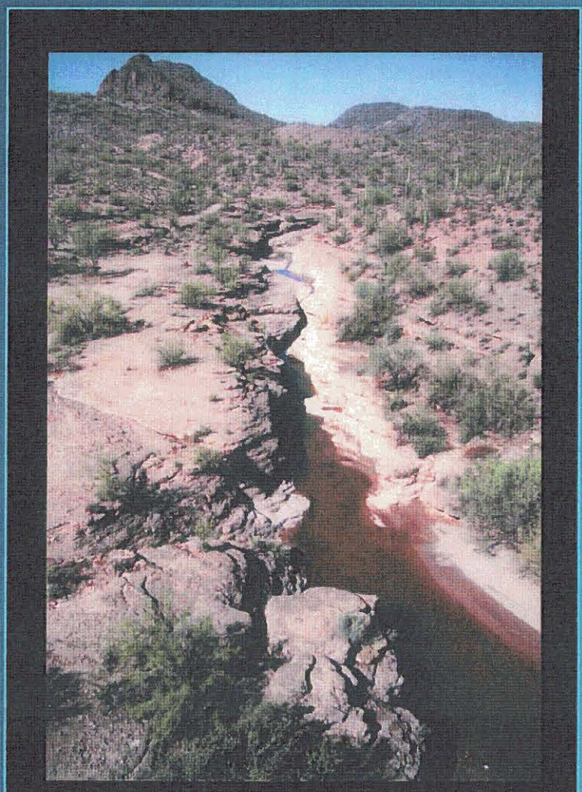
North Peoria Area Drainage Master Plan



Attachment 3
Sedimentation Engineering & Geomorphic Evaluation

Book 2 of 2

January 2002

Prepared for the
Flood Control District
of Maricopa County

FLOOD CONTROL DISTRICT of MARICOPA COUNTY 1959

and the
City of Peoria

CITY OF PEORIA

Project No. 82000146
Contract FCD 99-45

A452.015.012

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Flood Control District of MC Library
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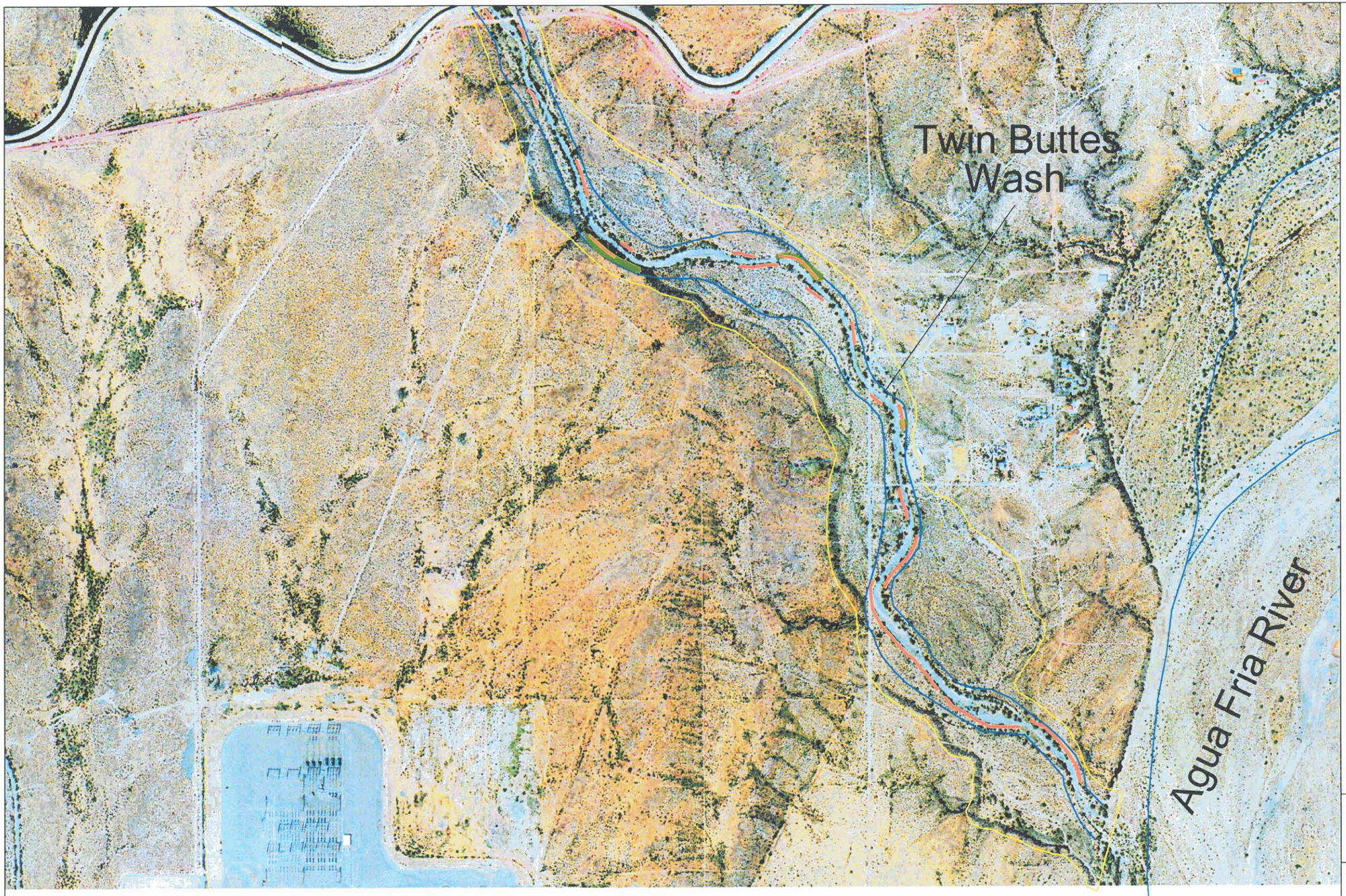
North Peoria Area Drainage Master Plan
Technical Data Notebook
Attachment 3

Sedimentation Engineering and Geomorphic Evaluation Technical Memorandums

Exhibits Book – Erosion Hazard Zones

Prepared for: Stantec Consulting, Inc.
8211 S. 48th Street
Phoenix, AZ 85044-5355
602-438-2200
Pat Ellison, P.E., Project Manager

Prepared by: JE Fuller/ Hydrology & Geomorphology, Inc.
6101 S. Rural Road, Suite 110
Tempe, AZ 85283
480-752-2124
Jon Fuller, P.E., Project Manager



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK
- SSA5-96 SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

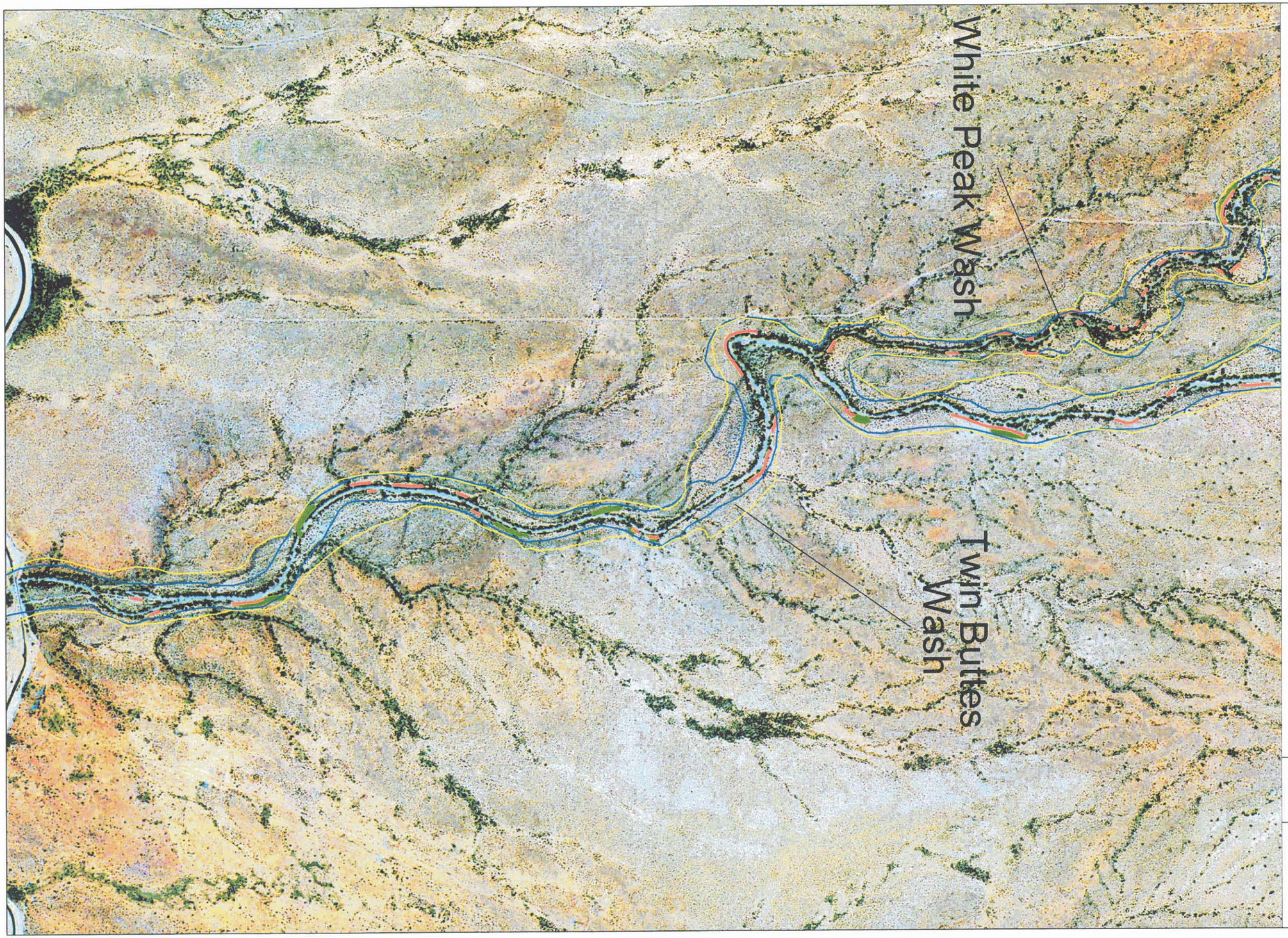
EXHIBIT 3-1

SHEET 1 OF 13

JE FULLER
HYDROLOGY & GEOMORPHOLOGY, INC.

6101 S. RURAL ROAD, STE 110
TEMPE, ARIZONA 85283
480-752-2124

2881 N. SILVER SPUR DRIVE
TUCSON, ARIZONA 85745
520-623-3112



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK
- SSA5-96 SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

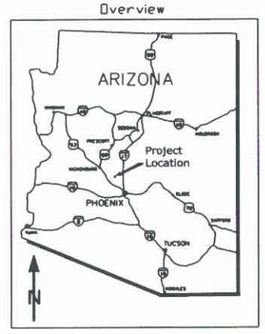


EXHIBIT 3-1

SHEET 2 OF 13

JE FULLER
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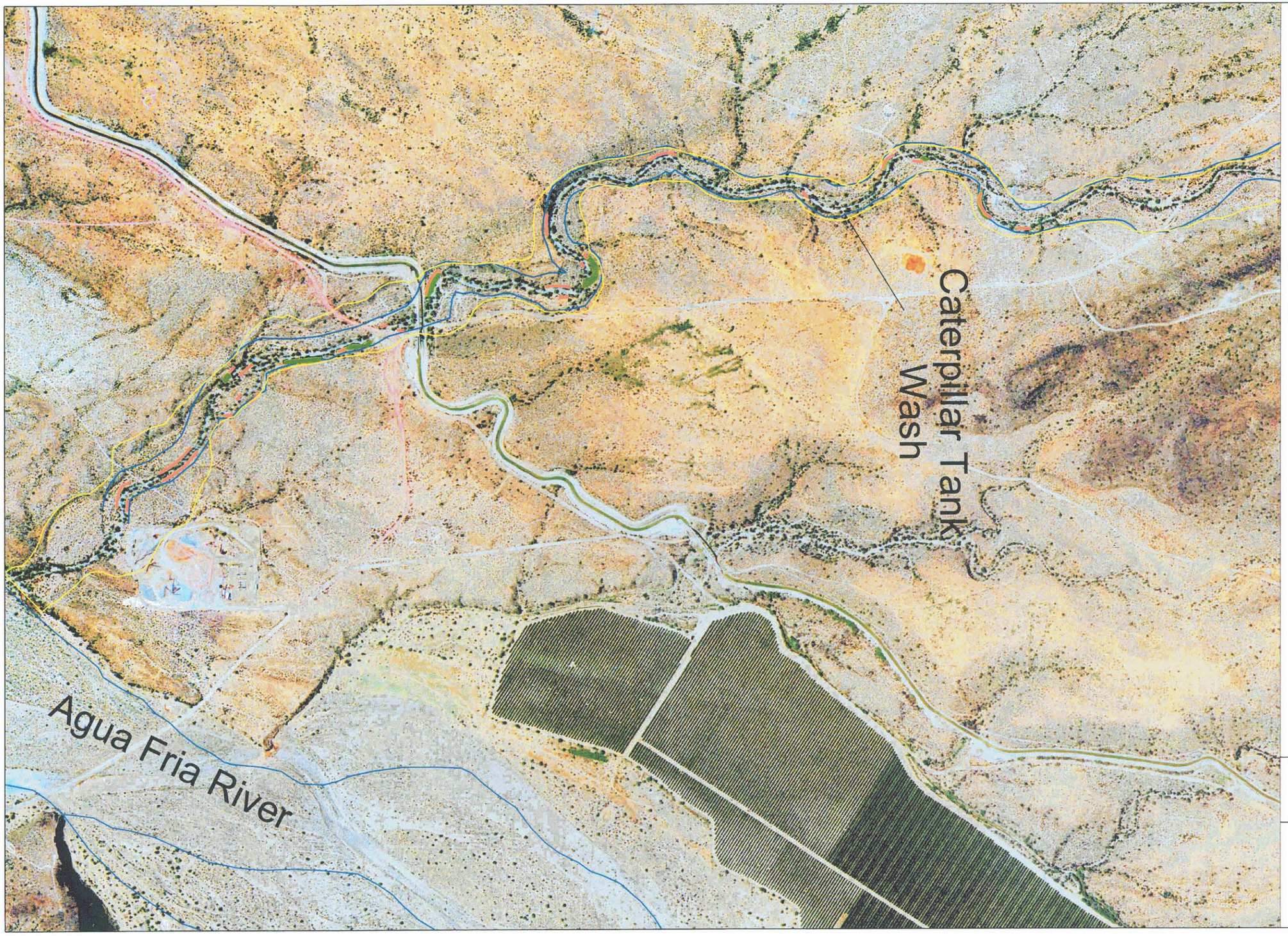
TUCSON, ARIZONA 85745
520-623-3112



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK
- SSA5-96 SETBACK

N

Scale

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1 Inch = 800 Feet

Overview

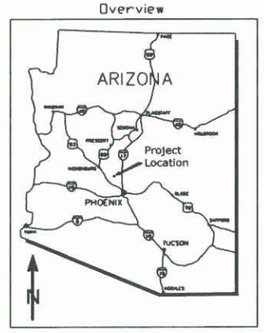

EXHIBIT 3-1

SHEET 3 OF 13

JE FULLER
HYDROLOGY & GEOMORPHOLOGY, INC.

6101 S. RURAL ROAD, STE 110
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480-752-2124

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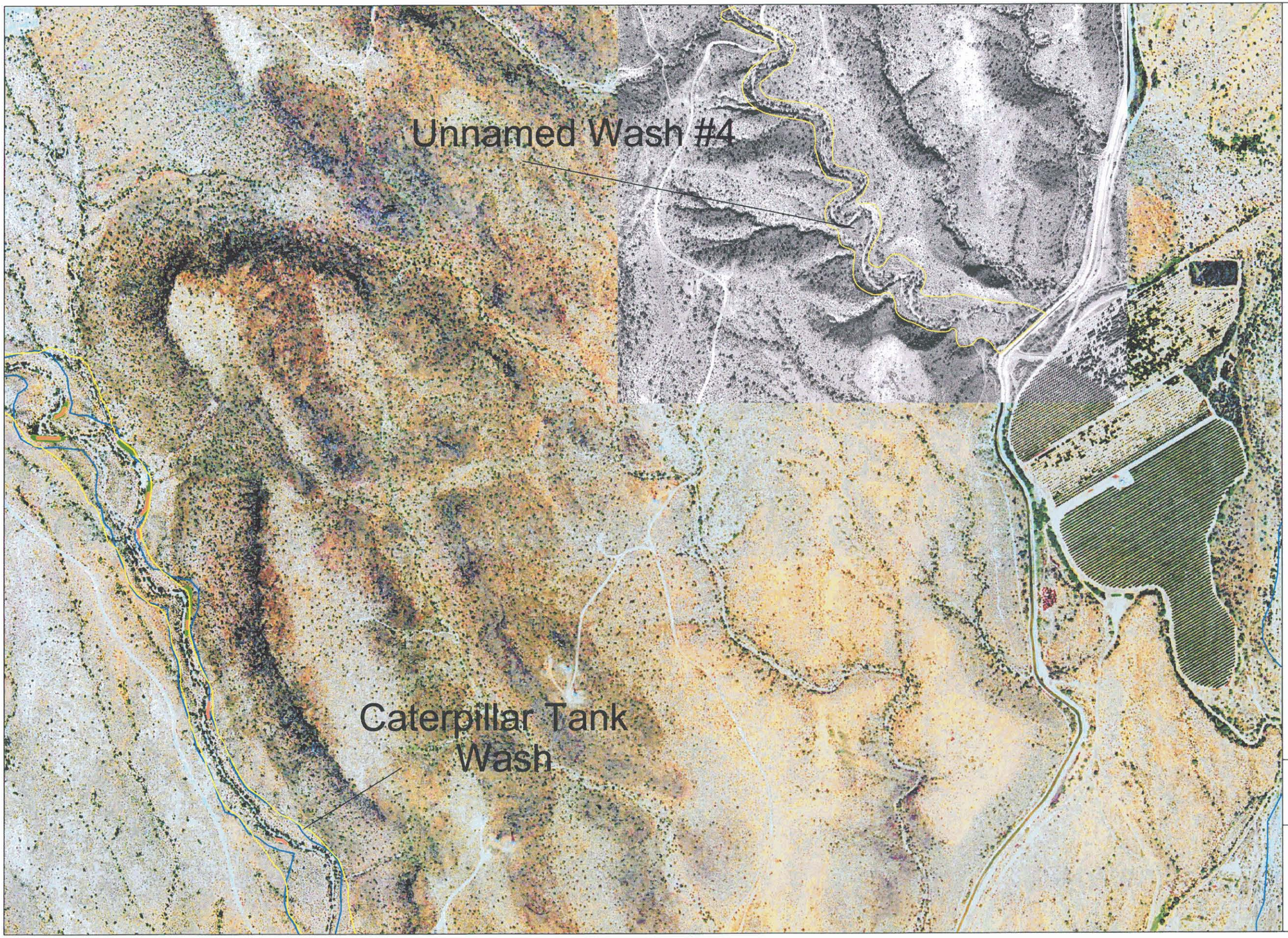
520-623-3112



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK
- SSA5-96 SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

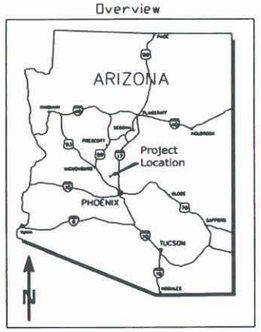


EXHIBIT 3-1

SHEET 4 OF 13

JE FULLER
HYDROLOGY & GEOMORPHOLOGY, INC.

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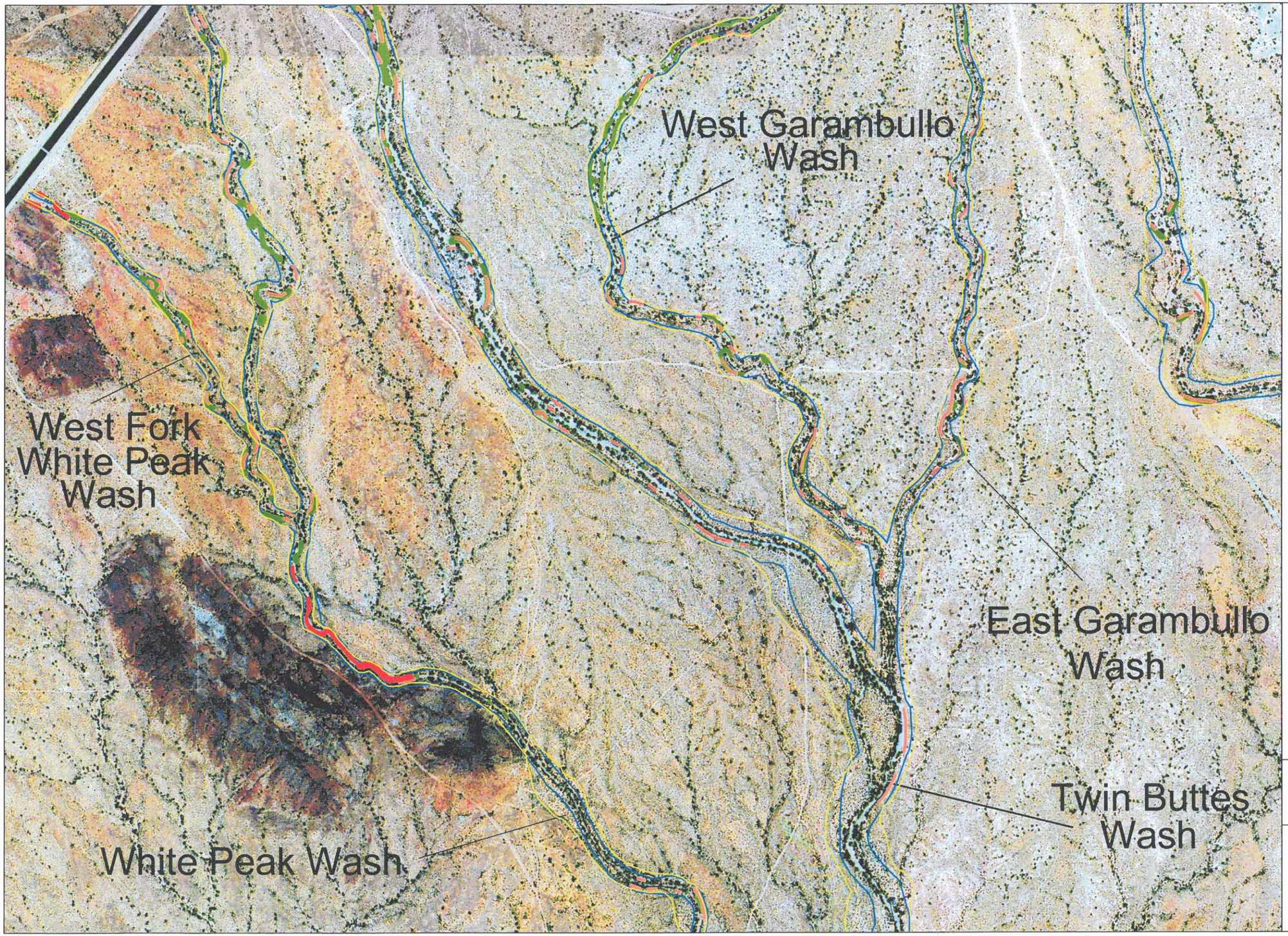

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK
- SSA5-96 SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

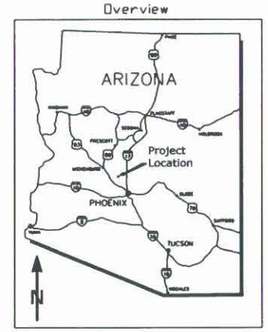

EXHIBIT 3-1

SHEET 5 OF 13

JE FULLER
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480-752-2124

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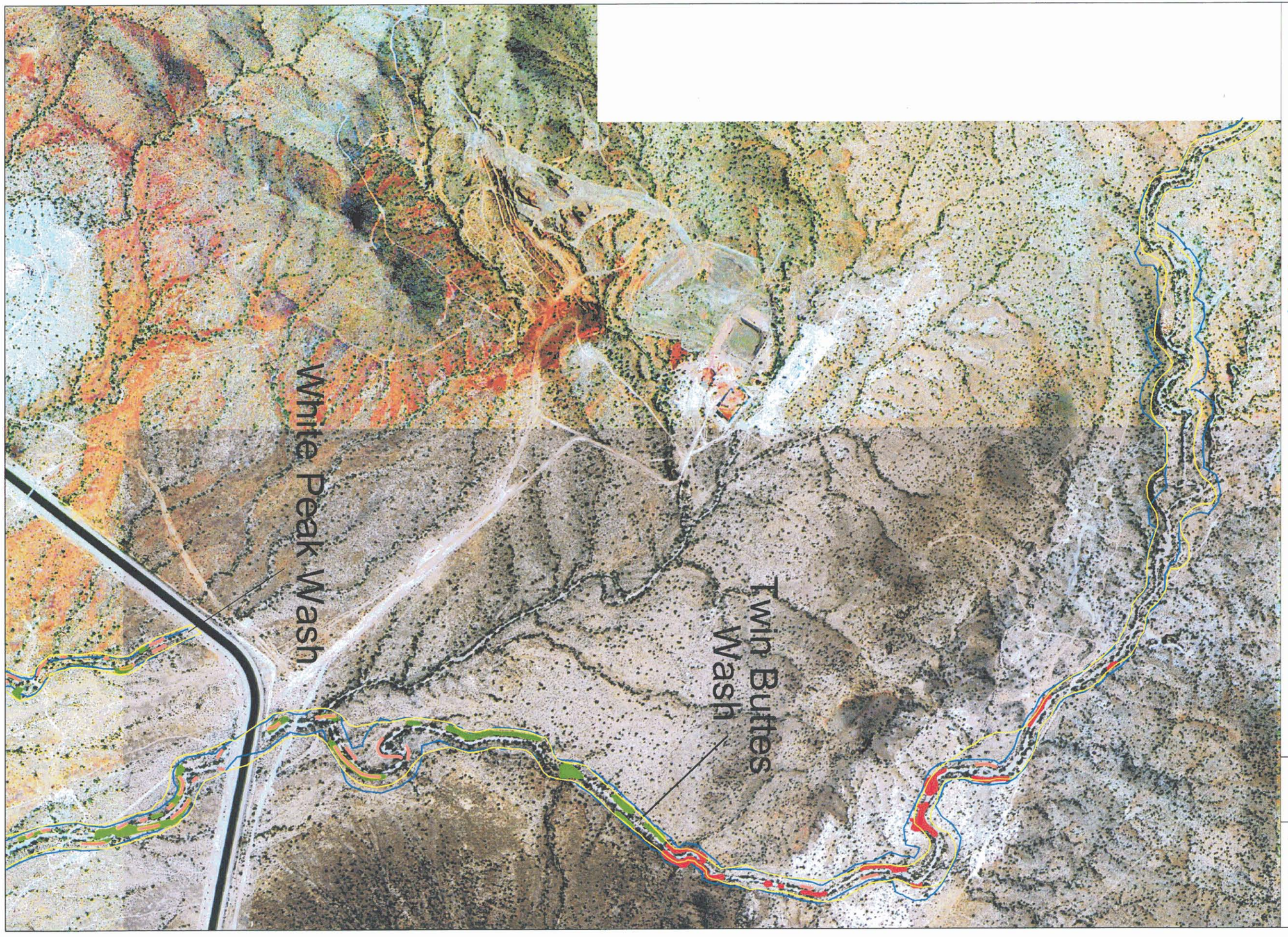


FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK
- SSA5-96 SETBACK

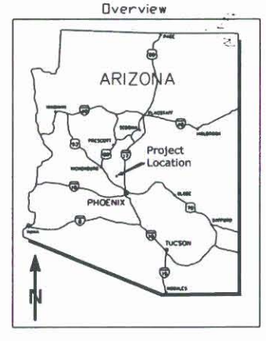
N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview



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SHEET 6 OF 13

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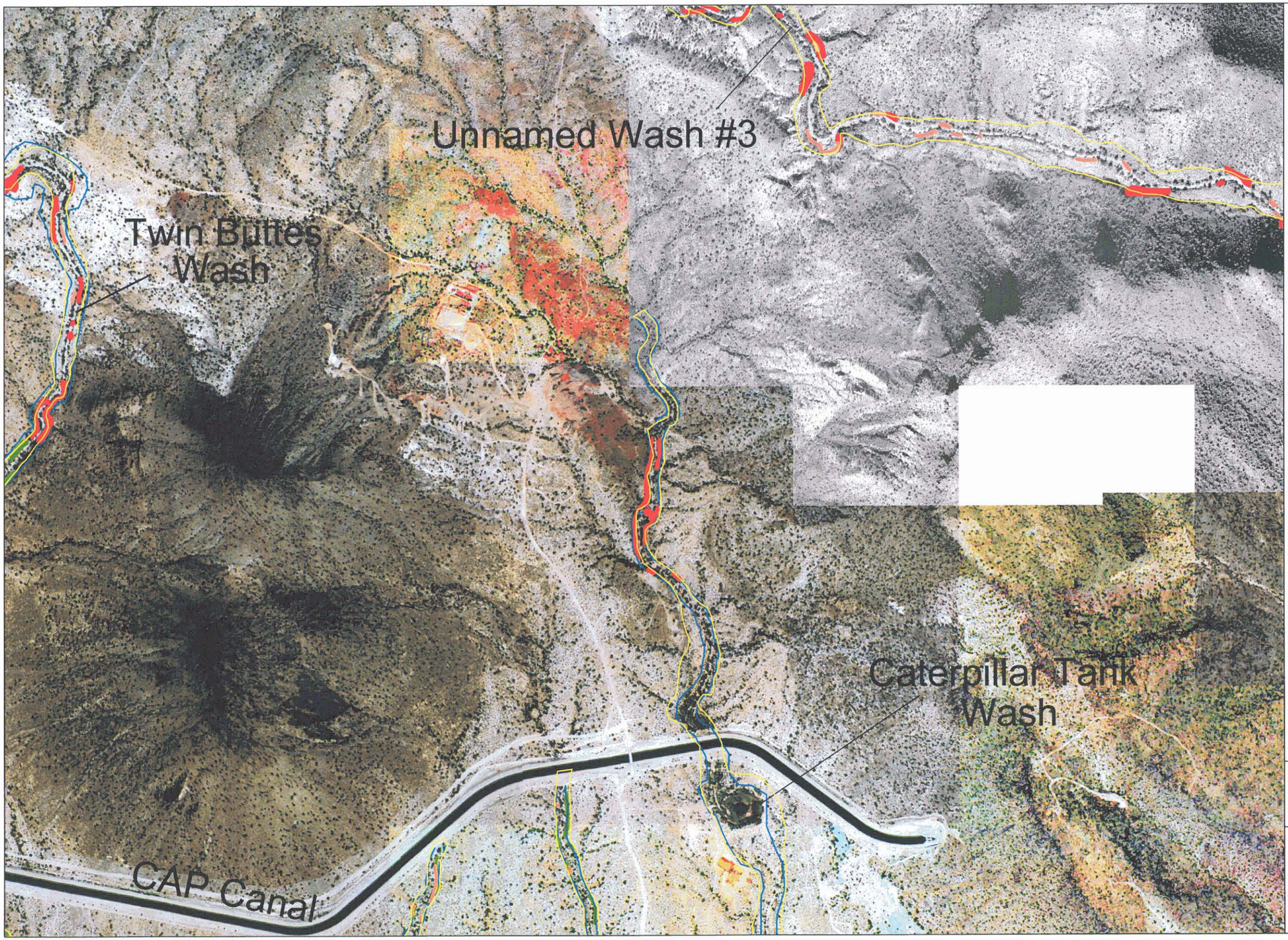

