



January 18, 2022

Mr. Bryan Leamons, P.E.  
Senior Operations Manager – Office of Water Quality  
ARKANSAS ENERGY AND ENVIRONMENT  
DIVISION OF ENVIRONMENTAL QUALITY  
5301 Northshore Drive  
North Little Rock, AR 72118-5328

RE: Paradise Valley Subdivision WWTP  
NPDES Permit No. AR0053210  
AFIN: 60-05010

Dear Mr. Leamons:

On behalf of Paradise Valley Subdivision and Rick Ferguson, this letter is in response to your letter dated January 6, 2022. The enumerated responses below correspond directly to your request for additional information.

1. Attached is the final signed Multipurpose Improvement District No. 2021-2 forming the property owners district for Paradise Valley Subdivision.
2. Mr. Ferguson has developed and installed wastewater treatment facilities for similar residential subdivisions. Monitored flows from those subdivisions are normally 135 gallons per day per house. 135 gal/day x 300 homes equals 40,500 gallons which is approximately 80% of design flow. When the actual flow from Paradise Valley reaches 40,000 gal/day, Paradise Valley will submit a request to DEQ to modify their permit for an additional 50,000 gal/day treatment plant.
3. The Arkansas Historic Preservation Program (AHPP) sent the attached narrative and maps on the possible historic site in the vicinity of Paradise Valley WWTP. AHPP did not know about this site and it was first recorded in October 2021.

The third paragraph of the AHPP narrative indicates their concern is additional man-made influences (assume flows from WWTP) could be detrimental to the site.

AHPP acknowledges the site is subject to natural flooding. According to AHPP maps the historic site is located within the floodplain of Mill Bayou on a local rise at elevation between 260 and 270 msl. The mapped zone AE(100 year) floodplain elevation for Mill

Bayou in this area is 265 msl. Attached is a PAGIS floodplain map with contours that indicates the location of the AHPP site and the location of the Paradise Valley WWTP. The AHPP site is within the FEMA mapped flood zone and likely is flooded at elevations near 265 msl or below.

The Paradise Valley WWTP flow will flow into the floodplain of Mill Bayou. The proposed flow from the WWTP is 50,000 gpd or 0.08 cubic feet per second (cfs). The peak flow for Mill Bayou in this location is 6,400 cfs, see attached FEMA FIS report page. Even at 100,000 gpd (future buildout), 100,000 gal/day equals 69.4 gpm x 1.8 (peak factor) = 124.92 gpm = 0.28 cfs. The WWTP flow of 0.28 cfs compared to the 6,400 cfs at this location should be negligible and therefore, additional water surface rise due to the WWTP flow should be minimal.

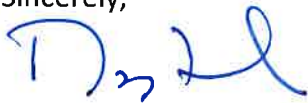
The velocity of the discharge from the WWTP flowing into Mill Bayou is very small compared to the flow of Mill Bayou in this area, therefore, concern about additional erosion due to WWTP discharge should be minimal.

- 4a. Attached is Permit No. 21-629, the Flood Development Permit from Pulaski County, no other permitting is required for the WWTP site.
- 4b. Attached is a preliminary plat that was signed by Pulaski County on December 21, 2021. The certificate states that all requirements of the Pulaski County Subdivision Rules and Regulations have been fulfilled. The certificate is good for two years which allows the project to be constructed and a final plat approved and recorded by Pulaski County.
- 4c. Pulaski County does not require platting for parcels larger than 10 acres. The parcel of land where the WWTP is located is approximately 31.12 acres, therefore, no plat needed.

We request your review of the above responses and publication of the additional 30-day public comment period as soon as possible.

If you need additional information, please let me know.

