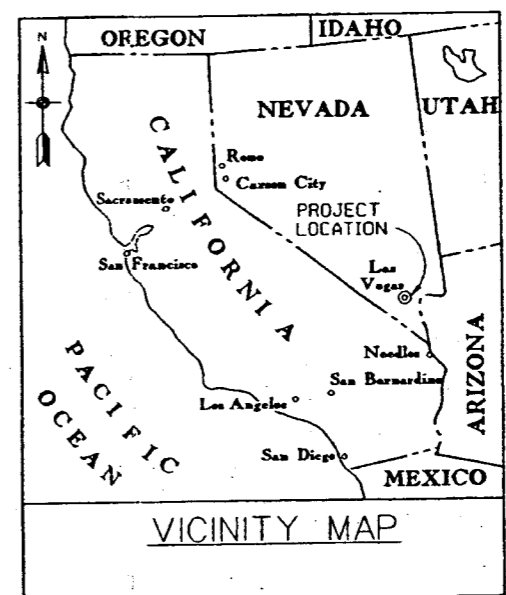
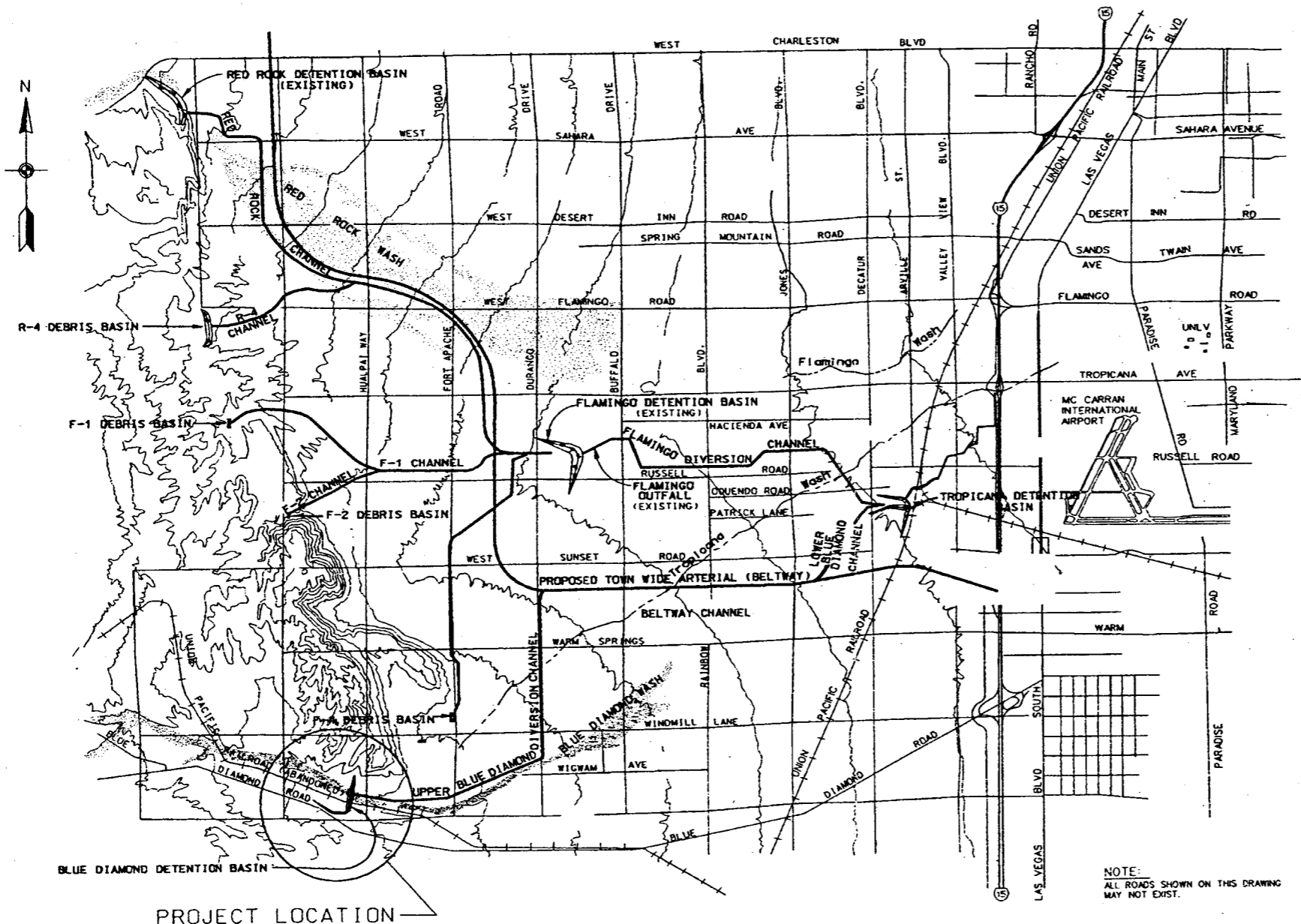


LAS VEGAS WASH AND TRIBUTARIES  
(TROPICANA AND FLAMINGO WASHES), NEVADA

BLUE DIAMOND DETENTION BASIN



**LEGEND**

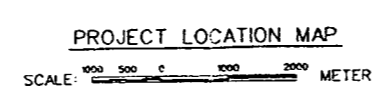
SYMBOL	DESCRIPTION
⊕ 635.300	EXISTING ELEVATION
⊕ 633.500	FINISHED GRADE ELEVATION
—	CENTERLINE/CONTROL LINE
—	RIGHT-OF-WAY
—	CONSTRUCTION EASEMENT
—	FENCE
—	RAILROAD
—	TOP OF SLOPE
—	TOE OF SLOPE

Clark County Department of Public Works

Approved by:  
M.J. Honning, P.E., Director  
Clark County Regional Flood Control District

Approved by:  
Gale Wm. Fraser, II P.E., General Manager  
County Manager  
Donald L. "Pat" Shalmy  
County Commissioners  
Bruce L. Woodbury, Chair  
Erin Kenny, Vice Chair  
Yvonne Atkinson Gates  
Dario Herrera  
Mary J. Kincaid  
Lance M. Melone  
Myrna Wilkms

AGENCY	PLANS REVIEWED BY	DATE
SPRINT/CENTRAL TELEPHONE COMPANY		
LAS VEGAS VALLEY WATER DISTRICT		
SOUTHWEST GAS COMPANY		
NEVADA POWER COMPANY		
CLARK COUNTY SANITATION DISTRICT		
COMMUNITY CABLE T.V.		
UNION PACIFIC RAILROAD		
WLA TEL		



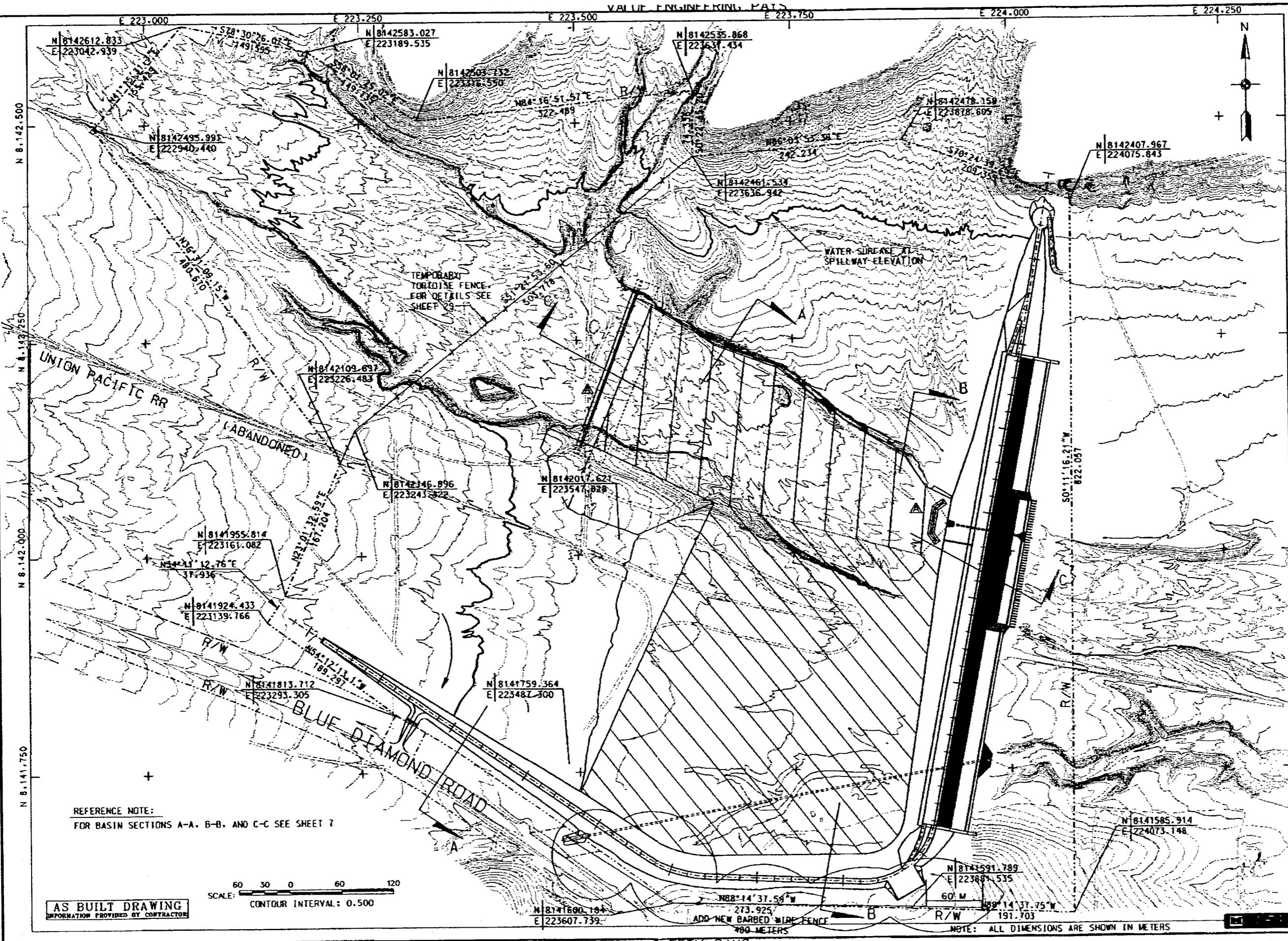
**AS BUILT DRAWING**  
INFORMATION PROVIDED BY CONTRACTOR

THIS PROJECT WAS DESIGNED BY THE LOS ANGELES DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF THE INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY E.R. 110-1-952.