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK
- SSA5-96 SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

EXHIBIT 3-1

SHEET 7 OF 13

JE FULLER
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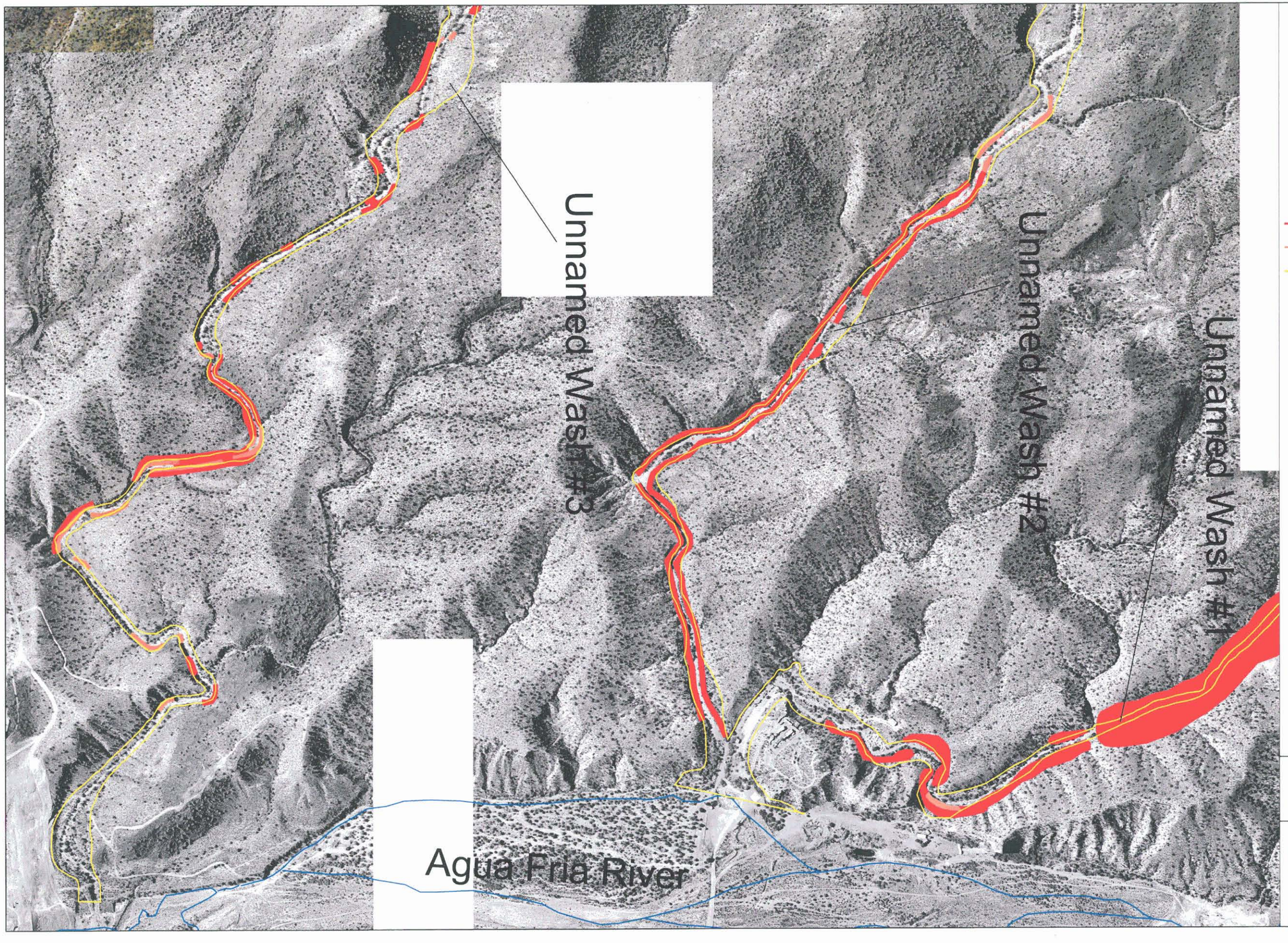
520-623-3112



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- EROSION SETBACK

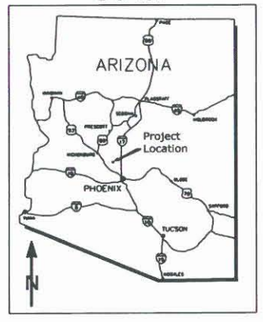
N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview



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SHEET 8 OF 13

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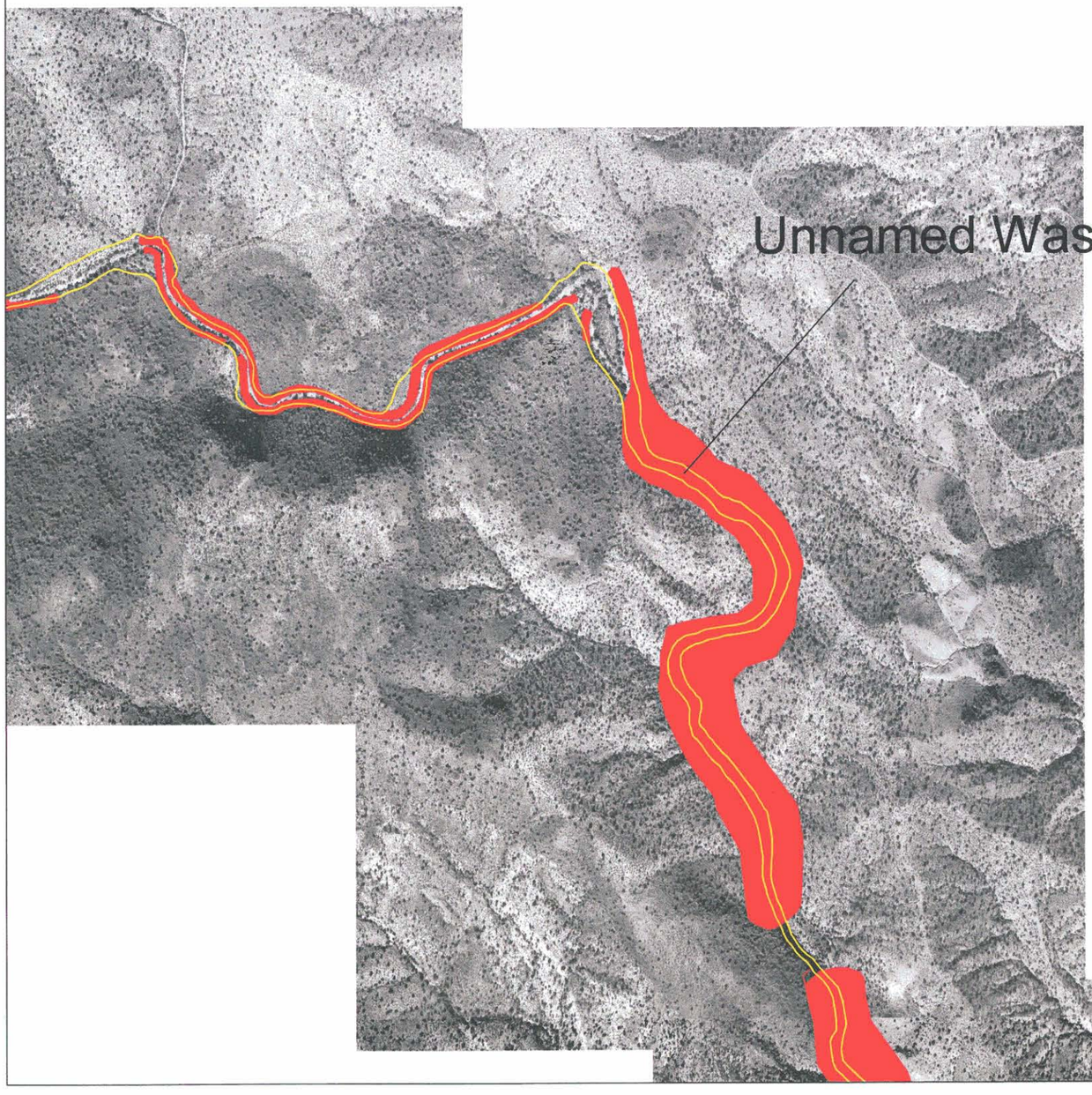

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

EXHIBIT 3-1

SHEET 9 OF 13

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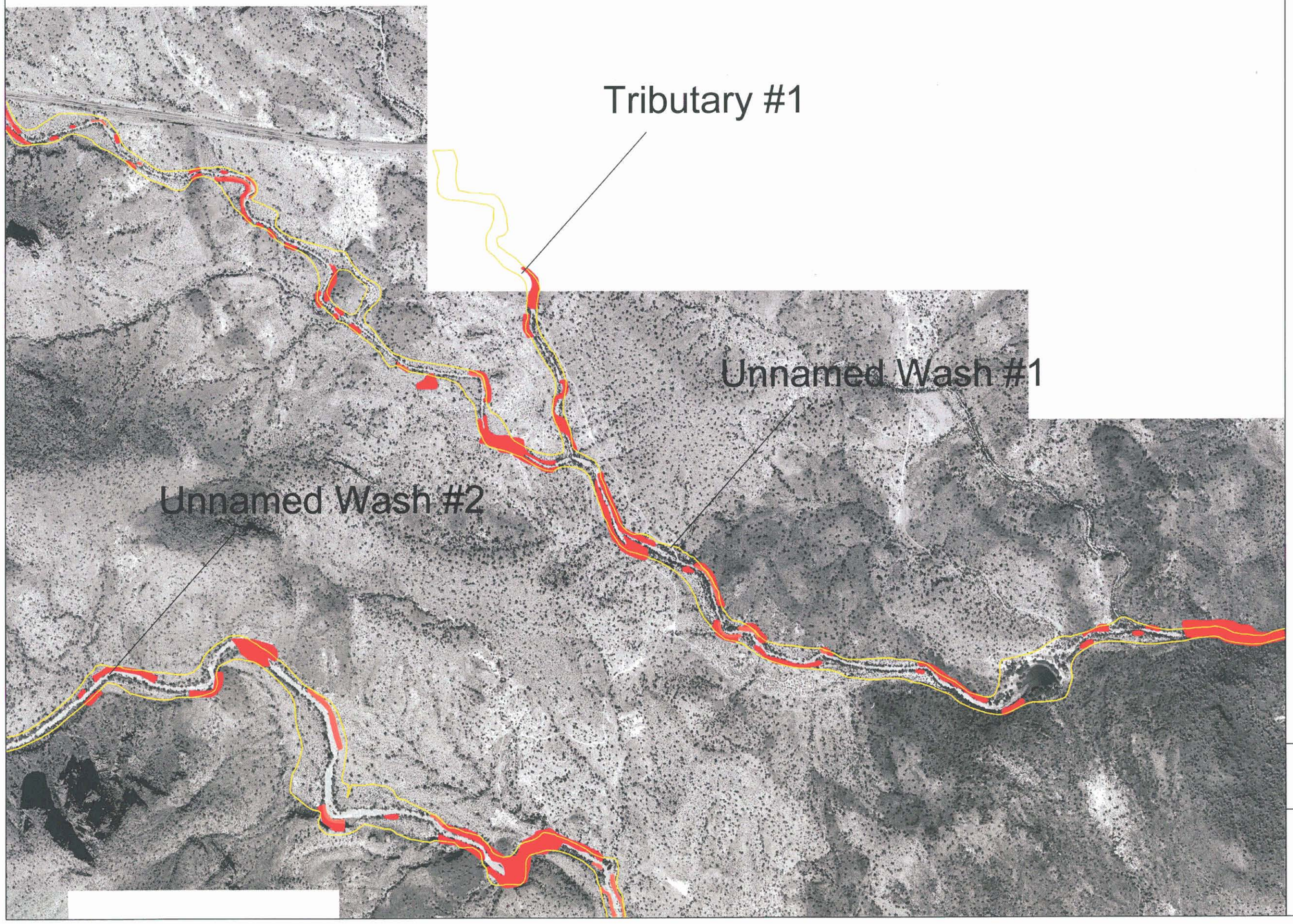

FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

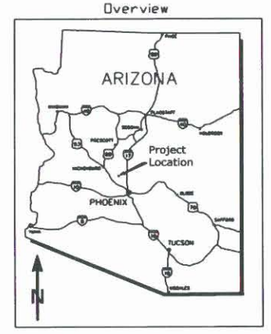

EXHIBIT 3-1

SHEET 10 OF 13

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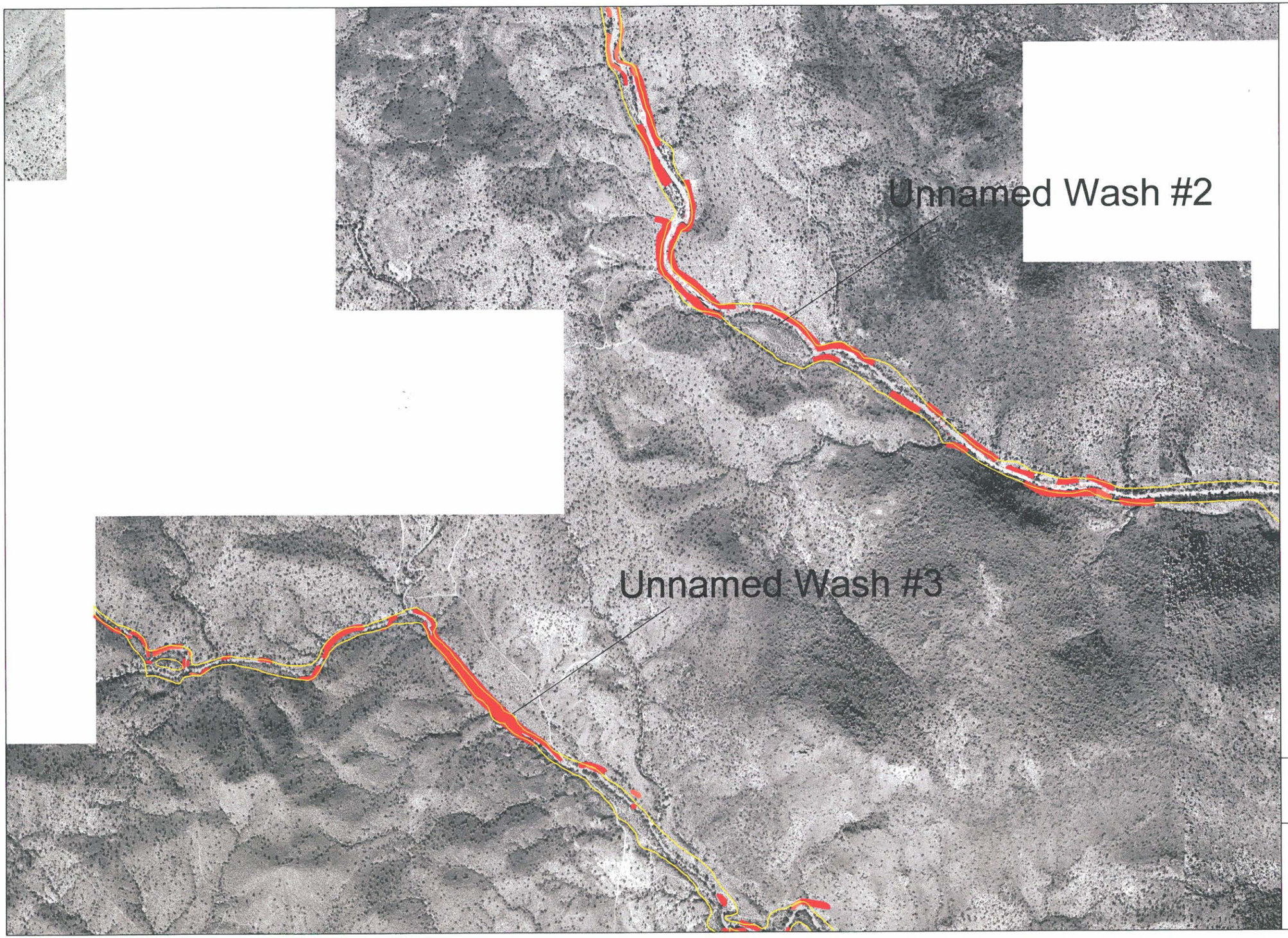


FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

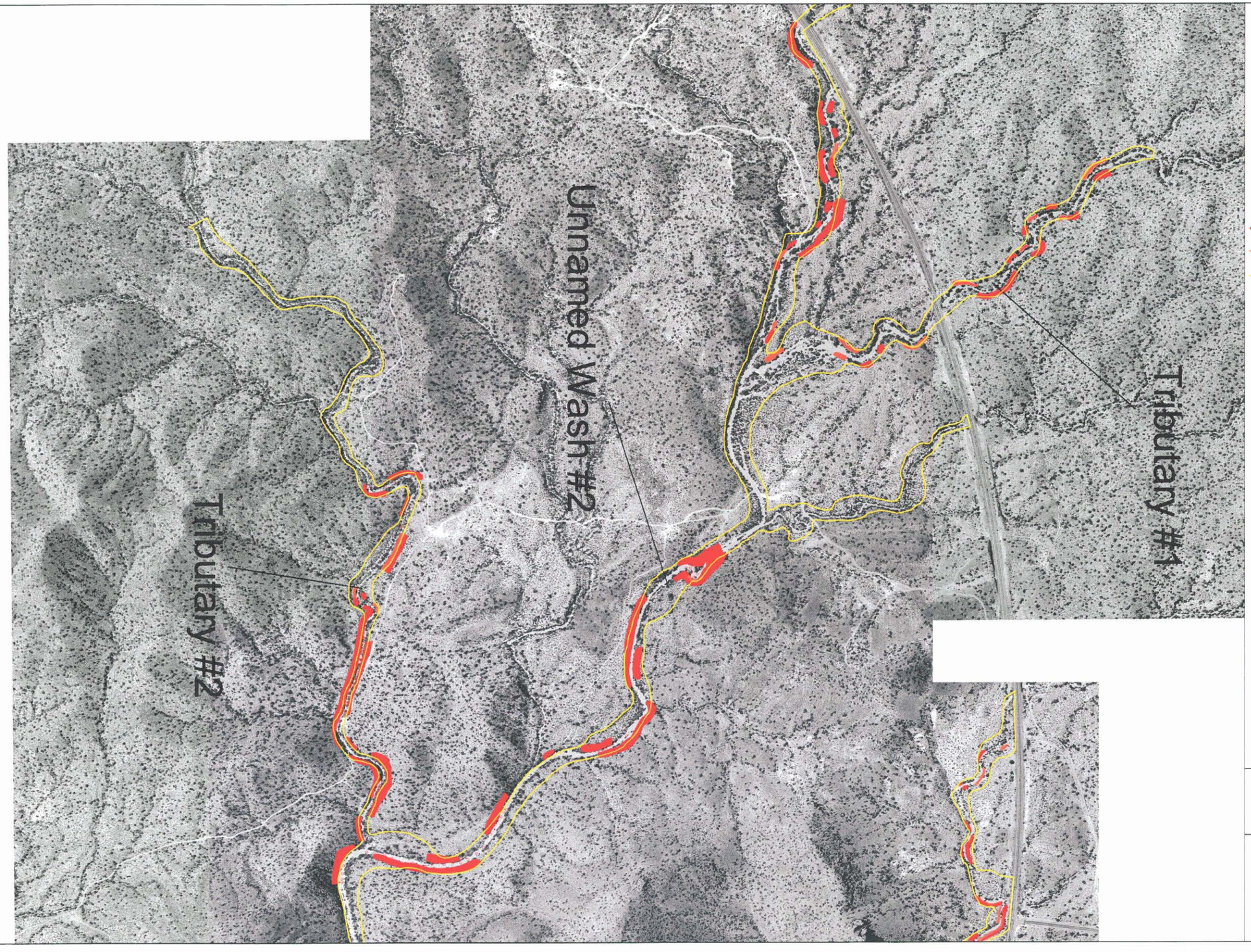
EXHIBIT 3-1

SHEET 11 OF 13

JE FULLER
HYDROLOGY & GEOMORPHOLOGY, INC.

6101 S. RURAL ROAD, STE 110
TEMPE, ARIZONA 85283
480-752-2124

2881 N. SILVER SPUR DRIVE
TUCSON, ARIZONA 85745
520-623-3112



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- EROSION SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

EXHIBIT 3-1

SHEET 12 OF 13

JE FULLER
HYDROLOGY & GEOMORPHOLOGY, INC.

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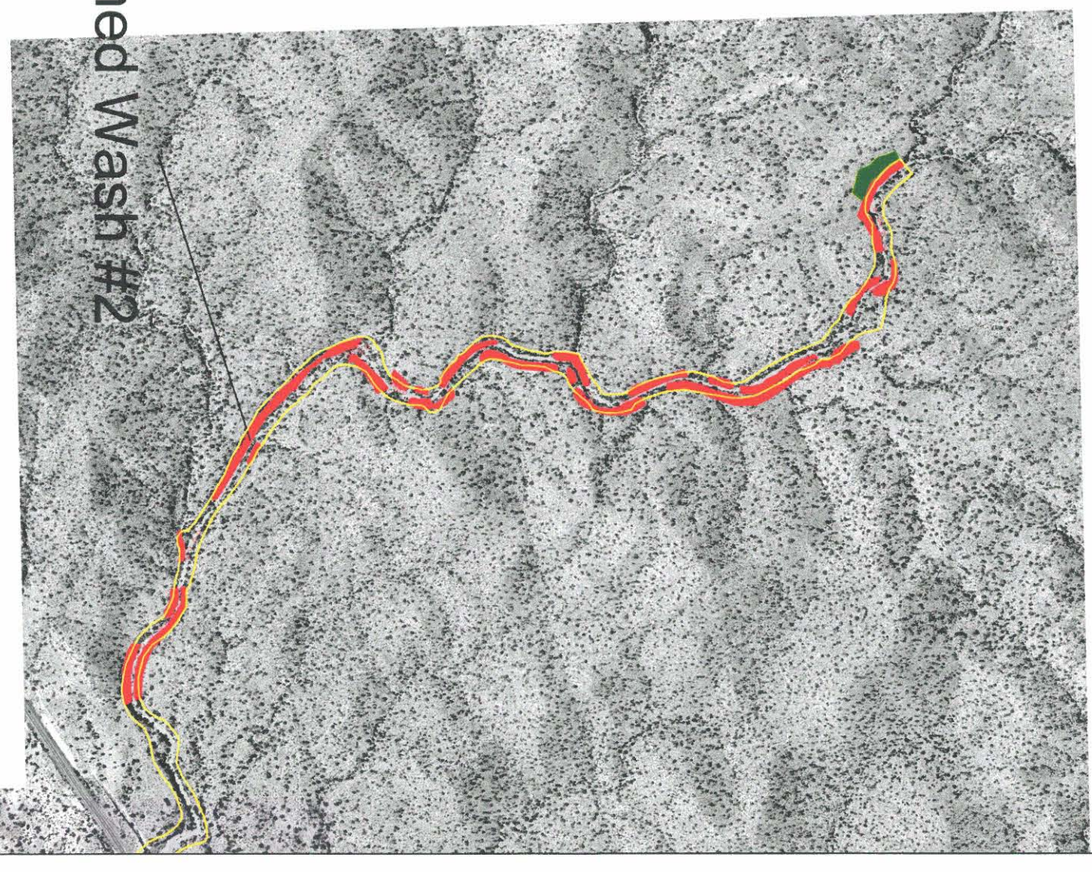
TEMPE, ARIZONA 85283
480-752-2124

2881 N. SILVER SPUR DRIVE
TUCSON, ARIZONA 85745
520-623-3112



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA ADMP

DECEMBER, 2001

LEGEND

- BEDROCK
- CUTBANK
- CALICHE
- EROSION SETBACK

N

Scale

0 400 800 1200

1 Inch = 800 Feet

Overview

EXHIBIT 3-1

SHEET 13 OF 13

JE FULLER
HYDROLOGY & GEOMORPHOLOGY, INC

6101 S. RURAL ROAD, STE 110
TEMPE, ARIZONA 85283
480-752-2124

2881 N. SILVER SPUR DRIVE
TUCSON, ARIZONA 85745
520-623-3112

1018000 1019000 1020000 1021000 1022000 1023000

586000 587000 588000 589000

UNNAMED WASH 2

ZONE AE

Begin Detail Study

UNNAMED WASH 1

AGUA FRIA RIVER

EDGE MATCH TO SHEET 2

CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: 2-18-00

200' 0' 200' 400'

LEGEND

- 100-YR FLOODPLAIN BOUNDARY
- HYDRAULIC BASE LINE WITH RIVER MILE — M12.0 — M13.0
- EROSION HAZARD ZONE
- CROSS SECTION — 3.456 — 3.456
- FLOOD ZONE DESIGNATIONS — ZONE AE
- CORPORATE LIMITS — Corporate Limits
- SECTION LINE

EXHIBIT 3-2

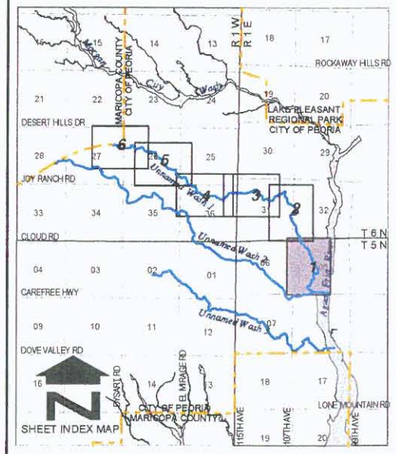
NOTES

1- THE HYDRAULIC BASE LINE IS CROSS SECTION STATION 10,000 UNLESS NOTED OTHERWISE.

2- COORDINATES ARE IN NAD 1983 HORIZONTAL AND NGVD 1929 VERTICAL. COORDINATES ARE GRID AND IN INTERNATIONAL FEET. NGVD 1929 ELEVATIONS WERE DERIVED BY SUBTRACTING THE PUBLISHED DIFFERENCE OF 2.07 FEET AT BM S-366 FROM THE ADJUSTED NAVD 1998 VALUES.

3- ALL SECTION LINES ARE APPROXIMATE.

4- EROSION HAZARD BOUNDARIES DELINEATED BY JE FULLER HYDROLOGY AND GEOMORPHOLOGY, INC.



NO.	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 1
F.C.D. CONTRACT NO. 99-45

Stantec Consulting Inc.
8211 South 48th Street
Phoenix, AZ 85044-5355 U.S.A.
Tel (602) 438-2200
Fax (602) 431-9562
www.stantec.com

	BY	DATE
DESIGN	MCG	04/01
DESIGN CHK.	PJE	04/01
PLANS	NKD / HAR	04/01
PLANS CHK.	PJE	04/01

SHEET 1 OF 6

P:\82000146\gis\erosion\unnamed1_erosion.apr
August 22, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS

COOPER AERIAL SURVEYS CO.

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP.

1023000 1024000 1025000 1026000 1027000 1028000

EDGE MATCH TO SHEET 3

UNNAMED WASH 1

ZONE AE

EDGE MATCH TO SHEET 1

T6N T5N R1W R1E 31 32

LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
FLOOD ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

NOTES

1- THE HYDRAULIC BASE LINE IS CROSS SECTION STATION 10,000 UNLESS NOTED OTHERWISE.

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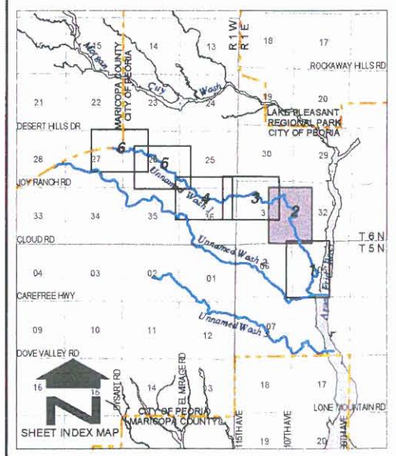
3- ALL SECTION LINES ARE APPROXIMATE.

4- EROSION HAZARD BOUNDARIES DELINEATED BY JE FULLER HYDROLOGY AND GEOMORPHOLOGY, INC.



