



United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Maumelle Ordnance Works Bunker #4

other names/site number PU8364

2. Location

street & number 4 Willastein Drive

not for publication

city or town Maumelle

vicinity

state Arkansas

Code AR

county Pulaski

code 119

zip code 72113

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set for in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant

nationally statewide locally. (See continuation sheet for additional comments.)

Cashie Matthews

4/7/06

Signature of certifying official/Title

Date

Arkansas Historic Preservation Program

State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See Continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

entered in the National Register.

See continuation sheet

determined eligible for the National Register.

See continuation sheet

determined not eligible for the National Register.

removed from the National Register.

other, (explain):

Signature of the Keeper

Edson H. Beall

Date of Action

5/24/06

5. Classification

Ownership of Property
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property
(Do not include previously listed resources in count.)

Contributing	Noncontributing	
		buildings
		sites
1		structures
		objects
1		Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of Contributing resources previously listed in the National Register

N/A

6. Function or Use

Historic Functions
(Enter categories from instructions)

DEFENSE/arms storage

Current Functions
(Enter categories from instructions)

Vacant/Not in Use

7. Description

Architectural Classification
(Enter categories from instructions)

OTHER

Materials
(Enter categories from instructions)

foundation Concrete
walls Concrete

roof Concrete
other

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

SUMMARY

Maumelle Ordnance Works Bunker #4 was one of twenty-one original bunkers constructed in Maumelle as part of the Maumelle Ordnance Works built between 1941 and 1942. The bunkers were built for production of picric acid and ammonium picrate for use during World War II. In 1945 production of picric acid and ammonium picrate ceased and the plant was slated for decontamination. In subsequent years all but three of the twenty-one bunkers have been destroyed. Maumelle Ordnance Works Bunker #4 is the only surviving bunker that is completely intact.

ELABORATION

The twenty-one bunkers located around Lake Willastein in Maumelle, Arkansas, were of standard materials and dimensions. The bunkers were constructed of reinforced concrete. They were built into the earth so that only the front was visible. The bunkers were 61 feet long by 27 feet wide. They had rounded roofs with an inside radius of 13 feet 5 inches. All magazines have lighting rod protection system, ventilator stack with fusible link control, membrane waterproofing, indirect lighting by reflective mirrors and floodlights, steel doors, and concrete pavement adjacent to entrance for loading and unloading. Maumelle Ordnance Works Bunker #4 is no exception to these standard dimensions.

INTEGRITY

Maumelle Ordnance Works Bunker #4 has not been altered since its construction in 1942. The concrete structure is still intact with its original steel door. This bunker is a wonderful reminder of the days during which Maumelle was little more than an arms manufacturing area.

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
B Property is associated with the lives of persons significant in our past.
C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
D Property has yielded, or is likely to yield, information important in prehistory or history.

Levels of Significance (local, state, national)

Local

Areas of Significance (Enter categories from instructions)

MILITARY

ARCHITECTURE

Period of Significance

1942-1945

Significant Dates

1942-1945

Significant Person (Complete if Criterion B is marked)

N/A

Cultural Affiliation (Complete if Criterion D is marked)

N/A

Architect/Builder

The City Services Defense Corporation of New York (Main Contractor) Arkansas State Employment Service (Construction Labor)

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A owned by a religious institution or used for religious purposes.
B removed from its original location.
C birthplace or grave of a historical figure of outstanding importance.
D a cemetery.
E a reconstructed building, object, or structure.
F a commemorative property
G less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
previously listed in the National Register
Previously determined eligible by the National Register
designated a National Historic Landmark
recorded by Historic American Buildings Survey
#
recorded by Historic American Engineering

Primary location of additional data:

- State Historic Preservation Office
Other State Agency
Federal Agency
Local Government
University
Other

Name of repository:

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 1

SUMMARY

Maumelle Ordnance Works Bunker #4 is being nominated to the National Register of Historic Places with **local significance** under **Criterion A** for its association with wartime activities on the home front during World War II and under **Criterion C** as the best example of an ordnance bunker in the Maumelle area. This remaining bunker is the only intact example of a Maumelle Ordnance Works (MOW) bunker and is a significant part of the city's history. Maumelle was not incorporated as a city until 1985. The development of the land for MOW led to the eventual residential settlement in Maumelle. This structure is a significant part of the city's history in terms of its contributions to the development of Maumelle and local involvement in the war effort.

