TECHNICAL DATA NOTEBOOK

Volume III of III
Maps

CAREFREE DRAINAGE MASTER PLAN FLOODPLAIN DELINEATION STUDY

Carefree, Arizona

Prepared for
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, AZ 85009

CONTRACT NO: FCD 2000C037

in Cooperation with
Town of Carefree
100 Easy Street
Carefree, AZ 85377

Prepared by
CH2MHILL
2625 South Plaza Drive, Suite 300
Tempe, Arizona 85282-3397

September 2003

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2801 W. Durango
Phoenix, AZ 85009

Final Report

Volume III of III
Carefree Drainage Master Plan Floodplain Delineation Study Technical Data Notebook

Maps

Prepared for

Flood Control District of Maricopa County

2801 West Durango Street
Phoenix, AZ 85009

In Cooperation with

The Town of Carefree

Registered Professional Engineer (Civil)
CERTIFICATE NO.
24971
TONY A.
BOKICH
Date Signed 5-11-04
ARIZONA, U.S.A.

May 2004

Prepared in partnership with
JE Fuller Hydrology and Geomorphology
HDR, Inc.
Logan Simpson Design

CH2MHILL
2625 South Plaza Drive
Suite 300
Tempe, AZ 85282-3375
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Final Report

Volume III of III
Carefree Drainage Master Plan Floodplain Delineation Study Technical Data Notebook

Maps

Submitted to

Flood Control District of Maricopa County

May 2004

Registered Professional Engineer (Civil)
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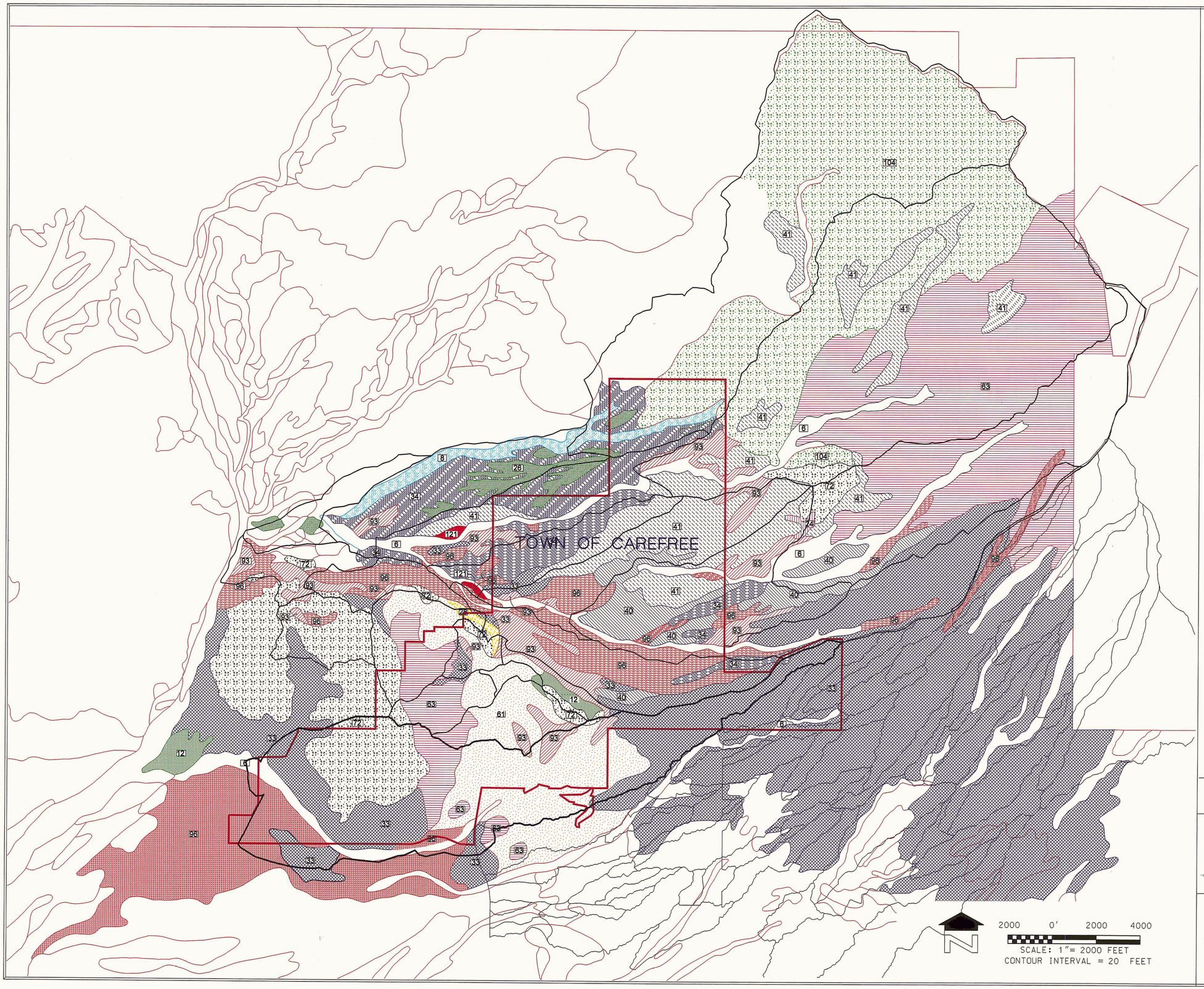
CH2MHILL