200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: 2-18-00

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP UNNAMED WASH 1 F.C.D. CONTRACT NO. 99-45

Stantec Consulting Inc.
8211 South 48th Street
Phoenix, AZ 85044-5355 U.S.A.
Tel. (602) 438-2200
Fax. (602) 431-9562
www.stantec.com

	BY	DATE
DESIGN	MCG	04/01
DESIGN CHK.	PJE	04/01
PLANS	NKD / HAR	04/01
PLANS CHK.	PJE	04/01

SHEET 2 OF 6

P:\82000149\gis\erosion\unnamed1_erosion.apr
August 22, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR — COOPER AERIAL SURVEYS CO. — GROUND CONTROL SURVEY DATA

580000 581000 582000 583000 584000 585000

1029000 1028000 1027000 1026000

30 31 R 1 W R 1 E 25 36

EDGE MATCH TO SHEET 4

EDGE MATCH TO SHEET 2

ZONE AE

UNNAMED WASH 1

Start of Study

Start of Study

3,455 3,455 3,455

576000 577000 578000 579000 580000

1029000 1028000 1027000 1026000

EDGE MATCH TO SHEET 5

EDGE MATCH TO SHEET 3

ZONE AE

UNNAMED WASH 1

4.53 4.53 4.53 4.49 4.49 4.49

572000 573000 574000 575000 576000 577000

1032000 1031000 1030000 1029000 1028000

STATE ROUTE 74

EDGE MATCH TO SHEET 6

ZONE AE

End of Study

UNNAMED MC&D WASH 1

ZONE A

Begin Approximate Method Study End of Detail Study

End of Study

EDGE MATCH TO SHEET 4

5,835 5,822 5,505 5,505 5,439 5,359 5,359 5,359 5,310 5,310 5,227 5,207 5,207 5,176 5,176 5,084 5,084 5,005 4,932 4,879 4,879 4,838 4,838 4,795 4,795 4,652 4,652 4,614

200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET

FLIGHT DATES: 2-18-00

LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
FLOOD ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

NOTES

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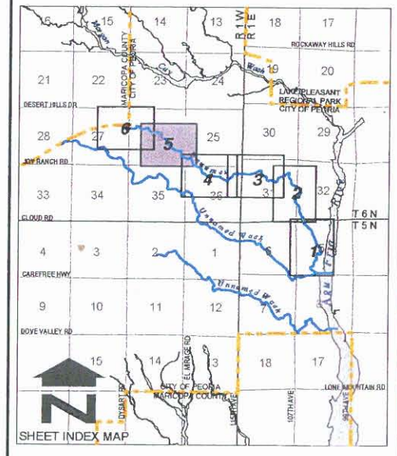

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 1
F.C.D. CONTRACT NO. 99-45

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	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

SHEET 5 OF 6

P:\82000146\gis\erosion\unnamed1_erosion.apr
August 22, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2 'CONTOUR INTERVALS

COOPER AERIAL SURVEYS CO

GROUND CONTROL SURVEY DATA PROVIDED BY: VALCO SURVEYING CORP.

568000 569000 570000 571000 572000 573000

1033000 1032000 1031000 1030000

22 23
27 26

MARICOPA COUNTY
CITY OF PEORIA

End of Detail Study

STATE ROUTE 74

ZONE AE

MILO

UNNAMED WASH 1

EDGE MATCH TO SHEET 5

N

200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: 2-18-00

LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
FLOOD ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

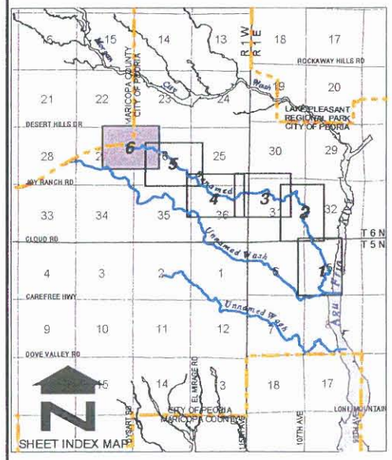
NOTES

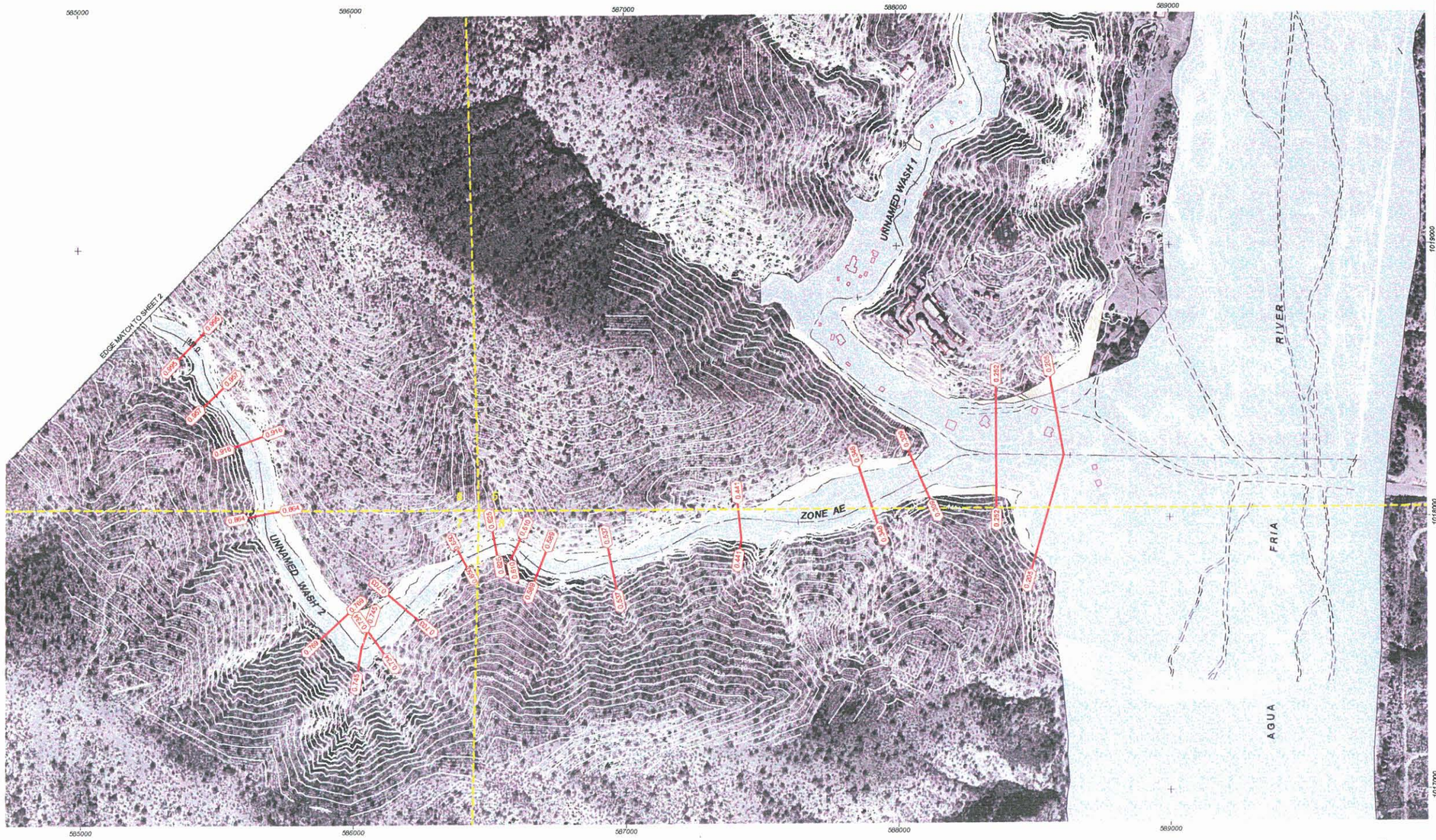
1- THE HYDRAULIC BASE LINE IS CROSS SECTION STATION 10,000 UNLESS NOTED OTHERWISE.

2- COORDINATES ARE IN NAD 1983 HORIZONTAL AND NGVD 1929 VERTICAL. COORDINATES ARE GRID AND IN INTERNATIONAL FEET. NGVD 1929 ELEVATIONS WERE DERIVED BY SUBTRACTING THE PUBLISHED DIFFERENCE OF 2.07 FEET AT BM S-366 FROM THE ADJUSTED NAVD 1998 VALUES.

3- ALL SECTION LINES ARE APPROXIMATE.

4- EROSION HAZARD BOUNDARIES DELINEATED BY JE FULLER HYDROLOGY AND GEOMORPHOLOGY, INC.




585000
586000
587000
588000
589000
1019000
1018000
1017000
EDGE MATCH TO SHEET 2
UNNAMED WASH 1
UNNAMED WASH 2
ZONE AE
RIVER
AGUA FRIA
0.995
0.995
0.995
0.995
0.916
0.916
0.864
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0.610
0.589
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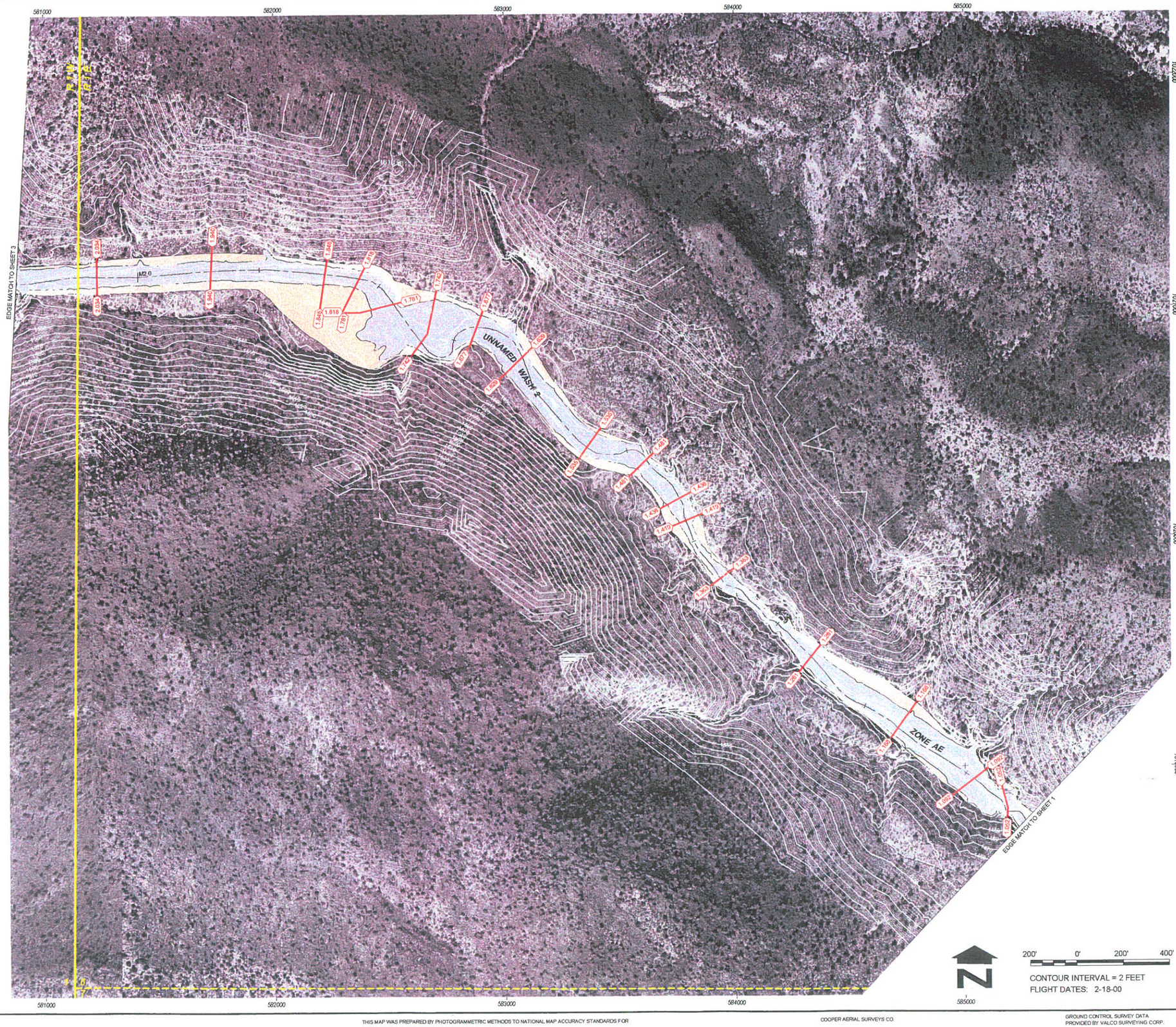
0.293
0.293



LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

NOTES

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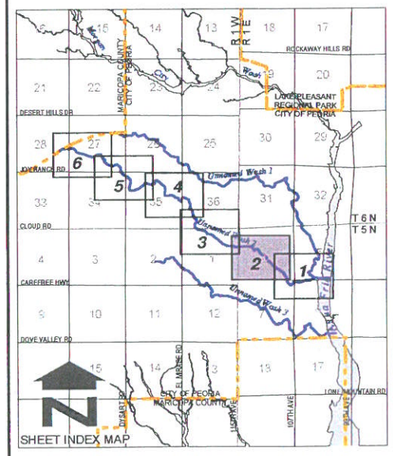

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 2
F.C.D. CONTRACT NO. 99-45

Stantec Consulting Inc.
8211 South 48th Street
Phoenix, Az 85044-5355 U.S.A.
Tel.: (602) 438-2200
Fax: (602) 431-9562
www.stantec.com

	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD /HAR	01/01
PLANS CHK.	PJE	01/01

SHEET 2 OF 6

200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: 2-18-00

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2 'CONTOUR INTERVALS.

COOPER AERIAL SURVEYS CO.

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP.

P:\82000146\gis\erosion\unnamed2_erosion.apr
August 23, 2001

577000 578000 579000 580000

1024000 1023000 1022000 1021000

EDGE MATCH TO SHEET 4

EDGE MATCH TO SHEET 2

T.6 N.
R.1 W.

UNNAMED WASH 2

ZONE AE

LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

NOTES

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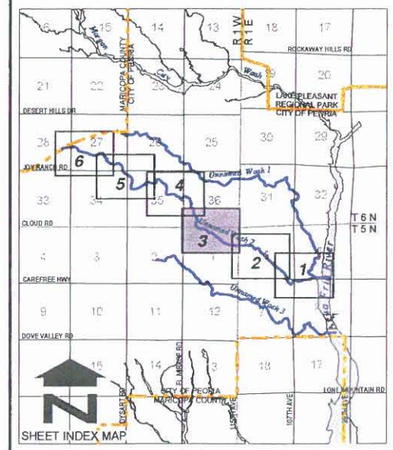
3- ALL SECTION LINES ARE APPROXIMATE.

4- EROSION HAZARD BOUNDARIES DELINEATED BY JE FULLER HYDROLOGY AND GEOMORPHOLOGY, INC.



SHEET INDEX MAP

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 2
F.C.D. CONTRACT NO. 99-45

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	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

SHEET 3 OF 6

200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: 2-18-00

P:\82000146\gis\erosion\unnamed2_erosion.apr
August 23, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2 'CONTOUR INTERVALS.

COOPER AERIAL SURVEYS CO

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP

573000 574000 575000 576000 577000

1028000 1027000 1026000 1025000 1024000

EDGE MATCH TO SHEET 5

UNNAMED WASH 2

ZONE AE

EDGE MATCH TO SHEET 3

200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: 2-18-00

LEGEND

- 100-YR FLOODPLAIN BOUNDARY
- HYDRAULIC BASE LINE WITH RIVER MILE — M12.0 — M13.0
- EROSION HAZARD ZONE
- CROSS SECTION — 3.456 — 3.456
- ZONE DESIGNATIONS — ZONE AE
- CORPORATE LIMITS — Corporate Limits
- SECTION LINE

NOTES

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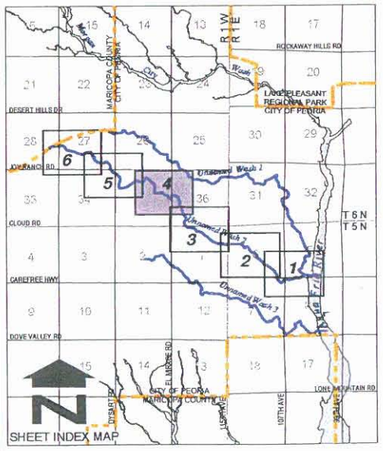
4- EROSION HAZARD BOUNDARIES DELINEATED BY JE FULLER HYDROLOGY AND GEOMORPHOLOGY, INC.



NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 2
F.C.D. CONTRACT NO. 99-45

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PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

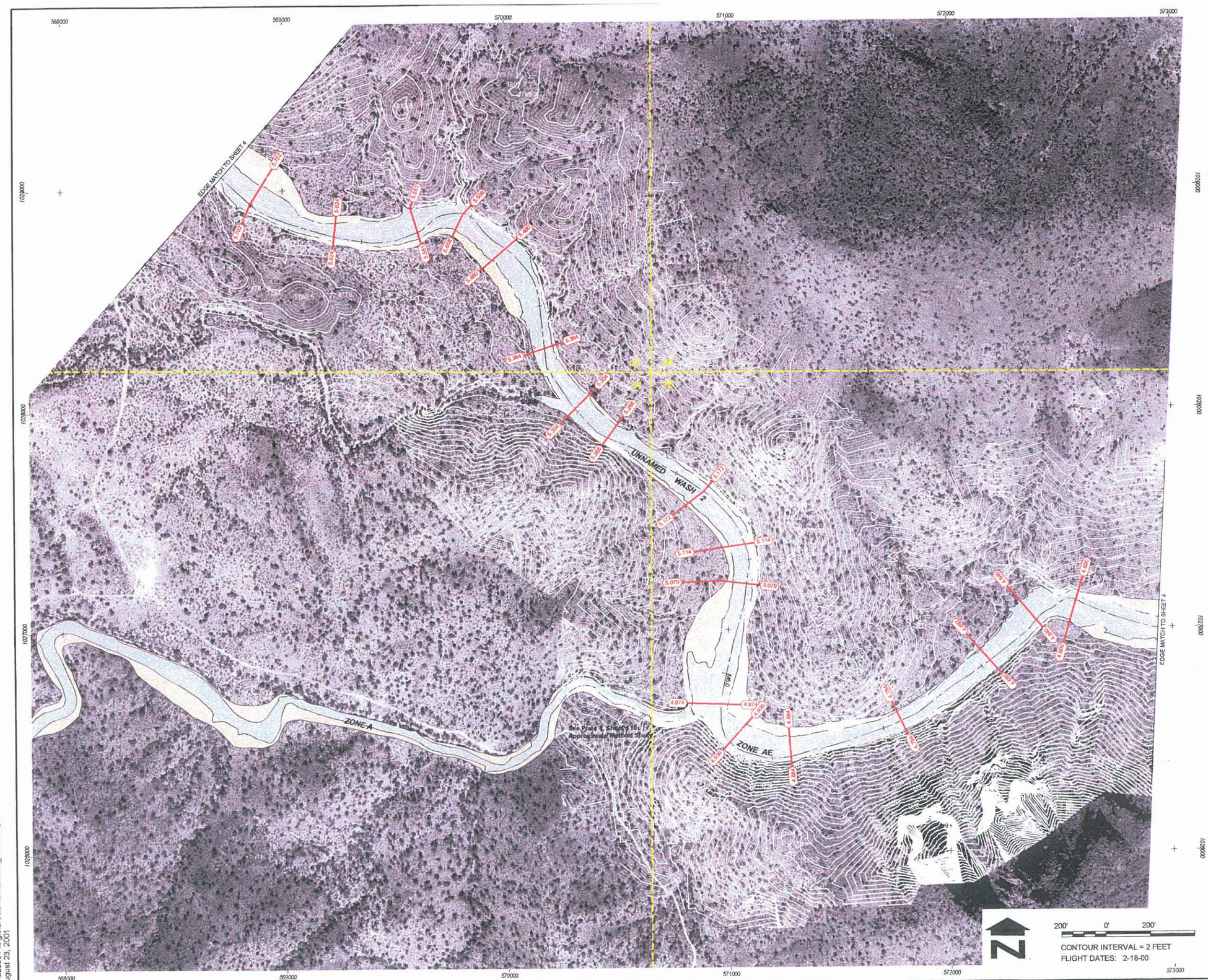
SHEET 4 OF 6

P:\82000146\gis\erosion\unnamed2_erosion.apr
August 23, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS.

COOPER AERIAL SURVEYS CO.

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP.



LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

NOTES

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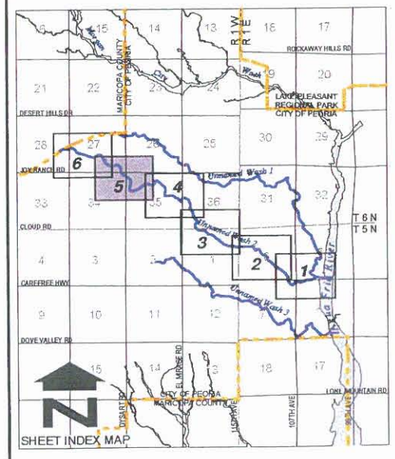

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 2
F.C.D. CONTRACT NO. 99-45

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	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

SHEET 5 OF 6

P:\82000146\gis\erosion\unnamed2_erosion.apr
August 23, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS.

COOPER AERIAL SURVEYS CO

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP

564000 565000 566000 567000 568000 569000

1031000 1030000 1029000 1028000

ZONE A

ZONE A
See Plate 4, Sheet 2 for Approximate Method Study

ZONE A

End of Study

ZONE AE

UNNAMED WASH 2

STATE ROUTE 74

EDGE MATCH TO SHEET 5

200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: 2-18-00

LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

NOTES

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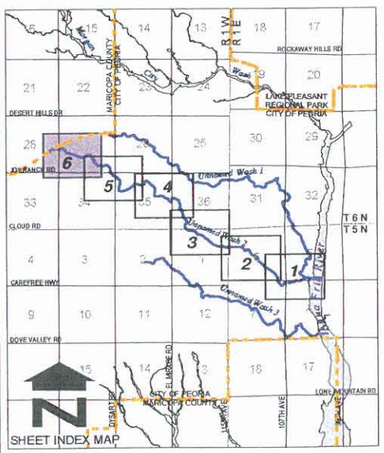
3- ALL SECTION LINES ARE APPROXIMATE.

4- EROSION HAZARD BOUNDARIES DELINEATED BY JE FULLER HYDROLOGY AND GEOMORPHOLOGY, INC.



SHEET INDEX MAP

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 2
F.C.D. CONTRACT NO. 99-45

Stantec Consulting Inc.
8211 South 48th Street
Phoenix, Az 85044-5305 U.S.A
Tel.: (602) 436-2200
Fax: (602) 431-9562
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	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

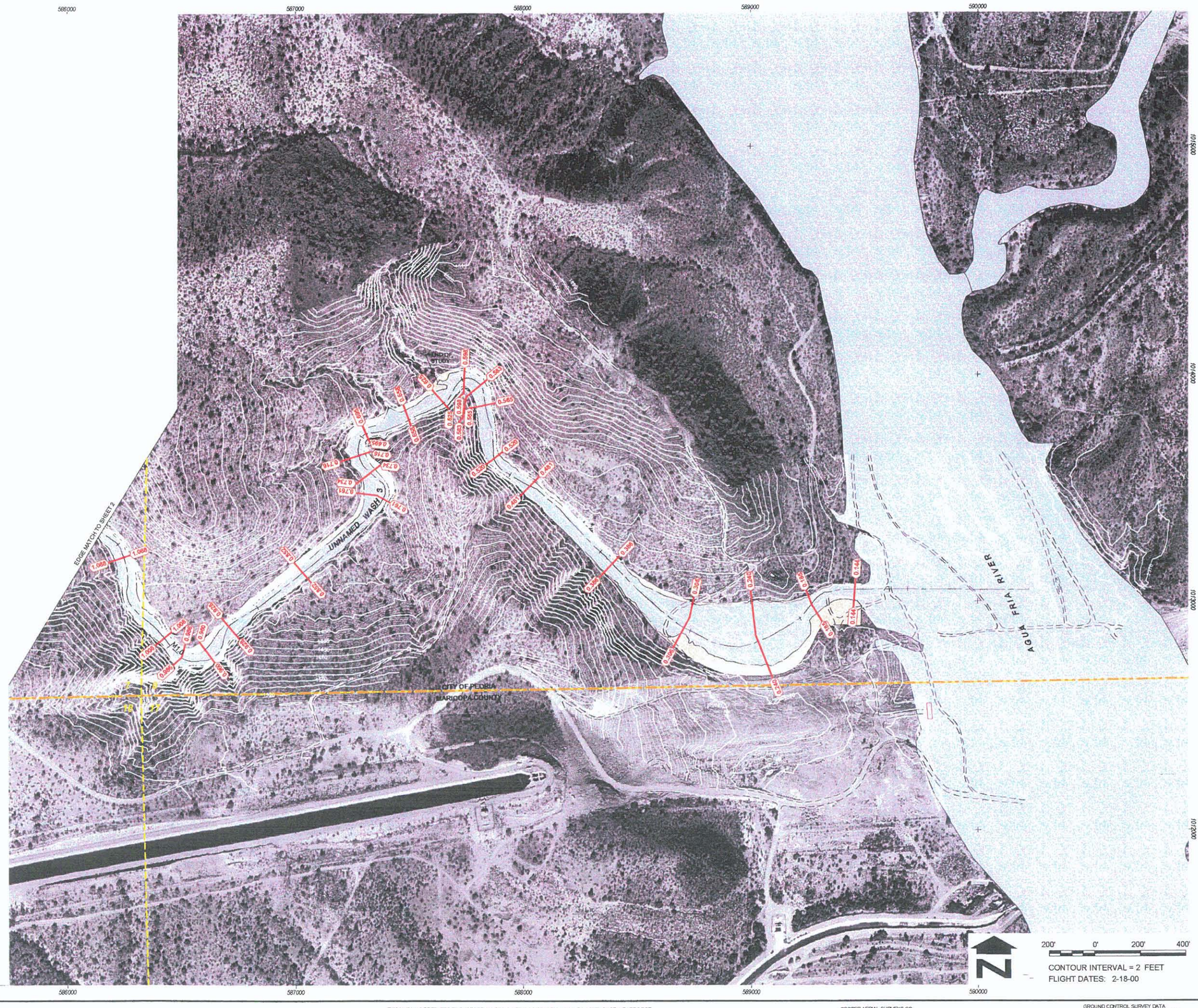
SHEET 8 OF 8

P:\82000146\gis\erosion\unnamed2_erosion.apr
August 23, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2 'CONTOUR INTERVALS

COOPER AERIAL SURVEYS CO.

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP.



LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
FLOOD ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

EXHIBIT 3-2

NOTES

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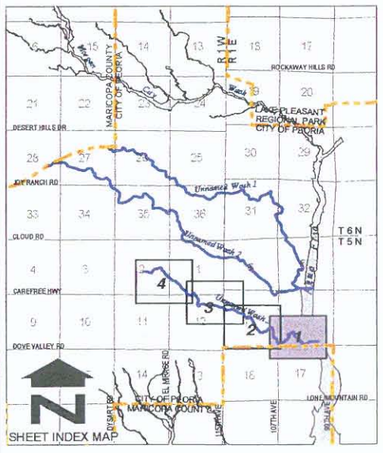

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 3
F.C.D. CONTRACT NO. 99-45

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Phoenix, AZ 85044-5355 U.S.A.
Tel.: (602) 438-2200
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	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

SHEET 1 OF 4

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS.

COOPER AERIAL SURVEYS CO.

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP.

P:\82000146\gis\erosion\unnamed3_erosion.apr
August 23, 2001

582000 583000 584000 585000 586000

1016000 1015000 1014000 1013000

10170.00 10169.00 10168.00 10167.00

EDGE MATCH TO SHEET 3

UNNAMED WASH 3

ZONE AE

EDGE MATCH TO SHEET 1

MARICOPA COUNTY

2.178 2.119 2.060 2.001 1.942 1.883 1.824 1.765 1.706 1.647 1.588 1.529 1.470 1.411 1.352 1.293 1.234 1.175 1.116 1.057 0.998 0.939 0.880 0.821 0.762 0.703 0.644 0.585 0.526 0.467 0.408 0.349 0.290 0.231 0.172 0.113

M12.0

LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
FLOOD ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

NOTES

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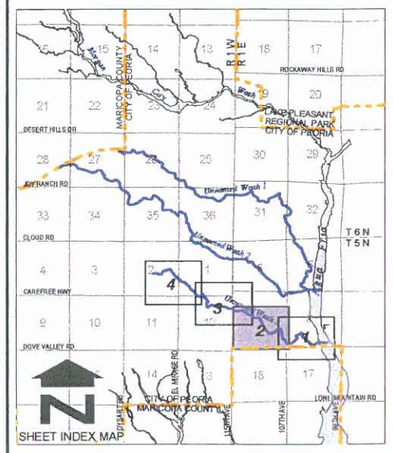
3- ALL SECTION CORNERS ARE APPROXIMATE.



