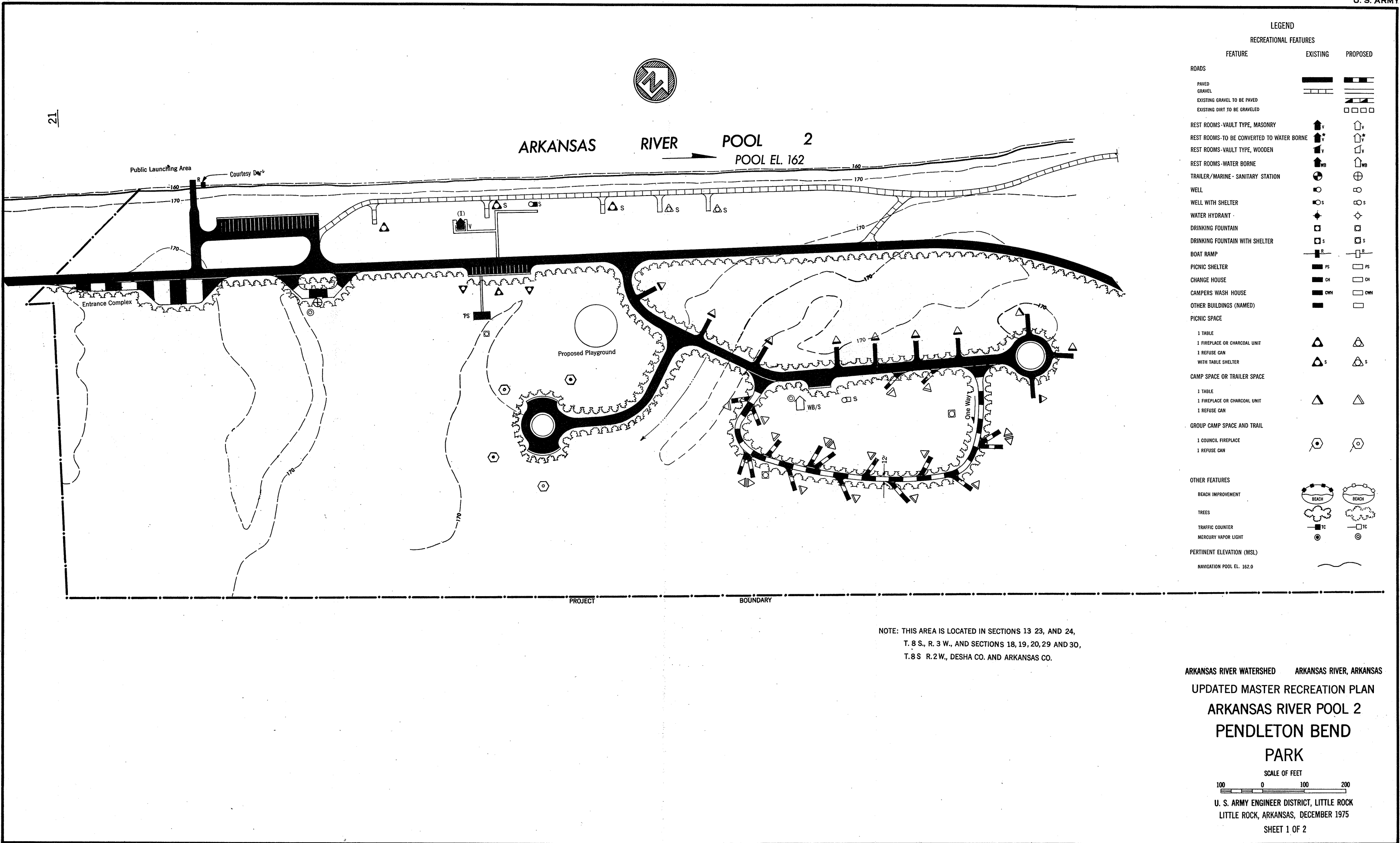
SCALE OF FEET

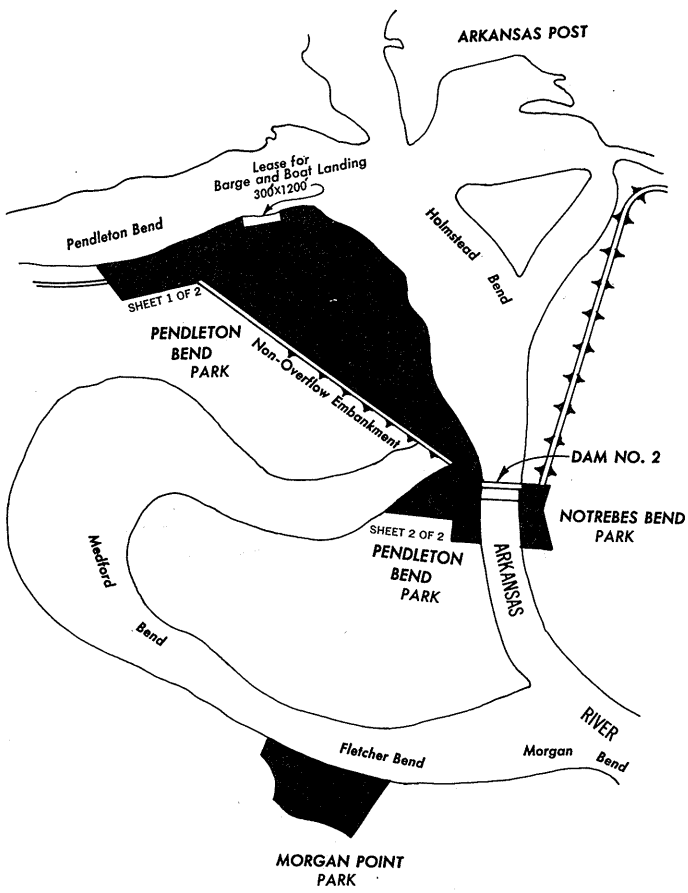


U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, DECEMBER 1975

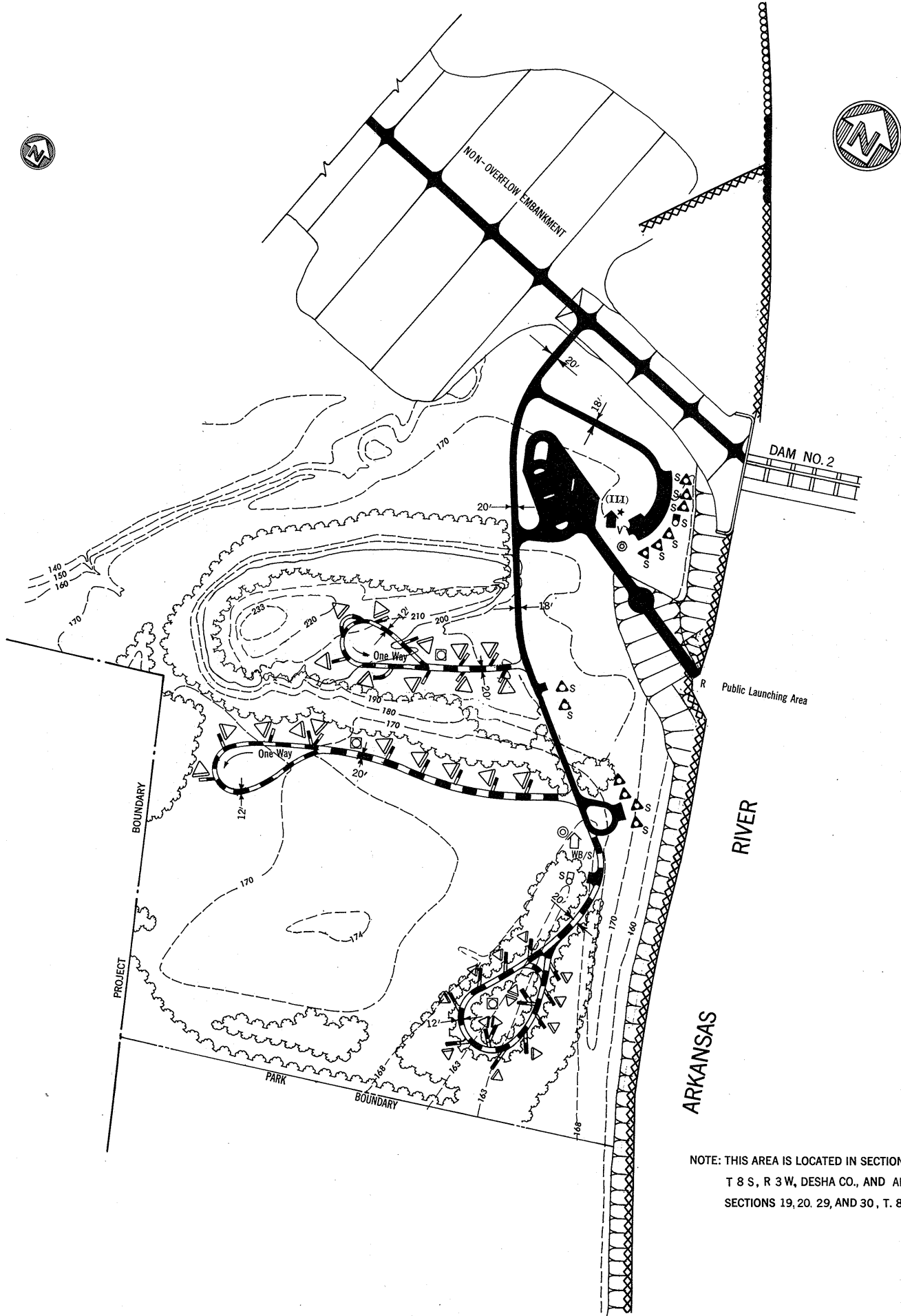
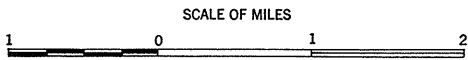
REVISED NOVEMBER 1986 SHEET 2 OF 2







AREA MAP



NOTE: THIS AREA IS LOCATED IN SECTIONS 13,23, AND 24,  
T 8 S, R 3 W, DESHA CO., AND ARKANSAS CO., AND  
SECTIONS 19,20, 29, AND 30, T. 8 S, R. 2 W., DESHA CO.

LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS-VAULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VAULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		

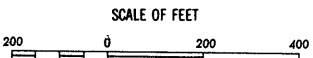
ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

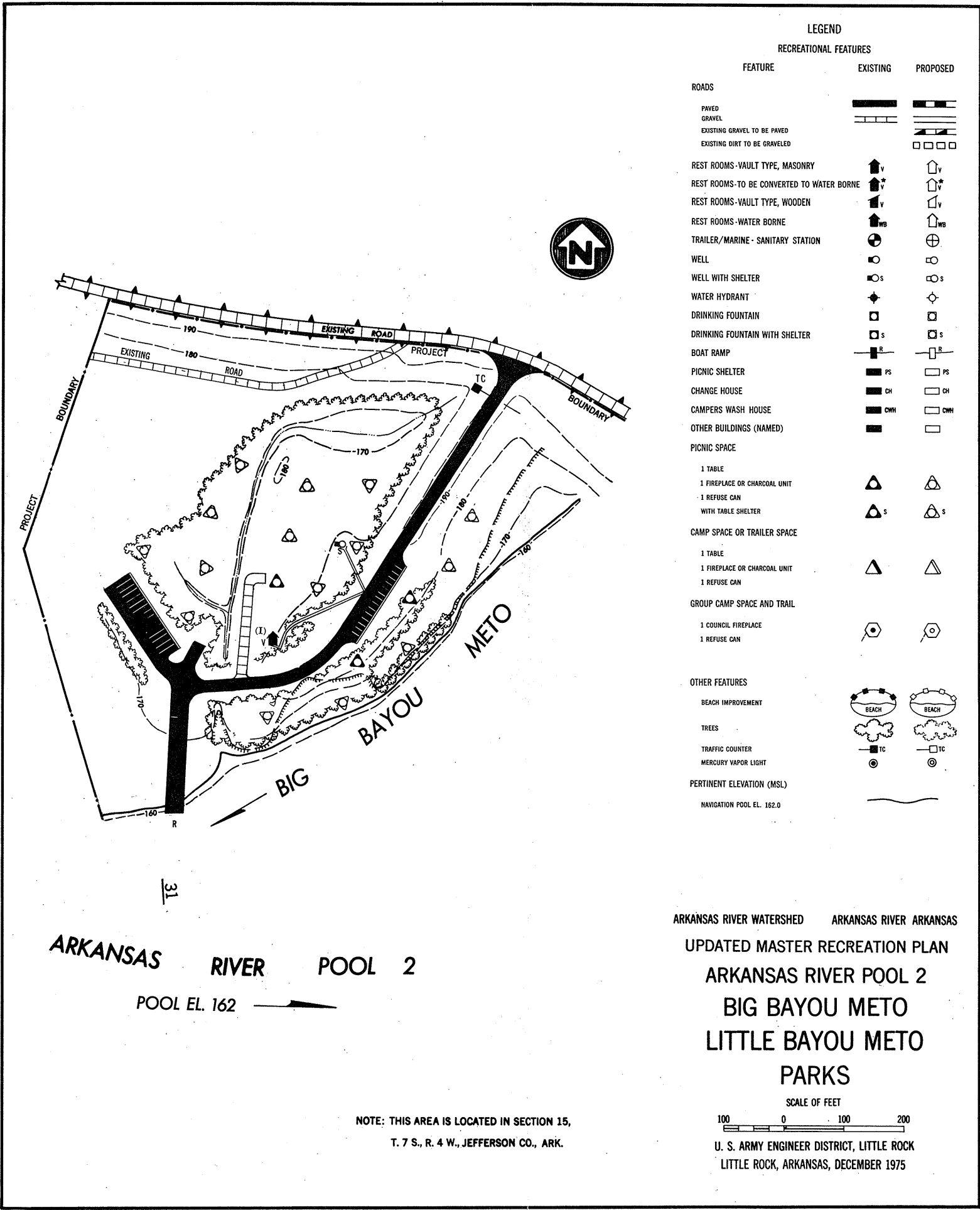
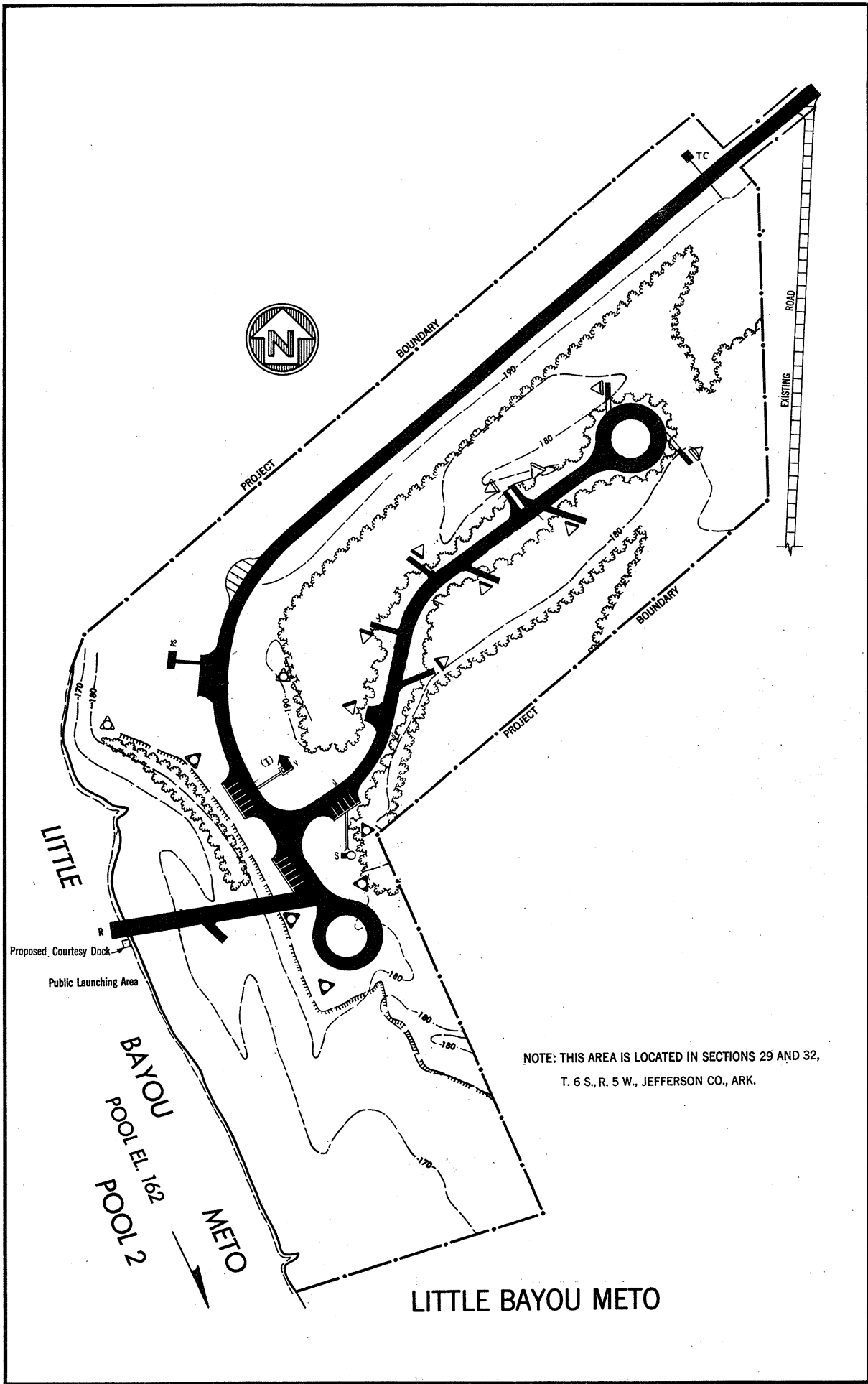
ARKANSAS RIVER POOL 2