LEGEND

- STUDY AREA AND TOWN BOUNDARIES
- 6 SANDY LOAM - VERY GRAVELLY SANDY LOAM
- 8 VERY COBBLY SANDY LOAM
- 12 CLAY
- 26 CLAY
- 28 CLAY
- 33 VERY GRAVELLY LOAM
- 34 VERY GRAVELLY LOAM
- 40 VERY GRAVELLY LOAM - GRAVELLY CLAY LOAM
- 41 VERY GRAVELLY LOAM - GRAVELLY CLAY LOAM
- 61 EXT. GRAVELLY SANDY - GRAVELLY SANDY LOAM
- 63 EXT. GRAVELLY SANDY CLAY - GRAVELLY SANDY LOAM - ROCK OUTCROP
- 72 CLAY LOAM - ROCK OUTCROP
- 93 GRAVELLY LOAM - LOAM
- 96 GRAVELLY CLAY LOAM - CLAY LOAM
- 104 ROCK OUTCROP - GRAVELLY CLAY LOAM
- 121 CLAY LOAM - SANDY LOAM

NOTES

TAKEN FROM DIGITAL INFORMATION SUPPLIED BY THE FCDMC AND THE USDA/SCS "SOIL SURVEY OF AGUILA-CAREFREE AREA, PARTS OF MARICOPA AND PINAL COUNTIES, ARIZONA".

SEE REFERENCES CITED ABOVE AND REPORT FOR FURTHER SOIL UNIT INFORMATION.

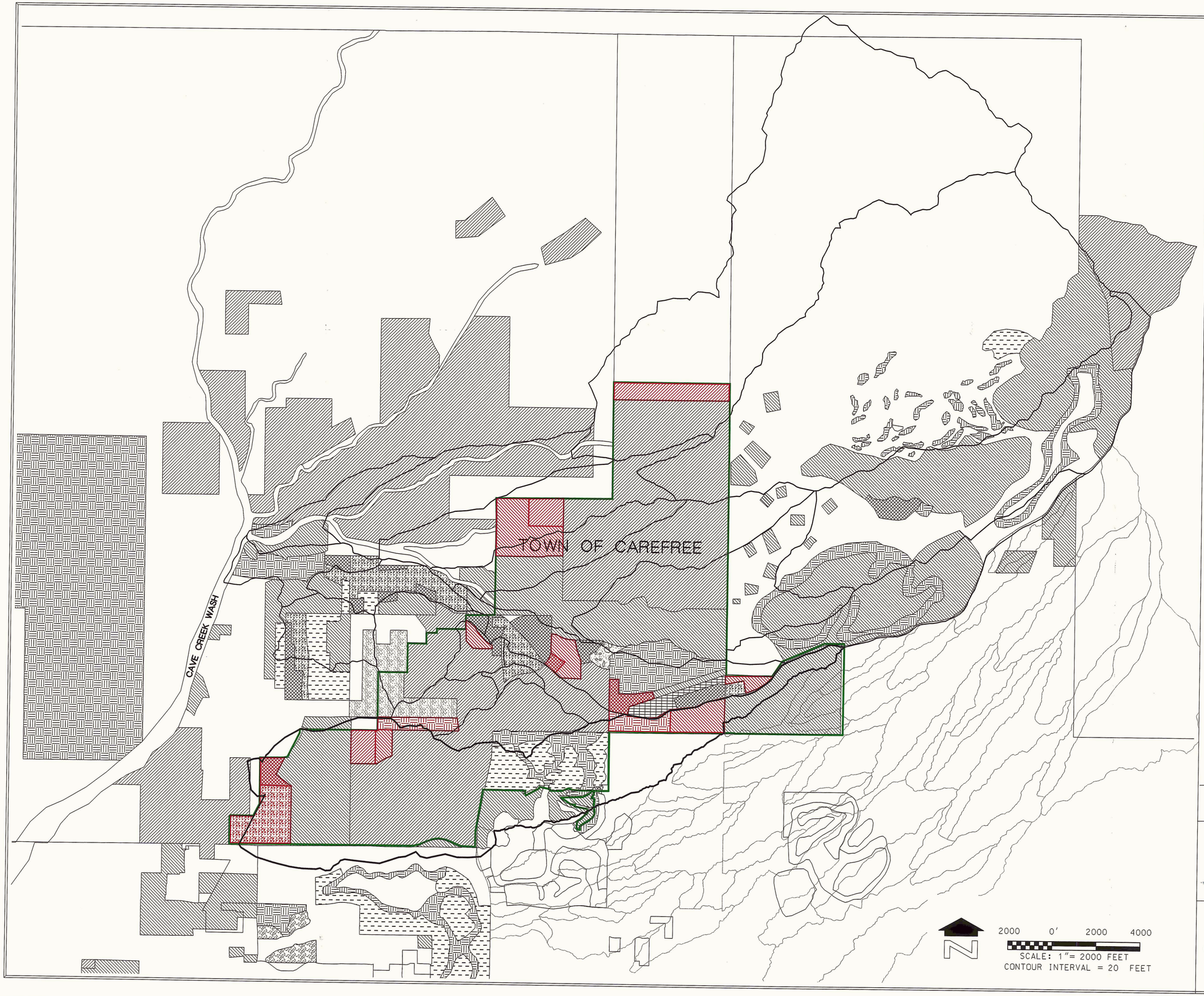
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CH2MHILL