TROPICANA AND FLAMINGO WASHES FLOOD CONTROL PROJECT		BLUE DIAMOND DETENTION BASIN		VICINITY AND PROJECT LOCATION MAPS	
SYMBOL	DESCRIPTIONS	DATE	APPROVAL	SYMBOL	DESCRIPTIONS
⊕	ADDED CLARK COUNTY SIGNATURES			⊕	ADDED CLARK COUNTY SIGNATURES
⊕	ADDED SIGNATURES			⊕	ADDED SIGNATURES

DESIGNED BY: J. SERANO	DATE: 08/14/08
DRAWN BY: J. SERANO	CHECKED BY: G. DAVIS
U.S. ARMY ENGINEER DISTRICT LOS ANGELES	CORPS OF ENGINEERS
PREPARED UNDER THE DIRECTION OF: JOHN P. CARROLL, COLONEL	DISTRICT ENGINEER
SHEET NO. 57	SHEETS



DESIGNED BY: PTV		DRAWN BY: PTV		CHECKED BY: MD	
SUBMITTED BY: THOMAS H. SAGE, P.E.		CHECK DESIGN BRANCH		CARD FILE NAME: BODAL.D3.D04	
DISTRICT FILE NO. 437 REV. A		SPEC. NO. DACW9189-8-0005		DATE	
SHEET 1 OF 5		PROJECT		APPROVAL	
TROPICANA AND FLAMINGO WASHES FLOOD CONTROL PROJECT BLUE DIAMOND DETENTION BASIN GENERAL PLAN					
STABILIZER ADDED SEDIMENT BERM AND SLOPE SYMBOLS DESCRIPTIONS DATE APPROVAL					

**The Plate you are attempting to access is not currently available.**

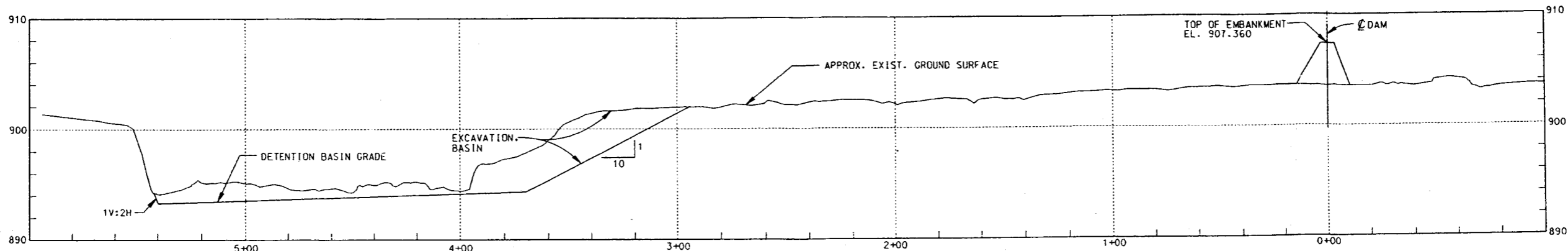
For additional information, please contact the Los Angeles District Public Affairs Office at (213) 452-3908.

**The Plate you are attempting to access is not currently available.**

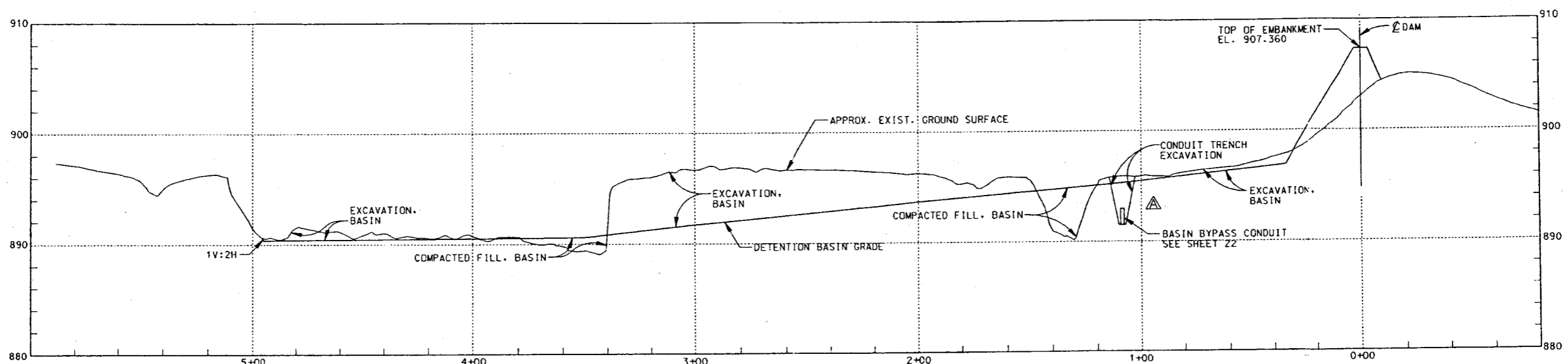
For additional information, please contact the Los Angeles District Public Affairs Office at (213) 452-3908.

**The Plate you are attempting to access is not currently available.**

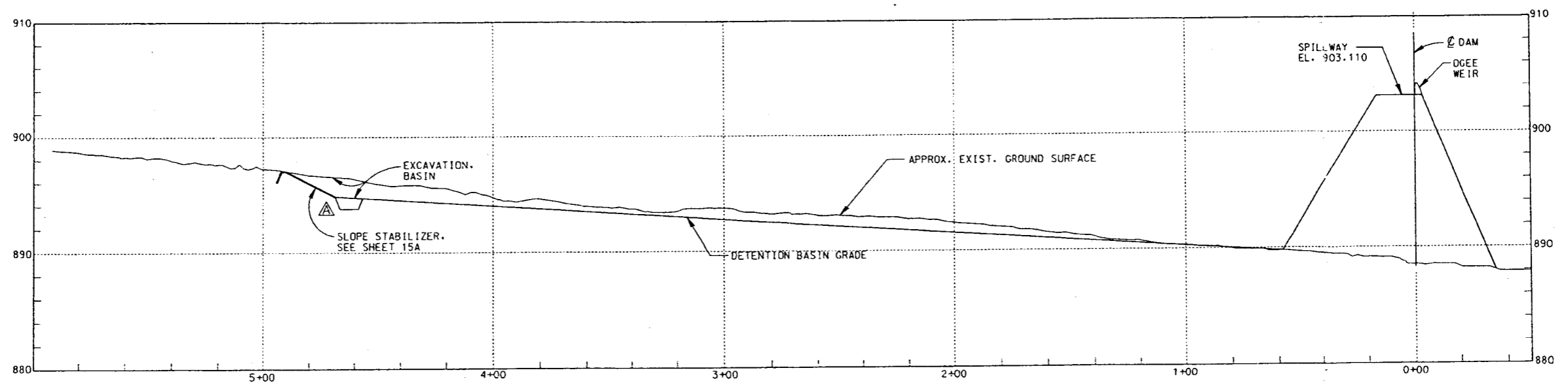
For additional information, please contact the Los Angeles District Public Affairs Office at (213) 452-3908.



BASIN SECTION A-A



BASIN SECTION B-B



BASIN SECTION C-C

- NOTES:
1. ALL DIMENSIONS ARE SHOWN IN METERS
  2. FOR PLAN VIEW OF BASIN, SEE SHEET 3
  3. DAM AND SPILLWAY DETAILS NOT SHOWN. FOR DAM EMBANKMENT AND SPILLWAY DETAILS, SEE SHEETS 9 THRU 11

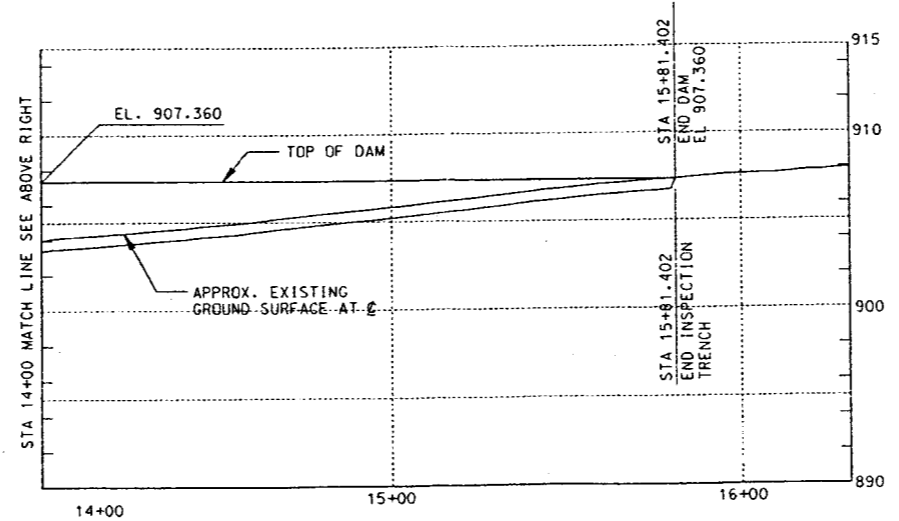
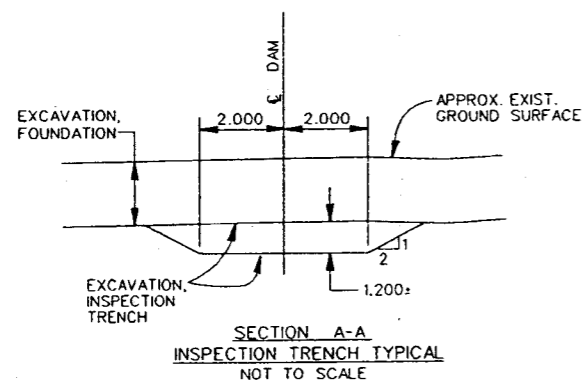
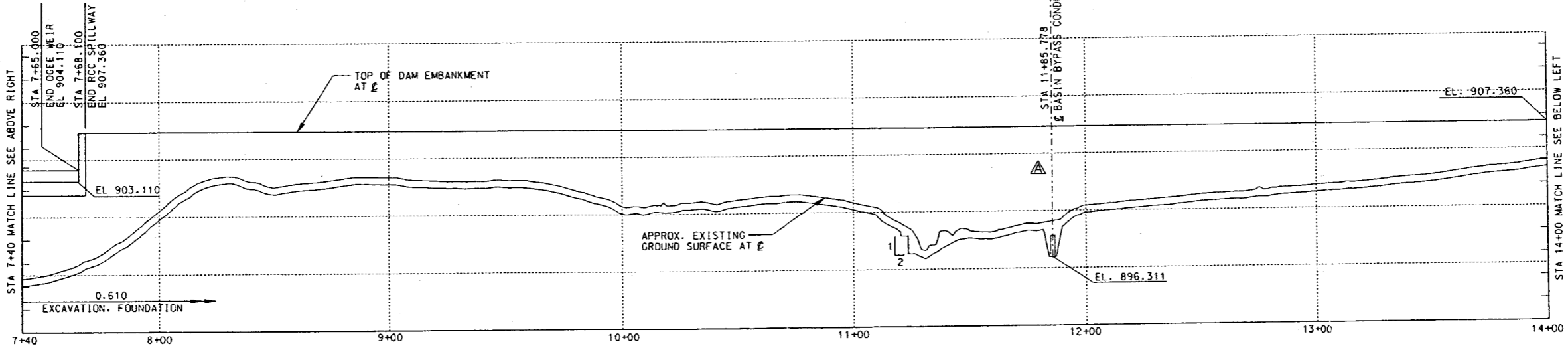
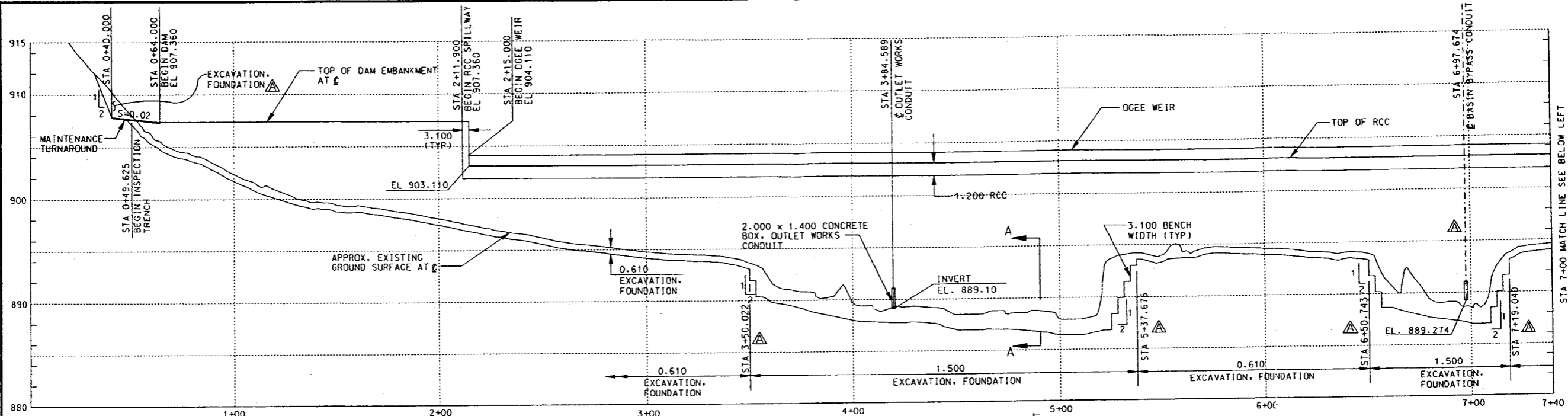
**AS BUILT DRAWING**  
INFORMATION PROVIDED BY CONTRACTOR



