

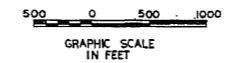
- NOTES**
1. FOR GENERAL NOTES SEE DRAWING NO. C-0001
 2. STRUCTURES FOR GGNS UNIT 2 ARE FOR INFORMATION ONLY, SINCE CONSTRUCTION OF UNIT 2 WAS SUSPENDED ON 8/21/81.

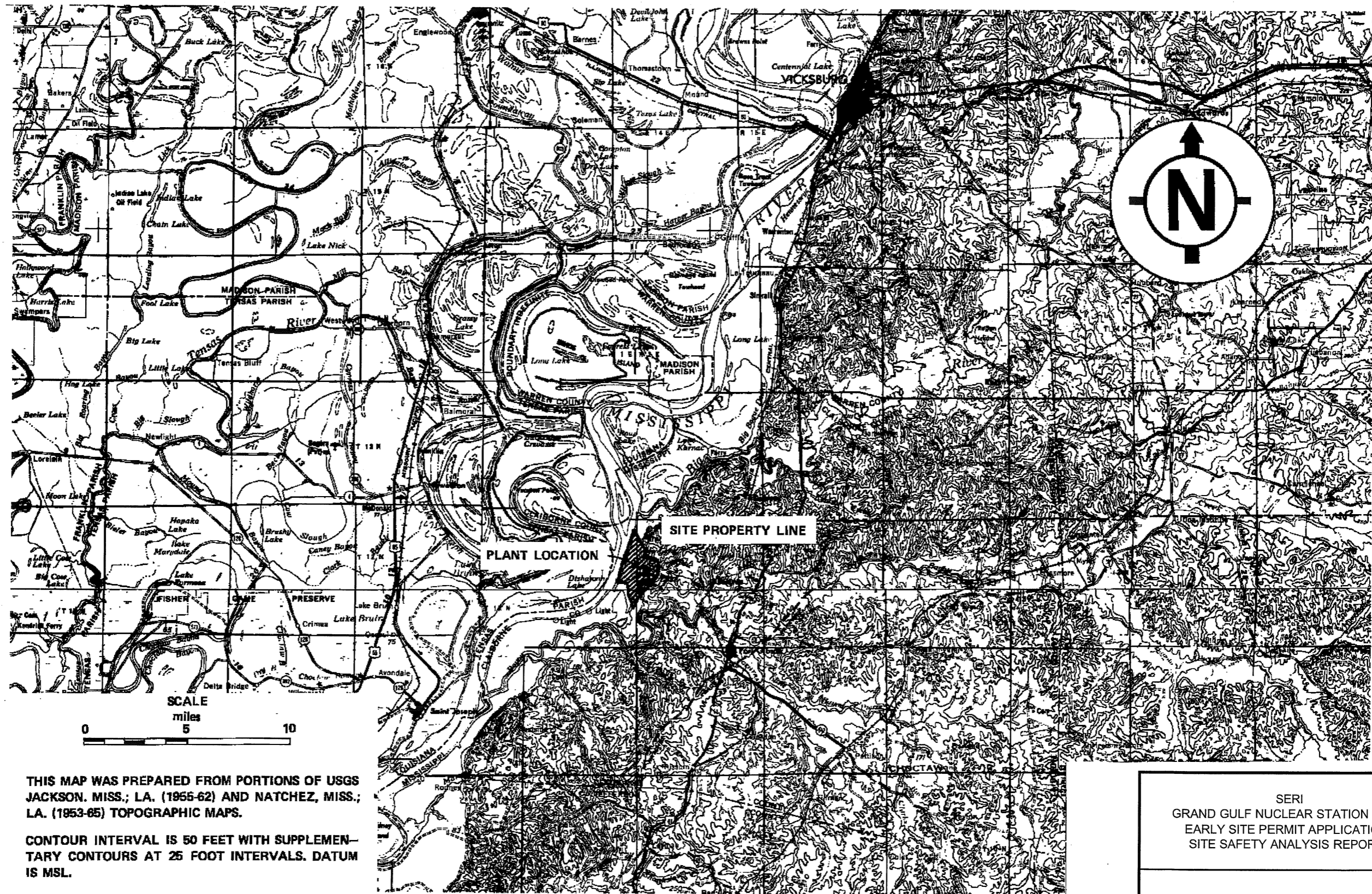
LEGEND:
 [Hatched Box] PROPOSED NEW FACILITY
 [Dotted Box] CONSTRUCTION AREAS.

- REFERENCE DWGS.**
- C-000B ROUGH GRADING PLAN
 - C-0012 PLOT PLAN
 - C-0020 EROSION CONTROL & GEN. SITE DRAINAGE
 - C-0045A ACCESS ROAD PLAN & PROFILE
 - C-0045B " " " "

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 EARLY SITE PERMIT APPLICATION
 SITE SAFETY ANALYSIS REPORT

SURFACE DRAINAGE PLAN
 (UFSAR FIGURE 2.4-1)



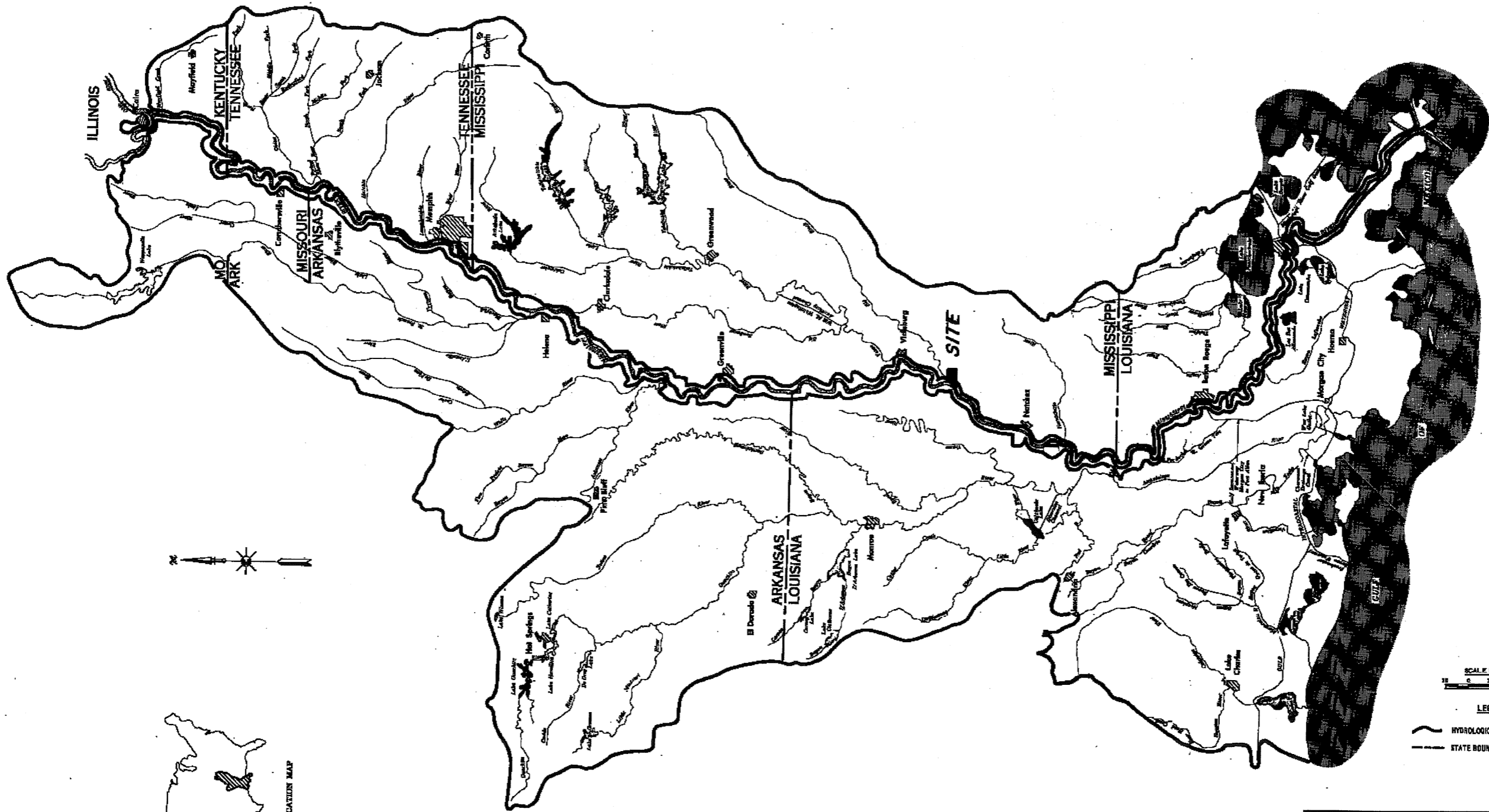


THIS MAP WAS PREPARED FROM PORTIONS OF USGS JACKSON, MISS.; LA. (1955-62) AND NATCHEZ, MISS.; LA. (1953-65) TOPOGRAPHIC MAPS.

CONTOUR INTERVAL IS 50 FEET WITH SUPPLEMENTARY CONTOURS AT 25 FOOT INTERVALS. DATUM IS MSL.

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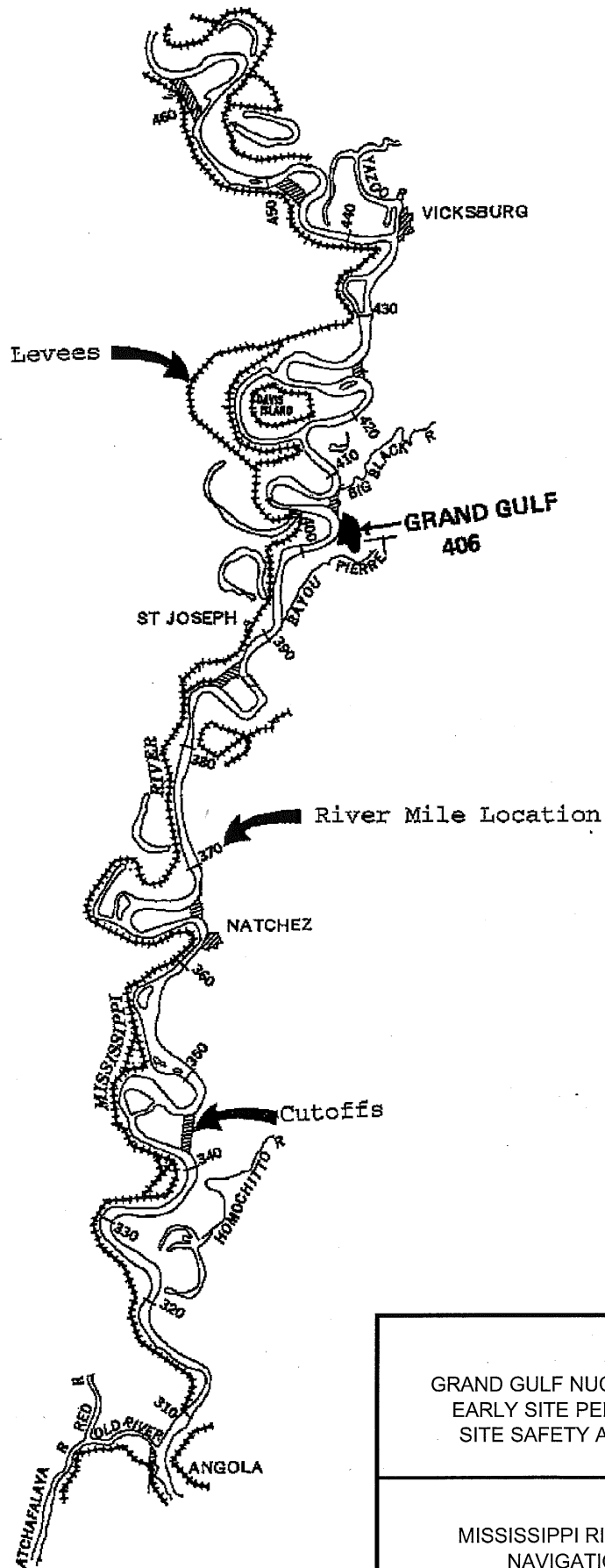
REGIONAL TOPOGRAPHY
 (UFSAR FIGURE 2.4-2)



Source: Mississippi River Commission,
 "Lower Mississippi Region
 Comprehensive Study,"
 Appendix C, Figure-1, 1974

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LOWER MISSISSIPPI REGION
 HYDROLOGIC BOUNDARY
 (UFSAR FIGURE 2.4-3)

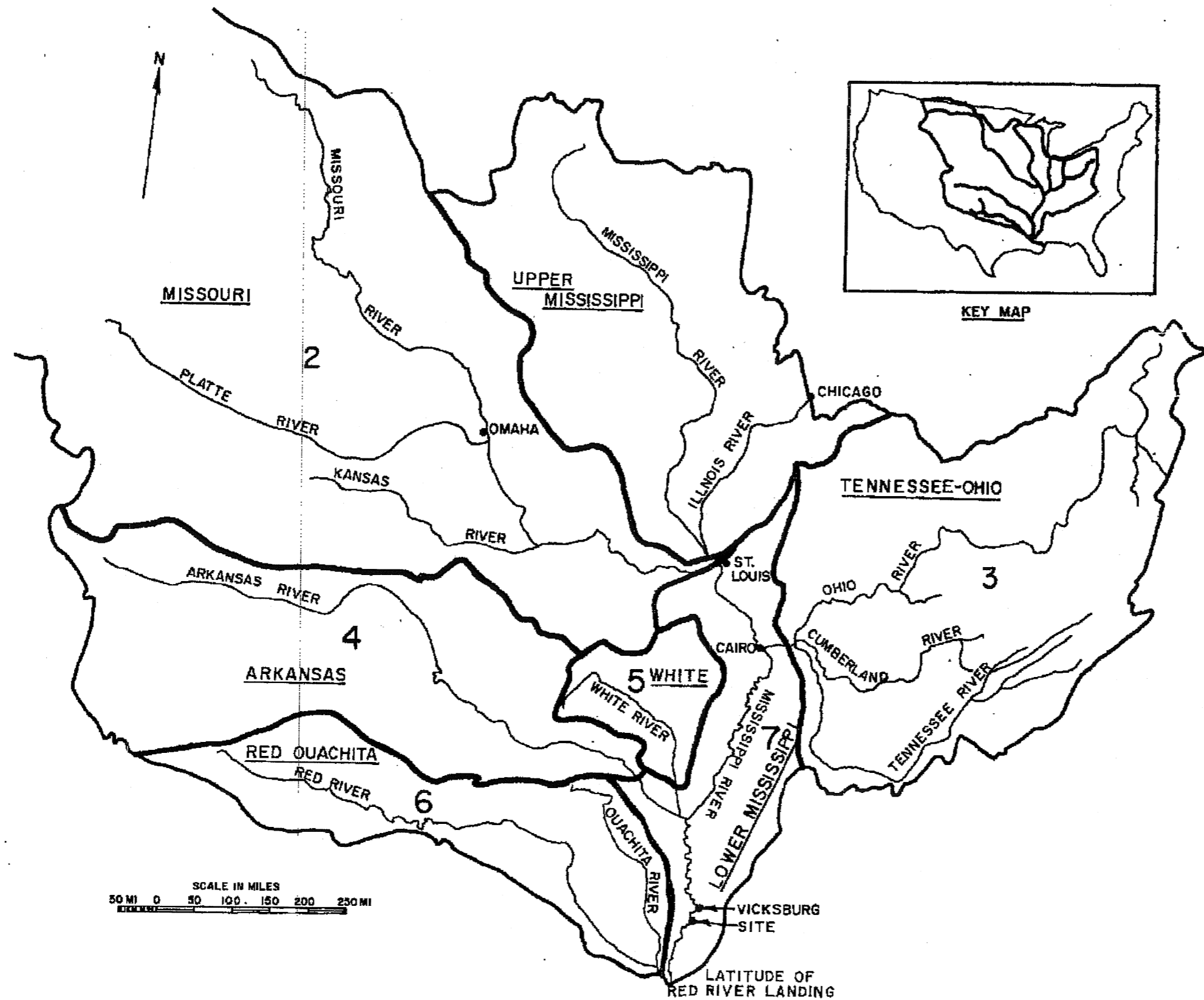


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MISSISSIPPI RIVER LEVEES AND
 NAVIGATION CUTOFFS

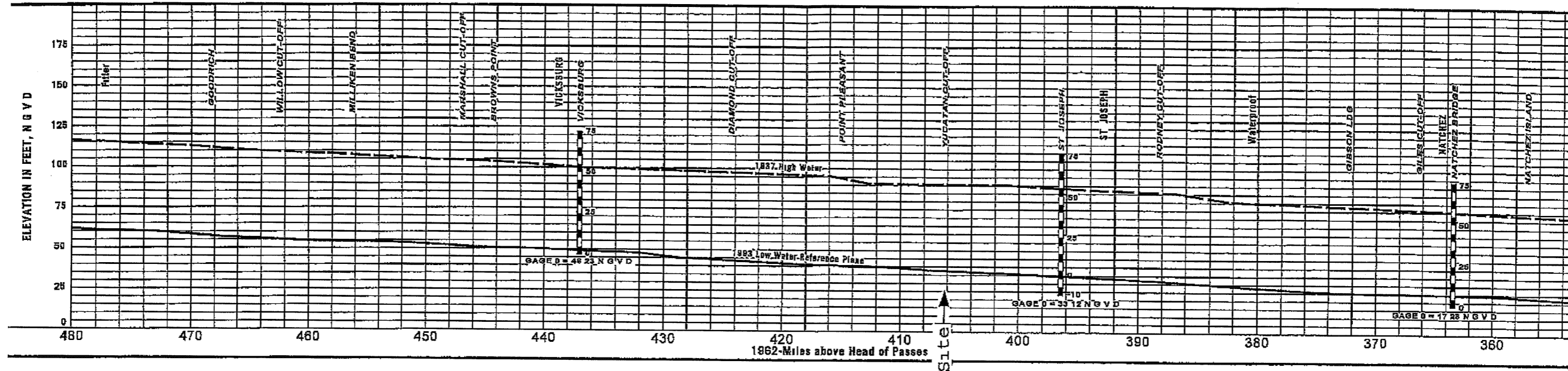
SOURCE: ADAPTED FROM U.S. ARMY CORPS OF ENGINEERS

FIGURE 2.4-3a



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DRAINAGE AREAS OF THE
 MISSISSIPPI BASIN
 (UFSAR FIGURE 2.4-4)



LEGEND

- 430 1962 Mileage above Head of Passes
- Low Water Reference Plane*
- 1937 High Water

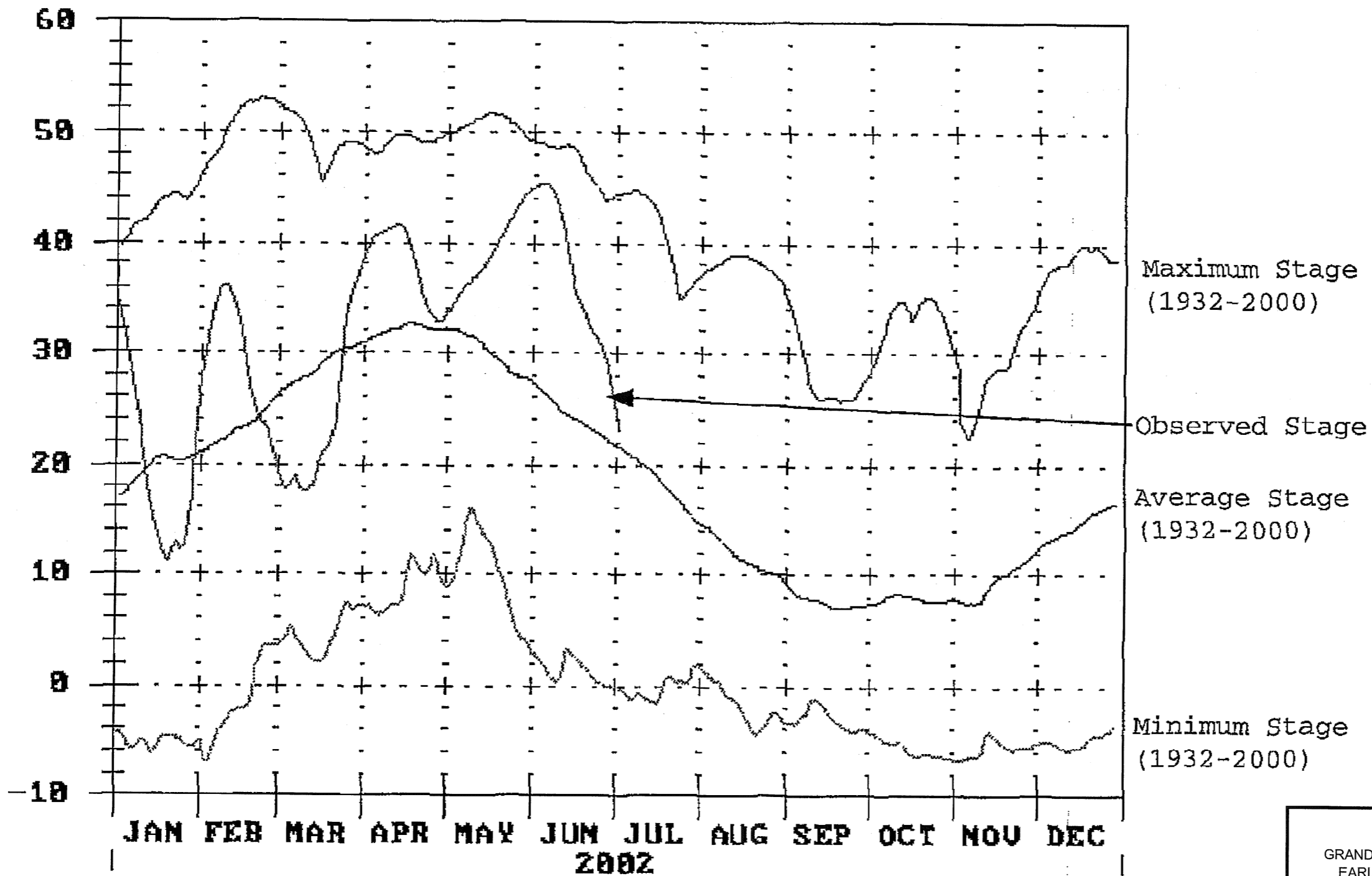
Source: Adapted from USACE, 2001

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WATER SURFACE PROFILES FOR 1937 HIGH
 FLOW AND 1993 LOW WATER REFERENCE
 PLANE

FIGURE 2.4-6 REV. 1

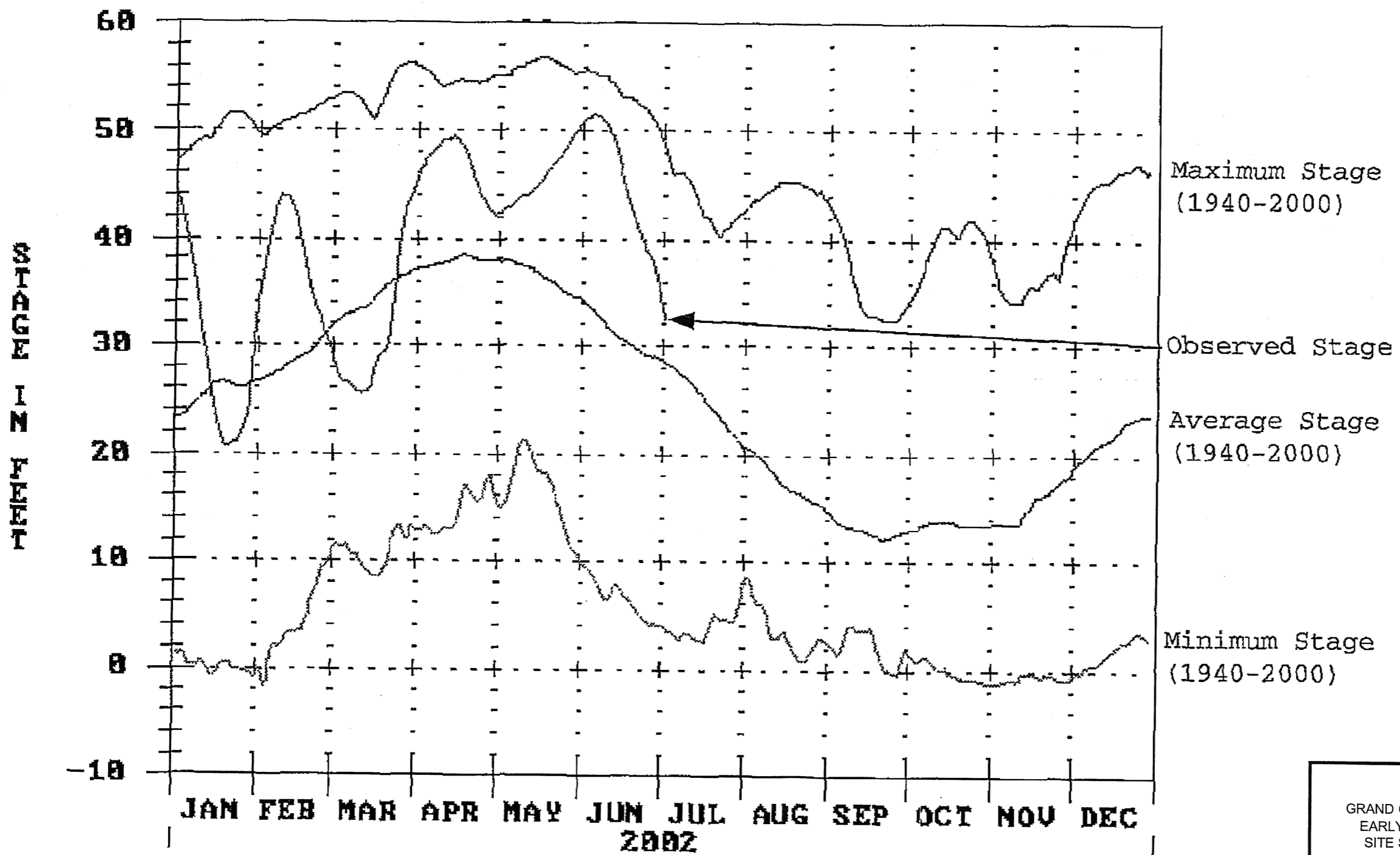
STAGE IN FEET



Source: Adapted from U.S. Army Corps of Engineers

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HYDROGRAPH FOR THE MISSISSIPPI
RIVER AT VICKSBURG, MS



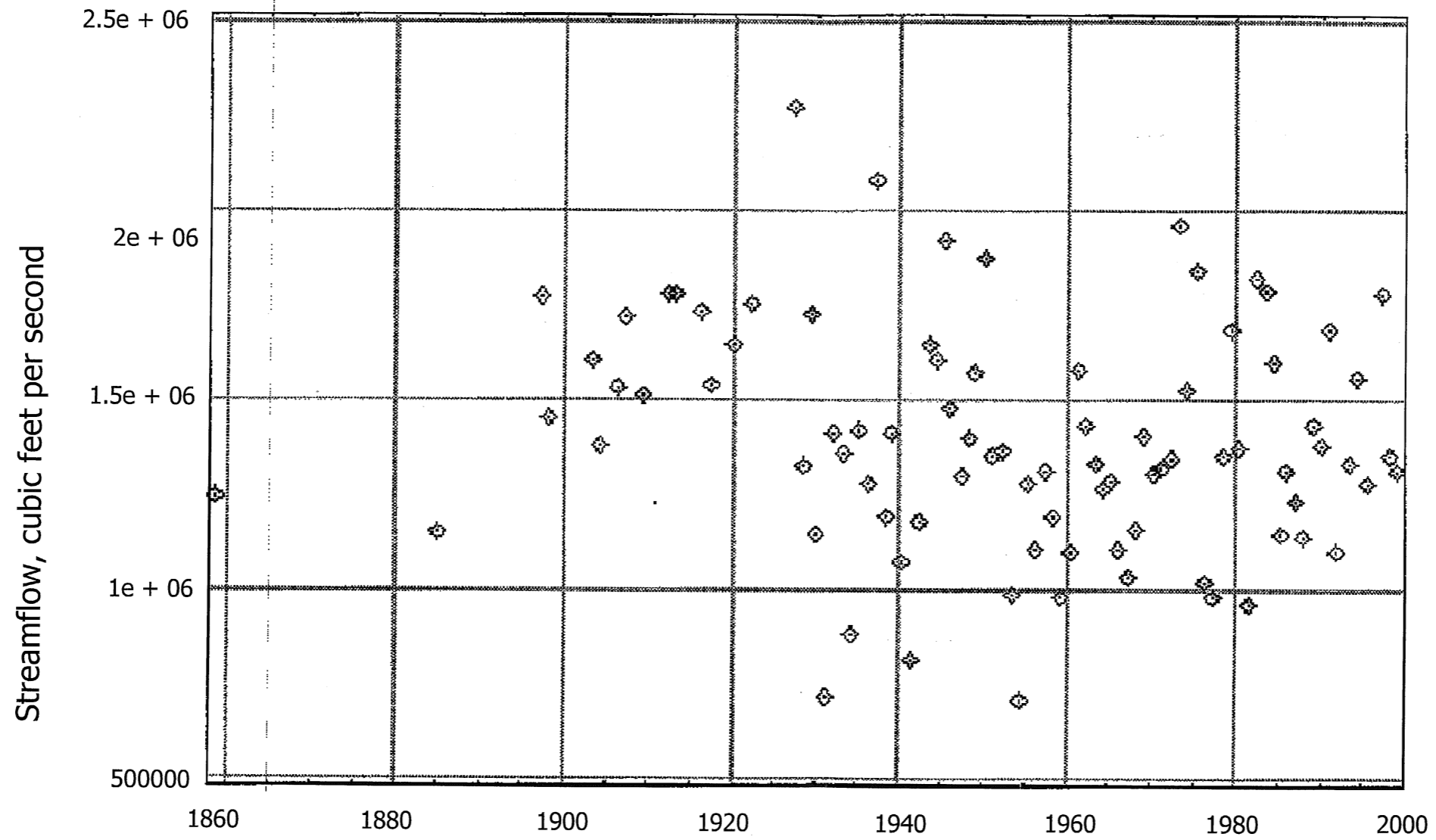
Source: Adapted from U.S. Army Corps of Engineers

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HYDROGRAPH FOR MISSISSIPPI RIVER
 AT NATCHEZ, MS

FIGURE 2.4-8 REV. 1

USGS 07289000 MISSISSIPPI RIVER AT VICKSBURG, MS

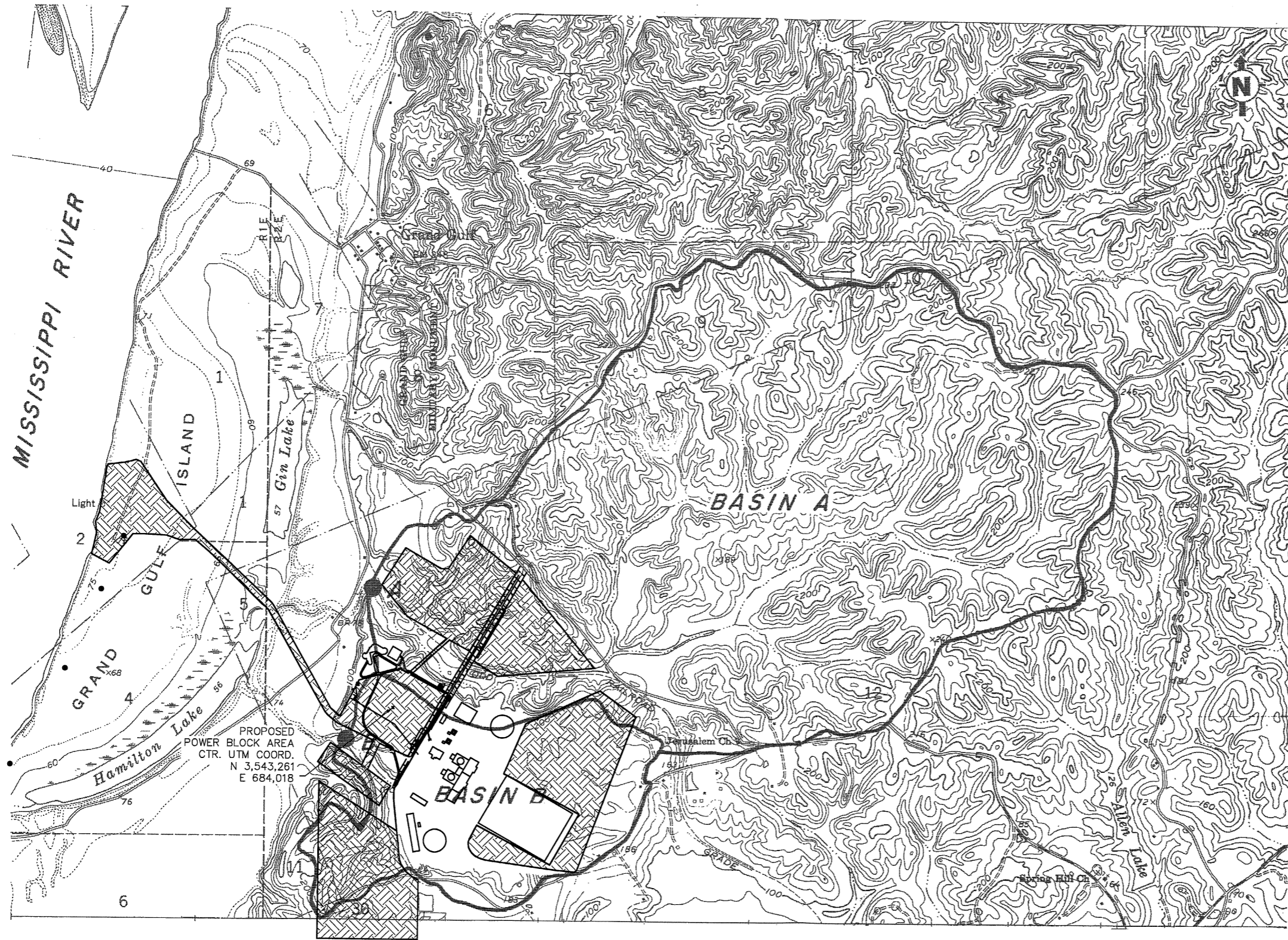


DATES: 06/24/1858 to 02/13/1999

Source: U.S.G.S.

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ANNUAL MAXIMUM INSTANTANEOUS PEAK
STREAMFLOW - MISSISSIPPI RIVER
USGS STATION, VICKSBURG, MS



NOTES:

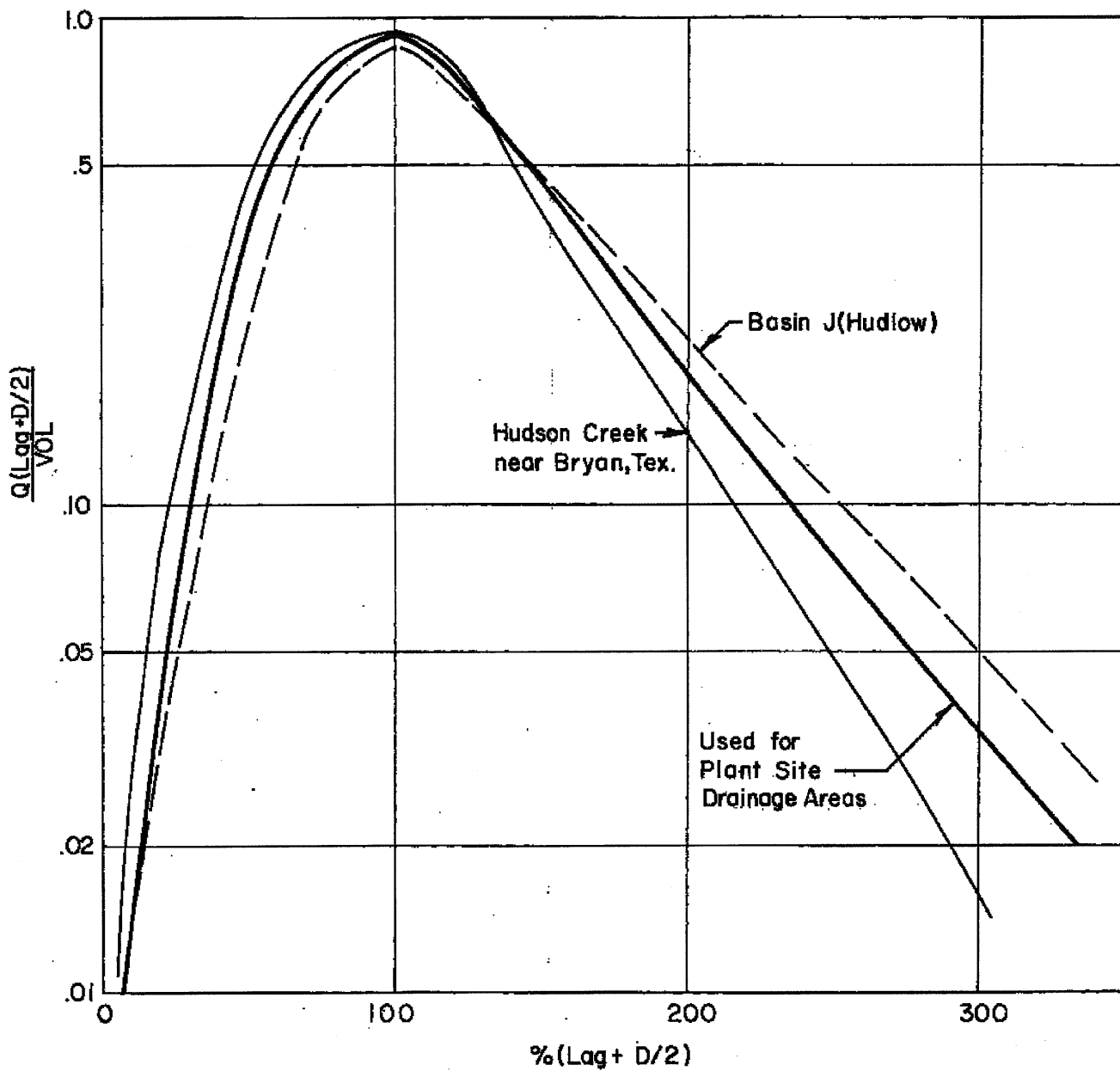
- 1. GGNS UNIT 1 FACILITIES ADDED FOR REFERENCE.