FIGURE 3 - SOILS MAP

CAREFREE DRAINAGE MASTER PLAN

F.C.D. CONTRACT NO. 2000C037



LEGEND

EXISTING LAND USAGES (BLACK)

- STUDY AREA AND TOWN BOUNDARIES
- RURAL
  1 UNIT OR LESS PER ACRE
- LARGE LOT RESIDENTIAL
  1 TO 2 UNITS PER ACRE
- MEDIUM DENSITY RESIDENTIAL
  5 TO 15 UNITS PER ACRE
- SMALL LOT RESIDENTIAL
  2 TO 5 UNITS PER ACRE
- RECREATIONAL OPEN SPACE
- EDUCATIONAL
- VACANT (*FUTURE LAND USE SHOWN)
- AIRPORT
- HOTEL, MOTEL AND RESORT
- DEDICATED OR NON-DEVELOPABLE OPEN SPACE
- NEIGHBORHOOD RETAIL CENTER

FUTURE LAND USAGES (RED)

- FUTURE RURAL
  1 UNIT OR LESS PER ACRE
- FUTURE LARGE LOT RESIDENTIAL
  1 TO 2 UNITS PER ACRE
- FUTURE MEDIUM DENSITY RESIDENTIAL
  5 TO 15 UNITS PER ACRE
- FUTURE RECREATIONAL OPEN SPACE
- SPECIAL PLANNING