SYMBOL	DESCRIPTIONS	DATE	APPROVAL
▲	ADDED SLOPE STABILIZER		
▲	REVISED BYPASS CONDUIT, CALLOUTS, AND		

TROPICANA AND FLAMINGO WASHES FLOOD CONTROL PROJECT  
BLUE DIAMOND DETENTION BASIN  
DETENTION BASIN SECTIONS

DESIGNED BY: PNU	DRAWN BY: PNU	CHECKED BY: NU	CADD FILE NAME: B00B6.07.DGN
U.S. ARMY ENGINEER DISTRICT LOS ANGELES CORPS OF ENGINEERS			
SUBMITTED BY: THOMAS H. SAGE, P.E. CHIEF, DESIGN BRANCH			
DISTRICT FILE NO. 1887/486 REV. K	SPEC. NO. DACR09-98-B-0002		
SCALE: 1000:1	SHEET 7 OF 57 SHEETS		



PROFILE - DAM EMBANKMENT

- REFERENCE NOTES:
1. THIS PROFILE IS TAKEN LOOKING DOWNSTREAM.
  2. FOR PLAN VIEW OF DAM EMBANKMENT, SEE SHEETS 3-6.
  3. FOR SPILLWAY PLAN VIEW, DETAILS, AND CROSS SECTIONS, SEE SHEETS 9-10 AND 14-15.
  4. FOR DAM OUTLET WORKS CONDUIT DETAILS, SEE SHEET 17.
  5. FOR BASIN BYPASS CONDUIT DETAILS, SEE SHEET 22.

- NOTES:
1. ALL DIMENSIONS ARE SHOWN IN METERS
  2. TOPOGRAPHY BY PHOTOGRAMMETRIC METHOD BY AERIAL MAPPING CO., INC. ON AUGUST 20, 1992. HORIZONTAL CONTROL IS BASED ON NAD83 DATUM. VERTICAL CONTROL IS BASED ON NAVD88 DATUM.

AS BUILT DRAWING  
INFORMATION PROVIDED BY CONTRACTOR

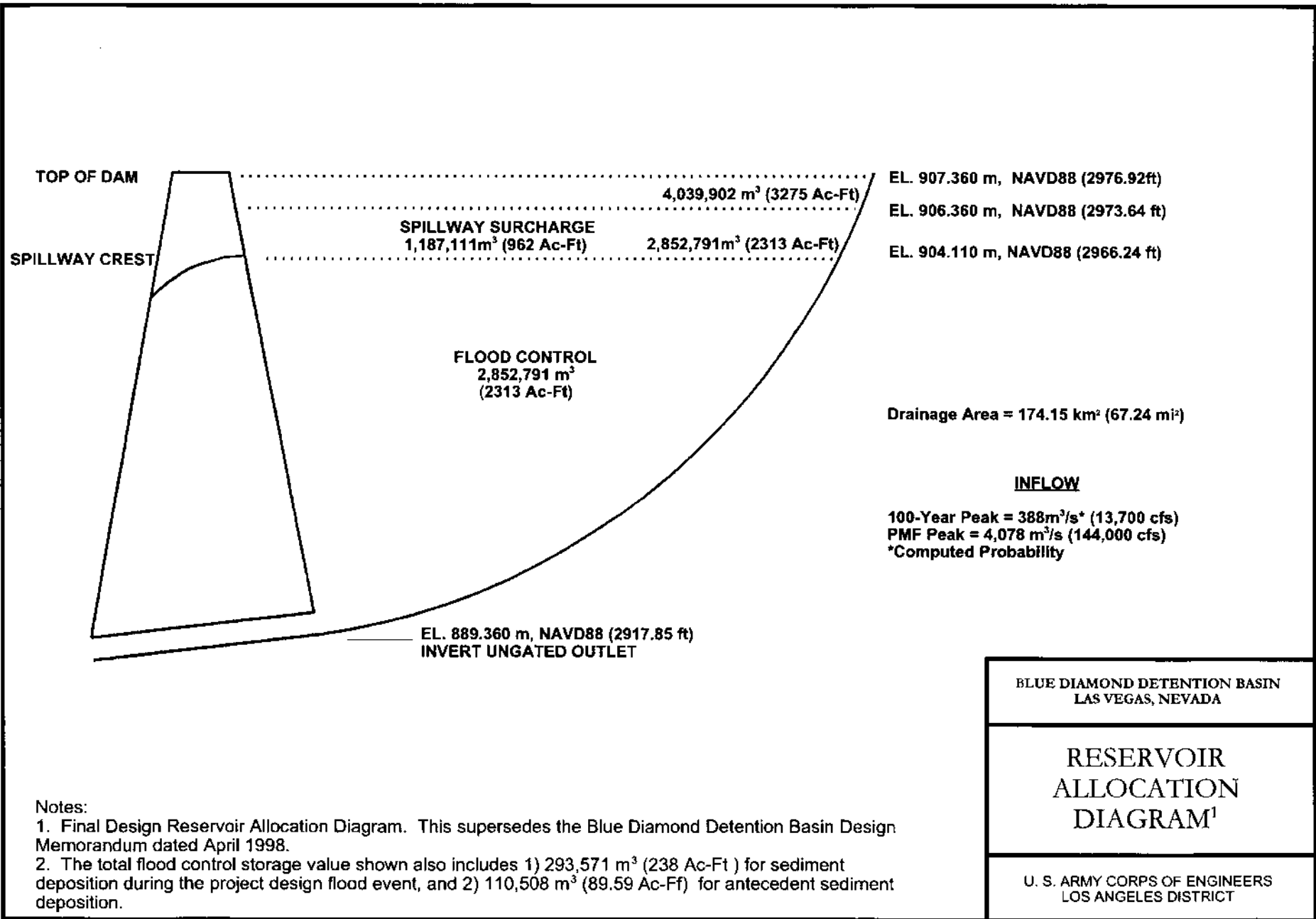


TROPICANA AND FLAMINGO WASHES FLOOD CONTROL PROJECT BLUE DIAMOND DETENTION BASIN DAM EMBANKMENT - PROFILE		DESIGNED BY: PHU	CADD FILE NAME: BDDBA_08.DGN
		DRAWN BY: PHU	
		CHECKED BY: HU	
		U.S. ARMY ENGINEER DISTRICT LOS ANGELES CORPS OF ENGINEERS	
		THOMAS H. SAGE, P.E. CHIEF DESIGN BRANCH	
		SUBMITTED BY:	DISTRICT FILE NO. 196-487 REV. 'X' SPEC. NO. DACW09-99-B-0009
SCALE: 1000:1	SHEET 8 of 57	STATIONING, ADDED NOTE: REVISED BYPASS CONDUIT CALLOUTS AND SYMBOLS	DATE
		REVISIONS	APPROVAL

**Plates 6-17 are not currently available.**

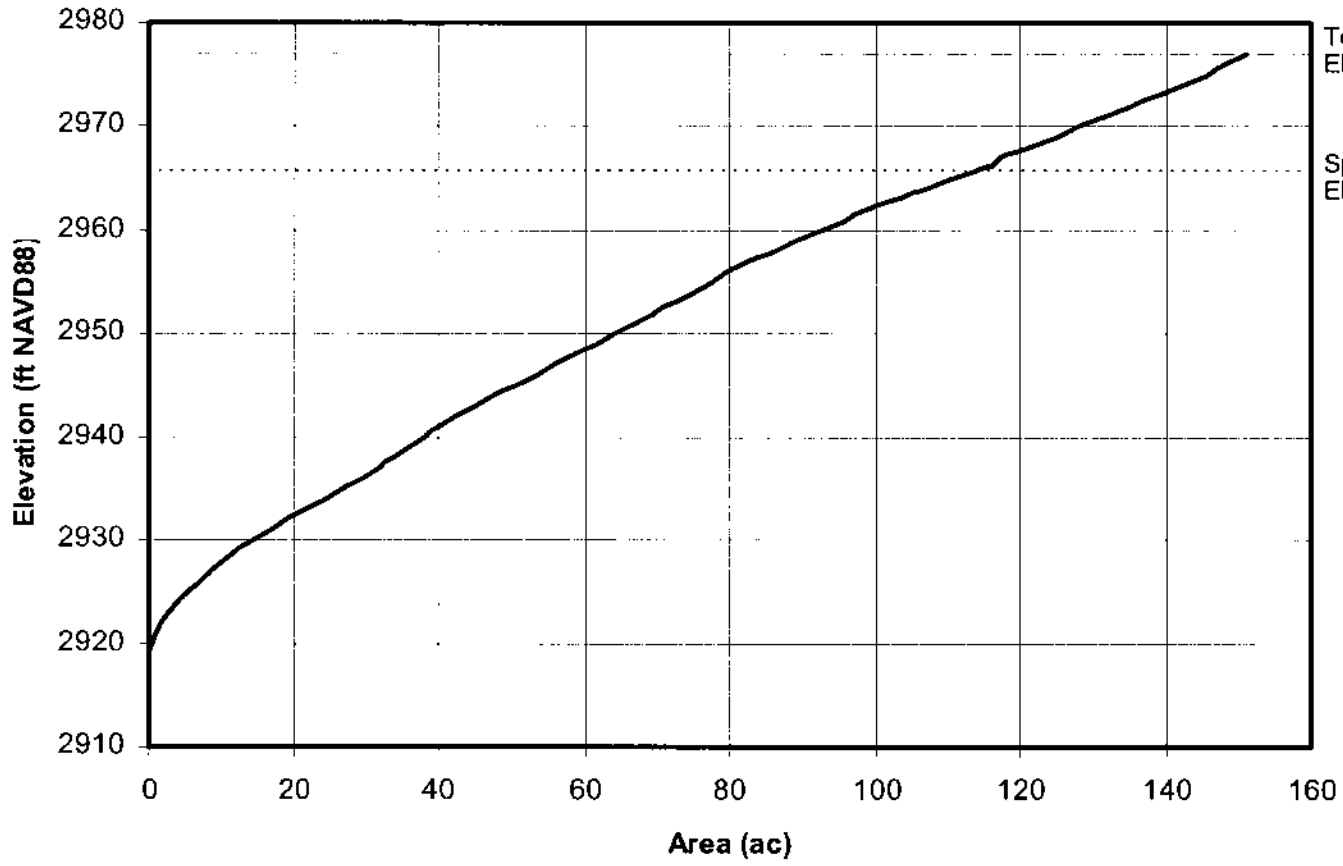
For additional information, please contact the Los Angeles District Public Affairs Office at (213) 452-3908.





**Notes:**

1. Final Design Reservoir Allocation Diagram. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.
2. The total flood control storage value shown also includes 1) 293,571 m<sup>3</sup> (238 Ac-Ft) for sediment deposition during the project design flood event, and 2) 110,508 m<sup>3</sup> (89.59 Ac-Ft) for antecedent sediment deposition.