Sincerely,



Wm. Doug Ford, P.E.  
Principal

WDF:tlr

Enclosures

cc: Mr. Rick Ferguson, Paradise Valley Subdivision

FERG-11791

# **MULTIPURPOSE IMPROVEMENT DISTRICT DOCUMENTS**

**FILED**

**IN THE COUNTY COURT OF PULASKI COUNTY, ARKANSAS  
NO. 2021-044**

JAN 12 2022

**TERRI HOLLINGSWORTH  
CIRCUIT COUNTY CLERK**

**IN RE: PETITION TO FORM PULASKI COUNTY  
PROPERTY OWNERS' MULTIPURPOSE IMPROVEMENT  
DISTRICT NO. 2021-2 (PARADISE VALLEY SUBDIVISION)**

**ORDER  
2022-07**

The Pulaski County Court finds:


Pursuant to Ark. Code Section 14-93-106 the Court has heard on the date and time ordered by the Court and noticed for two consecutive weeks in the *Arkansas Democrat-Gazette*, which is within sixty (60) days after presentation by the County Clerk, the Petition to Form Pulaski County Property Owners' Multipurpose Improvement District No. 2021-2 (Paradise Valley Subdivision) (the "District") to ascertain whether those signing said Petition constitute all the owners of the real property to be located in the District. The Court has determined from evidence presented to the Court that all the owners of the real property to be located in the District have petitioned for the improvements.

IT IS, THEREFORE, ORDERED that the real property described in Exhibit "A" attached hereto and made a part hereof is hereby established and laid off into Pulaski County Property Owners' Multipurpose Improvement District No. 2021-2 (Paradise Valley Subdivision) for the purpose of (a) constructing and maintaining waterworks, sewers, wastewater treatment plant, and systems of gas pipelines, and (b) grading, draining, paving, curbing, and guttering streets and laying sidewalks, together with facilities related to any of the foregoing within said district, and (c) specifically to extend potable water services from municipal facilities to residents of the District. Specifically and without limitation the District intends to construct, operate, and maintain a private sewer plant for the benefit of District property owners.



IT IS FURTHER ORDERED that Rick B. Ferguson, Brock Ferguson and German Jimenez are appointed as Commissioners of said Improvement District.

DATED this 12th day of January 2022.

  
\_\_\_\_\_  
COUNTY JUDGE

**EXHIBIT A**  
**Legal Description**

**TRACT 1:**

PART OF THE SW1/4 OF SECTION 17, PART OF THE SE1/4 SE1/4 OF SECTION 18, PART OF THE NE1/4 NE1/4 OF SECTION 19 AND PART OF THE N1/2 NW1/4 OF SECTION 20, ALL IN T-3-N, R-14-W, PULASKI COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE NW1/4 SW1/4 OF SAID SECTION 17; THENCE S01°28'42"W A DISTANCE OF 6.92 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF ROLAND CUT OFF ROAD, SAID POINT BEING THE POINT OF BEGINNING; THENCE ALONG SAID SOUTHERLY RIGHT OF WAY LINE THE FOLLOWING COURSES: (1) ALONG THE ARC OF A 484.53 FOOT RADIUS CURVE TO THE RIGHT, HAVING AN ARC LENGTH OF 87.89 FEET AND A CHORD BEARING AND DISTANCE OF N89°26'32"E, 87.77 FEET; (2) S87°25'24"E, 325.57 FEET; (3) S88°21'22"E, 318.28 FEET; (4) S87°36'29"E, 722.46 FEET; (5) S87°45'18"E, 266.03 FEET; THENCE LEAVING SAID SOUTHER RIGHT OF WAY LINE S01°59'08"W, A DISTANCE OF 1094.20 FEET; THENCE S88°38'44"E, A DISTANCE OF 891.27 FEET; THENCE S38°52'28"W, A DISTANCE OF 223.58 FEET; THENCE S25°39'38"W, A DISTANCE OF 266.11 FEET; THENCE S10°24'32"W, A DISTANCE OF 234.17 FEET; THENCE S02°04'45"E, A DISTANCE OF 328.13 FEET; THENCE S25°23'57"W, A DISTANCE OF 126.17 FEET; THENCE S71°18'19"W, A DISTANCE OF 488.38 FEET; THENCE S18°10'49"E, A DISTANCE OF 435.10 FEET; THENCE S30°50'52"E, A DISTANCE OF 496.64 FEET; THENCE S69°36'12"W, A DISTANCE OF 556.16 FEET; THENCE N60°02'00"W, A DISTANCE OF 383.37 FEET; THENCE N60°02'26"W, A DISTANCE OF 62.87 FEET; THENCE N57°38'46"W, A DISTANCE OF 401.55 FEET; THENCE N71°11'41"W, A DISTANCE OF 1042.64 FEET; THENCE S01°41'54"W, A DISTANCE OF 314.63 FEET; THENCE N88°10'56"W, A DISTANCE OF 1317.17 FEET; THENCE N01°46'43"E, A DISTANCE OF 1682.29 FEET; THENCE S88°16'38"E, A DISTANCE OF 1314.82 FEET; THENCE N01°28'42"E, A DISTANCE OF 1311.67 FEET TO THE POINT OF BEGINNING. CONTAINING 193.39 ACRES, MORE OR LESS.