NOTES

EXISTING LAND USE TAKEN FROM: DIGITAL INFORMATION AND AERIAL PHOTOGRAPHS SUPPLIED BY FCDMC, DATED 2000

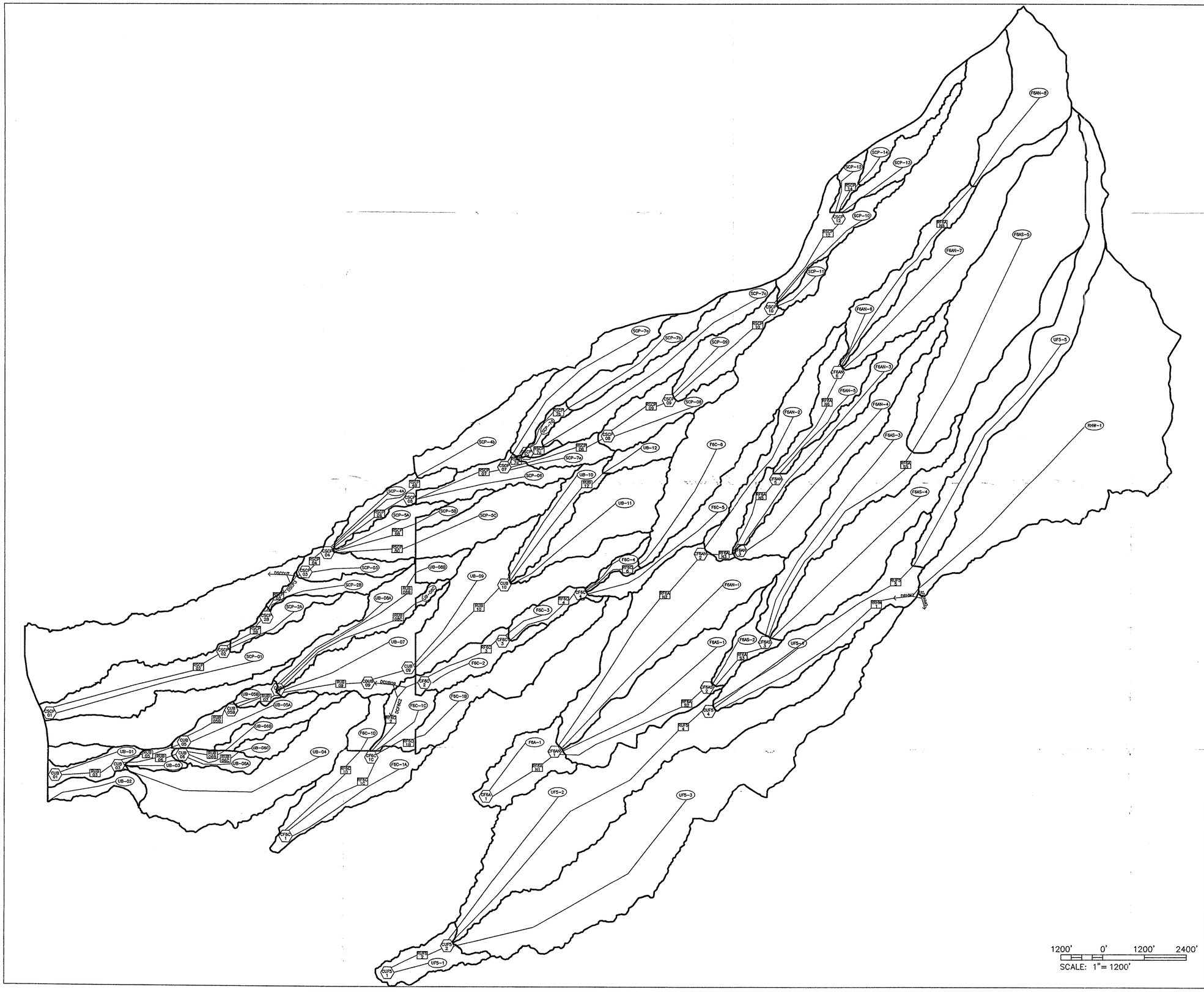
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CH2MHILL