ELABORATION

The Maumelle Ordnance Works main function during World War II was the manufacture of two kinds of explosives, picric acid and ammonium picrate. Picric Acid (2, 4, 6- trinitrophenol) was the modern high explosive to be used extensively as a burster in gun projectiles. It was first obtained by the nitration of indigo, and used primarily as a fast dye for silk and wool. It offered many advantages; when compressed it was used as a booster for other explosives, and when cast, served as a burster in explosive shells. It was stable, insensitive, relatively nontoxic, and had a high density when cast.

The War Department decided to build Maumelle Ordnance Works on July 11, 1941, after entering into contract W-ORD-525-DA-W-ORD-11 with the Cities Service Defense Corporation. It acquired 7,613.61 acres located near West Marche, Arkansas, for this plant. The plant would exclusively be for the production of picric acid and ammonium nitrate Approval of the contract for the Maumelle Ordnance Works was granted on July 15, 1941. The contract originally called for an ammonium picrate plant composed of six units with an estimated average daily capacity of 75,000 pounds. After the initial survey and the laying of water and gas lines, work on the administration buildings commenced on September 2, 1941. The main facilities of the Maumelle Ordnance Works contained various buildings associated in the manufacture of ammonium picrate and picric acid, along with a synthetic nitric acid plant, a nitric acid condensing plant, and sulfuric acid reclaiming plant. These facilities also had cooling towers, auxiliary tanks and other buildings. They were interconnected by pipelines, utility lines and a road system. In all there were nine ammonium picrate manufacturing units, dryer houses, auxiliary buildings, tanks and other equipment.

The plant placed orders for the raw material of the production of ammonium picrate in February 1942. In March 1942, a supplement to the original contract was approved. It called for a fifty percent increase in capacity. A subsequent change order provided for the recovery of nitric acid. The plant was to consist of nine ammonium picrate manufacturing units. Delays in the arrival of equipment slowed work on the plant, but work continued on the facilities. These facilities included 21 storage igloos (bunkers). The first ammonium picrate unit was ready to begin production on March 29, 1942.

United States Department of the Interior
National Park Service

National Register of Historic Places

Continuation Sheet

Section number 8 Page 2

The plant was basically completed on May 25, 1942. The first sulfuric acid concentrator started on June 11. On June 25, the War Department asked the contractor to begin the production by July 16, 1942. Capacity was subsequently increased by the addition of the extra three ammonium picrate units on November 17, 1942. Due to the critical supply of the raw material, phenol, the plant was under utilized with only six ammonium picrate units running by the end of the year. Production of ammonium picrate and picric acid continued until August 15, 1945, when the War Department notified that all production would terminate. However, an exception was made for the production of special fine ammonium picrate. The next day, the contractor put the plant into standby conditions and they began the decontamination of the plant. Subsequently the production of special fine ammonium picrate ceased on August 23. The contractor finished the decontamination operations of the plant by November 20, 1945.

The Little Rock District of the U.S. Army Corps of Engineers transferred 2,344.06 acres in the safety zone of the plant to the Federal Land Bank's Surplus Property Board on September 13, 1945. On December 19, 1945, the U.S. Army Ordnance Department continued the decontamination and shutdown of the plant. The contractor provided a final report of its decontamination activities on February 28, 1946. The U.S. Army Corps of Engineers assumed standby operations for the entire plant on April 26, 1946. By February 1947, the safety zone property had either been returned to former owners or sold. The plant remained in a standby status, falling under command of the Arkansas Ordnance Works. Attempts were made to lease parcels of the reservation for grazing purposes. They also used the storage igloos at the Maumelle Ordnance Works to house in-transit bulk explosives.