200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET

FLIGHT DATES: 2-18-00

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 3
F.C.D.CONTRACT NO. 99-45

Stantec Consulting Inc.
8211 South 48th Street
Phoenix, Az 85044-5355 U.S.A.
Tel.: (602) 438-7200
Fax: (602) 431-9562
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	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

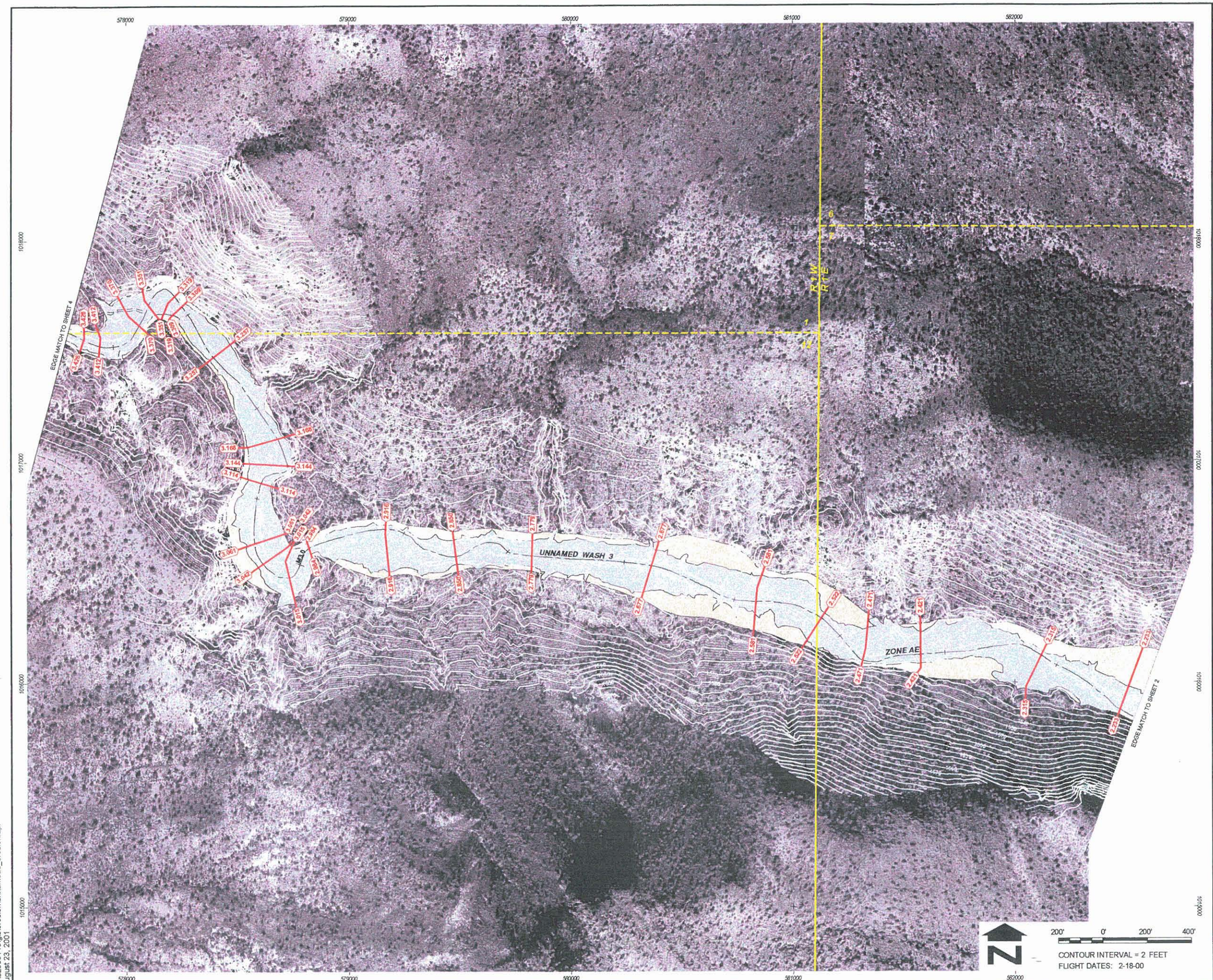
SHEET 2 OF 4

P:\18200146\gis\erosion\unnamed3_erosion.apr
August 23, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2 'CONTOUR INTERVALS

COOPER AERIAL SURVEYS CO

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP.



LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 — 3.456
FLOOD ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

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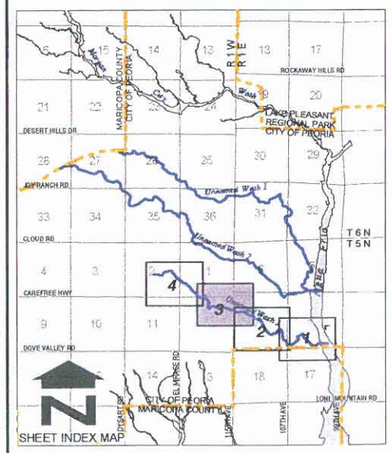

NO	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 3
F.C.D. CONTRACT NO. 99-45

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	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

SHEET 3 OF 4

P:\8200014\gis\erosion\unnamed3_erosion.apr
August 23, 2001

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COOPER AERIAL SURVEYS CO.

GROUND CONTROL SURVEY DATA PROVIDED BY: VALCO SURVEYING CORP.

573000 574000 575000 576000 577000 578000

1020000 1019000 1018000 1017000

DUNAWEED WASH 1

ZONE AE

EDGE MATCH TO SHEET 3

4.540 4.540 4.465 4.465 4.435 4.417 4.399 4.379 4.357 4.337 4.288 4.288 4.275 4.275 4.197 4.197 4.171 4.171 4.146 4.146 4.110 4.110 4.035 4.035 4.013 4.013 3.921 3.921 3.826 3.826 3.731 3.731 3.540 3.540 3.541 3.541 3.520 3.520 3.509 3.509 3.497 3.497 3.460 3.460 3.457 3.457

200' 0' 200' 400'

CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: 2-18-00

LEGEND

100-YR FLOODPLAIN BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 M13.0
EROSION HAZARD ZONE	
CROSS SECTION	3.456 3.456
FLOOD ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
SECTION LINE	

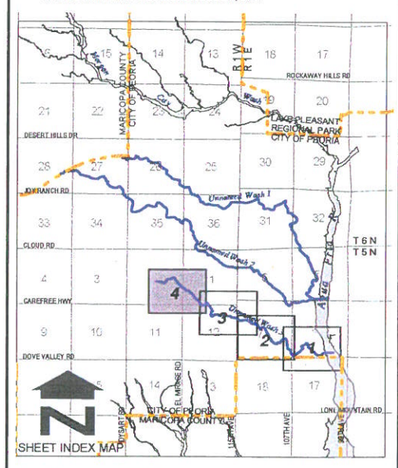
NOTES

1- THE HYDRAULIC BASE LINE IS CROSS SECTION STATION 10,000 UNLESS NOTED OTHERWISE.

2- COORDINATES ARE IN NAD 1983 HORIZONTAL AND NGVD 1929 VERTICAL. COORDINATES ARE GRID AND IN INTERNATIONAL FEET. NGVD 1929 ELEVATIONS WERE DERIVED BY SUBTRACTING THE PUBLISHED DIFFERENCE OF 2.07 FEET AT BM S-366 FROM THE ADJUSTED NAVD 1998 VALUES.

3- ALL SECTION LINES ARE APPROXIMATE.

4- EROSION HAZARD BOUNDARIES DELINEATED BY JE FULLER HYDROLOGY AND GEOMORPHOLOGY, INC.



SHEET INDEX MAP

NO	REVISION	BY	DATE
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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
UNNAMED WASH 3
F.C.D. CONTRACT NO. 99-45

Stantec Consulting Inc.
8211 South 48th Street
Phoenix, Az 85044-5355 U.S.A.
Tel: (602) 438-2200
Fax: (602) 431-9562
www.stantec.com

	BY	DATE
DESIGN	MCG	01/01
DESIGN CHK.	PJE	01/01
PLANS	NKD / HAR	01/01
PLANS CHK.	PJE	01/01

SHEET 4 OF 4

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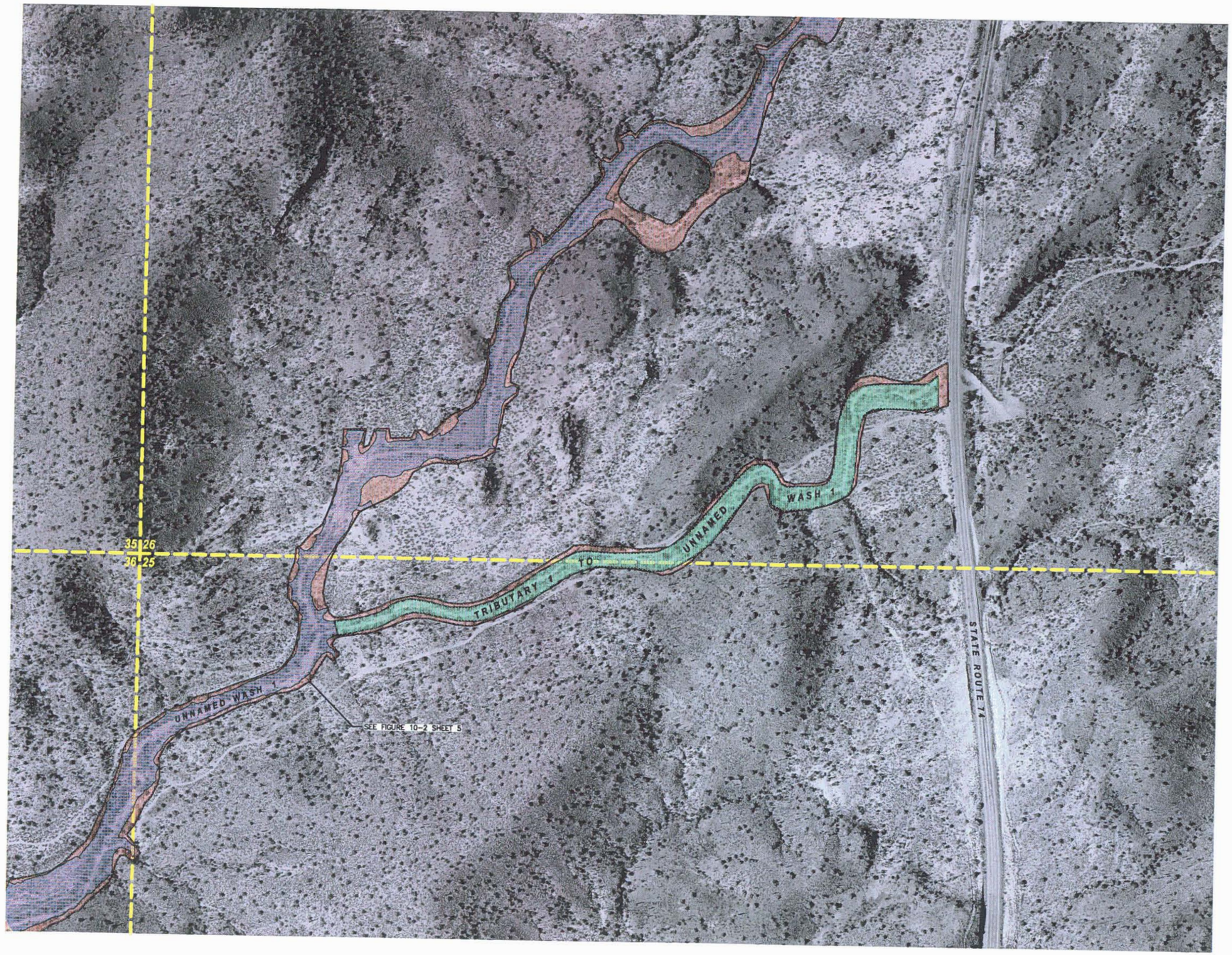
August 23, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 400' HORIZONTAL SCALE AND 2 'CONTOUR INTERVALS.

COOPER AERIAL SURVEYS CO.

GROUND CONTROL SURVEY DATA PROVIDED BY VALCO SURVEYING CORP.



AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

LEGEND

- ZONE A 100-YR FLOODPLAIN BOUNDARY (NEW FEMA SUBMITTAL)
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

EXHIBIT 3-2

NOTES

1. ALL SECTION LINES AND CORPORATE LIMITS ARE APPROXIMATE.
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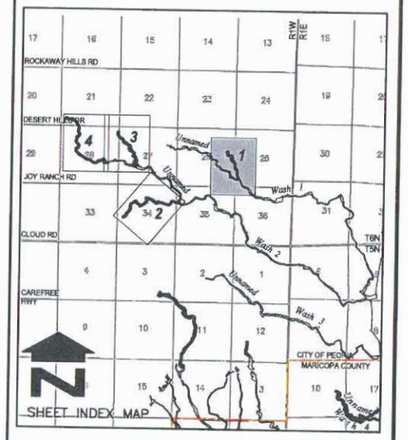

NO.	REVISION	BY	DATE
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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

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	BY	DATE
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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

SHEET 1 OF 4

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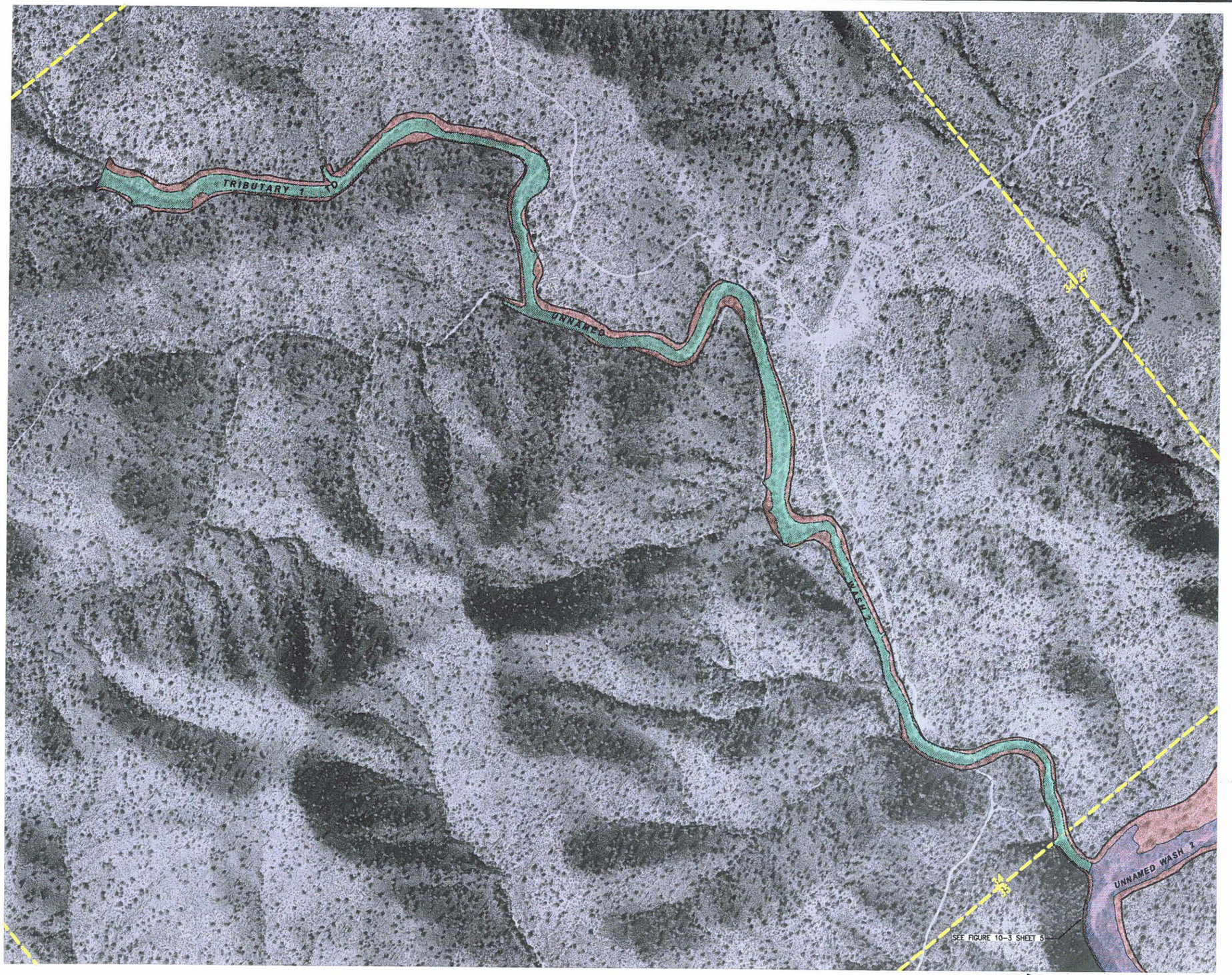

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AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

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- ZONE A 100-YR FLOODPLAIN BOUNDARY (NEW FEMA SUBMITTAL)
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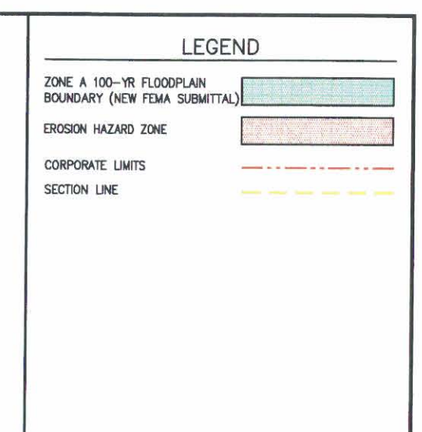

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

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PLANS	HAR	06.05.01
PLANS CHK.	PJE	06.13.01

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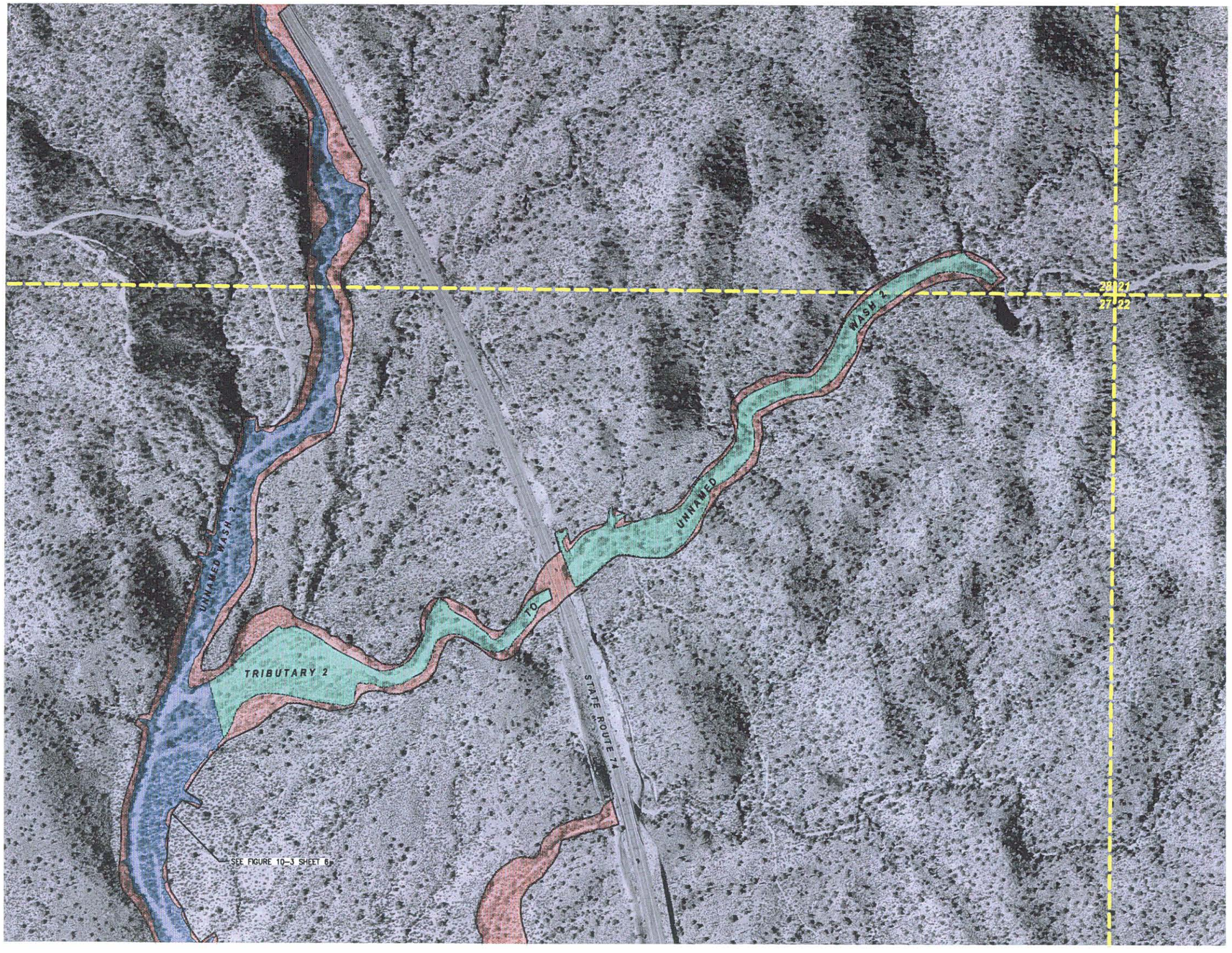

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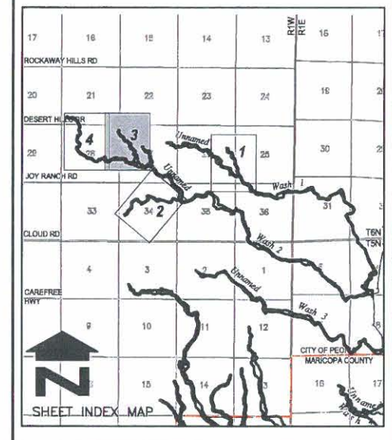

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FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
F.C.D. CONTRACT NO. 99-45

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200' 0' 200' 400'

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

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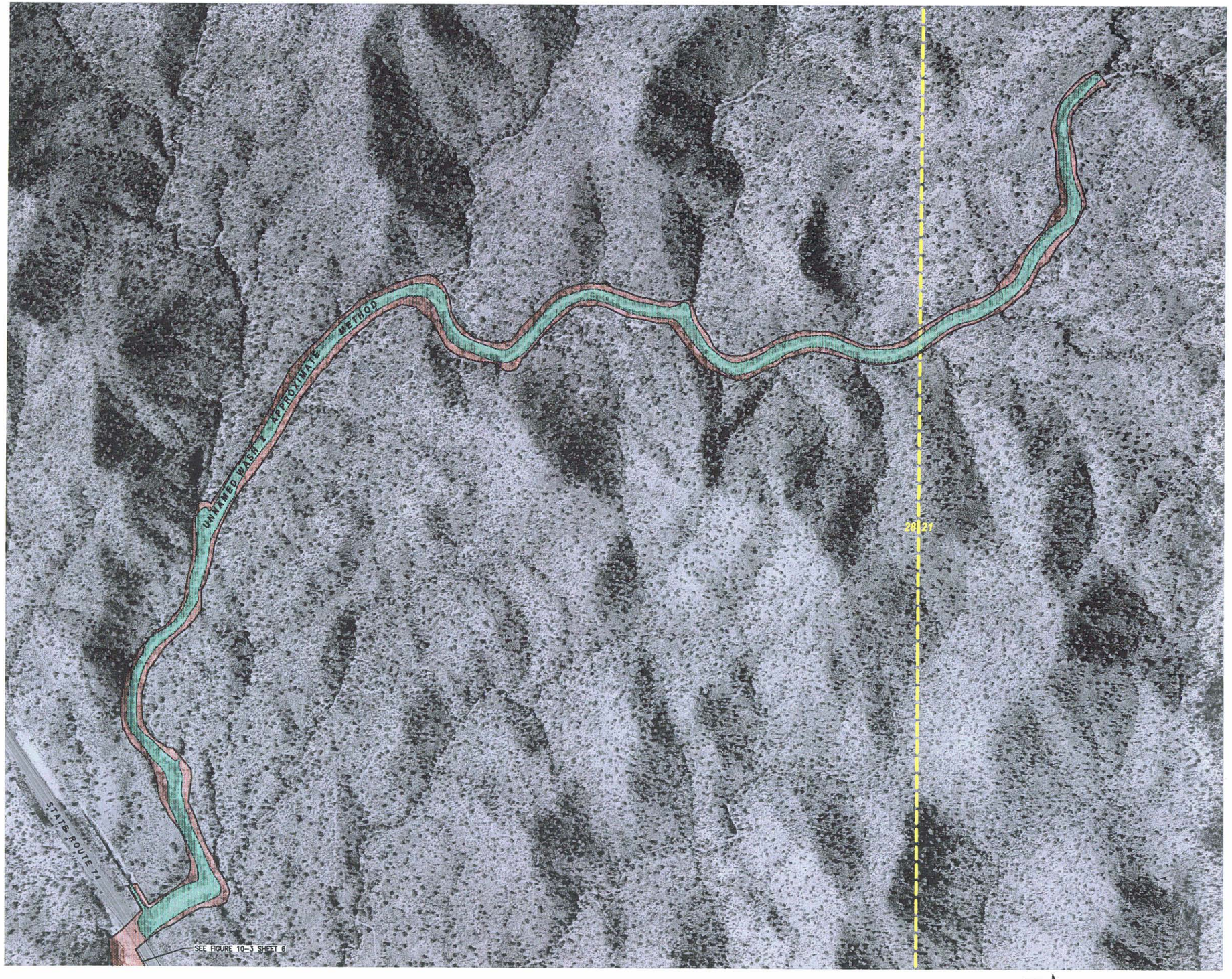

LEGEND

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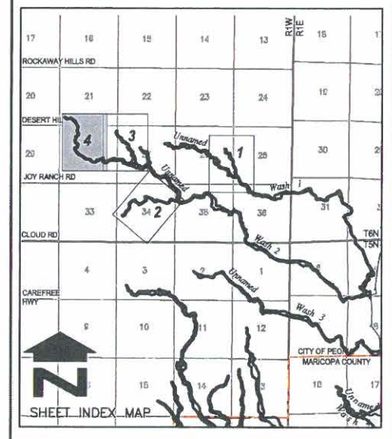

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FLOOD CONTROL DISTRICT
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NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
F.C.D. CONTRACT NO. 99-45

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SHEET 4 OF 4

200' 0' 200' 400'

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

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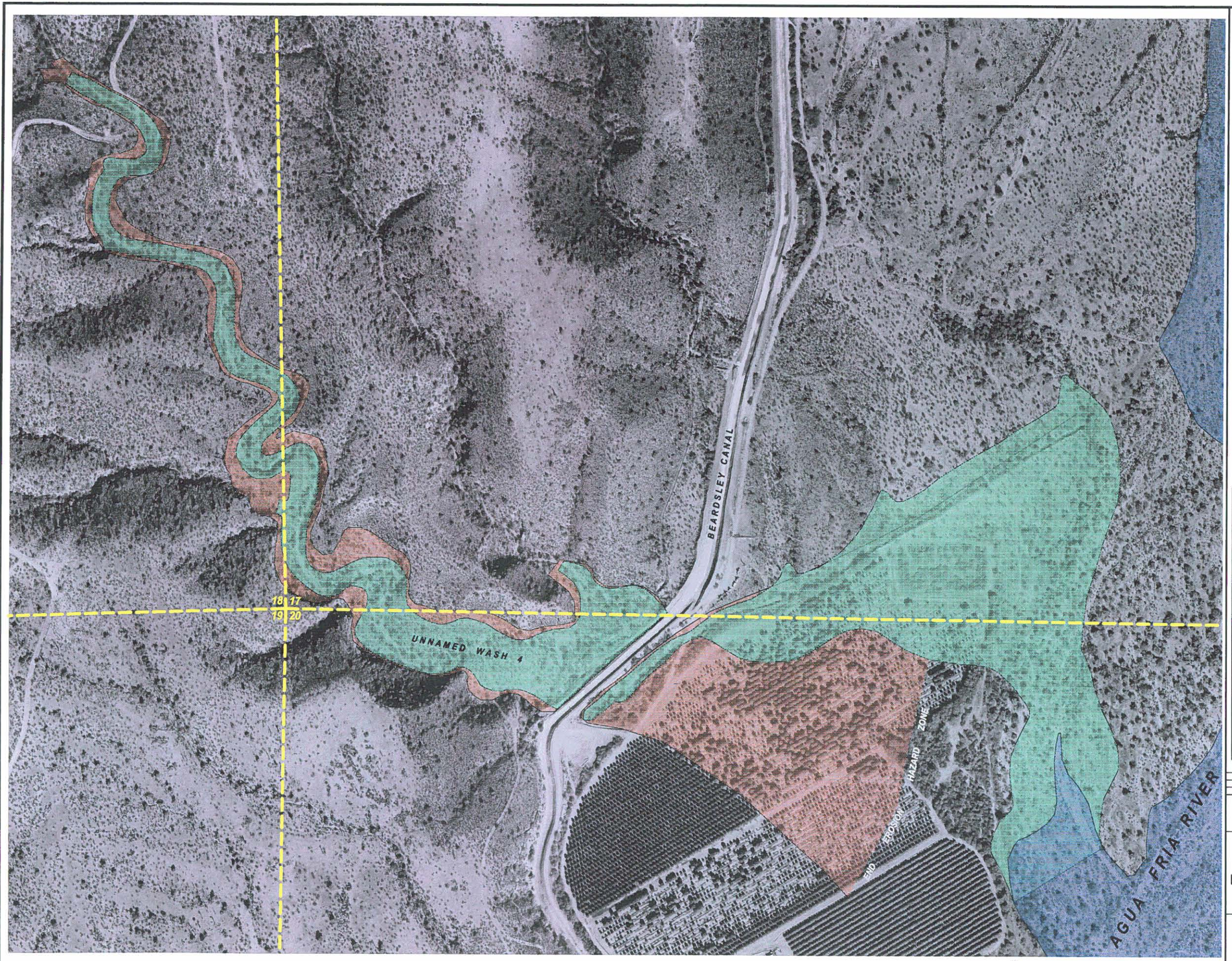

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
- ZONE A 100-YR FLOODPLAIN BOUNDARY (NEW FEMA SUBMITTAL)
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

EXHIBIT 3-2

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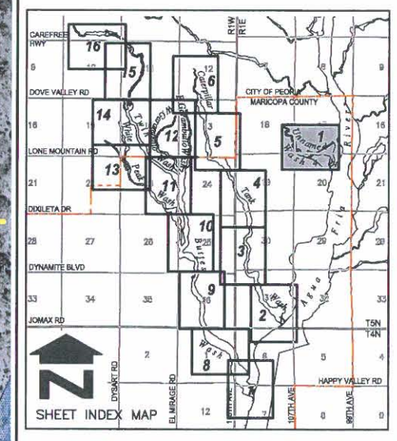

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

SHEET 1 OF 16

200' 0' 200' 400'