**TRACT 2:**

A PART OF LOTS 8 AND 9 OF ROLAND WEST SUBDIVISION AND A PART OF THE SOUTH 1/2 OF THE NW1/4 OF SECTION 17, TOWNSHIP 3 NORTH, RANGE 14 WEST IN PULASKI COUNTY, ARKANSAS AND BEING MORE PARTICULARLY DESCRIBED AS BEGINNING AT THE NORTHEAST CORNER OF THE SE1/4 OF THE NW1/4; THENCE SOUTH 00 DEGREES 05 MINUTES 12 SECONDS EAST A DISTANCE OF 1336.27 FEET TO THE SOUTHEAST CORNER OF THE SE1/4 OF THE NW1/4; THENCE NORTH 89 DEGREES 34 MINUTES 16 SECONDS WEST, ALONG THE SOUTH LINE OF THE SE1/4 OF THE NW1/4, A DISTANCE OF 60.00 FEET; THENCE NORTH 00 DEGREES 05 MINUTES 12 SECONDS WEST A DISTANCE OF 445.50 FEET; THENCE NORTH 89

DEGREES 34 MINUTES 16 SECONDS WEST A DISTANCE OF 781.93 FEET; THENCE SOUTH 01 DEGREE 37 MINUTES 13 SECONDS EAST A DISTANCE OF 445.77 FEET TO THE SOUTHEAST CORNER OF LOT 8; THENCE NORTH 89 DEGREES 34 MINUTES 16 SECONDS WEST, ALONG THE SOUTH LINE OF LOT 8 AND LOT 9, A DISTANCE OF 169.28 FEET; THENCE NORTH 00 DEGREES 05 MINUTES 12 SECONDS WEST A DISTANCE OF 445.50 FEET; THENCE NORTH 89 DEGREES 34 MINUTES 16 SECONDS WEST A DISTANCE OF 494.13 FEET; THENCE NORTH 00 DEGREES 04 MINUTES 08 SECONDS EAST A DISTANCE OF 881.46 FEET TO THE NORTH LINE OF THE SW1/4 OF THE NW1/4; THENCE SOUTH 89 DEGREES 55 MINUTES 41 SECONDS EAST A DISTANCE OF 164.52 FEET TO THE NORTHWEST CORNER OF THE SE1/4 OF THE NW1/4; THENCE CONTINUING SOUTH 89 DEGREES 55 MINUTES 41 SECONDS EAST, ALONG SAID LINE, A DISTANCE OF 1326.44 FEET TO THE POINT OF BEGINNING.

**TRACT 3:**

PART OF THE S1/4 OF THE NW1/4 OF SECTION 17, TOWNSHIP 3 NORTH, RANGE 14 WEST, PULASKI COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SOUTHEAST CORNER OF THE S1/2 NW1/4 SECTION 17, TOWNSHIP 3 NORTH, RANGE 14 WEST; THENCE NORTH 89 DEGREES 34 MINUTES 16 SECONDS WEST 1494.72 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE NORTH 89 DEGREES 34 MINUTES 16 SECONDS WEST 165.6 FEET; THENCE NORTH 1325.94 FEET; THENCE SOUTH 89 DEGREES 55 MINUTES 15 SECONDS EAST 165.5 FEET; THENCE SOUTH 1326.95 FEET TO THE POINT OF BEGINNING.