It was not until February 1959 that the U.S. Army Corps of Engineers reported the remaining 5,213.84 acres excess to the needs of the government. The General Services Administration subsequently reported the property excess on June 20, 1960. After unsuccessful low bids to sell the plant, the General Services Administration accepted a bid from the Perry Equipment Company on March 3, 1961. The Perry Equipment Company performed considerable salvage of the plant facilities. During the 1960s, the Perry Equipment Company sold the property to the Maumelle Land Development Corporation. In 1968, entrepreneur Jess Odom applied for the property to be the third project the U.S. Housing and Urban Development's (HUD) New Communities Act. During the ensuing years, most of the bunkers were razed and removed. The remaining three bunkers all front Lake Willastein and are less than a mile apart. One of the bunkers is owned by the city and is used by the fire department for training. A second bunker had its front and sides removed to convert it into a pavilion. The third is Maumelle Ordnance Works Bunker #4 which is presently used for storage but is planned to be preserved and open to the public.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 3

The Maumelle Land Development Corporation entered into a project agreement with HUD on December 17, 1971, forming the Maumelle New Town. The area was developed into a residential community, based on the New Town planning model. In 1972 lots began to form in Maumelle along with plans for schools and streets. However, sales of property did not keep up with investment. Parts of the property were sold to other interests. In 1985, the Maumelle Land Development Corporation sold all of its remaining holdings to other developers, thus ending the New Town. The City of North Little Rock, Arkansas, attempted to annex the area at that time. Residents of the New Town opposed this idea and incorporated in July 1985, to form the City of Maumelle. Maumelle is presently a city with over 10,000 residents. It covers nine square miles just north of the Arkansas River and a few miles northwest of the state capitol of Little Rock.

STATEMENT OF SIGNIFICANCE

Maumelle Ordnance Works Bunker #4 is being nominated to the National Register of Historic Places with **local significance** under **Criterion A** for its association with wartime activities on the home front during World War II and under **Criterion C** as the best example of an ordnance bunker in the Maumelle area. This remaining bunker is the only intact example of a Maumelle Ordnance Works (MOW) bunker and is a significant part of the city's history. Maumelle was not incorporated as a city until 1985. The development of the land for MOW led to the eventual residential settlement in Maumelle. This structure is a significant part of the city's history in terms of its contributions to the development of Maumelle and local involvement in the war effort.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 Page 1

BIBLIOGRAPHY

Arkansas Gazette, August 1, 1941 sec. 5A:1

Arkansas Gazette, August 3, 1941 sec. 1A:4

Arkansas Gazette, July 5, 1942 sec. 25A:1

Arkansas Gazette, July 5, 1942 sec. 25A:1

Green, Frederick, editor. "A Brief History of Maumelle, Arkansas." July 1996.

"History of Maumelle." Accessed online: <http://maumelle.dina.org/living/history.html>. January 2006.

Maumelle Ordnance Works Bunker #4
Name of Property

Pulaski County, Arkansas
County and State

10. Geographical Data

Acreage of Property Less than one.

UTM References

(Place additional UTM references on a continuation sheet.)

1 15 553690 3856864
Zone Easting Northing
2 _____

3 _____
Zone Easting Northing

4 _____

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Elizabeth A. James
organization Arkansas Historic Preservation Program date April 7, 2006
street & number 1500 Tower Building, 323 Center Street telephone 501-324-9789
city or town Little Rock state AR zip code 72205

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items

(Check with the SHPO or FPO for any additional items.)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name The City of Maumelle
street & number 550 Edgewood Drive Suite 590 telephone 501-851-2500
city or town Maumelle state AR zip code 72113

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listing. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*)

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P. O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20303.

Maumelle Ordnance Works Bunker #4

Name of Property

Pulaski County, Arkansas

County and State

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section number 10 Page 1

LEGAL BOUNDARY DESCRIPTION

A TRACT OF LAND LYING WITHIN A CITY PARK IN SECTION 32, TOWNSHIP 3 NORTH, RANGE 13 WEST, PULASKI COUNTY ARKANSAS. SAID PROPERTY BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER SECTION 32 THENCE S00°00'0"E 59.07 FEET, THENCE N90°00'00"W 1225.40 FEET TO THE POINT OF BEGINNING. THENCE N06°08'40"E 88.88 FEET, THENCE S83°51'20"W 70.80 FEET, THENCE S06°08'40"E 88.88 FEET, THENCE N83°51'20"E 70.80 FEET TO THE POINT OF BEGINNING. SAID PROPERTY CONTAINS 3,146 SQUARE FEET MORE OR LESS.