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

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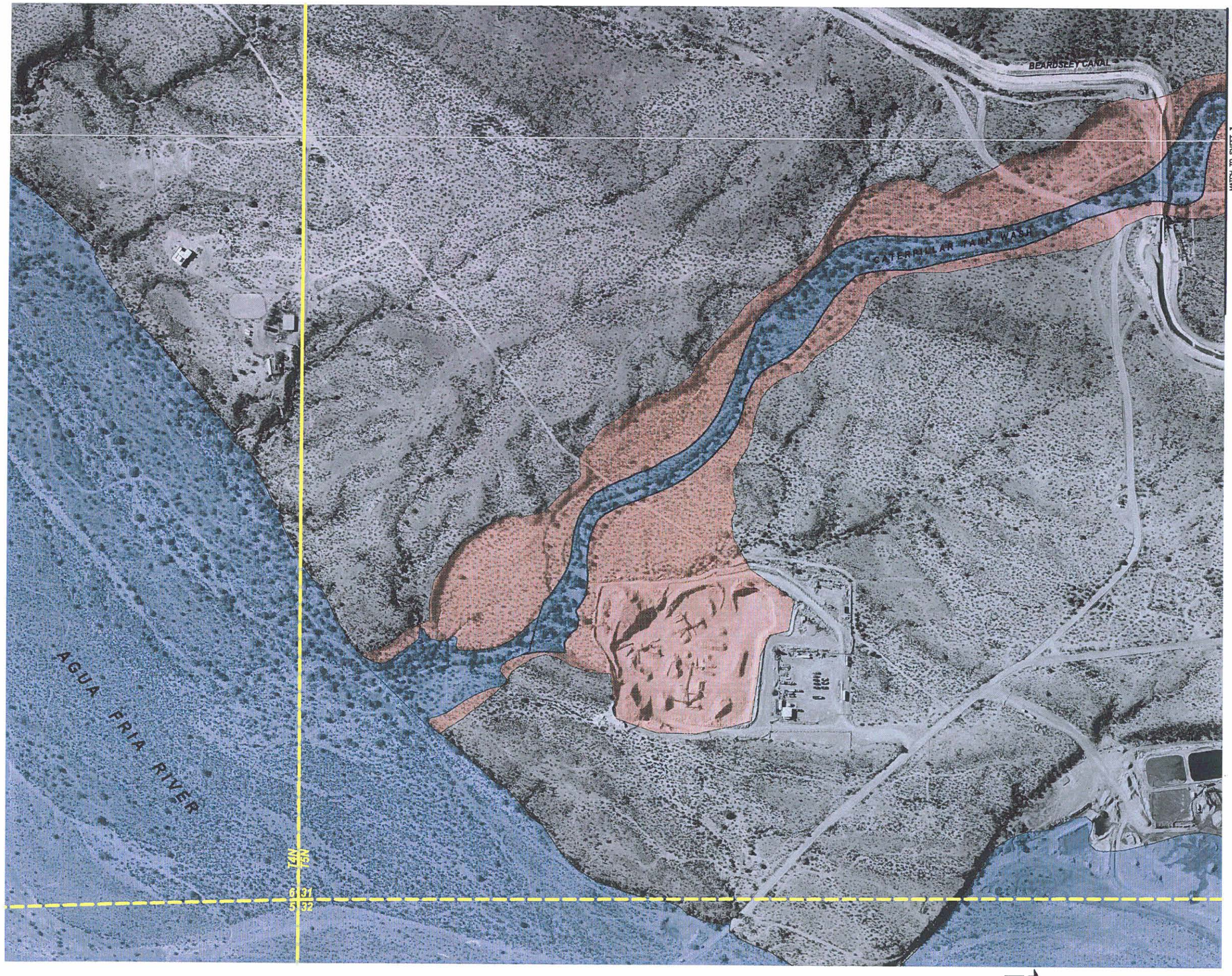

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AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
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- CORPORATE LIMITS
- SECTION LINE

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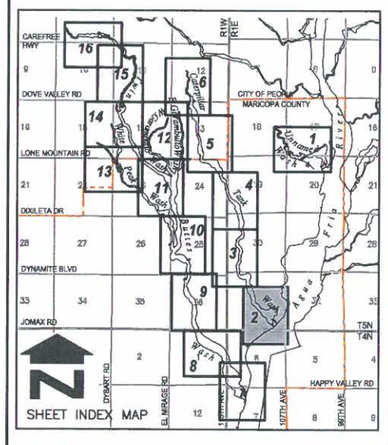

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

Stanley Consulting Inc.
8211 South 48th Street
Phoenix AZ 85044-5305 U.S.A.
Tel. 602.438.2200
Fax. 602.431.8562
www.stanley.com

	BY	DATE
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PLANS CHK.	PJE	06.06.01

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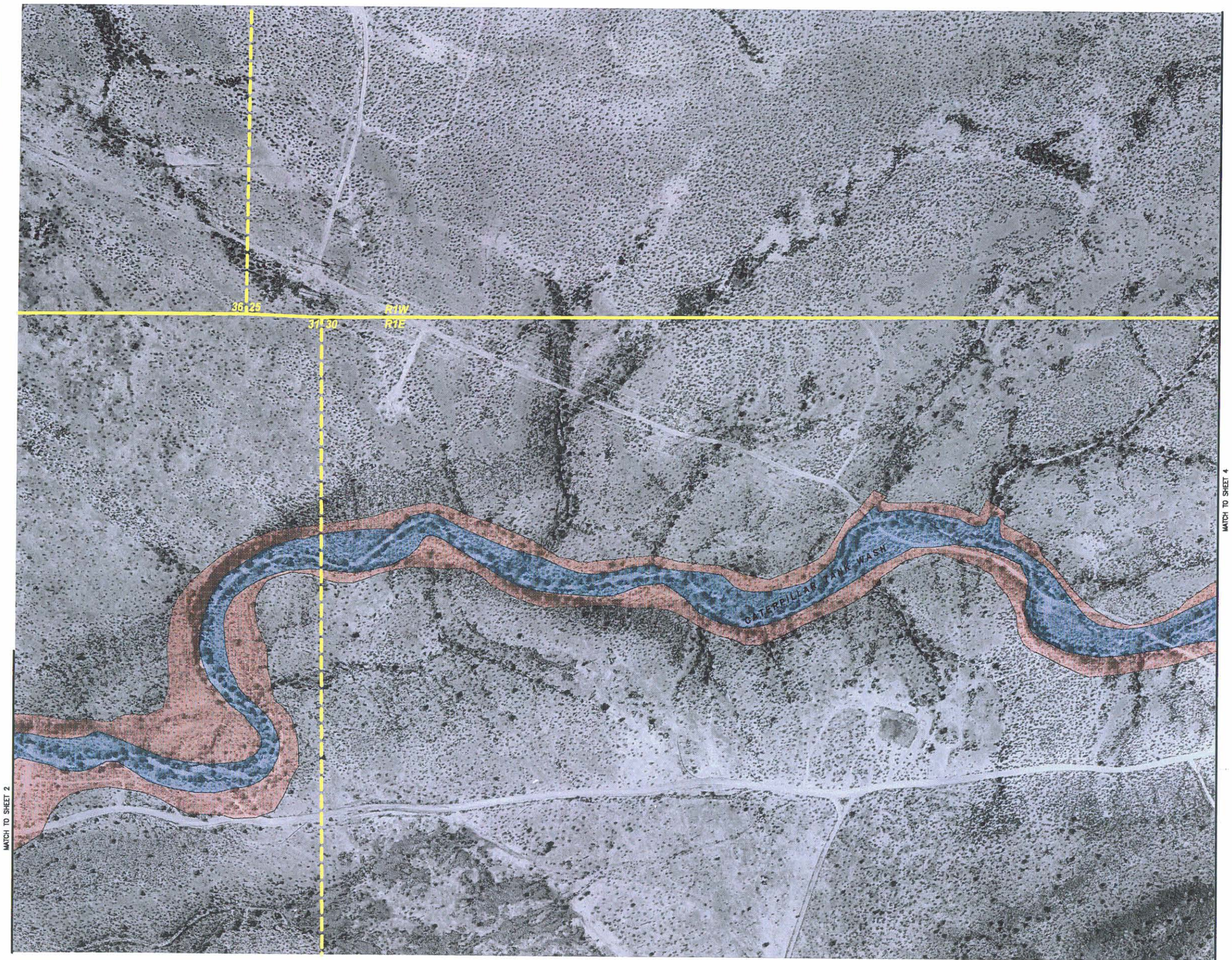

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200' 0' 200' 400'

LEGEND

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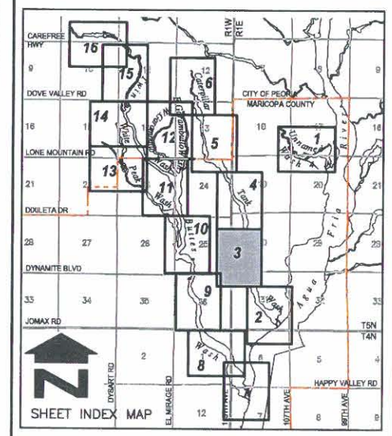

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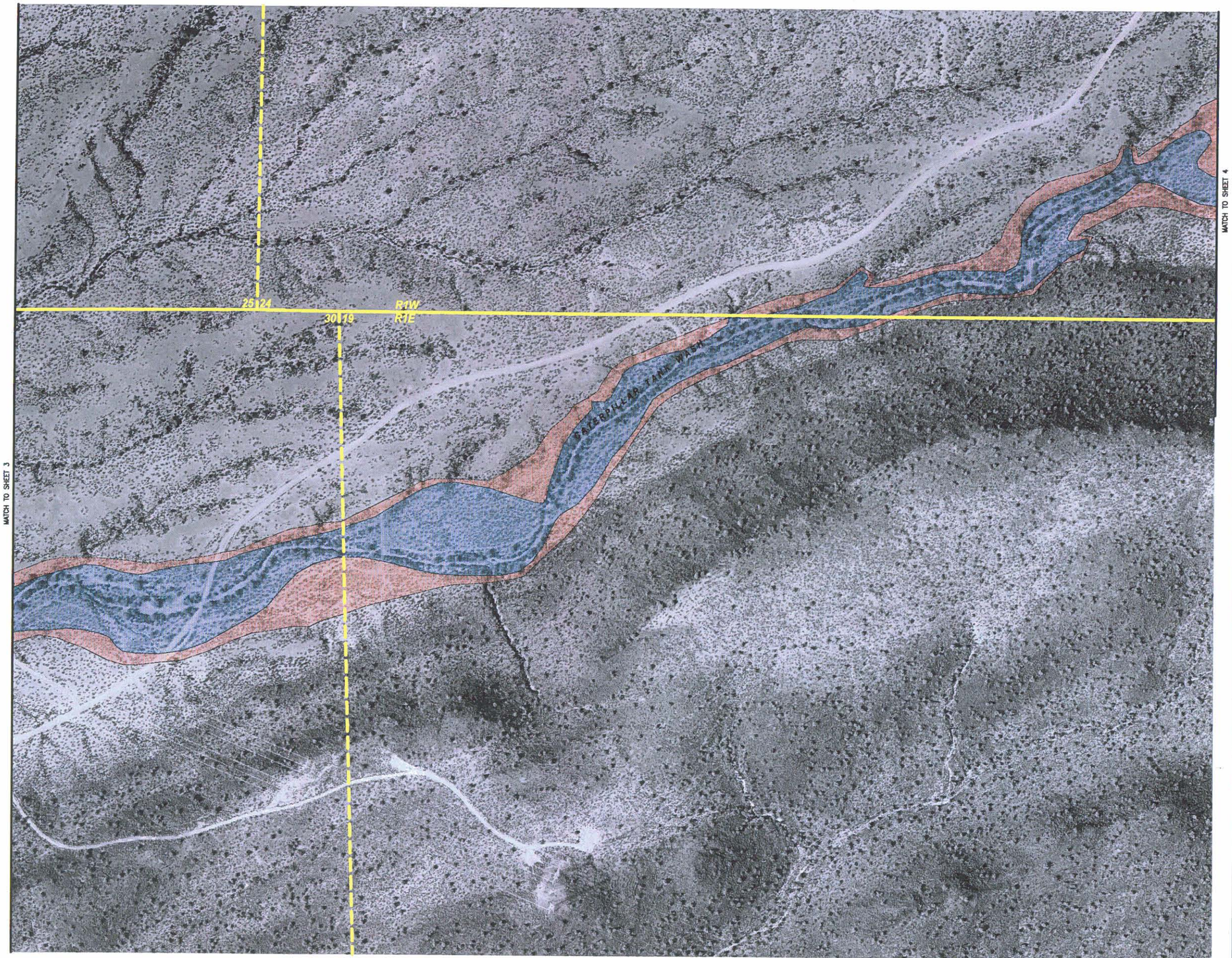

LEGEND

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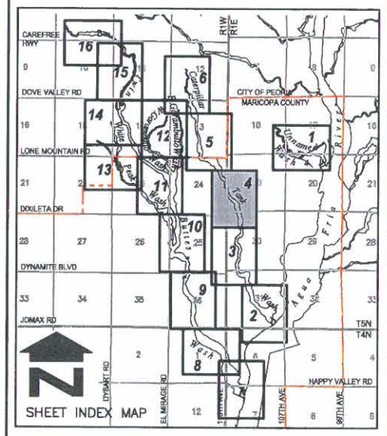

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SHEET 4 OF 16

200' 0' 200' 400'

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

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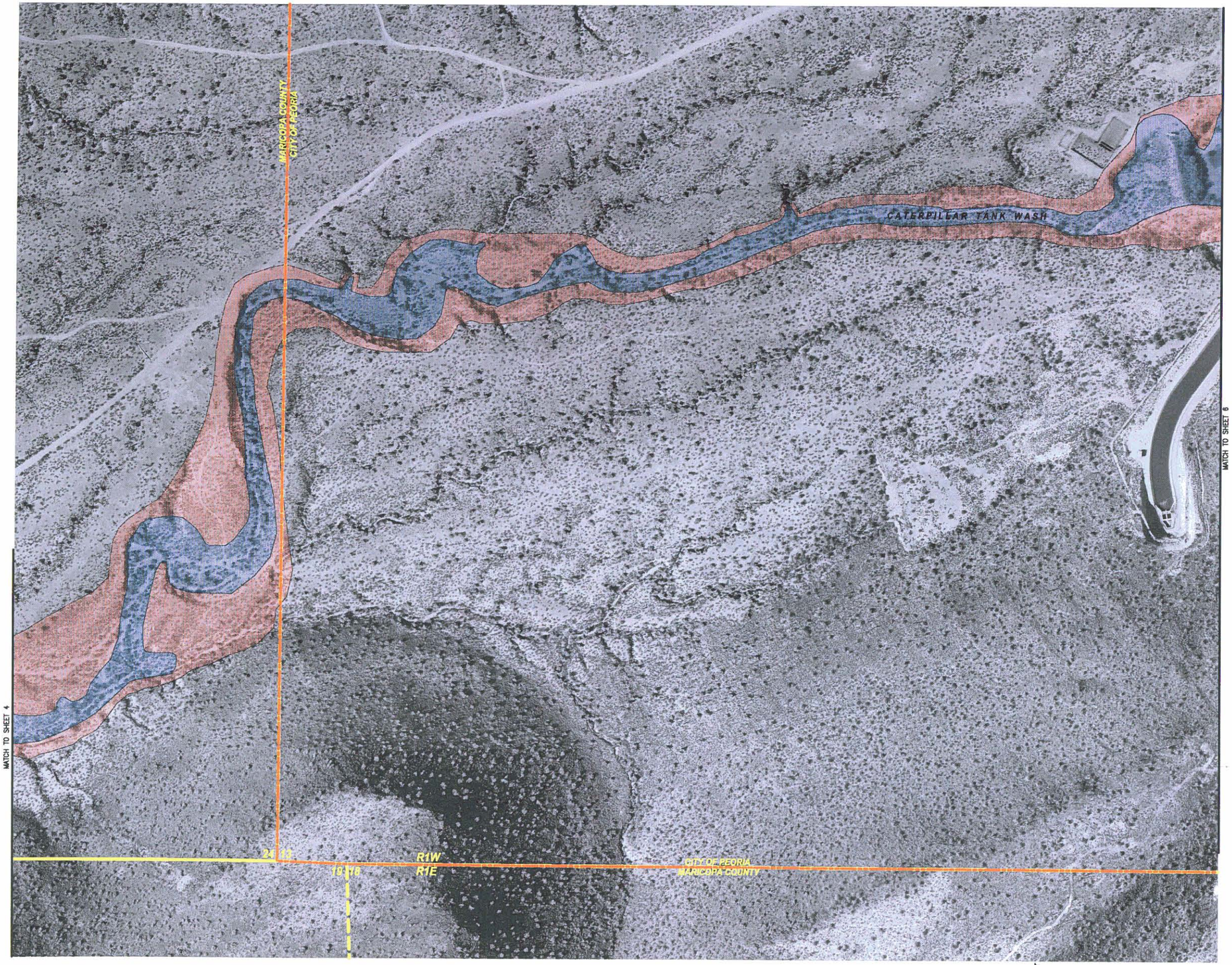

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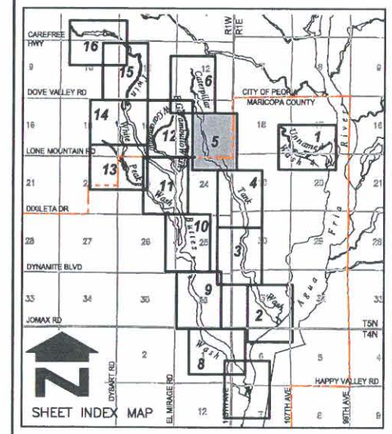

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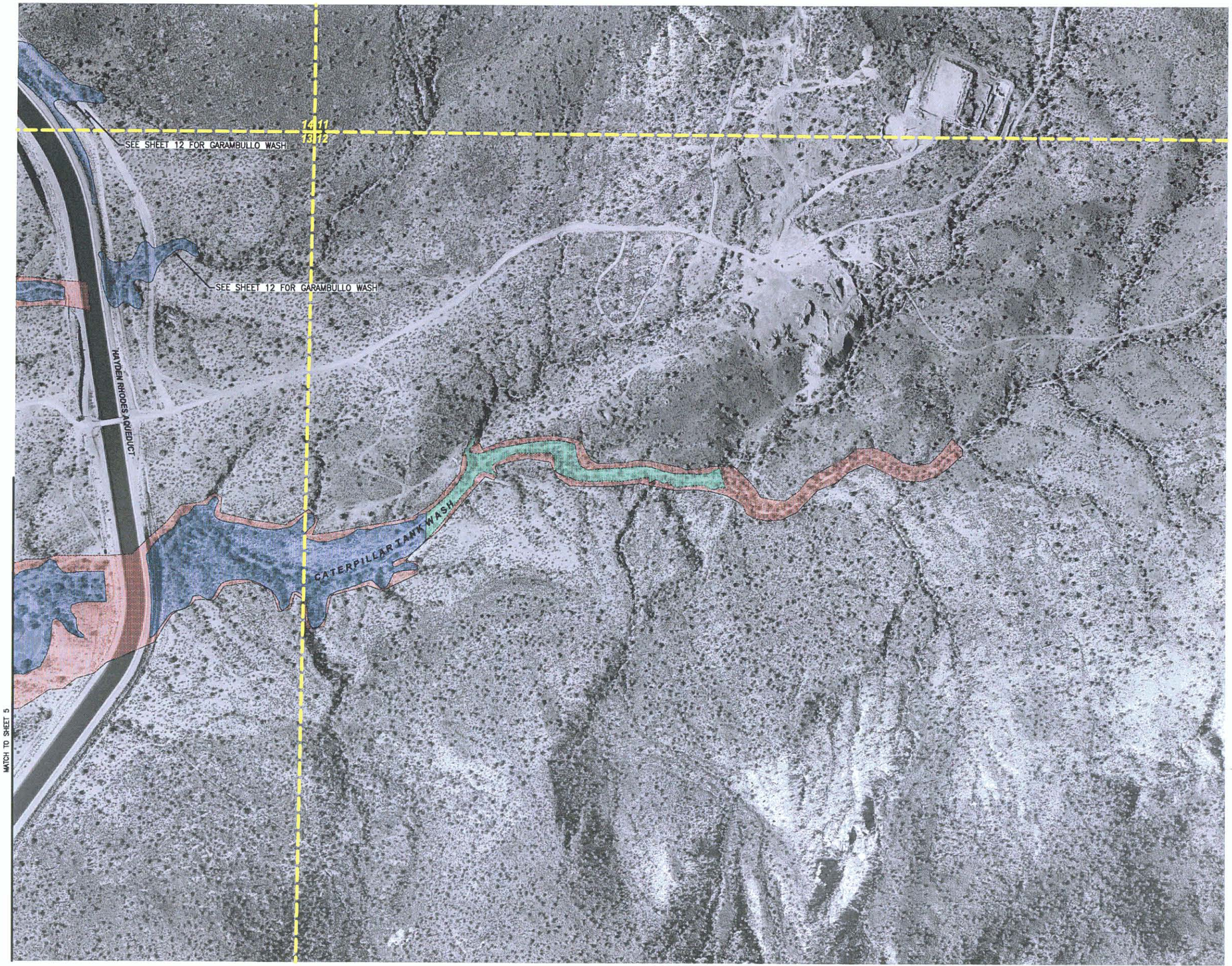

LEGEND

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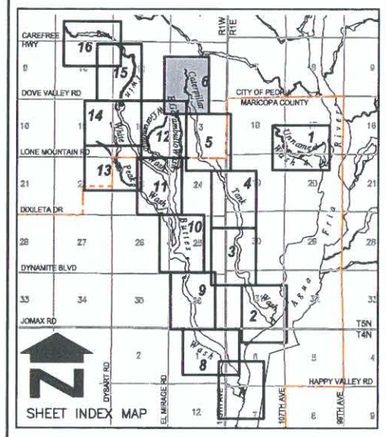

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SHEET 6 OF 16

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

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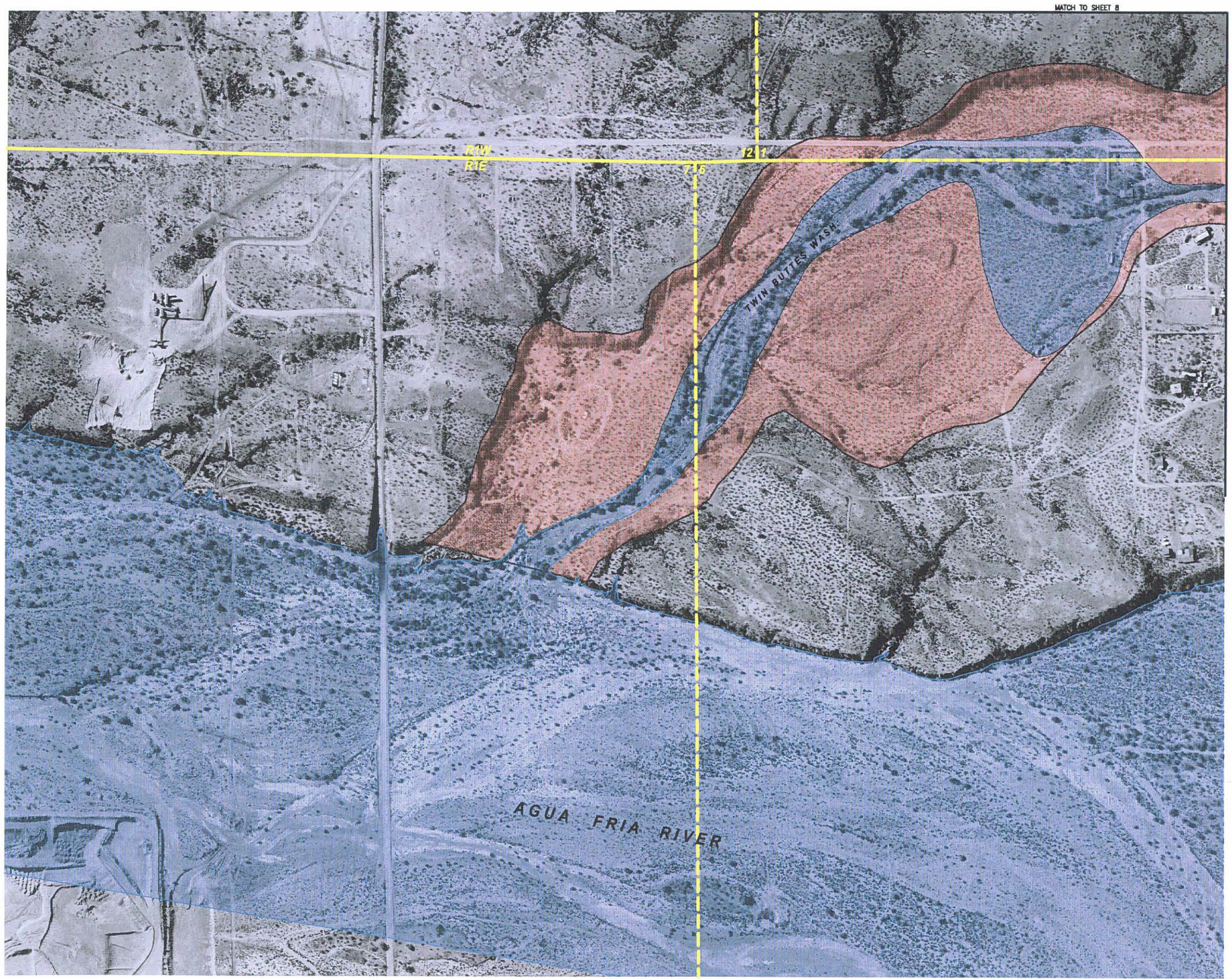

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AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

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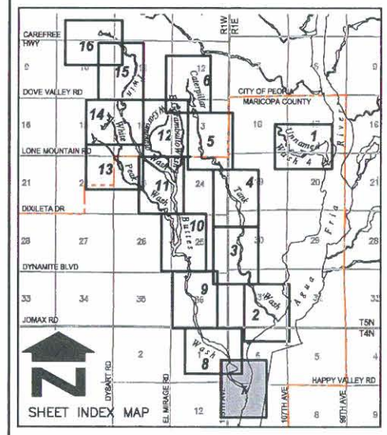
3. EFFECTIVE FEMA 100-YR FLOODPLAINS ARE APPROXIMATE ONLY. FOR DETAILED INFORMATION SEE: FLOOD INSURANCE STUDY FOR CATERPILLAR TANK AND TWIN BUTTES WASHES FROM AGUA FRIA RIVER TO C.A.P. CANAL, MARICOPA COUNTY, ARIZONA, CONTRACT FCD 90-09



NO.	REVISION	BY	DATE
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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

Stantec Consulting Inc.
8211 South 48th Street
Phoenix AZ 85044-5305 U.S.A.
Tel. 602.438.2200
Fax. 602.431.9562
www.stantec.com

	BY	DATE
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DESIGN CHK.	-	-
PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

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2001-12-21 08:53AM By: bformsworth

MATCH TO SHEET 9

TWIN BUTTES WASH

RNW RNE

MATCH TO SHEET 7

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

NOTES

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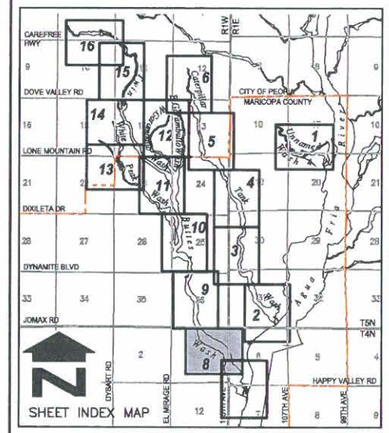

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

SHEET 8 OF 16

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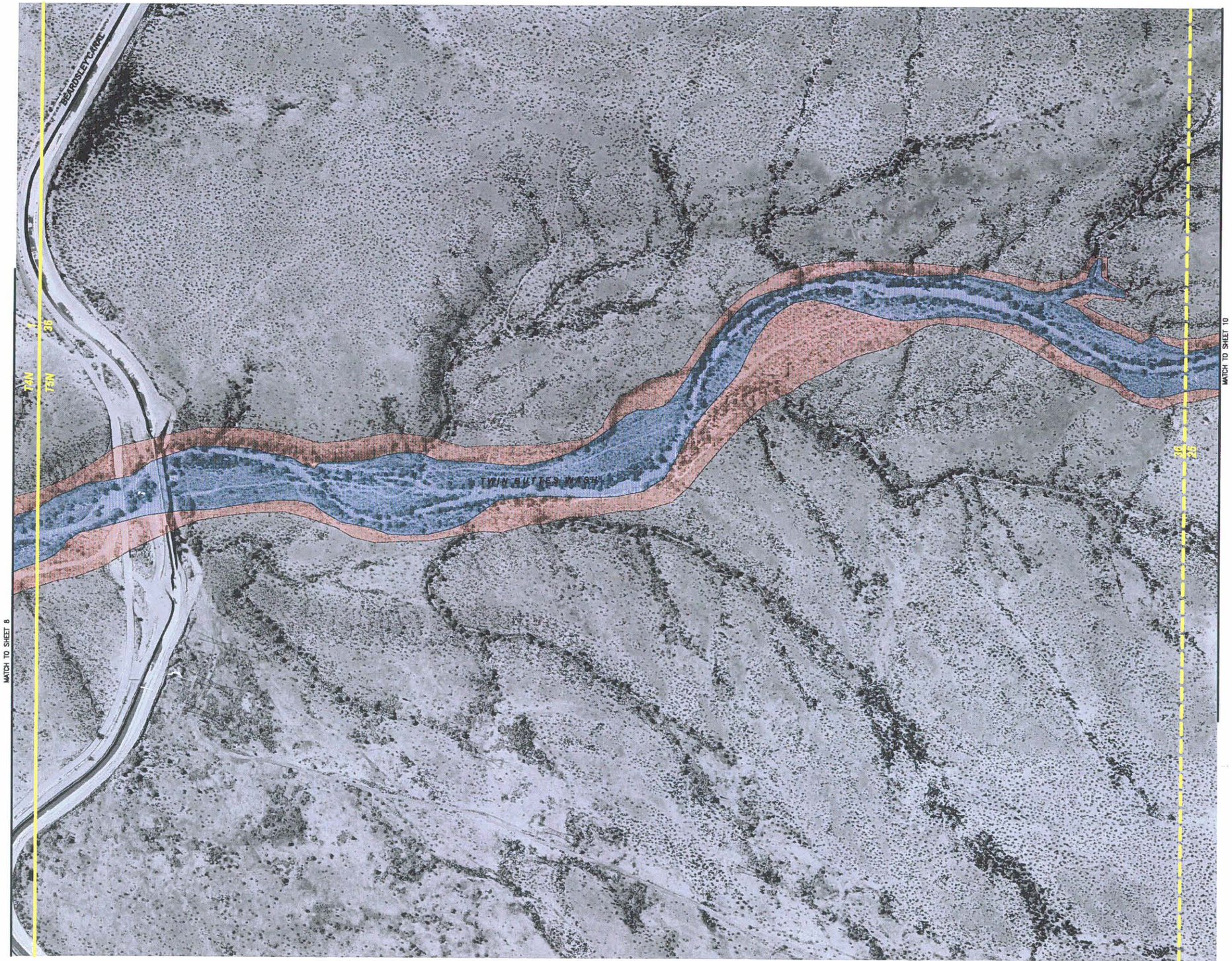