**PULASKI COUNTY PROPERTY OWNERS' MULTIPURPOSE  
IMPROVEMENT DISTRICT NO. 2021-2  
(PARADISE VALLEY SUBDIVISION)**

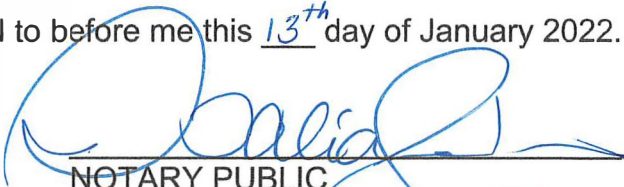
**COMMISSIONER'S OATH OF OFFICE**

I, RICK FERGUSON, A COMMISSIONER OF PULASKI COUNTY PROPERTY OWNERS' MULTIPURPOSE IMPROVEMENT DISTRICT NO. 2021-2 (PARADISE VALLEY SUBDIVISION), HEREBY SWEAR TO SUPPORT THE CONSTITUTION OF THE UNITED STATES AND THE CONSTITUTION OF THE STATE OF ARKANSAS, TO DISCHARGE FAITHFULLY MY DUTY AS AN IMPROVEMENT DISTRICT COMMISSIONER, AND TO NOT BE INTERESTED, DIRECTLY OR INDIRECTLY, IN ANY CONTRACT LET BY THE BOARD EXCEPT UPON THE APPROVAL OF ALL THE OWNERS OF REAL PROPERTY LOCATED IN THE DISTRICT.

  
\_\_\_\_\_  
RICK FERGUSON

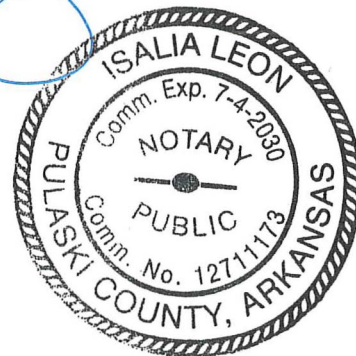
STATE OF ARKANSAS    )  
                                  )ss.  
COUNTY OF PULASKI    )

SUBSCRIBED AND SWORN to before me this 13<sup>th</sup> day of January 2022.

  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:

July 4, 2030



**PULASKI COUNTY PROPERTY OWNERS' MULTIPURPOSE  
IMPROVEMENT DISTRICT NO. 2021-2  
(PARADISE VALLEY SUBDIVISION)**

**COMMISSIONER'S OATH OF OFFICE**

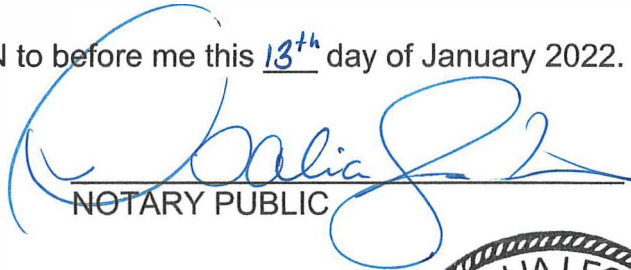
I, BROCK FERGUSON, A COMMISSIONER OF PULASKI COUNTY PROPERTY OWNERS' MULTIPURPOSE IMPROVEMENT DISTRICT NO. 2021-2 (PARADISE VALLEY SUBDIVISION), HEREBY SWEAR TO SUPPORT THE CONSTITUTION OF THE UNITED STATES AND THE CONSTITUTION OF THE STATE OF ARKANSAS, TO DISCHARGE FAITHFULLY MY DUTY AS AN IMPROVEMENT DISTRICT COMMISSIONER, AND TO NOT BE INTERESTED, DIRECTLY OR INDIRECTLY, IN ANY CONTRACT LET BY THE BOARD EXCEPT UPON THE APPROVAL OF ALL THE OWNERS OF REAL PROPERTY LOCATED IN THE DISTRICT.



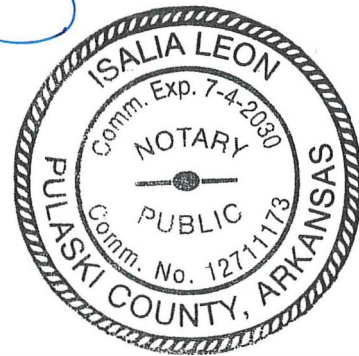
\_\_\_\_\_  
BROCK FERGUSON

STATE OF ARKANSAS    )  
                                  )ss.  
COUNTY OF PULASKI    )

SUBSCRIBED AND SWORN to before me this 13<sup>th</sup> day of January 2022.