FIGURE 4 - EXISTING AND FUTURE LAND USE

CAREFREE DRAINAGE MASTER PLAN

F.C.D. CONTRACT NO. 2000C037

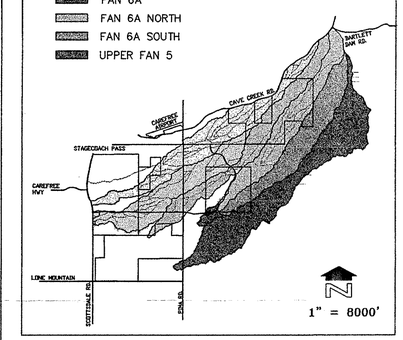


LEGEND

- SUB-BASIN BOUNDARY
- SUB-BASIN INDENTIFICATION
- ROUTE HYDROGRAPH
- COMBINE HYDROGRAPH
- DIVERT HYDROGRAPH

WATERSHED KEY MAP AND SHEET INDEX

- STAGECOACH PASS WASH
- UPPER BOULDERS WASH
- FAN 6C
- FAN 6A
- FAN 6A NORTH
- FAN 6A SOUTH
- UPPER FAN 5



NO.	REVISION	BY	DATE
3			
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

NORTH SCOTTSDALE FLOODPLAIN DELINEATION STUDY
FCD 2001 C009 WORK ORDER #2

	BY	DATE
DESIGNED		
DRAWN		
CHECKED		

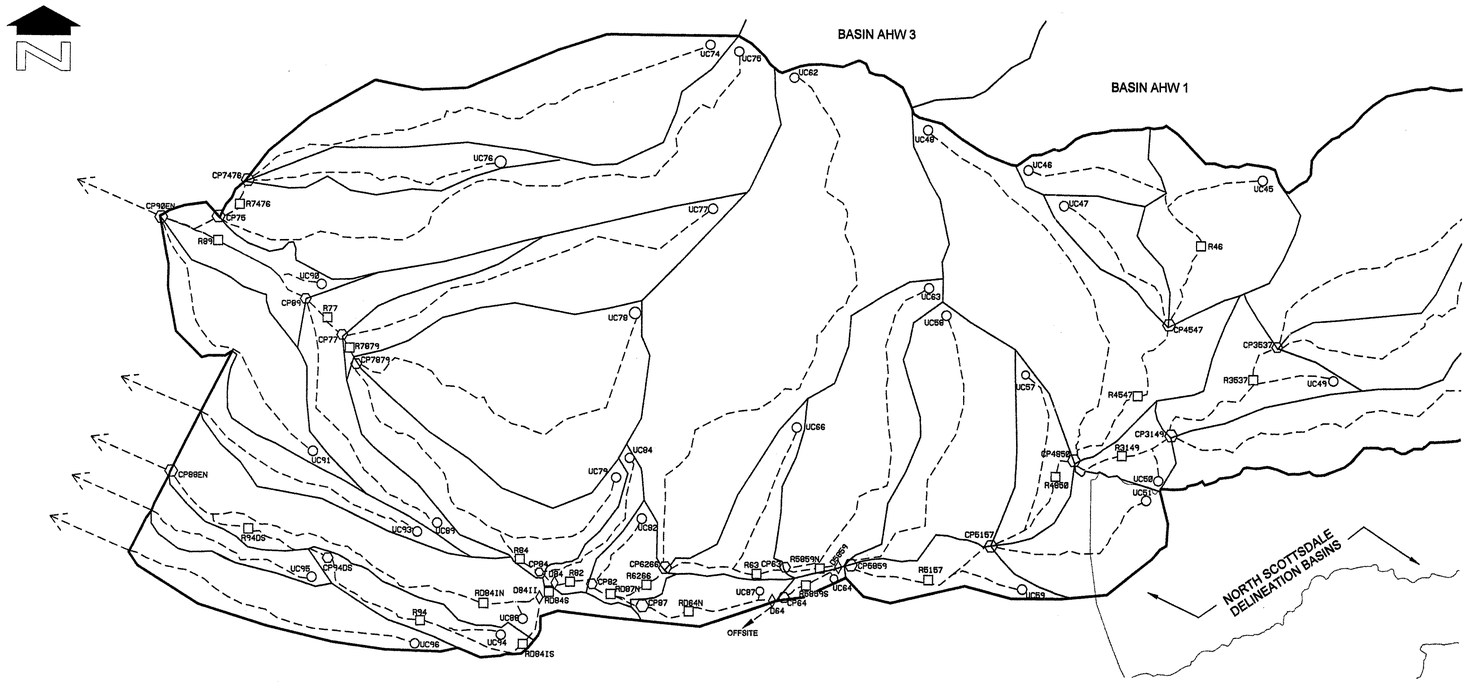
1983-2003 20 YEARS OF EXCELLENCE

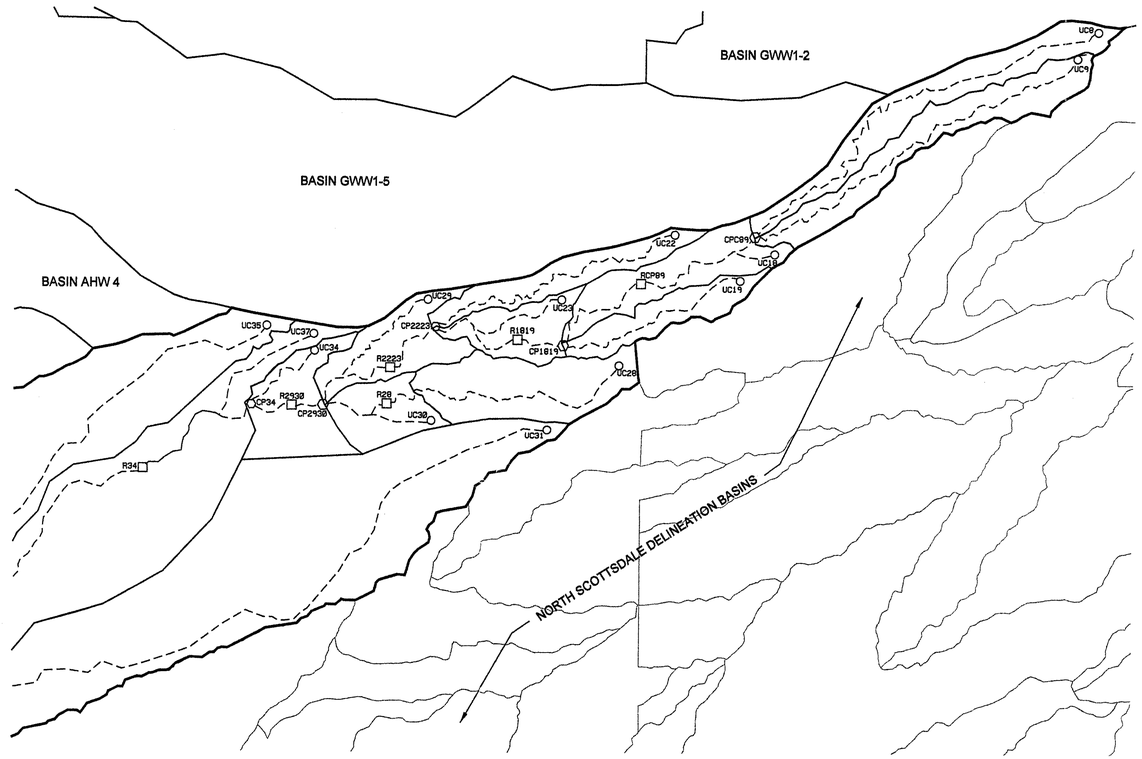
DEI Professional Services, LLC
4520 N. 24th St., Ste. 200
Phoenix, AZ 85016
Phone: (602)954-4018
Fax: (602)944-8605