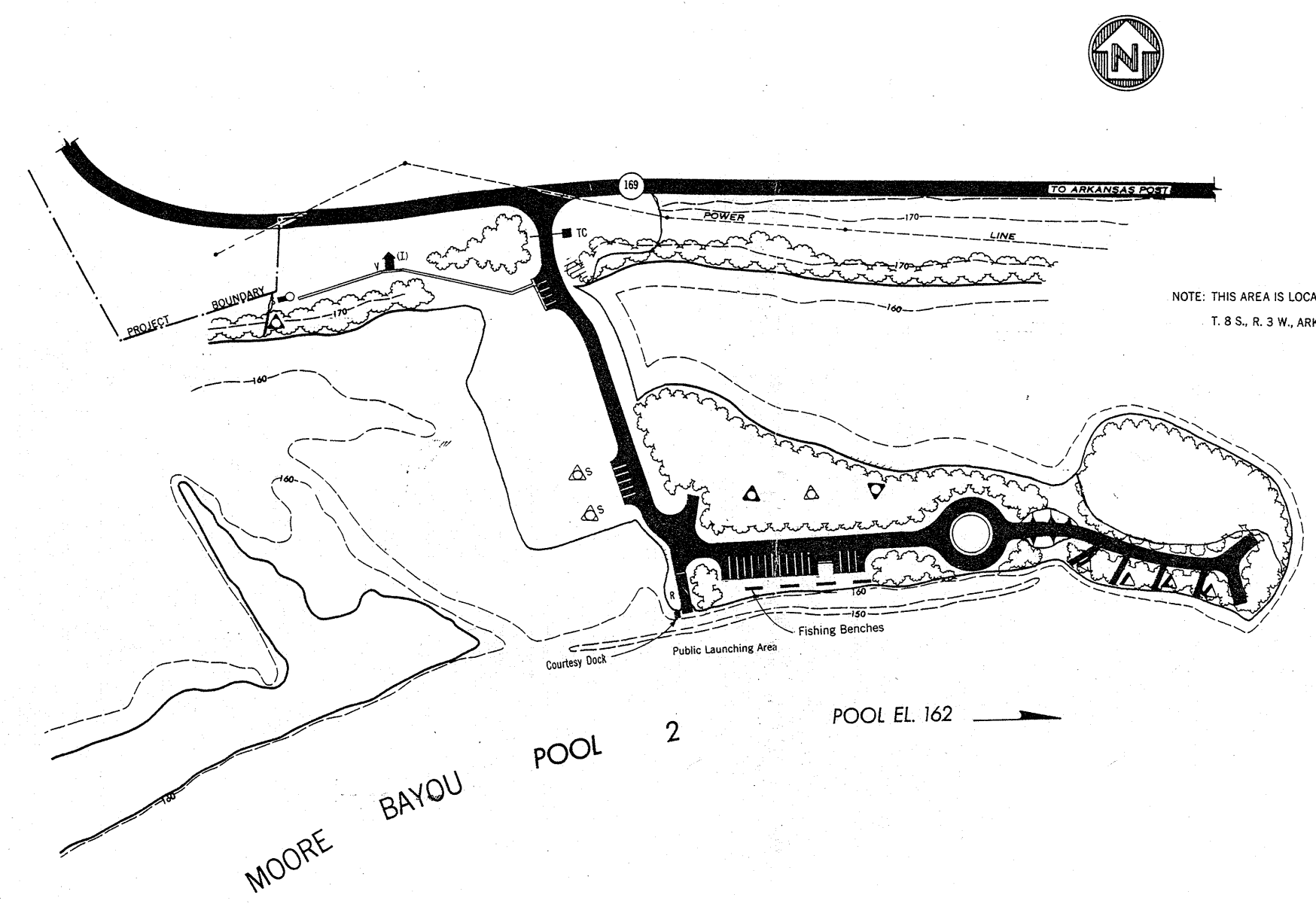
PENDLETON BEND

PARK



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

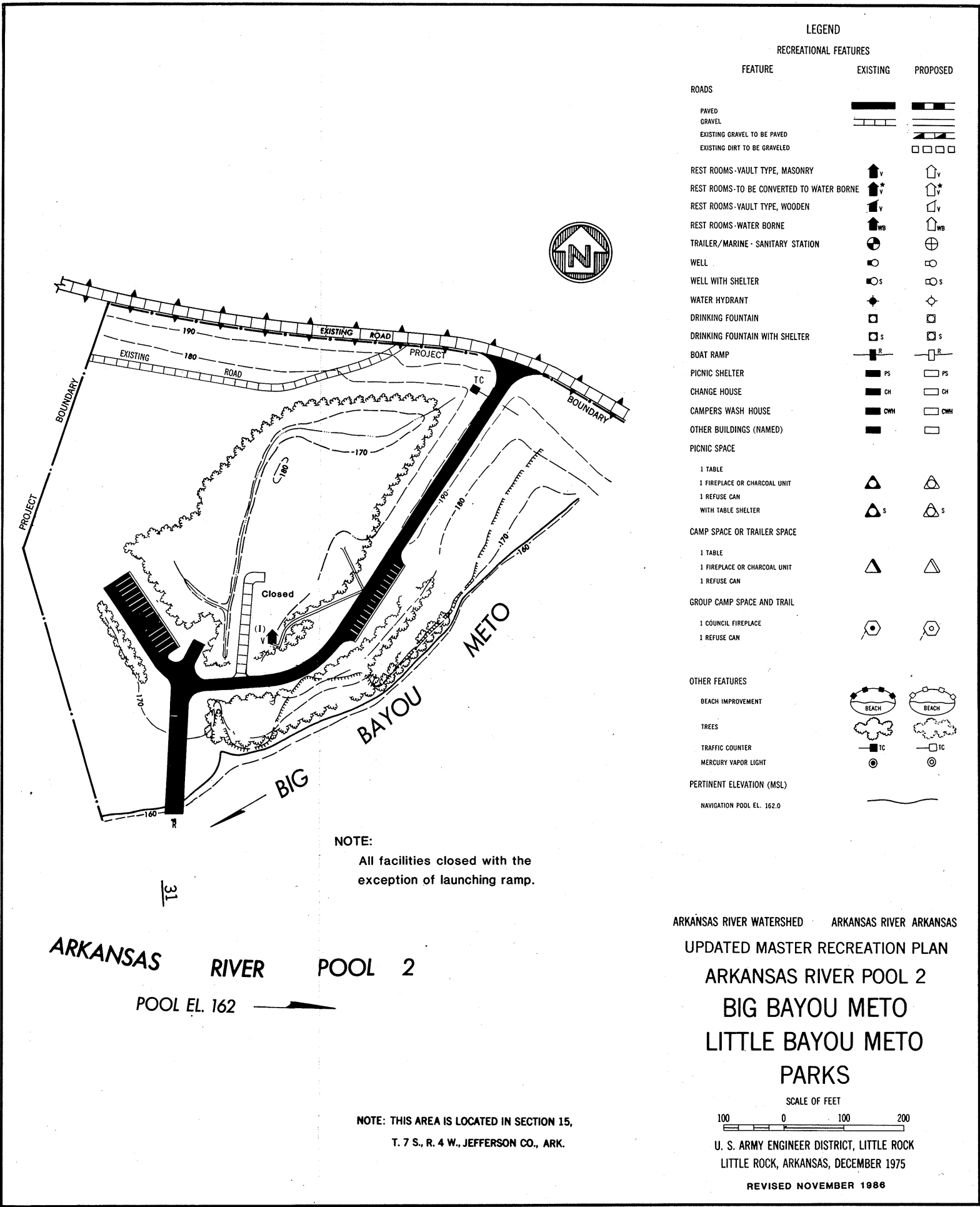
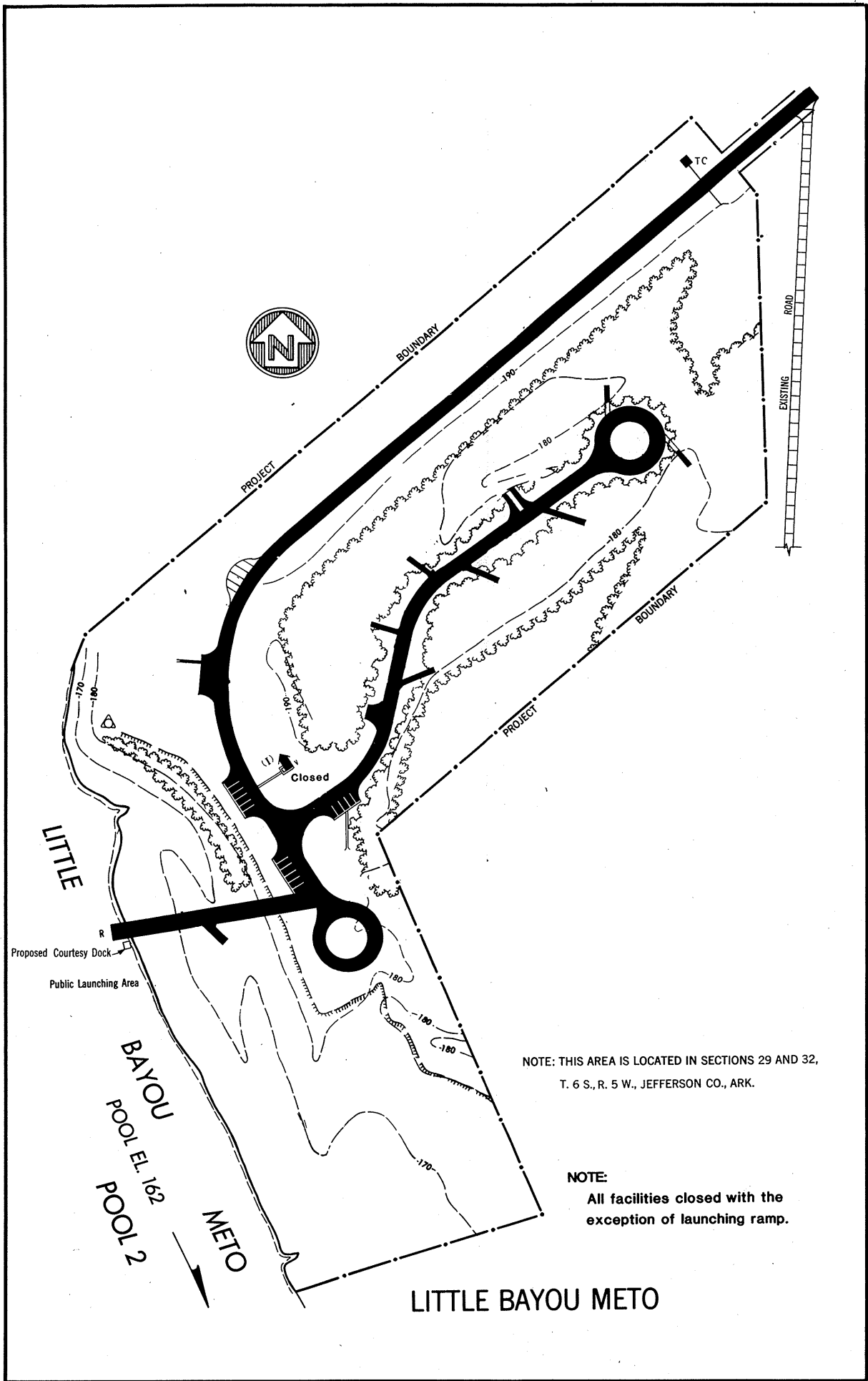




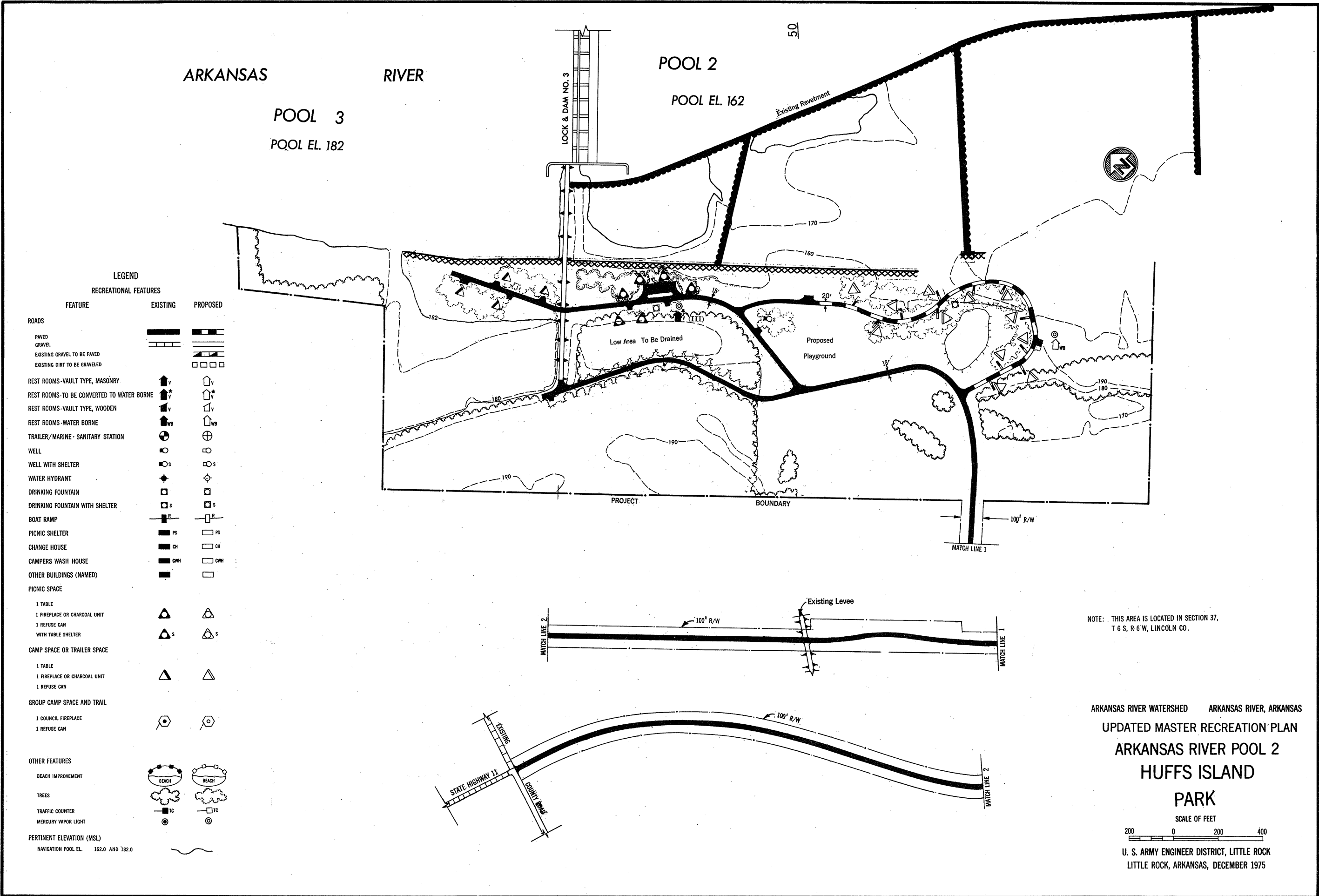
NOTE: THIS AREA IS LOCATED IN SPANISH GRANT NO. 2299  
T. 8 S., R. 3 W., ARKANSAS CO., ARK.