BOUNDARY JUSTIFICATION

This boundary includes all land historically associated with Maumelle Ordnance Works Bunker #4.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Maumelle Ordnance Works Bunker #4

MULTIPLE
NAME:

STATE & COUNTY: ARKANSAS, ~~Clark~~ Pulaski

DATE RECEIVED: 4/13/06 DATE OF PENDING LIST: 4/26/06
DATE OF 16TH DAY: 5/11/06 DATE OF 45TH DAY: 5/27/06
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 06000417

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

ACCEPT RETURN REJECT 5.24.06 DATE

ABSTRACT/SUMMARY COMMENTS:

Entered in the
National Register

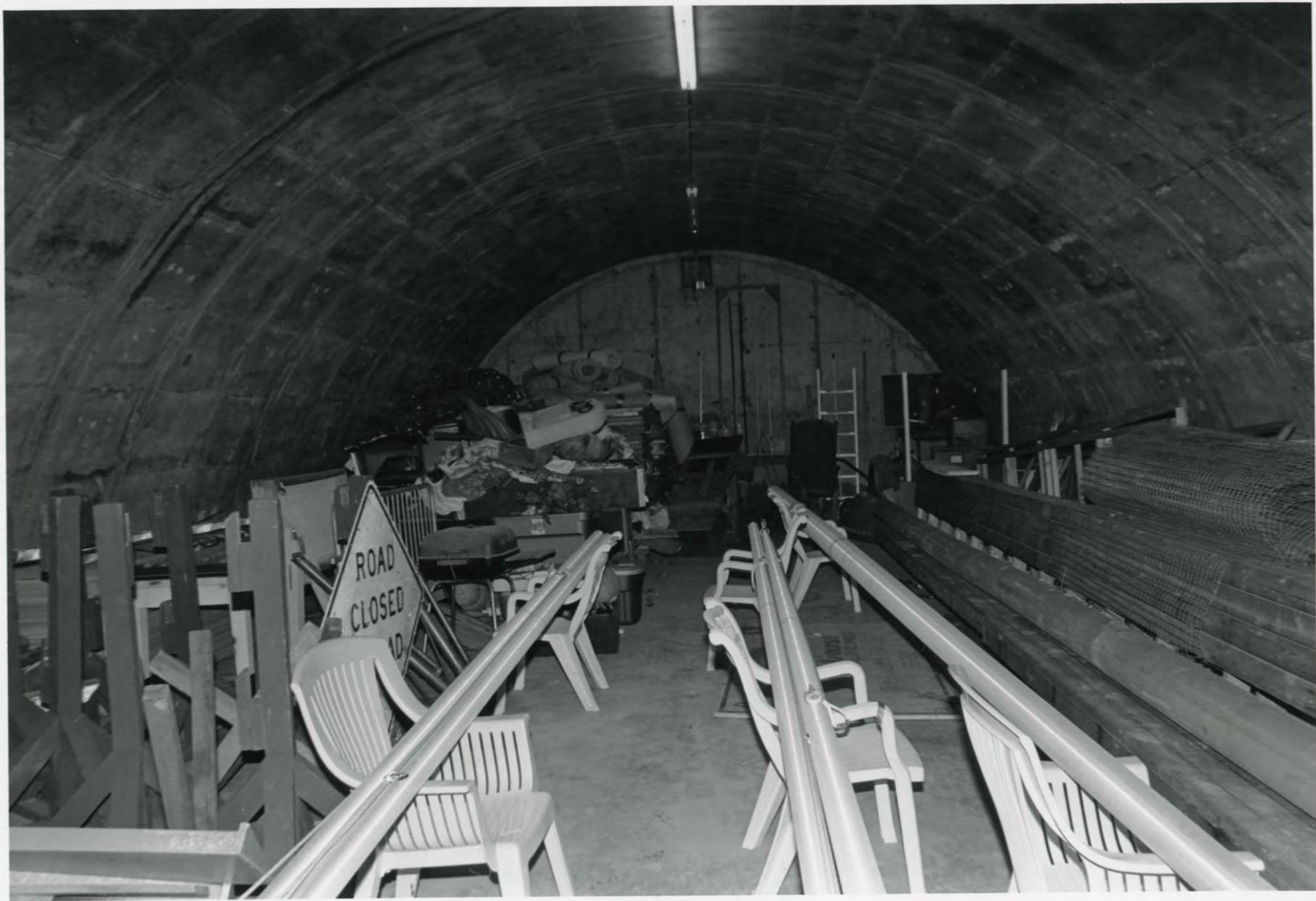
RECOM./CRITERIA _____

REVIEWER _____ DISCIPLINE _____

TELEPHONE _____ DATE _____

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.