LEGEND:

- PROPOSED NEW FACILITY CONSTRUCTION AREAS

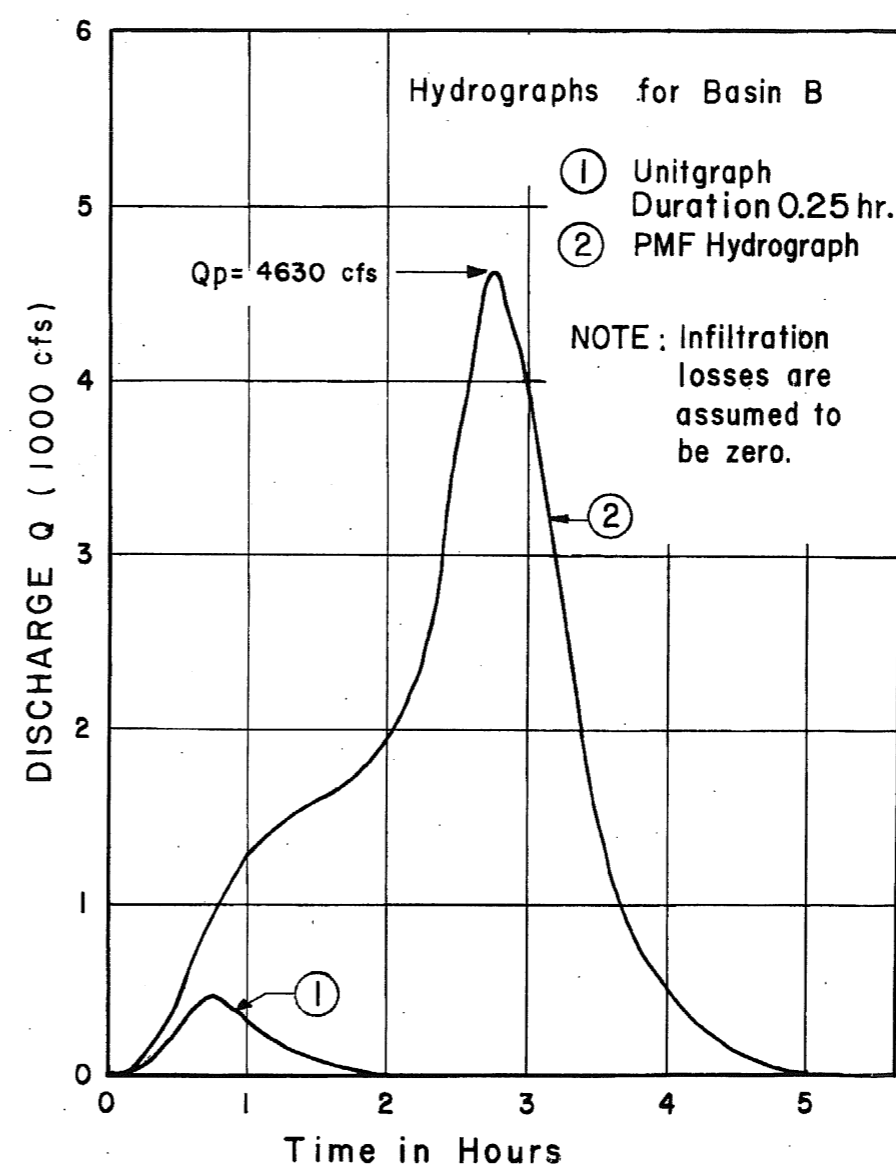
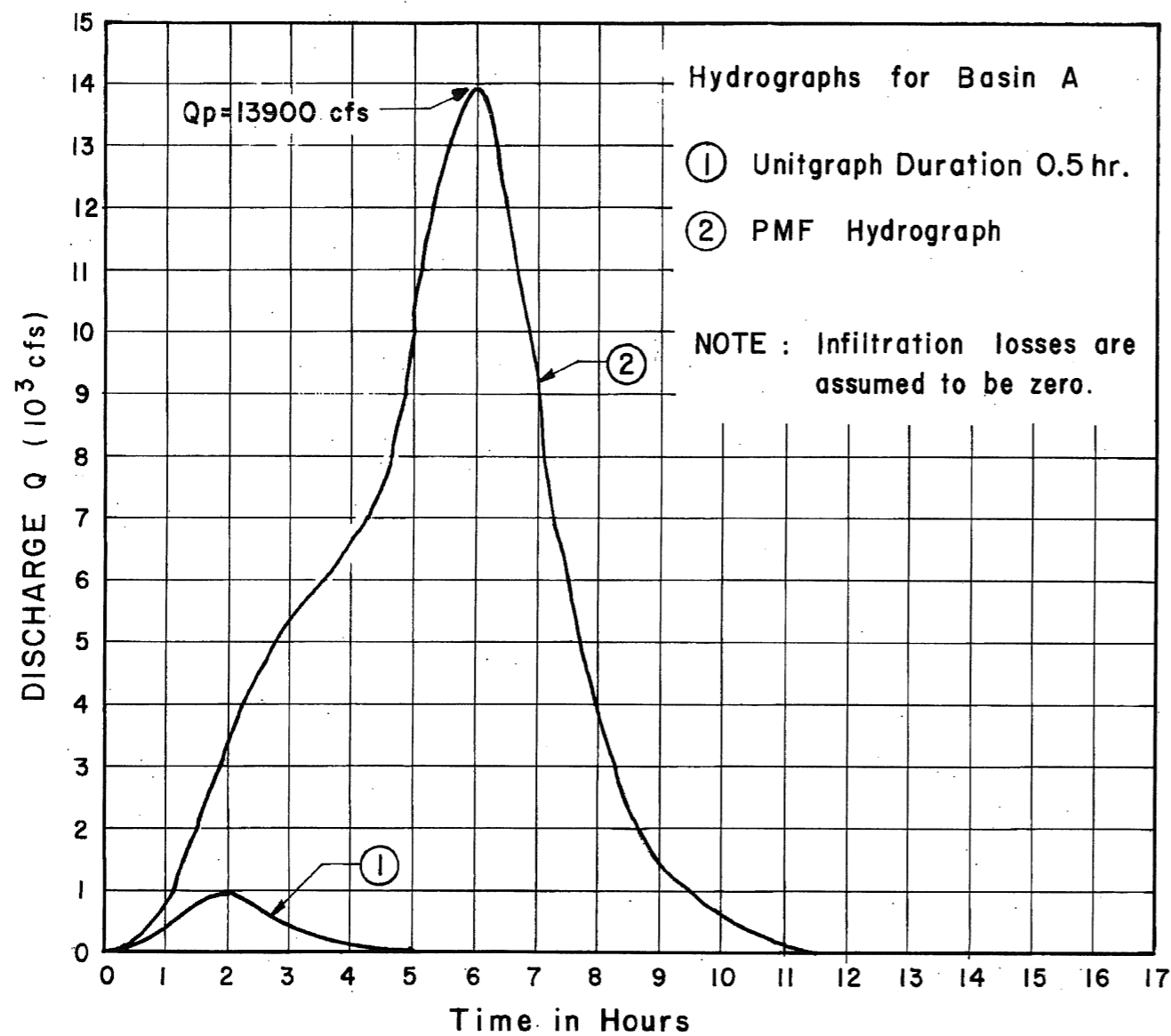
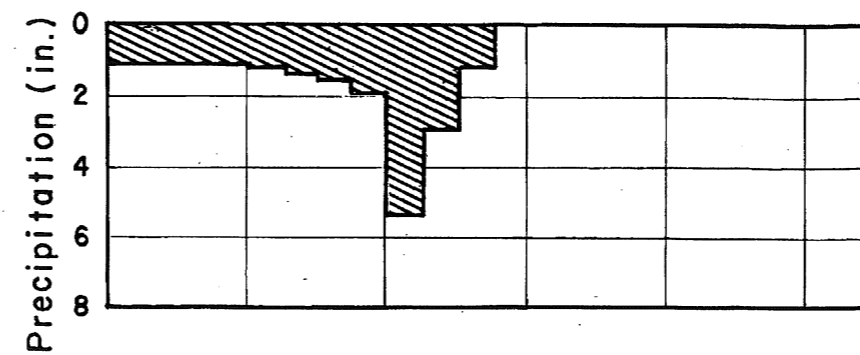
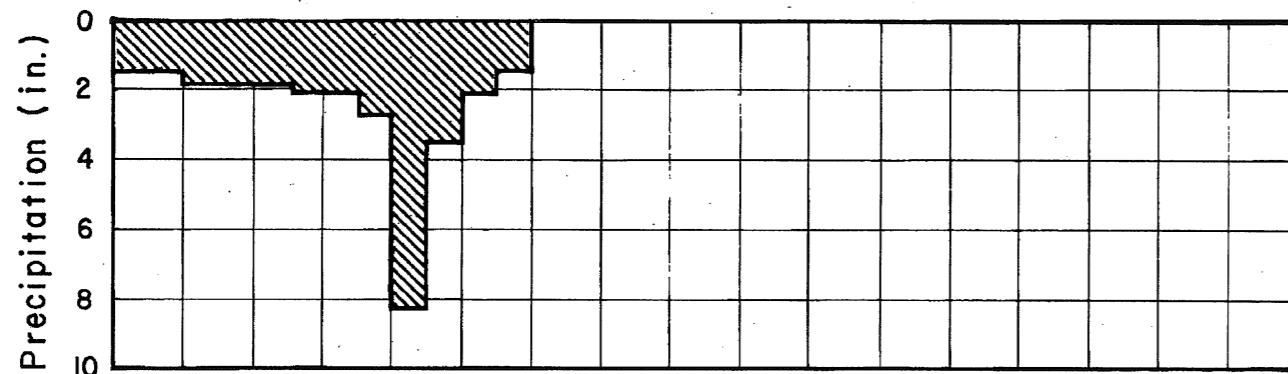
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LOCAL DRAINAGE BASINS
 (UFSAR FIGURE 2.4-8)



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 SITE SAFETY ANALYSIS REPORT

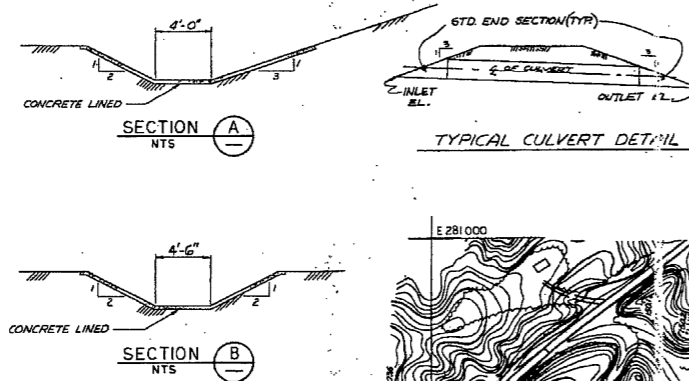
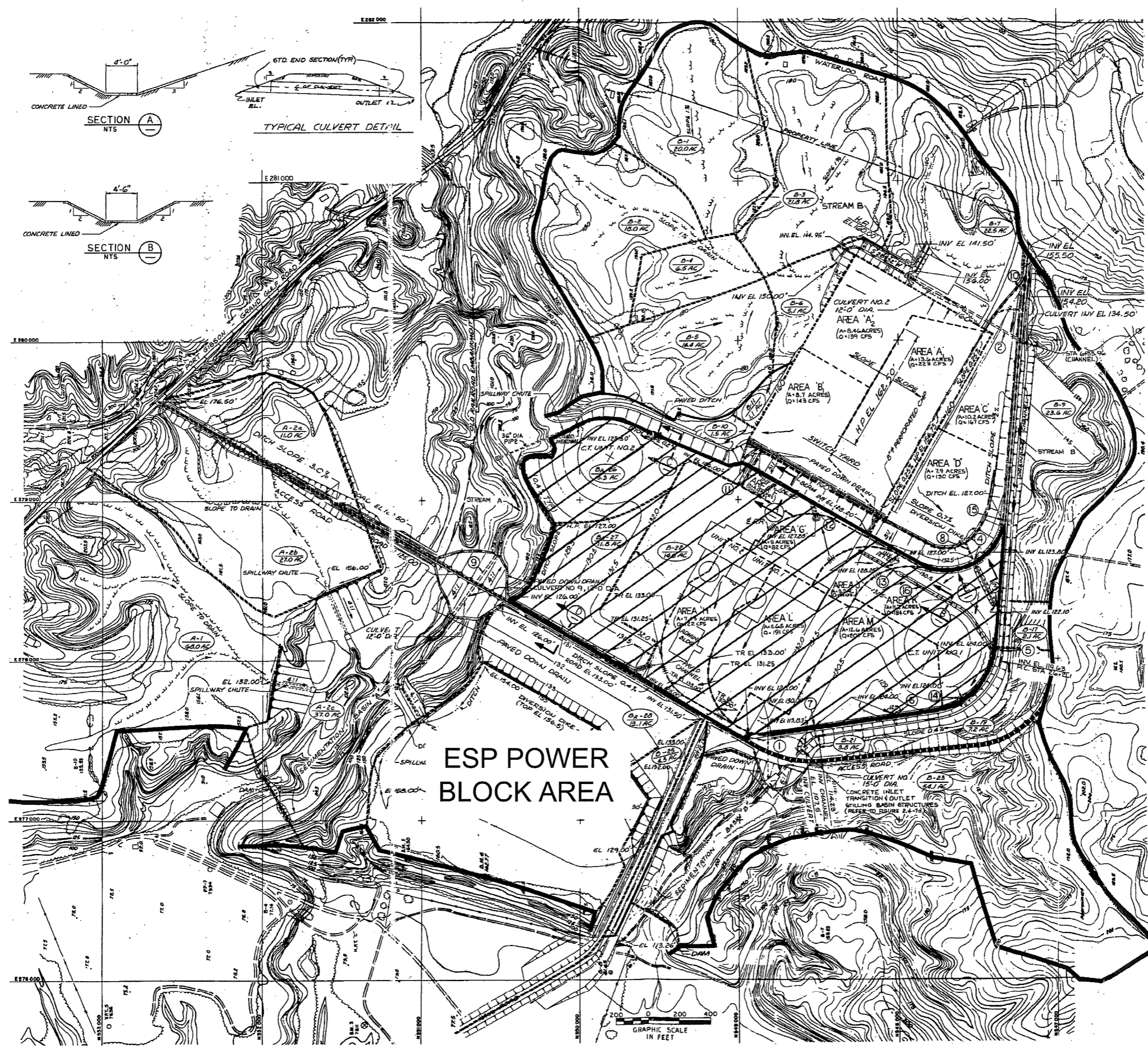
DIMENSIONLESS HYDROGRAPH FOR
 THE PLANT SITE DRAINAGE BASINS
 (UFSAR FIGURE 2.4-9)



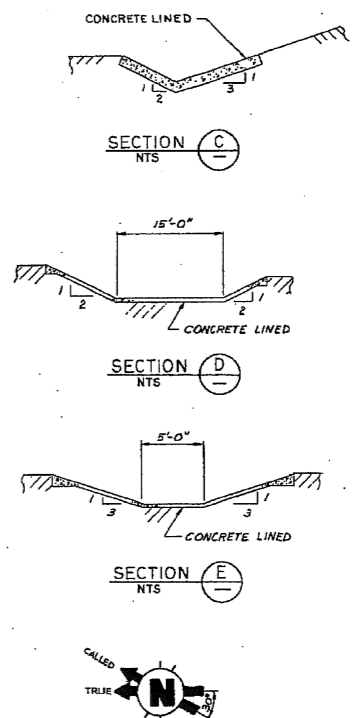
NOTE:
THESE HYDROGRAPHS WERE DEVELOPED
FOR GGNS UNIT 1 USING RAINFALL RATES
FROM HMR 33 AND USACE EM-1110-2-1411
AND ARE PRESENTED FOR INFORMATION
ONLY.

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BASIN A & B
HYDROGRAPHS
(UFSAR FIGURE 2.4-10)



TYPICAL CULVERT DETAIL



- LEGEND:**
- GRASS LINED DITCHES
 - GRASS LINED WATERWAYS
 - PAVED DITCHES
 - (3\"/>

- NOTES:**
1. FOR DETAILS OF CULVERTS REFER TO TABLE 2.4-12 (UFSAR TABLE 2.4-28).
 2. FOR DRAINAGE AREA BOUNDARIES IN SHADED AREA, SEE SHEET 2.
 3. STRUCTURES FOR UNIT 2 ARE FOR INFORMATION ONLY, SINCE CONSTRUCTION OF UNIT 2 WAS SUSPENDED ON 8/21/91.
 4. RAILROAD DATA AND LOCATIONS ARE FOR INFORMATION ONLY TO IDENTIFY LOCATION OF ORIGINAL RR BED. MOST OF THE RR HAS BEEN REMOVED.
 5. DRAINAGE AREAS & FLOW RATES (Q) INDICATED ARE SPECIFIC TO GONS UNIT 1 PMP ANALYSIS.

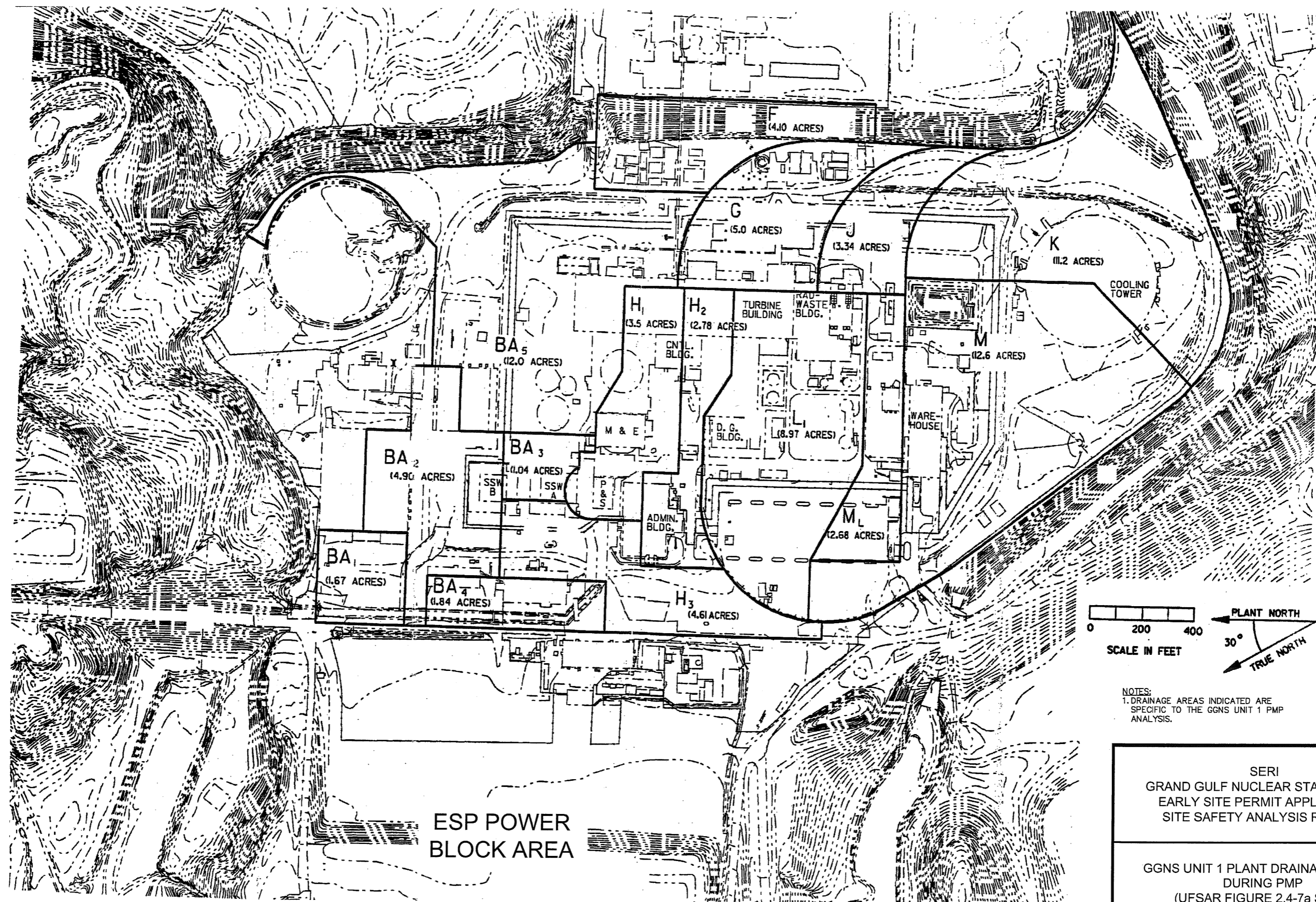
ESP POWER BLOCK AREA



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GGNS UNIT 1 PLANT DRAINAGE AREAS
 DURING PMP
 (UFSAR FIGURE 2.4-7a SH. 1)

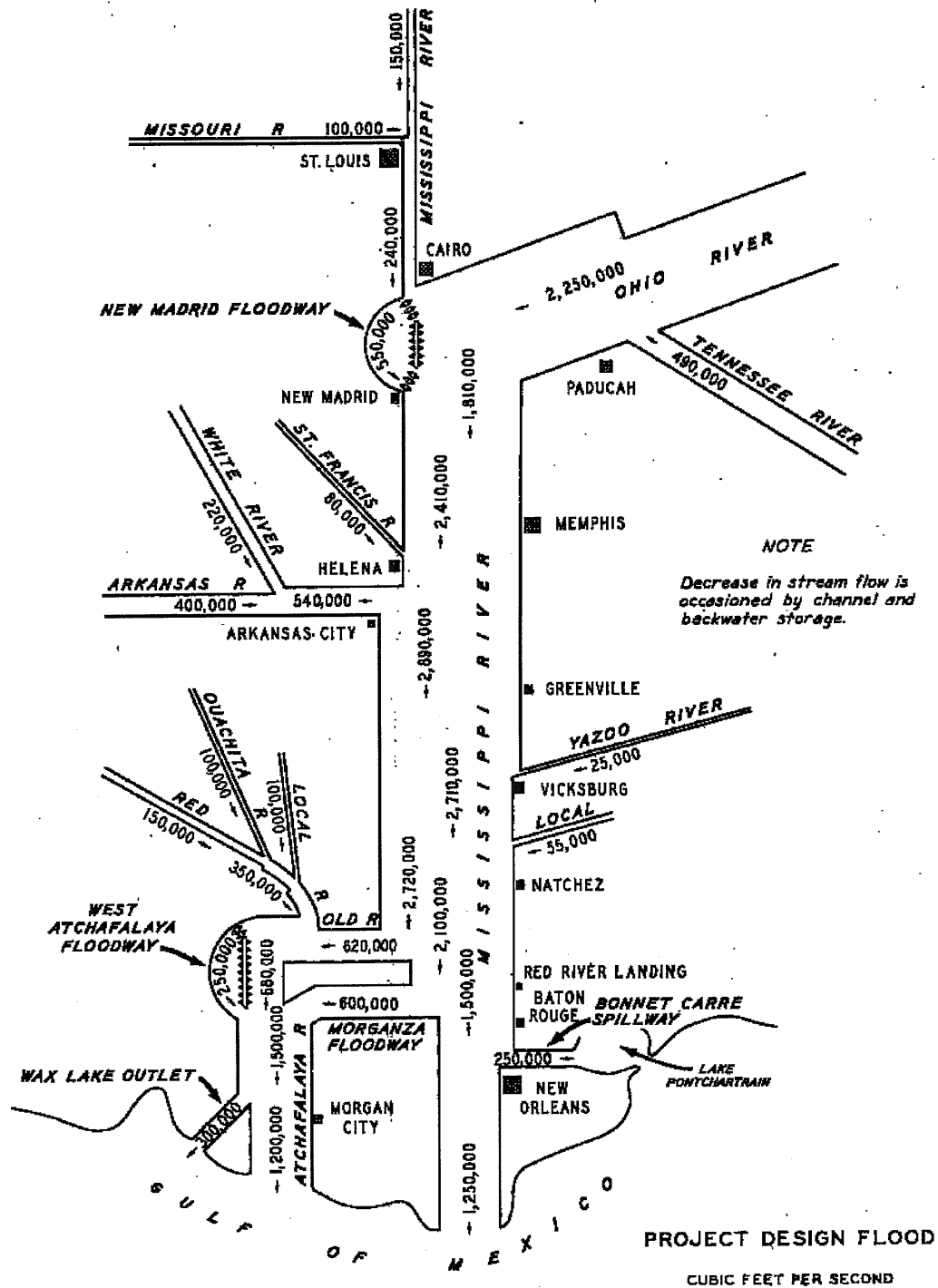
FIGURE 2.4-13 SHEET 1 OF 2 REV. 1



NOTES:
 1. DRAINAGE AREAS INDICATED ARE SPECIFIC TO THE GGNS UNIT 1 PMP ANALYSIS.

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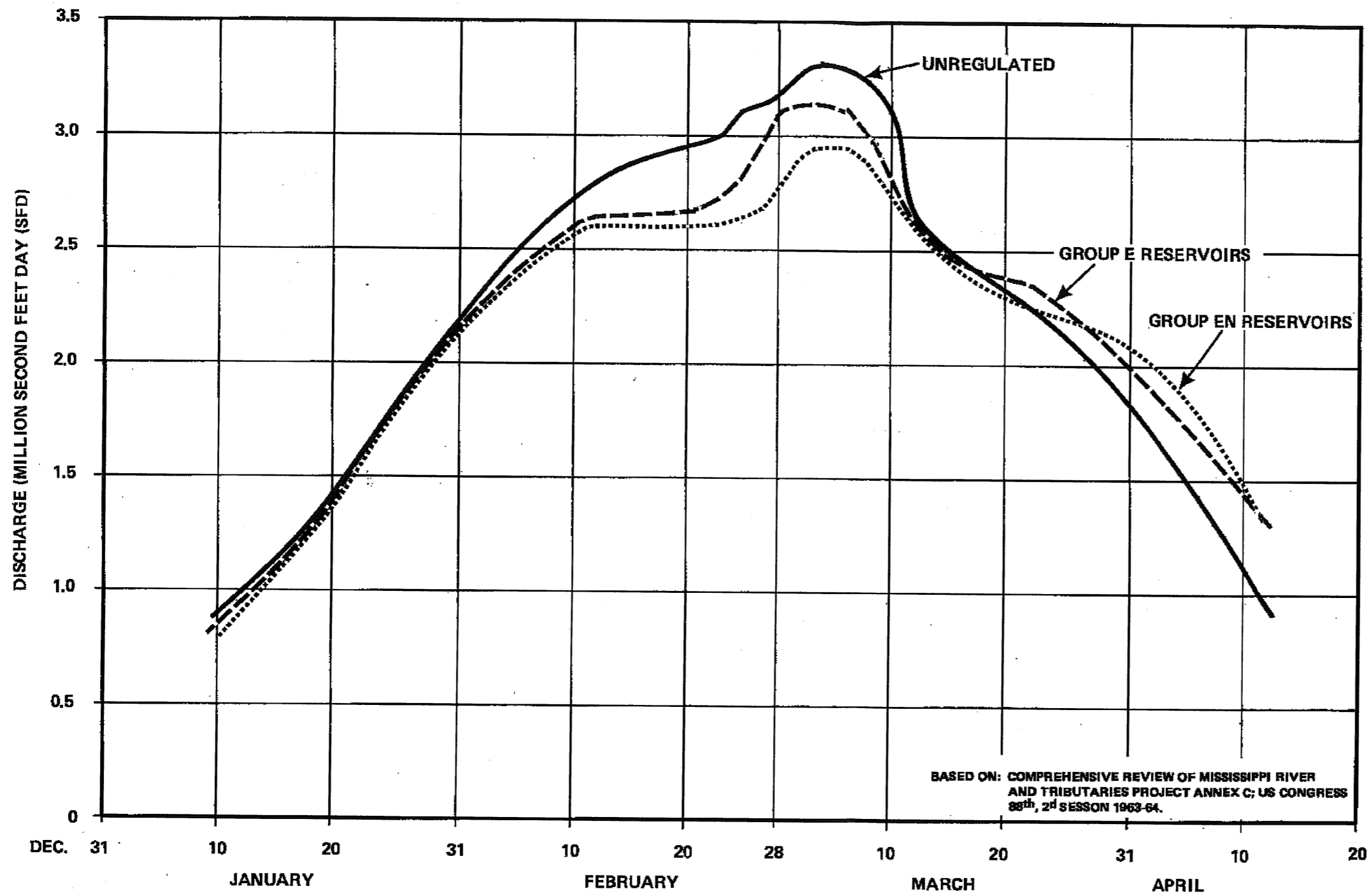
GGNS UNIT 1 PLANT DRAINAGE AREAS
 DURING PMP
 (UFSAR FIGURE 2.4-7a SH. 2)



SOURCE: MISSISSIPPI RIVER COMMISSION,
"LOWER MISSISSIPPI REGION
COMPREHENSIVE STUDY," APPENDIX C,
FIGURE-69, 1974

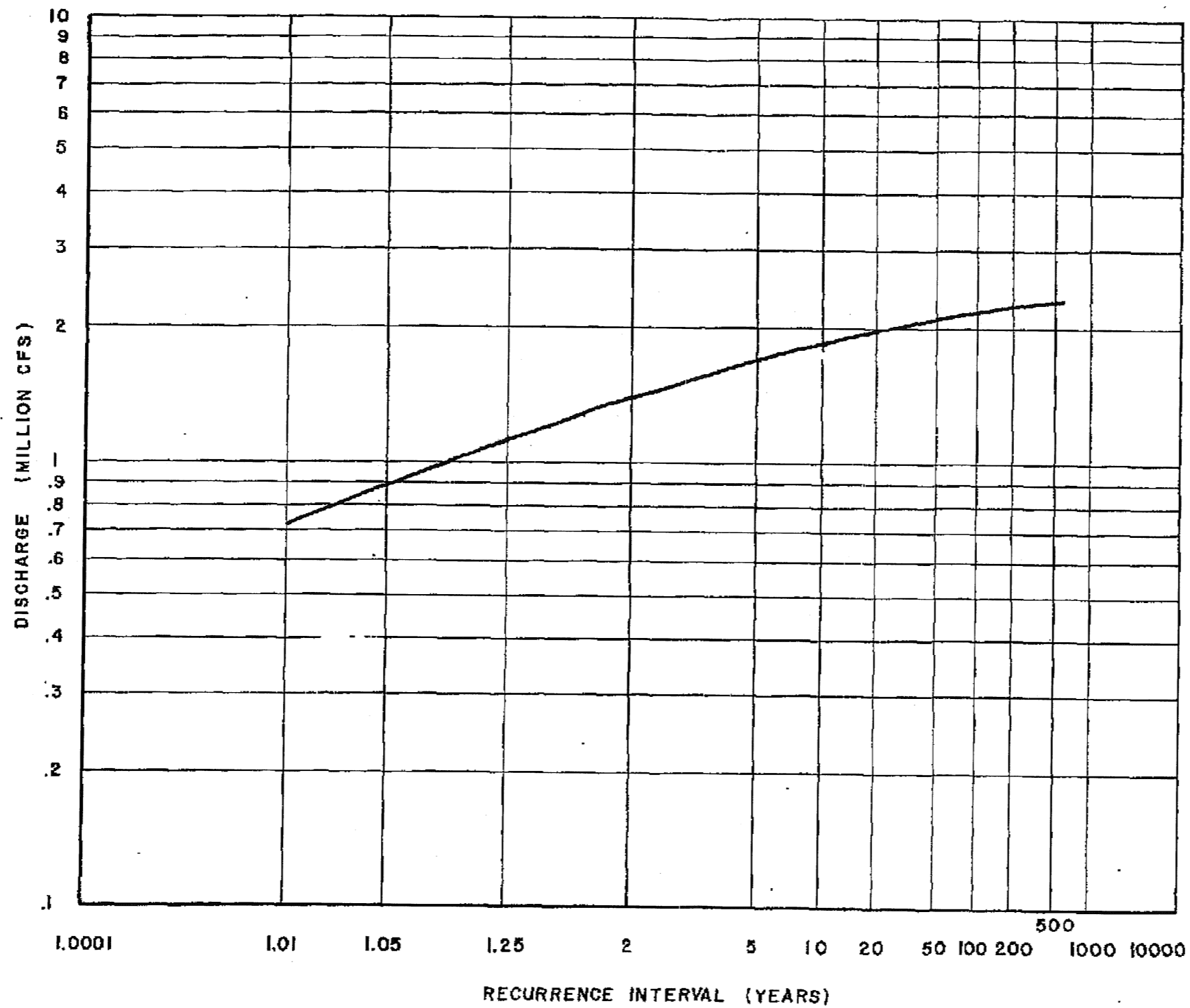
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DESIGN-PROJECT FLOOD FOR THE
LOWER MISSISSIPPI RIVER
U.S. CORPS OF ENGINEERS 1958
(UFSAR FIGURE 2.4-11)