Top of Dam  
Elevation 2976.92 ft

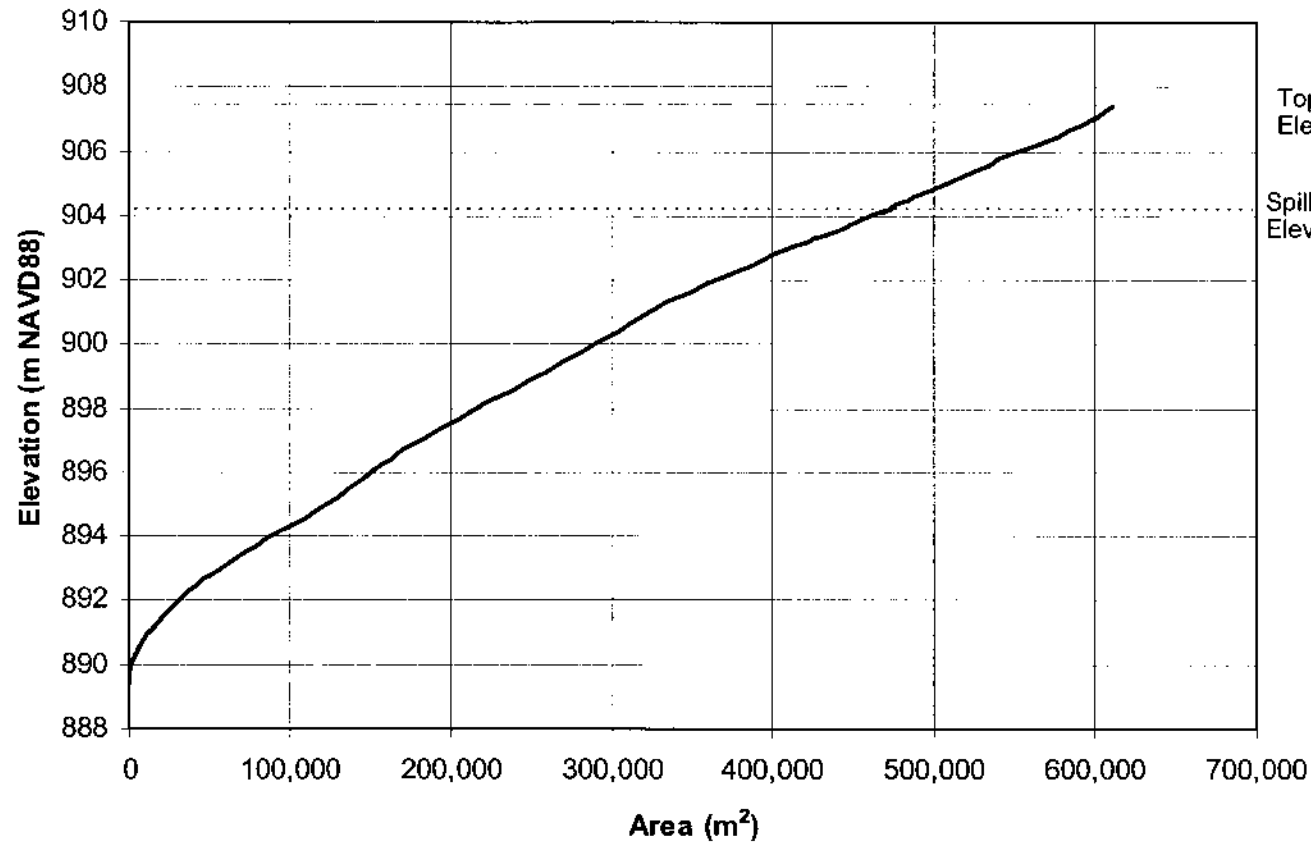
Spillway Crest  
Elevation 2966.24 ft

BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

SURFACE AREA  
ELEVATION CURVE

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

Note: Final Design Surface Area Elevation Curve. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.



Top of Dam  
Elevation 907.360 ft

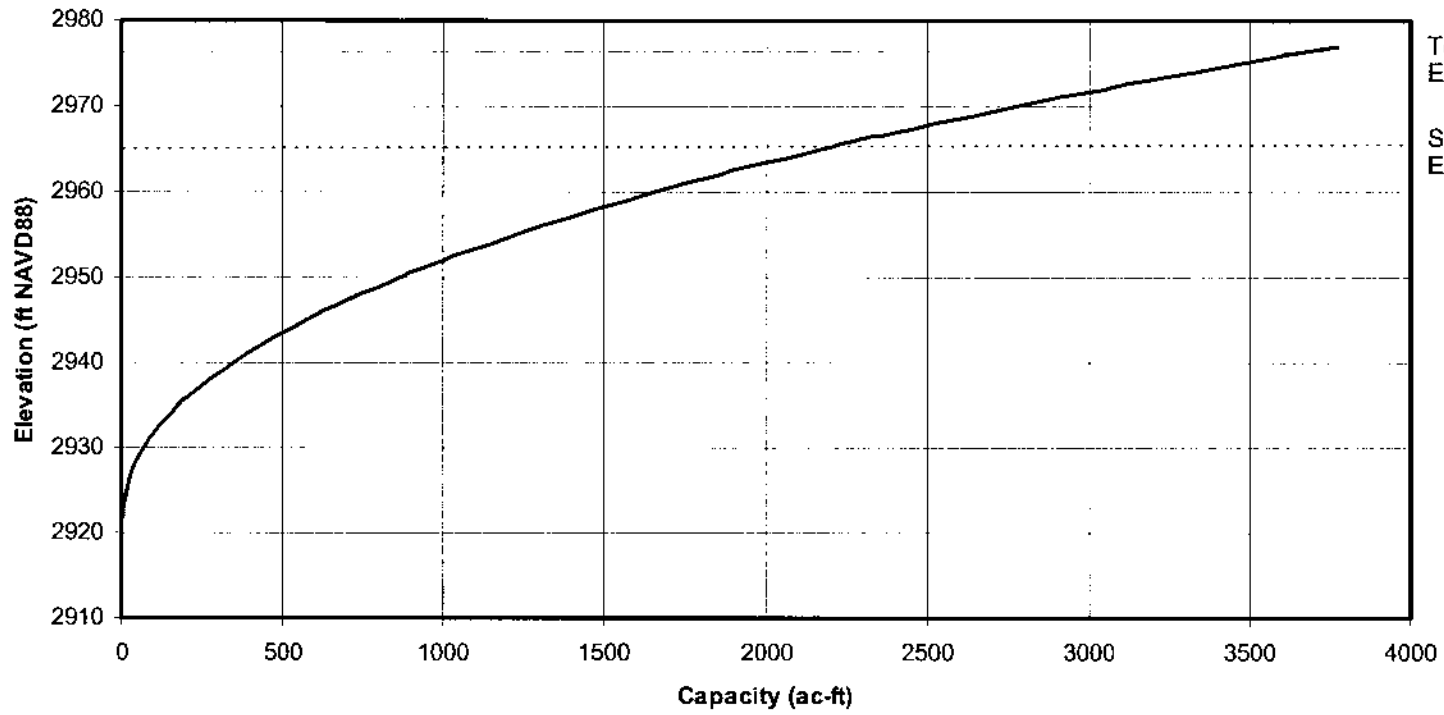
Spillway Crest  
Elevation 904.110 ft

BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

SURFACE AREA  
ELEVATION CURVE  
(Metric Units)

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

Note: Final Design Surface Area Elevation Curve. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.



Top of Dam  
Elevation 2976.92 ft

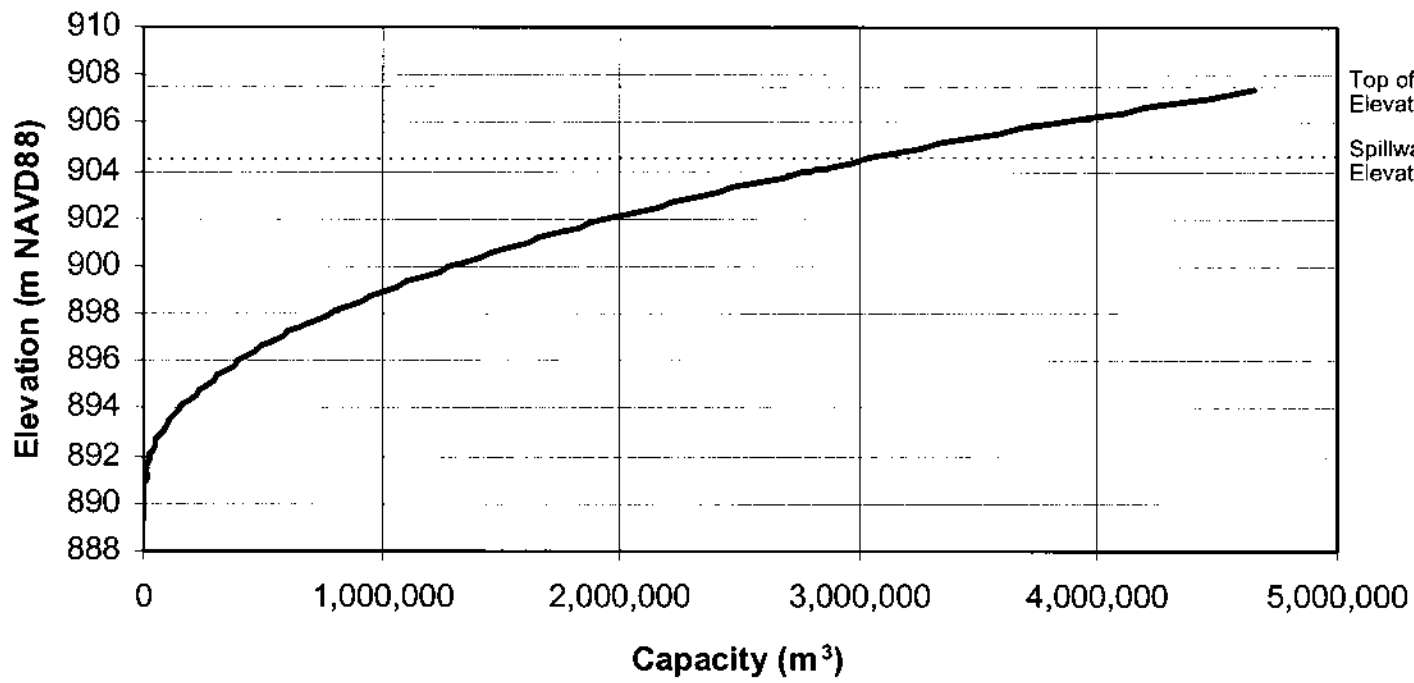
Spillway Crest  
Elevation 2966.24 ft

BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

STORAGE  
ELEVATION CURVE

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

Note: Final Design Storage Elevation Curve This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.