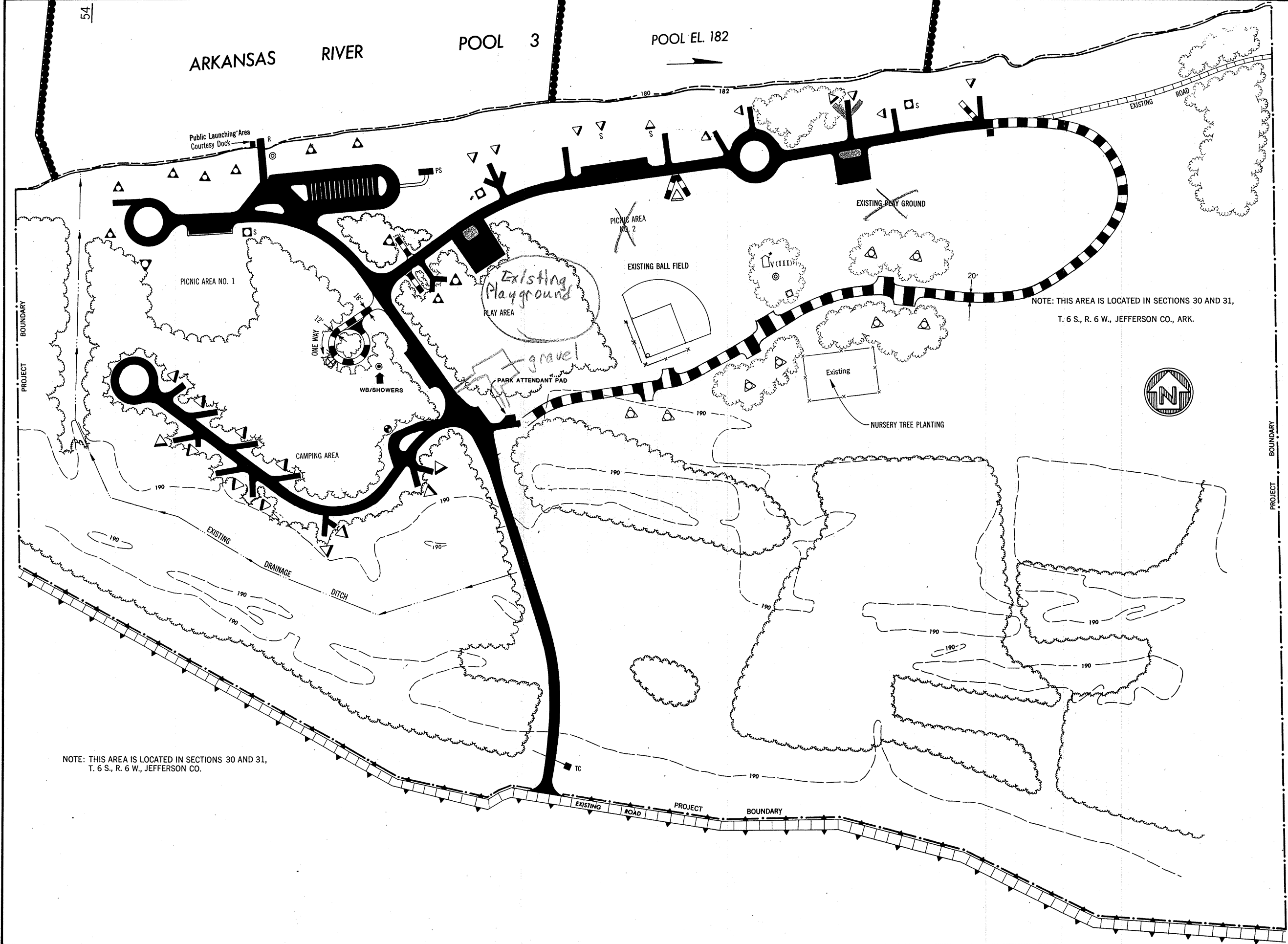
LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS-VULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 162.0		

ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER POOL 2  
MOORE BAYOU  
PARK  
SCALE OF FEET  
100 0 100 200  
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS,





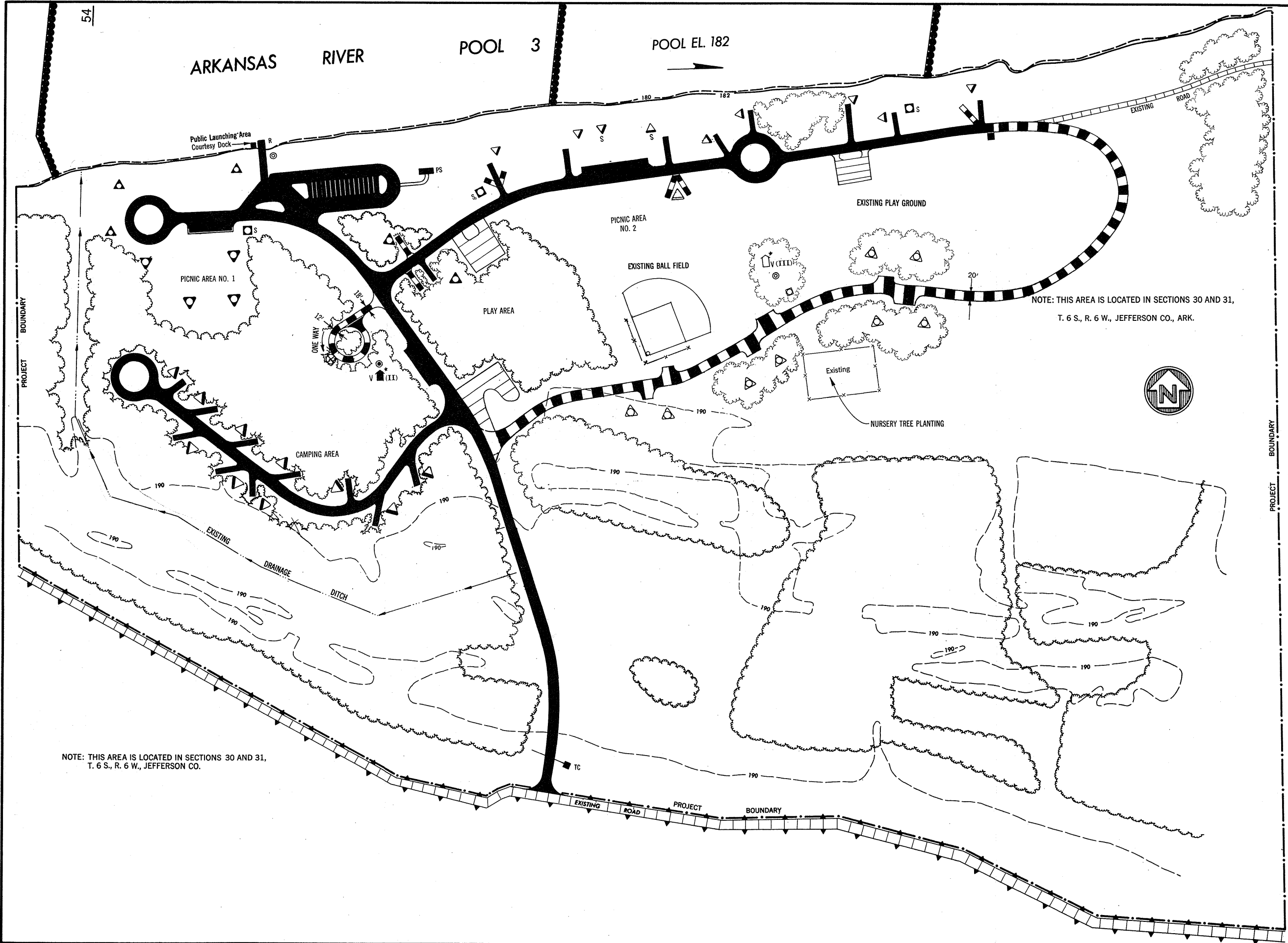




LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 182.0		

ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER POOL 3  
RISING STAR  
PARK  
SCALE OF FEET  
100    0    100    200  
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, DECEMBER 1975  
REVISED NOVEMBER 1986





LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 182.0		

ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER POOL 3

RISING STAR

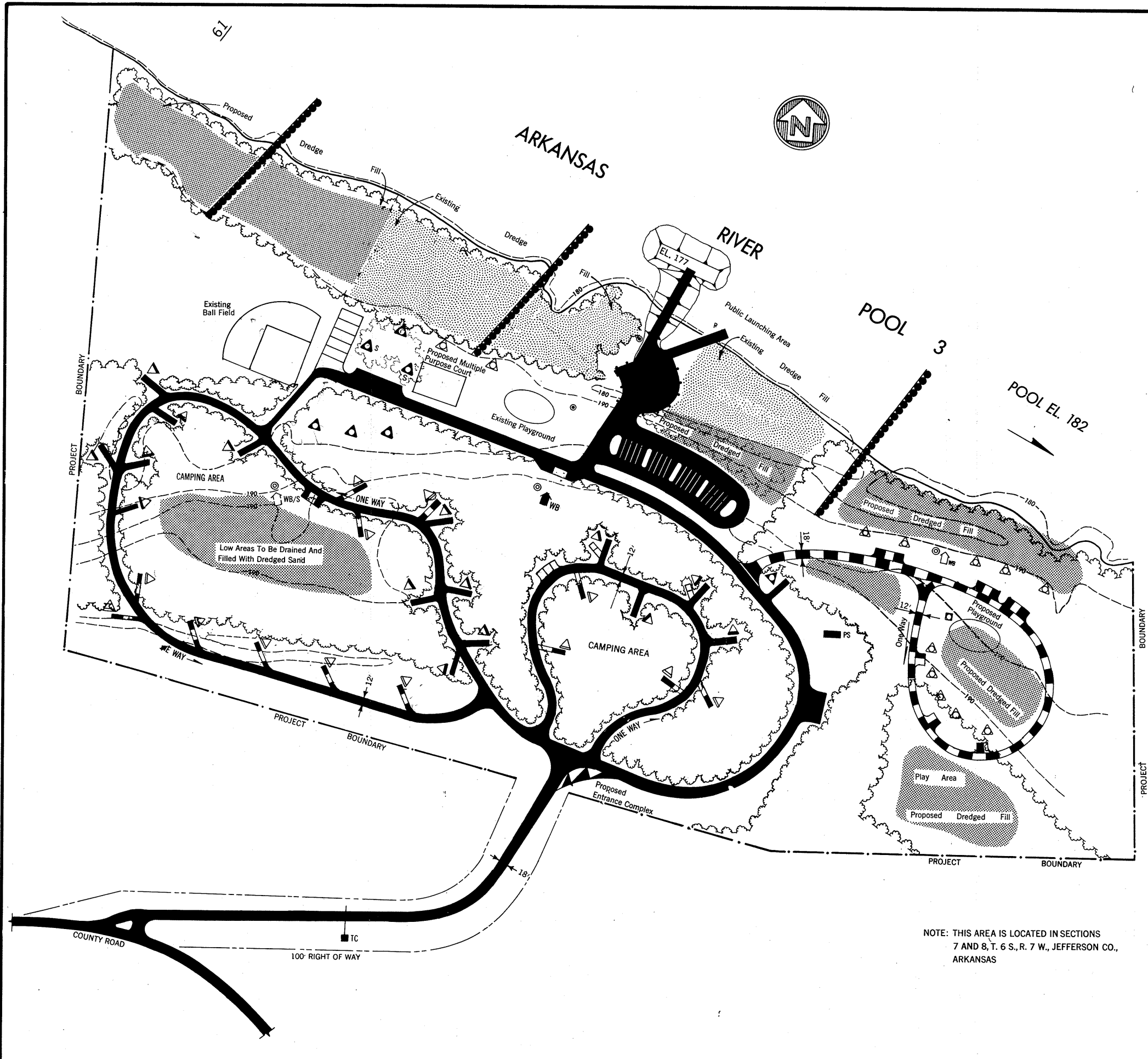
PARK

SCALE OF FEET

100    0    100    200

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK

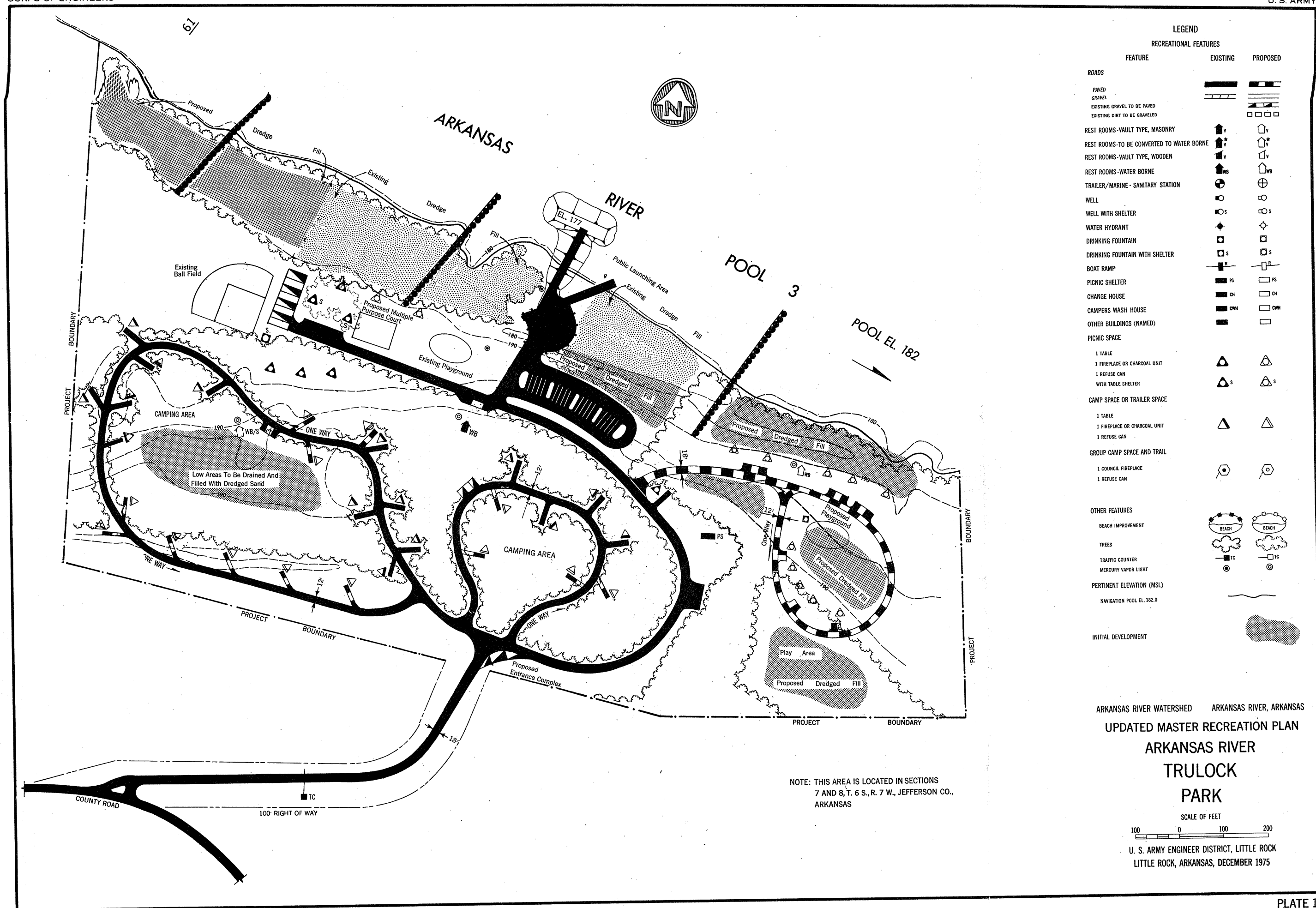
LITTLE ROCK, ARKANSAS, DECEMBER 1975

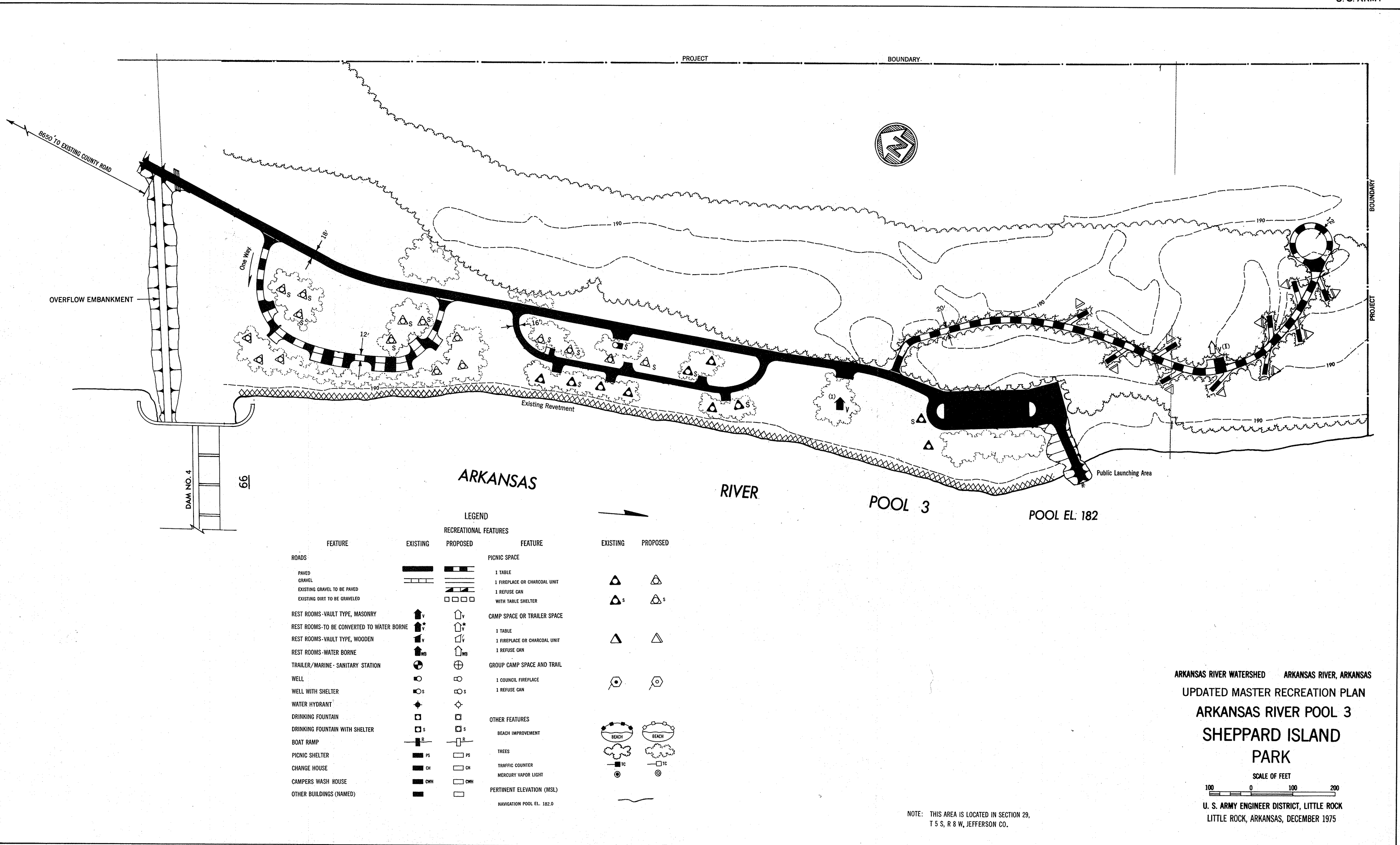


NOTE: THIS AREA IS LOCATED IN SECTIONS  
7 AND 8, T. 6 S., R. 7 W., JEFFERSON CO.,  
ARKANSAS

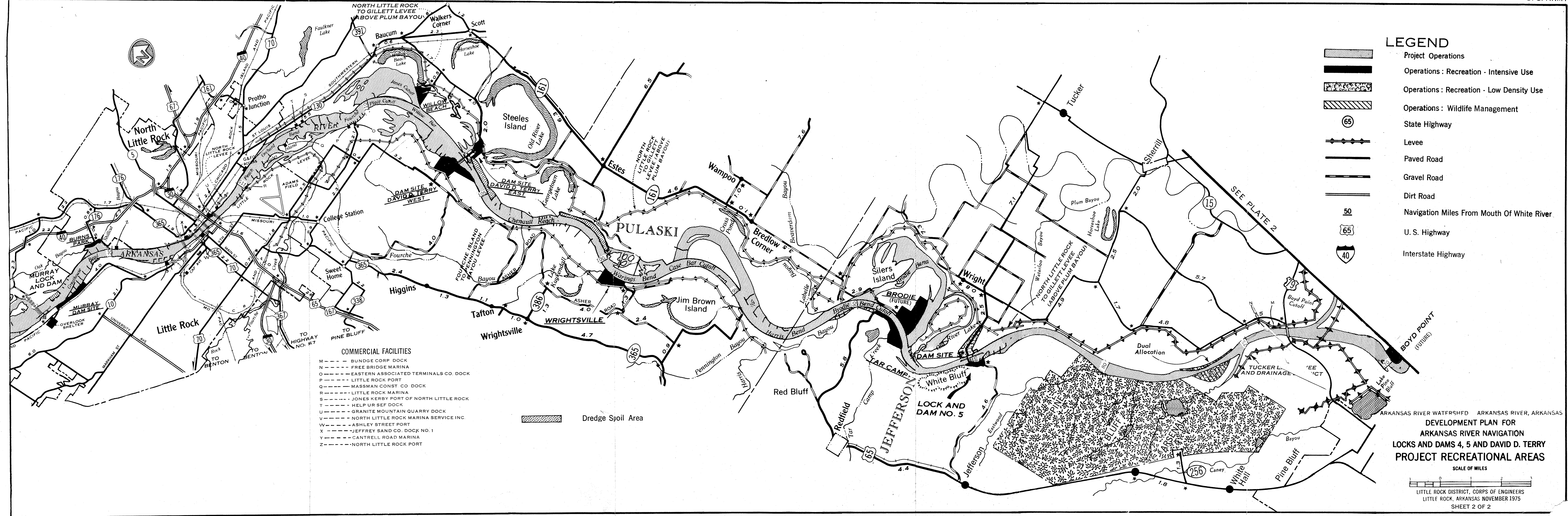
LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
RECREATIONAL FEATURES		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 182.0		

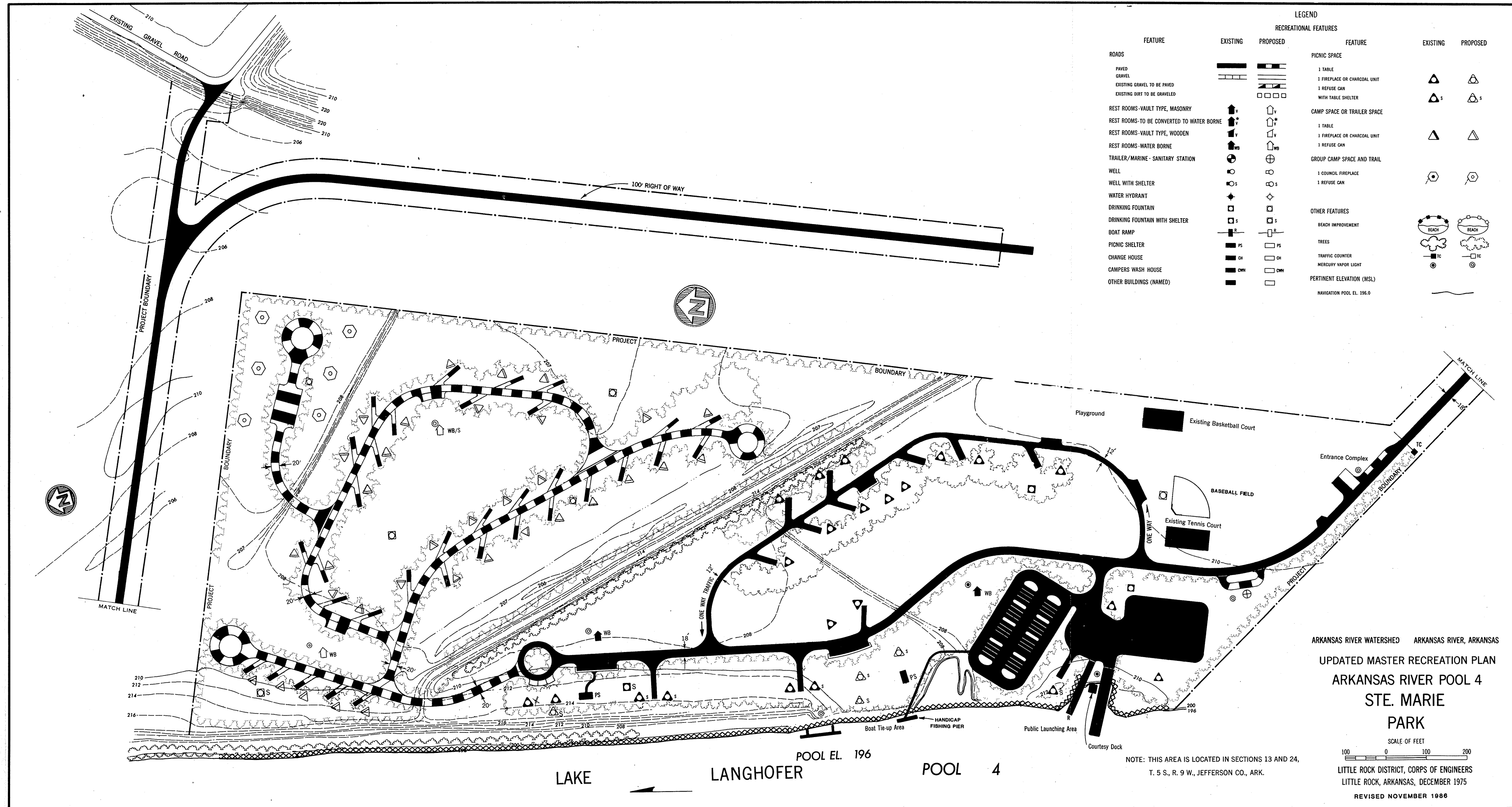
ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
TRULOCK  
PARK  
SCALE OF FEET  
100    0    100    200  
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, DECEMBER 1975  
REVISED NOVEMBER 1988

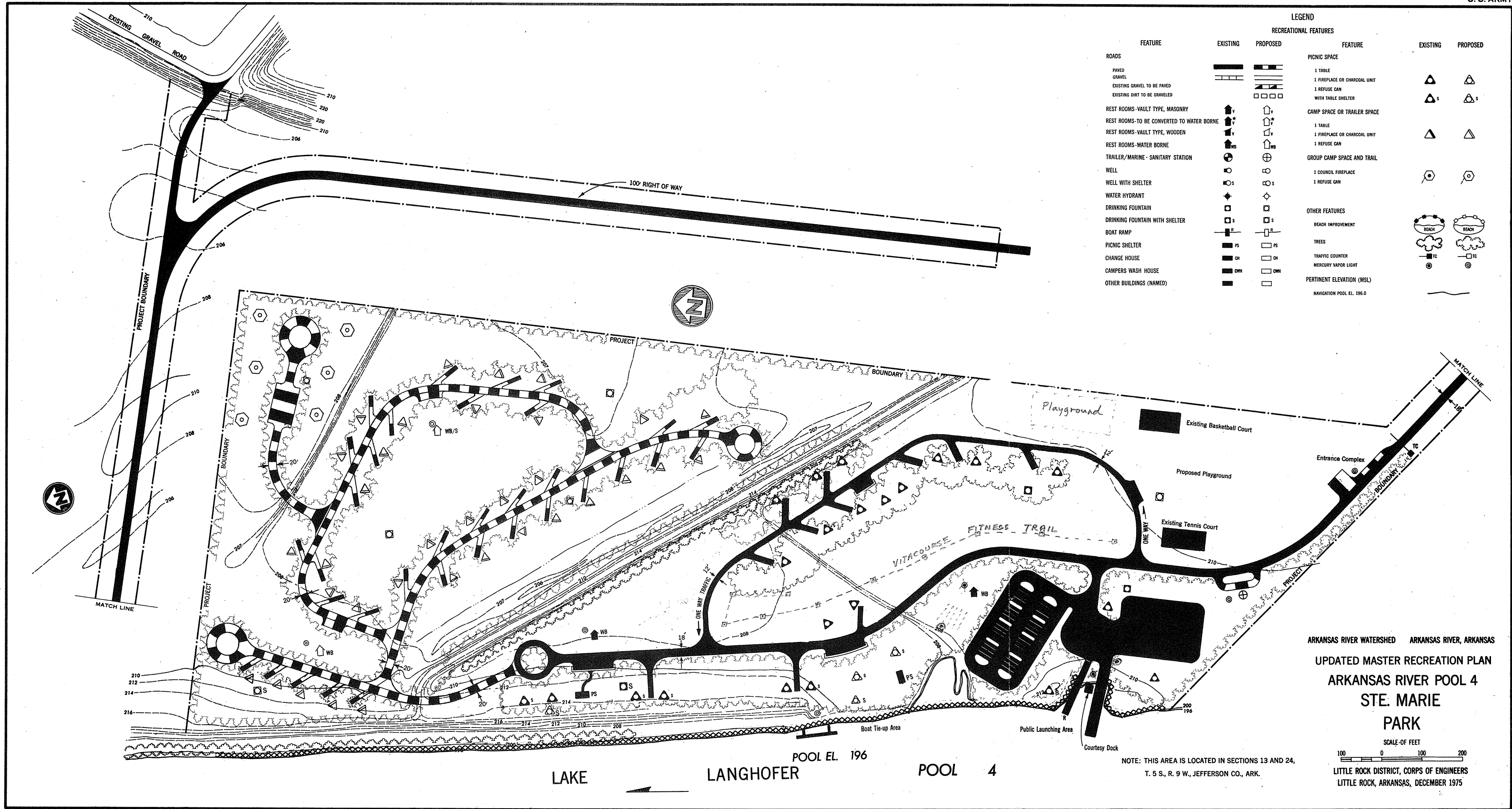




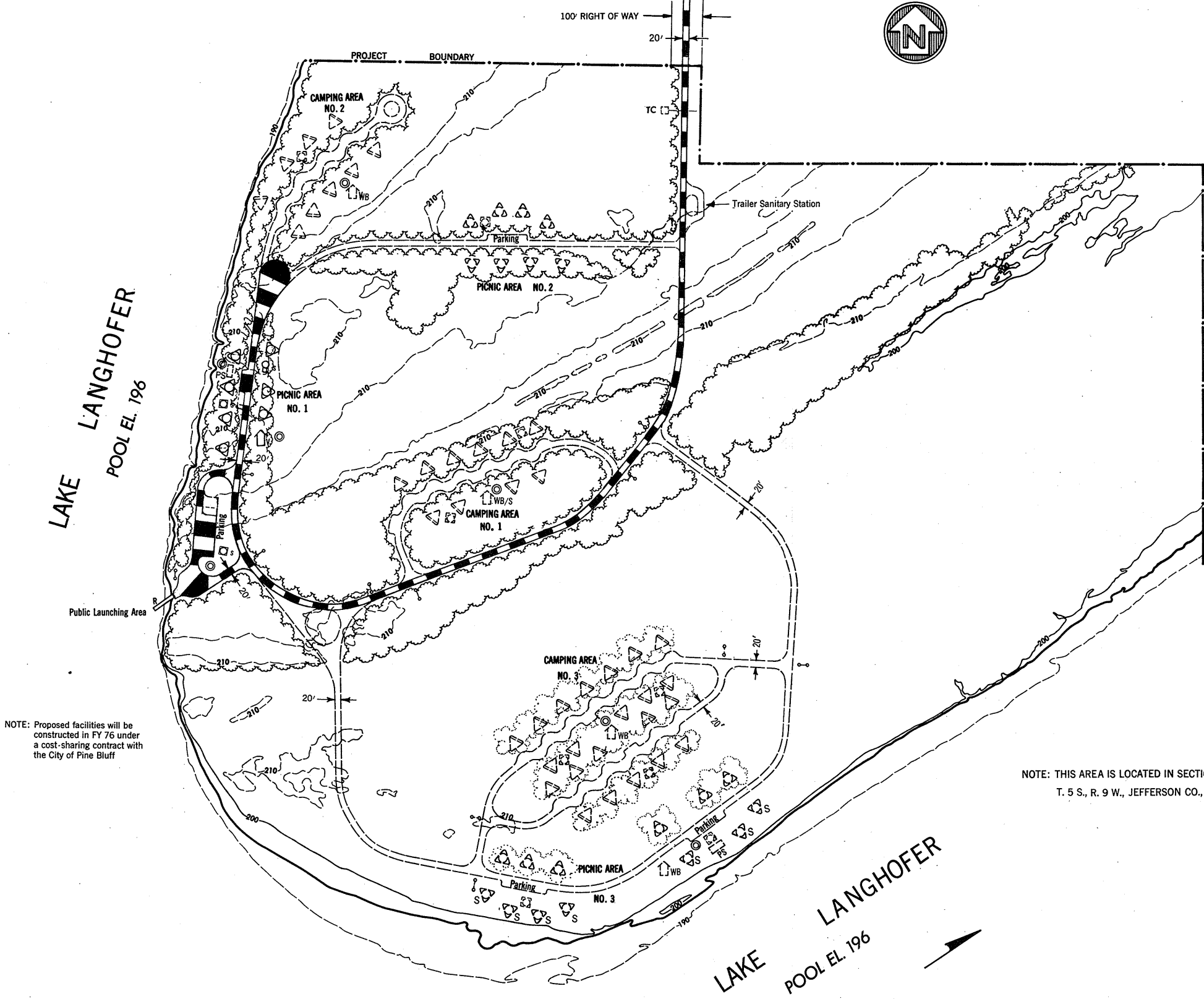










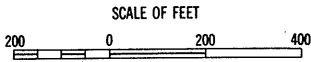


NOTE: Proposed facilities will be constructed in FY 76 under a cost-sharing contract with the City of Pine Bluff