MAUMELLE ORDNANCE WORKS BUNKER #4

PULASKI COUNTY, ARKANSAS

ELIZABETH JAMES

FEBRUARY 2006

ARKANSAS HISTORIC PRESERVATION PROGRAM

INTERIOR, LOOKING SOUTH

1 of 6



MAUMELLE ORDNANCE WORKS BUNKER #4
PULASKI COUNTY, ARKANSAS

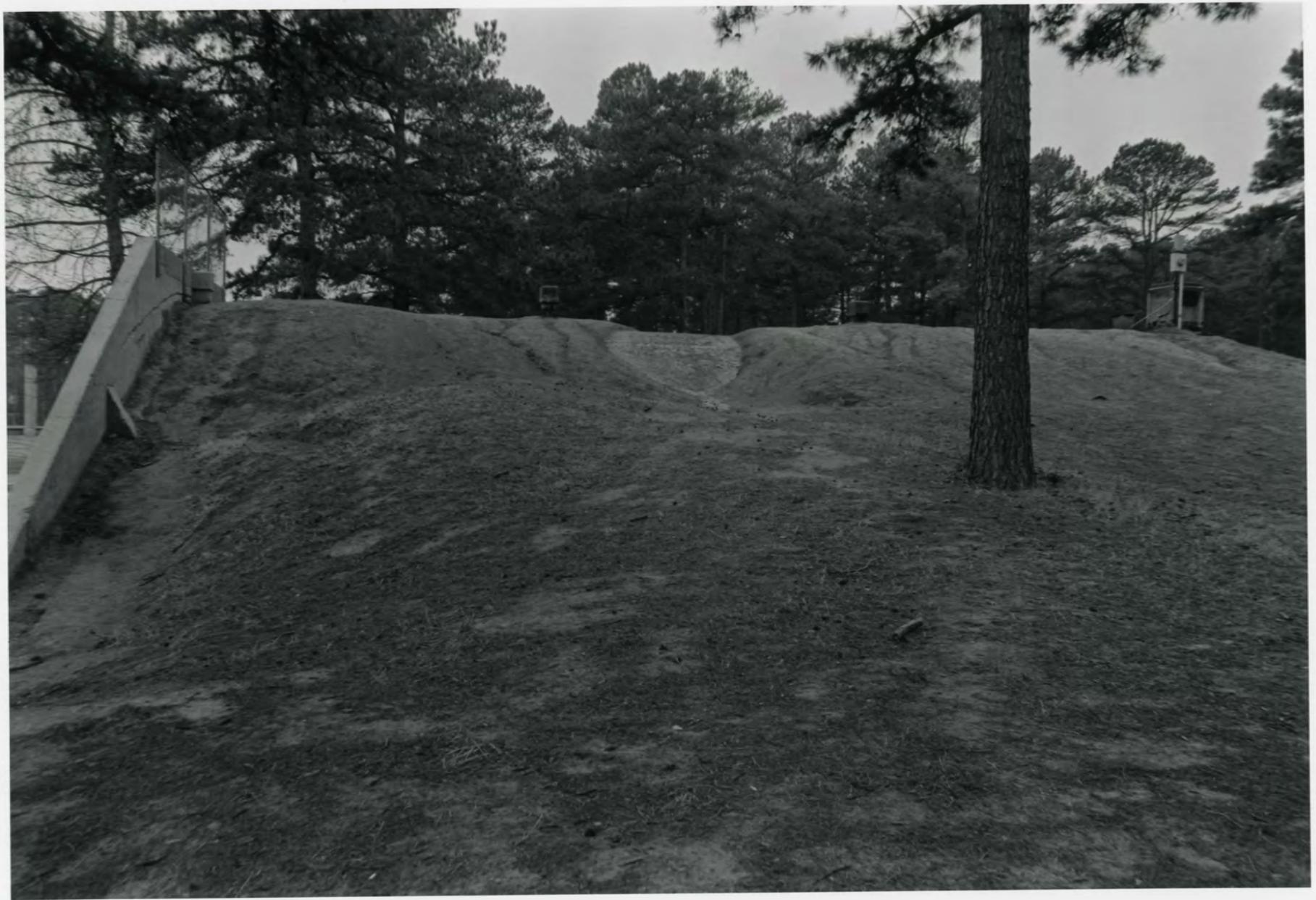
ELIZABETH JAMES

FEBRUARY 2006

ARKANSAS HISTORIC PRESERVATION PROGRAM

SOUTHWEST CORNER LOOKING NORTHEAST

2 of 6



MAUMELLE ORDONANCE WORKS BUNKER #4

PULASKI COUNTY, ARKANSAS

ELIZABETH JAMES

FEBRUARY 2006

ARKANSAS HISTORIC PRESERVATION PROGRAM

WEST SIDE, LOOKING EAST

3 of 6



MAUMELLE ORDINANCE WORKS BUNKER #4

PULASKI COUNTY, ARKANSAS COUNTY

ELIZABETH JAMES

FEBRUARY 2006, ARKANSAS HISTORIC PRESERVATION PROGRAM

EAST SIDE, LOOKING WEST

4 of 6



Bunker
4
306

MAUMELLE ORDNANCE WORKS BUNKER #4

PULASKI COUNTY, ARKANSAS

ELIZABETH JAMES

FEBRUARY 2006

ARKANSAS HISTORIC PRESERVATION PROGRAM

DETAIL OF ENTRY, LOOKING SOUTH

5 of 6



MAUMELLE ORDNANCE WORKS BUNKER #4

PULASKI COUNTY, ARKANSAS

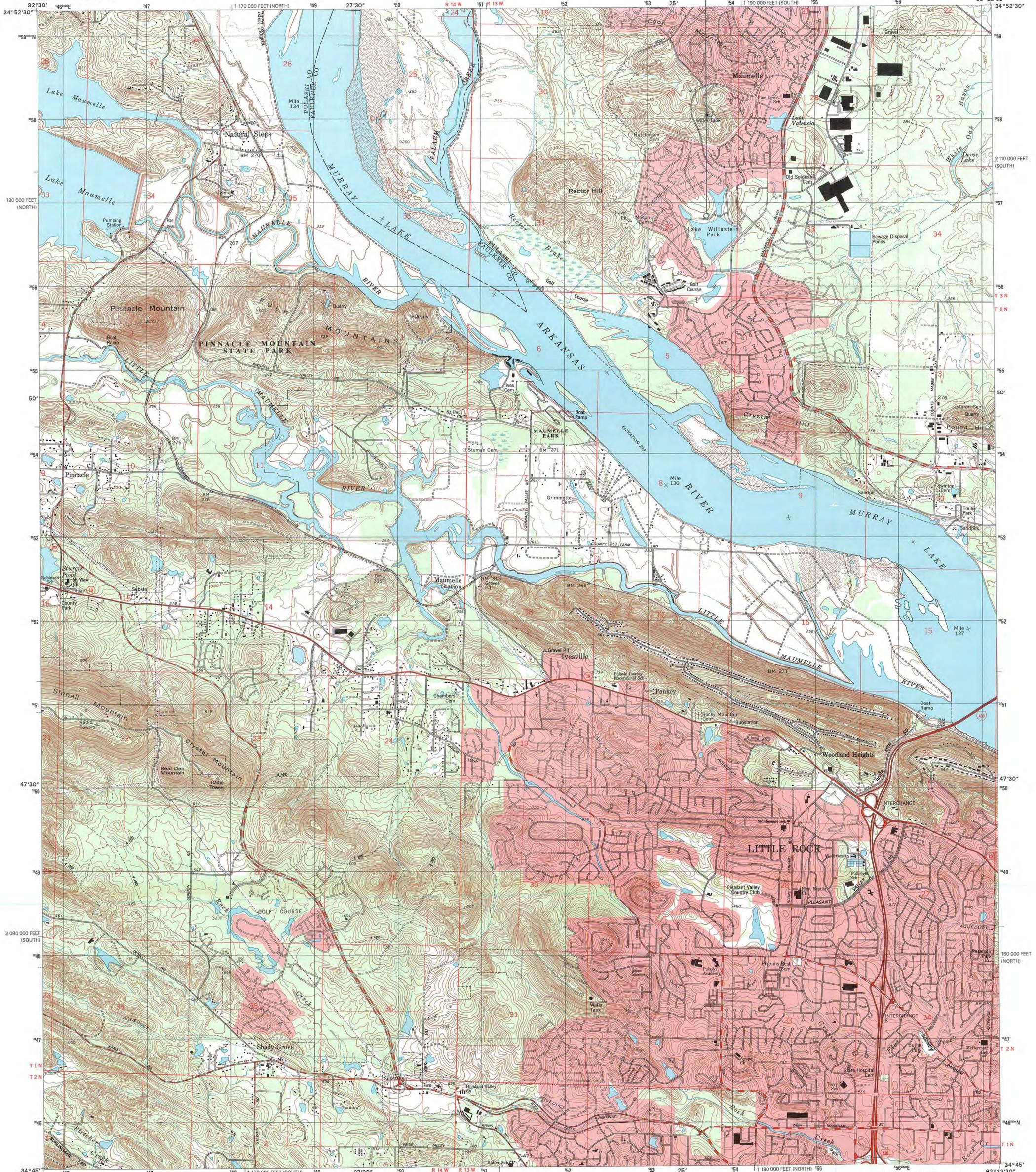
ELIZABETH JAMES

FEBRUARY 2006

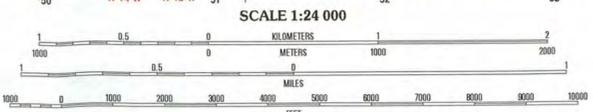
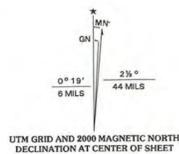
ARKANSAS HISTORIC PRESERVATION PROGRAM

NORTH SIDE, LOOKING SOUTH

6 of 6



Produced by the United States Geological Survey