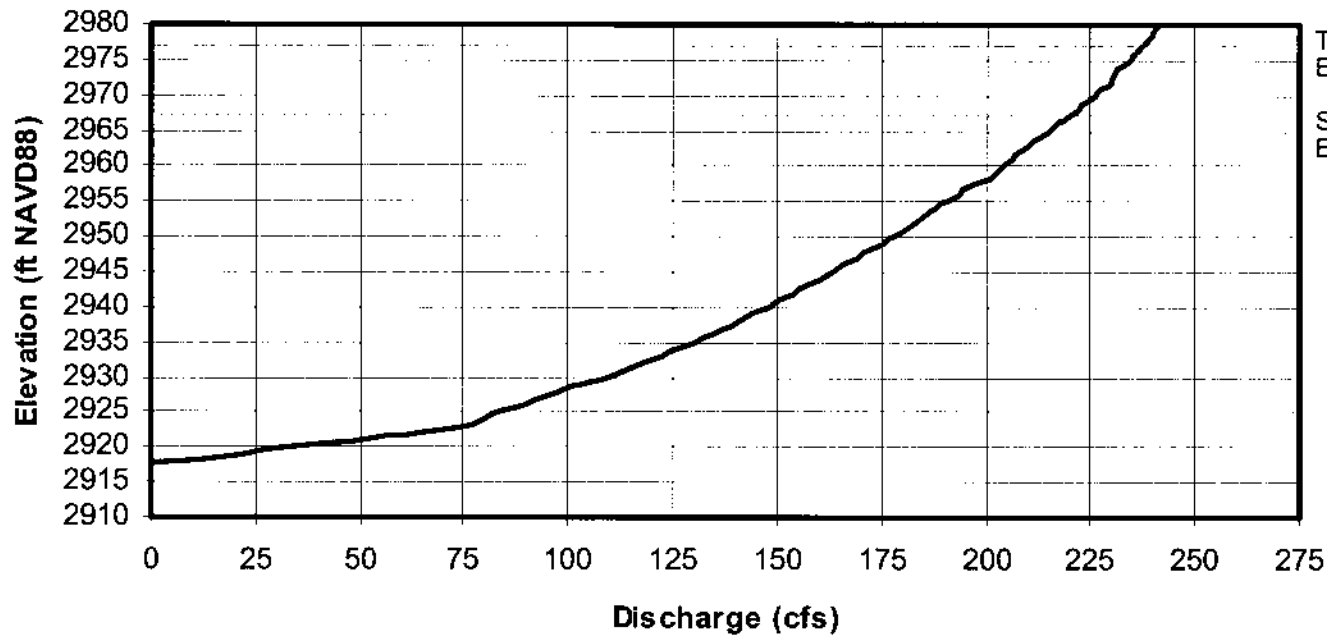
Top of Dam  
Elevation 907.360 m  
Spillway Crest  
Elevation 904.110 m

BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

STORAGE  
ELEVATION CURVE  
(Metric Units)

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

Note: Final Design Storage Elevation Curve. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.



Top of Dam  
Elevation 2976.90 ft

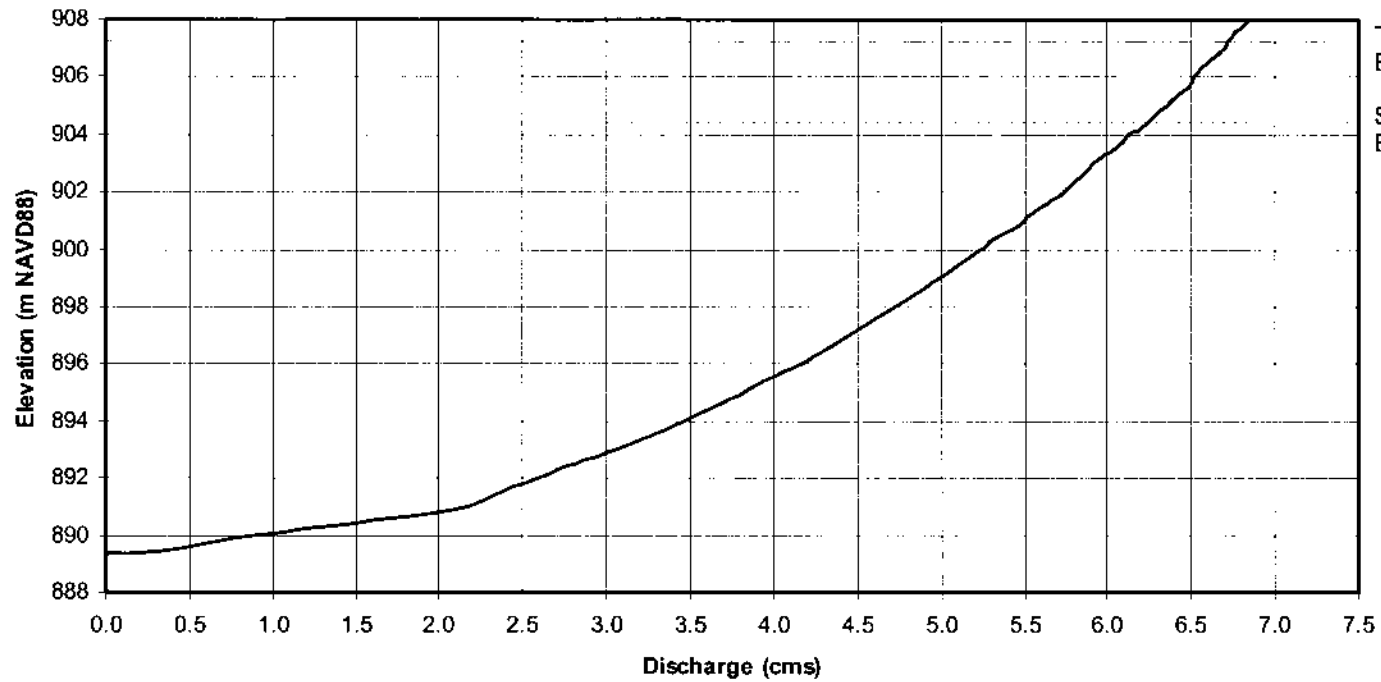
Spillway Crest  
Elevation 2966.24 ft

BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

OUTLET DISCHARGE  
CURVE

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

Note: Final Design Outlet Discharge Curve. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.



Top of Dam  
Elevation 907.360 m

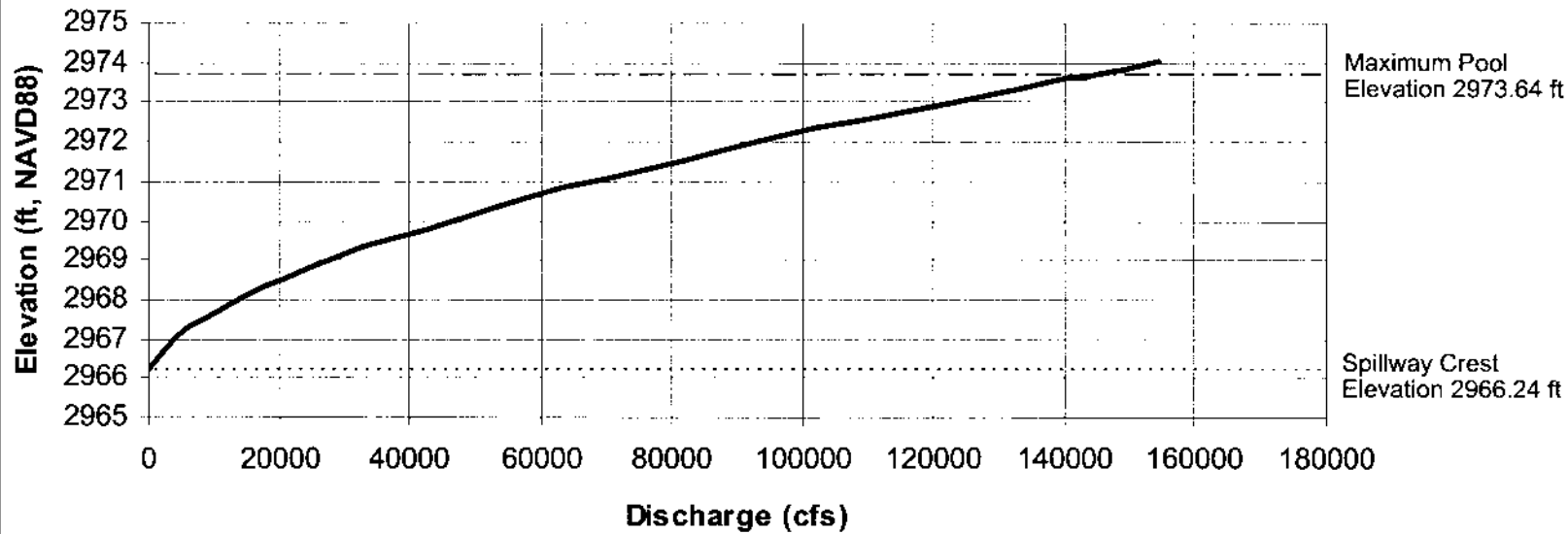
Spillway Crest  
Elevation 904.110 m

BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

OUTLET DISCHARGE  
CURVE  
(Metric Units)

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

Note: Final Design Outlet Discharge Curve. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.



Maximum Pool  
Elevation 2973.64 ft

Spillway Crest  
Elevation 2966.24 ft

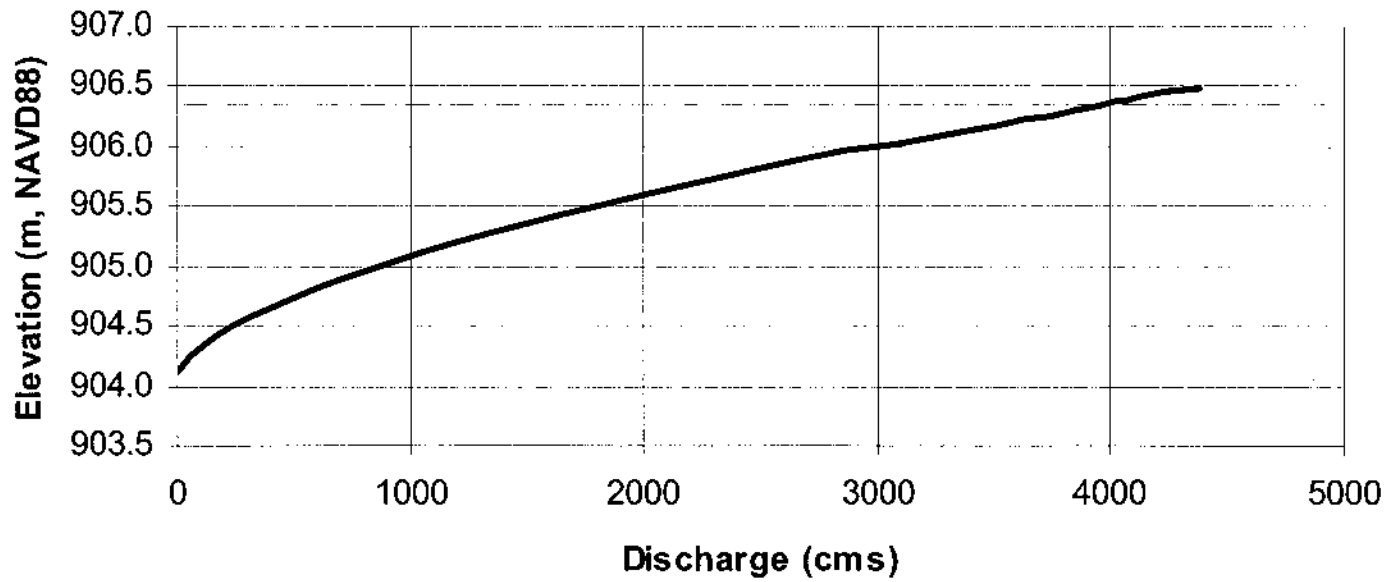
BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

SPILLWAY RATING  
CURVE

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

Note: Final Design Rating Curve. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.