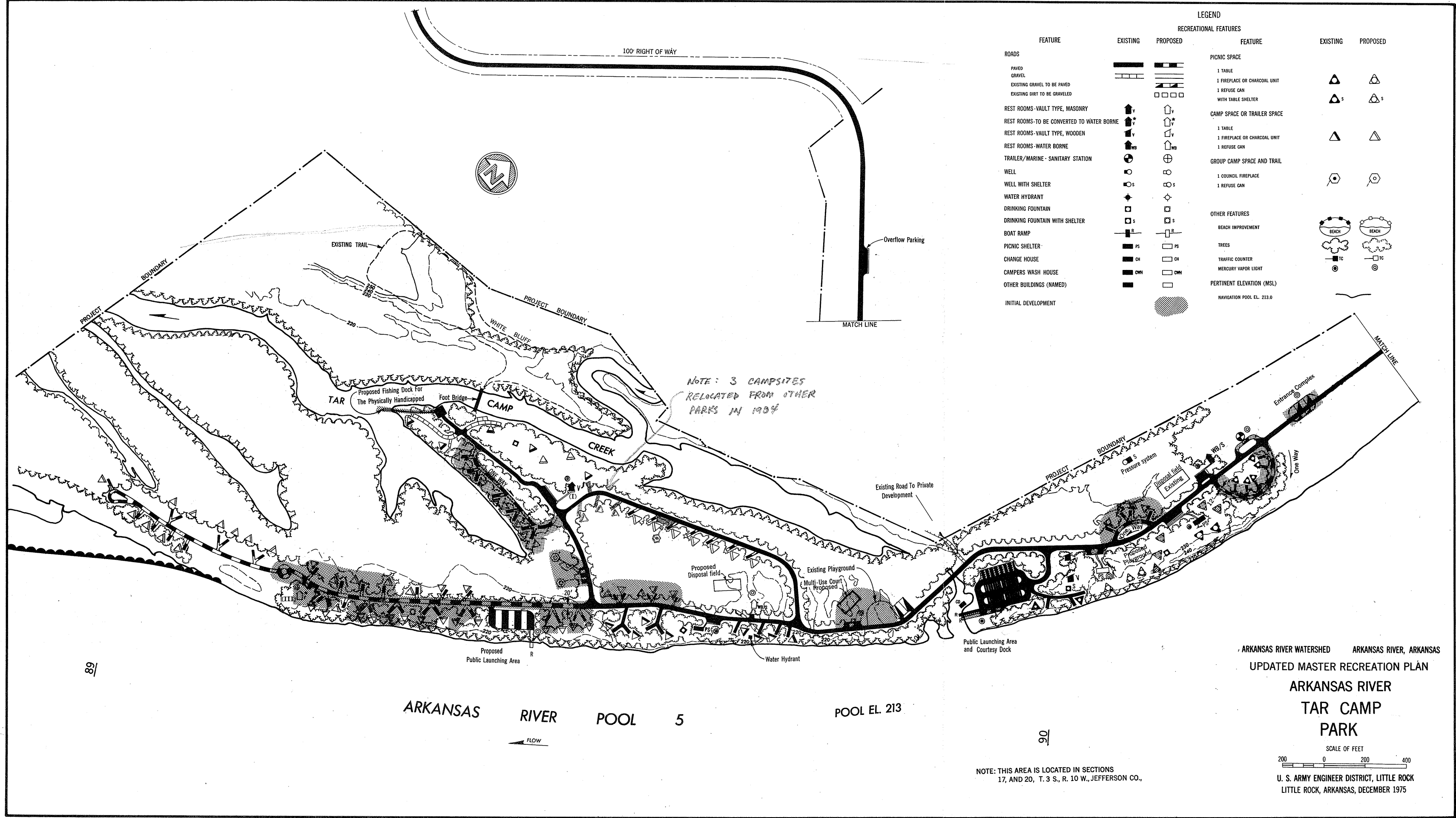
NOTE: THIS AREA IS LOCATED IN SECTIONS 27, 33, AND 34, T. 5 S., R. 9 W., JEFFERSON CO.,

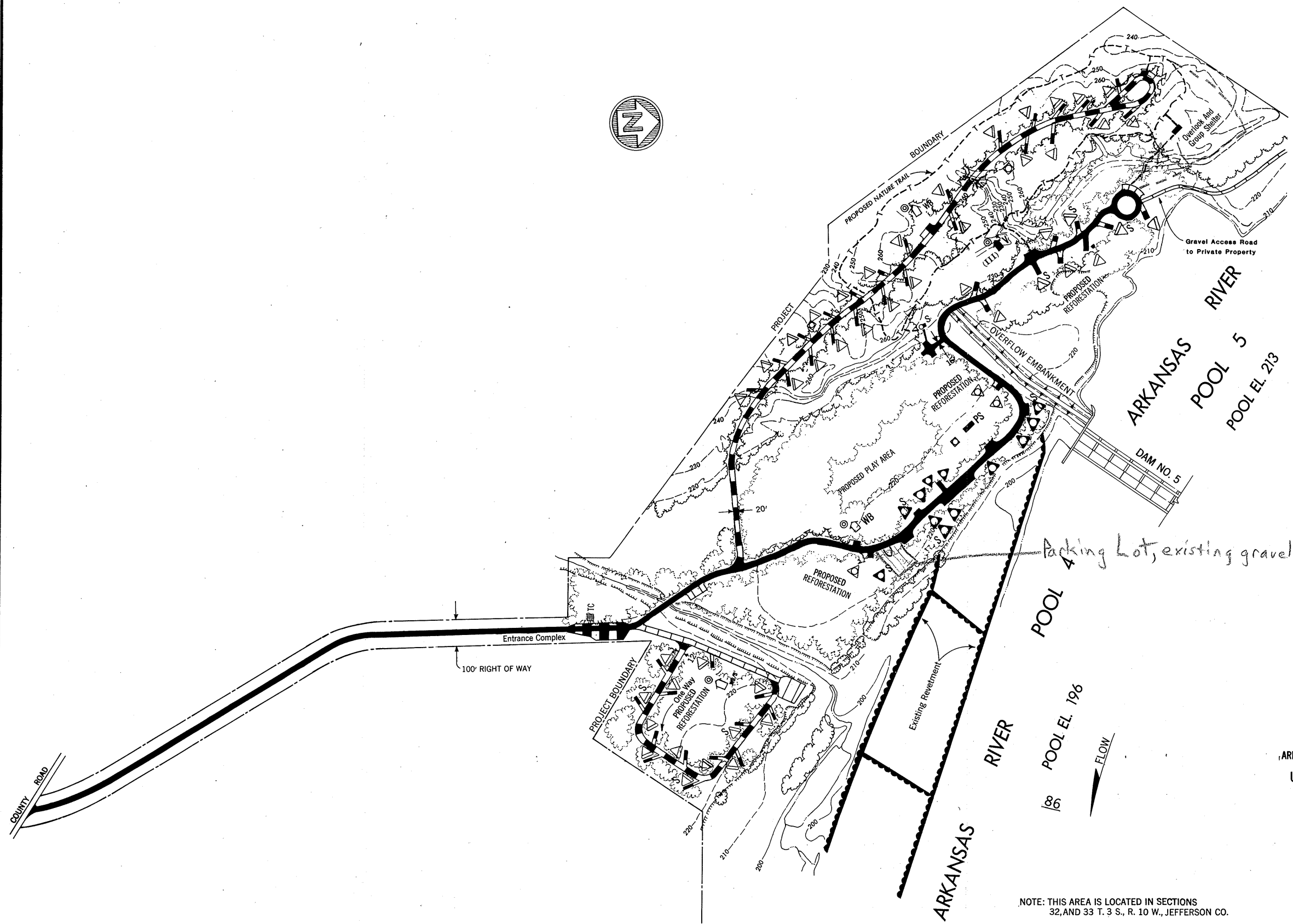
LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS-VULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 196.0		
FACILITIES SHOWN IN DASH TO BE DEVELOPED IN THE FUTURE		

ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER POOL 4  
BOYD POINT  
PARK



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

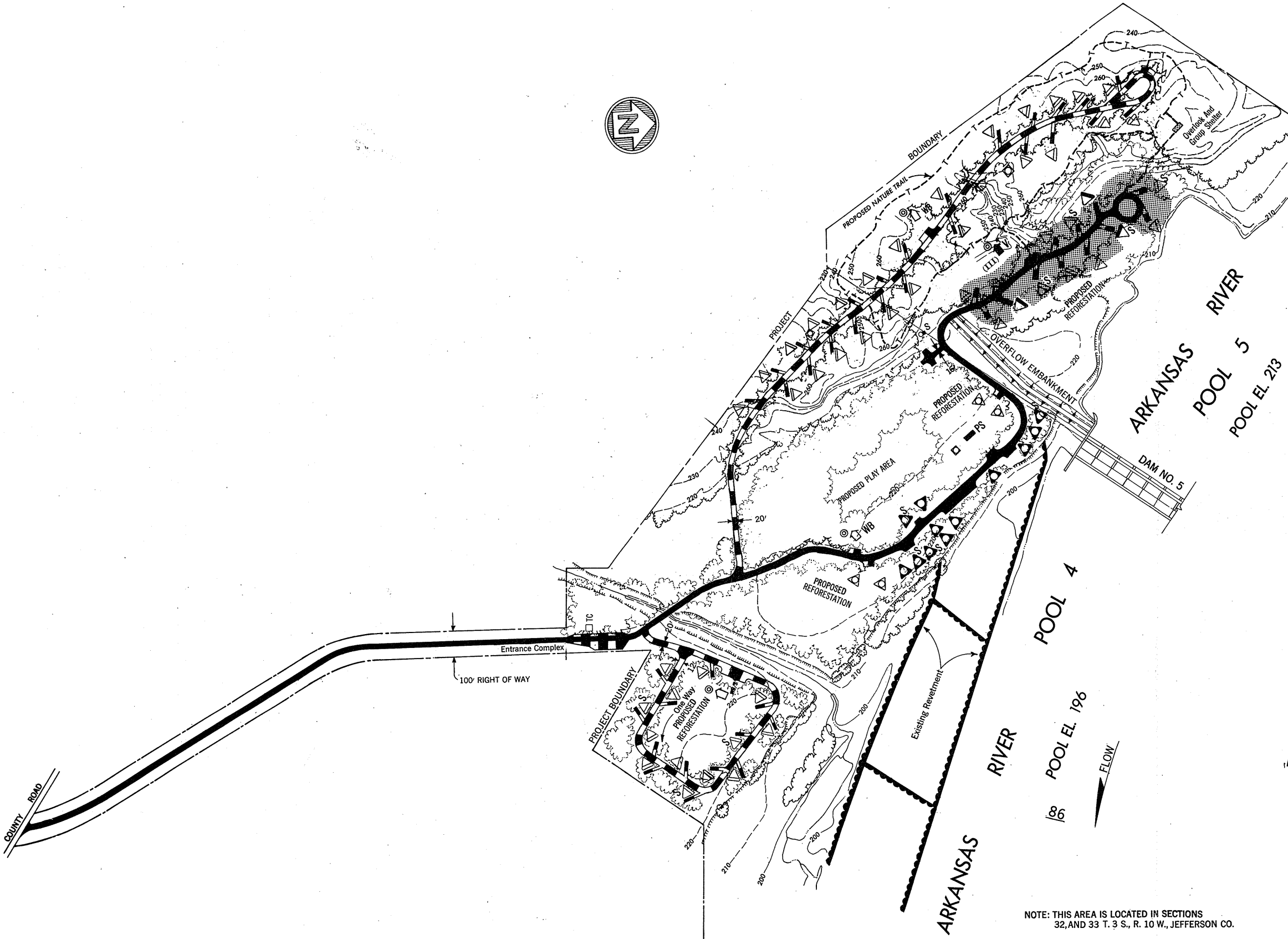




LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 213.0, 196.0		

ARKANSAS RIVER WATERSHED ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER POOLS  
DAM SITE 5  
PARK  
SCALE OF FEET  
200 0 200 400  
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, DECEMBER 1975  
REVISED NOVEMBER 1986

NOTE: THIS AREA IS LOCATED IN SECTIONS  
32, AND 33 T. 3 S., R. 10 W., JEFFERSON CO.



LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS-VAULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VAULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE- SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 213.0, 196.0		
INITIAL DEVELOPMENT		

ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

**ARKANSAS RIVER**

**DAM SITE 5**

**PARK**

SCALE OF FEET

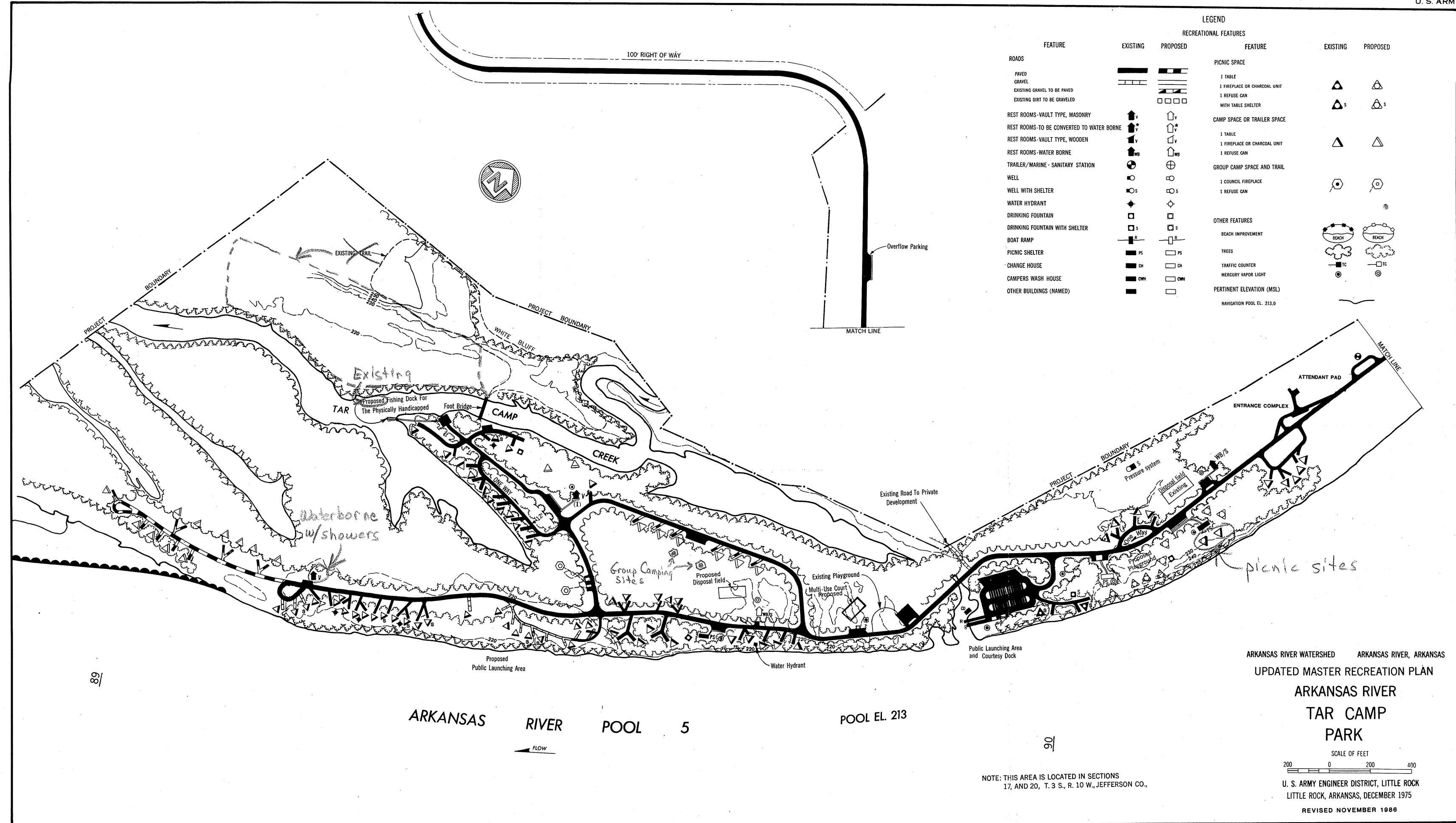
200    0    200    400

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK

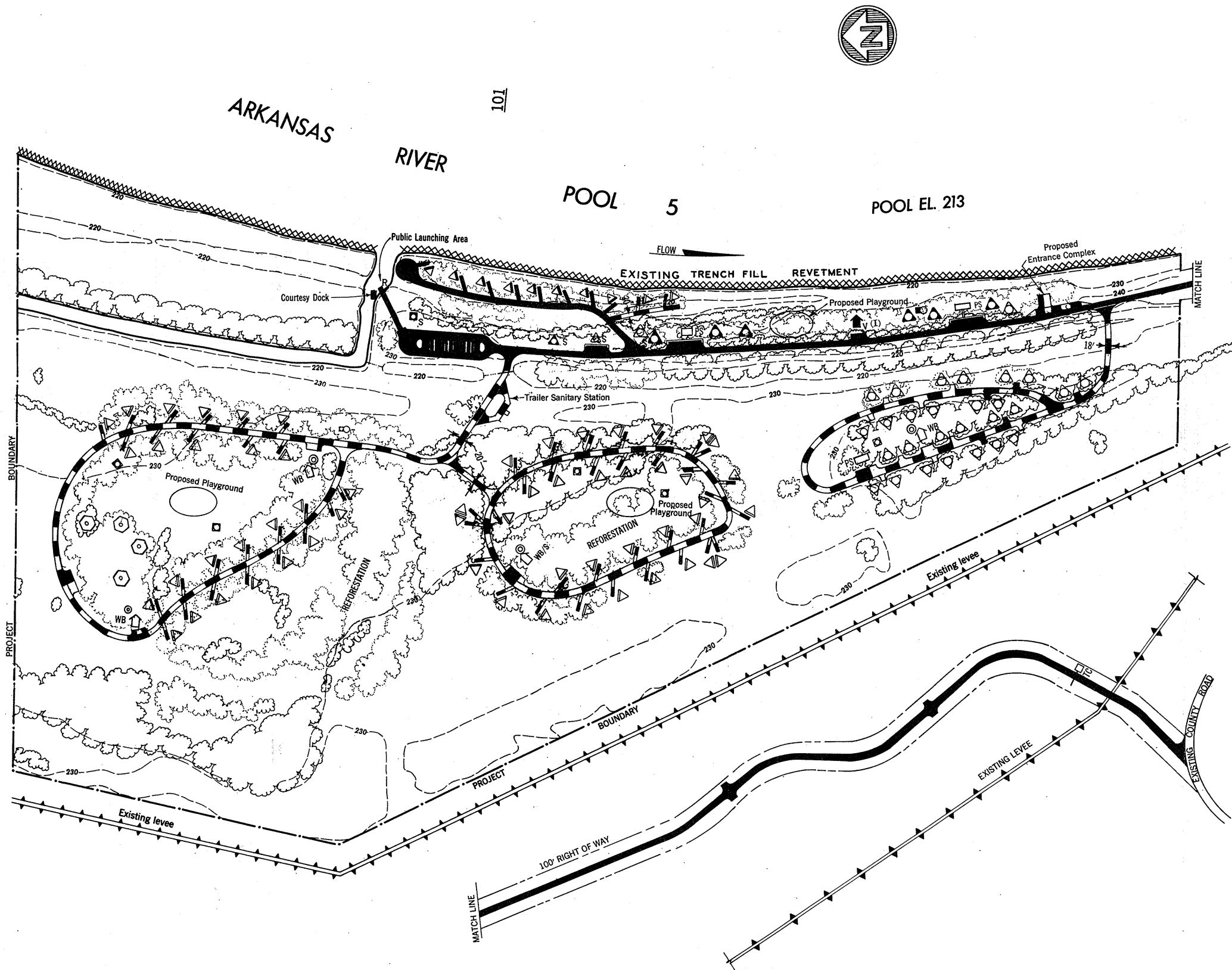
LITTLE ROCK, ARKANSAS, DECEMBER 1975

NOTE: THIS AREA IS LOCATED IN SECTIONS 32, AND 33 T. 9 S., R. 10 W., JEFFERSON CO.