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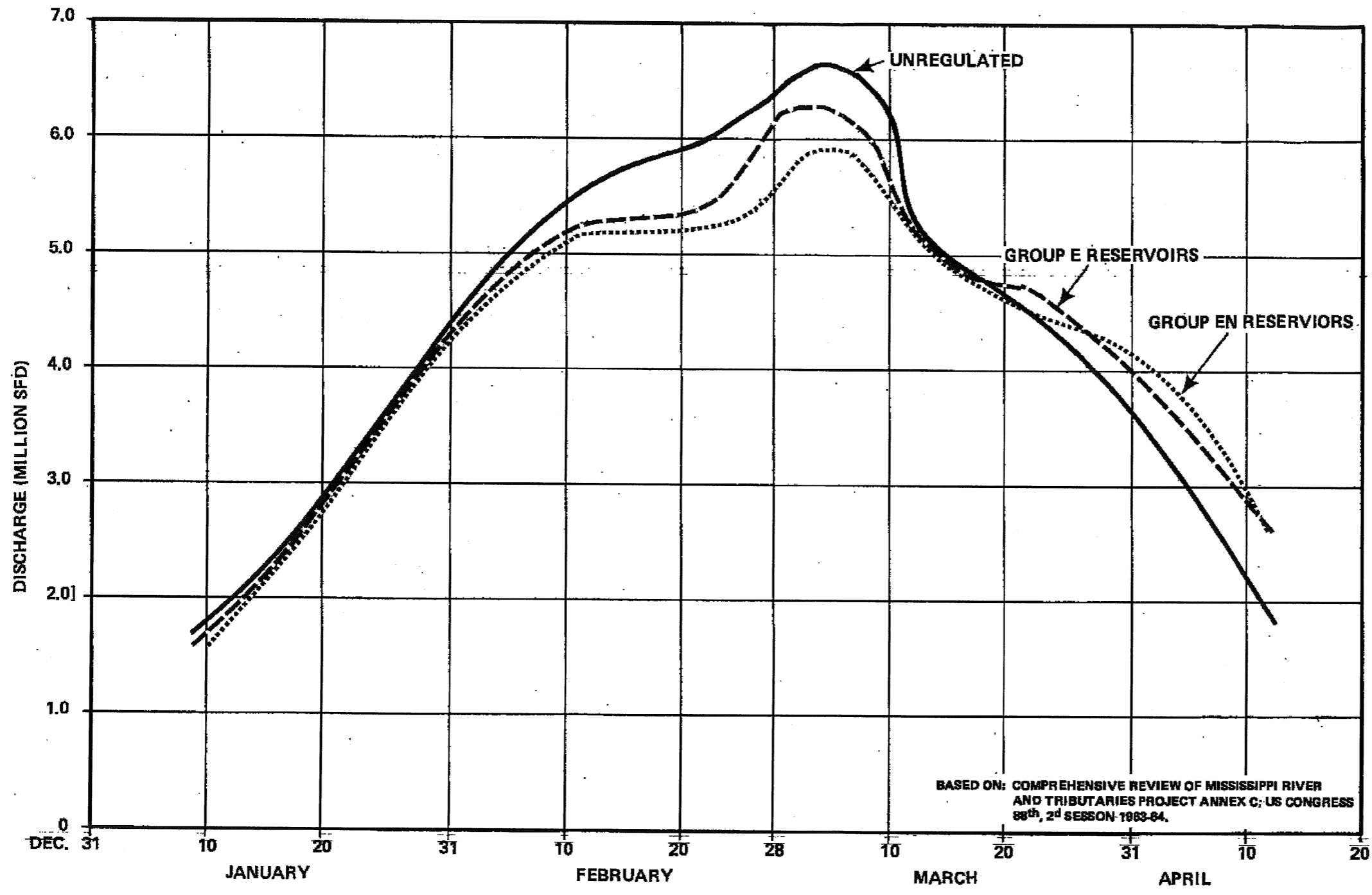
DPF HYDROGRAPHS FOR
 MISSISSIPPI RIVER
 (UFSAR FIGURE 2.4-12)



SOURCE: U.S.G.S.
 PERIOD OF RECORD: 1858 - 1973

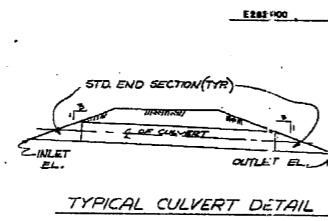
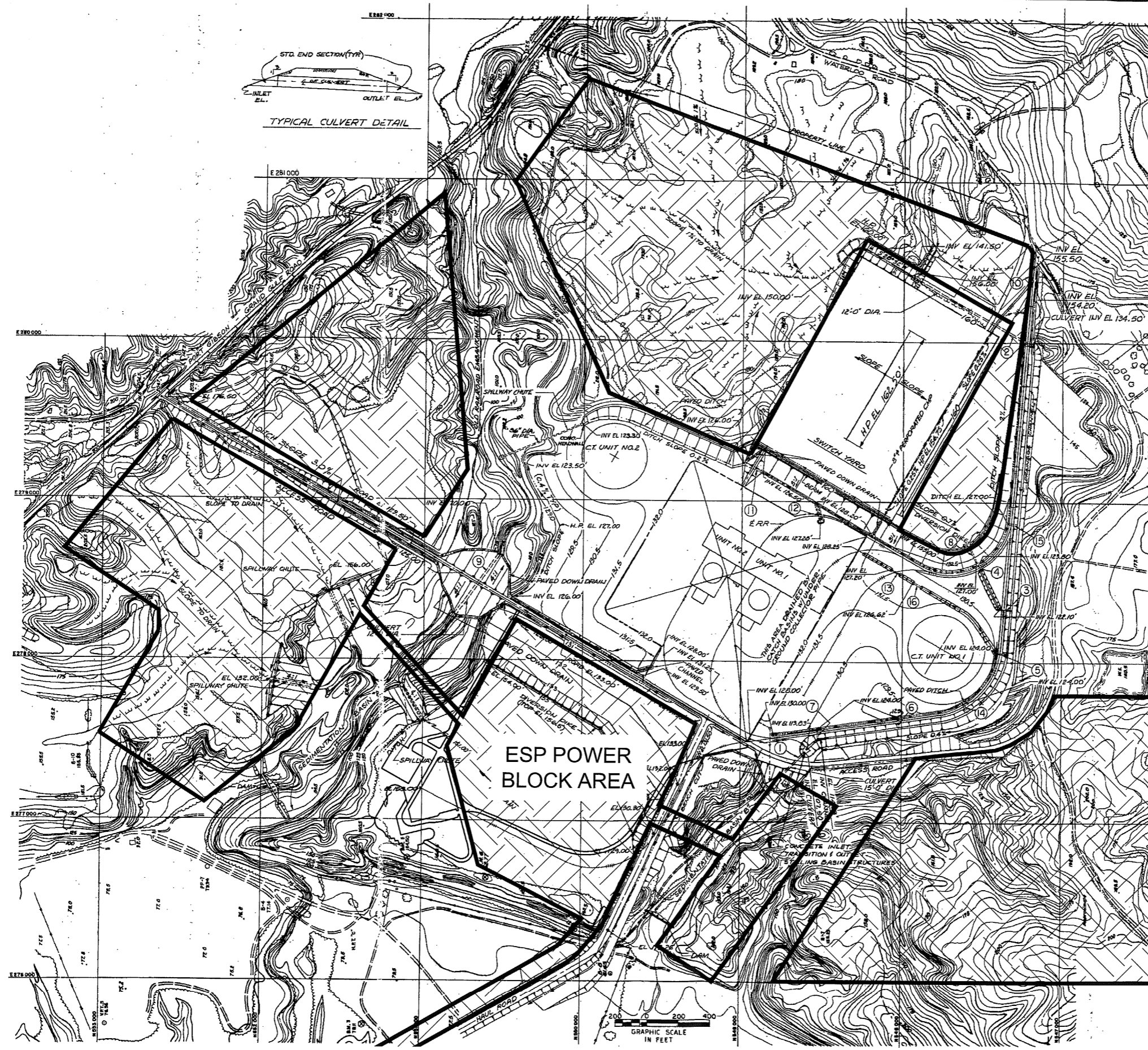
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 EARLY SITE PERMIT APPLICATION
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DISCHARGE-FREQUENCY RELATIONSHIP
 FOR MISSISSIPPI RIVER FLOODS AT
 VICKSBURG
 (UFSAR FIGURE 2.4-13)



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PMF HYDROGRAPHS FOR
 MISSISSIPPI RIVER
 (UFSAR FIGURE 2.4-14)



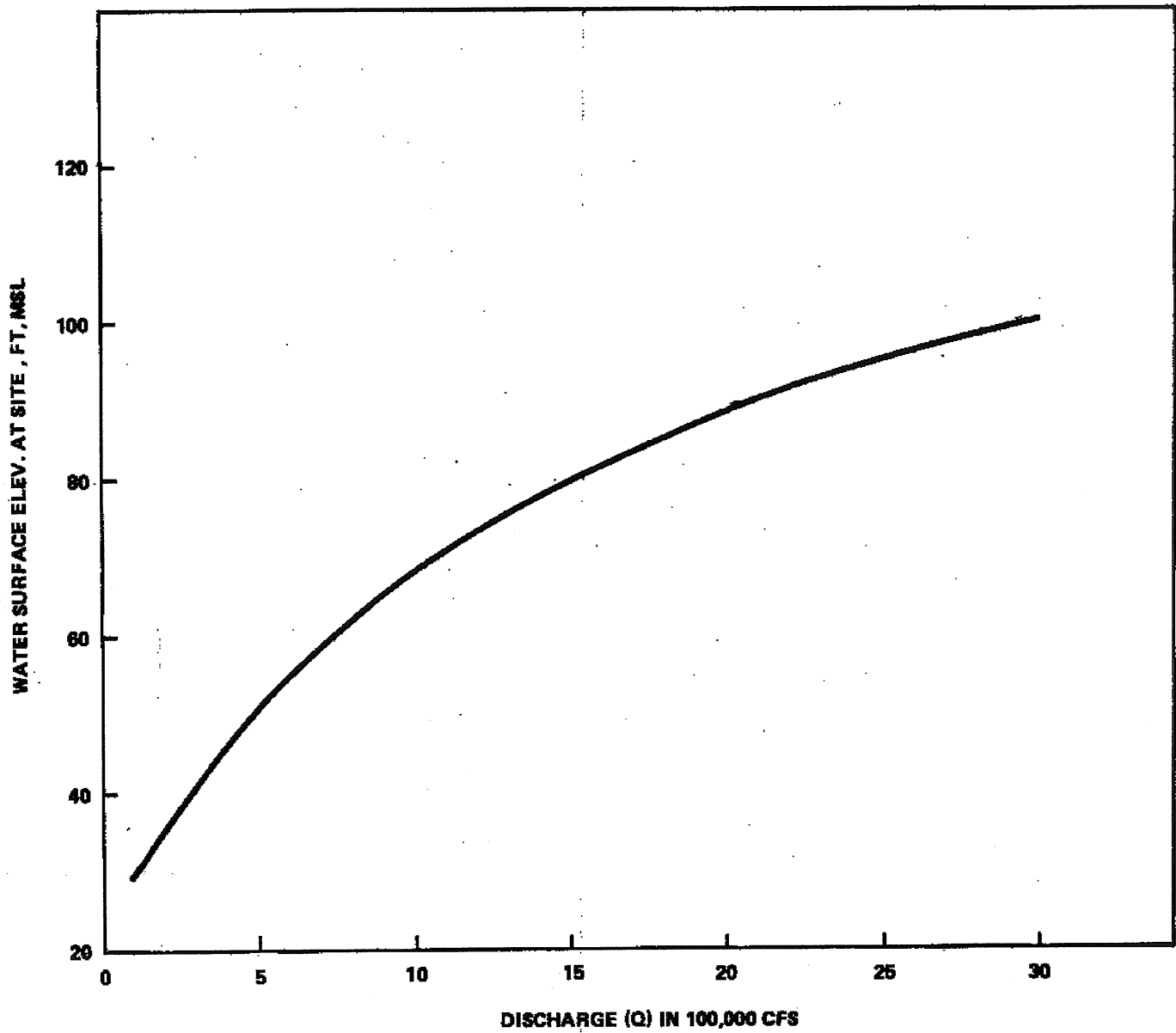
- LEGEND:**
- GRASS LINED DITCHES
 - GRASS LINED WATERWAYS
 - PAVED DITCHES
(3" GUNNITE OR 4" CONCRETE)
 - SPILLWAY CHUTES
(CMP WITH BASIN)
 - PAVED DOWN DRAIN
 - RAILROAD
 - CULVERTS
 - PROPOSED NEW FACILITY CONSTRUCTION AREAS.

- NOTES:**
1. STRUCTURES FOR GGNS UNIT 2 ARE FOR INFORMATION ONLY, SINCE CONSTRUCTION OF UNIT 2 WAS SUSPENDED ON 8/21/91.
 2. RAILROAD DATA AND LOCATIONS ARE FOR INFORMATION ONLY TO IDENTIFY LOCATION OF ORIGINAL RR BED. MOST OF THE RR HAS BEEN REMOVED.

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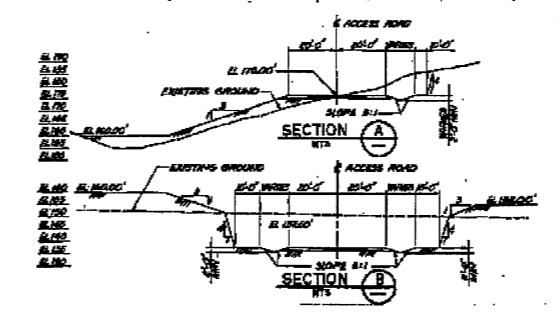
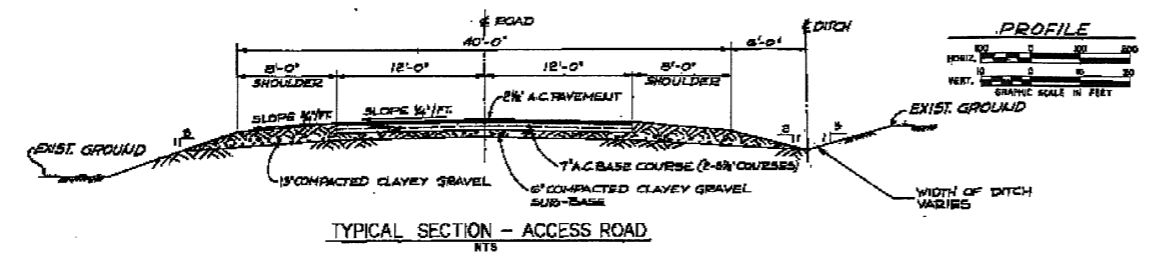
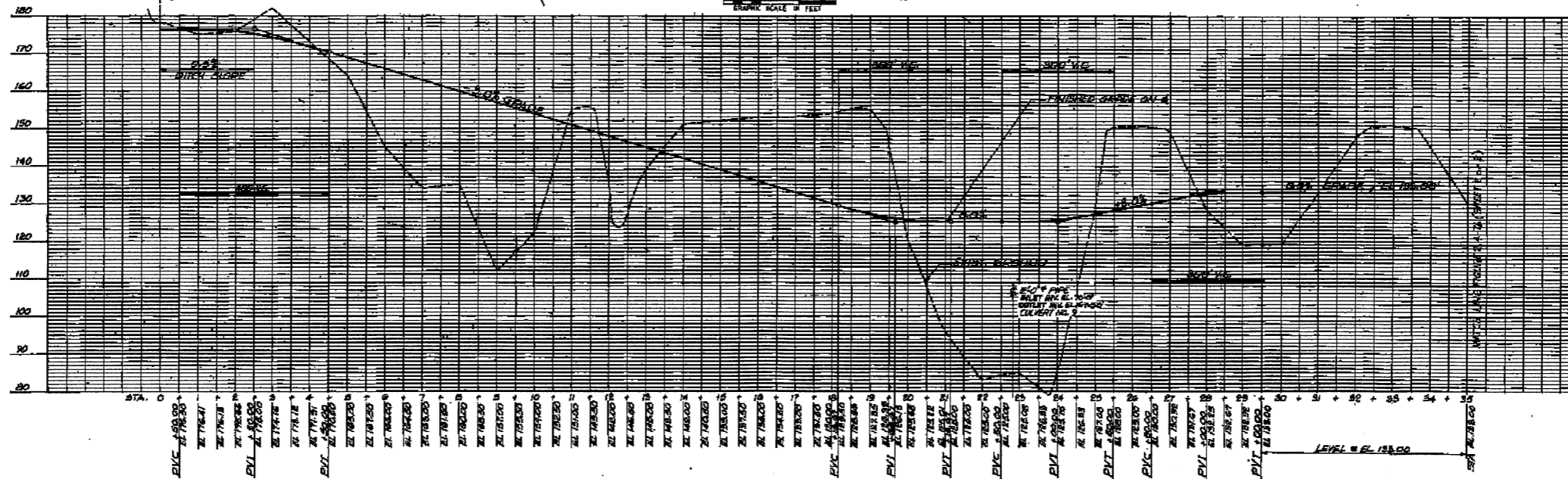
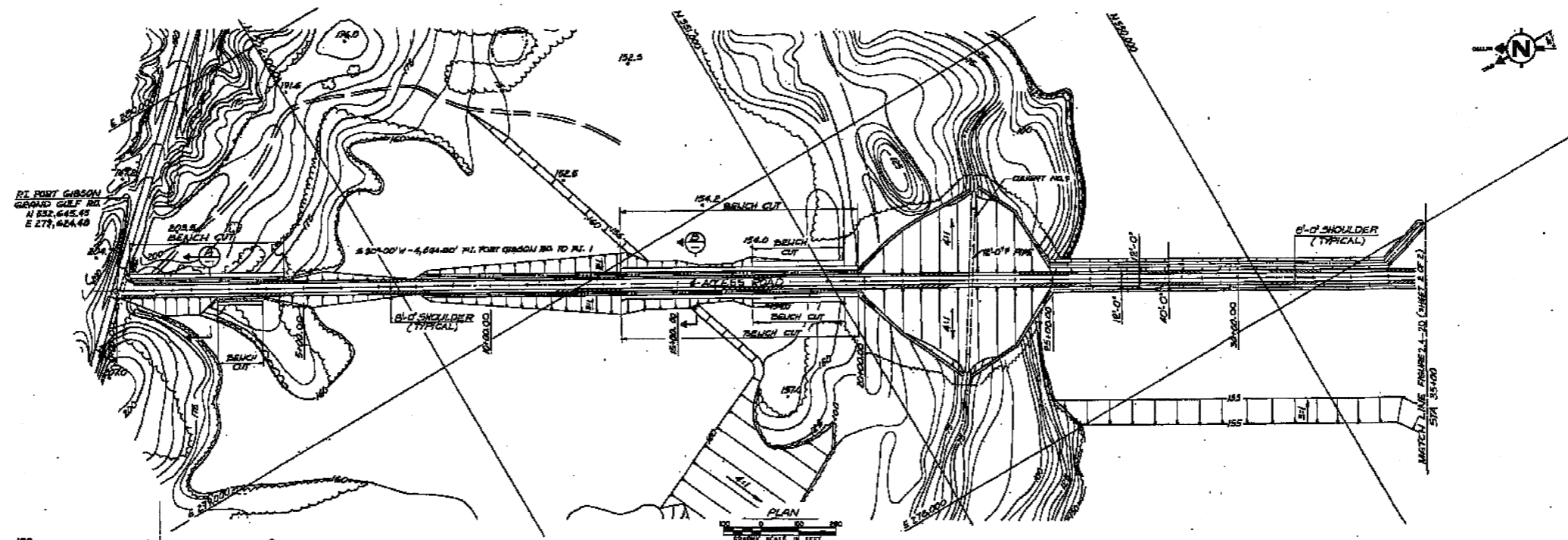
SITE DRAINAGE PLAN
 (UFSAR FIGURE 2.4-7)

FIGURE 2.4-18 REV. 1



SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

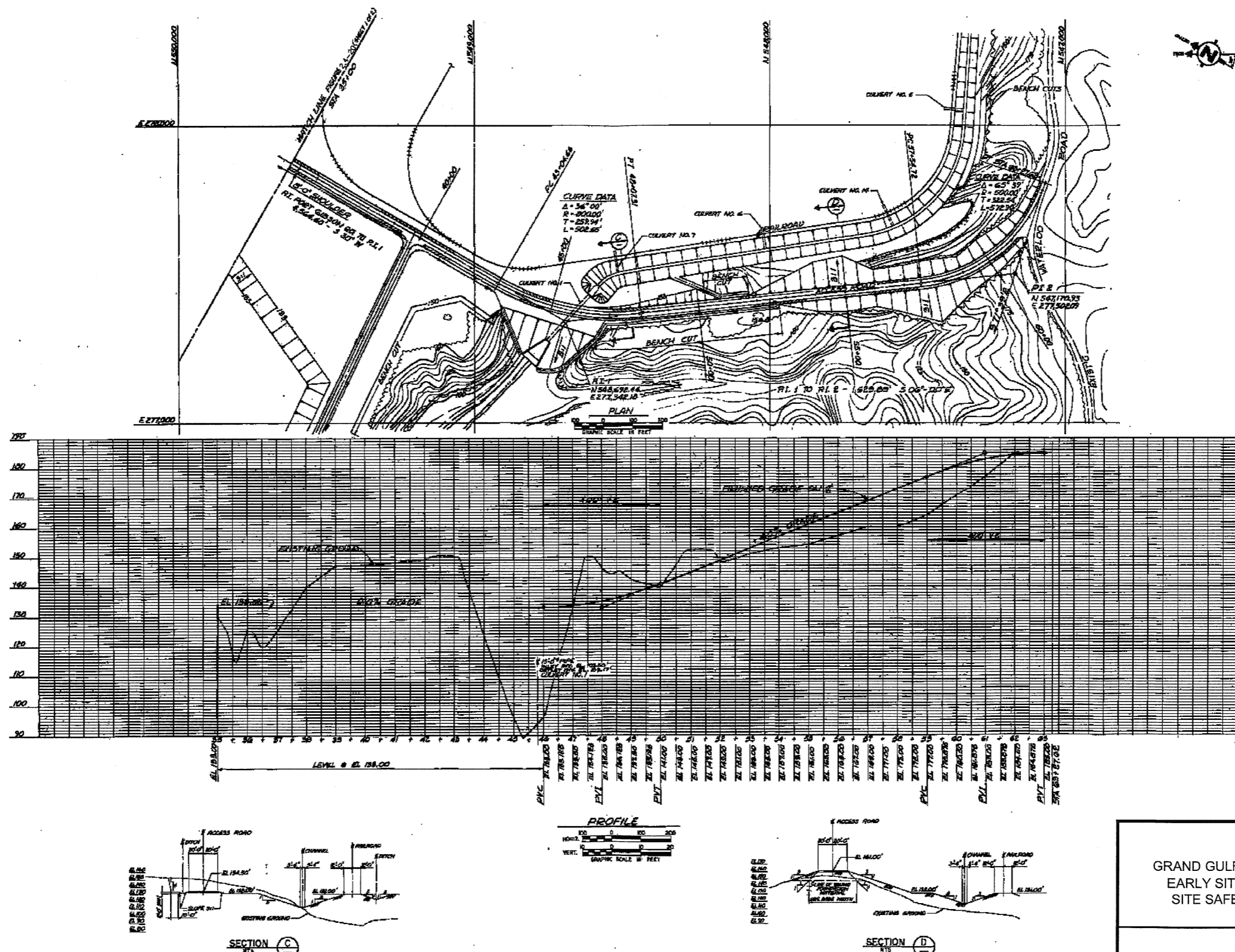
RATING CURVE FOR THE MISSISSIPPI
RIVER AT GRAND GULF SITE
(UFSAR FIGURE 2.4-15)



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 GRAND GULF NUCLEAR STATION SITE
 EARLY SITE PERMIT APPLICATION
 SITE SAFETY ANALYSIS REPORT

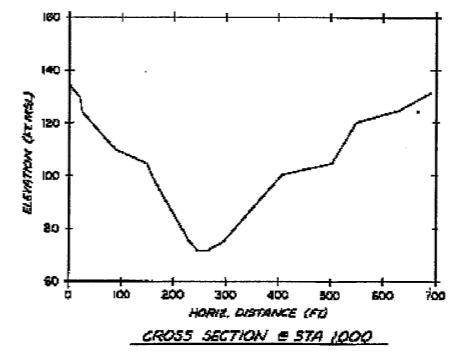
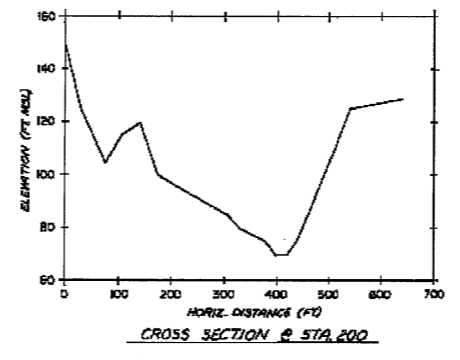
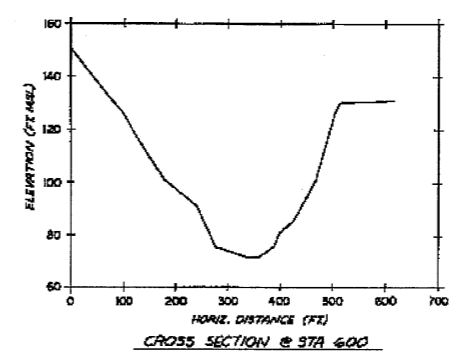
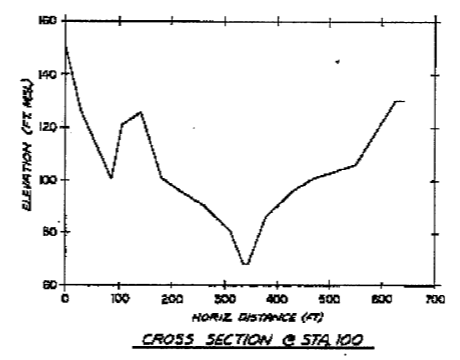
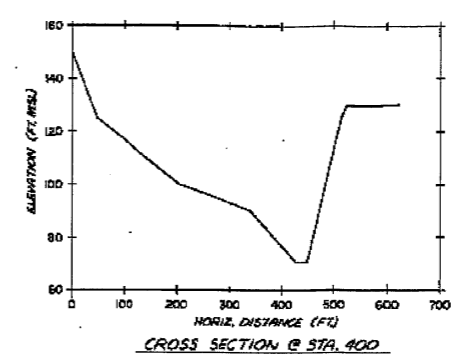
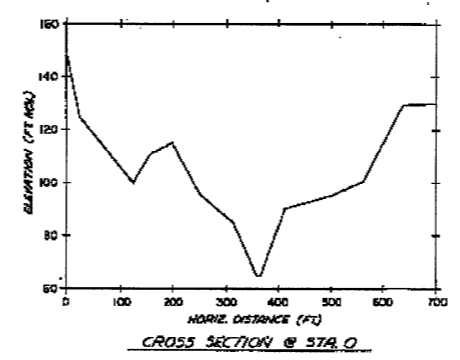
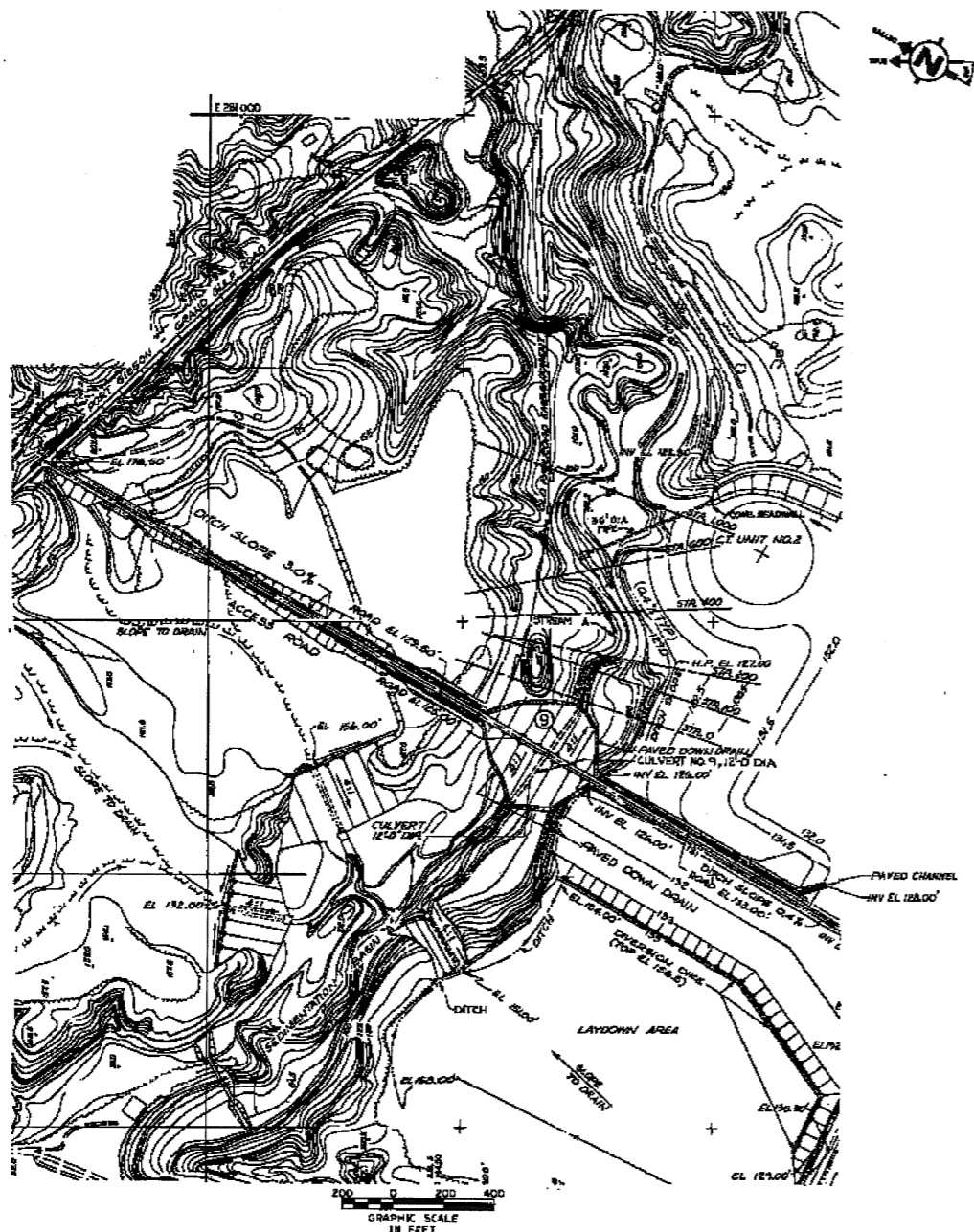
ACCESS ROAD
 PLAN AND PROFILE
 (UFSAR FIGURE 2.4-7b SH. 1)

FIGURE 2.4-20 SHEET 1 OF 2 REV. 1



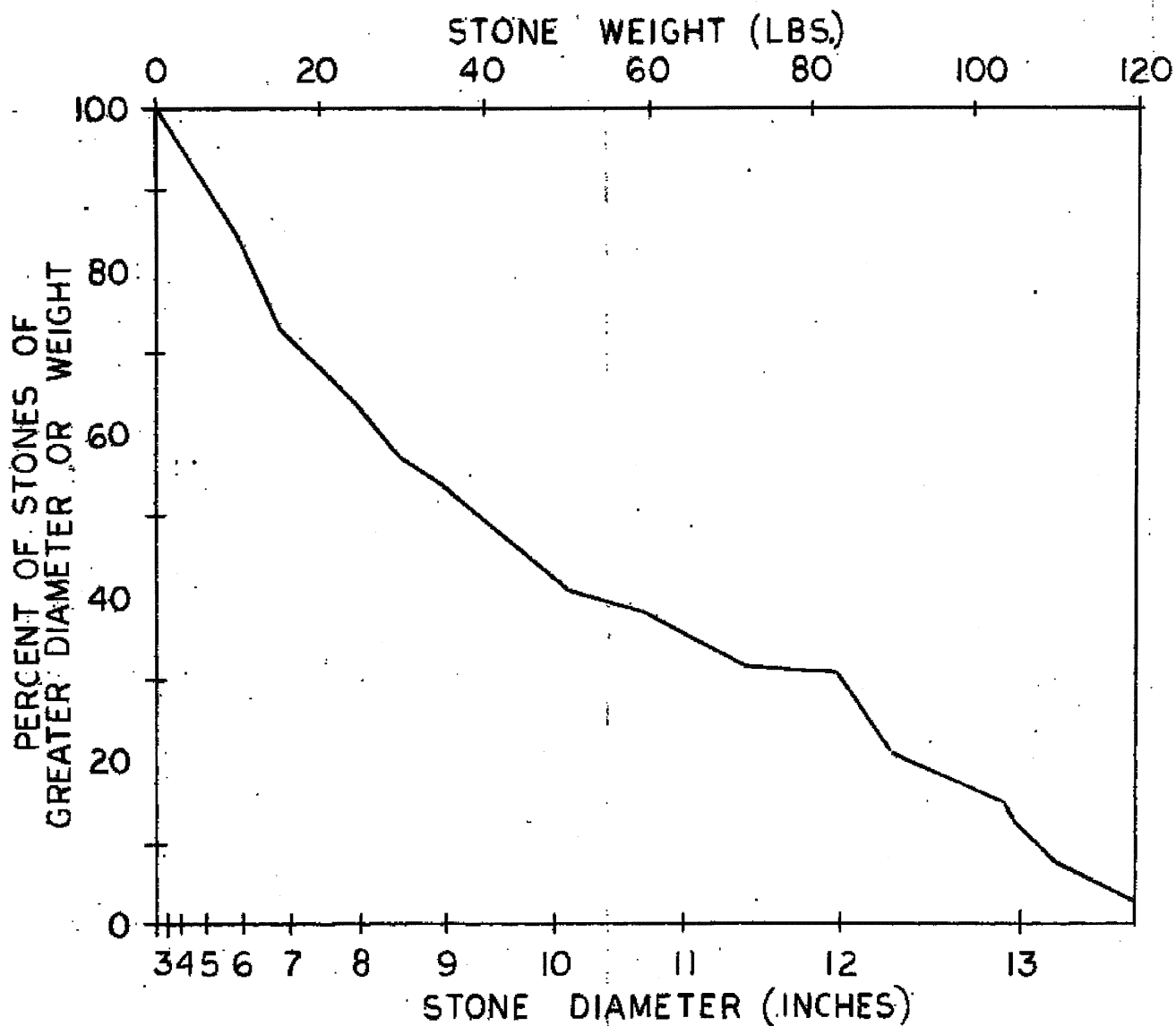
SERI
 GRAND GULF NUCLEAR STATION SITE
 EARLY SITE PERMIT APPLICATION
 SITE SAFETY ANALYSIS REPORT

ACCESS ROAD
 PLAN AND PROFILE
 (UFSAR FIGURE 2.4-7b SH. 2)



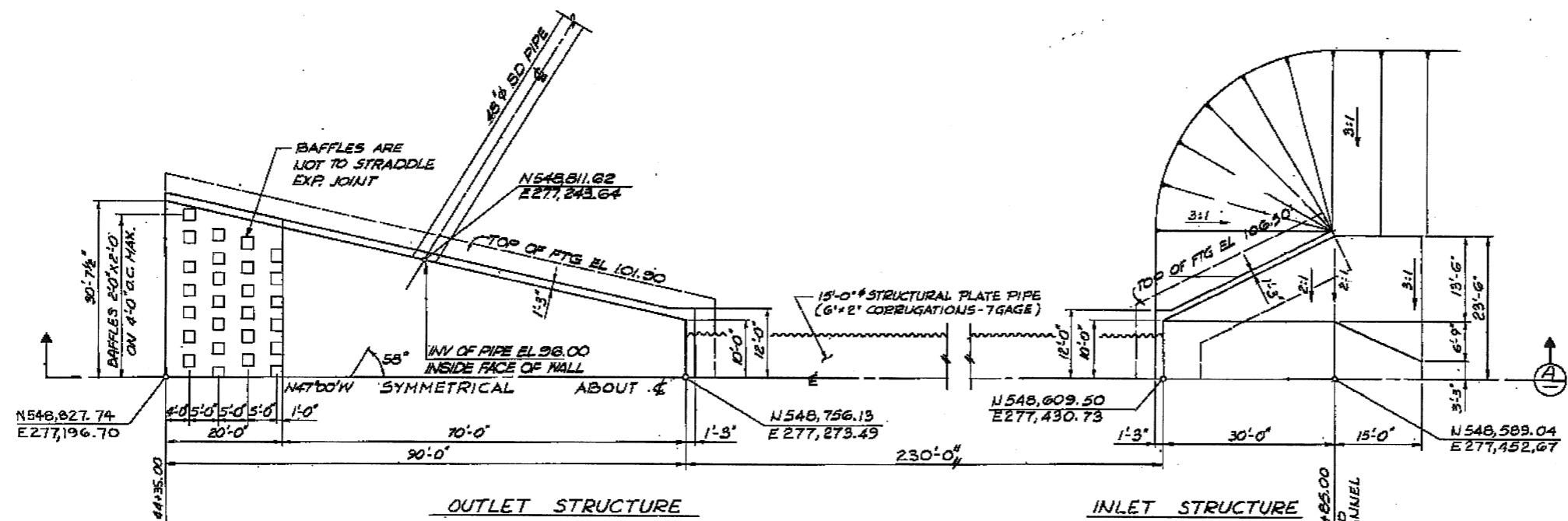
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 GRAND GULF NUCLEAR STATION SITE
 EARLY SITE PERMIT APPLICATION
 SITE SAFETY ANALYSIS REPORT

CROSS SECTIONS OF STREAM A
 (UFSAR FIGURE 2.4-7c)