Maximum Pool  
Elevation 906.36 m

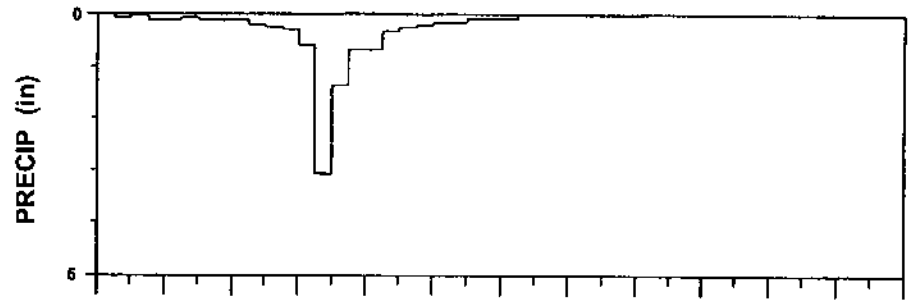
Spillway Crest  
Elevation 904.110 m

BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

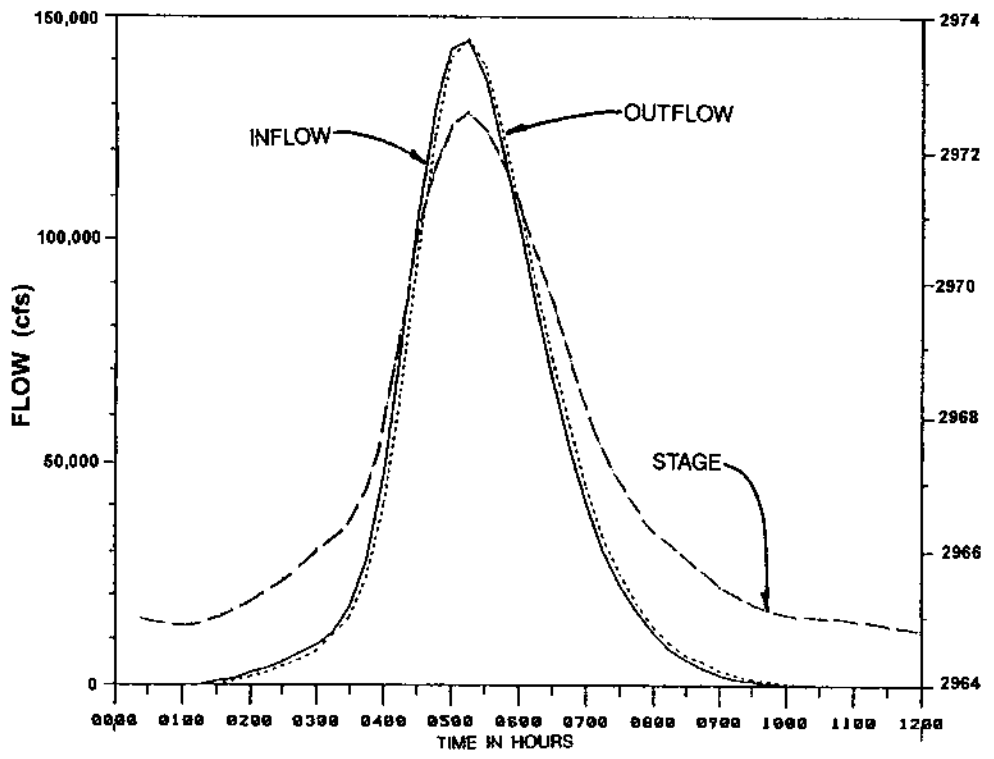
SPILLWAY RATING  
CURVE  
(Metric Units)

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

Note: Final Design Rating Curve. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.



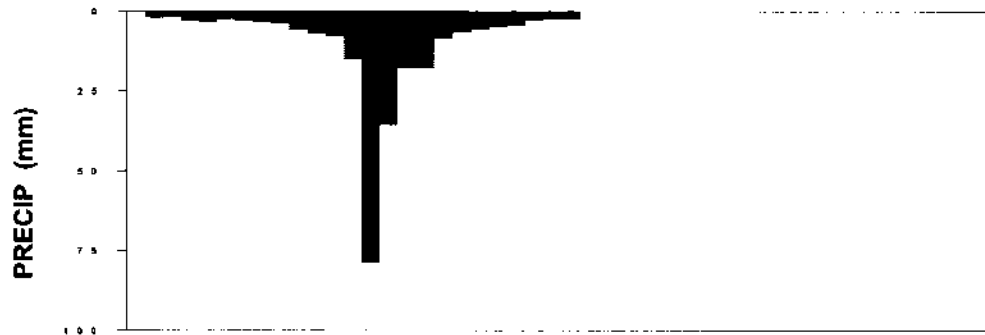
Total Precip. 9.70 in  
 Effective Precip. 8.20 in  
 Precip. Loss 1.50 in



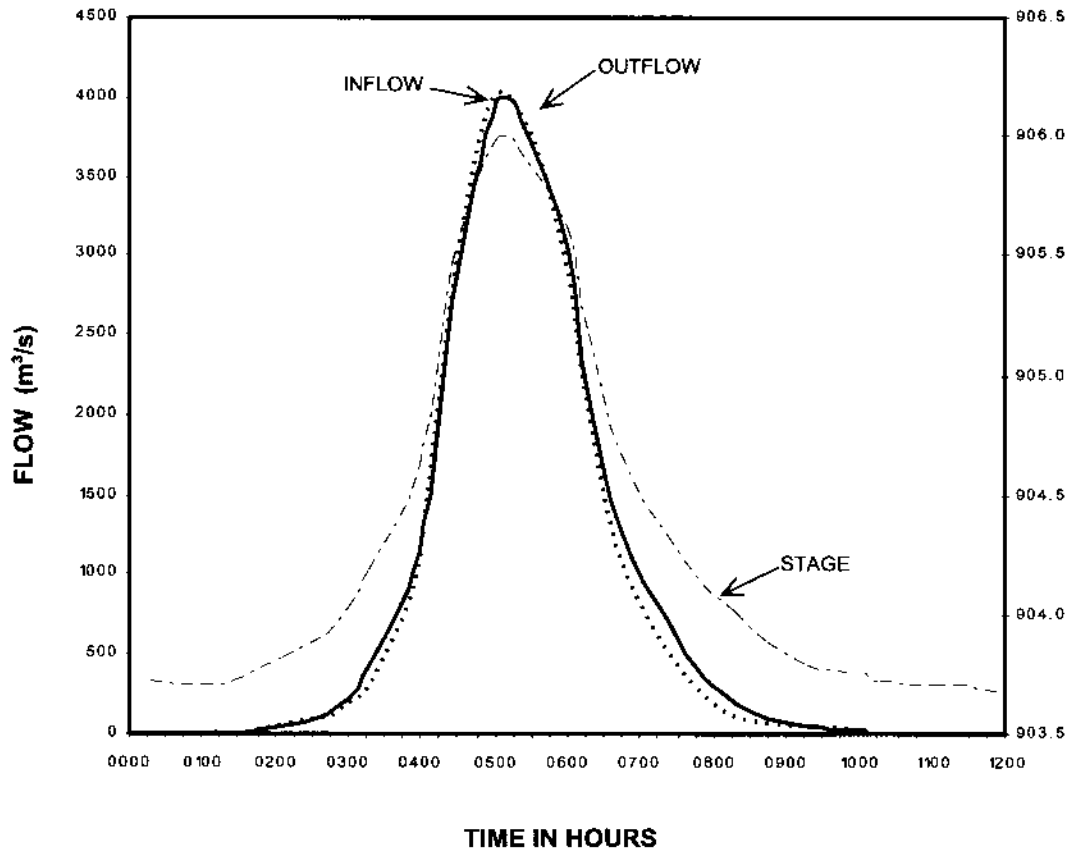
Drainage Area 67.24 mi<sup>2</sup>  
 Spillway Crest 2966.24 ft NAVD88  
 Maximum Inflow 144,000 ft<sup>3</sup>/s  
 Maximum Storage 3275 Ac-Ft  
 Inflow Volume 29,226 Ac-Ft  
 Maximum Stage 2973.64 ft NAVD88  
 Maximum Outflow 144,000 ft<sup>3</sup>/s

Source: Final Design PMF Routing dated June 2002. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.

<b>BLUE DIAMOND DETENTION BASIN</b> <b>LAS VEGAS, NEVADA</b>
<b>PROBABLE MAXIMUM</b> <b>FLOOD ROUTING</b> Basin Hyetograph and Inflow, Outflow and Stage Hydrographs
U. S. ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT



Total Precip. 246.4 mm  
 Effective Precip. 208.3 mm  
 Precip. Loss 38.1 mm



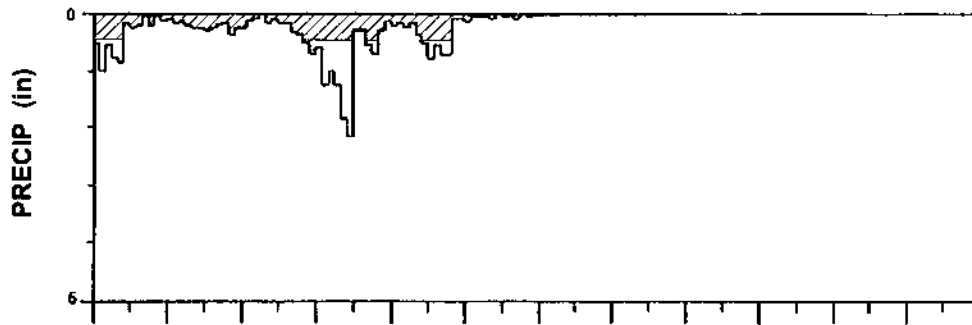
Drainage Area 174.15 km<sup>2</sup>  
 Spillway Crest 904.11m NAVD88  
 Maximum Inflow 4078 m<sup>3</sup>/s  
 Maximum Storage 4,039,680 m<sup>3</sup>  
 Inflow Volume 36,050,271 m<sup>3</sup>  
 Maximum Stage 906.36 m NAVD88  
 Maximum Outflow 4078 m<sup>3</sup>/s

Source: Final Design PMF Routing dated June 2002. This supersedes Blue Diamond Detention Basin Design Memorandum dated April 1998.

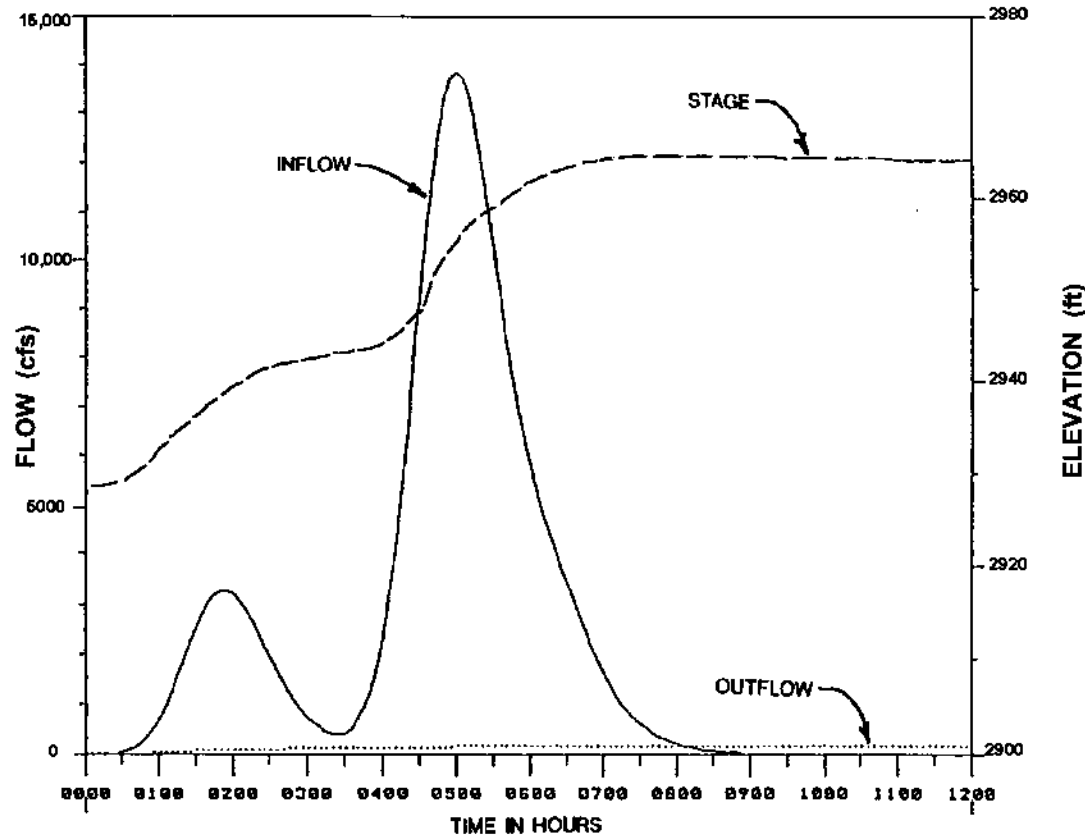
BLUE DIAMOND DETENTION BASIN  
 LAS VEGAS, NEVADA