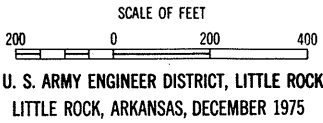




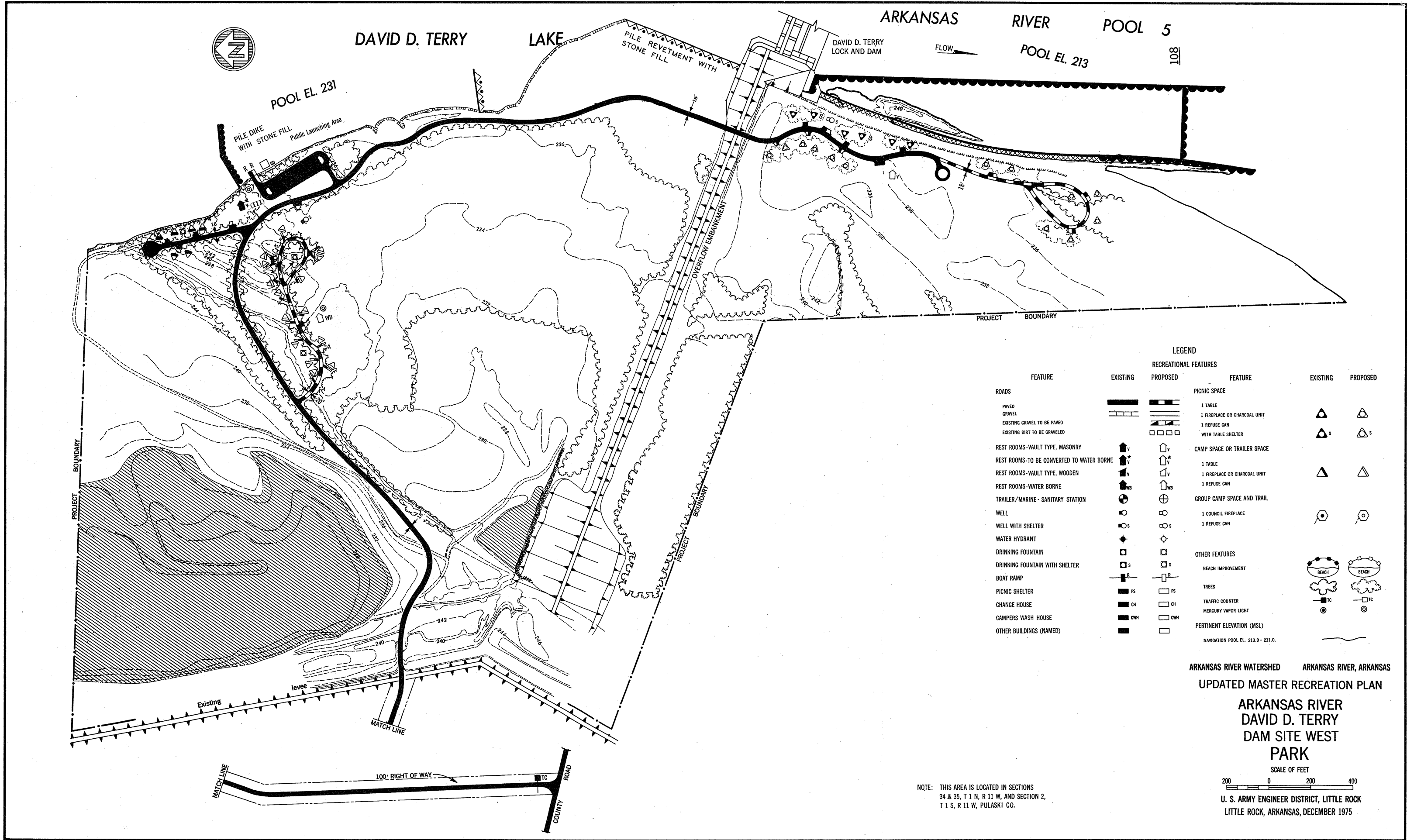
LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS-VAULT TYPE, MASONRY		
REST ROOMS-TO BE CONVERTED TO WATER BORNE		
REST ROOMS-VAULT TYPE, WOODEN		
REST ROOMS-WATER BORNE		
TRAILER/MARINE- SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
SIGN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 213.0		

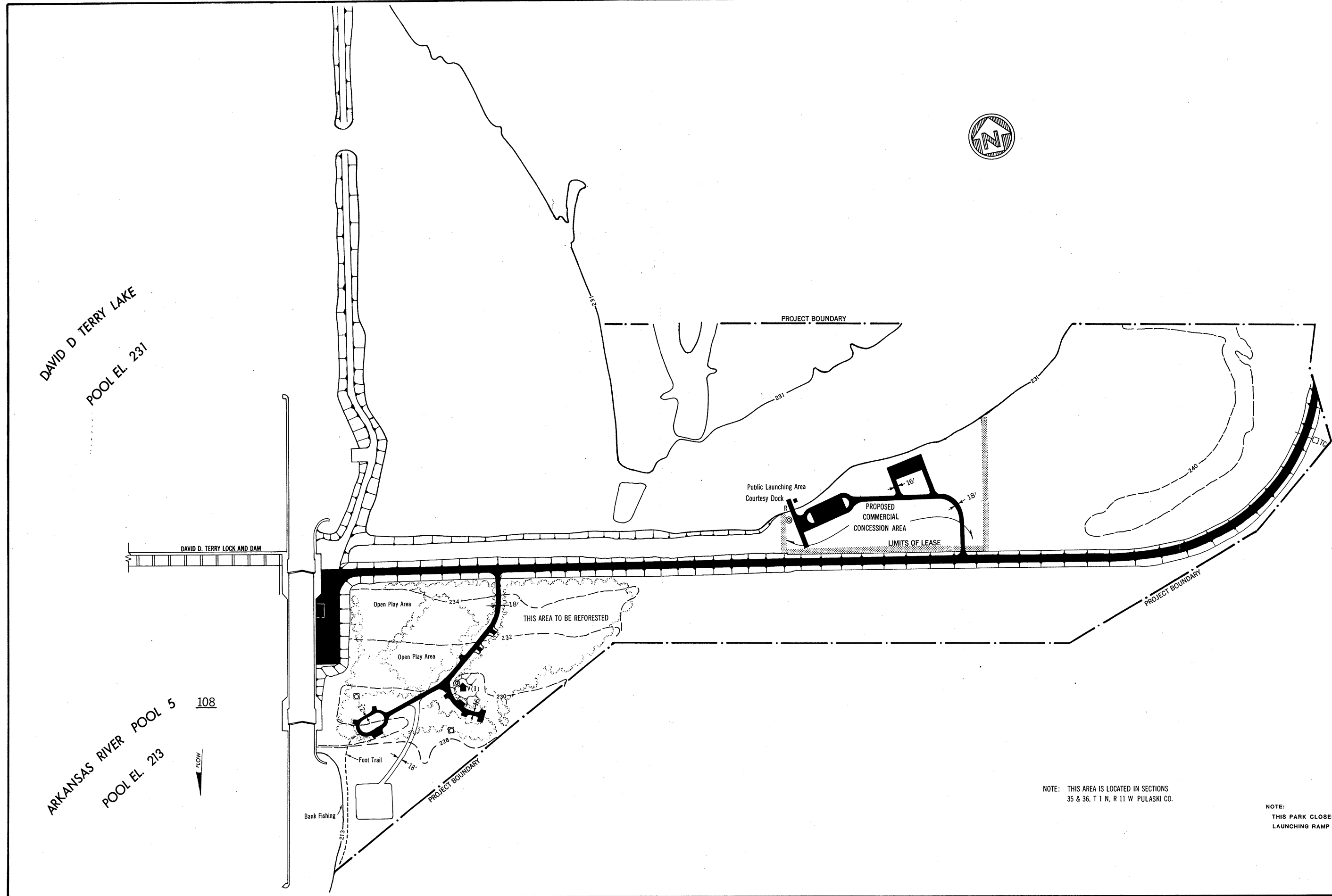
NOTE: THIS AREA IS LOCATED IN SECTIONS  
34 & 35, T 1 S, R 11 W AND SECTIONS 2 & 3,  
T 2 S, R 11 W PULASKI CO.

ARKANSAS RIVER WATERSHED - ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
WRIGHTSVILLE  
PARK









LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH. HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 213.0 - 231.0		

ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS

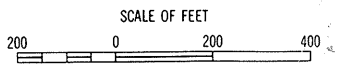
UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER

DAM SITE EAST

DAVID D. TERRY LAKE

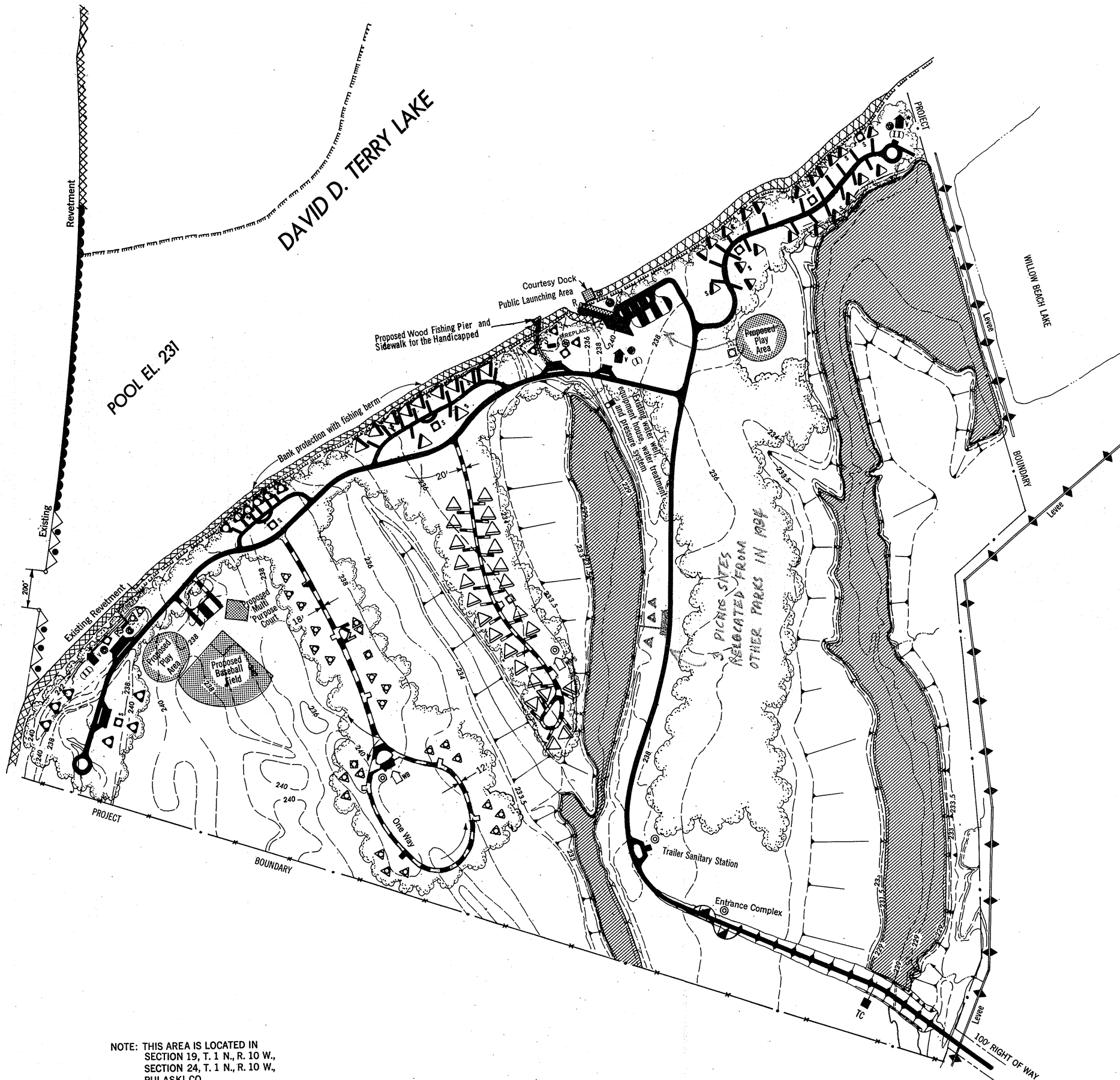
PARK



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

ARKANSAS RIVER

110



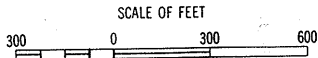
NOTE: THIS AREA IS LOCATED IN SECTION 19, T. 1 N., R. 10 W., SECTION 24, T. 1 N., R. 10 W., PULASKI CO.

LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 231.0		
INITIAL DEVELOPMENT		

ARKANSAS RIVER WATERSHED ARKANSAS RIVER, ARKANSAS

UPDATED MASTER RECREATION PLAN

ARKANSAS RIVER  
WILLOW BEACH  
PARK



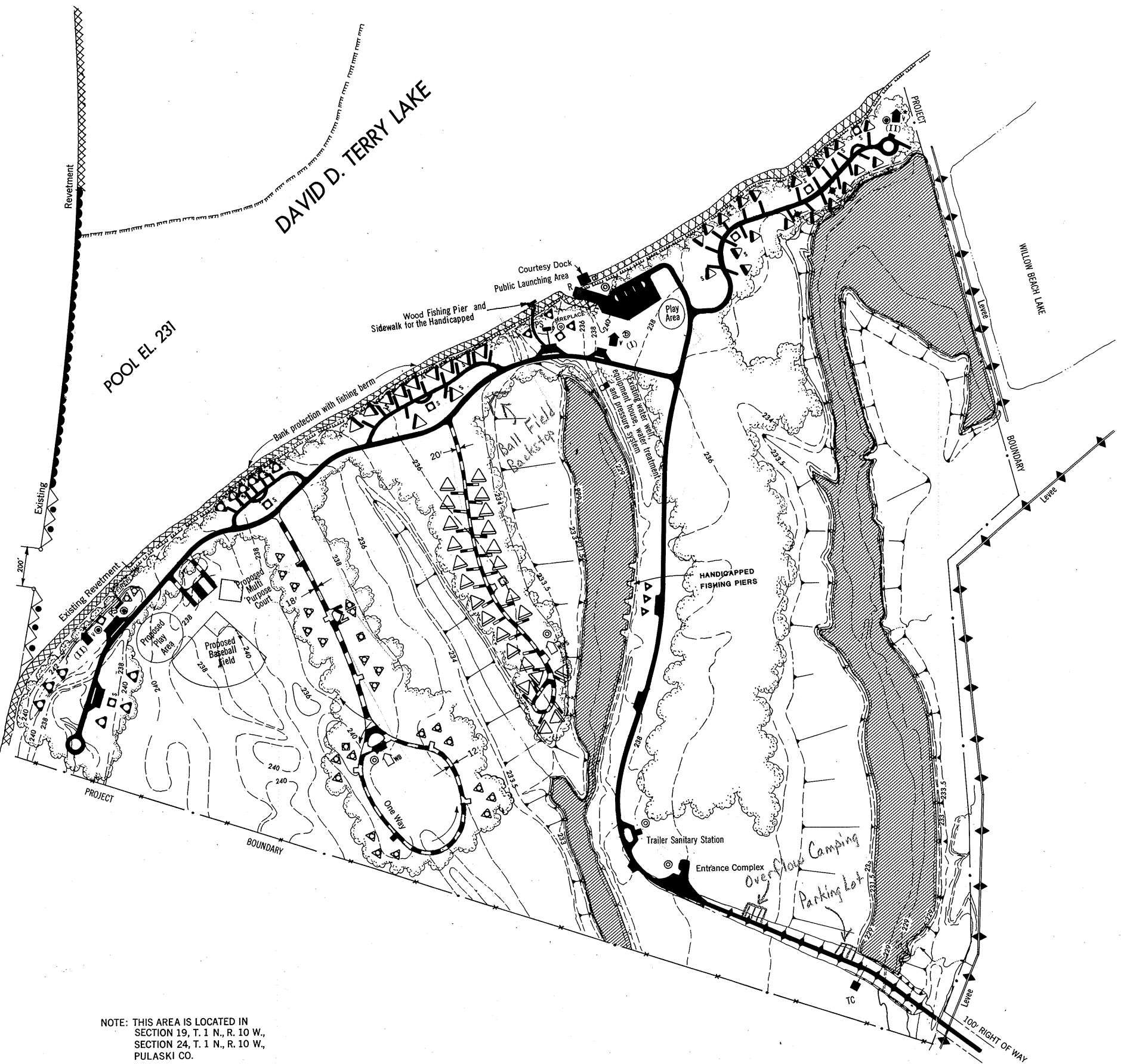
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
LITTLE ROCK, ARKANSAS, DECEMBER 1975