  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:  
July 4, 2030



PULASKI COUNTY PROPERTY OWNERS' MULTIPURPOSE  
IMPROVEMENT DISTRICT NO. 2021-2  
(PARADISE VALLEY SUBDIVISION)

COMMISSIONER'S OATH OF OFFICE

I, GERMAN JIMENEZ, A COMMISSIONER OF PULASKI COUNTY PROPERTY OWNERS' MULTIPURPOSE IMPROVEMENT DISTRICT NO. 2021-2 (PARADISE VALLEY SUBDIVISION), HEREBY SWEAR TO SUPPORT THE CONSTITUTION OF THE UNITED STATES AND THE CONSTITUTION OF THE STATE OF ARKANSAS, TO DISCHARGE FAITHFULLY MY DUTY AS AN IMPROVEMENT DISTRICT COMMISSIONER, AND TO NOT BE INTERESTED, DIRECTLY OR INDIRECTLY, IN ANY CONTRACT LET BY THE BOARD EXCEPT UPON THE APPROVAL OF ALL THE OWNERS OF REAL PROPERTY LOCATED IN THE DISTRICT.

German Jimenez  
GERMAN JIMENEZ

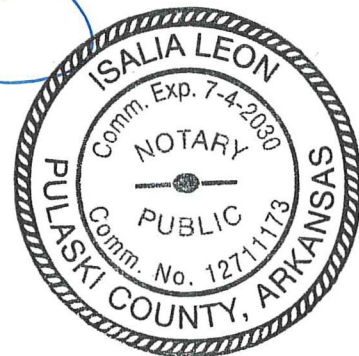
STATE OF ARKANSAS    )  
                                  )ss.  
COUNTY OF PULASKI    )

SUBSCRIBED AND SWORN to before me this 13<sup>th</sup> day of January 2022.

Isalia Leon  
NOTARY PUBLIC

My Commission Expires:

July 4, 2030



**ARKANSAS HISTORIC PRESERVATION PROGRAM  
INFORMATION**

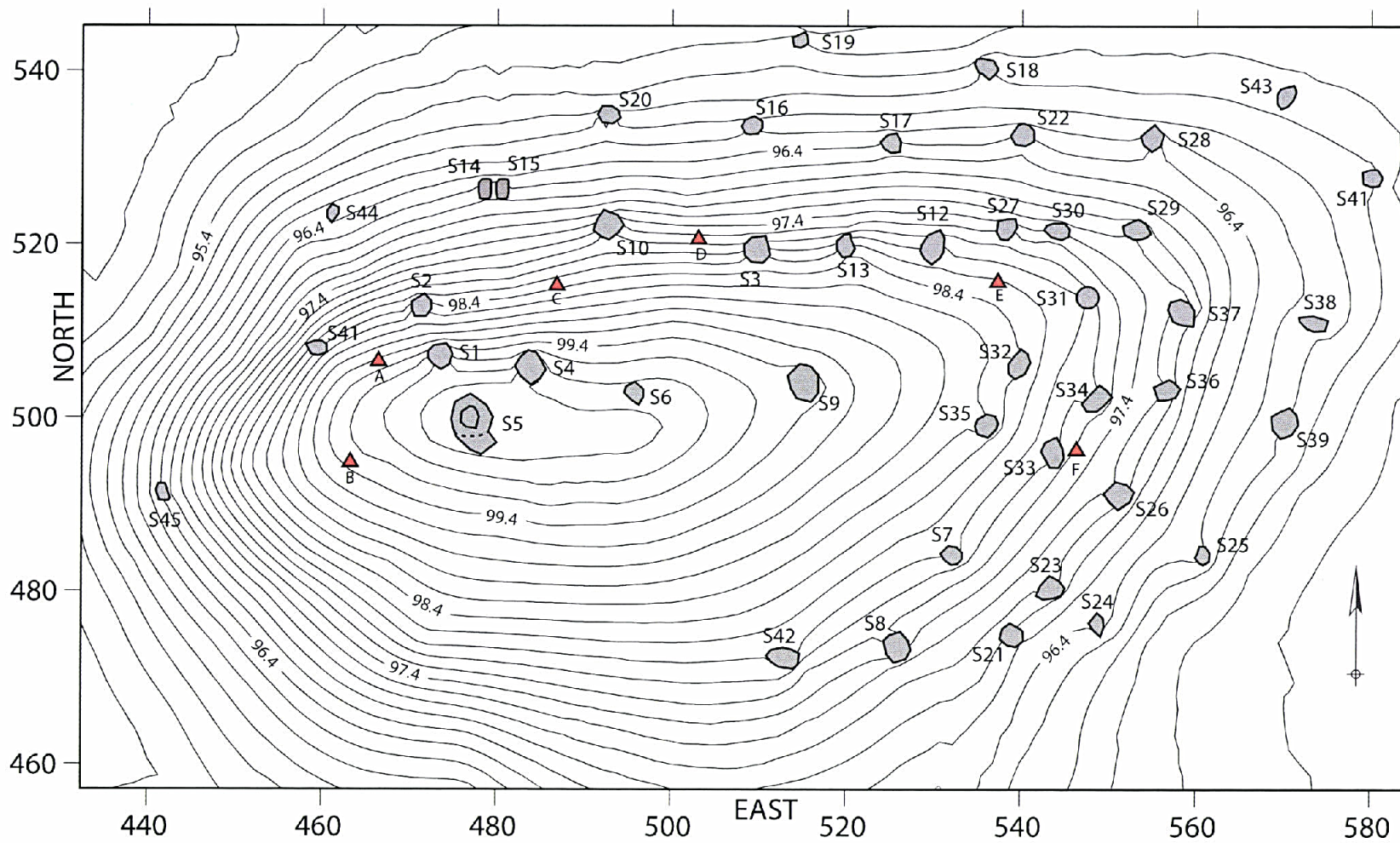
## Roland Cut-Off Site – 3PU1102

The Roland Cut-Off Site was first recorded in October 2021 and is located west of Roland, Arkansas on a prominent east-west oriented rise in the floodplain of Mill Bayou. An unnamed tributary of Mill Bayou is located immediately north of the site and is prone to flooding. The site consists of 45 or more small sandstone rock cairns ranging from 1.8 to 5 meters in diameter, the majority of which are located on the sloping edges of the landform. It is unknown when these rock cairns were constructed, but they could date anywhere between the pre-contact to early historic periods. There are known pre-contact sites Native American sites in the region, so the likelihood that this site is related is high. The people that constructed the rock cairns is also unknown, but they are similar to features associated with the Osage Nation.

Although much is still unknown, the site was created for a reason and should be protected. It is subject to natural flooding and erosional forces and any additional man-made influences could be extremely detrimental to the site.

A quadrangle map of the site location, along with a map of the site itself showing the rock cairn features is included.