PROBABLE MAXIMUM  
 FLOOD ROUTING  
 Basin Hyetograph and Inflow,  
 Outflow and Stage Hydrographs  
 (Metric Units)

U. S. ARMY CORPS OF ENGINEERS  
 LOS ANGELES DISTRICT



Total Precip. 2.22 in  
 Effective Precip. 0.65 in  
 Precip. Loss 1.57 in



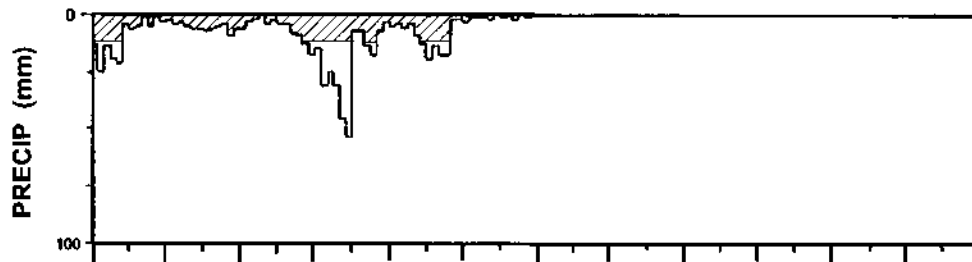
Drainage Area 67.24 mi<sup>2</sup>  
 Spillway Crest 2966.24 ft NAVD88  
 Maximum Inflow 13,700 ft<sup>3</sup>/s  
 Maximum Storage 2302 Ac-Ft  
 Inflow Volume 2334 Ac-Ft  
 Maximum Stage 2966.14 ft NAVD88  
 Maximum Outflow 218 ft<sup>3</sup>/s

Source: Final Design RDF Routing dated March 2001. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.

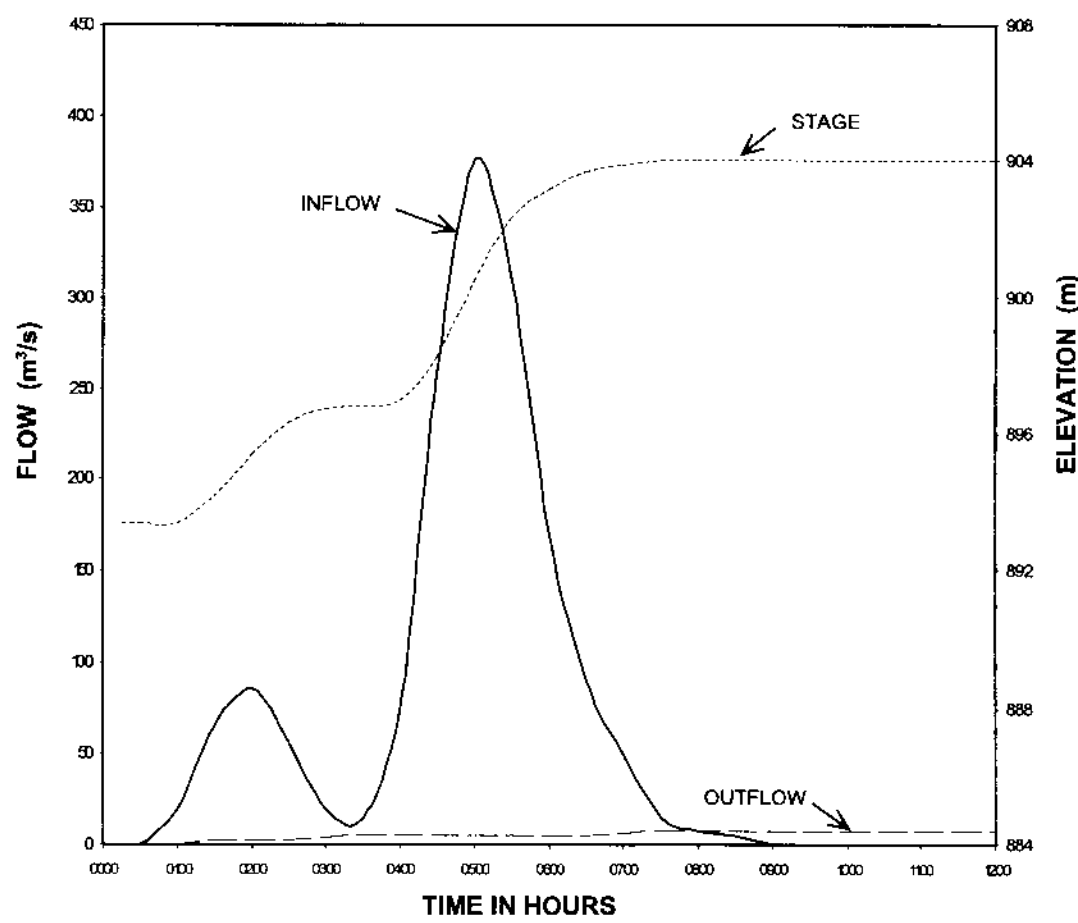
BLUE DIAMOND DETENTION BASIN  
 LAS VEGAS, NEVADA

RESERVOIR DESIGN  
 FLOOD ROUTING  
 Basin Hyetograph and Inflow,  
 Outflow and Stage Hydrographs

U. S. ARMY CORPS OF ENGINEERS  
 LOS ANGELES DISTRICT



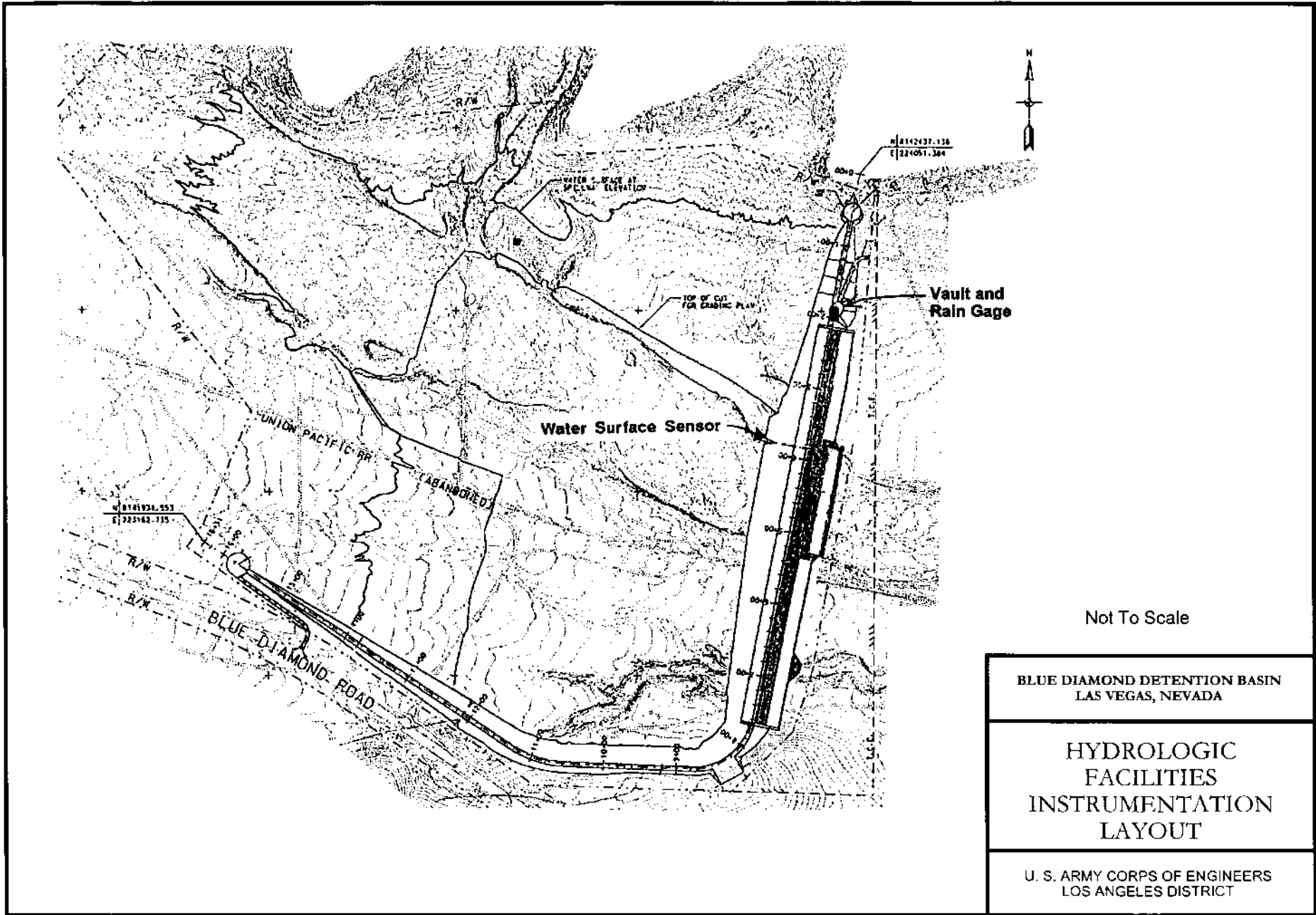
Total Precip. 56.4 mm  
 Effective Precip. 16.5 mm  
 Precip. Loss 39.9 mm



Drainage Area 174.15 km<sup>2</sup>  
 Spillway Crest 904.11 m NAVD88  
 Maximum Inflow 388 m<sup>3</sup>/s  
 Maximum Storage 2,839,494 m<sup>3</sup>  
 Inflow Volume 2,878,989 m<sup>3</sup>  
 Maximum Stage 904.08 m NAVD88  
 Maximum Outflow 6.17 m<sup>3</sup>/s

Source: Final Design RDF Routing dated March 2001. This supersedes the Blue Diamond Detention Basin Design Memorandum dated April 1998.