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

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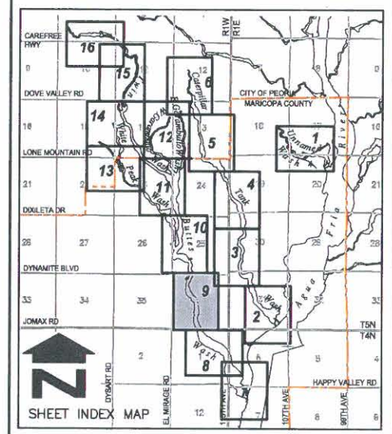

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FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

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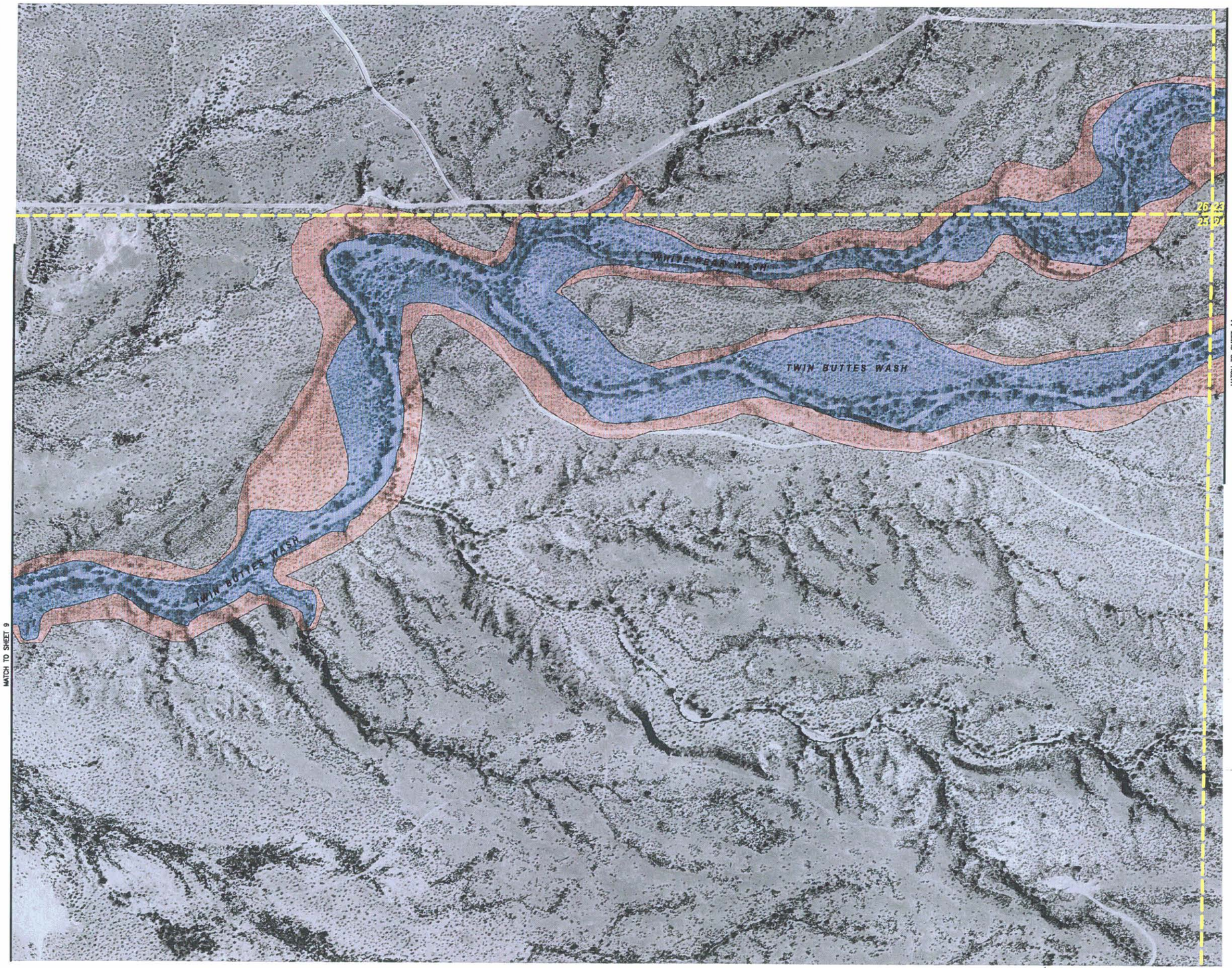

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

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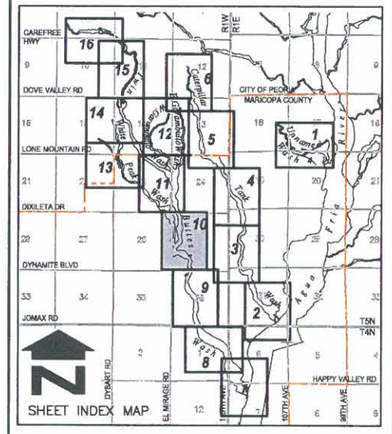

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

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Phoenix AZ 85044-5305 U.S.A.
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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

SHEET 10 OF 16

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

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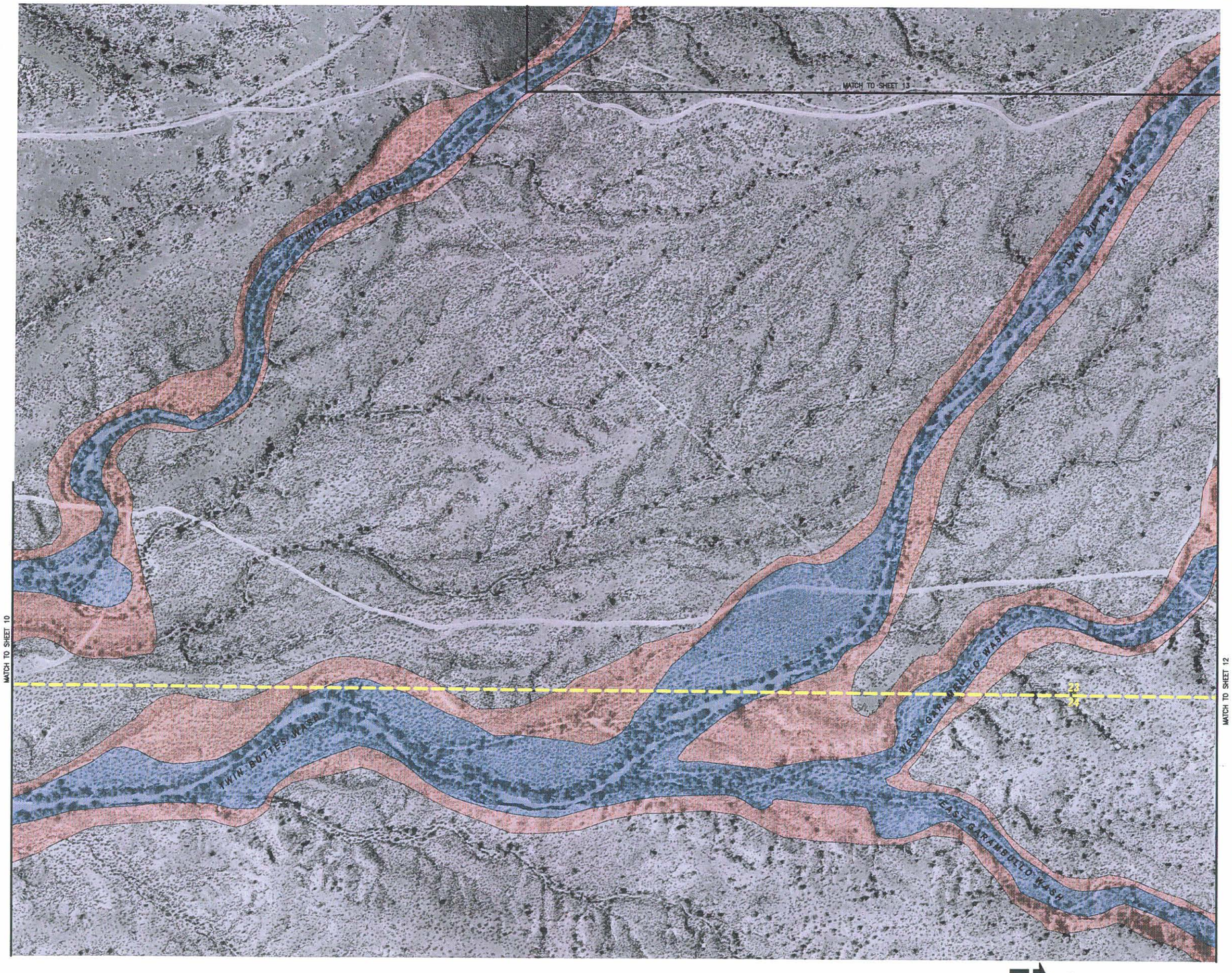
2001-12-21 08:44AM By: bfarnsworth



AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

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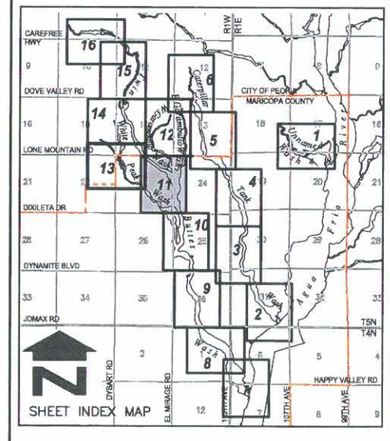

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

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8211 South 48th Street
Phoenix AZ 85044-5355 U.S.A.
Tel. 602.438.2200
Fax. 602.431.8562
www.stantec.com

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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

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2001-12-20 03:59PM By: bfarnsworth

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

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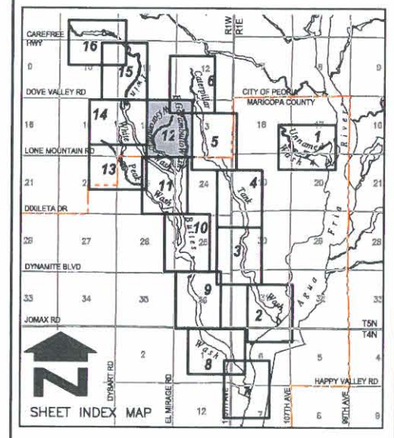

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

SHEET 12 OF 16

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

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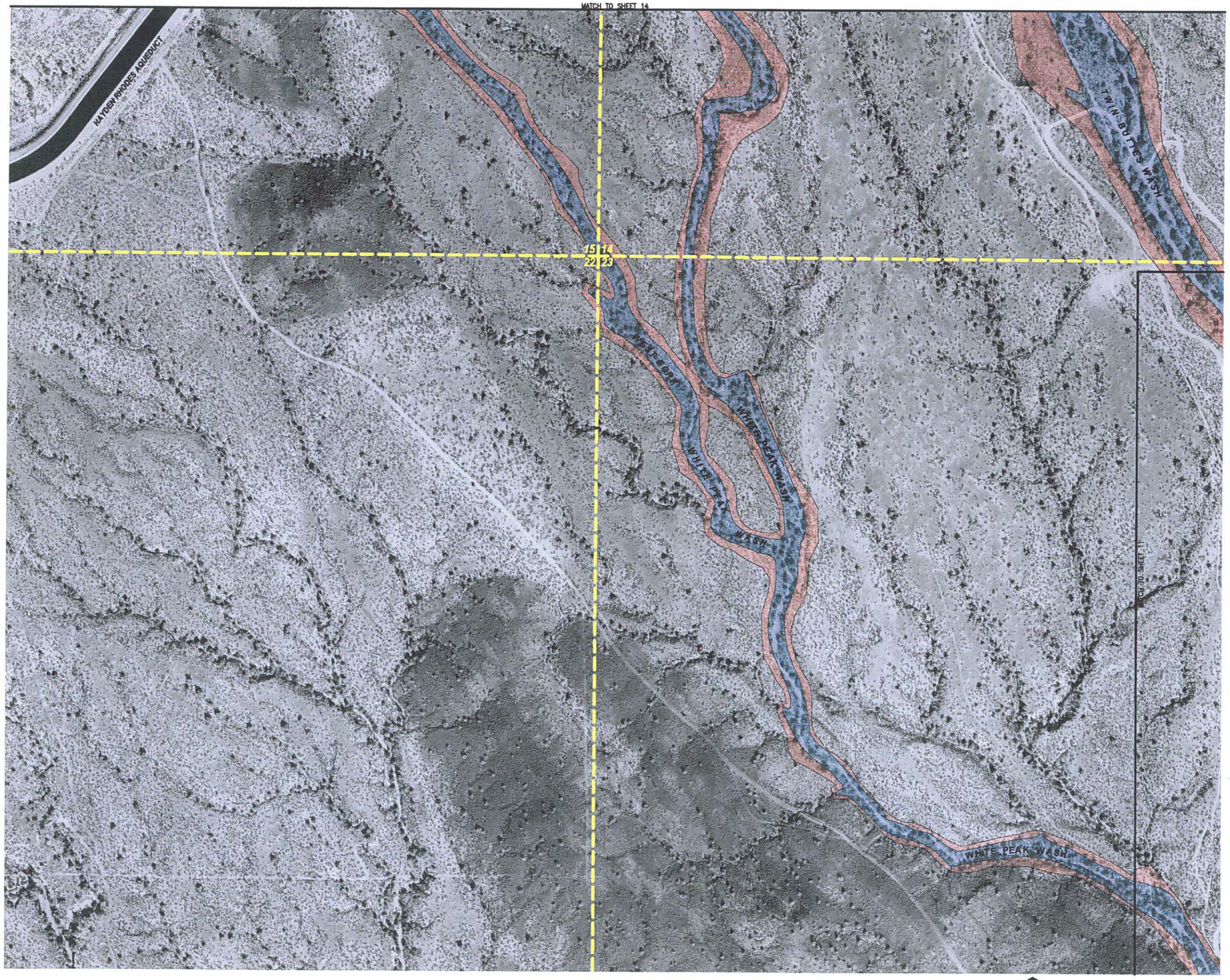

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

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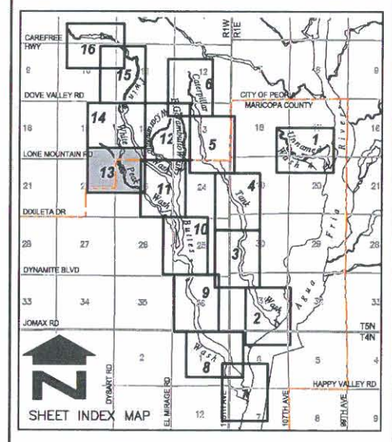

NO.	REVISION	BY	DATE
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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA AREA DRAINAGE MASTER PLAN FLOODPLAIN AND EROSION HAZARD MAP F.C.D. CONTRACT NO. 99-45

Stantec Consulting Inc.
8211 South 48th Street
Phoenix AZ 85044-5355 U.S.A.
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Fax. 602.431.9562
www.stantec.com

	BY	DATE
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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

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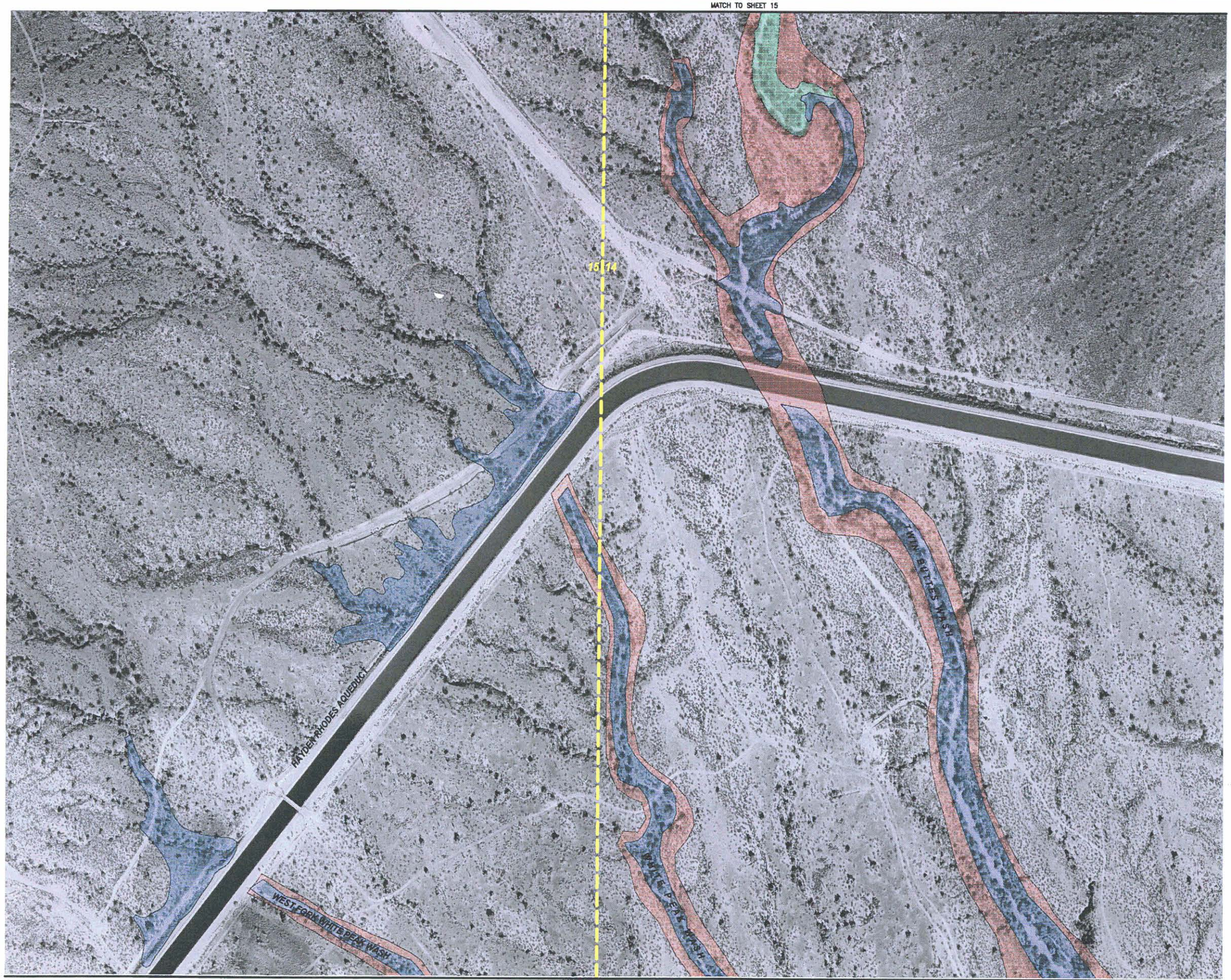
2001-12-20 02:33PM By: bfarnsworth

MATCH TO SHEET 15



MATCH TO SHEET 13

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

LEGEND

- EFFECTIVE FEMA 100-YR FLOODPLAIN BOUNDARY
- ZONE A 100-YR FLOODPLAIN BOUNDARY (NEW FEMA SUBMITTAL)
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

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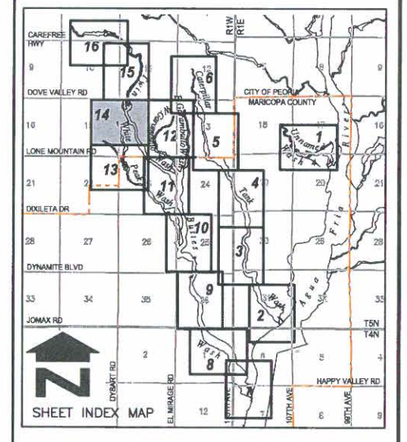

NO.	REVISION	BY	DATE
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FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
F.C.D. CONTRACT NO. 99-45

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	BY	DATE
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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

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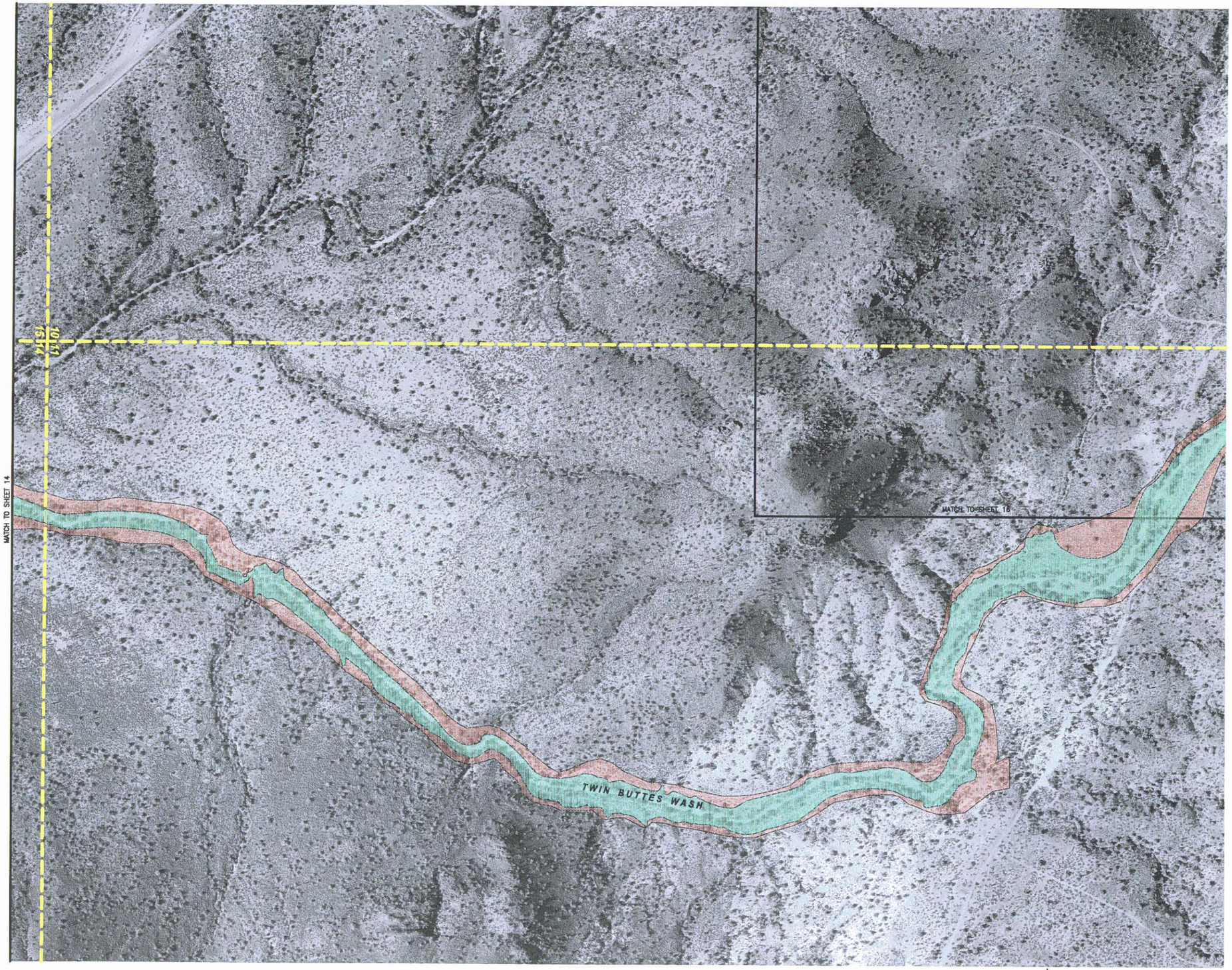

LEGEND

- ZONE A 100-YR FLOODPLAIN BOUNDARY (NEW FEMA SUBMITTAL)
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

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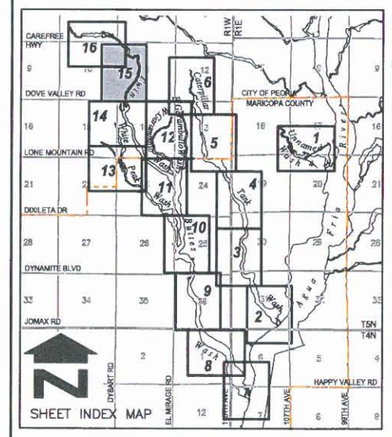

NO.	REVISION	BY	DATE
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FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
F.C.D. CONTRACT NO. 99-45

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PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.05.01

SHEET 15 OF 16

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

200' 0' 200' 400'

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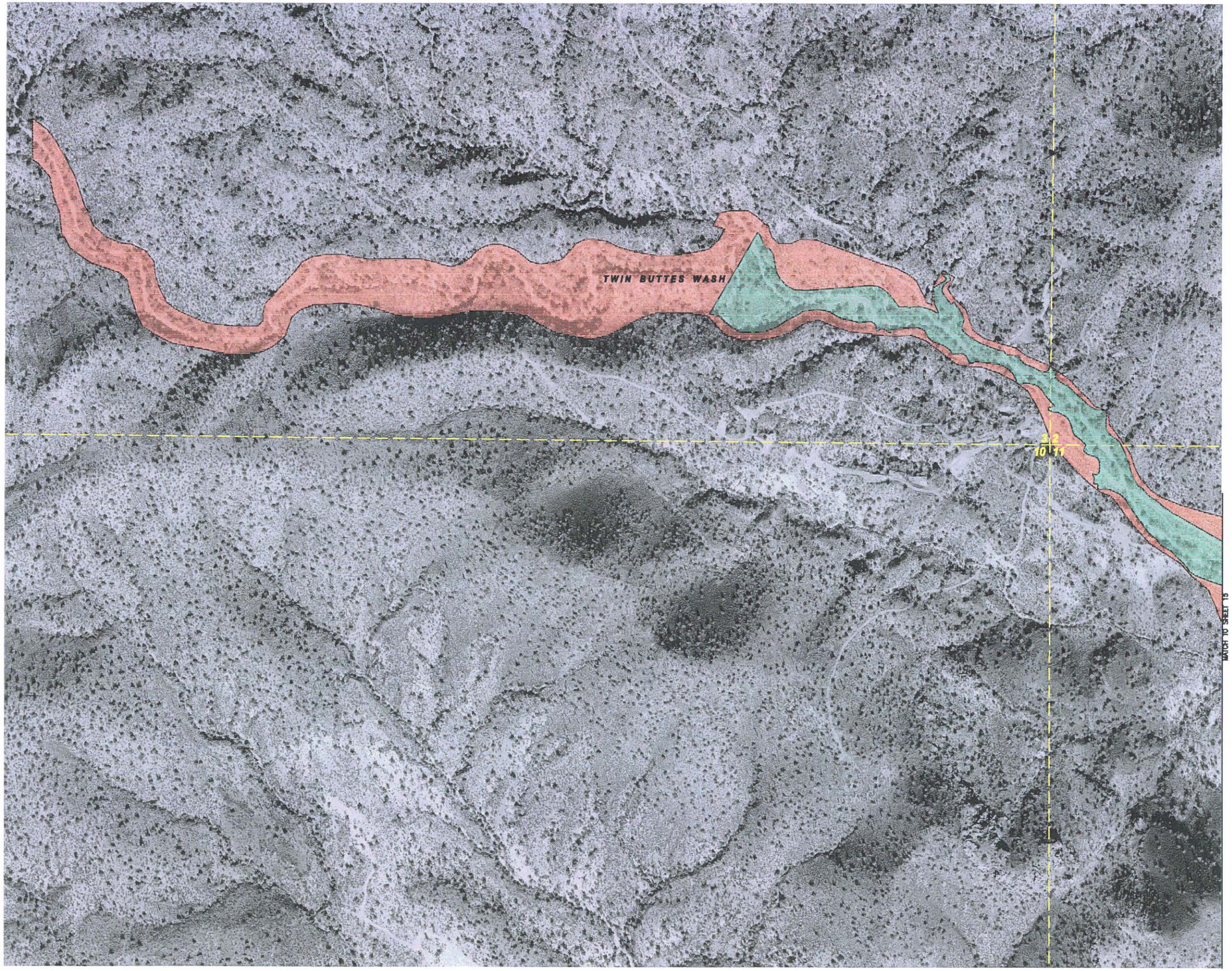

LEGEND

- ZONE A 100-YR FLOODPLAIN BOUNDARY (NEW FEMA SUBMITTAL)
- EROSION HAZARD ZONE
- CORPORATE LIMITS
- SECTION LINE

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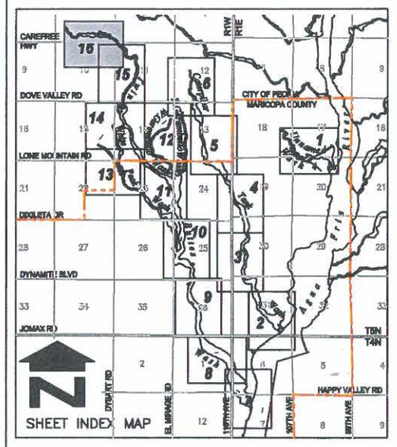

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FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
F.C.D. CONTRACT NO. 99-45

Stanley Consulting Inc.
8211 South 48th Street
Phoenix, AZ 85044-5305 U.S.A.
Tel. 602.438.2500
Fax. 602.431.9562
www.stanley.com

	BY	DATE
DESIGN	–	–
DESIGN CHK.	–	–
PLANS	HAR	05.18.01
PLANS CHK.	PJE	06.06.01

SHEET 16 OF 18

200' 0' 200' 400'

AERIAL PHOTOGRAPHY BASE PROVIDED BY FLOOD CONTROL DISTRICT OF MARICOPA COUNTY.
AERIAL PHOTOGRAPHY DATE: DECEMBER 2000

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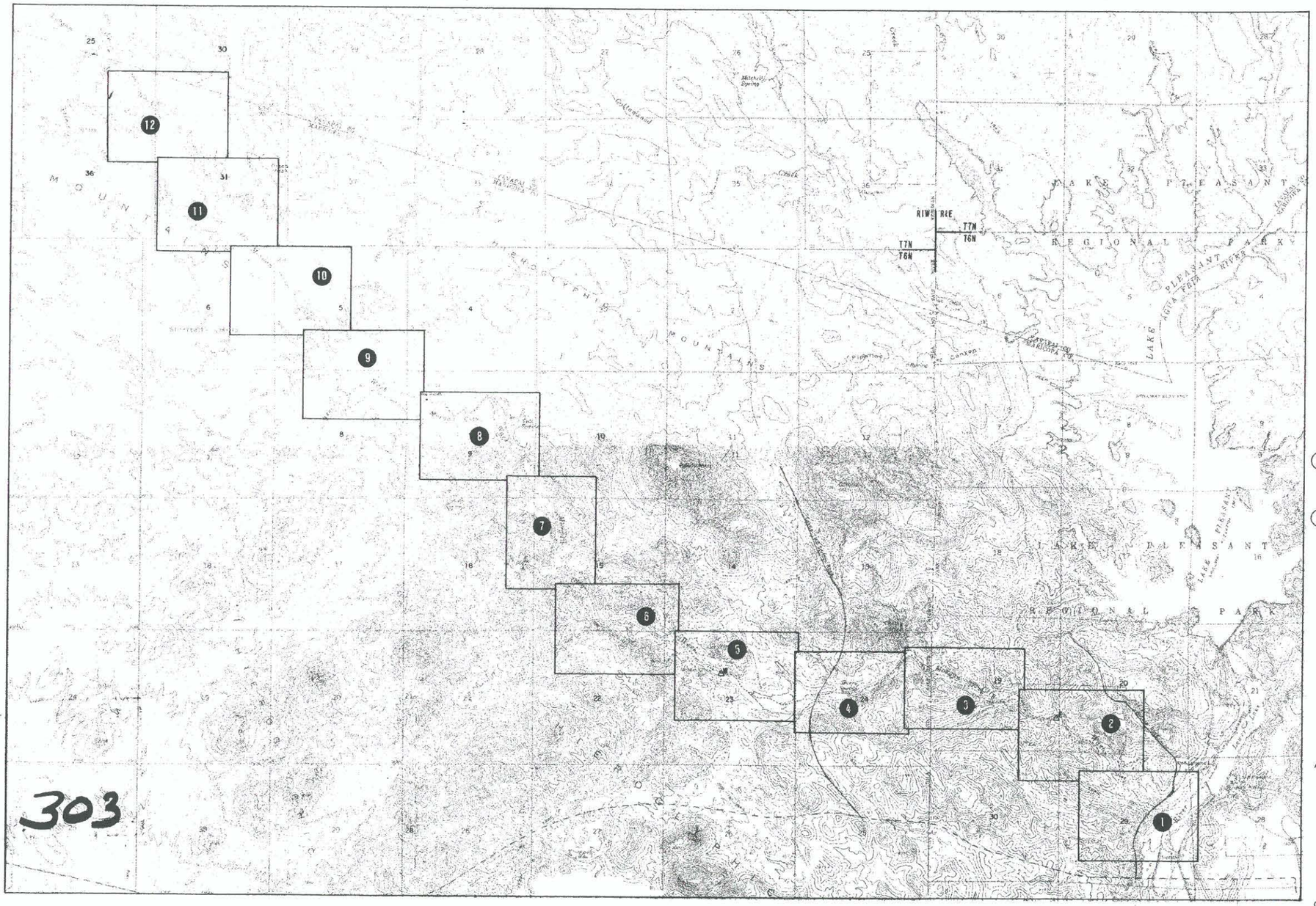
2001 November 21, 4:43 p.m.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

D.E. SAGRAMOSO, CHIEF ENGINEER AND GENERAL MANAGER

MORGAN CITY WASH FLOODPLAIN DELINEATION STUDY

AGUA FRIA RIVER TO RIVER MILE 12.02



100-YEAR FLOODPLAIN DELINEATION DISCHARGES

REACH			DISCHARGE (cfs)
Agua Fria River	to	River Mile 2.724	14,400
River Mile 2.724	to	River Mile 3.714	14,200
River Mile 3.714	to	River Mile 5.853	13,900
River Mile 5.853	to	River Mile 6.688	12.300
River Mile 6.688	to	River Mile 8.878	12,000
River Mile 8.878	to	River Mile 10.355	8,130
River Mile 10.355	to	River Mile 12.018*	4,820

* Upstream Limit of Study, Maricopa County Line.