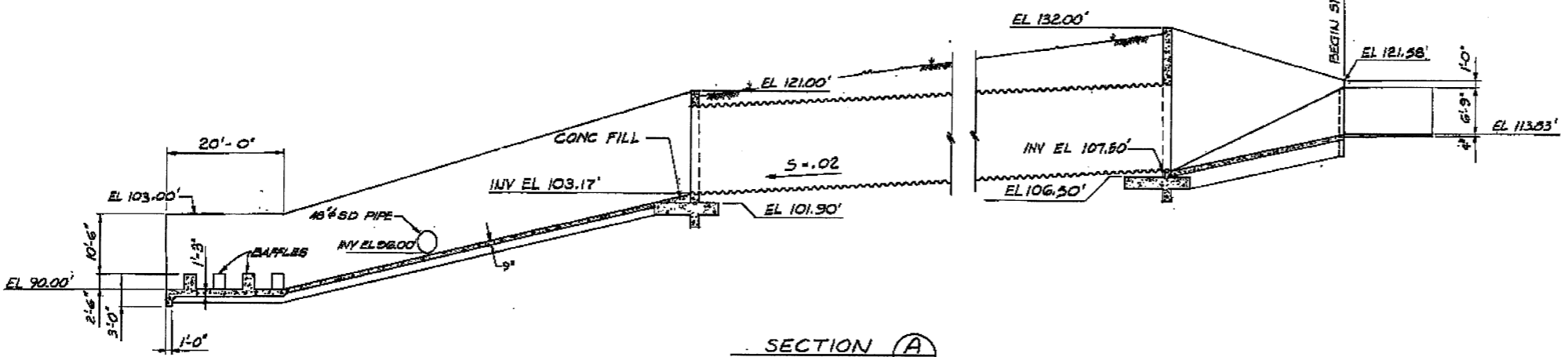


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 SITE SAFETY ANALYSIS REPORT

RIPRAP GRADATION CURVE
 (USAR FIGURE 2.4-16a)



HALF PLAN CULVERT NO. 1
 GRAPHIC SCALE IN FEET

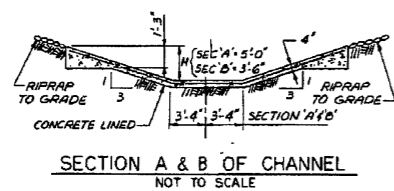
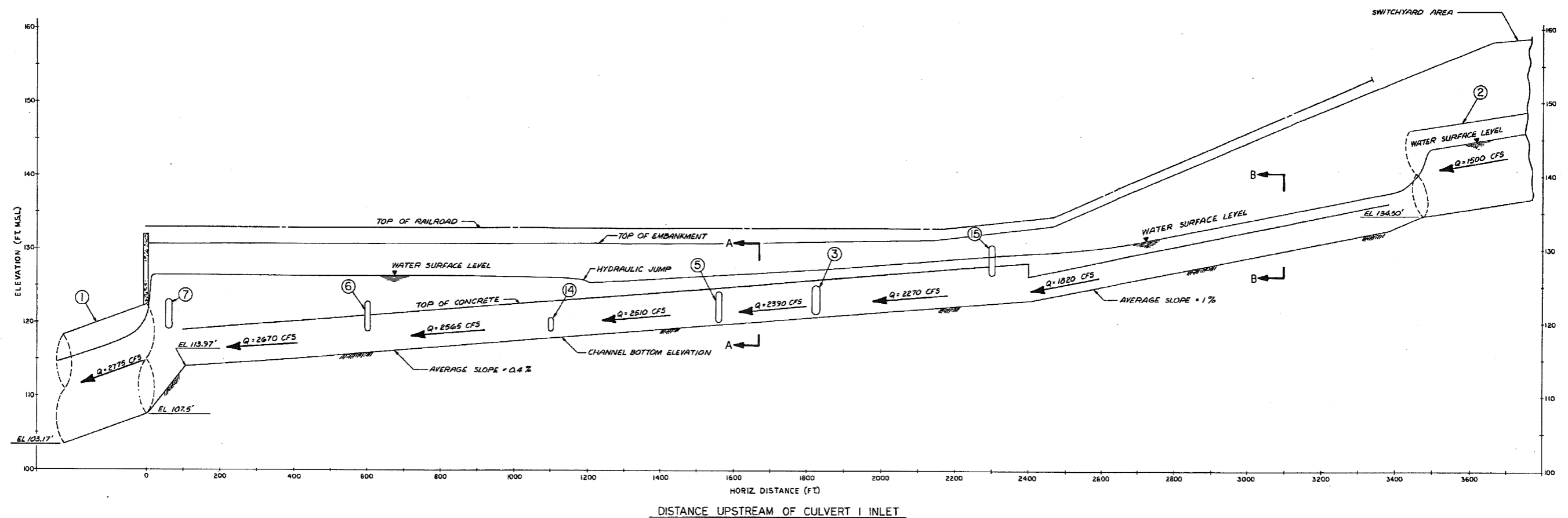


SECTION A
 GRAPHIC SCALE IN FEET

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 EARLY SITE PERMIT APPLICATION
 SITE SAFETY ANALYSIS REPORT

CULVERT NO. 1
 PLAN AND SECTIONS
 (UFSAR FIGURE 2.4-7d)

FIGURE 2.4-23 REV. 1



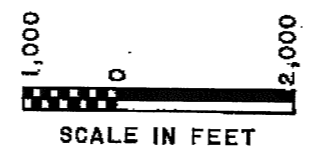
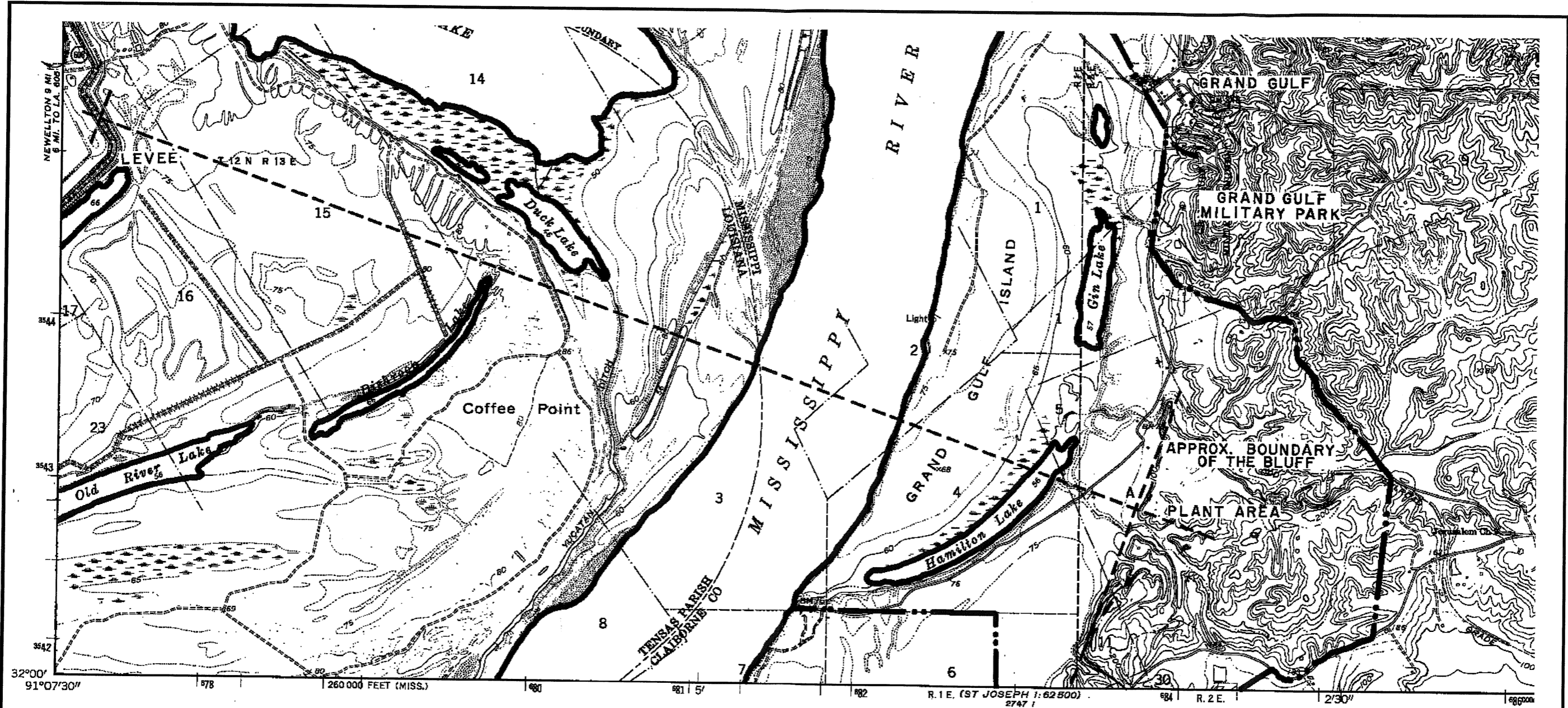
⑤ REPRESENTS CULVERT LOCATION

NOTES:

1. FOR DETAIL OF CULVERTS REFER TO TABLE 2.4-12 (GGNS UFSAR TABLE 2.4-28).
2. FOR PLAN OF PERIPHERAL DRAINAGE DITCH OF BASIN B REFER TO FIGURES 2.4-13 & 2.4-18 (GGNS UFSAR FIGURE 2.4-7 & 2.4-7A).
3. FLOW RATES (Q) SHOWN ARE FOR GGNS UNIT 1 PMP ANALYSIS ONLY.

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PROFILE AND SECTIONS
 OF PERIPHERAL DRAINAGE
 FOR BASIN B
 (UFSAR FIGURE 2.4-16)

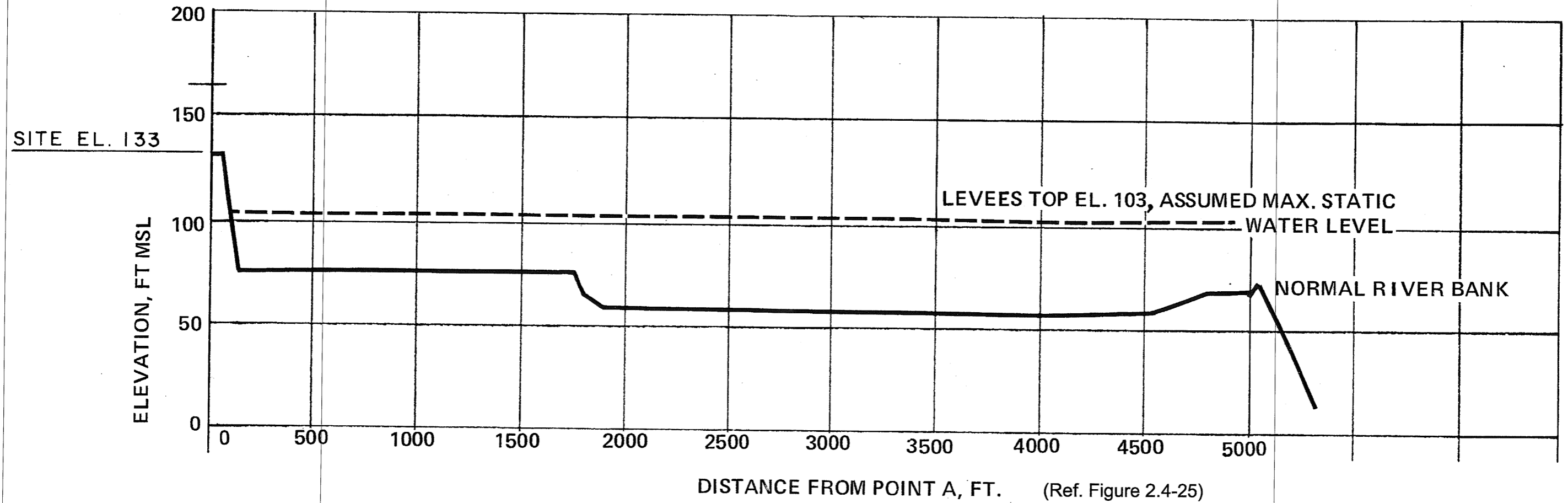


Adapted from U.S.G.S. 7.5 Minute
Topographic Sheet 1963 Series

SERI
GRAND GULF NUCLEAR STATION SITE
EARLY SITE PERMIT APPLICATION
SITE SAFETY ANALYSIS REPORT

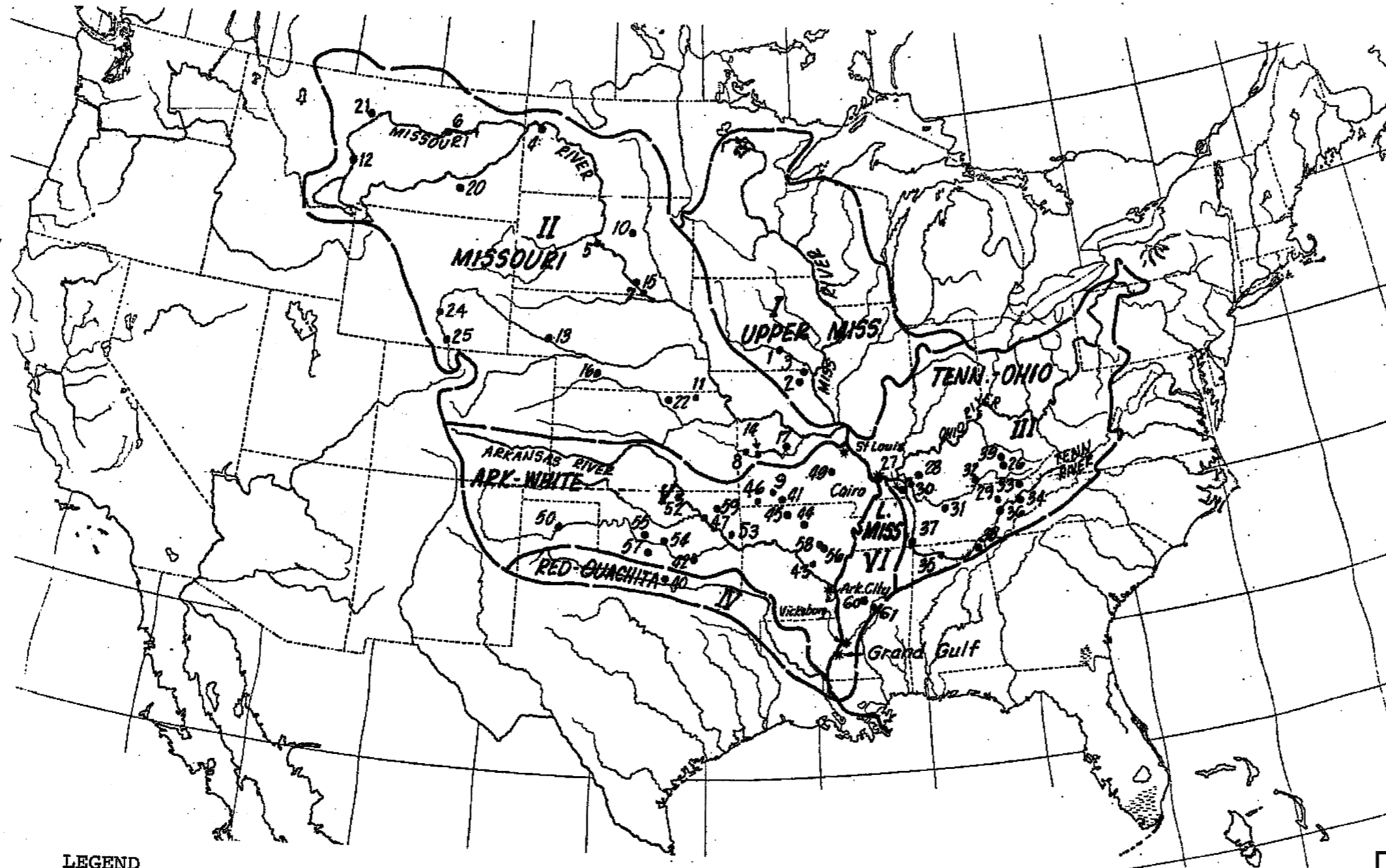
BOUNDARIES OF WATER SURFACE AT EL.
103 IN THE SITE REGION
(UFSAR FIGURE 2.4-17)

FIGURE 2.4-25 REV. 1



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GROUND SURFACE PROFILE OF
 MISSISSIPPI RIVER FLOOD PLAIN
 (UFSAR FIGURE 2.4-18)

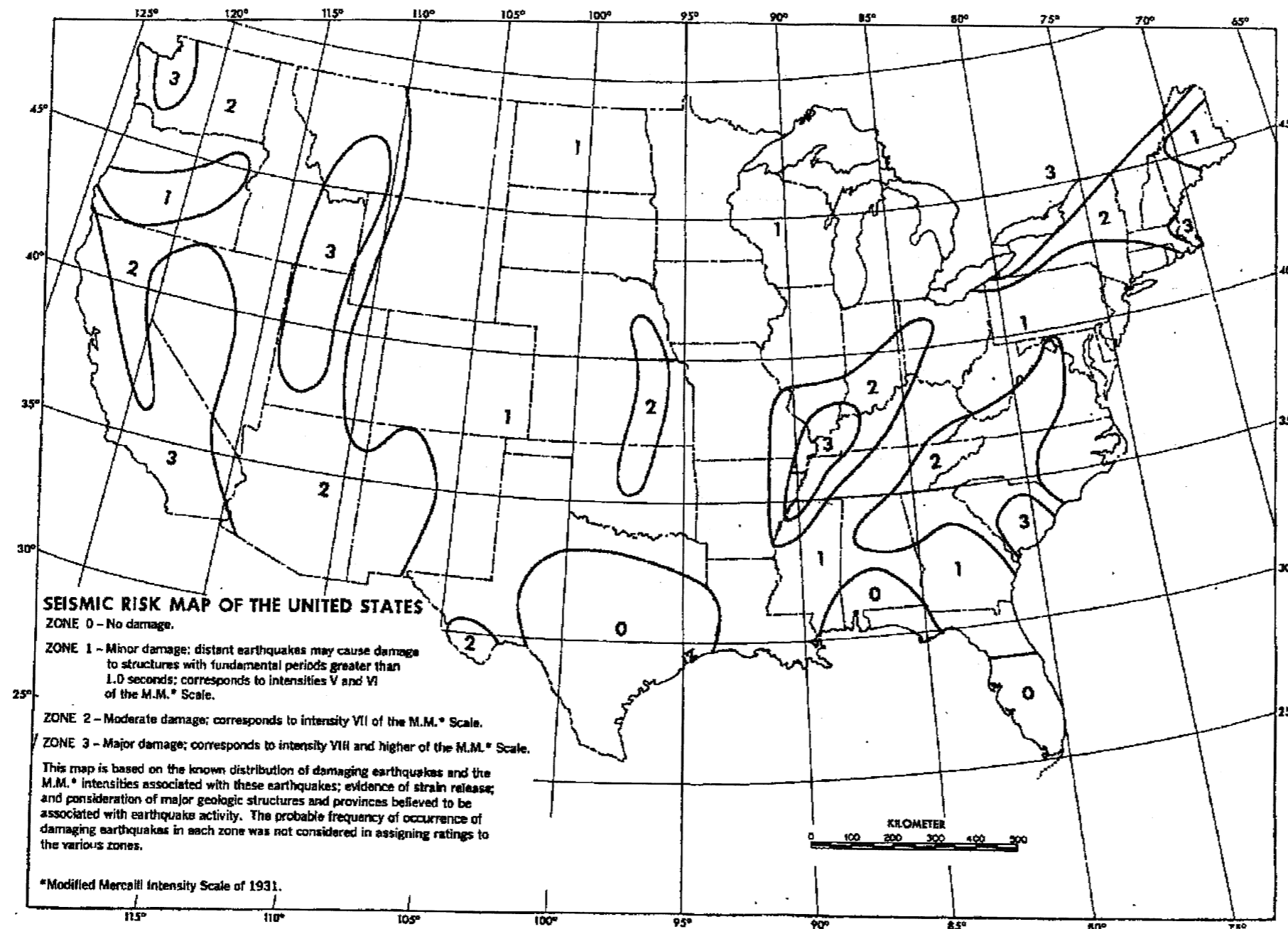


LEGEND

• 20 NUMBERS REFER TO RESERVOIRS LISTED IN TABLE 2.4-15
(UFSAR TABLE 2.4-14)

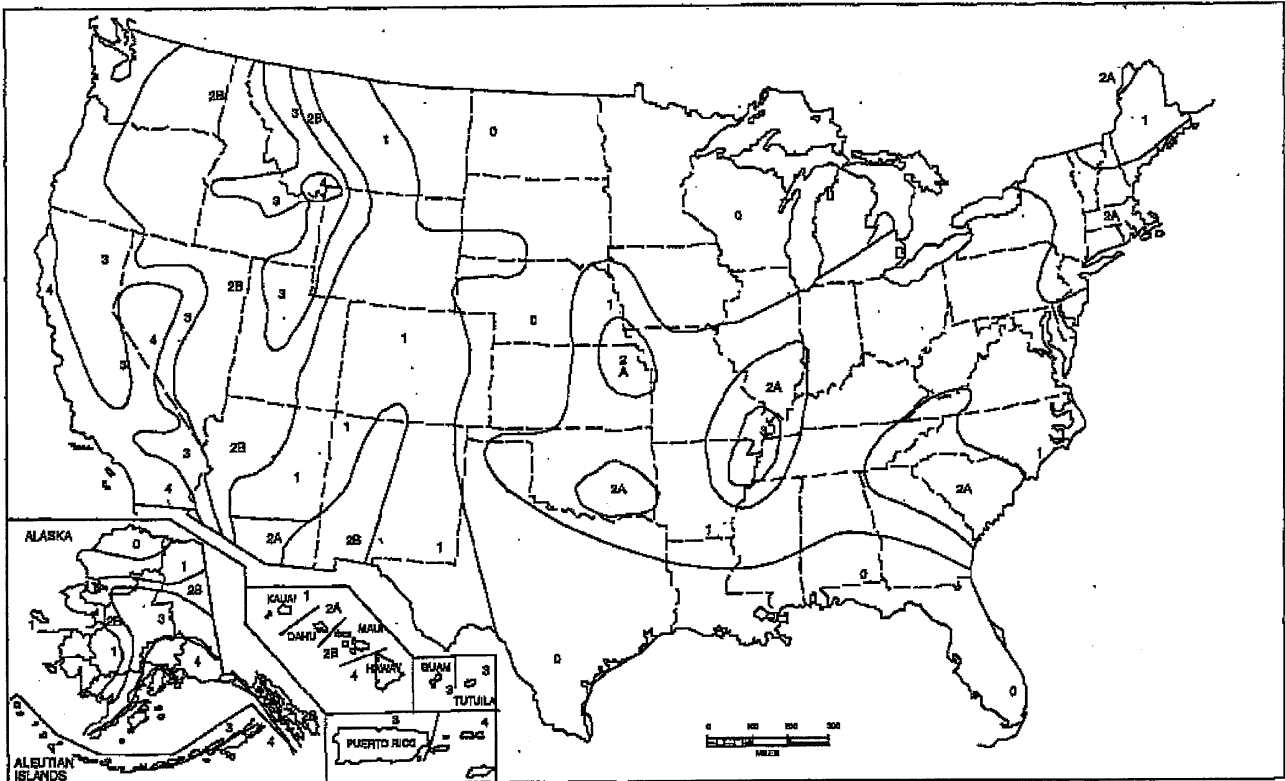
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MAJOR RESERVOIRS IN
THE MISSISSIPPI BASIN
(UFSAR FIGURE 2.4-19)



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SEISMIC RISK MAP
 FOR THE UNITED STATES
 (UFSAR FIGURE 2.4-20)



SEISMIC ZONE FACTOR Z

ZONE	1	2A	2B	3	4
Z	0.075	0.15	0.20	0.30	0.40

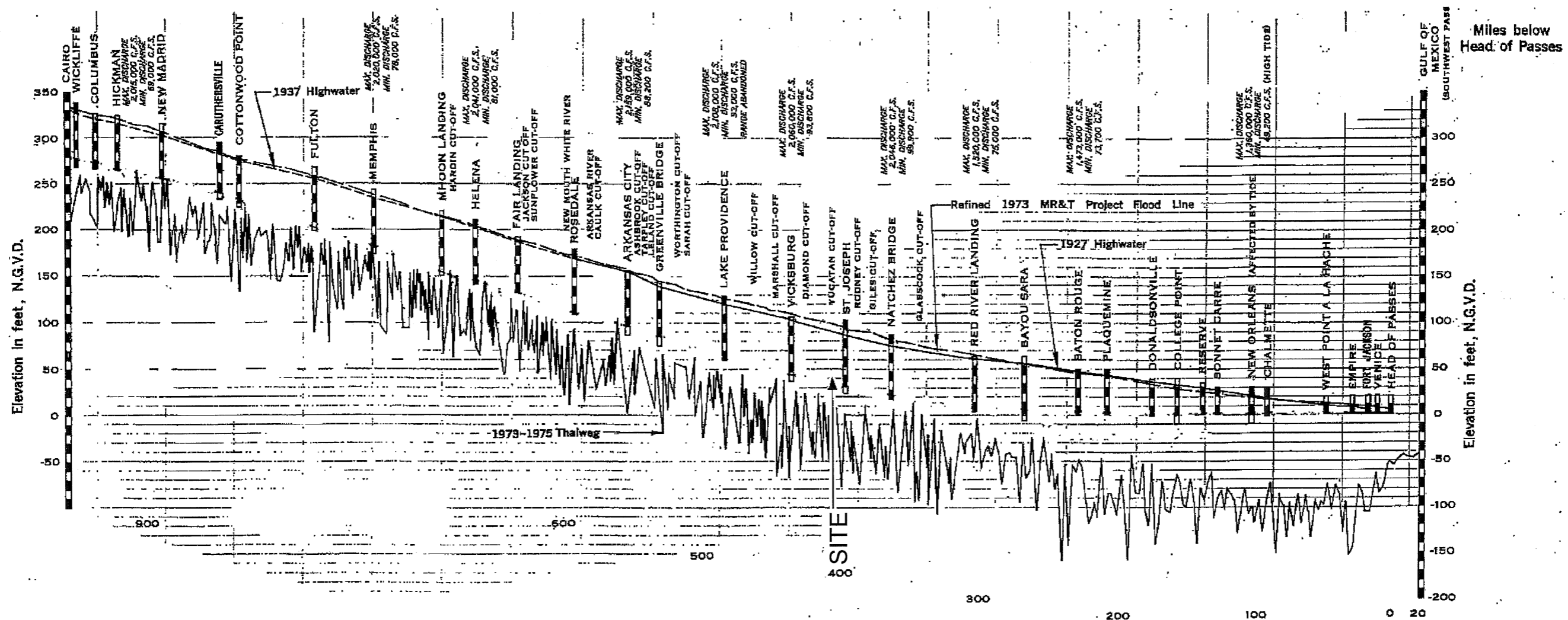
SOURCE: 1997 UNIFORM BUILDING CODE

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 SITE SAFETY ANALYSIS REPORT

SEISMIC ZONE MAP
 OF THE UNITED STATES

FIGURE 2.4-28a

REV. 1

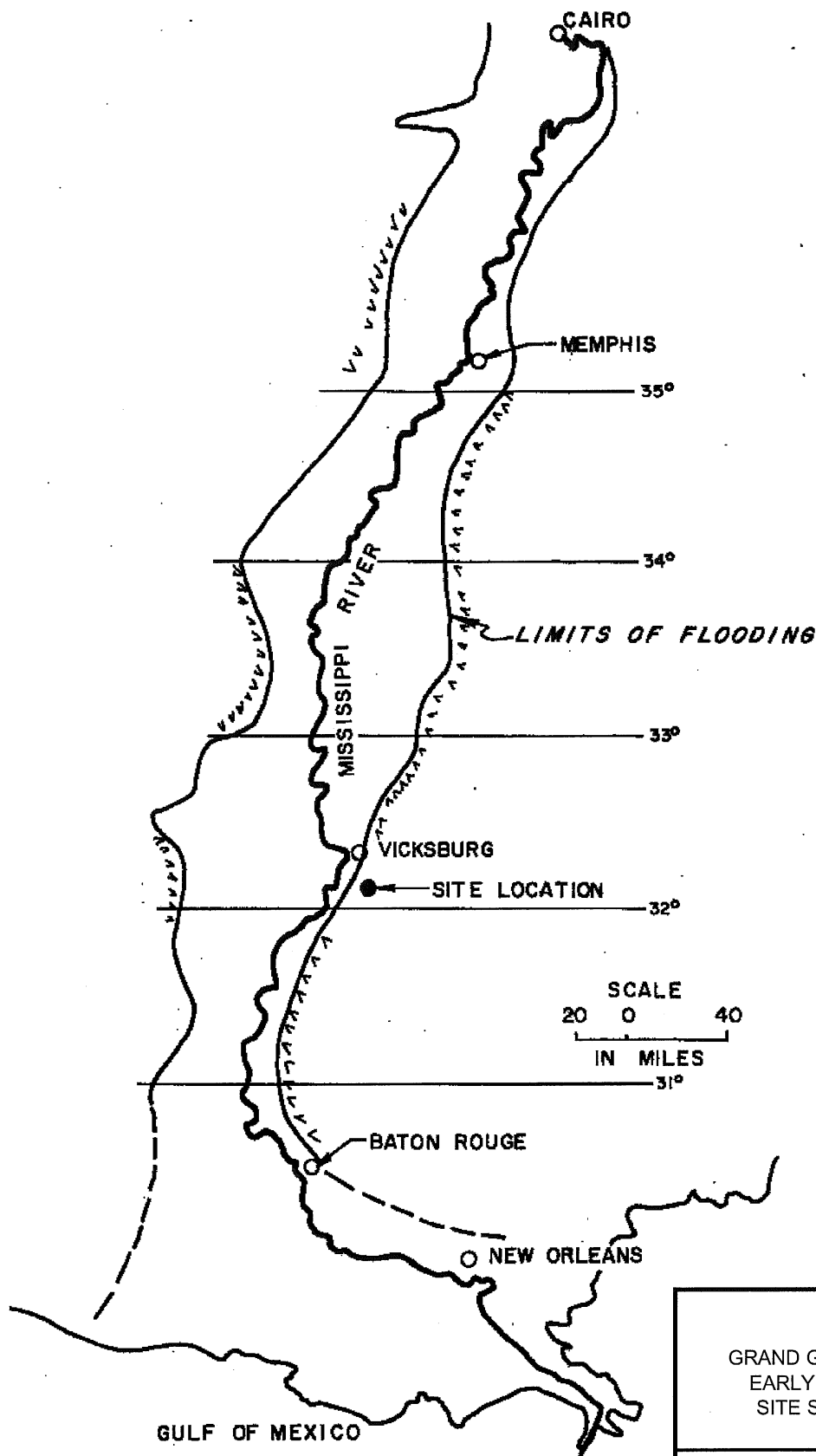


Source: Adapted from USACE

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DESIGN PROJECT FLOOD ELEVATIONS FROM
 CAIRO, ILLINOIS TO HEAD OF PASSES

FIGURE 2.4-29

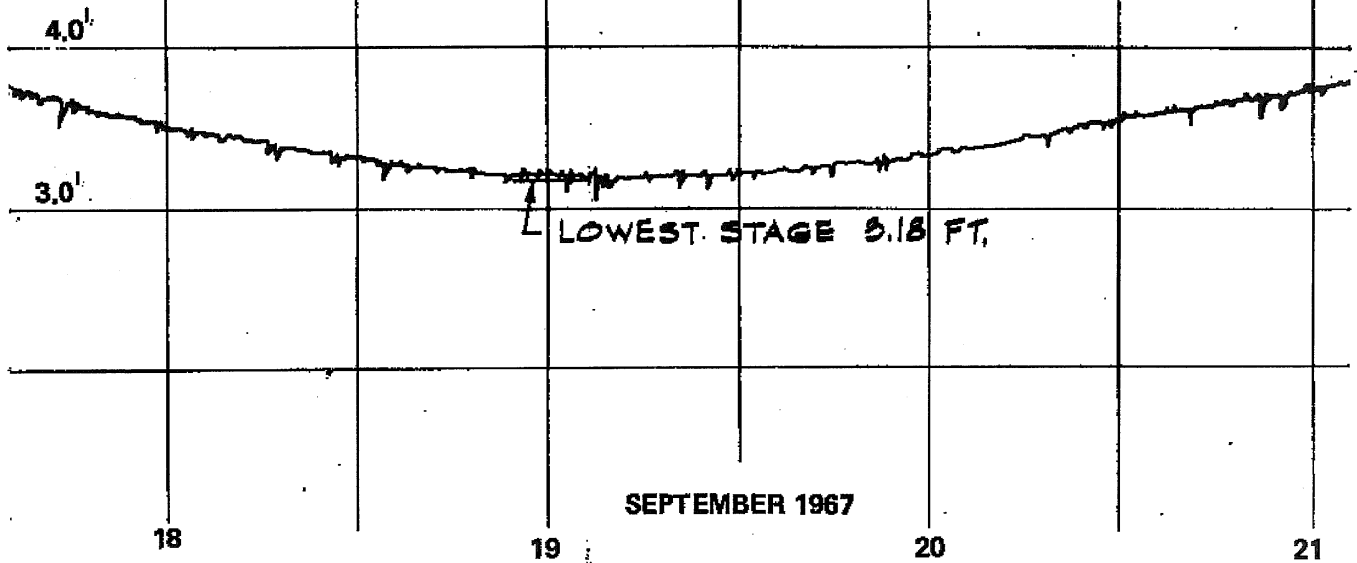


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PLAN SHOWING AREAS THAT MAY BE
 SUBMERGED DUE TO A FLOOD RISING TO
 EL. 103 MSL AT THE SITE
 (UFSAR FIGURE 2.4-22)

DATA SOURCE: CORP OF ENGINEERS
VICKSBURG, MISSISSIPPI

GAGE 0 = 46.22' MSL

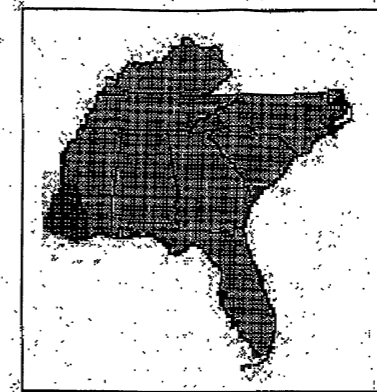
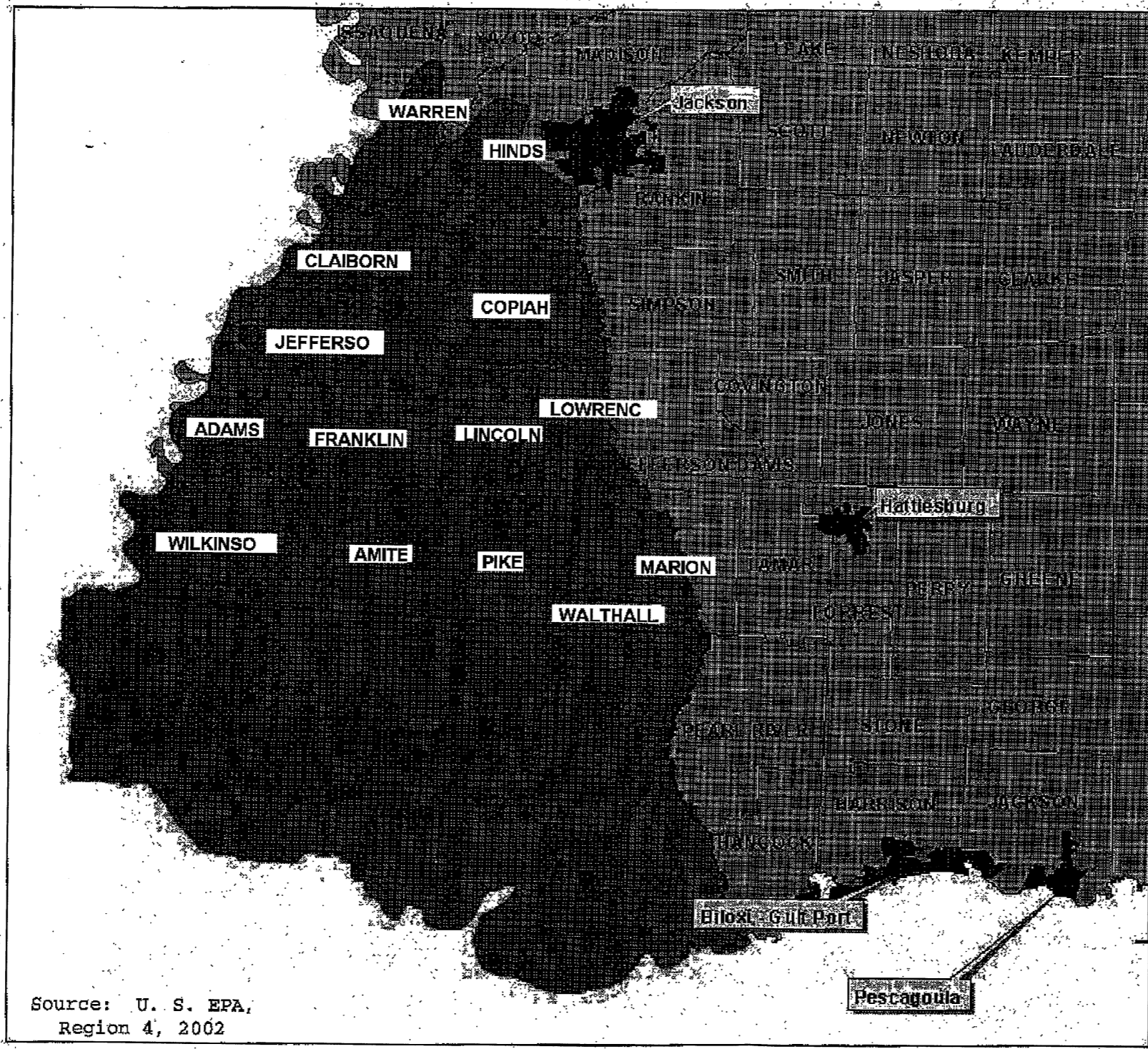