ARKANSAS RIVER

DAVID D. TERRY LAKE

110

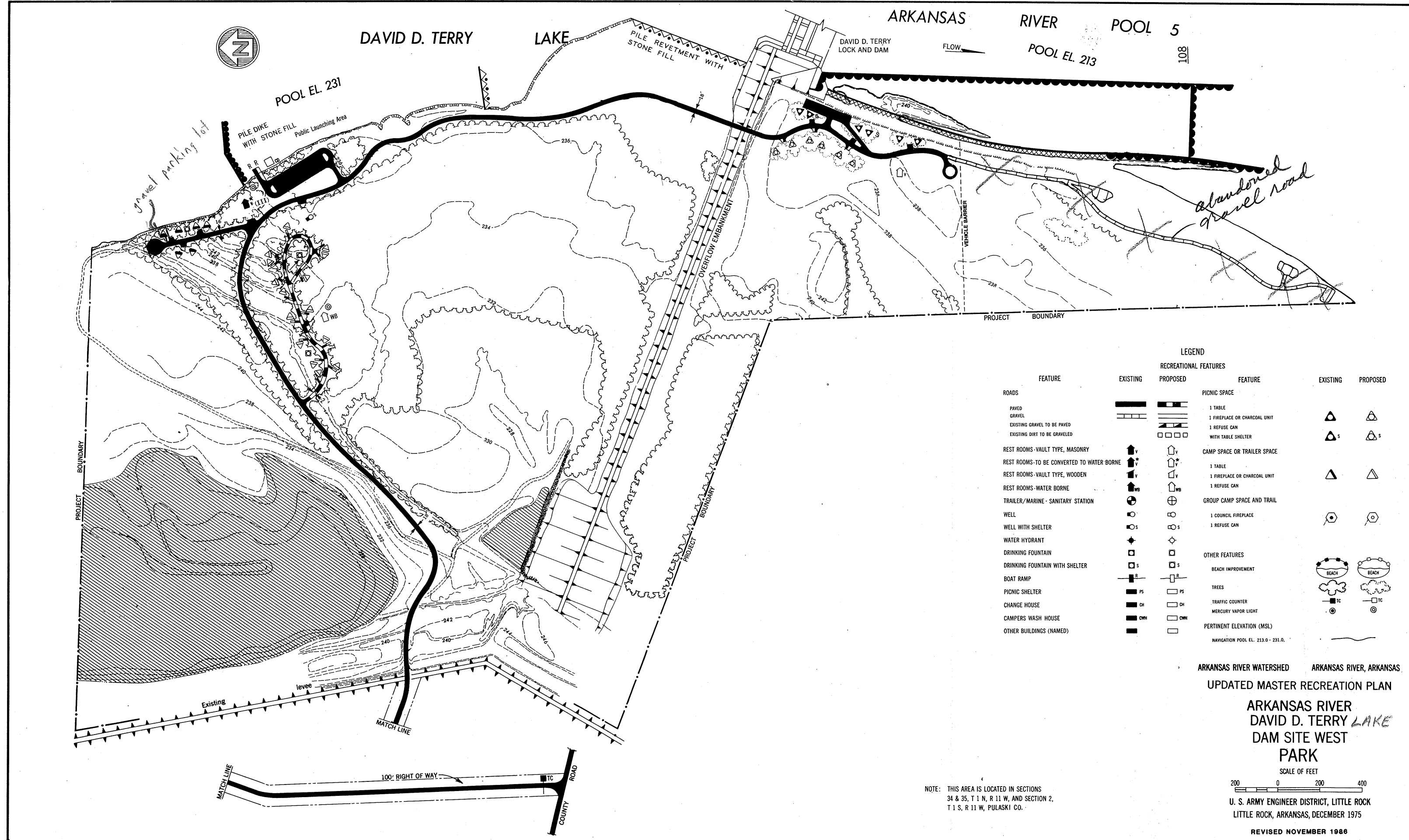
FLOW



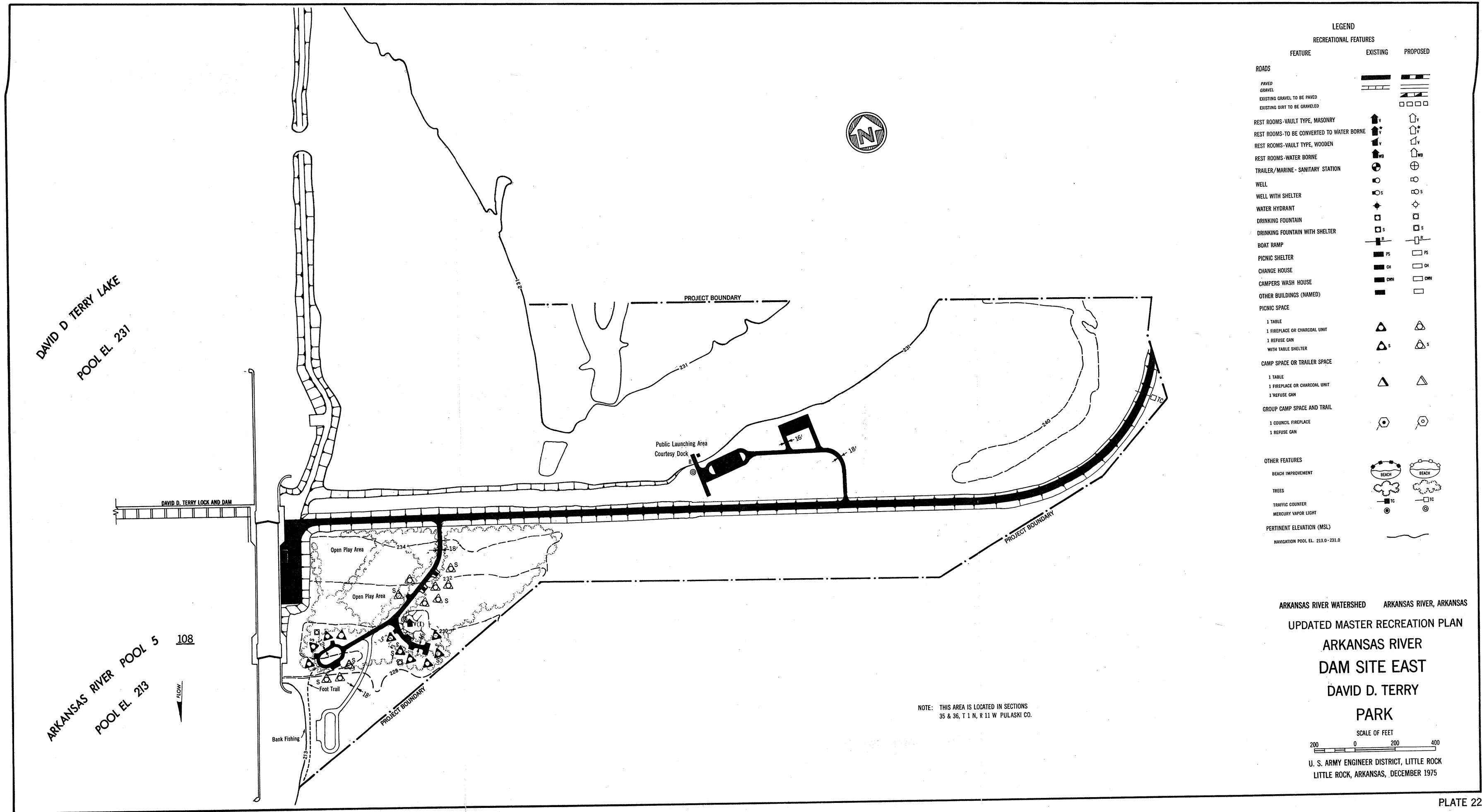
NOTE: THIS AREA IS LOCATED IN  
SECTION 19, T. 1 N., R. 10 W.,  
SECTION 24, T. 1 N., R. 10 W.,  
PULASKI CO.

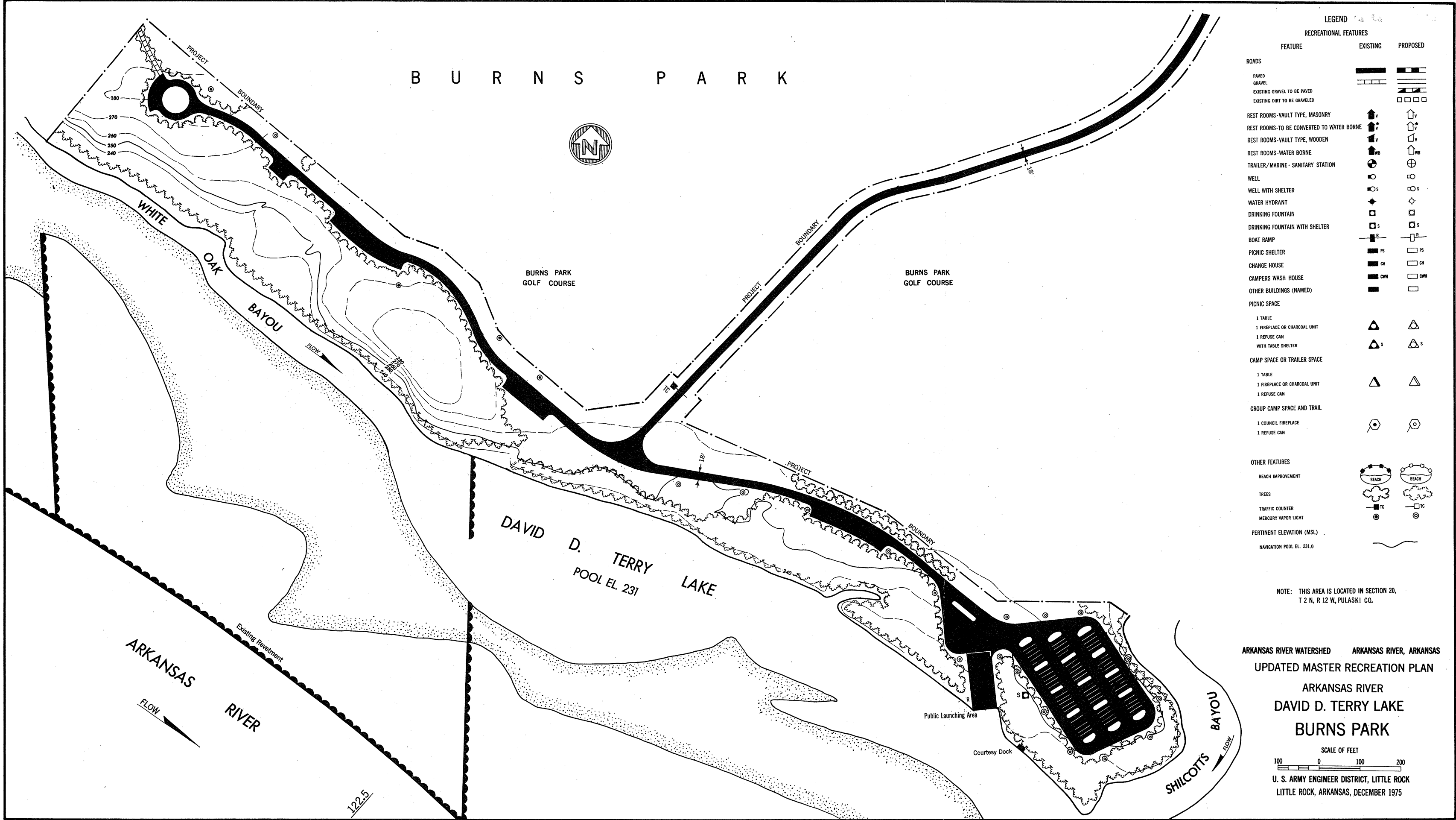
LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
ROADS		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
PICNIC SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
CAMP SPACE OR TRAILER SPACE		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
GROUP CAMP SPACE AND TRAIL		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
OTHER FEATURES		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
PERTINENT ELEVATION (MSL)		
NAVIGATION POOL EL. 231.0		

ARKANSAS RIVER WATERSHED      ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
WILLOW BEACH  
PARK  
SCALE OF FEET  
300 0 300 600  
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS  
LITTLE ROCK, ARKANSAS, DECEMBER 1975  
REVISED NOVEMBER 1986