NOTE: ELEVATION REFERENCE MARK (ERM) LOCATION

TO FIND ERM-20 & ERM-21, START AT THE INTERSECTION OF INTERSTATE 17 AND CAREFREE HIGHWAY, - "HIGHWAY 74" - AND PROCEED 6.40 MI. W. TO HIGHWAY 74 AND LAKE PLEASANT ROAD INTERSECTION, THENCE 3.75 MI. N. ON LAKE PLEASANT ROAD TO NEW WADDELL DAM ROAD, THENCE 2.25 MI. NO. ON NEW WADDELL DAM ROAD TO AN ACCESS DIRT ROAD ON SOUTHWEST SIDE OF NEW WADDELL DAM ROAD (AT 2.10 MI., WILL PASS OVERLOOK ROAD INTERSECTION) THENCE, 0.56 MI. SW. ON ACCESS DIRT ROAD DOWN THE MOUNTAIN TO THE INTERSECTION OF MORGAN CITY WASH, THIS POINT IDENTIFIED AS; MORGAN EAST, MAP SYMBOL ΔE

TO FIND ERM-12 THROUGH ERM-19, START AT THE INTERSECTION OF INTERSTATE 17 & CAREFREE HIGHWAY - "HIGHWAY 74" - AND PROCEED 6.40 MI. W. TO HIGHWAY 74 AND LAKE PLEASANT ROAD INTERSECTION, THENCE 7.30 MI. N. ON LAKE PLEASANT ROAD TO A COARSE ASPHALT ROAD, THENCE 1.21 MI. N. ON ASPHALT - DIRT ROAD TO MORGAN CITY WASH STREAMBED, THIS POINT IDENTIFIED AS; MORGAN WEST, MAP SYMBOL ΔW

(1) FLOODPLAIN WORKMAPS EDITED TO INCLUDE EROSION HAZARD BOUNDARIES PER FCD CONTRACT 99-45. EROSION HAZARD BOUNDARIES DELINEATED BY JE FULLER HYDROLOGY AND GEOMORPHOLOGY INC. (MARCH 2001)

(2) DISREGARD NOTE 2 ON SHEET 1. SEE AGUA FRIA RIVER FLOODPLAIN DELINEATION RE-STUDY FCD CONTRACT 99-6, FLOODPLAIN WORKMAPS SHEETS 44 AND 45.

EXHIBIT 3-3

NORTH PEORIA
AREA DRAINAGE MASTER PLAN
FLOODPLAIN AND EROSION HAZARD MAP
F.C.D. CONTRACT NO. 99-45

VICINITY MAP

Study Date : 1990

Mapping Dete : 1989

Aerial Mapping : McLain Harbers Co., Inc.

2000 0 2000 4000 6000 8000

Scale In Feet
1" = 2000'

one mile

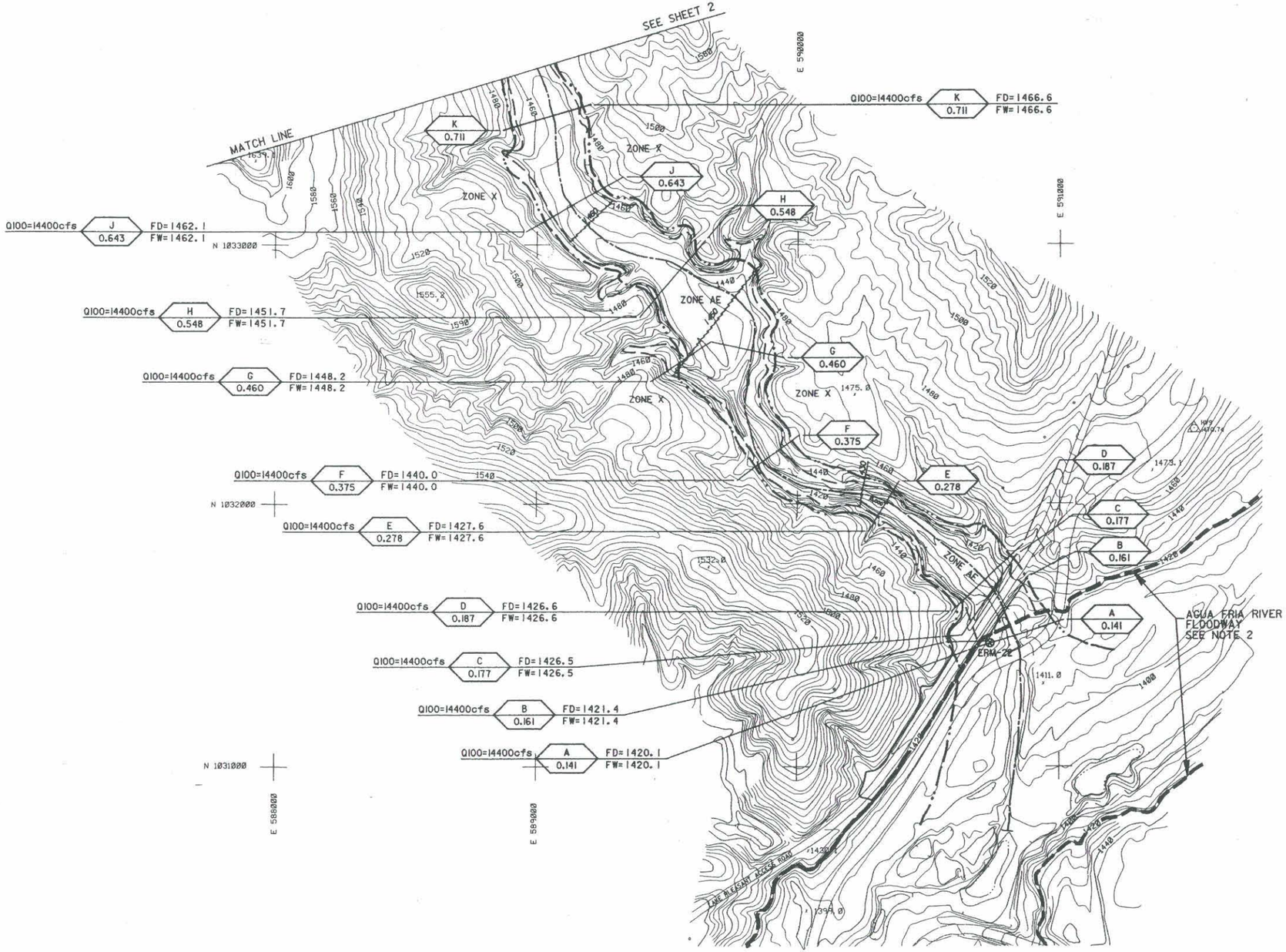
Baker Engineers 50 YEARS OF SERVICE

Michael Baker Jr., Inc.

MORGAN CITY WASH F.I.S./AGUA FRIA RIVER TO RIVER MILES 12.02

MICHAEL BAKER

STUDY 1990 FCD 89-15



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 — M5.0
- Cross Section — Q100=XXXcfs | A | LOT | FD = 100yr. WSE / FW = FLOODWAY WSE | A | LOT
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

ELEVATION REFERENCE MARKS

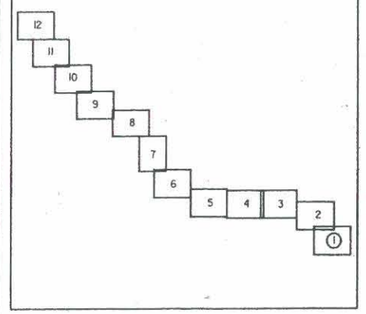
NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-22	1412.28	A 5/8" REBAR SET IN CONCRETE APPROX. 105FT. SOUTH OF CENTERLINE OF MORGAN CITY WASH, AND APPROX. 50FT EAST OF CENTERLINE OF NEW WADDELL DAM ROAD, AND AT THE SOUTHEAST CORNER OF NEW WADDELL DAM ROAD BRIDGE MARKED ERM°22

NOTES:

1. CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED
2. AGUA FRIA RIVER FLOODWAY PER FLOOD INSURANCE STUDY, MARICOPA COUNTY, ARIZONA AND UNINCORPORATED AREAS, FEDERAL EMERGENCY MANEGEMMENT AGENCY. EFFECTIVE DATE APRIL 15, 1988 PERFORMED BY : JERRY R. JONES ASSO. INC. UNDER JOB NO. 286-080,01

INDEX MAP



N

200 0 200 400
scale

CONTOUR INTERVAL = 4' FEET

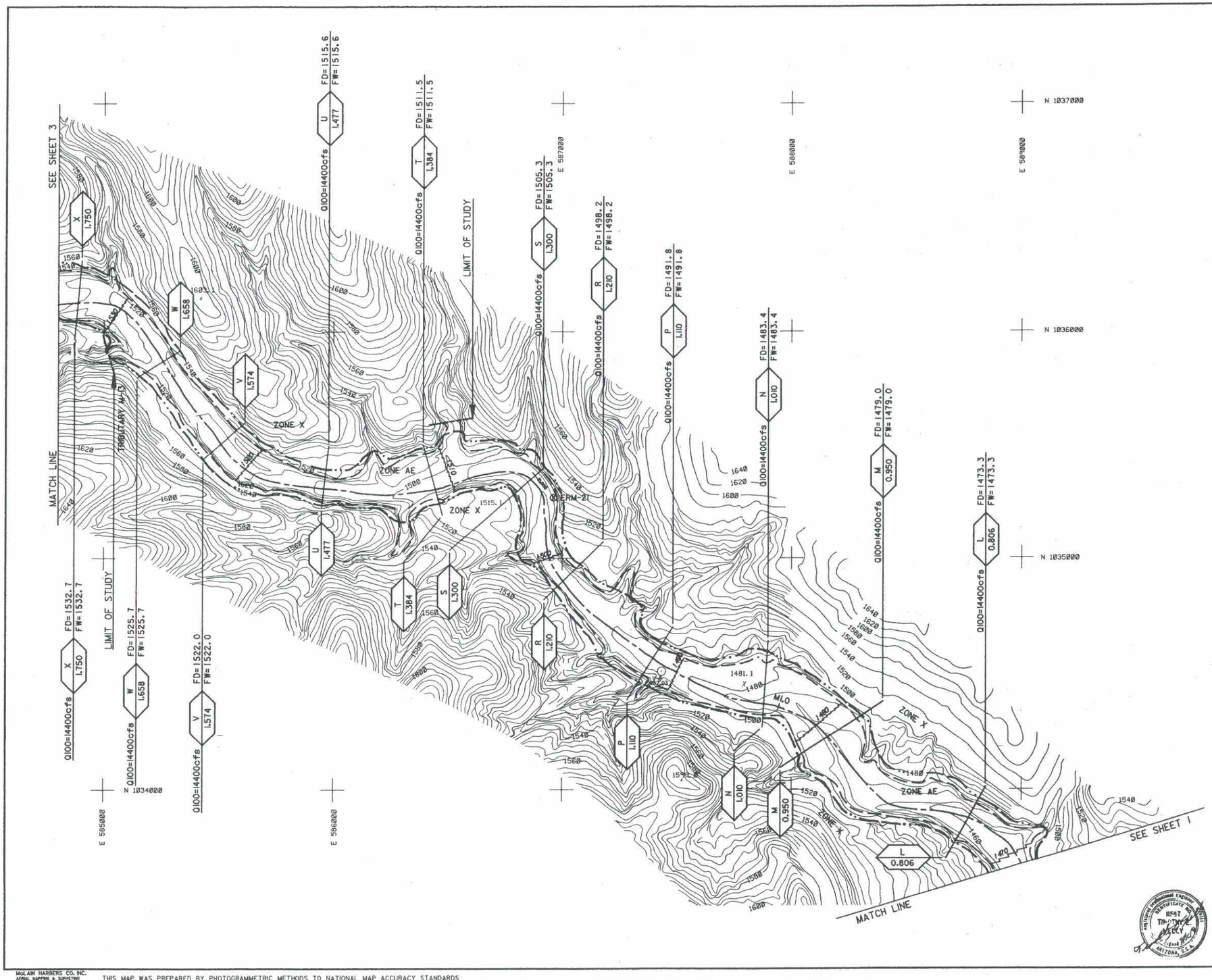
Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

	BY	DATE	SUBMITTED BY	DATE
Design	B.R. Jolly P.E.	8-16-90		
Design Chk.	T.E. Kelly P.E.	8-16-90	RECOMMENDED BY	DATE
Plans	S.S Obertello	8-16-90	APPROVED BY	DATE
Plans Chk.	B.R. Jolly P.E.	8-16-90	CHIEF ENGINEER AND GENERAL MANAGER	

SHEET 1 of 12

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
1655 E. 35th St. Suite 102
Tucson, Arizona 85713

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS.
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 — M5.0
- Cross Section — Q100=XXXcfs — B LOO — FD = 100yr. WSE — FW = FLOODWAY WSE — B LOO
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

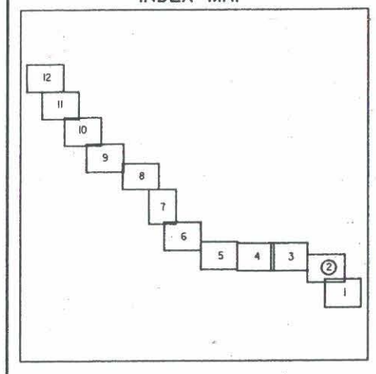
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-21	1497.435	BEGINING AT POINT#MORGAN EAST THENCE 0.08 MI. SE. IN MORGAN CITY WASH TO ERM#21 A 5/8" REBAR SET IN CONCRETE APPROX. 37 FT. NE. OF CENTERLINE OF MORGAN CITY WASH AT NORTHERN EDGE OF BEND IN WASH, AND AT TOE DIRT EMBANKMENT BY ROCK WALL MARKED - ERM#21

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



N

200 0 200 400
scale
CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

	BY	SUBMITTED BY	DATE
Design	B.R. Jolly P.E.		
Design Chk.	T.E. Kelly P.E.	RECOMMENDED BY	DATE
Plans	S.S Obertello	APPROVED BY	DATE
Plans Chk.	B.R. Jolly P.E.	CHIEF ENGINEER AND GENERAL MANAGER	

SHEET 2 OF 12

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
6845 E. 36th St. Suite 102
Tucson, Arizona 85710

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LIMIT OF DETAILED STUDY

MATCH LINE

SEE SHEET 4

LIMIT OF DETAILED STUDY

SEE SHEET 2

MATCH LINE

TRIBUTARY M-12

ZONE AE

ZONE X

ERM 20

E 581000

E 582000

E 583000

E 584000

N 1038000

N 1037000

N 1036000

AH 2.679 — FD=1607.7 FW=1607.7 — Q100=14200cfs

AH 2.679 — FD=1602.8 FW=1602.8 — Q100=14400cfs

AG 2.577 — FD=1593.4 FW=1593.5 — Q100=14400cfs

AF 2.476 — FD=1586.9 FW=1586.9 — Q100=14400cfs

AE 2.391 — FD=1579.3 FW=1579.3 — Q100=14400cfs

AD 2.287 — FD=1573.1 FW=1573.1 — Q100=14400cfs

AC 2.209 — FD=1567.9 FW=1567.9 — Q100=14400cfs

AB 2.114 — FD=1564.1 FW=1564.1 — Q100=14400cfs

AA 2.014 — FD=1557.3 FW=1557.3 — Q100=14400cfs

Z 1.926 — FD=1551.3 FW=1551.3 — Q100=14400cfs

Y 1.831 — FD=1542.0 FW=1542.0 — Q100=14400cfs

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 — M5.0
- Cross Section — 100=XXXcfs — A / 100 — FD = 100yr. WSE — FW = FLOODWAY WSE — A / 100
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-20	1590.715	BEGINING AT POINT; MORGAN EAST THENCE 1.44 MI. NW IN MORGAN CITY WASH TO ERM°20, A 5/8" REBAR SET IN CONCRETE APPROX 26 FT. NE. OF CENTERLINE OF NORTHERN FORK OF MORGAN CITY WASH, AND NEAR NE, JUNCTION OF CHALKY SPRING AT NORTH FORK OF MORGAN CITY WASH MARKED "ERM-20"

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP

12 11 10 9 8 7 6 5 4 3 2 1

N

200 0 200 400
scale

CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th. Street, Suite 220
Phoenix, Arizona 85016

	BY	DATE		DATE	SHEET
Design	B.R. Jolly P.E.	8-16-90	SUBMITTED BY		3
Design Chk.	T.E. Kelly P.E.	8-16-90	RECOMMENDED BY	DATE	
Plans	S.S Obertello	8-16-90	APPROVED BY	DATE	OF 12
Plans Chk.	B.R. Jolly P.E.	8-16-90	CHIEF ENGINEER AND GENERAL MANAGER		

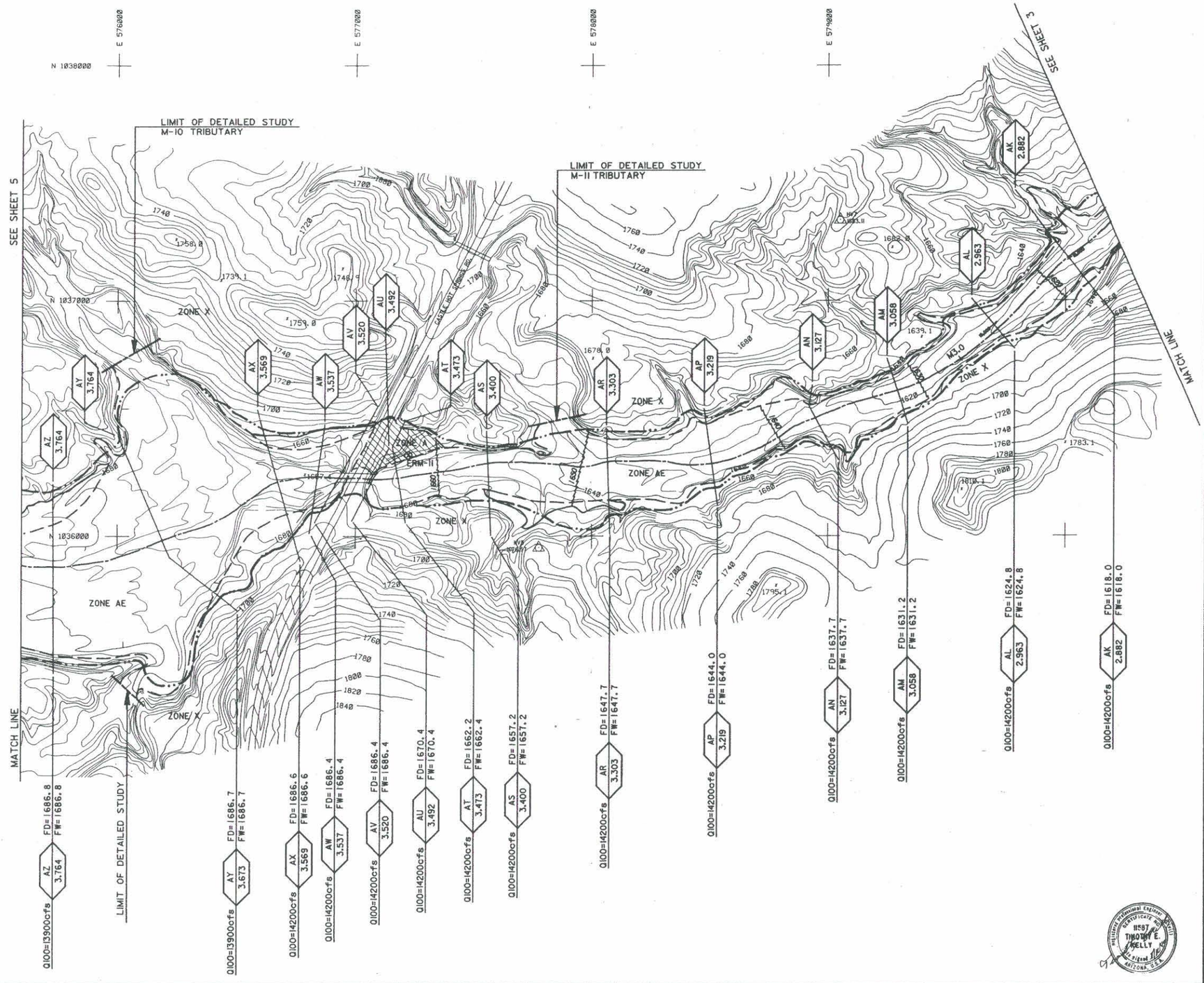
REGISTERED PROFESSIONAL ENGINEER — CERTIFICATE NO. 18587 — TIMOTHY E. KELLY — STATE OF ARIZONA — U.S.A.

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
1465 E. 18th St. Suite 102
Tucson, Arizona 85719

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH



LEGEND

Erosion Hazard Boundary	
100-Yr. Floodplain Boundary	
Floodway Boundary	
Hydraulic Base Line With River Mile	M4.0 M5.0
Cross Section	Q100=XXXcfs (B LOO) FD = 100yr. WSE FW = FLOODWAY WSE (B LOO)
Elevation Reference Marks	ERM-4
Base Flood Elevations	2180
Zone Designations	ZONE AE

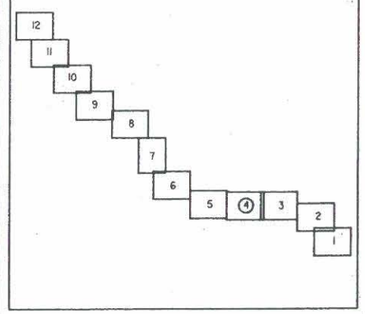
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-11	1662.677	FROM THE INTERSECTION OF LAKE PLEASANT ROAD AND CASTLE HOT SPRINGS ROAD THENCE 1.23 MI. SOUTH ON CASTLE HOT SPRINGS ROAD TO ERM=11, A U.S. B.R. BC AT CENTERLINE STATION CASTLE HOT SPRINGS ROAD 71+20.09 AT 150 FT. RIGHT (EAST) AT 4FT. BARBED WIRE FENCE CORNER RUNNING NORTHERLY AND SOUTHERLY MARKED ERM=11

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



N

200 0 200 400
scale

CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

	BY	SUBMITTED BY	DATE
Design	B.R. Jolly P.E.		8-16-00
Design Chk.	T.E. Kelly P.E.	RECOMMENDED BY	DATE
Plans	S.S Oberfelo	APPROVED BY	DATE
Plans Chk.	B.R. Jolly P.E.	CHIEF ENGINEER AND GENERAL MANAGER	

SHEET 4 OF 12

McLAIN HARBERS CO, INC.
AERIAL MAPPING & SURVEYING
1665 E. 18th. ST. Suite 102
Tucson, Arizona 85719

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 M5.0
- Cross Section — Q=100=XXXXcfs; B, LOO; FD = 100yr. WSE; FW = FLOODWAY WSE; B, LOO
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

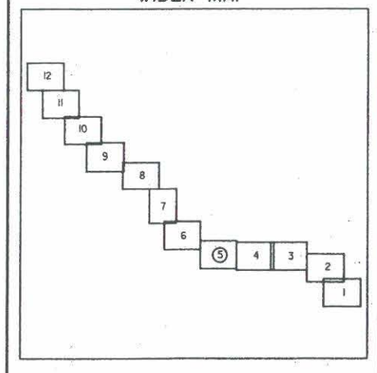
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-12	1732.120	BEGIN AT POINT ; MORGAN WEST, THENCE 0.05 MI. NW IN MORGAN CITY WASH TO ERM#12, A 5/8" REBAR SET IN CONCRETE APPROX. 111 FT. SW OF CENTERLINE OF MORGAN CITY WASH AND 88 FT. SE FROM ABANDONED (WELL) AND 1.5 FT. SE OF SE FACE OF ABANDONED CONCRETE WATER TROUGH ; MARKED ERM#12

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



N

200 0 200 400
scale

CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

	BY	DATE	SUBMITTED BY	DATE
Design	B.R. Jolly P.E.	8-16-10		
Design Chk.	T.E. Kelly P.E.	8-16-10	RECOMMENDED BY	DATE
Plans	S.S Obertello	8-16-10	APPROVED BY	DATE
Plans Chk.	B.R. Jolly P.E.	8-16-10	CHIEF ENGINEER AND GENERAL MANAGER	

SHEET 5 OF 12

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
1063 E. 8th St. Suite 102
Tucson,Arizona 85719

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile (M4.0 — M5.0)
- Cross Section (Q_{100}=XXXcfs; FD = 100yr. WSE; FW = FLOODWAY WSE)
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

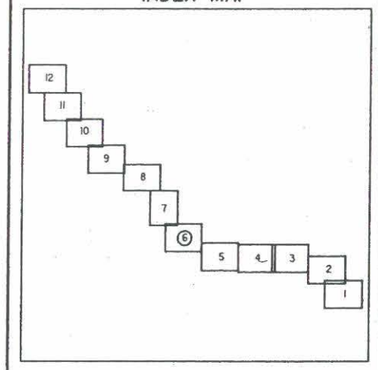
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-13	1806.195	BEGINING AT POINT; MORGAN WEST, THENCE L05 MI. N.W. IN MORGAN CITY WASH TO ERM-13, A 5/8" REBAR SET IN CONCRETE; APPROX. 29' N.E. OF CENTERLINE OF MORGAN CITY WASH IN AN ALLUVIAL DEPOSIT. MARKED ERM-13

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



N

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scale

CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

	BY	DATE	SUBMITTED BY	DATE
Design	B.R. Jolly P.E.	8-16-10		
Design Chk.	T.E. Kelly P.E.	8/16/10	RECOMMENDED BY	DATE
Plans	S.S Obertello	8-16-10		
Plans Chk.	B.R. Jolly P.E.	8-16-10	APPROVED BY	DATE
			CHIEF ENGINEER AND GENERAL MANAGER	