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INSTANTANEOUS LOW FLOW IN
MISSISSIPPI RIVER-TYPICAL GAUGE
RECORD AT VICKSBURG, MISS.
SEPTEMBER 18, 19, 20 & 21, 1967
(UFSAR FIGURE 2.4-25)

FIGURE 2.4-31

REV. 1



**SOUTHERN HILLS
REGIONAL AQUIFER
SYSTEM**

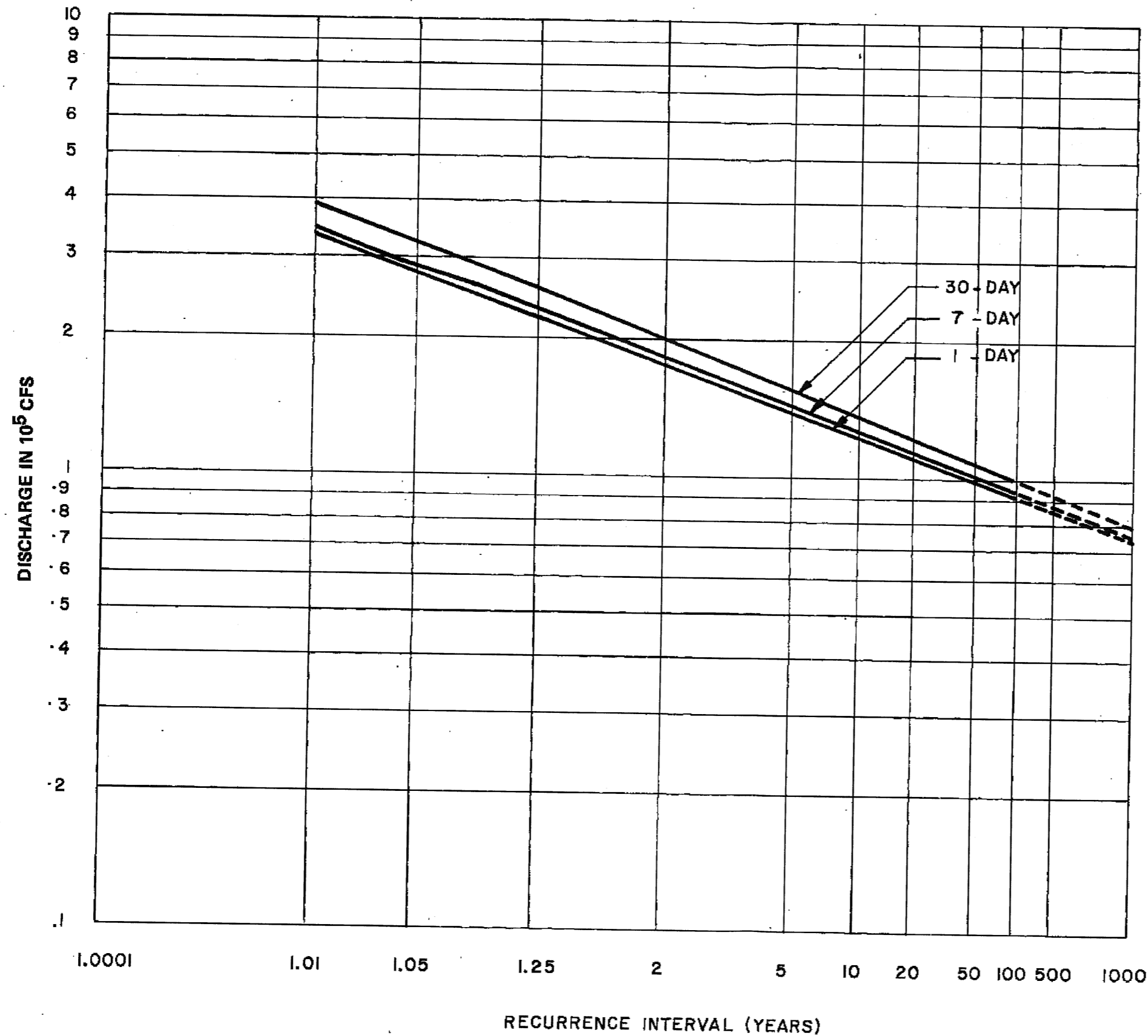
-  Major Cities
-  Sole Source Aquifer
-  Counties



Source: U. S. EPA,
Region 4, 2002

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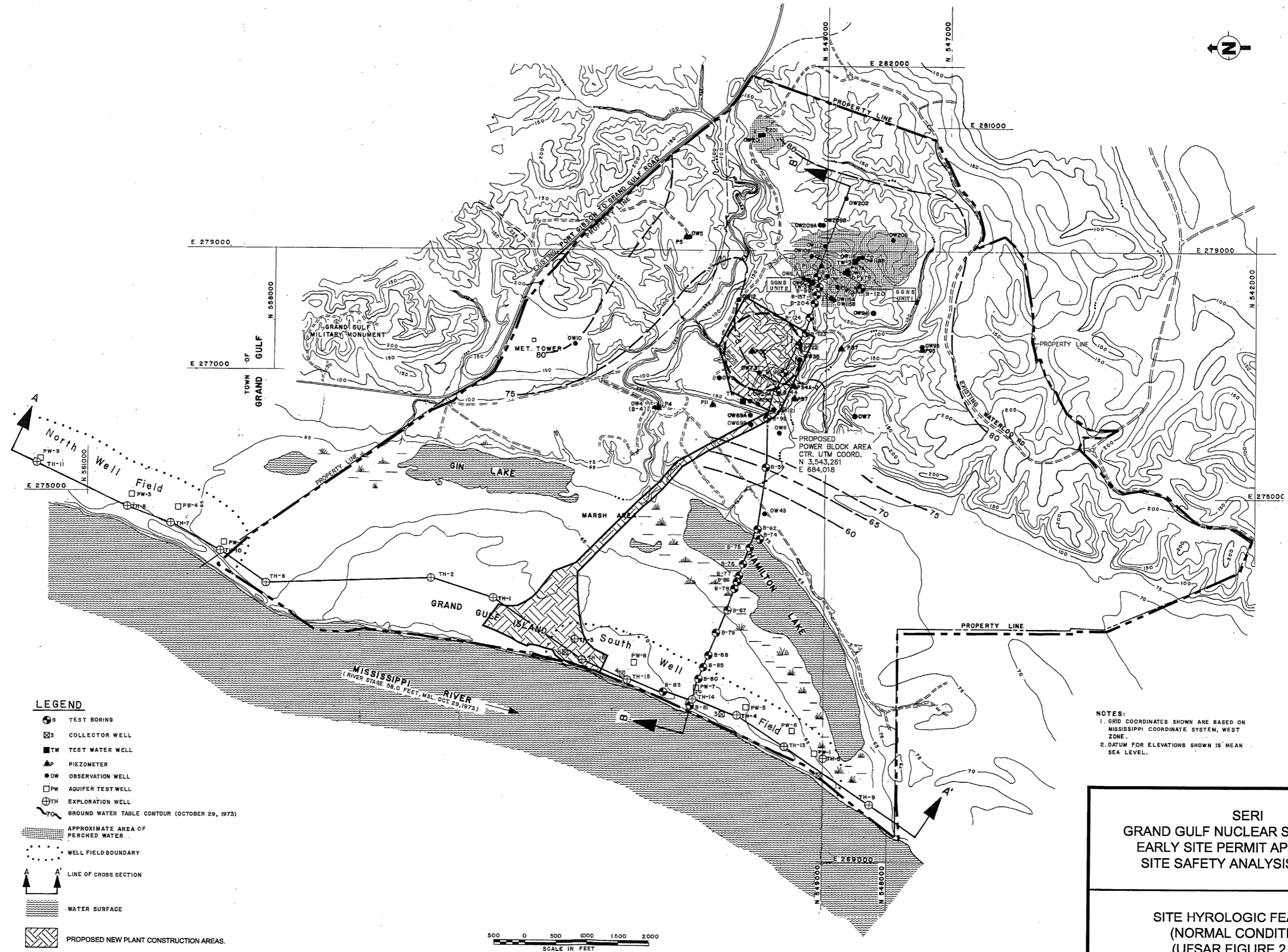
SOLE SOURCE AQUIFER MAP



SOURCE: U.S.G.S.
 PERIOD OF RECORD: 1933-79

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LOW FLOWS IN THE MISSISSIPPI
 RIVER AT VICKSBURG
 (UFSAR FIGURE 2.4-26)



LEGEND

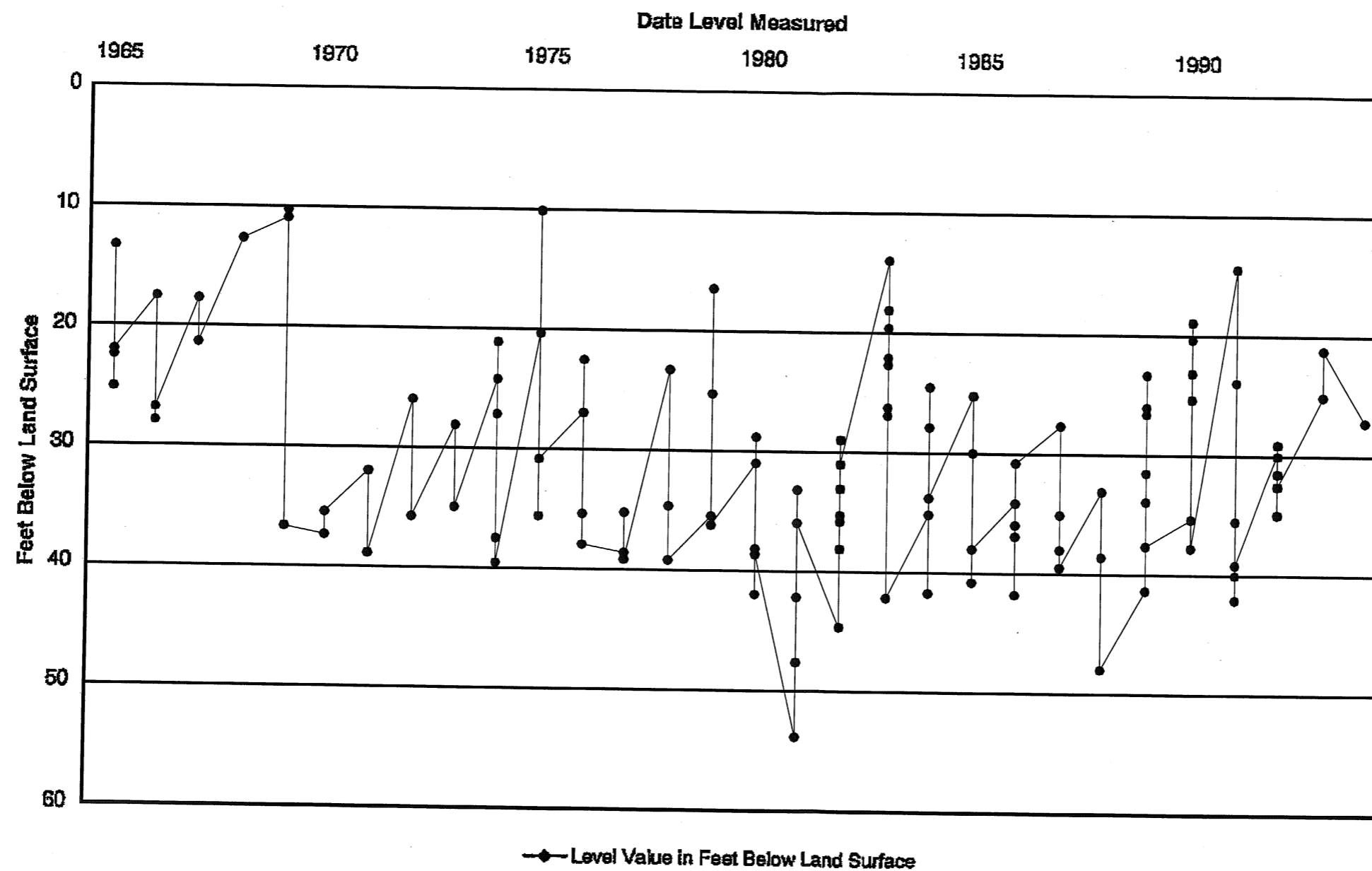
- ⊙ B TEST BORING
- ⊠ S COLLECTOR WELL
- ⊠ TW TEST WATER WELL
- ⊠ P PIEZOMETER
- ⊙ OW OBSERVATION WELL
- ⊠ PW AQUIFER TEST WELL
- ⊠ TH EXPLORATION WELL
- 70 GROUND WATER TABLE CONTOUR (OCTOBER 29, 1973)
- APPROXIMATE AREA OF PERCHED WATER
- WELL FIELD BOUNDARY
- A A' LINE OF CROSS SECTION
- WATER SURFACE
- PROPOSED NEW PLANT CONSTRUCTION AREAS.

NOTES:
 1. GRID COORDINATES SHOWN ARE BASED ON MISSISSIPPI COORDINATE SYSTEM, WEST ZONE.
 2. DATUM FOR ELEVATIONS SHOWN IS MEAN SEA LEVEL.

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**SITE HYDROLOGIC FEATURES
 (NORMAL CONDITIONS)
 (UFSAR FIGURE 2.4-27)**

Ground Water Levels Vicksburg Well Completed in the Mississippi River Alluvial Aquifer

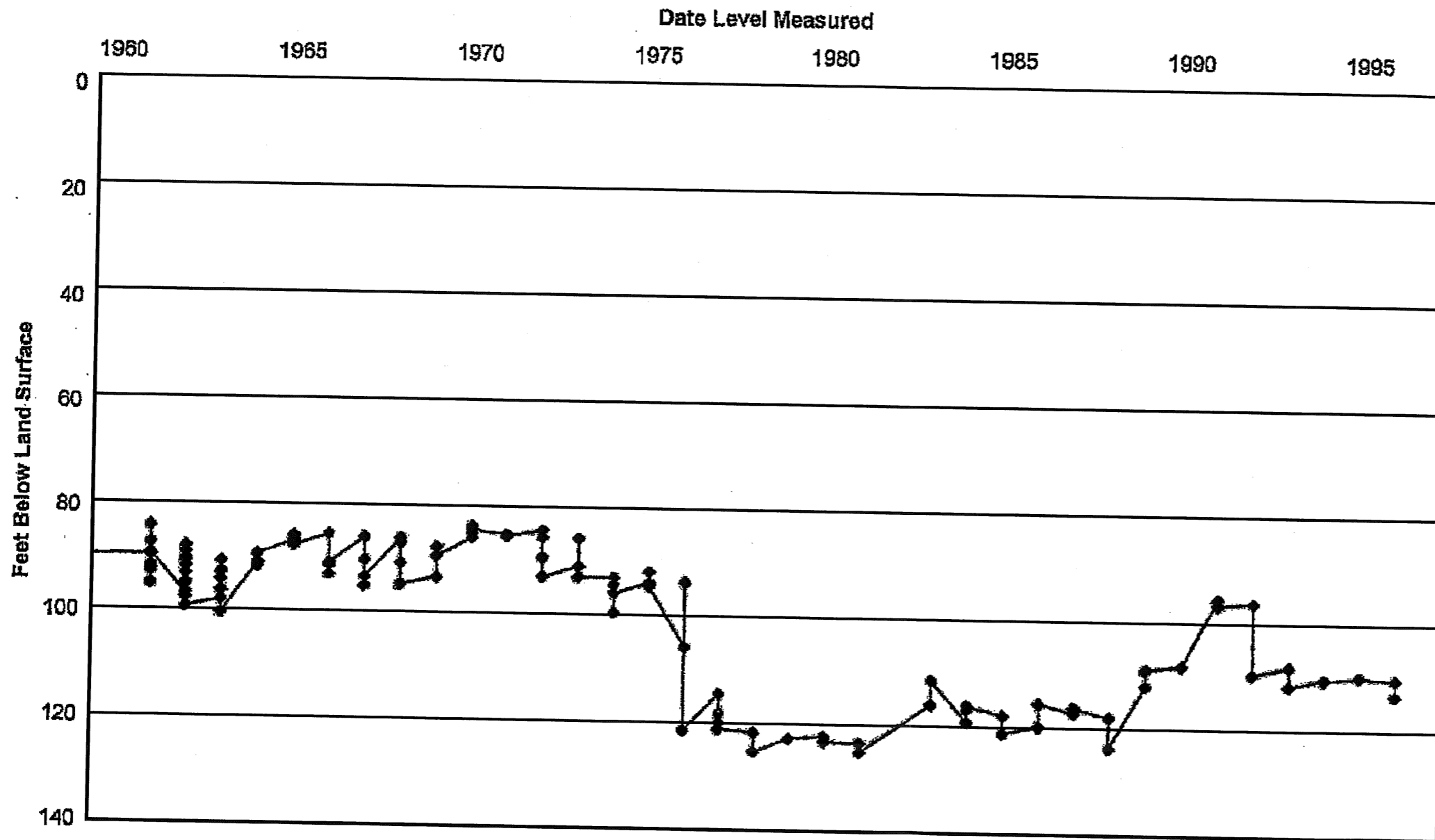


SOURCE: USGS

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HYDROGRAPH OF A WELL COMPLETED
IN THE MS RIVER ALLUVIAL AQUIFER,
VICKSBURG, MS

Ground Water Levels - Port Gibson, Well Completed in the Lower Catahoula Formation



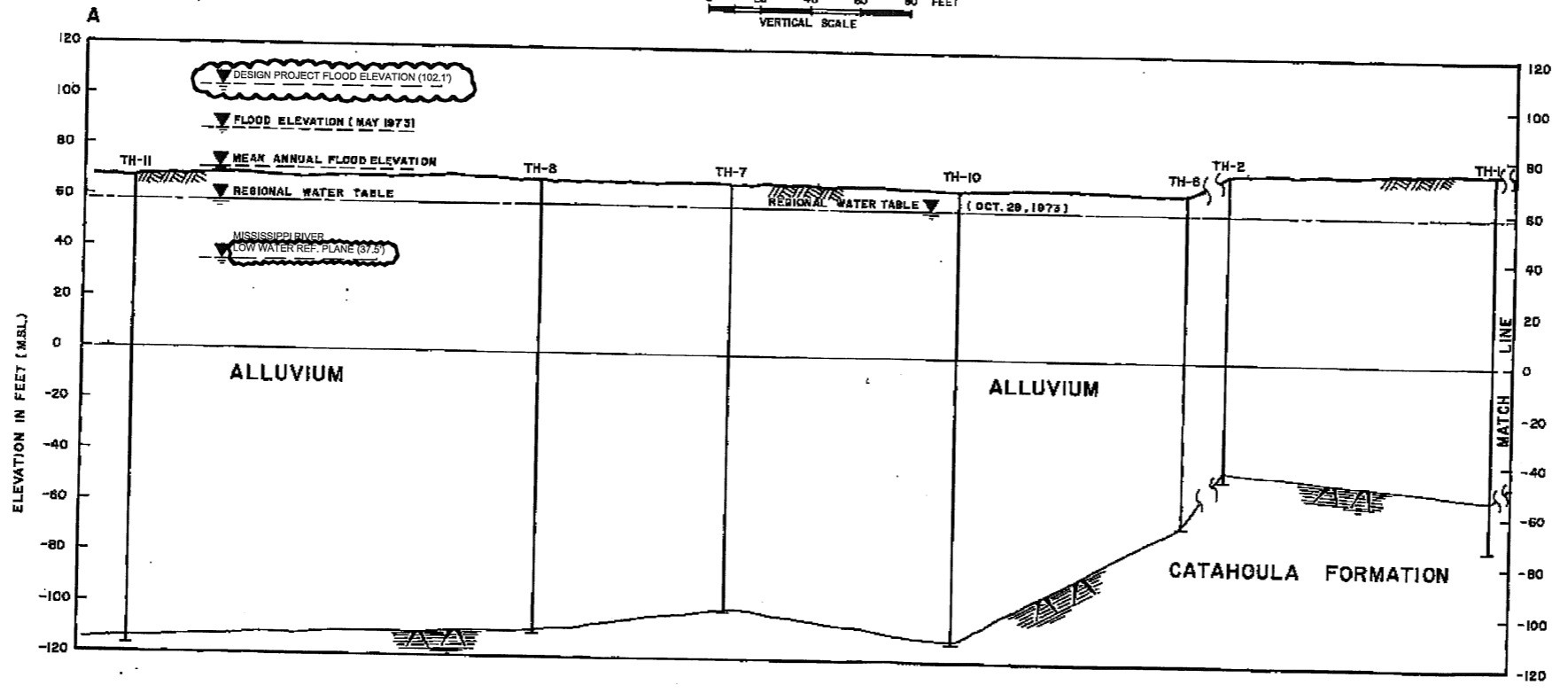
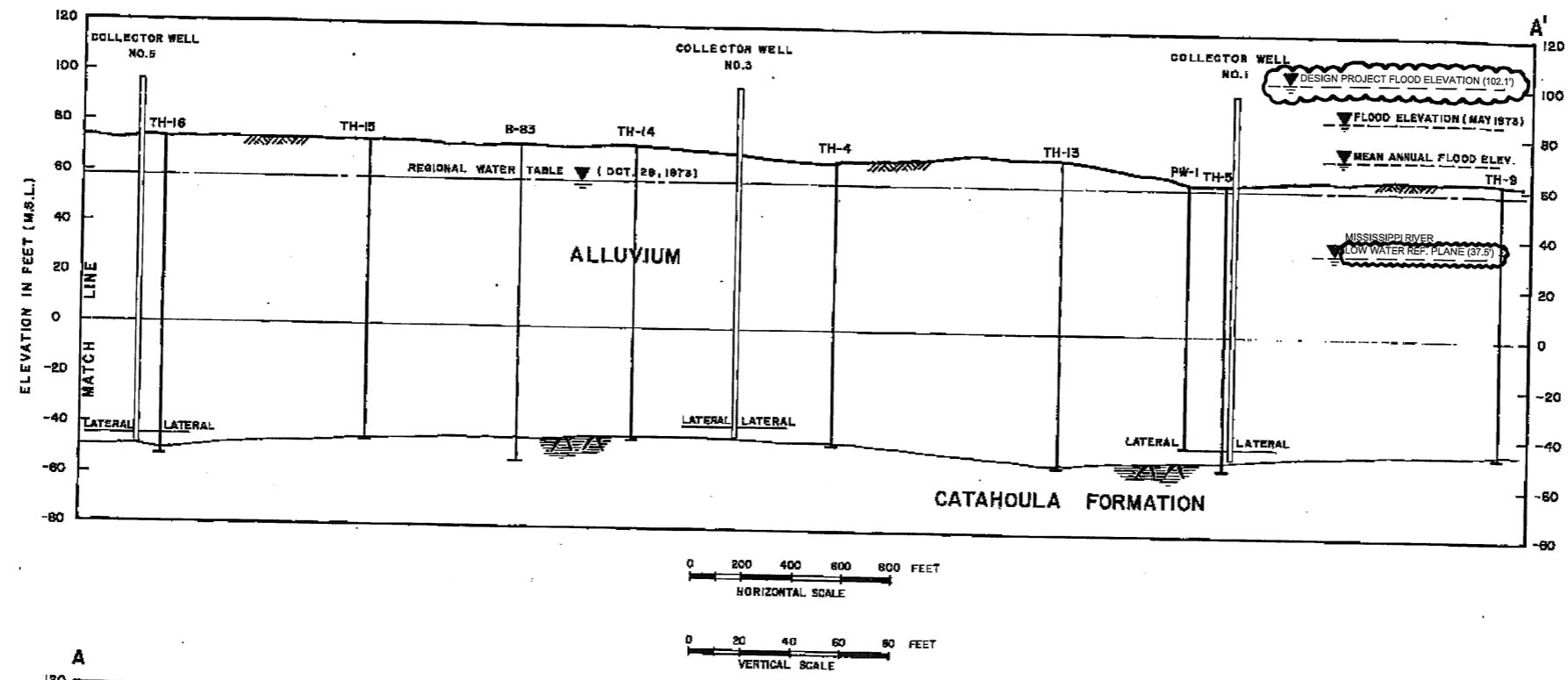
—●— Level Value in Feet Below Land Surface

SOURCE: USGS

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HYDROGRAPH OF A WELL COMPLETED IN THE
 LOWER CATAHOULA FORMATION,
 PORT GIBSON, MS

FIGURE 2.4-35 REV. 1



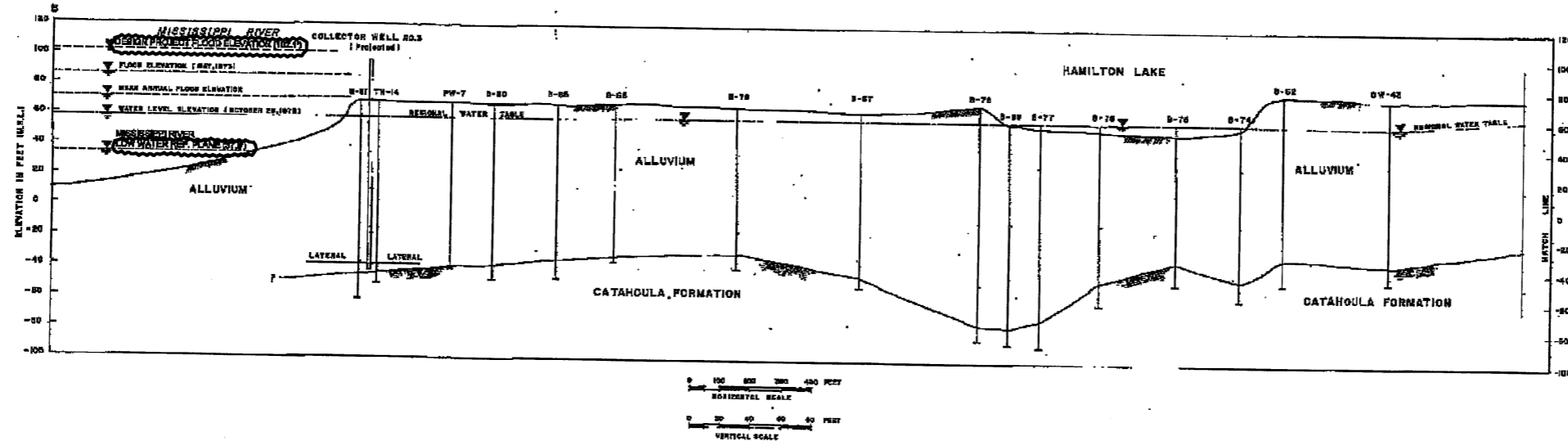
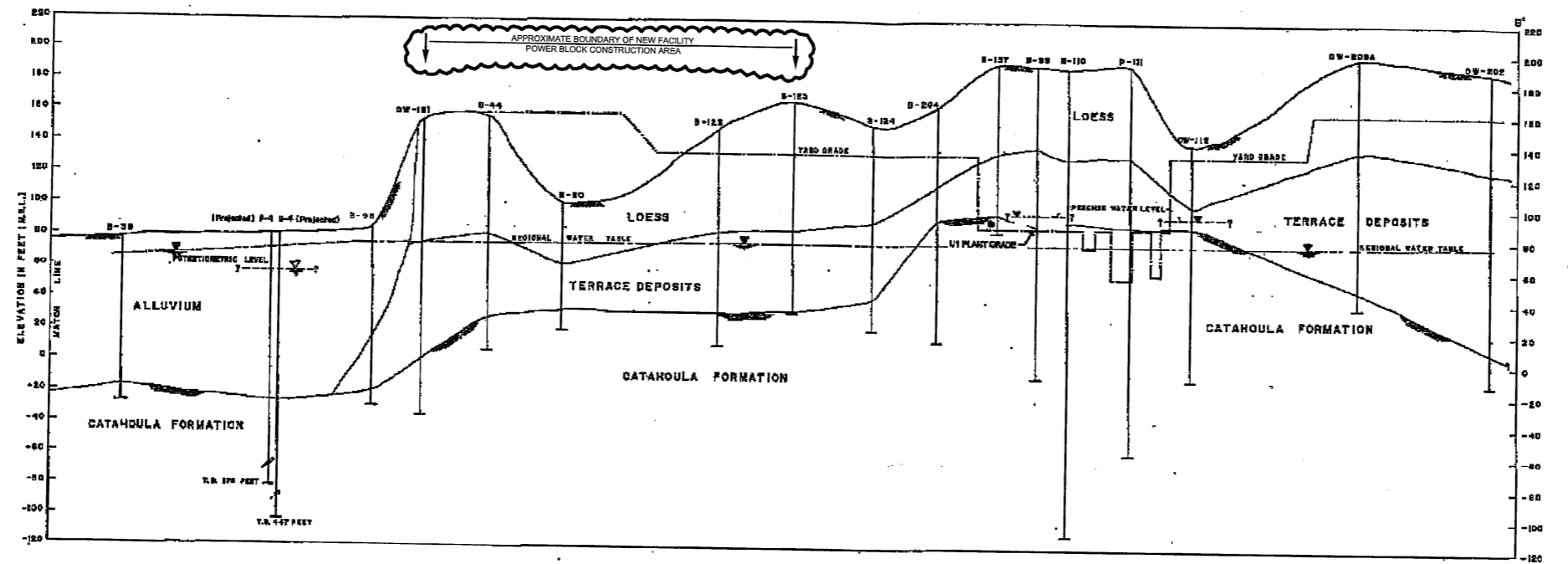
- NOTES:
 1. SEE REF. 1 AND 8 FOR SOURCE DATA & GGNS UFSAR FIGURE 2.4-28.
 2. ☉ CLOUDS INDICATE ESP APPLICATION DATA.

SECTION LOCATION IS SHOWN IN (UFSAR FIGURE 2.4-27) FIGURE 2.4-33

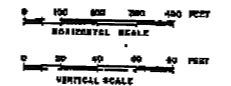
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HYDROGEOLOGIC
 CROSS SECTION A-A'
 (UFSAR FIGURE 2.4-28)

FIGURE 2.4-36 REV. 1



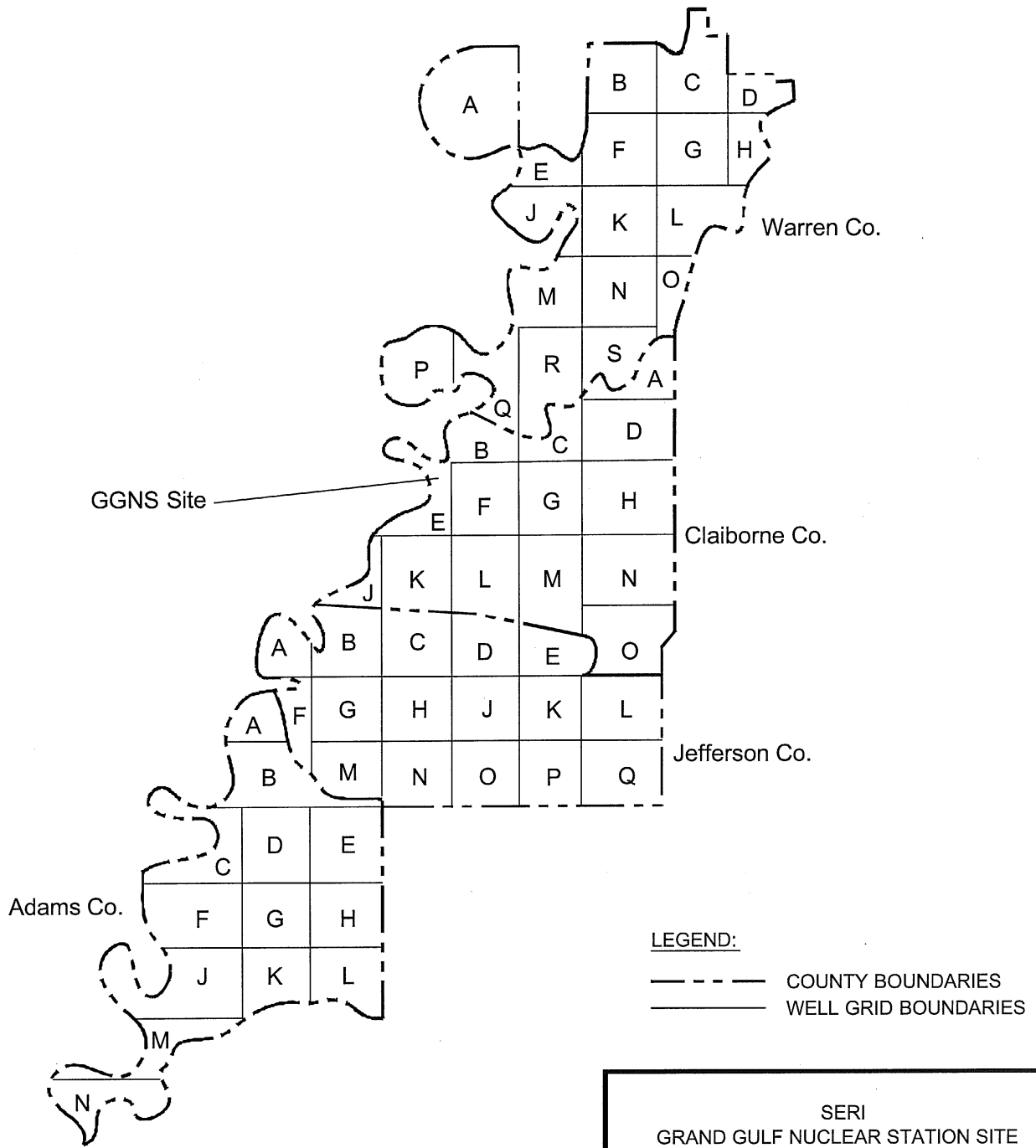
NOTES:
 1. SEE REF. 1 AND 8 FOR SOURCE DATA.
 2. CLOUDS INDICATE ESP APPLICATION CHANGES.