Topography compiled 1960. Planimetry derived from imagery taken 1994 and other sources. Public Land Survey System and survey control current as of 1985.
North American Datum of 1983 (NAD 83). Projection and 1 000-meter grid: Universal Transverse Mercator, zone 15 10 000-foot ticks; Arkansas Coordinate System of 1983 (south and north zones).
North American Datum of 1927 (NAD 27) is shown by dashed corner ticks. The values of the shift between NAD 83 and NAD 27 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software.
There may be private inholdings within the boundaries of the National or State reservations shown on this map.
Landmark buildings verified 1985.



CONTOUR INTERVAL 10 FEET
SUPPLEMENTARY CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
TO CONVERT FROM FEET TO METERS, MULTIPLY BY 0.3048



ROAD CLASSIFICATION

Primary highway	Light-duty road, hard or hard surface
Improved surface	Unimproved road
Secondary highway	
Interstate Route	U.S. Route
State Route	

1	2	3	1 Fourche
2	3	4	2 Maumelle
3	4	5	3 Cato
4	5	6	4 Fendale
5	6	7	5 North Little Rock
6	7	8	6 Camp
7	8		7 Alexander
8			8 Little Rock

ADJOINING 7.5' QUADRANGLE NAMES

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 25286, DENVER, COLORADO 80225
AND ARKANSAS GEOLOGICAL COMMISSION, LITTLE ROCK, ARKANSAS 72204
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

PINNACLE MOUNTAIN, AR