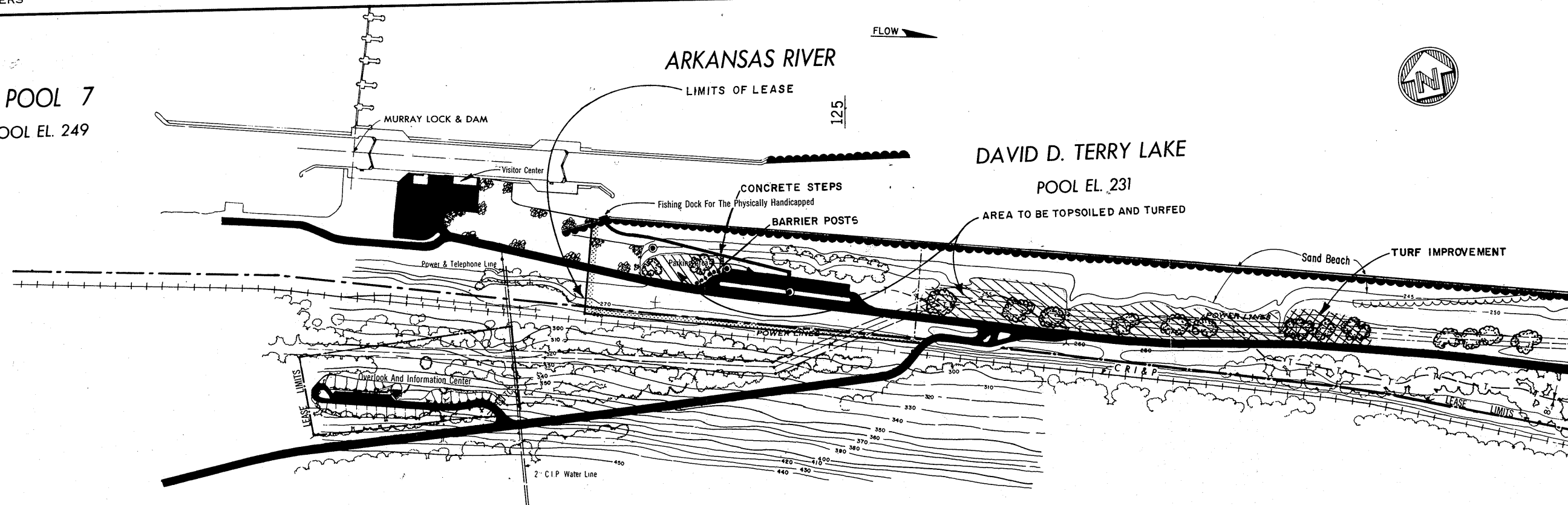








**POOL 7**  
POOL EL. 249



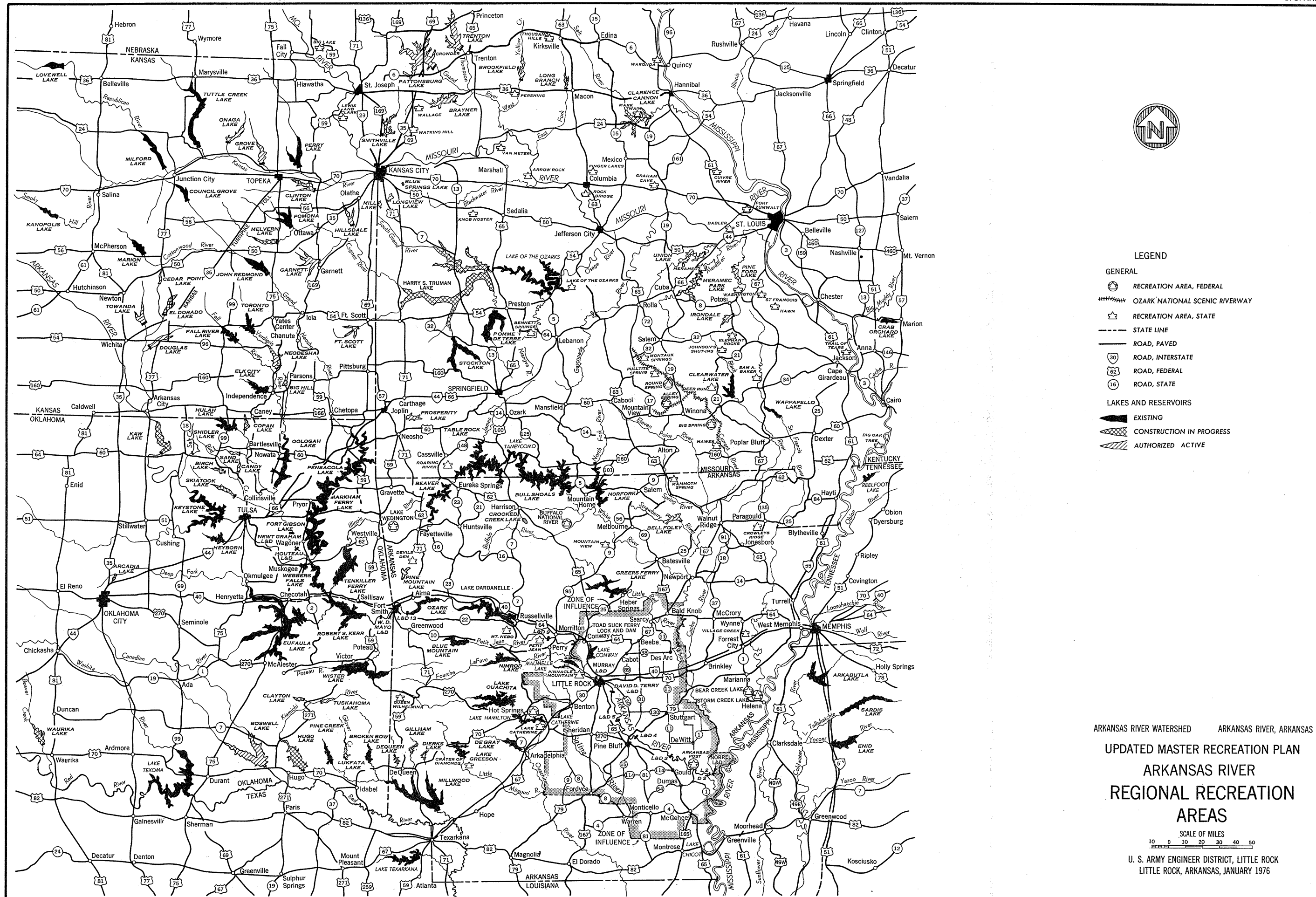
LEGEND		RECREATIONAL FEATURES		ROADS	
FEATURE	EXISTING	PROPOSED	FEATURE	EXISTING	PROPOSED
<b>PICNIC SPACE</b>			<b>PAVED</b>		
1 TABLE			<b>GRAVEL</b>		
1 FIREPLACE OR CHARCOAL UNIT			<b>EXISTING GRAVEL TO BE PAVED</b>		
1 REFUSE CAN			<b>EXISTING DIRT TO BE GRAVELED</b>		
WITH TABLE SHELTER			<b>REST ROOMS - VAULT TYPE, MASONRY</b>		
<b>CAMP SPACE OR TRAILER SPACE</b>			<b>REST ROOMS - TO BE CONVERTED TO WATER BORNE</b>		
1 TABLE			<b>REST ROOMS - VAULT TYPE, WOODEN</b>		
1 FIREPLACE OR CHARCOAL UNIT			<b>REST ROOMS - WATER BORNE</b>		
1 REFUSE CAN			<b>TRAILER/MARINE - SANITARY STATION</b>		
<b>GROUP CAMP SPACE AND TRAIL</b>			<b>WELL</b>		
1 COUNCIL FIREPLACE			<b>WELL WITH SHELTER</b>		
1 REFUSE CAN			<b>WATER HYDRANT</b>		
<b>OTHER FEATURES</b>			<b>DRINKING FOUNTAIN</b>		
<b>BEACH IMPROVEMENT</b>			<b>DRINKING FOUNTAIN WITH SHELTER</b>		
<b>TREES</b>			<b>BOAT RAMP</b>		
<b>TRAFFIC COUNTER</b>			<b>PICNIC SHELTER</b>		
<b>MERCURY VAPOR LIGHT</b>			<b>CHANGE HOUSE</b>		
<b>PERTINENT ELEVATION (MSL)</b>			<b>CAMPERS WASH HOUSE</b>		
NAVIGATION POOL EL. 231.0			<b>OTHER BUILDINGS (NAMED)</b>		

ARKANSAS RIVER WATERSHED      ARKANSAS RIVER, ARKANSAS  
**UPDATED MASTER RECREATION PLAN**  
**ARKANSAS RIVER**  
**MURRAY DAM SITE**  
**PARK**  
**SHEET 1 OF 2**

SCALE OF FEET  
 200 0 200 400

U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
 LITTLE ROCK, ARKANSAS, DECEMBER 1975  
 REVISED MARCH 1977

NOTE: THIS AREA IS LOCATED IN SECTIONS  
 23 & 24, T 2 N, R 13 W PULASKI CO.



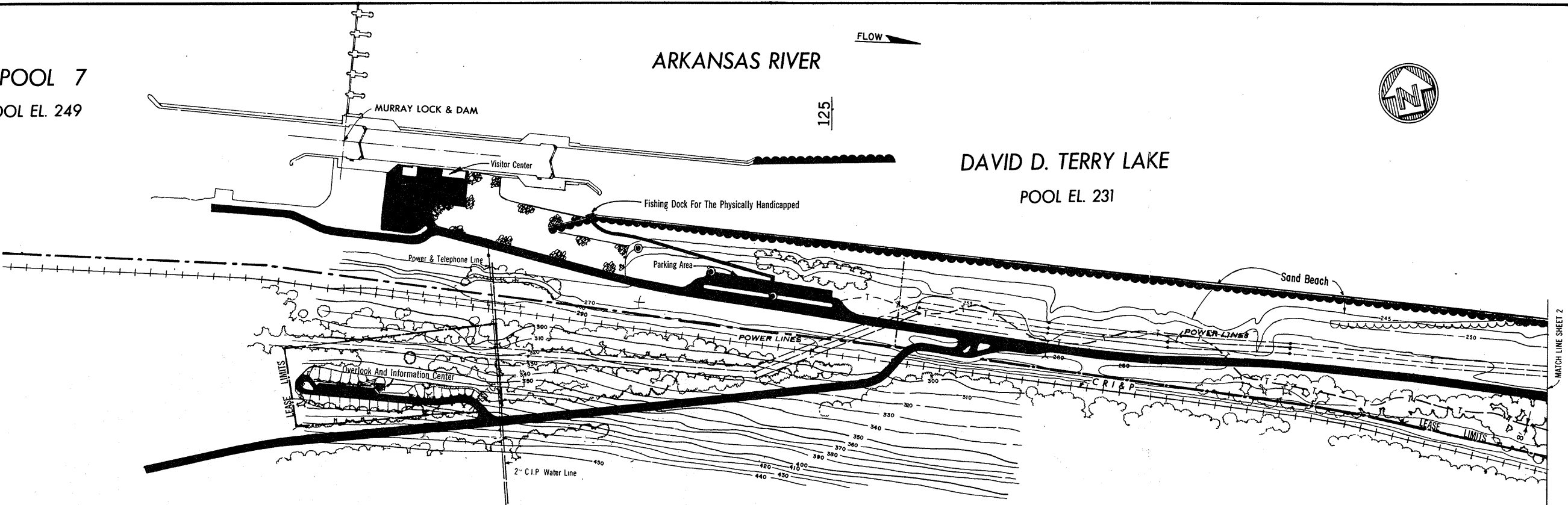
POOL 7  
POOL EL. 249

ARKANSAS RIVER

FLOW



DAVID D. TERRY LAKE  
POOL EL. 231

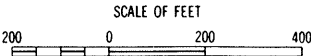


LEGEND

RECREATIONAL FEATURES

FEATURE	EXISTING	PROPOSED	FEATURE	EXISTING	PROPOSED
PICNIC SPACE			ROADS		
1 TABLE			PAVED		
1 FIREPLACE OR CHARCOAL UNIT			GRAVEL		
1 REFUSE CAN			EXISTING GRAVEL TO BE PAVED		
WITH TABLE SHELTER			EXISTING DIRT TO BE GRAVELED		
CAMP SPACE OR TRAILER SPACE			REST ROOMS-VULT TYPE, MASONRY		
1 TABLE			REST ROOMS-TO BE CONVERTED TO WATER BORNE		
1 FIREPLACE OR CHARCOAL UNIT			REST ROOMS-VULT TYPE, WOODEN		
1 REFUSE CAN			REST ROOMS-WATER BORNE		
GROUP CAMP SPACE AND TRAIL			TRAILER/MARINE - SANITARY STATION		
1 COUNCIL FIREPLACE			WELL		
1 REFUSE CAN			WELL WITH SHELTER		
OTHER FEATURES			WATER HYDRANT		
BEACH IMPROVEMENT			DRINKING FOUNTAIN		
TREES			DRINKING FOUNTAIN WITH SHELTER		
TRAFFIC COUNTER			BOAT RAMP		
MERCURY VAPOR LIGHT			PICNIC SHELTER		
PERTINENT ELEVATION (MSL)			CHANGE HOUSE		
NAVIGATION POOL EL. 231.0			CAMPERS WASH HOUSE		
			OTHER BUILDINGS (NAMED)		

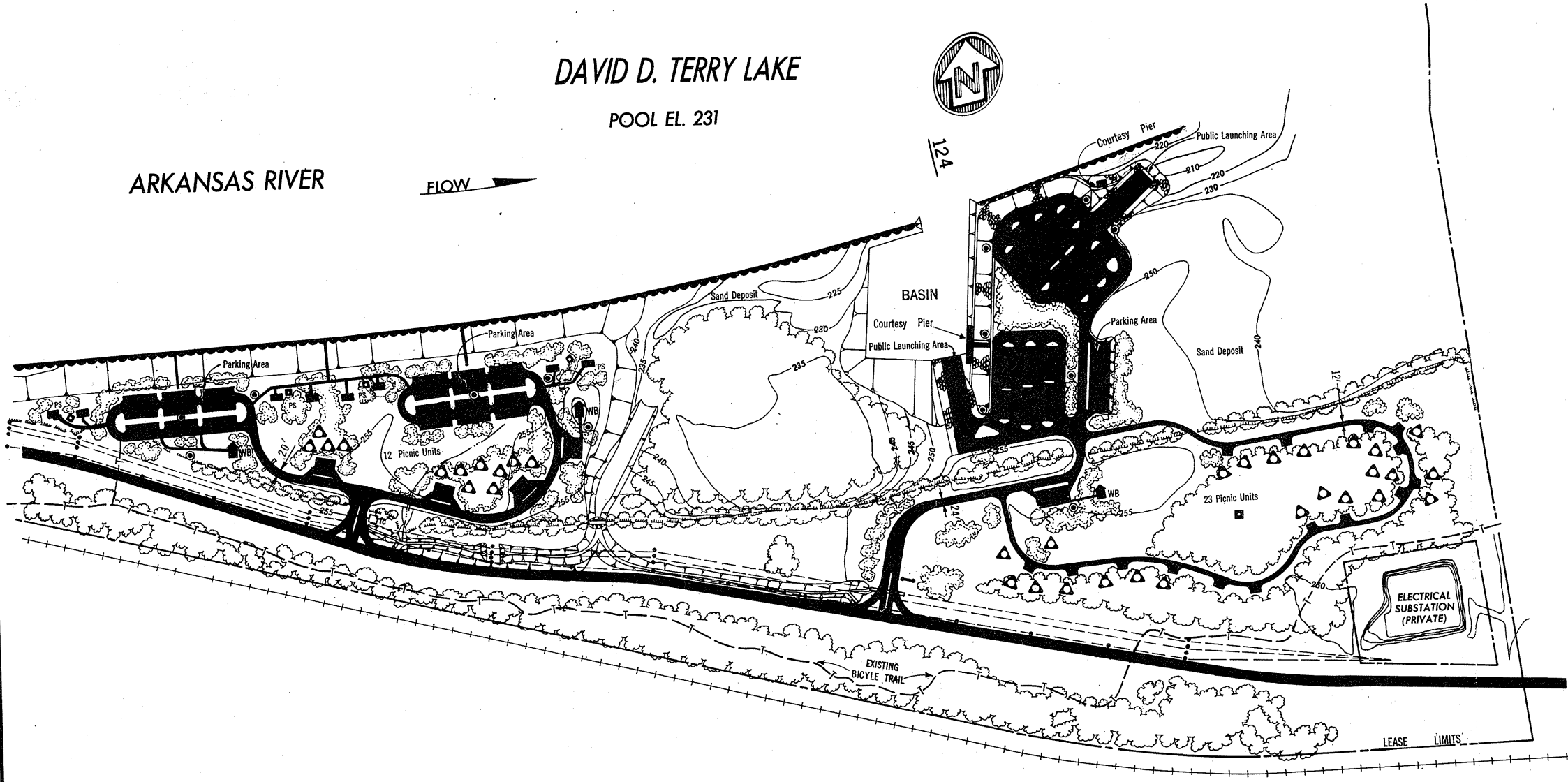
ARKANSAS RIVER WATERSHED    ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
MURRAY DAM SITE  
PARK  
SHEET 1 OF 2



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

NOTE: THIS AREA IS LOCATED IN SECTIONS  
23 & 24, T 2 N, R 13 W PULASKI CO.





LEGEND		
RECREATIONAL FEATURES		
FEATURE	EXISTING	PROPOSED
<b>ROADS</b>		
PAVED		
GRAVEL		
EXISTING GRAVEL TO BE PAVED		
EXISTING DIRT TO BE GRAVELED		
REST ROOMS - VAULT TYPE, MASONRY		
REST ROOMS - TO BE CONVERTED TO WATER BORNE		
REST ROOMS - VAULT TYPE, WOODEN		
REST ROOMS - WATER BORNE		
TRAILER/MARINE - SANITARY STATION		
WELL		
WELL WITH SHELTER		
WATER HYDRANT		
DRINKING FOUNTAIN		
DRINKING FOUNTAIN WITH SHELTER		
BOAT RAMP		
PICNIC SHELTER		
CHANGE HOUSE		
CAMPERS WASH HOUSE		
OTHER BUILDINGS (NAMED)		
<b>PICNIC SPACE</b>		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
WITH TABLE SHELTER		
<b>CAMP SPACE OR TRAILER SPACE</b>		
1 TABLE		
1 FIREPLACE OR CHARCOAL UNIT		
1 REFUSE CAN		
<b>GROUP CAMP SPACE AND TRAIL</b>		
1 COUNCIL FIREPLACE		
1 REFUSE CAN		
<b>OTHER FEATURES</b>		
BEACH IMPROVEMENT		
TREES		
TRAFFIC COUNTER		
MERCURY VAPOR LIGHT		
<b>PERTINENT ELEVATION (MSL)</b>		
NAVIGATION POOL EL. 231.0		

NOTE: THIS AREA IS LOCATED IN SECTIONS 24 & 25, T 2 N, R 13 W, AND SECTIONS 19 & 30, T 2 N, R 12 W, PULASKI CO.

ARKANSAS RIVER WATERSHED ARKANSAS RIVER, ARKANSAS  
UPDATED MASTER RECREATION PLAN  
ARKANSAS RIVER  
MURRAY DAM SITE  
PARK  
SHEET 2 OF 2  
SCALE OF FEET  
200 0 200 400  
U. S. ARMY ENGINEER DISTRICT, LITTLE ROCK  
LITTLE ROCK, ARKANSAS, DECEMBER 1975

TYPICAL ENTRANCE COMPLEX NOTES

1. PARKING AREA FOR LATE ARRIVALS AND OVERFLOW (PARKING ARRANGEMENT WILL BE SITE ADAPTED TO PRECLUDE EXTENSIVE CUTTING OF TREES. GRAVEL PARKING.)

2. WHERE JUSTIFIED BY USE, RESTROOMS MAY BE PROVIDED AWAY FROM THE GATEHOUSE. THESE MAY BE SIMILAR TO CURRENT APPROVED DESIGNS OR THOSE SHOWN IN PARK PRACTICE DESIGN (PLATES 140A&G, 229H, AND 590H).

3. TRAILS AND RESTROOMS SHALL BE DESIGNED FOR USE BY THE PHYSICALLY LIMITED.

4. AT THE GATEHOUSE A MAP OF THE AREA SHALL BE PROVIDED WITH METAL OR PLASTIC NUMBERS TO BE USED BY RANGER TO DESIGNATE OCCUPIED CAMPSITES.
5. DECORATIVE FENCE AND GATES TO BLEND WITH LANDSCAPE.

6. COMPOSITE SIGN, USER FEE SIGN, AND FEE DEPOSITORY.

7. PARKING AREA WILL BE LOCATED AND SIZED TO MEET THE NEEDS OF EACH INDIVIDUAL RECREATION AREA.

8. PARKING ARRANGEMENT WILL BE SITE ADAPTED TO PRECLUDE EXTENSIVE CUTTING OF TREES. PAVED PARKING.