SECTION LOCATION IS SHOWN IN (UFSAR FIGURE 2.4-27) FIGURE 2.4-33

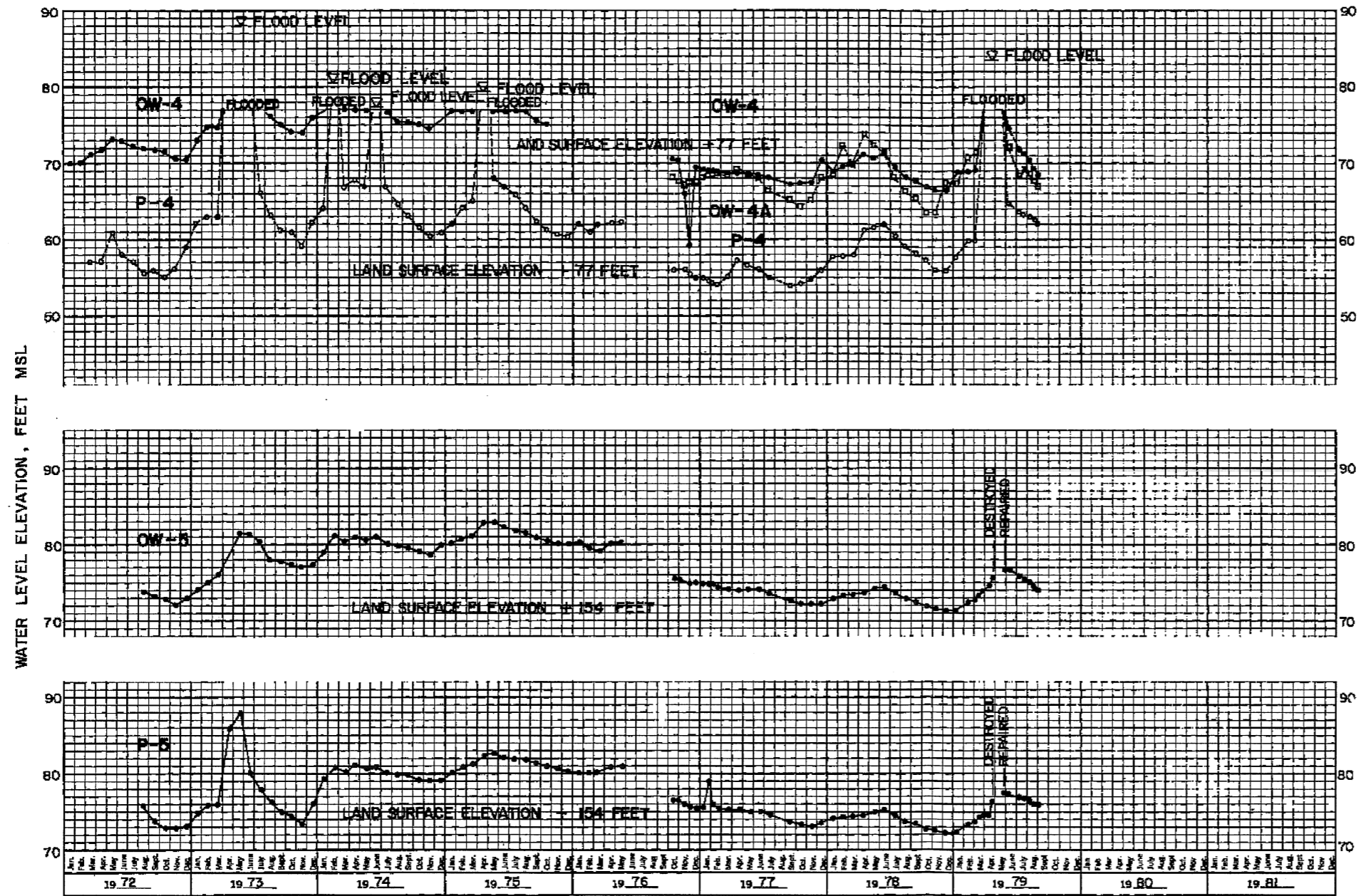
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HYDROGEOLOGIC
 CROSS SECTION B-B'
 (UFSAR FIGURE 2.4-29)

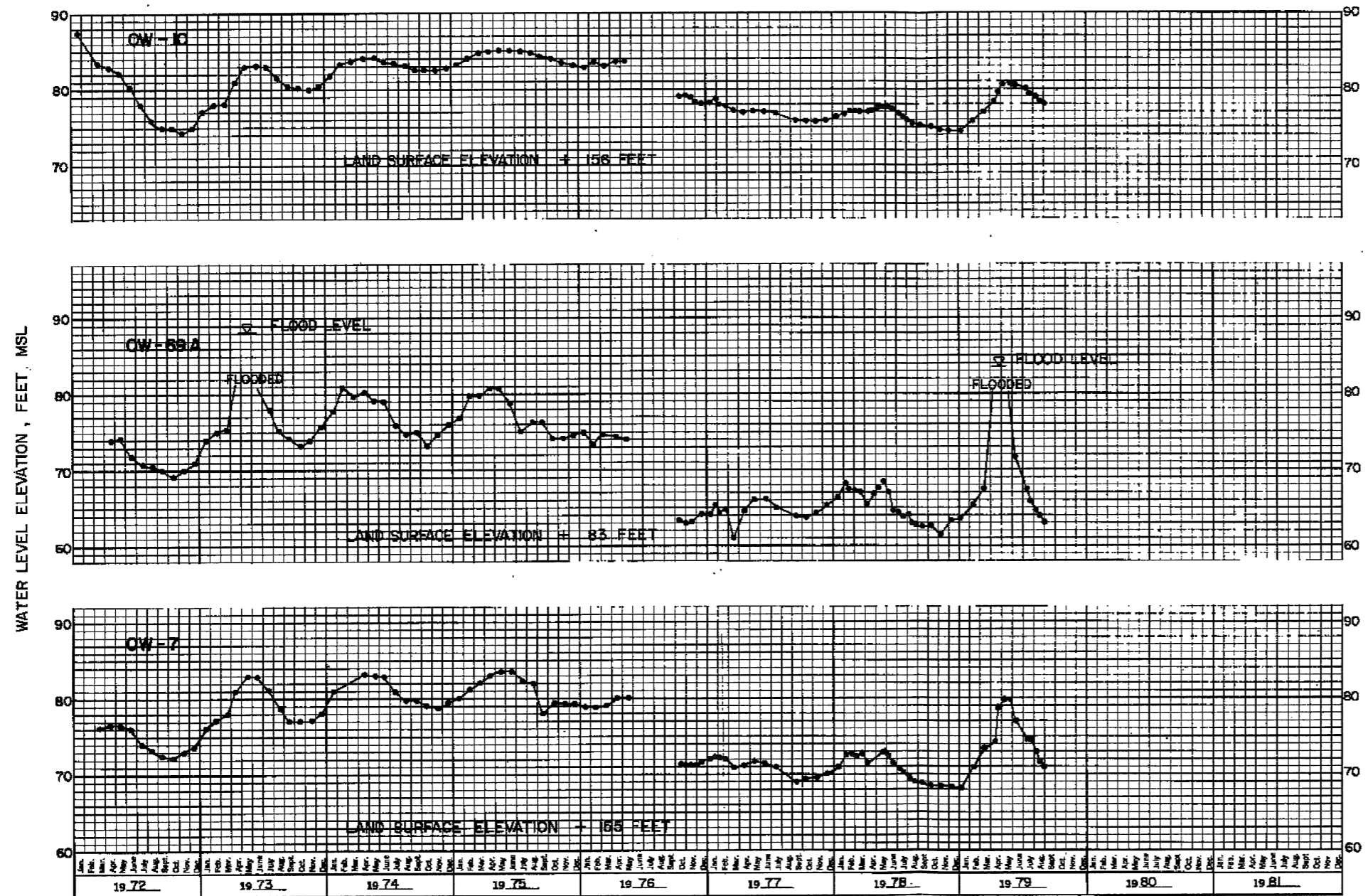


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COUNTY WELL LOCATION GRID



NOTES:
 1. OBSERVATION WELL AND PIEZOMETER LOCATIONS
 ARE SHOWN IN FIGURE 2.4-33 (UFSAR FIGURE 2.4-27).

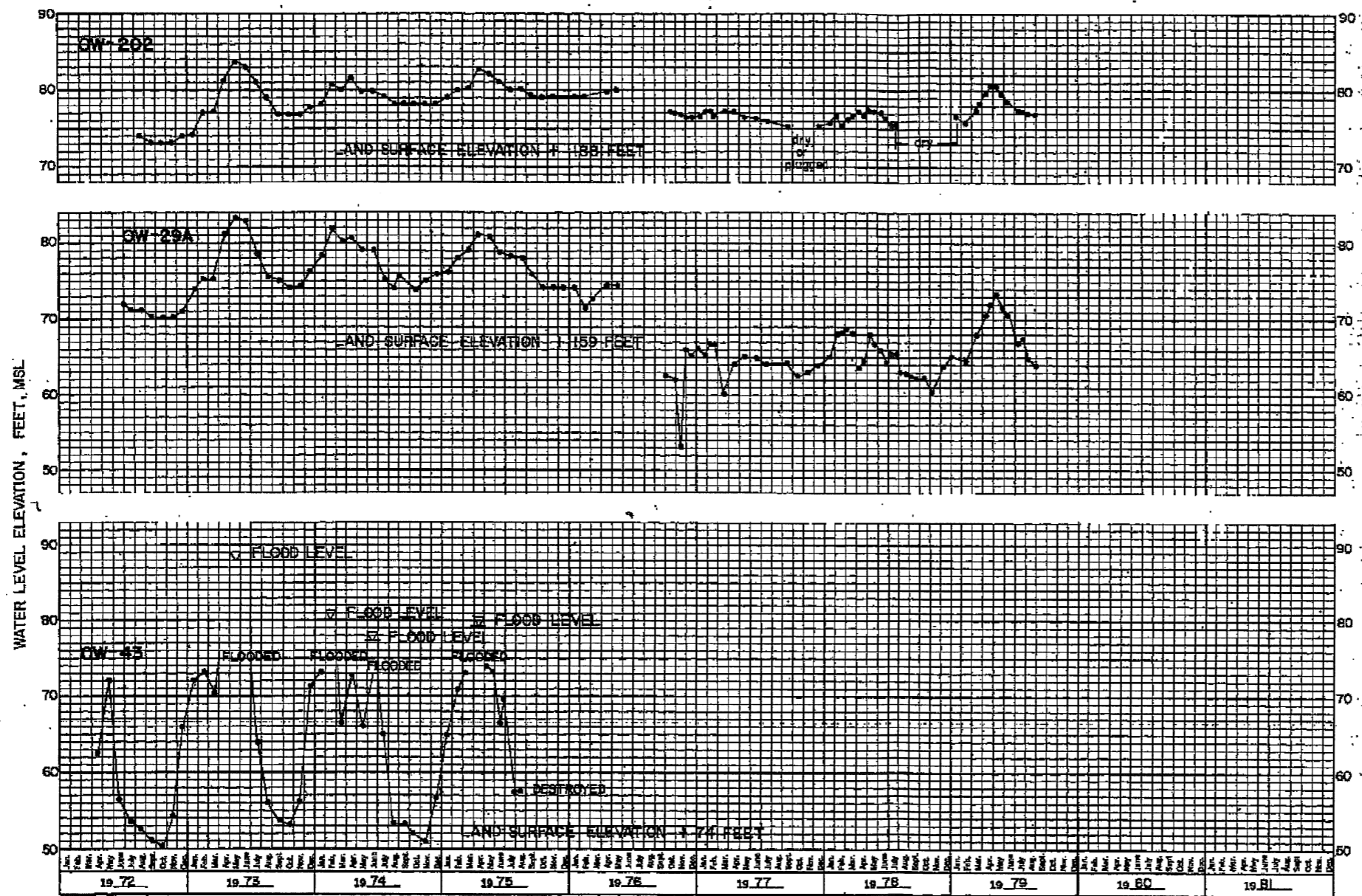


NOTES:
 1. OBSERVATION WELL AND PIEZOMETER LOCATIONS ARE SHOWN IN FIGURE 2.4-33 (UFSAR FIGURE 2.4-27).

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HYDROGRAPHS OF WELLS AND
 PIEZOMETERS
 (UFSAR FIGURE 2.4-32, SH.2)

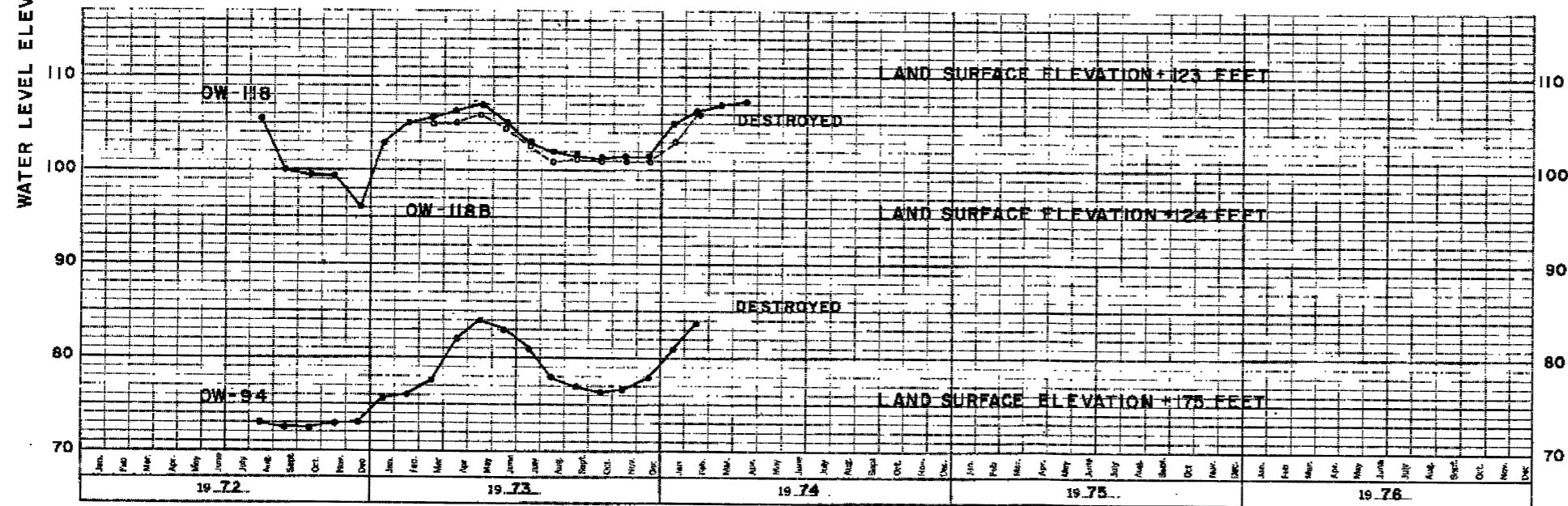
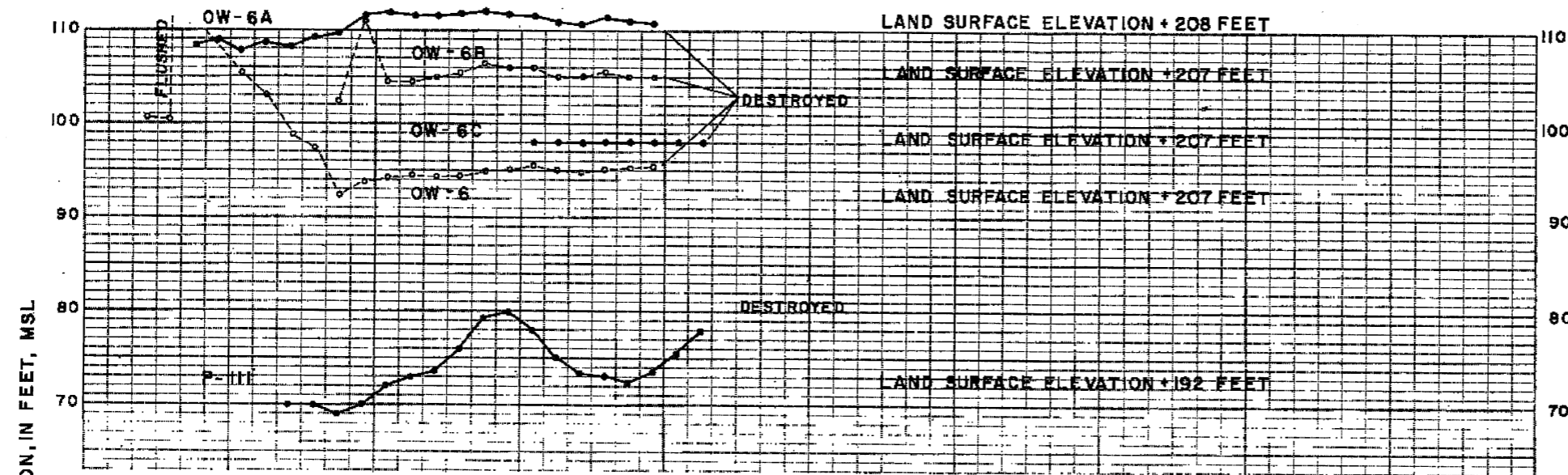
FIGURE 2.4-39 SHEET 2 OF 5 REV. 1



NOTES:
 1. OBSERVATION WELL AND PIEZOMETER LOCATIONS
 ARE SHOWN IN FIGURE 2.4-33 (UFSAR FIGURE 2.4-27).

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HYDROGRAPHS OF REPLACEMENT
 PIEZOMETERS
 (UFSAR FIGURE 2.4-32, SH.3)

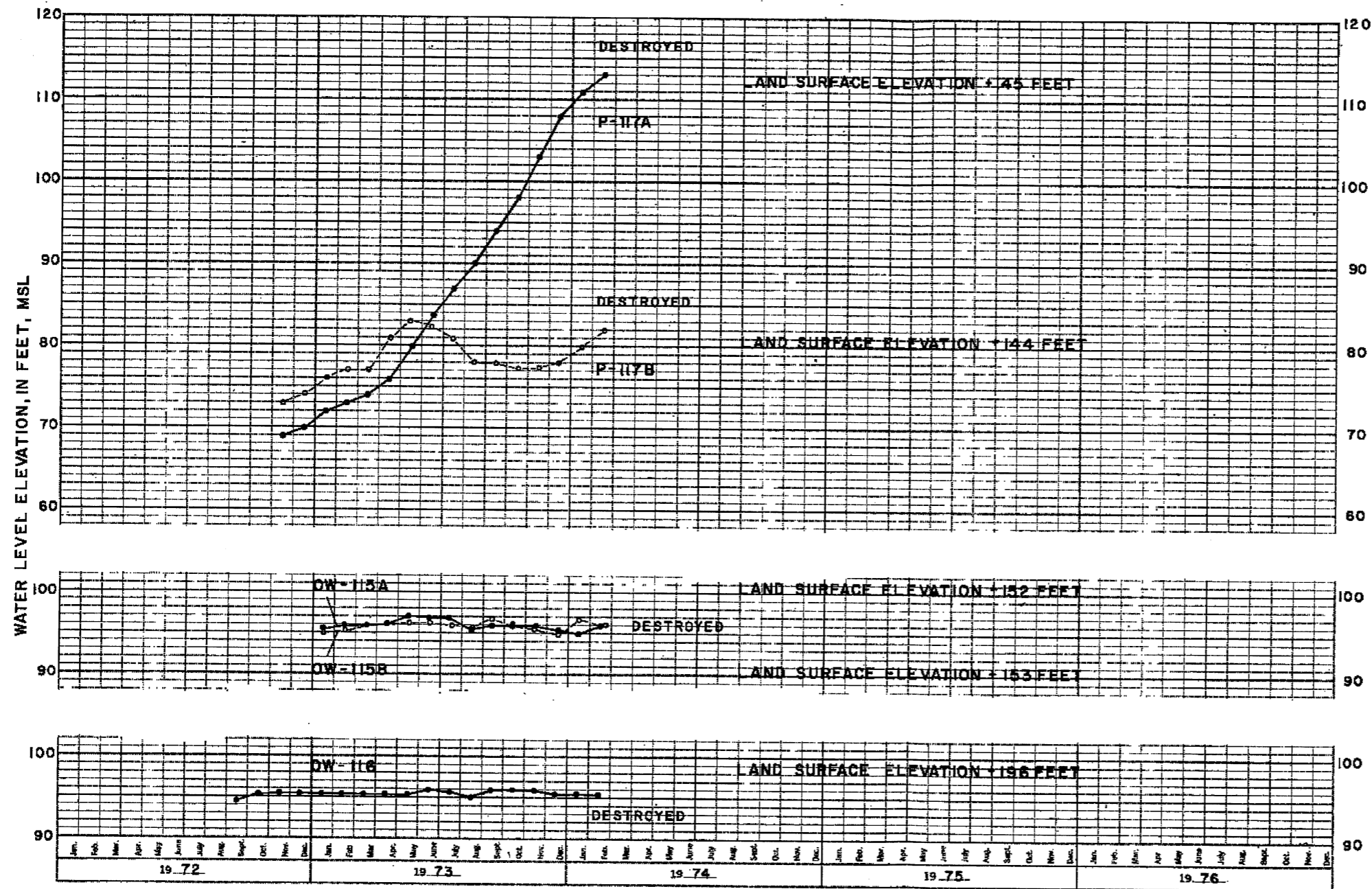


NOTES:
 1. OBSERVATION WELL AND PIEZOMETER LOCATIONS
 ARE SHOWN IN FIGURE 2.4-33 (UFSAR FIGURE 2.4-27).

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HYDROGRAPHS OF WELLS AND
 PIEZOMETERS
 (UFSAR FIGURE 2.4-32, SH.4)

FIGURE 2.4-39 SHEET 4 OF 5 REV. 1

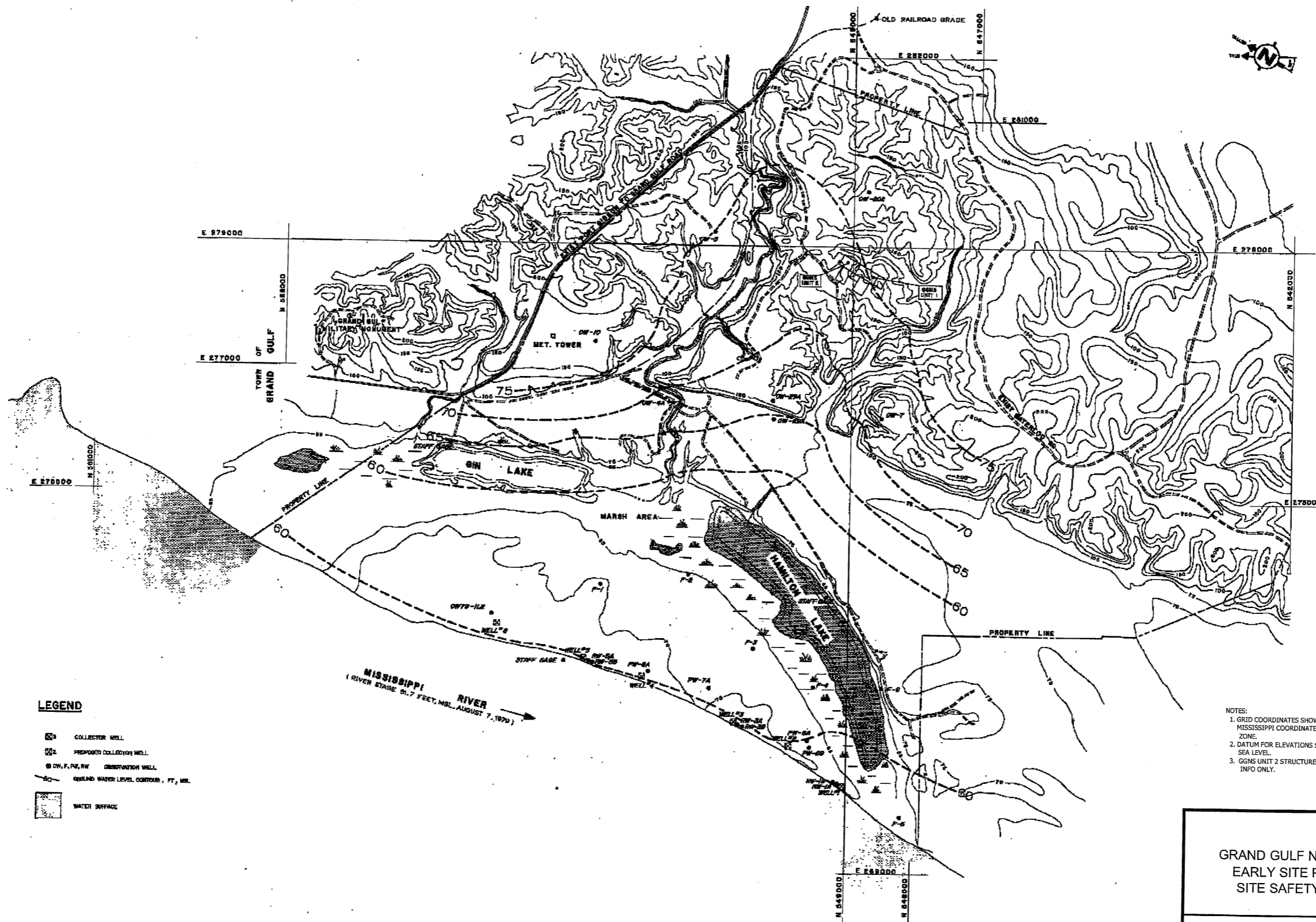


NOTES:
 1. OBSERVATION WELL AND PIEZOMETER LOCATIONS
 ARE SHOWN IN FIGURE 2.4-33 (UFSAR FIGURE 2.4-27).

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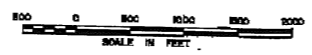
HYDROGRAPHS OF WELLS AND
 PIEZOMETERS
 (UFSAR FIGURE 2.4-32, SH.5)

FIGURE 2.4-39 SHEET 5 OF 5 REV. 1



- LEGEND**
- ☐ COLLECTOR WELL
 - ☐ PROPOSED COLLECTOR WELL
 - CW, F, PW, RW OBSERVATION WELL
 - GROUND WATER LEVEL CONTOUR, FT, MSL
 - ▨ WATER SURFACE

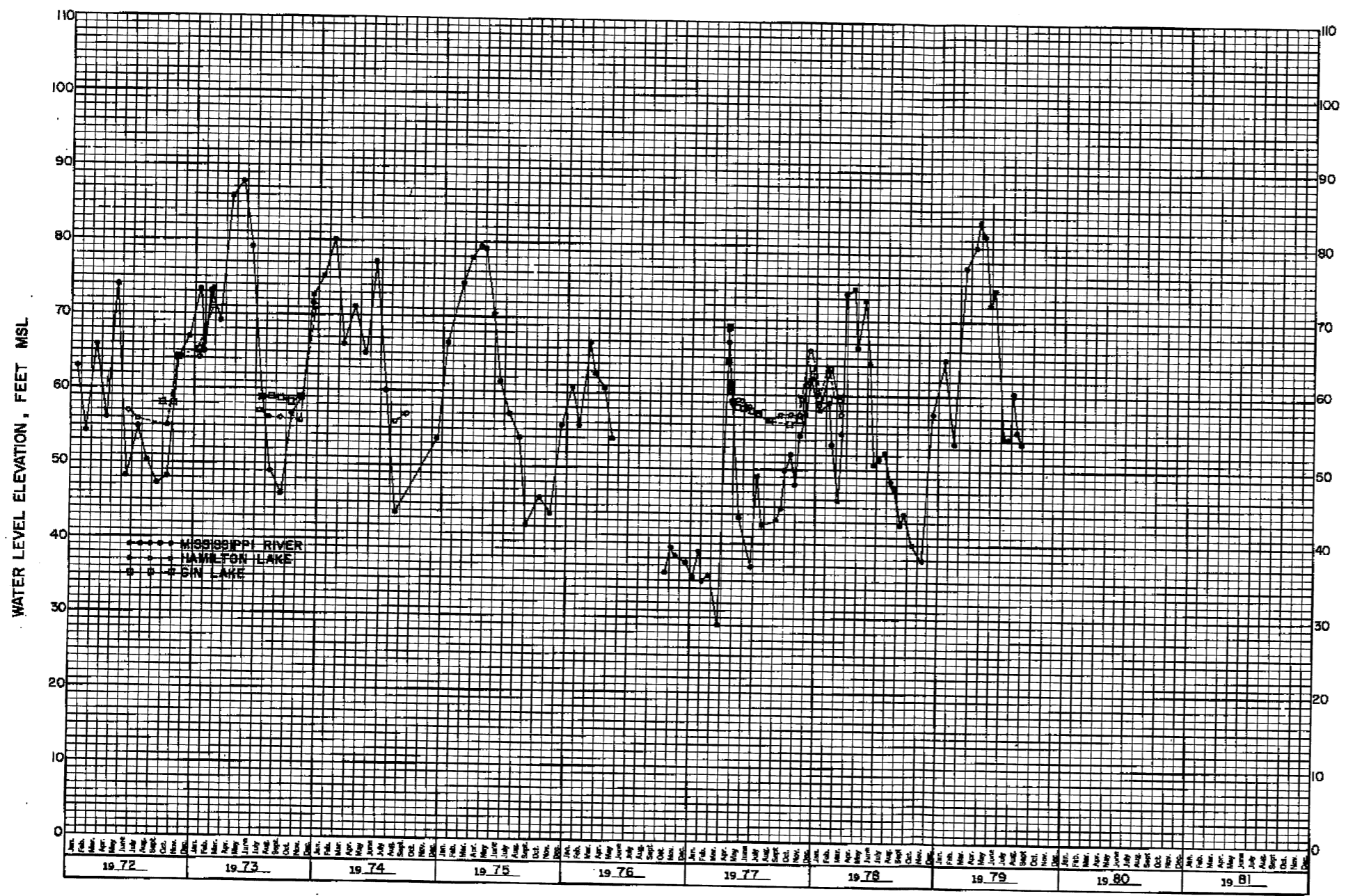
- NOTES:**
1. GRID COORDINATES SHOWN ARE BASED ON MISSISSIPPI COORDINATE SYSTEM, WEST ZONE.
 2. DATUM FOR ELEVATIONS SHOWN IS MEAN SEA LEVEL.
 3. GGNS UNIT 2 STRUCTURES ARE SHOWN FOR INFO ONLY.



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PUMPOUT TEST
 GROUND WATER LEVEL CONTOURS
 (PREPUMPING STATIC LEVELS)
 AUGUST 7, 1979
 (UFSAR FIGURE 2.4-38)

FIGURE 2.4-40 REV. 1

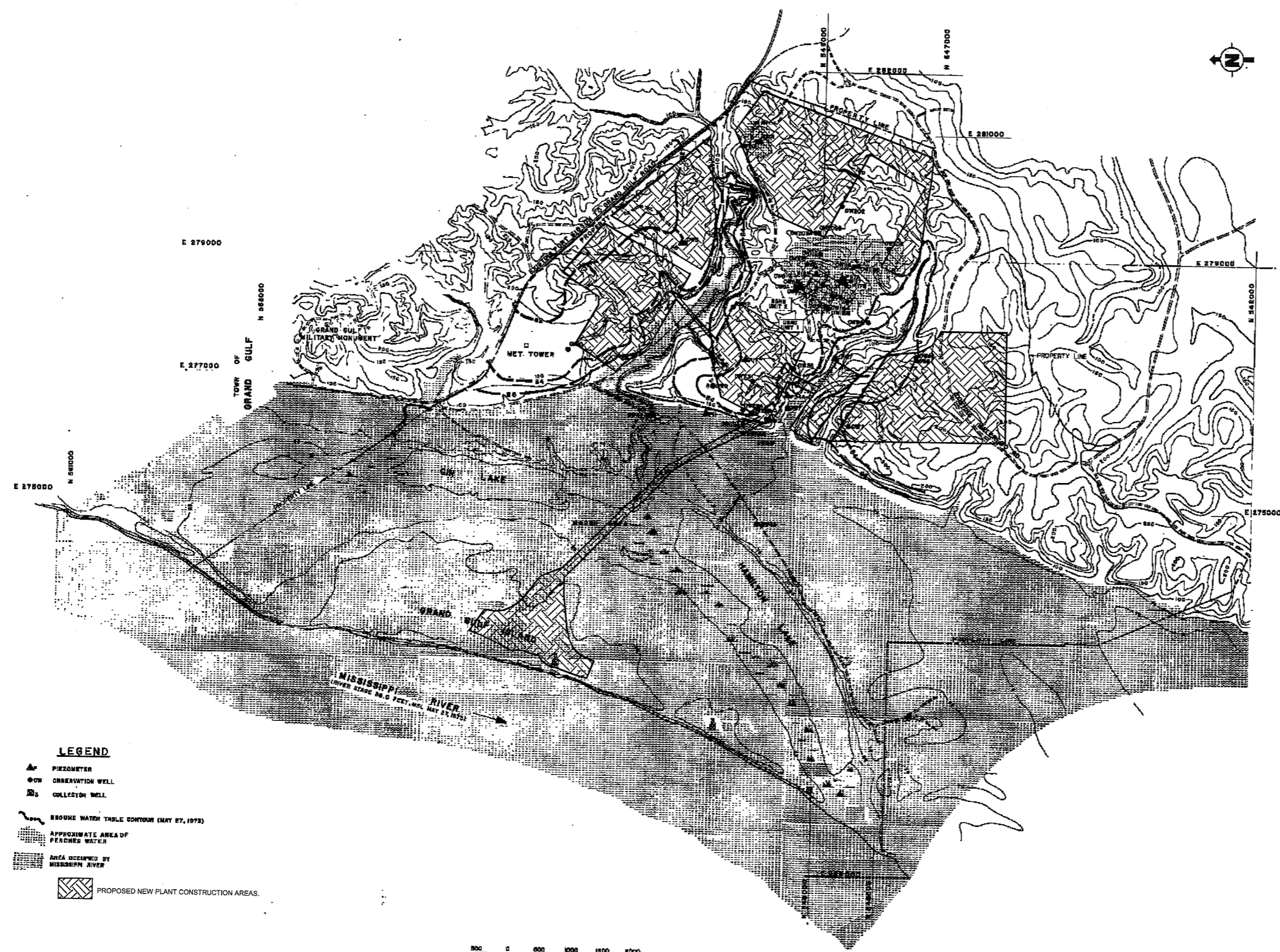


NOTES:
 1. LOCATIONS OF MISSISSIPPI RIVER, HAMILTON & GIN LAKES ARE SHOWN IN FIGURE 2.4-33 (UFSAR FIGURE 2.4-27).

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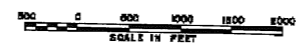
HYDROGRAPHS OF MISSISSIPPI RIVER,
 GIN LAKE, AND HAMILTON LAKE
 (UFSAR FIGURE 2.4-33)

FIGURE 2.4-41 REV. 1



LEGEND

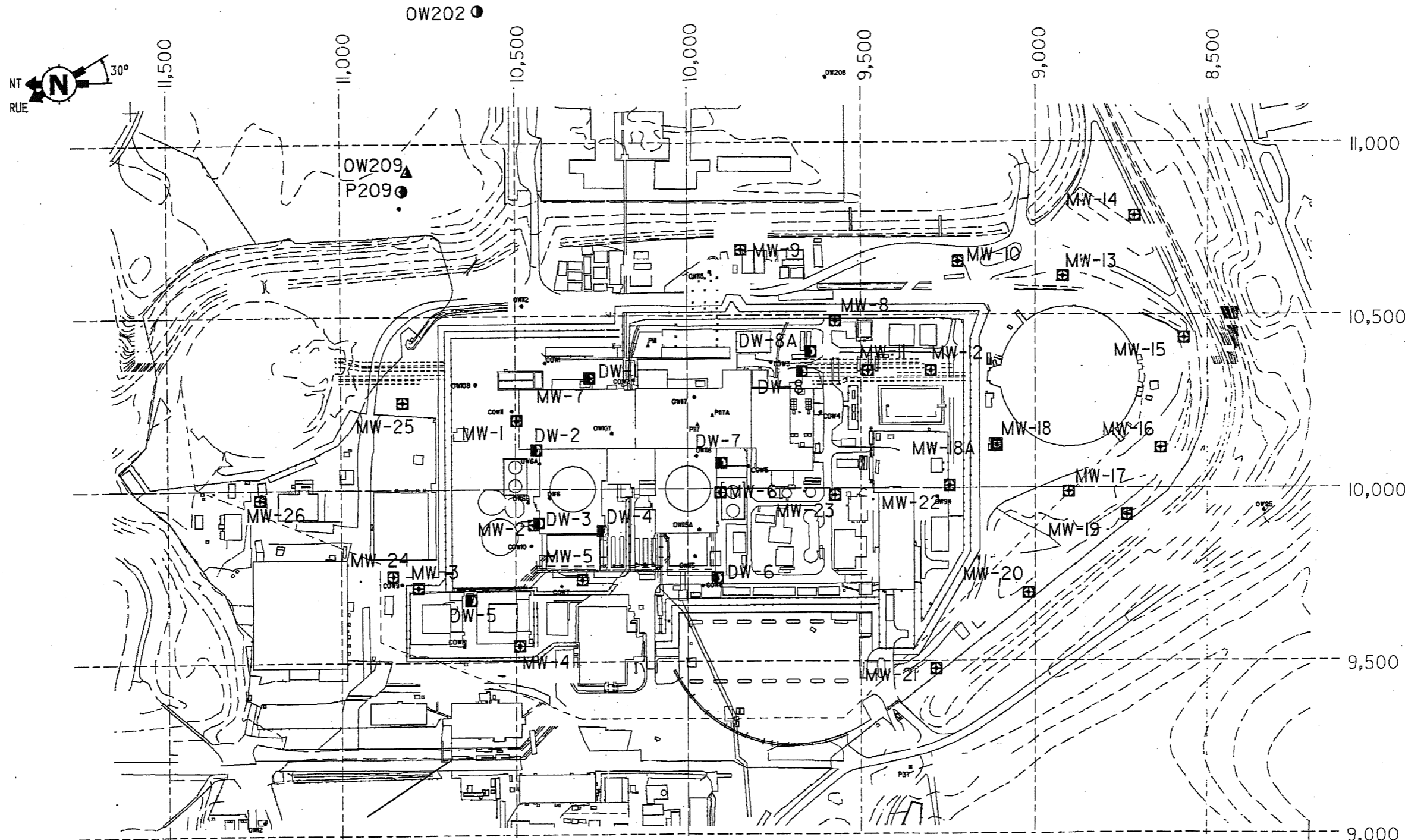
- PIEZOMETER
- OBSERVATION WELL
- COLLECTION WELL
- GROUND WATER TABLE CONTOUR (MAY 27, 1973)
- APPROXIMATE AREA OF FRESH WATER
- AREA OCCUPIED BY MISSISSIPPI RIVER
- PROPOSED NEW PLANT CONSTRUCTION AREAS.