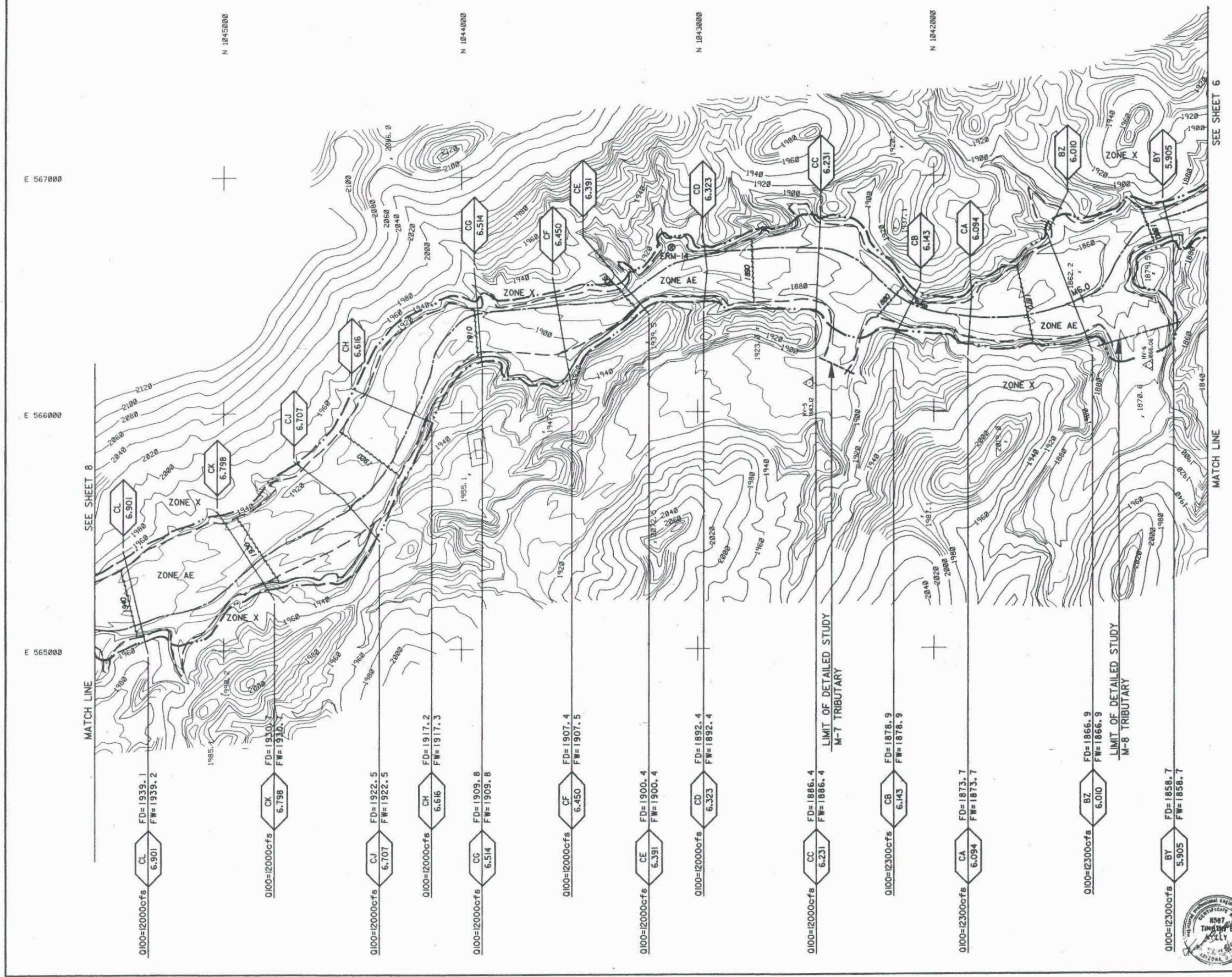
SHEET 6 OF 12

McLAIN HARBERS CO, INC.
AERIAL MAPPING & SURVEYING
1645 E. 18th St. Suite 102
Tucson, Arizona 85719

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH



LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 M5.0
- Cross Section — Q 100=XXXcfs; FD = 100yr. WSE; FW = FLOODWAY WSE; LOC
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

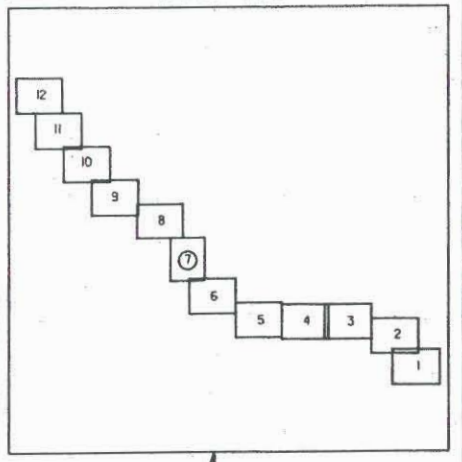
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-14	1891.945	BEGINING AT POINT; MORGAN WEST, THENCE 2.10 MI. N.W. IN MORGAN CITY WASH TO ERM-14, A 3/8" REBAR SET IN CONCRETE; APPROX. 73' N.E. OF CENTERLINE OF MORGAN CITY WASH AND APPROX. 20' SOUTH OF EDGE OF ROCK WALL MARKED "ERM-14"

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

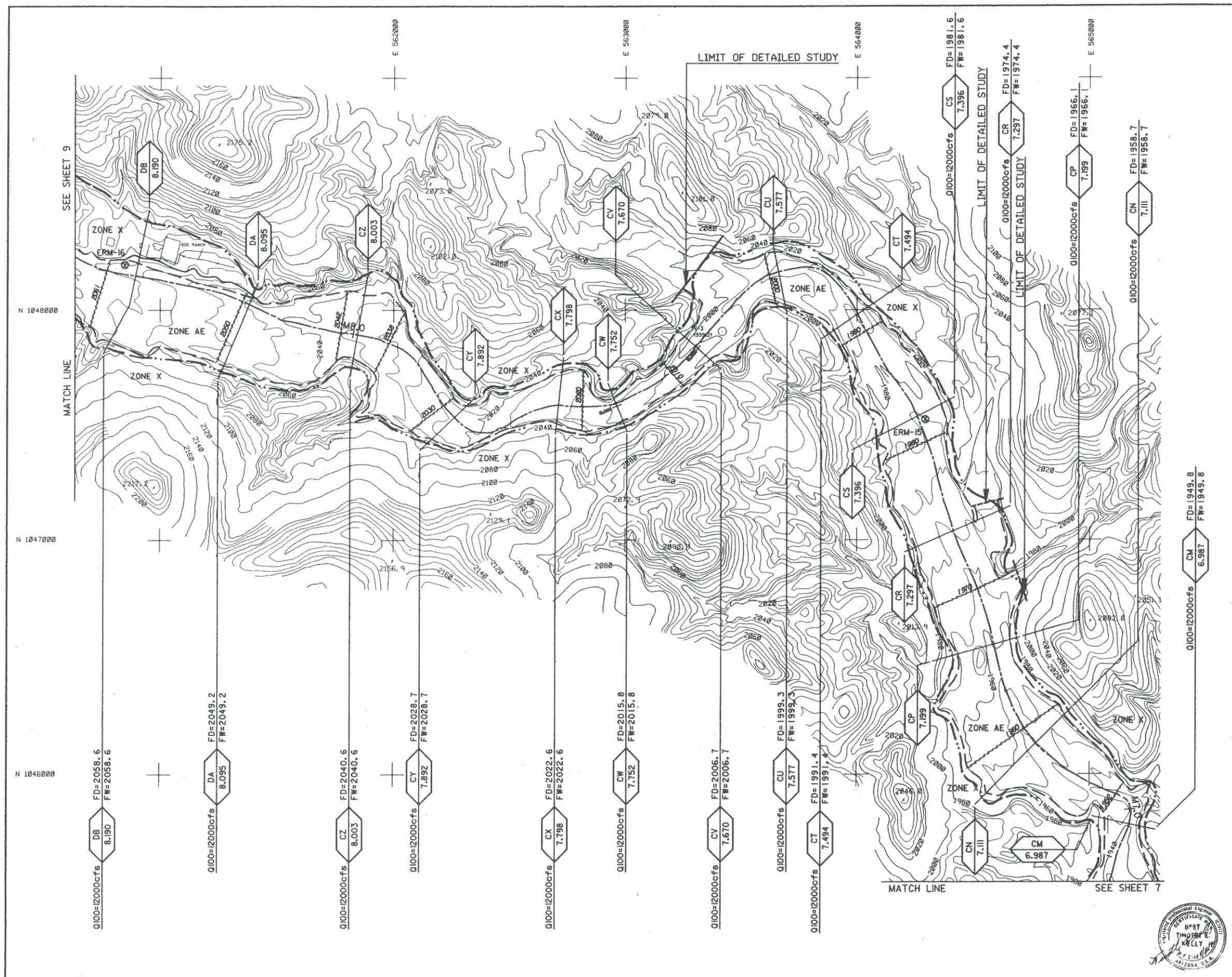
	BY	DATE		
Design	B.R. Jolly P.E.	8-16-30	SUBMITTED BY	DATE
Design Chk.	T.E. Kelly P.E.	8-16-30	RECOMMENDED BY	DATE
Plans	S.S Obertello	8-16-30	APPROVED BY	DATE
Plans Chk.	B.R. Jolly P.E.	8-16-30	CHIEF ENGINEER AND GENERAL MANAGER	

SHEET 7 OF 12

#1587 TIMOTHY E. KELLY — REGISTERED PROFESSIONAL ENGINEER — ARIZONA, U.S.A.

McLAIN HARBERS CO, INC:
AERIAL MAPPING & SURVEYING
1665 E. 18th ST. Suite 102
Tucson, Arizona 85719

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 M5.0
- Cross Section — Q100=XXXcfs; FD = 100yr. WSE / FW = FLOODWAY WSE; B LOC
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

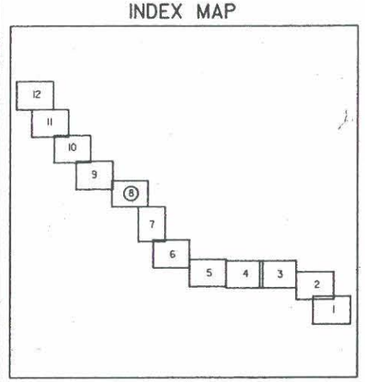
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-15	1976.50	BEGINING AT POINT; MORGAN WEST, THENCE 3.15 MI. N.W. IN MORGAN CITY WASH TO ERM-15, A ¾" REBAR SET IN CONCRETE APPROX. 28' N.E. OF CENTERLINE OF MORGAN CITY WASH, AND APPROX. 0.15 MI. N.W. OF TULE SPRING IN MORGAN CITY WASH, MARKED "ERM-15"
ERM-16	2055..85	BEGINING AT POINT MORGAN WEST, THENCE 4.00 MI. N.W. IN MORGAN CITY WASH TO ERM-16, A ¾" REBAR SET IN CONCRETE, APPROX. 40' N.E. OF CENTERLINE OF MORGAN CITY WASH, AND APPROX. 6' SOUTH OF SOUTH FACE OF CONCRETE WELL PAD,AND APPROX. 26' S.E. OF EAST SIDE DRIVEWAY ENTRANCE TO BOG RANCH PROPERTY, MARKED "ERM-16"

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



N

200 0 200 400
scale

CONTOUR INTERVAL = 4' FEET

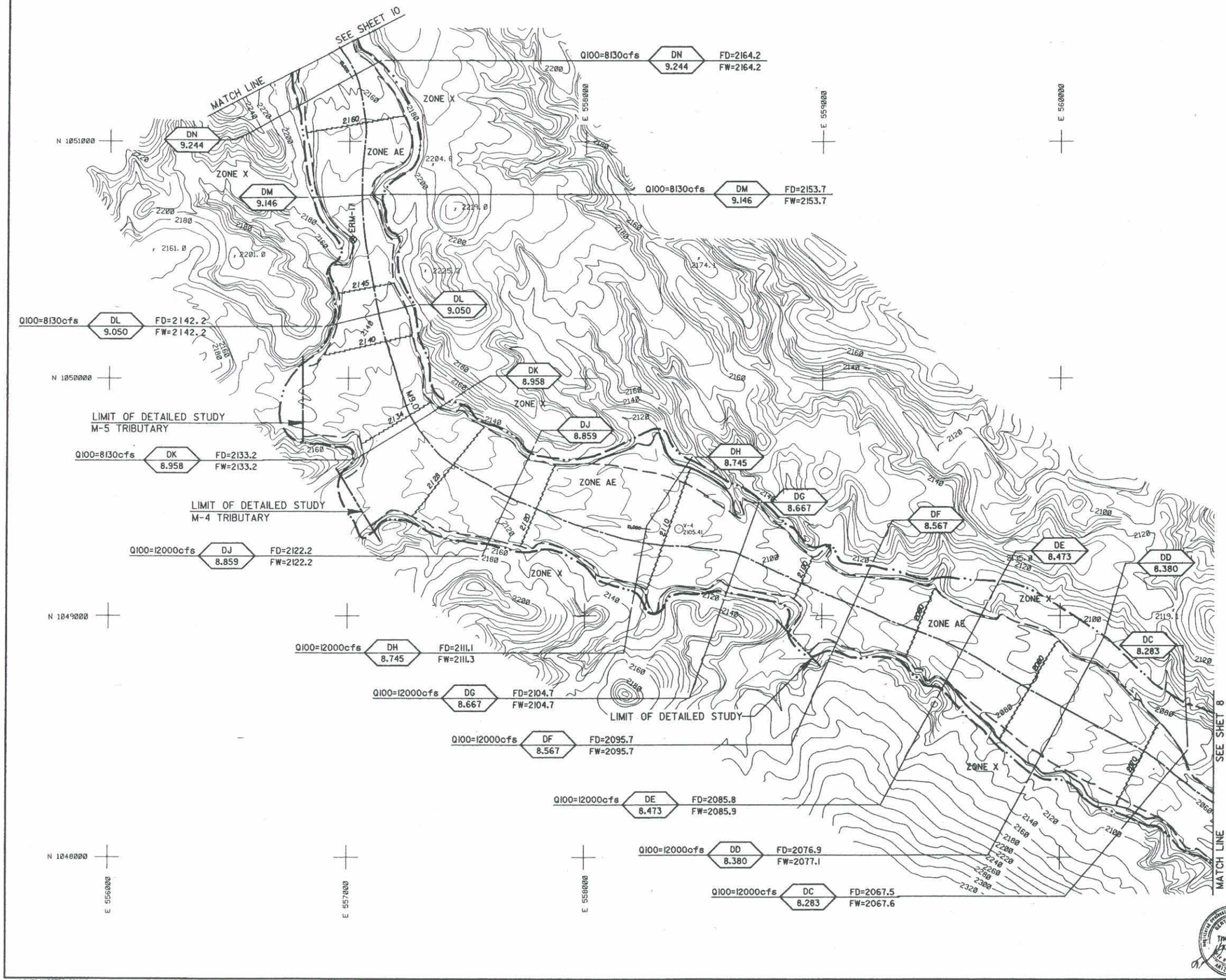
Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

	BY	DATE		
Design	B.R. Jolly P.E.	8-16-96	SUBMITTED BY	DATE
Design Chk.	T.E. Kelly P.E.	8-16-96	RECOMMENDED BY	DATE
Plans	S.S Obertello	8-16-96	APPROVED BY	DATE
Plans Chk.	B.R. Jolly P.E.	8-16-96	CHIEF ENGINEER AND GENERAL MANAGER	

SHEET 8 OF 12

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
4665 E. 48th St. Suite 402
Tucson, Arizona 85719

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 M5.0
- Cross Section — Q100=XXXcfs (B LOO) FD = 100yr. WSE / FW = FLOODWAY WSE (B LOO)
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

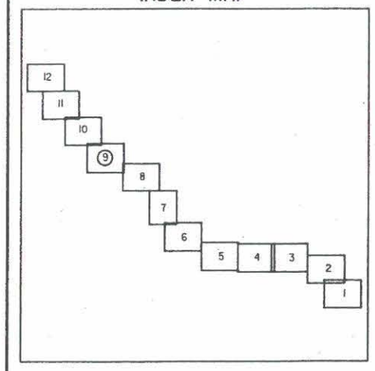
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-17	2155.02	BEGINNG AT POINT MORGAN WEST THENCE 5.04 MI. NW IN MORGAN CITY WASH TO ERM•17, A 5/8" REBAR SET IN CONCRETE APPROX. 48 FT. SOUTHWEST OF CENTERLINE OF MORGAN CITY WASH, MARKED ERM•17

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



200 0 200 400
scale
CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

	BY	SUBMITTED BY	DATE	SHEET
Design	B.R. Jolly P.E.			9
Design Chk.	T.E. Kelly P.E.	RECOMMENDED BY	DATE	
Plans	S.S Obertello	8-16-96		
Plans Chk.	B.R. Jolly P.E.	APPROVED BY	DATE	OF 12
		CHIEF ENGINEER AND GENERAL MANAGER		

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
1668 E. 18th St. Suite 102
Tucson, Arizona 85719

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 M5.0
- Cross Section — Q100=XXXcfs; A 100 FD = 100yr. WSE; FW = FLOODWAY WSE; A 100
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

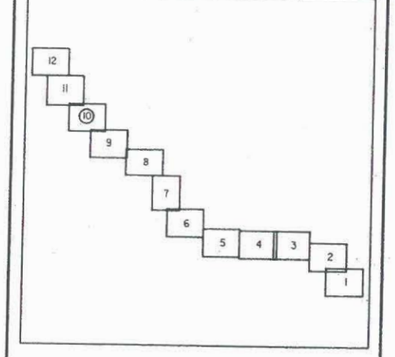
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-18	2268.18	BEGIN AT POINT MORGAN WEST, THENCE 6.05 MI. NW IN MORGAN CITY WASH TO ERM#18, A 5/8" REBAR SET IN CONCRETE APPROX. 56 FT. SOUTHWEST OF CENTERLINE OF MORGAN CITY WASH, AND APPROX. 0.10 MI. NW OF 4 FT. BARBED WIRE FENCE GATE IN MORGAN CITY WASH MARKER ERM#18

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



N

200 0 200 400
scale

CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th. Street, Suite 220
Phoenix, Arizona 85016

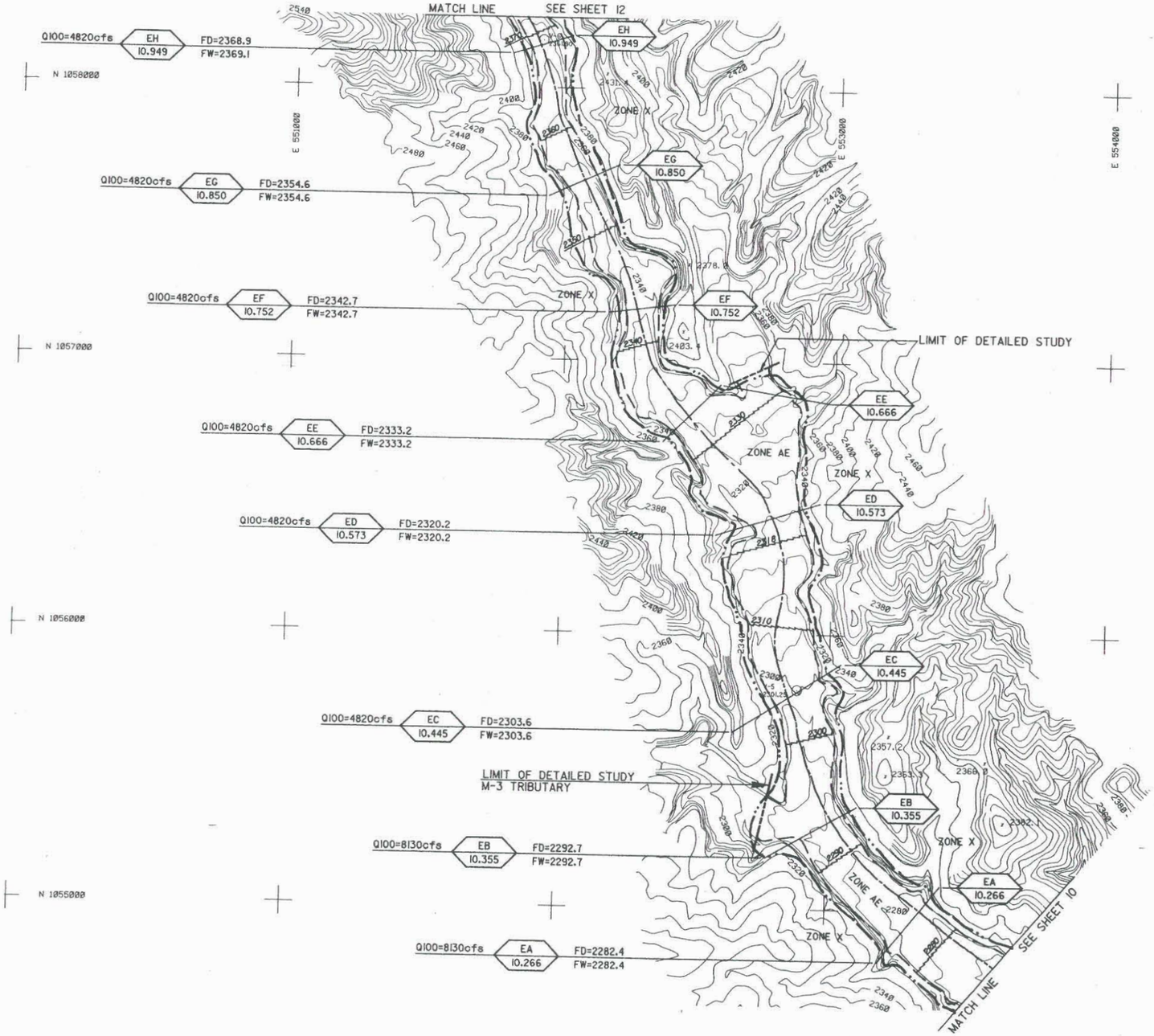
	BY	SUBMITTED BY	DATE
Design	B.R. Jolly P.E.		
Design Chk.	T.E. Kelly P.E.	RECOMMENDED BY	DATE
Plans	S.S Obertello	APPROVED BY	DATE
Plans Chk.	B.R. Jolly P.E.	CHIEF ENGINEER AND GENERAL MANAGER	

SHEET 10 of 12

REGISTERED PROFESSIONAL ENGINEER — CERTIFICATE NO. 11587 — TIMOTHY E. KELLY — ARIZONA, U.S.A.

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
6565 E. 18th St. Suite 102
Tucson, Arizona 85715

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS.
1" = 200' HORIZONTAL SCALE AND 4' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY DATA PROVIDED BY BAKER ENG.



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH

LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 M5.0
- Cross Section — Q 100=XXXcfs; B 1.00; FD = 100yr. WSE; FW = FLOODWAY WSE; B 1.00
- Elevation Reference Marks — ERM-4
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

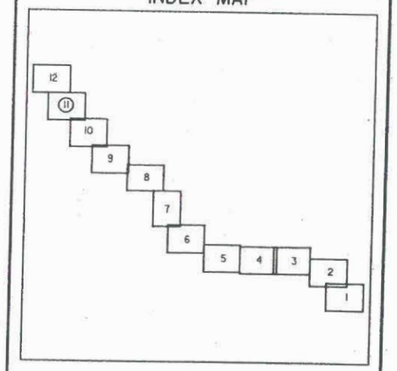
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
NONE		

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



200 0 200 400
scale
CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th. Street, Suite 220
Phoenix, Arizona 85016

	BY	DATE	SUBMITTED BY	DATE
Design	B.R. Jolly P.E.	8-16-94		
Design Chk.	T.E. Kelly P.E.	8/16/94	RECOMMENDED BY	DATE
Plans	S.S Obertello	8-16-94	APPROVED BY	DATE
Plans Chk.	B.R. Jolly P.E.	8-16-94	CHIEF ENGINEER AND GENERAL MANAGER	

SHEET 11 OF 12

11587 TIMOTHY E. KELLY — Registered Professional Engineer — Certificate — Arizona, U.S.A.

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
845 E. 8th St. Suite 102
Tucson, Arizona 85719

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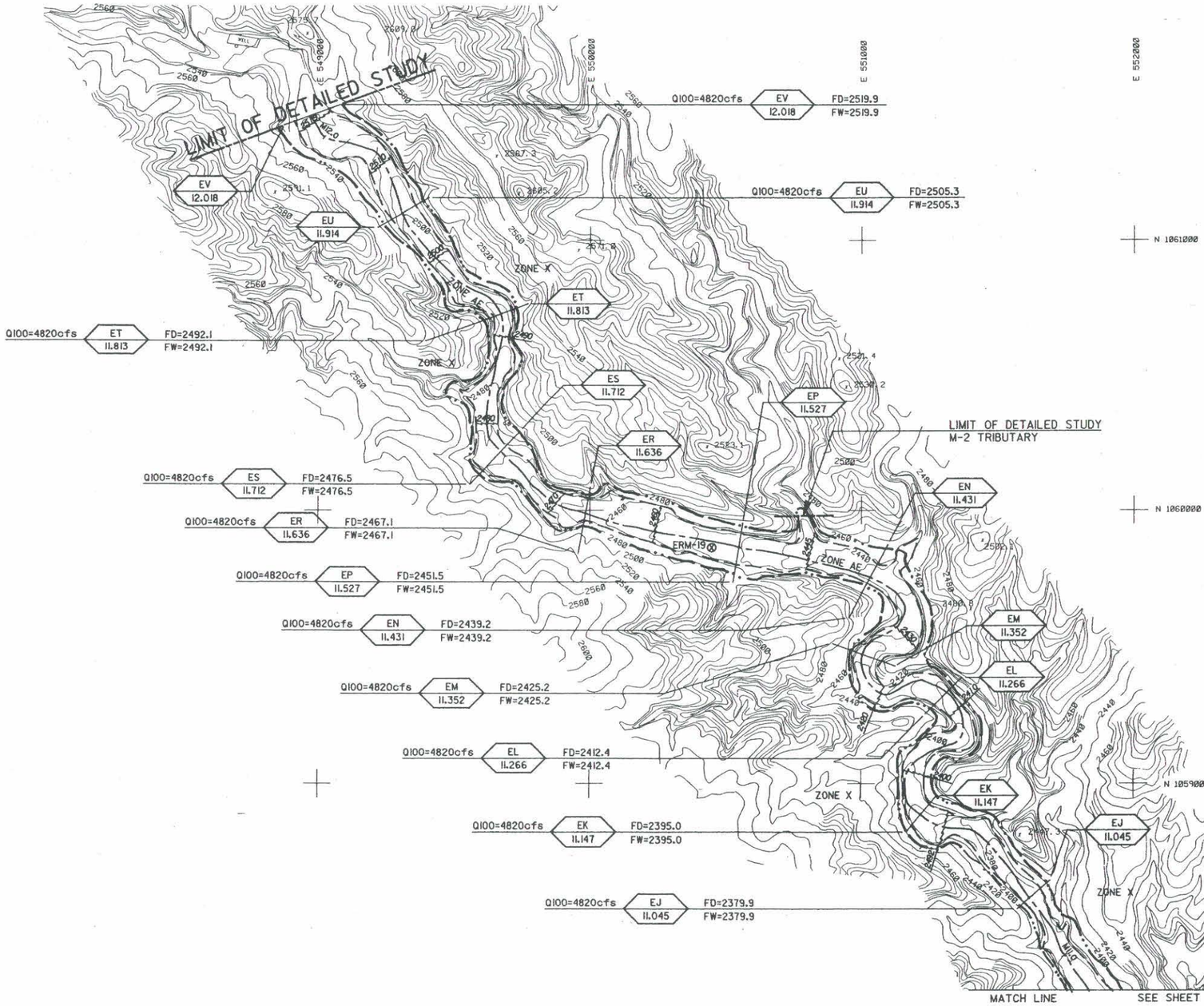
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF MORGAN CITY WASH



LEGEND

- Erosion Hazard Boundary
- 100-Yr. Floodplain Boundary
- Floodway Boundary
- Hydraulic Base Line With River Mile — M4.0 M5.0
- Cross Section — Q100-XXXcfs (B/100) FD = 100yr. WSE FW = FLOODWAY WSE (B/100)
- Elevation Reference Marks — ERM-4 ⊗
- Base Flood Elevations — 2180
- Zone Designations — ZONE AE

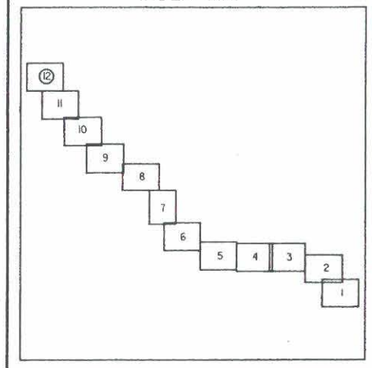
ELEVATION REFERENCE MARKS

NOTE: All Elevation Are Based On National Geodetic Vertical Datum Of 1927

I.D. NUMBER	ELEVATION (FT.)	DESCRIPTION/LOCATION
ERM-19	2450.86	BEGIN AT POINT MORGAN WEST THENCE 7.75 MI. NW IN MORGAN CITY WASH TO ERM*19, A ½" REBAR SET IN CONCRETE (AT 6.25 MI., BEAR TO THE RIGHT WHERE MORGAN CITY WASH STREAMBED FORKS IN TWO DIRECTIONS) APPROX. 24 FT. SOUTHWEST OF CENTERLINE OF MORGAN CITY WASH, AND APPROX. 0.60 MI. SOUTHWEST OF WELL IN NORTHERN REGION OF MORGAN CITY WASH, MARKED ERM*19

NOTE:
CROSS SECTION STATION 10,000.0 IS HYDRAULIC BASE LINE EXCEPT AS NOTED

INDEX MAP



N

200 0 200 400
scale

CONTOUR INTERVAL = 4' FEET

Michael Baker, Jr., Inc.
4105 North 20th Street, Suite 220
Phoenix, Arizona 85016

	BY	DATE	SUBMITTED BY	DATE	SHEET
Design	B.R. Jolly P.E.	8-16-90			12
Design Chk.	T.E. Kelly P.E.	8/16/90	RECOMMENDED BY	DATE	
Plans	S.S Obertello	8-16-90	APPROVED BY	DATE	
Plans Chk.	B.R. Jolly P.E.	8-16-90	CHIEF ENGINEER AND GENERAL MANAGER		of 12

McLAIN HARBERS CO. INC.
AERIAL MAPPING & SURVEYING
645 E. 18th St. Suite 102
Tucson, Arizona 85719

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NORTH PEORIA AREA DRAINAGE MASTER PLAN

Stantec

Stantec Consulting
Southwest Regional Headquarters
8211 South 48th Street
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other offices located throughout North America

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Attachment 3- Sedimentation Engineering
Book 2