1994

NIMA 7553 IV SW-SERIES V884





The Department of
**Arkansas
Heritage**

Mike Huckabee, Governor
Cathie Matthews, Director

Arkansas Arts Council

▪

Arkansas Natural Heritage
Commission

▪

Delta Cultural Center

▪

Historic Arkansas Museum

▪

Mosaic Templars
Cultural Center

▪

Old State House Museum



Arkansas Historic
Preservation Program

1500 Tower Building
323 Center Street
Little Rock, AR 72201
(501) 324-9880
fax: (501) 324-9184
tdd: (501) 324-9811

e-mail: info@arkansaspreservation.org

website:

www.arkansaspreservation.org

An Equal Opportunity Employer



April 6, 2006

Dr. Janet Matthews
Chief of Registration
United States Department of the Interior
National Register of Historic Places
National Park Service
8th Floor
1201 Eye Street, NW
Washington, DC 20005



RE: Maumelle Ordnance Works Bunker #4 – Maumelle, Pulaski
County

Dear Dr. Matthews:

We are enclosing for your review the above-referenced nomination. The Arkansas Historic Preservation Program has complied with all applicable nominating procedures and notification requirements in the nomination process.

If you need further information, please call Elizabeth A. James of my staff at (501) 324-9789. Thank you for your cooperation in this matter.

Sincerely,

Cathie Matthews
State Historic Preservation Officer

CM:eaj

Enclosure