DRAWING NO. 01131HEC-1

HEC-1 SCHEMATIC

SHEET 1 OF 1





LEGEND

UC30	SUBBASIN
R29	ROUTING
D84	DIVERSION
CP2230	COMBINE
	HEC-1 IDENTIFIER
	FLOW PATH (APPROXIMATE)

NOTES

Registered Professional Engineer (Civil) CERTIFICATE NO. 24971 ANTHONY A. BOKICH Date Signed 7-27-04 ARIZONA, U.S.A.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CH2MHILL

FIGURE 6 - HEC1 SCHEMATIC

CAREFREE DRAINAGE MASTER PLAN

F.C.D. CONTRACT NO. 2000C037

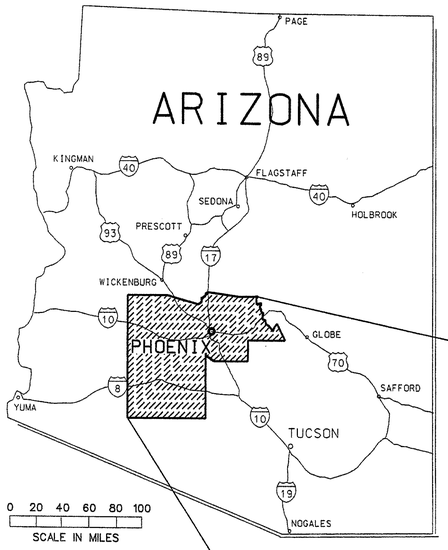
27-JUL-2004

2944fig06.dlv

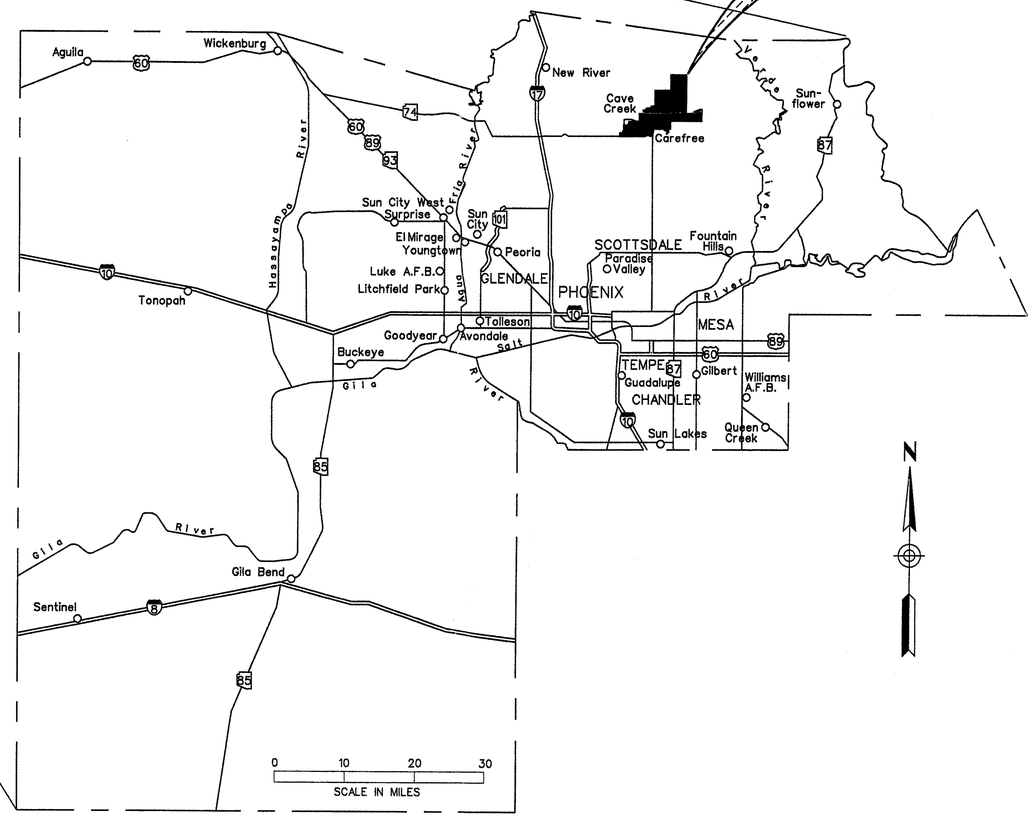
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOODPLAIN DELINEATION STUDY OF GALLOWAY WASH MIDDLE BRANCH, WINDMILL WASH, EASTERN PIMA WASH, UNNAMED TRIBUTARY TO STAGECOACH PASS WASH, AND UNNAMED CENTRAL TRIBUTARY TO CAVE CREEK