<b>BLUE DIAMOND DETENTION BASIN</b> <b>LAS VEGAS, NEVADA</b>
<b>RESERVOIR DESIGN</b> <b>FLOOD ROUTING</b> Basin Hyetograph and Inflow, Outflow and Stage Hydrographs (Metric Units)
U. S. ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT

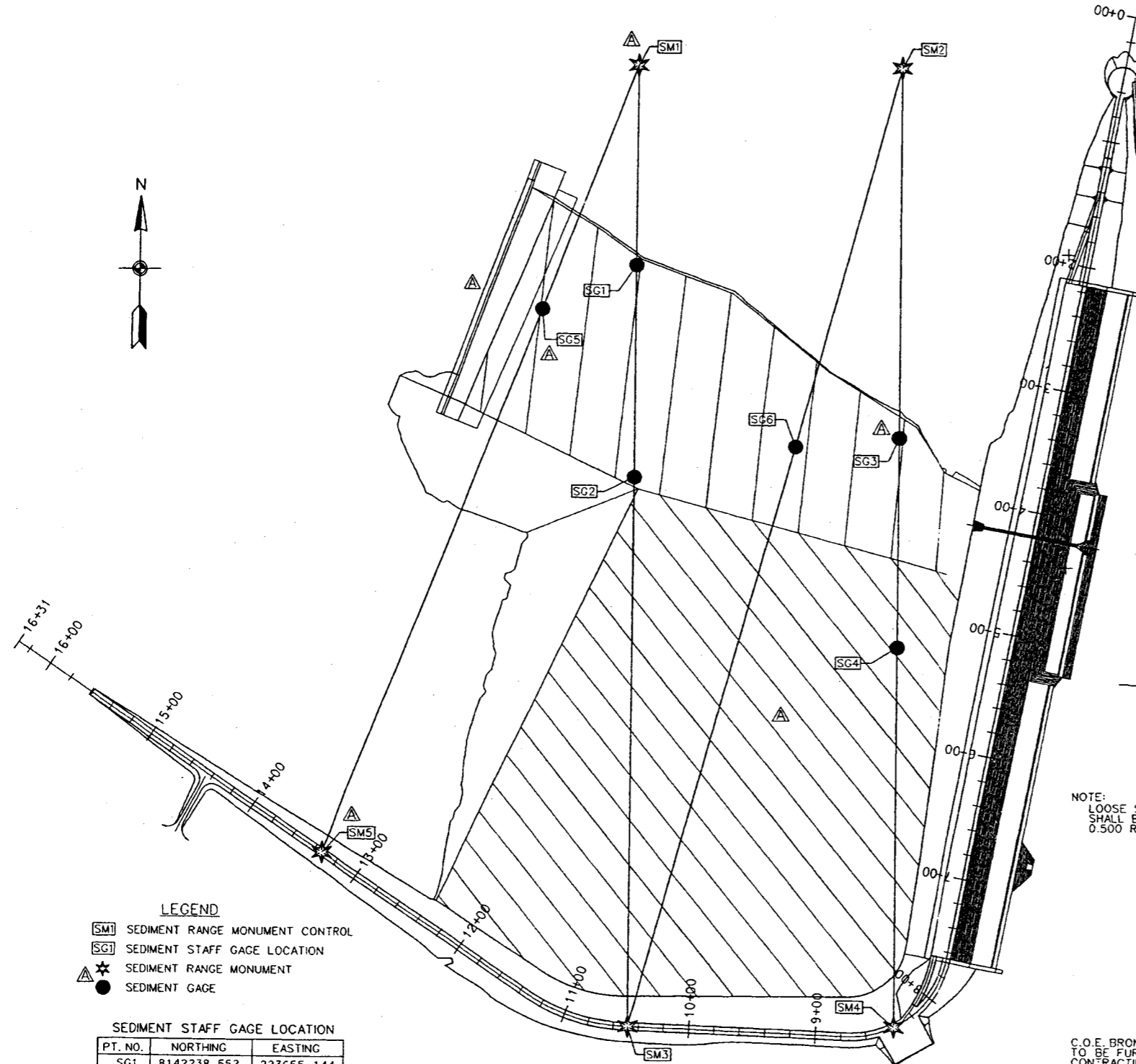


Not To Scale

BLUE DIAMOND DETENTION BASIN  
LAS VEGAS, NEVADA

HYDROLOGIC  
FACILITIES  
INSTRUMENTATION  
LAYOUT

U. S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT



- LEGEND**
- SM1 SEDIMENT RANGE MONUMENT CONTROL
  - SG1 SEDIMENT STAFF GAGE LOCATION
  - ▲ SEDIMENT RANGE MONUMENT
  - SEDIMENT GAGE

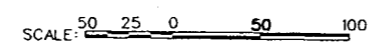
**SEDIMENT STAFF GAGE LOCATION**

PT. NO.	NORTHING	EASTING
SG1	8142238.552	223655.144
SG2	8142069.448	223655.144
SG3	8142103.038	223864.984
SG4	8141934.814	223864.984
SG5	8142202.985	223579.957
SG6	8142095.245	223782.851

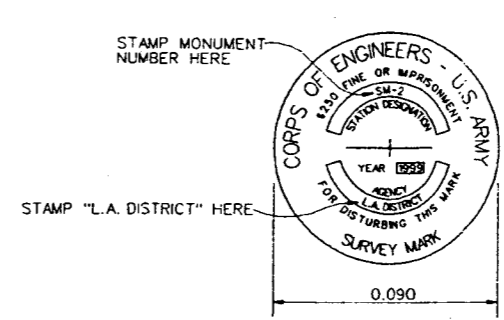
**SEDIMENT RANGE MONUMENT LOCATION**

PT. NO.	NORTHING	EASTING
SM1	8142395.458	223655.141
SM2	8142395.047	223864.990
SM3	8141629.092	223655.159
SM4	8141630.696	223864.974
SM5	8141766.277	223404.955

**SEDIMENT RANGE MONUMENT AND SEDIMENT STAFF GAGE PLACEMENT - PLAN**

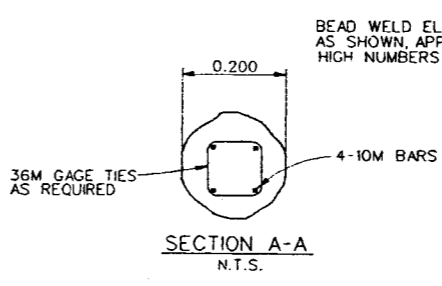


- NOTES:**
- ALL DIMENSIONS ARE SHOWN IN METERS.
  - HORIZONTAL CONTROL IS BASED ON NAD83 DATUM. VERTICAL CONTROL IS BASED ON NAVD88 DATUM.

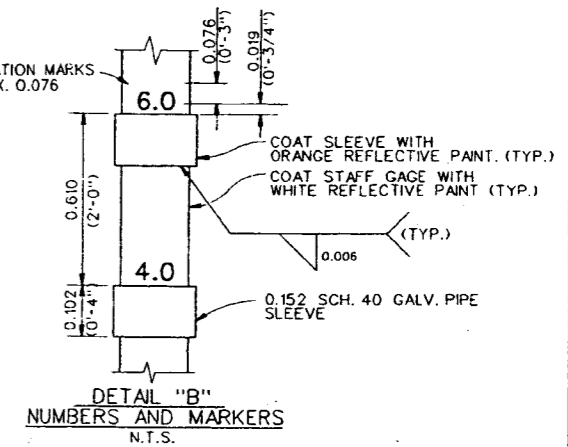


**TOP VIEW OF BRONZE DISK**  
N.T.S.

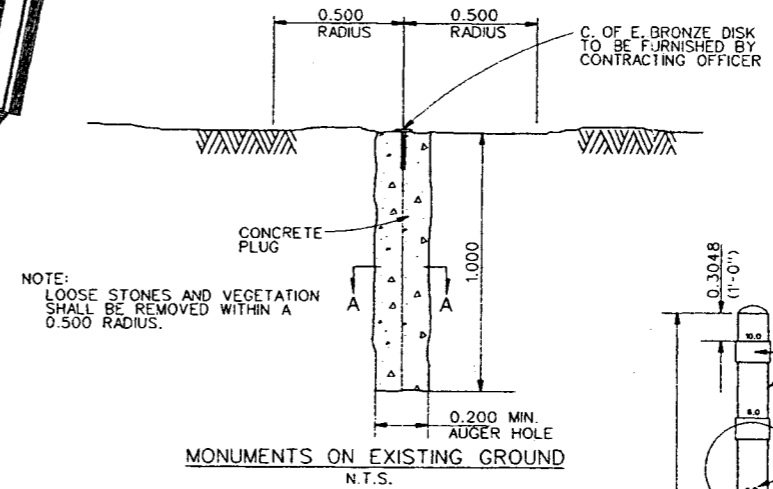
- TYPICAL MONUMENT DETAILS**
- NOTES:**
- BRONZE DISKS TO BE FURNISHED BY CONTRACTING OFFICER.
  - FOR MONUMENT NUMBER SEE SCHEDULE.
  - SIZE OF LETTERS AND NUMBERS STAMPED ON DISK TO 0.005 m HEIGHT.
  - METAL STAMPING OUTFITS SHALL BE USED FOR STAMPING LETTERS AND NUMBERS.



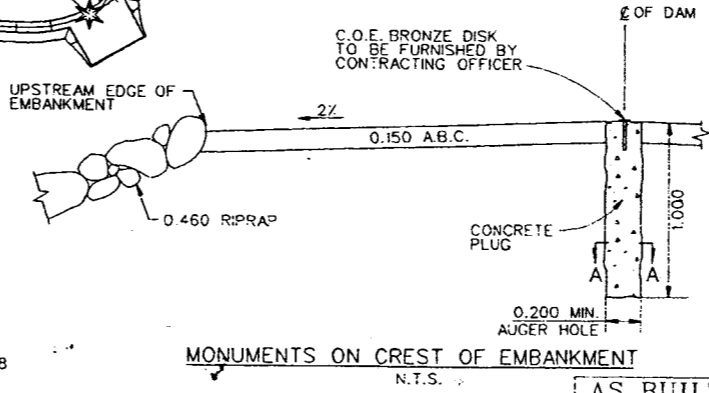
**SECTION A-A**  
N.T.S.



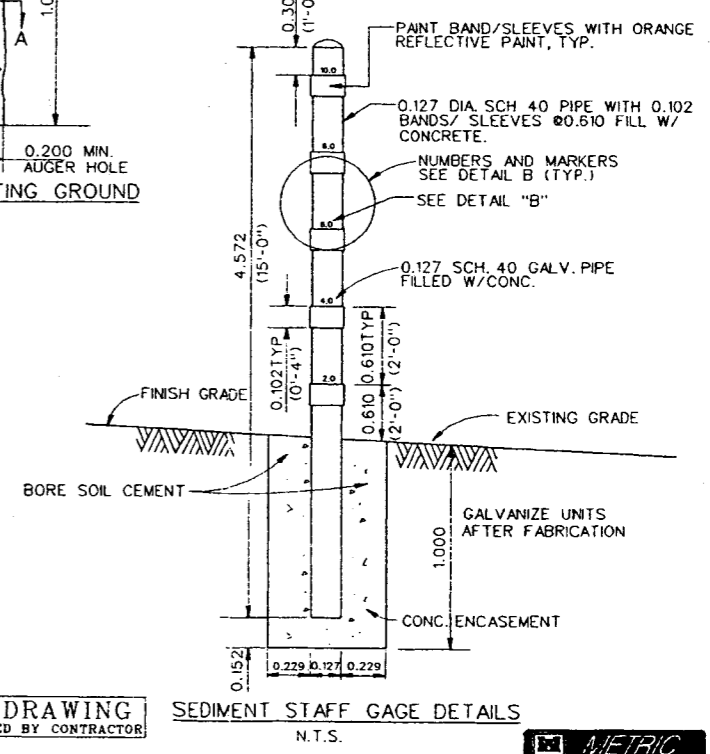
**DETAIL "B" NUMBERS AND MARKERS**  
N.T.S.



**MONUMENTS ON EXISTING GROUND**  
N.T.S.



**MONUMENTS ON CREST OF EMBANKMENT**  
N.T.S.



**SEDIMENT STAFF GAGE DETAILS**  
N.T.S.

**AS BUILT DRAWING**  
INFORMATION PROVIDED BY CONTRACTOR



DESIGNED BY: J.S.V.C.	DESIGNED BY: J.S.V.C.	DESIGNED BY: J.S.V.C.	DESIGNED BY: J.S.V.C.
DRAWN BY: J.S.	DRAWN BY: J.S.	DRAWN BY: J.S.	DRAWN BY: J.S.
CHECKED BY: G.D.	CHECKED BY: G.D.	CHECKED BY: G.D.	CHECKED BY: G.D.
TROPICANA AND FLAMINGO WASHES FLOOD CONTROL PROJECT			
BLUE DIAMOND DETENTION BASIN			
SEDIMENT RANGE MONUMENTS AND STAFF GAGES			
GENERAL PLAN AND DETAILS			
SCALE AS SHOWN	SHEET NO. 30 OF 57	DATE	APPROVAL
SUBMITTED BY: THOMAS H. SAGE, P.E., CHIEF DESIGN BRANCH		REVISIONS	DATE
DISTRICT FILE NO. 198/ 519 REV. 'A' SPEC. NO. DACW08-88-B-0009		DESCRIPTIONS	DATE
CADD FILE NAME: B08B1-30.DGN		SYMBOL	DATE