- NOTES:
1. GRID COORDINATES SHOWN ARE BASED ON MISSISSIPPI COORDINATE SYSTEM, WEST ZONE.
 2. DATUM FOR ELEVATIONS SHOWN IS MEAN SEA LEVEL.
 3. GGNS UNIT 2 STRUCTURES ARE SHOWN FOR INFO ONLY.

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SITE HYDROLOGIC FEATURES
 FLOOD CONDITIONS MAY 1973
 (UFSAR FIGURE 2.4-34)



LEGEND

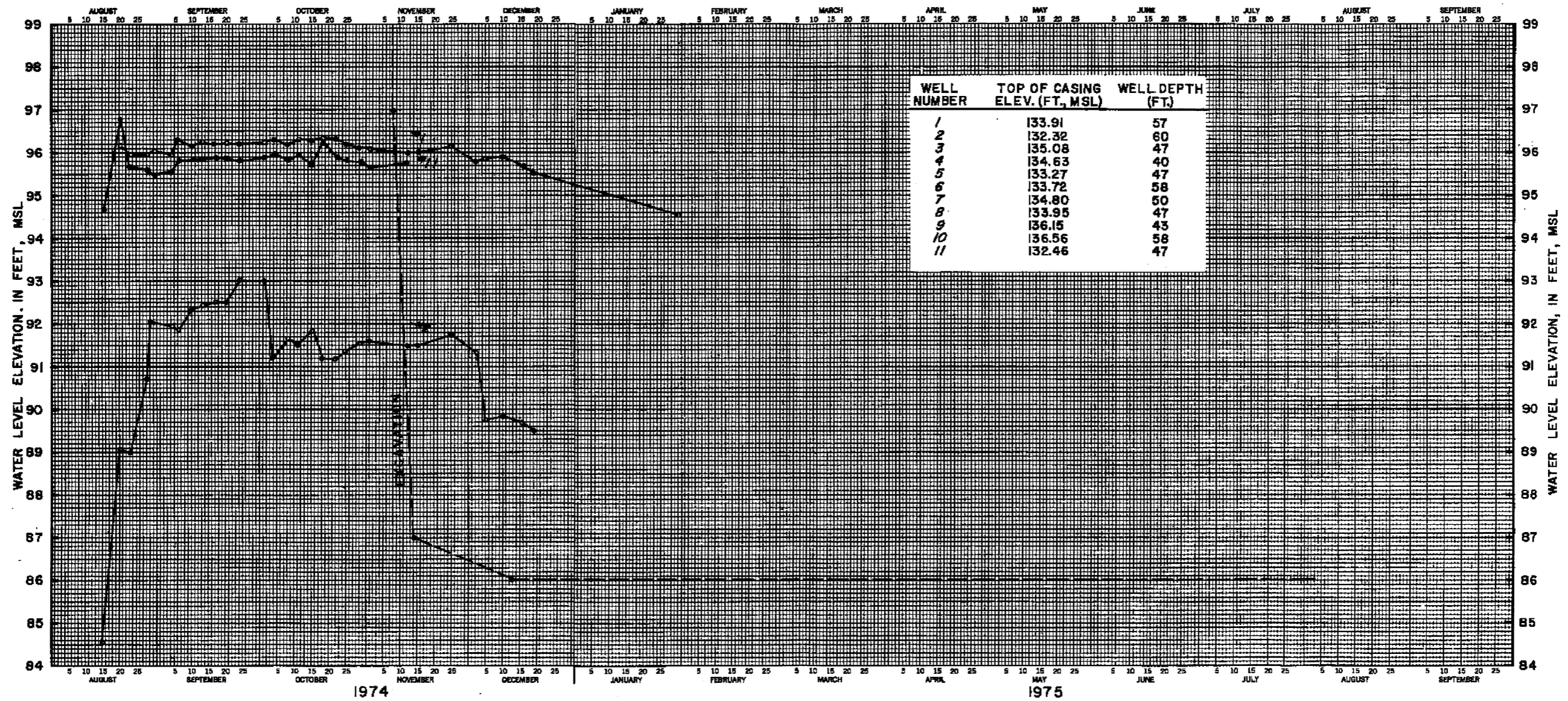
- ▲ HISTORICAL MONITORING WELL - CATAHOULA FORMATION
- HISTORICAL MONITORING WELL - TERRACE DEPOSITS
- ⊕ MONITORING WELL
- DEWATERING WELL
- TIE-BACK WALL PROJECTION

0 100 200 300
SCALE IN FEET

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GGNS UNIT 1 PLANT SITE
WELL PLAN
(UFSAR FIGURE 2.4-35c)

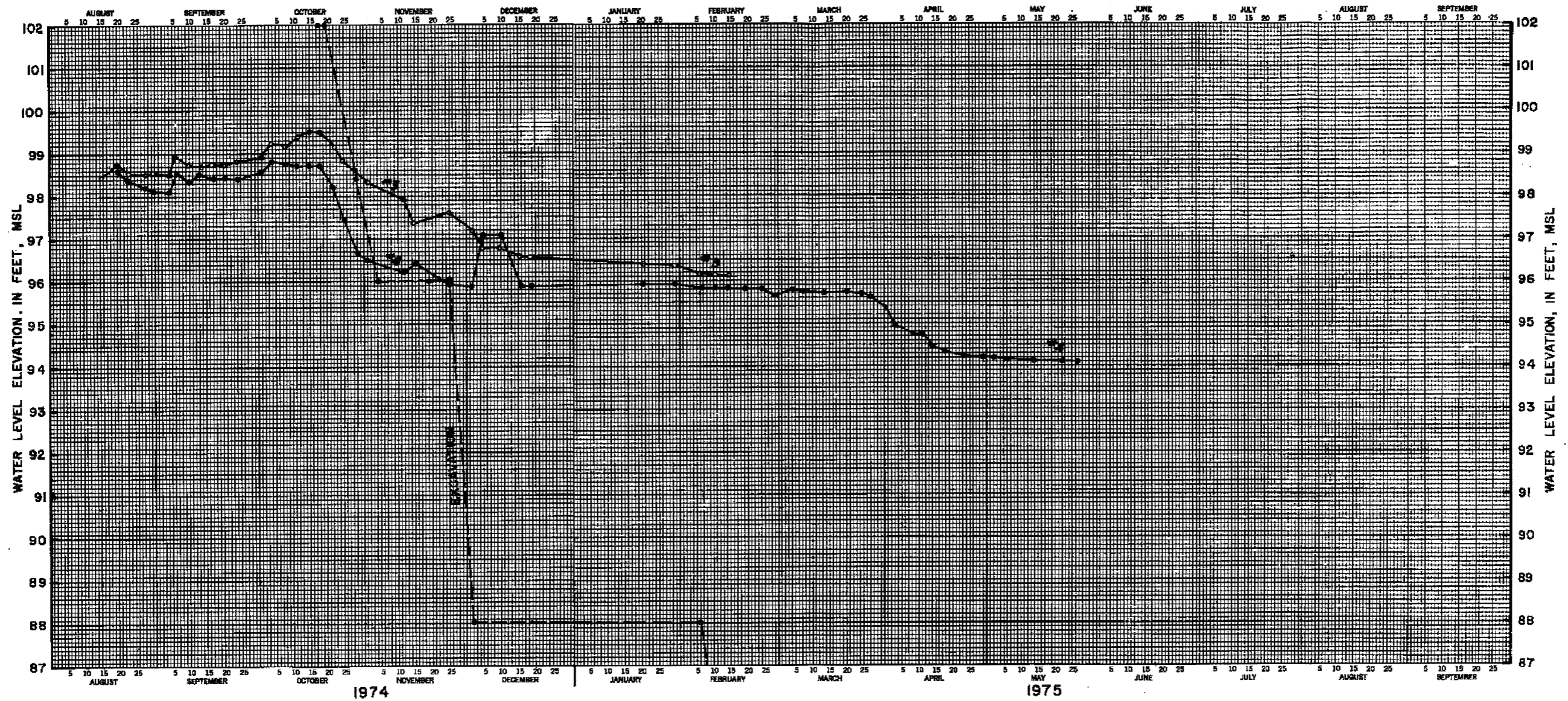
FIGURE 2.4-43 REV. 1



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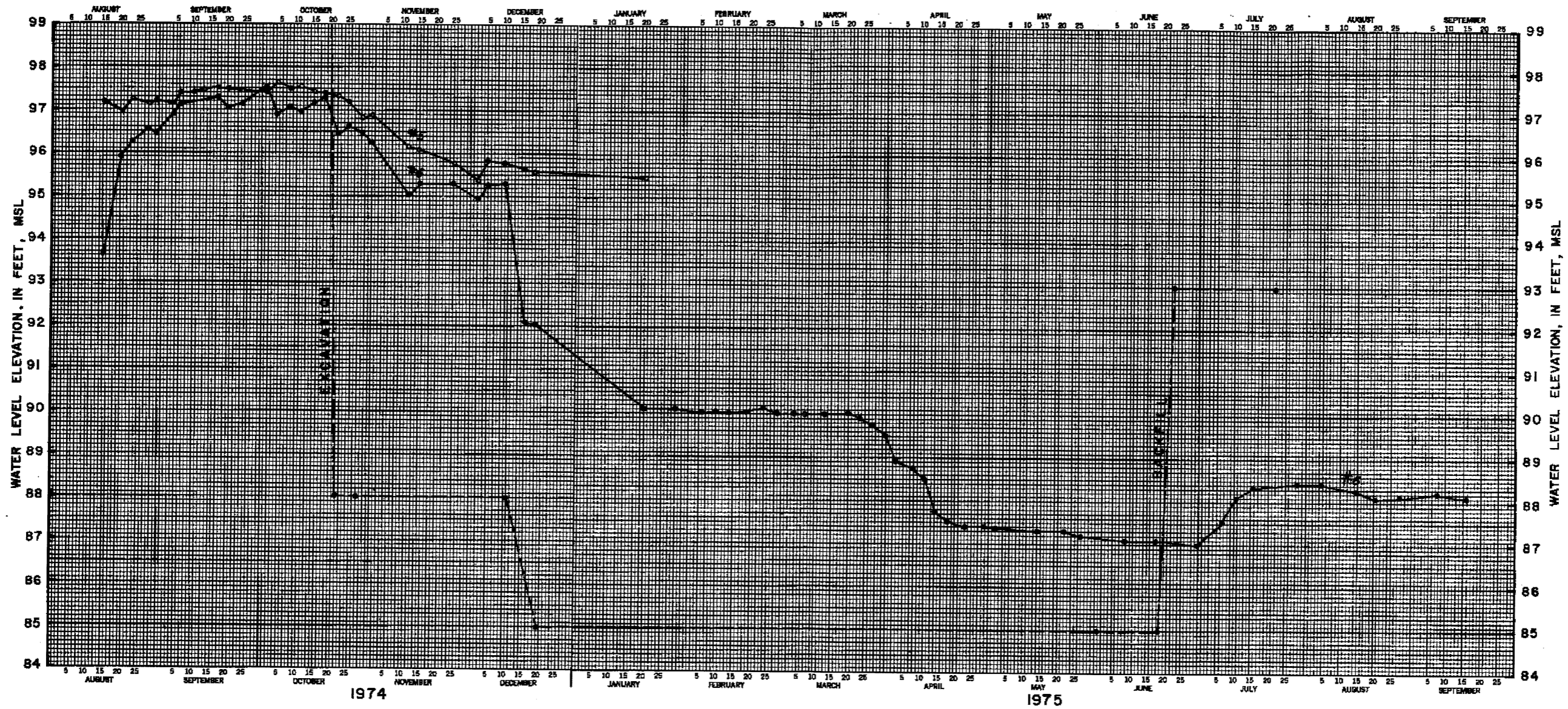
HYDROGRAPHS OF
 CONSTRUCTION OBSERVATION WELLS
 (UFSAR FIGURE 2.4-36, SH.1)

FIGURE 2.4-44 SHEET 1 OF 5 REV. 1



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 SITE SAFETY ANALYSIS REPORT

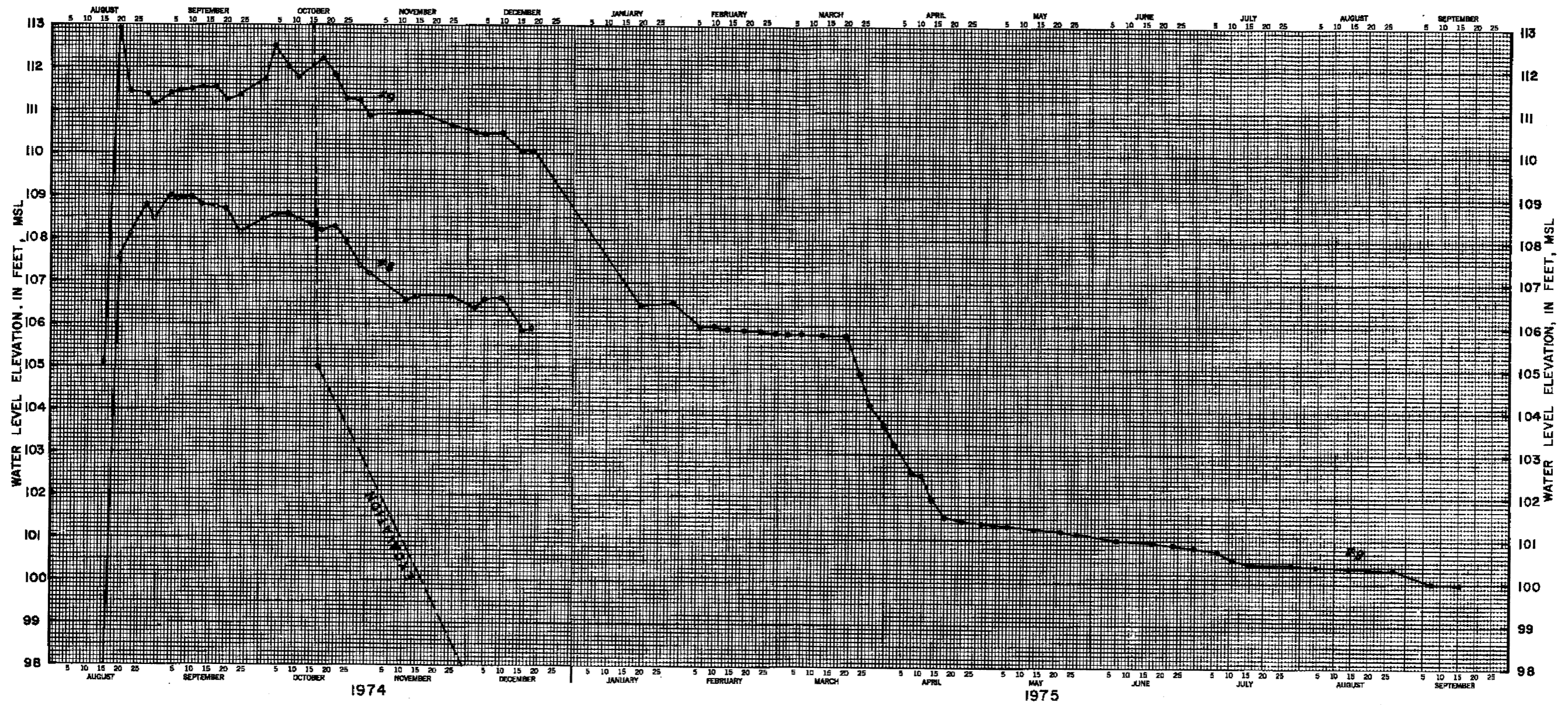
HYDROGRAPHS OF
 CONSTRUCTION OBSERVATION WELLS
 (UFSAR FIGURE 2.4-36, SH.2)



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 EARLY SITE PERMIT APPLICATION
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HYDROGRAPHS OF
 CONSTRUCTION OBSERVATION WELLS
 (UFSAR FIGURE 2.4-36, SH.3)

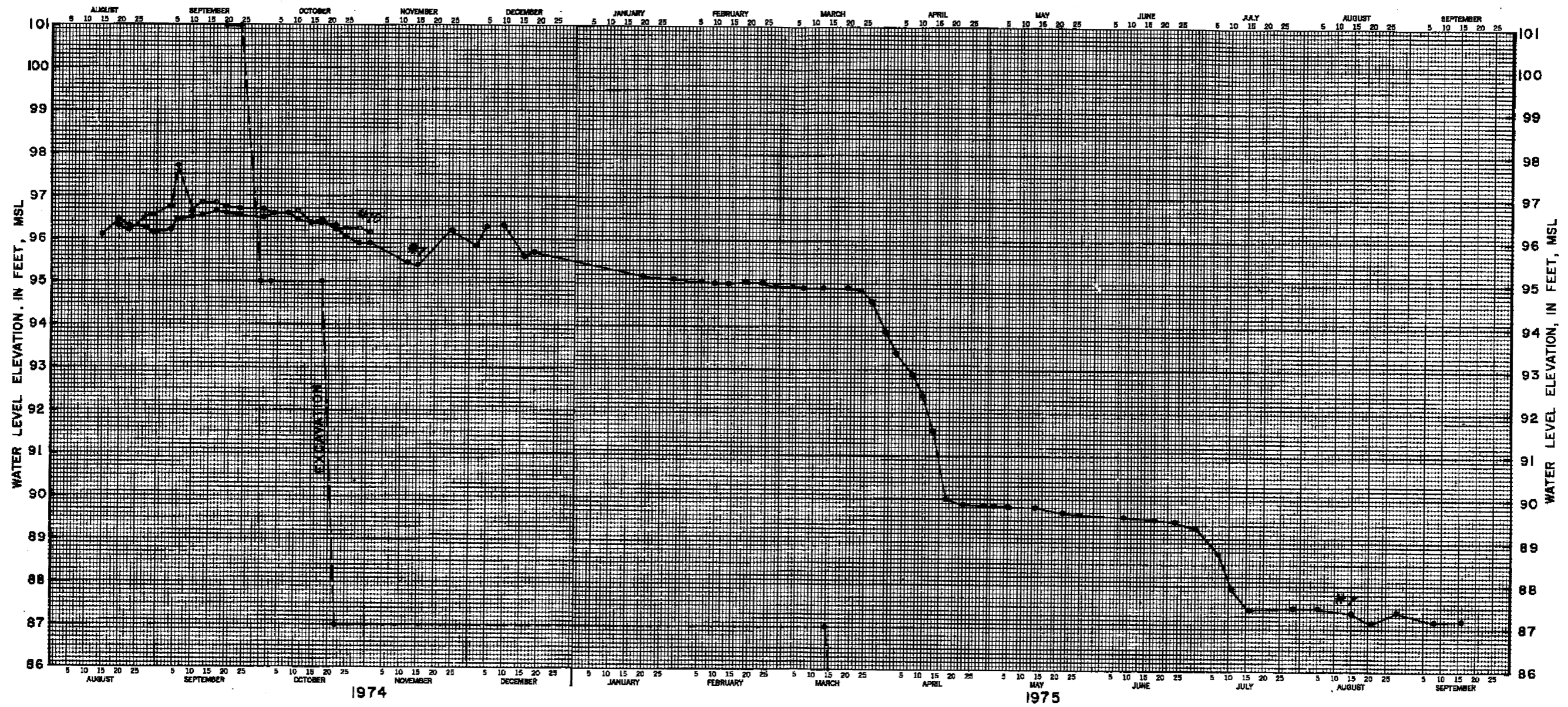
FIGURE 2.4-44 SHEET 3 OF 5 REV. 1



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HYDROGRAPHS OF
 CONSTRUCTION OBSERVATION WELLS
 (UFSAR FIGURE 2.4-36, SH.4)

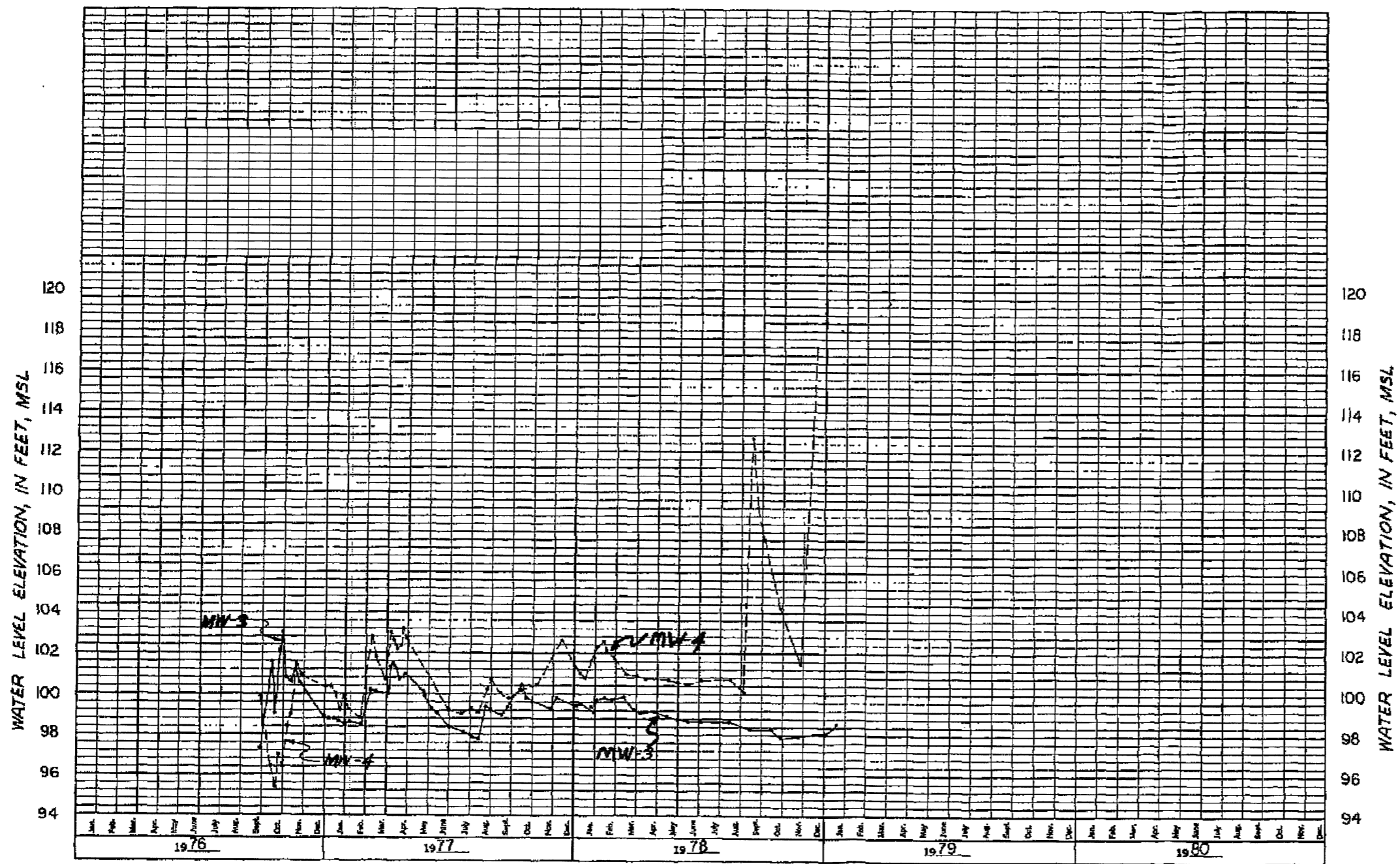
FIGURE 2.4-44 SHEET 4 OF 5 REV. 1



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HYDROGRAPHS OF
 CONSTRUCTION OBSERVATION WELLS
 (UFSAR FIGURE 2.4-36, SH.5)

FIGURE 2.4-44 SHEET 5 OF 5 REV. 1

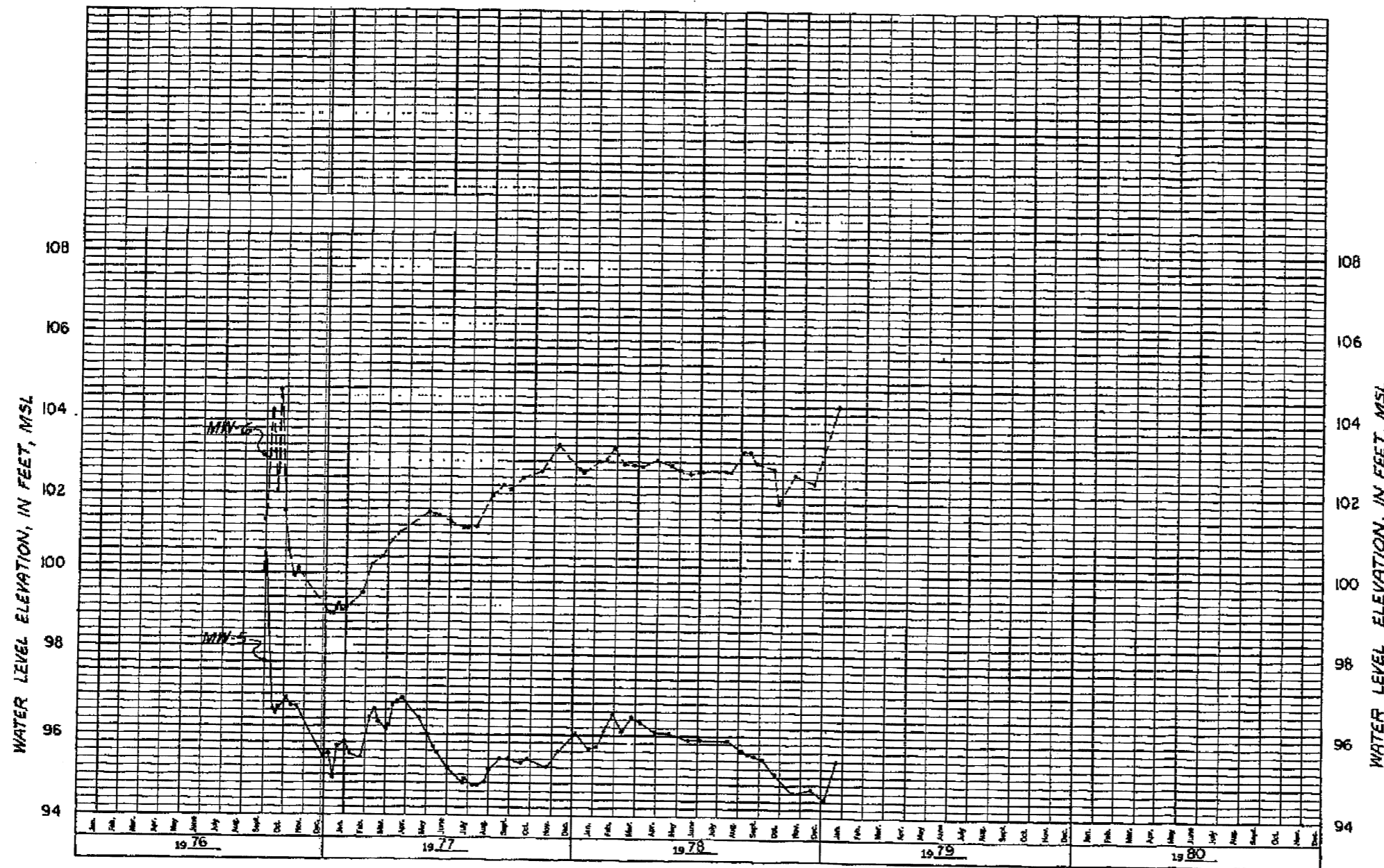


- NOTES:
1. OBSERVATION WELLS MW-1 AND MW-2 WERE DRY FROM SEPT., 1976 TO JAN., 1979.
 2. OBSERVATION WELL LOCATIONS SHOWN ON FIGURE 2.4-43 (UFSAR FIGURE 2.4-35c).
 3. TEMPORARY SITE DRAINAGE CAUSES RECHARGE INTO FILL NEAR MW-4. AREA TO BE REGRADED NEAR MW-4 FEB., 1979.

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HYDROGRAPHS OF REPLACEMENT
 OBSERVATION WELLS
 MW-3 AND MW-4
 (UFSAR FIGURE 2.4-36a, SH.1)

FIGURE 2.4-45 SHEET 1 OF 2 REV. 1

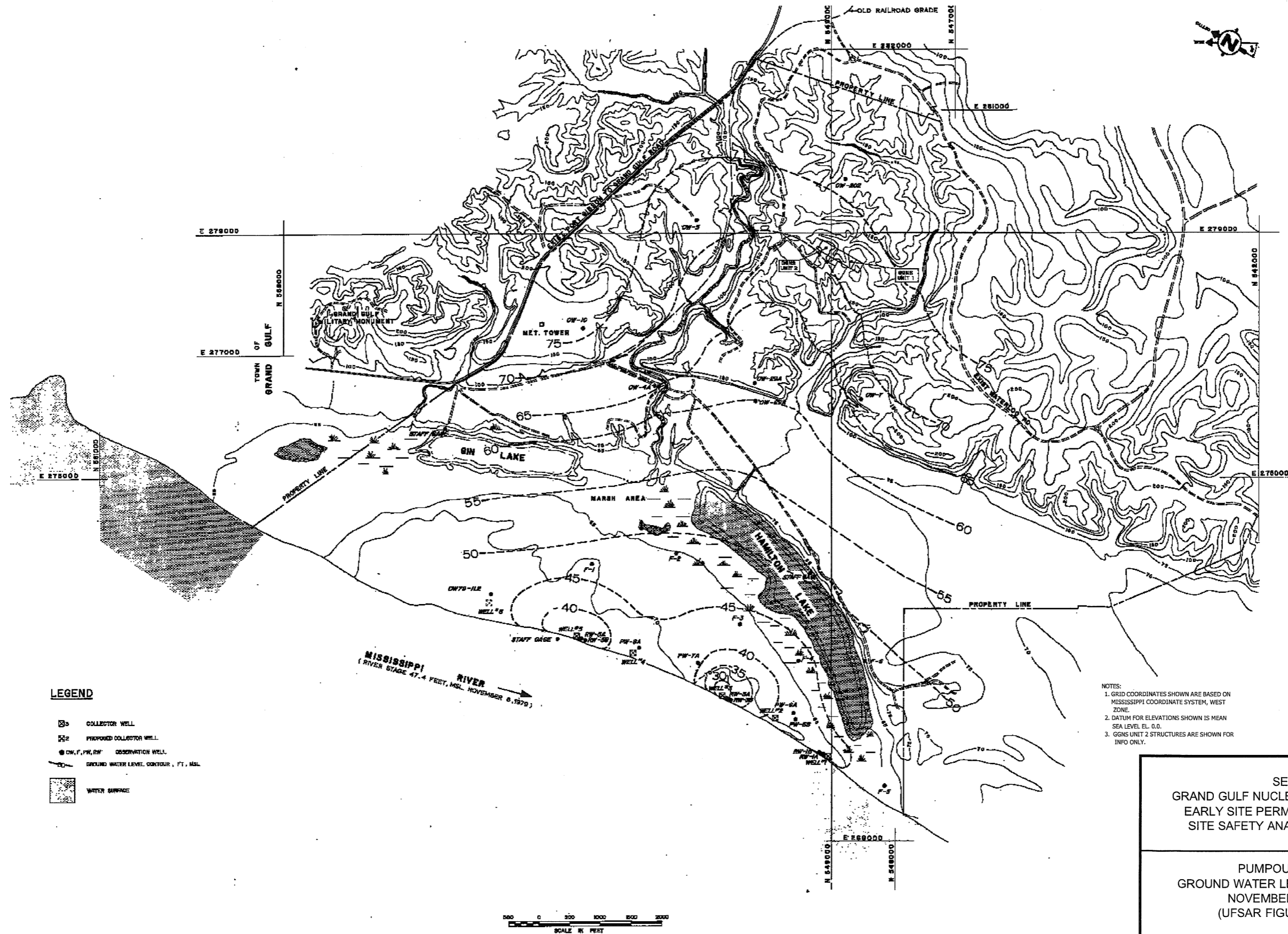


NOTES:
 1. OBSERVATION WELL LOCATIONS SHOWN
 ON FIGURE 2.4-43 (UFSAR FIGURE 2.4-35c).