FCD 00-37



STUDY AREA



MARICOPA COUNTY

NOTES

1. ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
2. ALL HORIZONTAL COORDINATES ARE BASED ON ARIZONA STATE PLANE COORDINATES BASED ON THE 1983 NORTH AMERICAN DATUM.

STATEMENTS OF PROFESSIONAL REGISTRANTS

THE GROUND CONTROL SURVEY WAS PREPARED UNDER MY DIRECT SUPERVISION.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 25396 ALAN D. REECE 1/27/04 Date Signed ARIZONA, U.S.A.

THE FLOODPLAIN AND FLOODWAY DELINEATIONS WERE PERPARED UNDER MY DIRECT SUPERVISION USING HYDROLOGY FROM FCD 99-14, FCD 01-09 AND NEW HYDROLOGY UNDER THIS CONTRACT.

Registered Professional Engineer (Civil) CERTIFICATE NO. 24971 TERRY A. BOK 1/27/04 Date Signed ARIZONA, U.S.A.

FLOOD CONTROL DISTRICT of MARICOPA COUNTY

CH2MHILL
2625 SOUTH PLAZA DRIVE SUITE 300
TEMPE, AZ
85282-3397

LOCATION MAP

JULY, 2004

UNNAMED CENTRAL TRIBUTARY TO CAVE CREEK									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
Main					Main				
2.2214	2267	1652	9.76	7.49	1.5812	2210.25	2622	7.37	2.66
2.2064	2262.25	1652	9.21	5.22	1.5549	2207.91	2622	7.26	2.48
2.1828	2258.25	2335	10.15	8.13	1.5234	2204.66	2822	6.36	2.66
2.1684	2257.6	2335	9.53	8.49	1.4675	2199.3	2779	6.19	2.95
2.1443	2257.51	2363	6.41	9.46	1.4233	2194.7	2779	5.34	2.67
2.1205	2255.17	2363	10.23	9.02	1.3724	2189.13	2779	5.7	2.23
2.0829	2252.47	2363	11.49	7.72	1.3235	2183.71	2854	5.03	1.47
2.0456	2248.54	2391	9.04	5.72	1.2701	2179.28	2274	5.52	1.91
2.0048	2245.97	2391	10.26	5.05	1.2175	2174.69	2274	5.91	2.3
1.9633	2243.44	2391	10.32	5.29	1.1824	2171.81	2764	4.47	4
1.9389	2241.2	2391	9.76	4.31	1.1329	2166.32	2764	5.28	3.07
1.9192	2239.28	2447	8.33	3.66	1.0827	2159	2764	5.99	3.65
1.9042	2238.6	2447	4.73	5.89	1.0158	2153.21	2764	5.93	3.13
1.8875	2237.97	2447	5.85	6.27	0.9888	2150.92	2849	5.67	3.15
1.8644	2235.19	2447	6.85	4.7	0.9593	2147.95	2849	5.35	3.61
1.8424	2232.64	2447	7.51	3.95	North				
1.8096	2230.46	2467	5.2	4.04	0.9285	2144.98	2092	4.38	3.81
1.7593	2225.87	2467	5.29	2.84	0.9094	2141.45	2092	7.34	4.07
1.7007	2220.63	2467	5.94	2.66	South				
1.6442	2215.52	2467	6.16	2.08	0.9065	2141.86	704	3.97	3.16
1.6113	2213.12	2467	5.12	1.92	0.8919	2141.45	562	1.4	2.56