Roland Cutoff Site

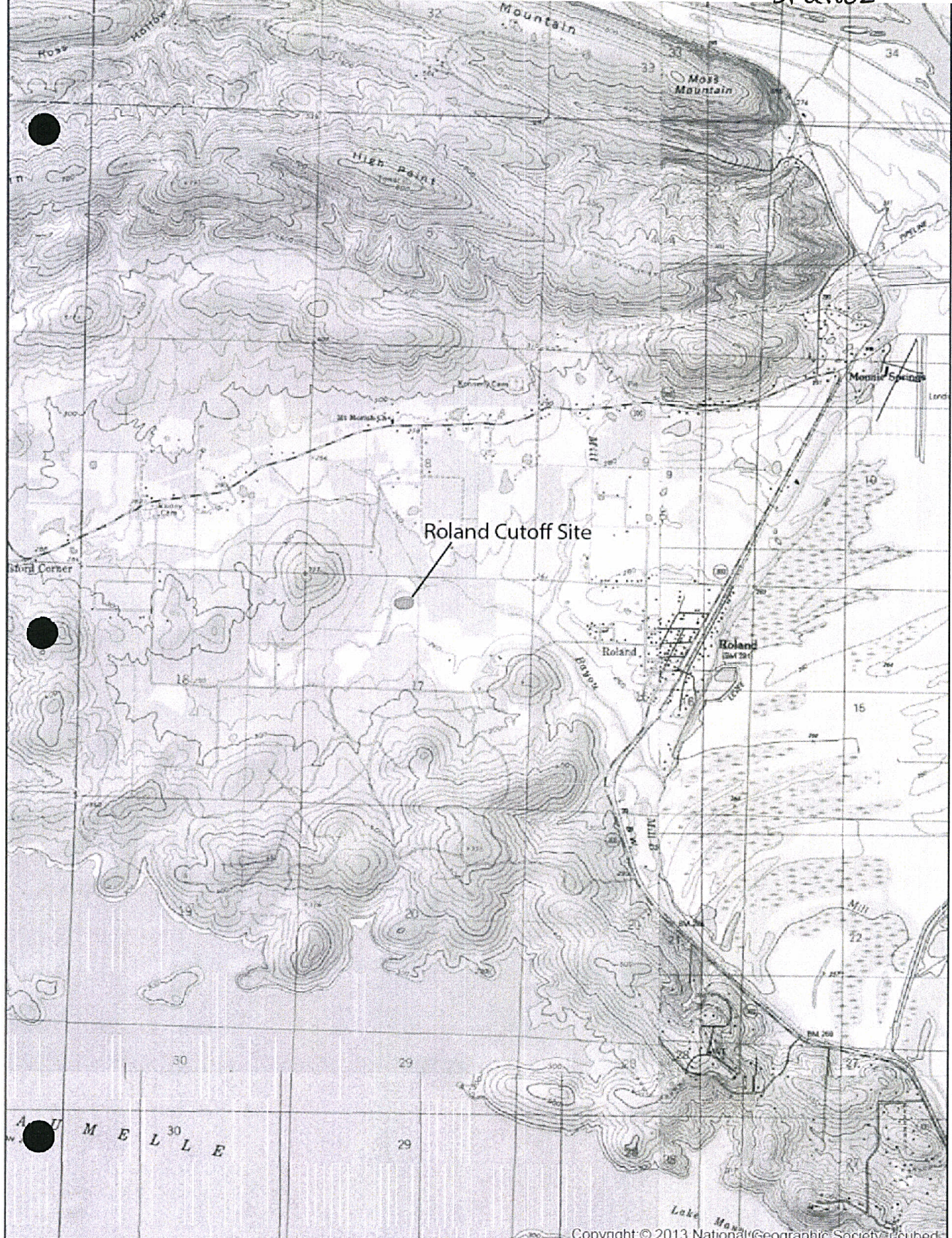


Stone Pile/  
Concentration  
Contour Interval = 20cm

▲ Mapping Datum

3PUL102





Roland Cutoff Site



## **FLOODPAIN INFORMATION**

**Table 3 - Summary of Discharges**

<u>FLOODING SOURCE AND LOCATION</u>	<u>DRAINAGE AREA (sq. miles)</u>	<u>PEAK DISCHARGES (cfs)</u>			
		<u>10% Annual Chance</u>	<u>2% Annual Chance</u>	<u>1% Annual Chance</u>	<u>0.2% Annual Chance</u>
Lake No. 1 Tributary At Avondale Road	0.8	1,360	1,780	1,970	2,410
Landmark Branch At mouth	1.3	1,450	1,900	2,100	2,600
Little Fourche Creek At 65 <sup>th</sup> Street	20.7	6,380	10,110	11,860	17,000
Little Maumelle River At its confluence with Arkansas River	82.26	29,381	39,258	43,884	53,892
Approximately 1.01 miles upstream of State Highway 10	31.48	15,500	21,400	24,200	30,000
Approximately 2,000 ft downstream of Kanis Road	10.2	5,860	8,050	9,110	11,900
Maumelle River Approximately 650 feet downstream of confluence of Rothy Creek	72.50	13,120	21,990	25,490	36,030
Approximately 11,710 feet upstream of confluence of Rothy Creek	65.90	12,270	20,590	23,890	33,830
Approximately 15,000 feet upstream of confluence with Rothy Creek	53.20	10,540	17,710	20,600	29,280
McHenry Creek At its confluence with Fourche Creek	8.4	6,600	8,200	9,000	11,500
At River Mile 3.30	4.6	2,503	3,718	4,419	5,709
→ Mill Bayou At River Mile 3.82	7.6	4,450	5,700	6,400	7,650
Mill Bayou Tributary At confluence with Mill Bayou	5.53	3,250	4,250	4,550	5,550
Nash Creek At River Mile 1.20	2.26	1,343	2,287	2,807	3,900
Nash Creek Tributary At its confluence with Nash Creek	0.32	545	848	950	1,157





Source: PAGIS Floodplain map