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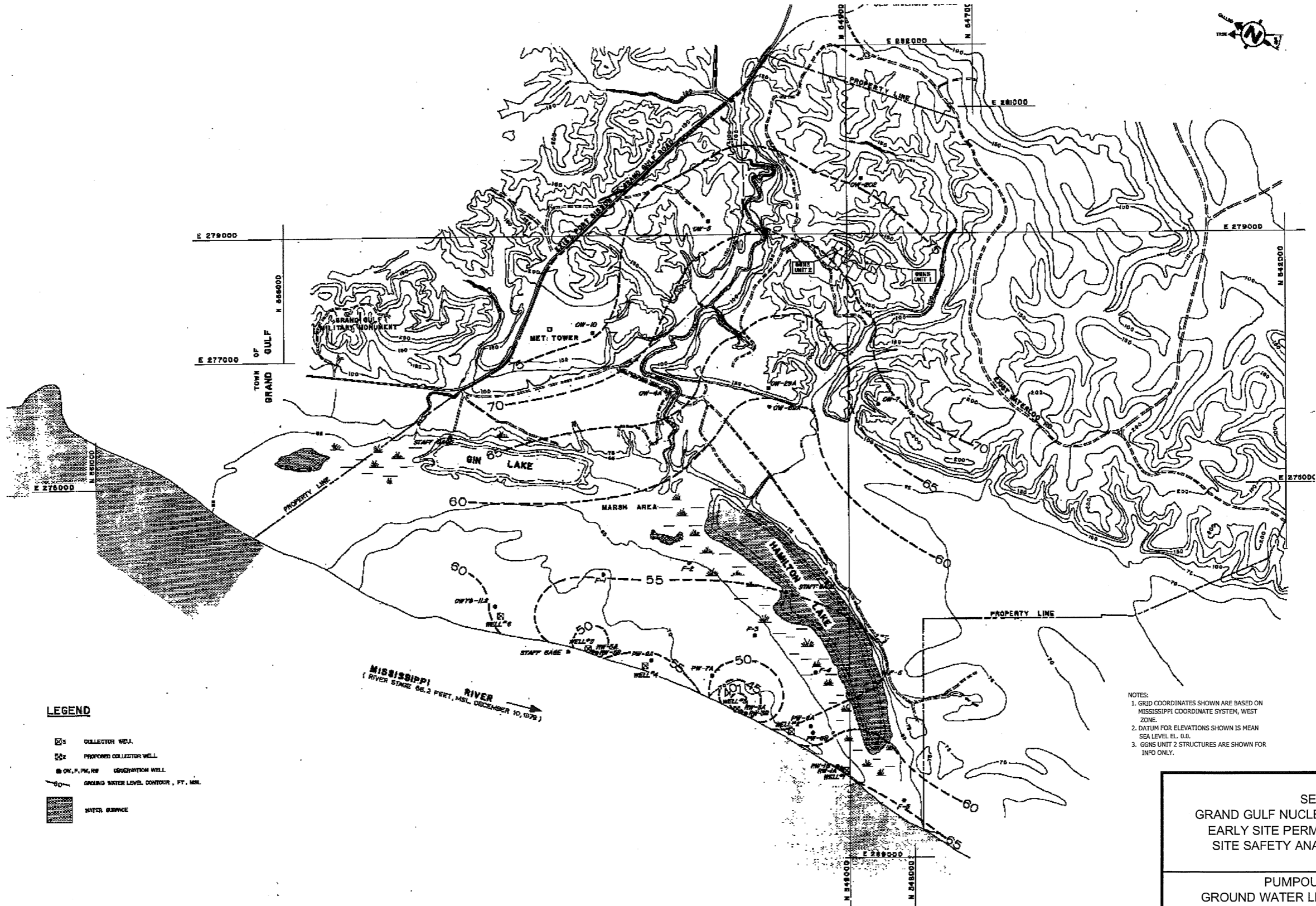
HYDROGRAPHS OF REPLACEMENT
 OBSERVATION WELLS
 MW-5 AND MW-6
 (UFSAR FIGURE 2.4-36a, SH.2)

FIGURE 2.4-45 SHEET 2 OF 2 REV. 1



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PUMPOUT TEST
 GROUND WATER LEVEL CONTOURS
 NOVEMBER 6, 1979
 (UFSAR FIGURE 2.4-39)

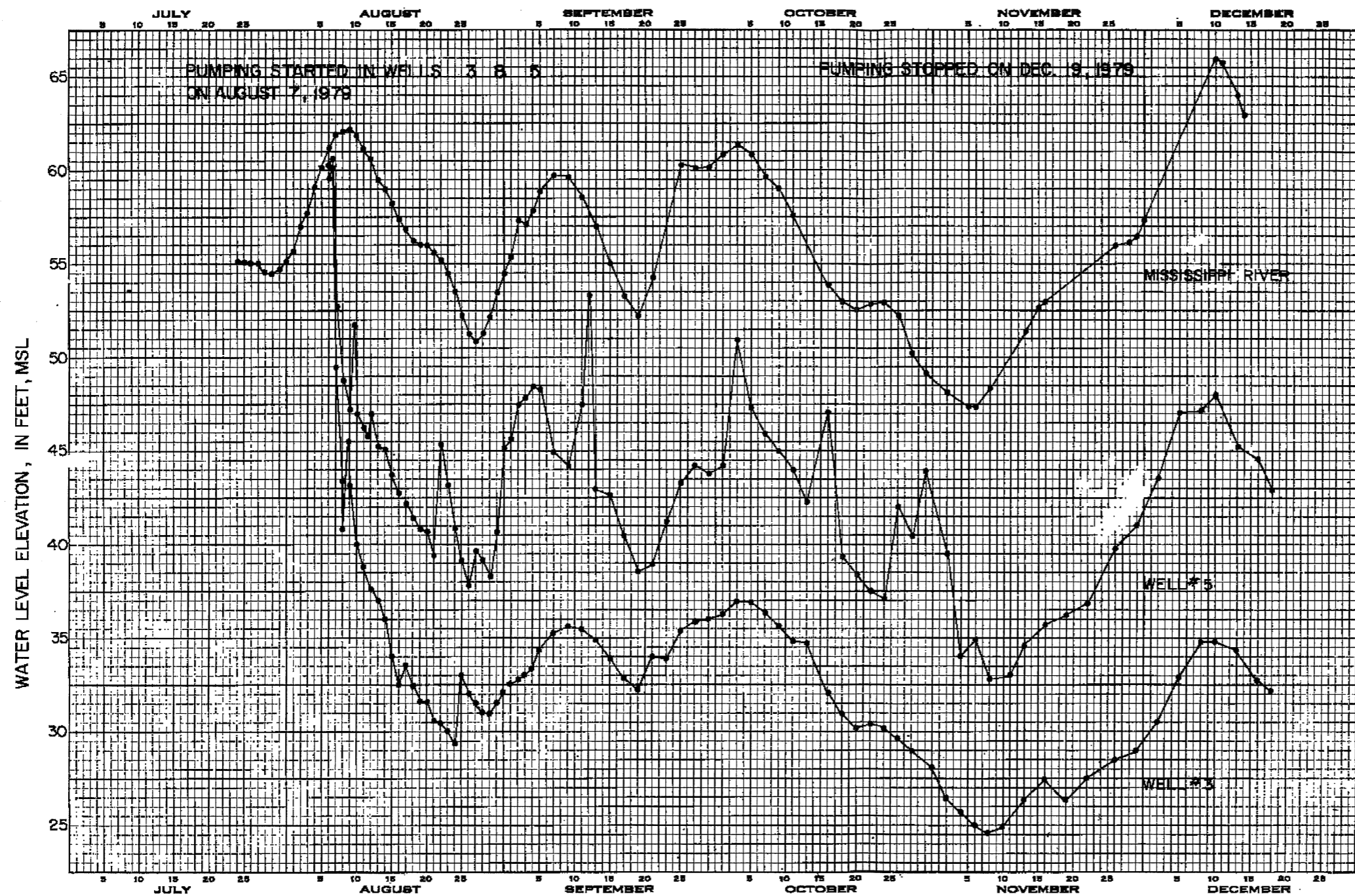


- LEGEND**
- ☒ COLLECTOR WELL
 - ☒ PROPOSED COLLECTOR WELL
 - OW, P, PW, RW OBSERVATION WELL
 - GROUND WATER LEVEL CONTOUR, FT., MSL
 - ▨ WATER SURFACE

NOTES:
 1. GRID COORDINATES SHOWN ARE BASED ON MISSISSIPPI COORDINATE SYSTEM, WEST ZONE.
 2. DATUM FOR ELEVATIONS SHOWN IS MEAN SEA LEVEL EL. 0.0.
 3. GGN5 UNIT 2 STRUCTURES ARE SHOWN FOR INFO ONLY.

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PUMP-OUT TEST
 GROUND WATER LEVEL CONTOURS
 (HIGH RIVER LEVEL)
 DECEMBER 10, 1979
 (UFSAR FIGURE 2.4-40)



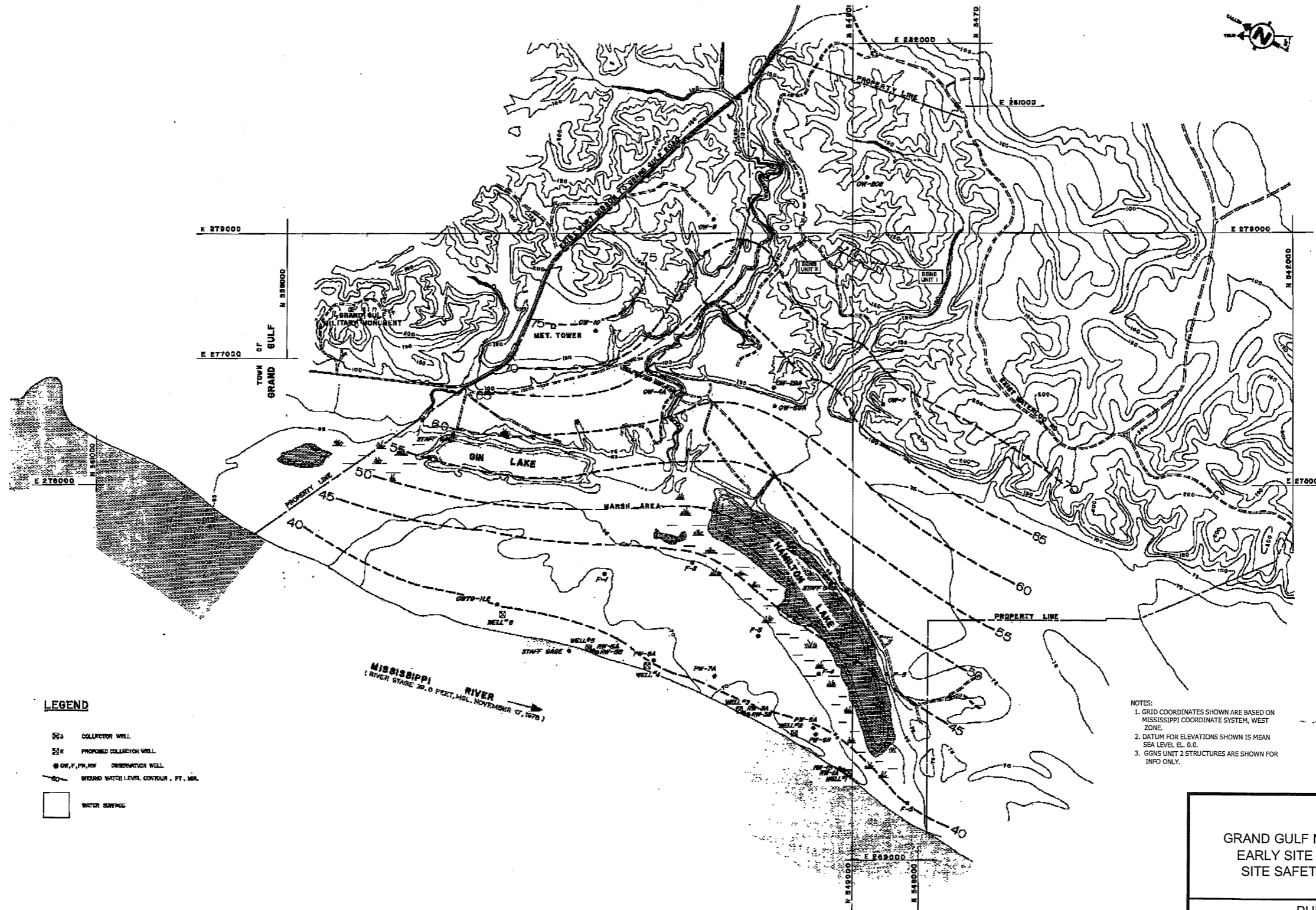
1979

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HYDROGRAPHS OF MISSISSIPPI
 RIVER WELLS 3 AND 5
 DURING PUMP TEST
 (UFSAR FIGURE 2.4-41)

FIGURE 2.4-48

REV. 1



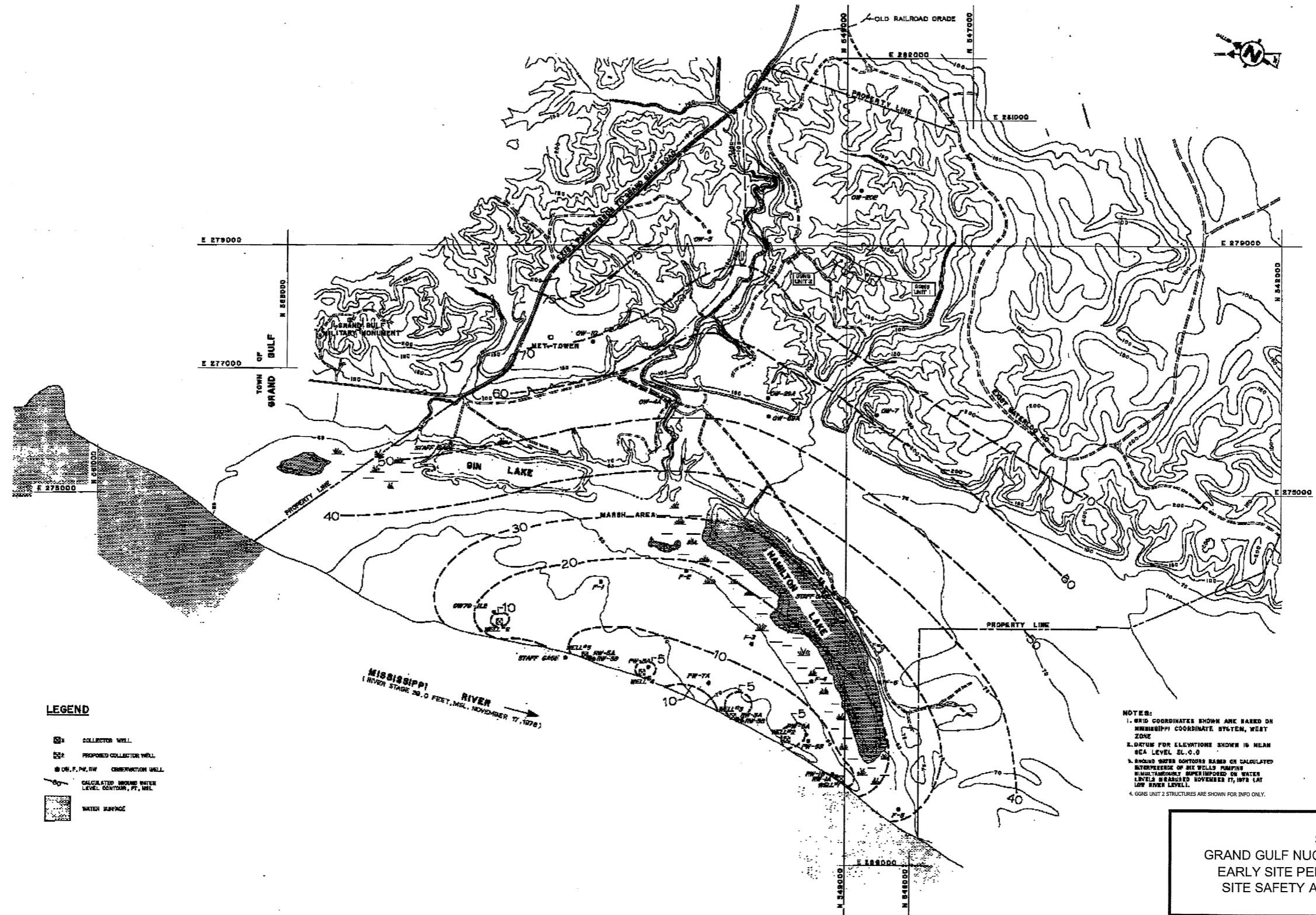
- LEGEND**
- COLLECTOR WELL
 - PROPOSED COLLECTOR WELL
 - OW, F, PW, RW OBSERVATION WELL
 - - - GROUND WATER LEVEL CONTOUR, FT., MSL.
 - WATER SURFACE

- NOTES:**
1. GRID COORDINATES SHOWN ARE BASED ON MISSISSIPPI COORDINATE SYSTEM, WEST ZONE.
 2. DATUM FOR ELEVATIONS SHOWN IS MEAN SEA LEVEL, EL. 0.0.
 3. GGNS UNIT 2 STRUCTURES ARE SHOWN FOR INFO ONLY.

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PUMP-OUT TEST
 GROUND WATER LEVEL CONTOURS
 (LOW RIVER LEVEL)
 NOVEMBER 17, 1978
 (UFSAR FIGURE 2.4-42)

FIGURE 2.4-49 REV. 1



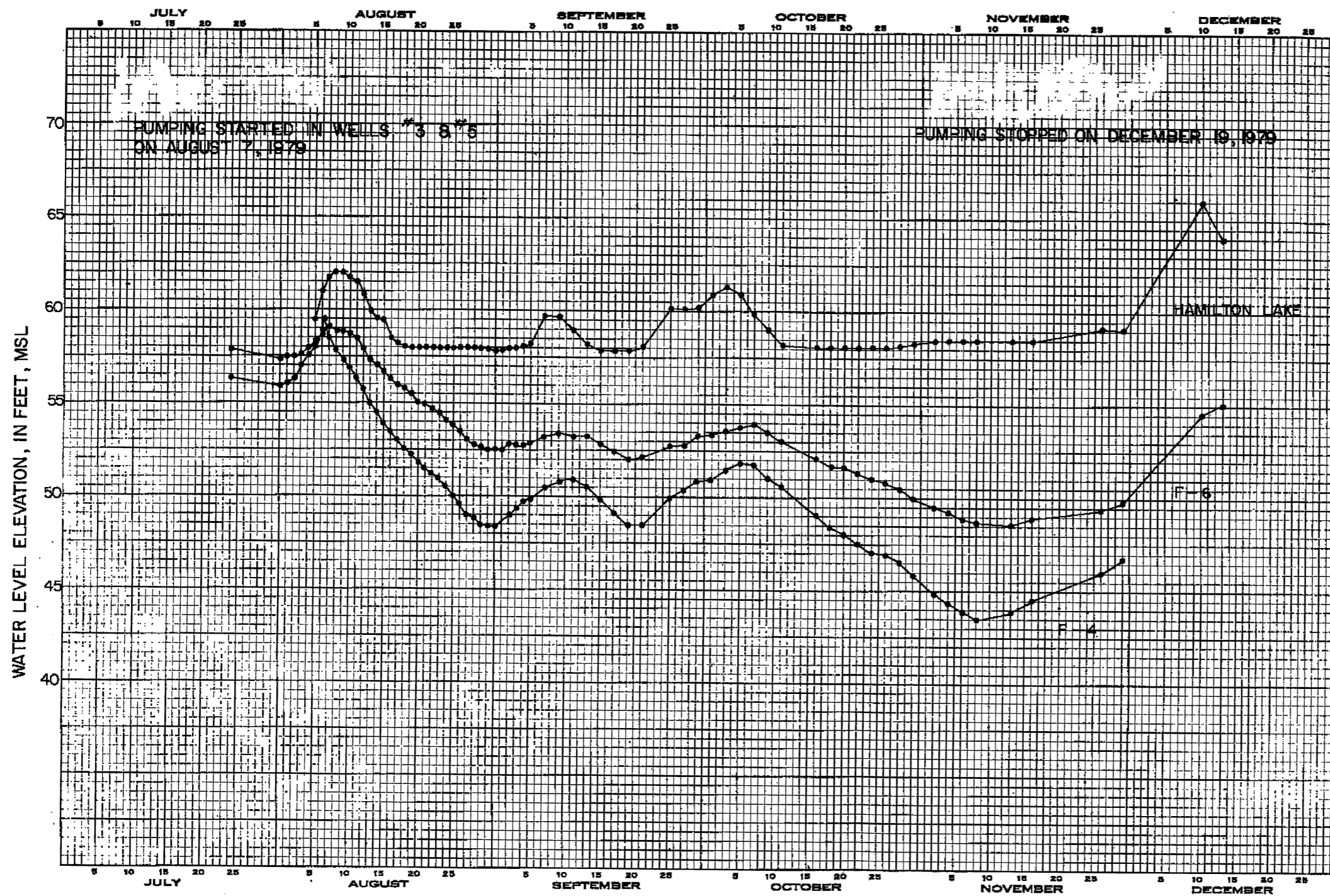
LEGEND

- X COLLECTOR WELL
- E PROPOSED COLLECTOR WELL
- O ON, P, M, RW OBSERVATION WELL
- CALCULATED GROUND WATER LEVEL CONTOUR, FT. MSL
- WATER SURFACE

- NOTES:**
1. GRID COORDINATES SHOWN ARE BASED ON MISSISSIPPI COORDINATE SYSTEM, WEST ZONE
 2. DATUM FOR ELEVATIONS SHOWN IS MEAN SEA LEVEL EL. 0.0
 3. GROUND WATER CONTOURS BASED ON CALCULATED INTERFERENCE OF SIX WELLS PUMPING EQUAL FLOWS, SUPERIMPOSED ON WATER LEVELS MEASURED NOVEMBER 17, 1978 (AT LOW RIVER LEVEL)
 4. GRS UNIT 2 STRUCTURES ARE SHOWN FOR INFO ONLY.

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 EARLY SITE PERMIT APPLICATION
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CALCULATED GROUND
 WATER LEVEL CONTOURS
 (LOW RIVER LEVEL)
 (UFSAR FIGURE 2.4-43)

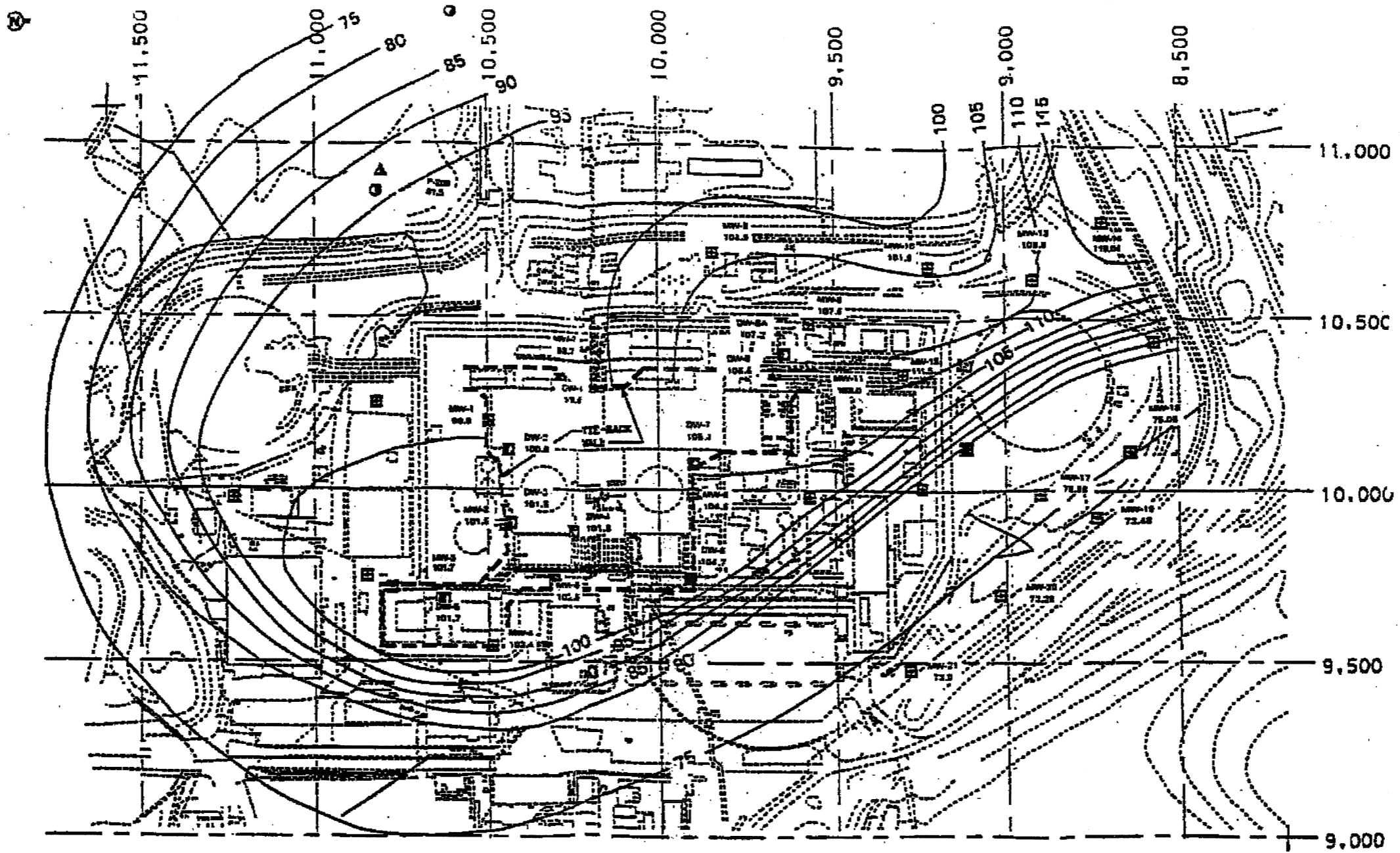


1979












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 GRAND GULF NUCLEAR STATION SITE
 EARLY SITE PERMIT APPLICATION
 SITE SAFETY ANALYSIS REPORT

HYDROGRAPHS OF HAMILTON LAKE
 AND OBSERVATION WELLS
 F-4 AND F-6 DURING PUMP TESTS
 (UFSAR FIGURE 2.4-45)

FIGURE 2.4-51 REV. 1



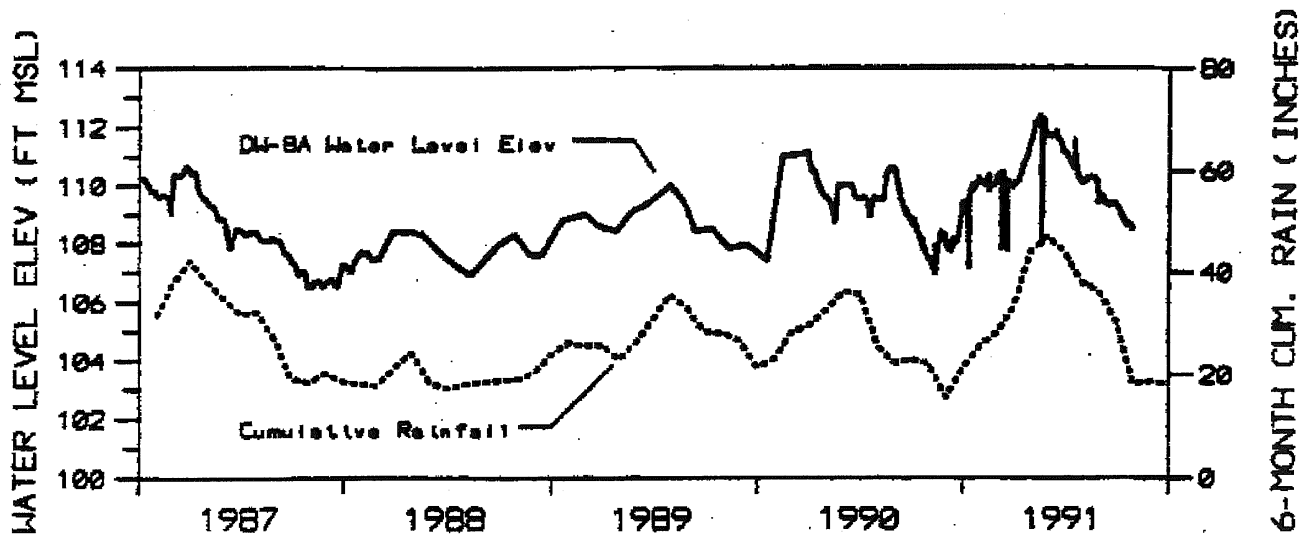
LEGEND:

- 
 MW-1
101.6
Ground water dewatering wells, monitoring wells, observation wells and estimated average post-construction ground water elevations based on measurements taken on 11/08/90
- 
 MW-2
101.7
- 
 MW-3
101.8
- 
 MW-4
101.9
- 
 MW-5
102.0
- 
 MW-6
102.1
- 
 MW-7
102.2
- 
 MW-8
102.3
- 
 MW-9
102.4
-
 MW-10
102.5
-
 MW-11
102.6
-
 MW-12
102.7
-
 MW-13
102.8
-
 MW-14
102.9
-
 MW-15
103.0
- 
 115
Ground water elevation contour; contour interval is 5 feet
- 
 Tieback Wall Project

0 100 200 300
SCALE IN FEET

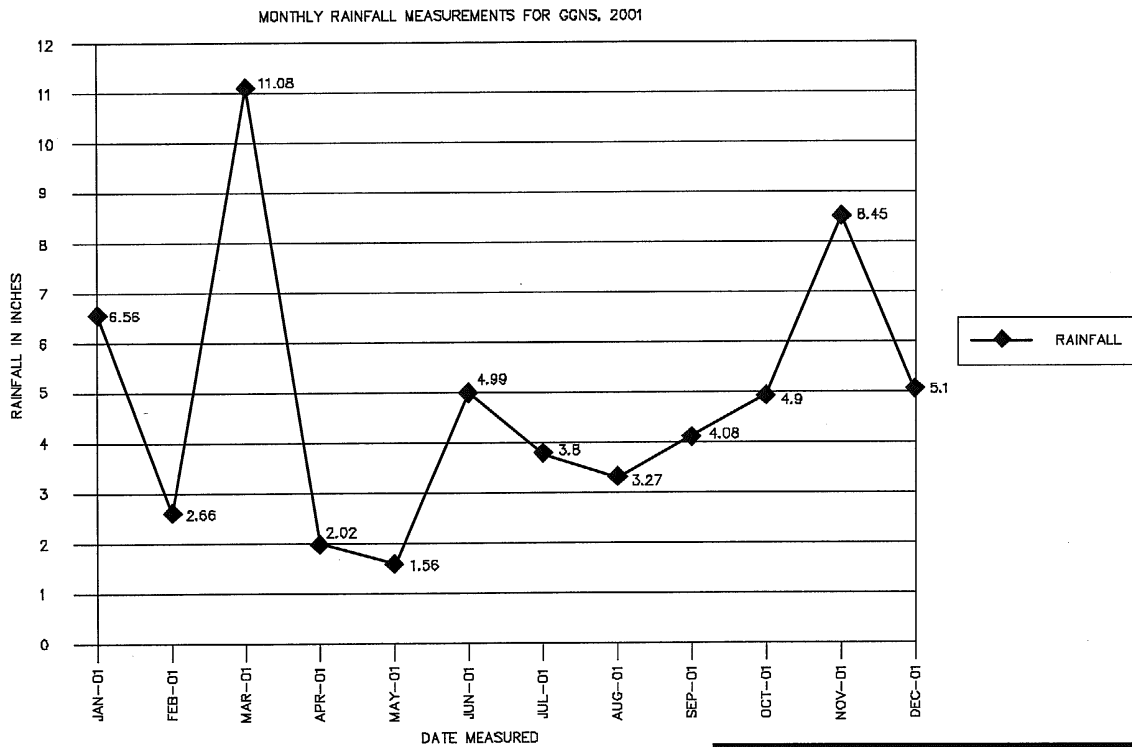
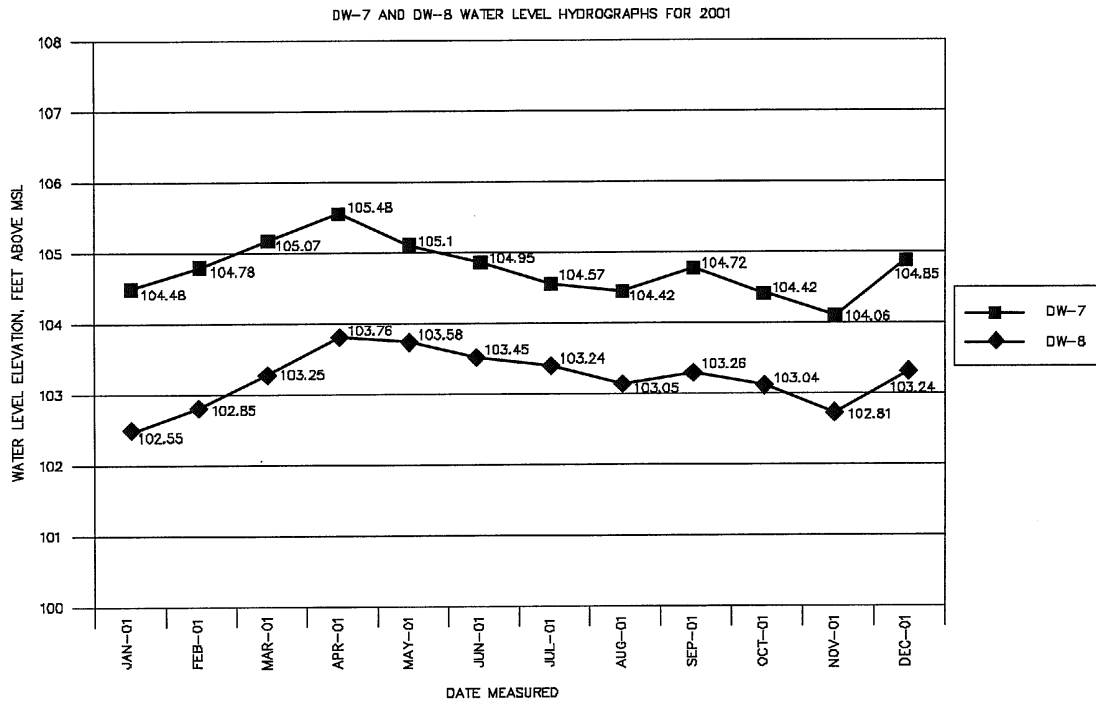
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AVERAGE
POST-CONSTRUCTION
GROUND WATER ELEVATIONS
(UFSAR FIGURE 2.4-48)



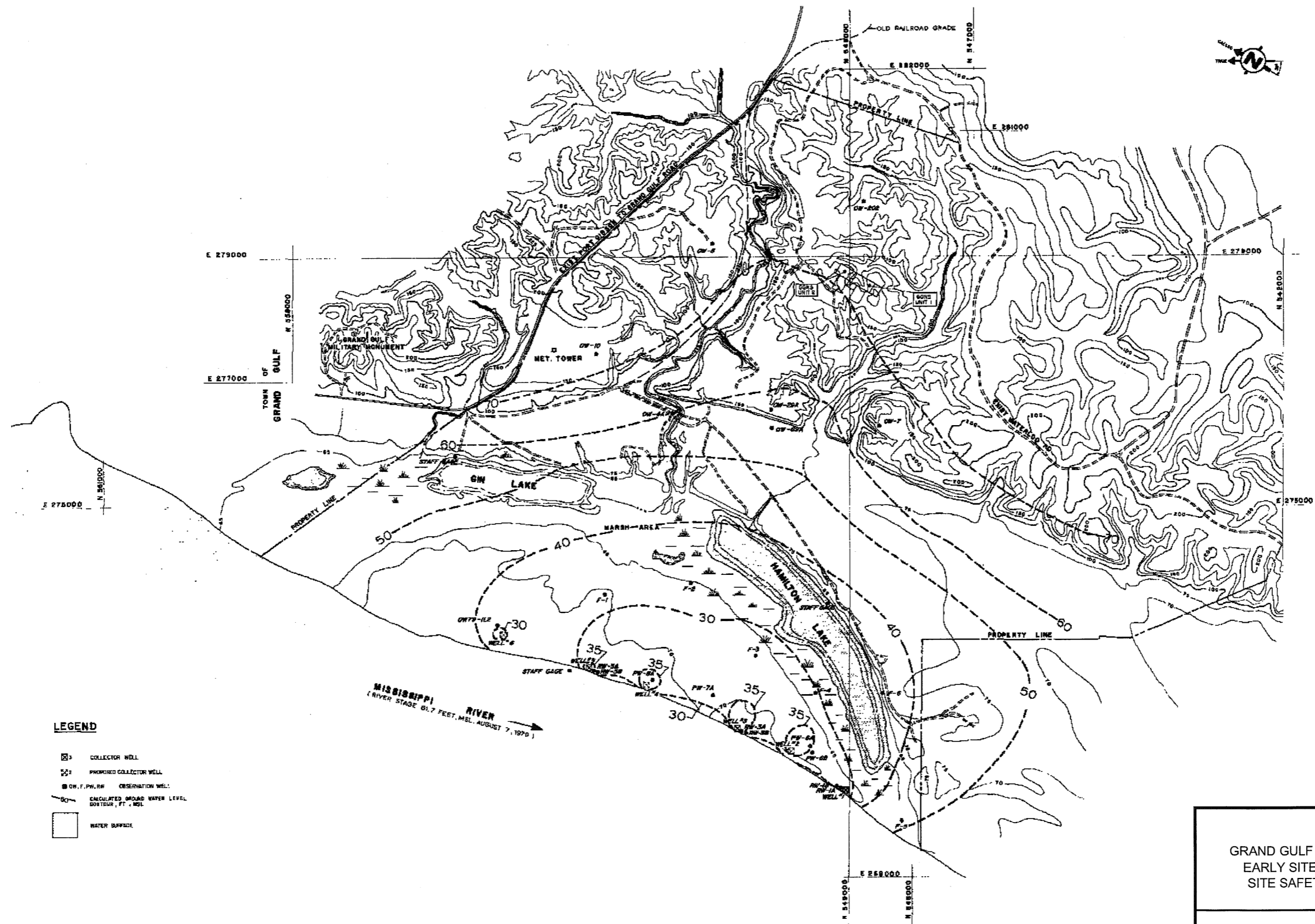
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DW-8A WATER-LEVEL HYDROGRAPH
 AND 6-MONTH CUMULATIVE PRECIPITATION
 1987-1991
 (UFSAR FIGURE 2.4-50)



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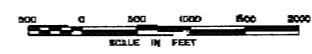
GGNS GROUNDWATER LEVEL AND
 RAINFALL HYDROGRAPHS - 2001



NOTES:
 1. GRID COORDINATES SHOWN ARE BASED ON MISSISSIPPI COORDINATE SYSTEM, WEST ZONE
 2. DATUM FOR ELEVATIONS SHOWN IS MEAN SEA LEVEL EL 0.0
 3. SHOWN WATER CONTOURS BASED ON CALCULATED INTERFERENCE OF SIX WELLS PUMPING SIMULTANEOUSLY SUPERIMPOSED ON WATER LEVEL MEASURED AUGUST 7, 1970 (AT NORMAL RIVER LEVEL).

- LEGEND**
- ☐ COLLECTOR WELL
 - ☐ PROMISED COLLECTOR WELL
 - ON T, PW, RW OBSERVATION WELL
 - CALCULATED GROUND WATER LEVEL BOUNDARY, FT. MSL
 - WATER SURFACE

MISSISSIPPI RIVER
 (RIVER STAGE 61.7 FEET, MSL, AUGUST 7, 1970)



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CALCULATED GROUND
 WATER LEVEL CONTOURS
 (NORMAL RIVER LEVEL)
 (UFSAR FIGURE 2.4-44)