LEGEND

- 100-YR FLOODPLAIN BOUNDARY
- FLOODWAY BOUNDARY
- HYDRAULIC BASE LINE WITH RIVER MILE
- SECTION LINE
- SECTION CORNER (26 25 / 35 36)
- CROSS SECTION
- FLOW DIVERSION (CFS) — 381
- SURVEY CONTROL, ELEVATION REFERENCE MARK
- BASE FLOOD ELEVATIONS — 2505
- ZONE DESIGNATIONS — ZONE AE
- CORPORATE LIMITS — Corporate Limits
- COUNTY, PARISH, STATE OR INTERNATIONAL BOUNDARY — County Boundary

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. CONVERSION FACTOR 1988 NAVD = -2.23 AVERAGE TO 1929 NGVD

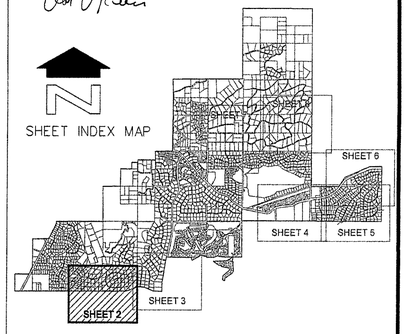
I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION

NOTES

1.) HORIZONTAL DATUM IS NAD 83 STATE PLANE GRID COORDINATES, ARIZONA CENTRAL ZONE.
2.) TOWN LIMITS APPROXIMATE.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 25396 ALAN D. REECE Date Signed 7/27/04 ARIZONA, U.S.A.

SHEET INDEX MAP



NO.	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

UNNAMED CENTRAL TRIBUTARY
TO CAVE CREEK
CAREFREE FLOODPLAIN DELINEATION
F.C.D. CONTRACT NO. 2000 C037

Registered Professional Engineer (Civil) CERTIFICATE NO. 24971 TONY BOK LEE Date Signed 7-27-04 ARIZONA, U.S.A.

CH2MHILL

	BY	DATE
DESIGN	ROL	03/07/03
DESIGN CHK.	LAP	03/07/03
PLANS	ROL	09/04/03
PLANS CHK.	TAB	09/04/03

SHEET 2 OF 8

200' 0' 200' 400'
SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: AUGUST 2, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 200' HORIZONTAL SCALE AND 2'CONTOUR INTERVALS.

MAPPING COMPANY: M&B AERIAL (INTERNAL JOB # FCD-1184)

GROUND CONTROL SURVEY DATA PROVIDED BY AZTEC ENGINEERING

2944fplo2.dlv 21-JUL-2004

UNNAMED CENTRAL TRIBUTARY TO CAVE CREEK									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
Main					Main				
2.2214	2267	1652	9.76	7.49	1.5812	2210.25	2622	7.37	2.66
2.2064	2282.25	1652	9.21	5.22	1.5549	2207.91	2622	7.28	2.48
2.1828	2258.25	2335	10.15	8.13	1.5234	2204.66	2822	6.38	2.66
2.1684	2267.9	2335	9.53	8.49	1.4876	2199.3	2779	6.19	2.85
2.1443	2257.51	2363	6.41	9.46	1.4233	2194.7	2779	5.34	2.67
2.1205	2255.17	2363	10.23	9.02	1.3724	2189.13	2779	5.7	2.23
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1.9389	2241.2	2391	9.76	4.31	1.1329	2166.32	2764	5.28	3.07
1.9192	2239.28	2447	8.33	3.86	1.0627	2159	2764	5.99	3.85
1.8042	2238.8	2447	4.73	5.89	1.0156	2153.21	2764	5.93	3.13
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1.7693	2226.67	2467	5.28	2.84	0.9094	2141.45	2092	7.34	4.07
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1.6113	2213.12	2467	5.12	1.92	0.8919	2141.45	862	1.4	2.66

200′ 0′ 200′ 400′

SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: AUGUST 2, 2001

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	20
SECTION LINE	
SECTION CORNER	26 25 / 35 36
CROSS SECTION	0.2185
FLOW DIVERSION (CFS)	381
SURVEY CONTROL, ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	2505
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
COUNTY, PARISH, STATE OR INTERNATIONAL BOUNDARY	County Boundary

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. CONVERSION FACTOR 1988 NAVD = -2.23 AVERAGE TO 1929 NGVD

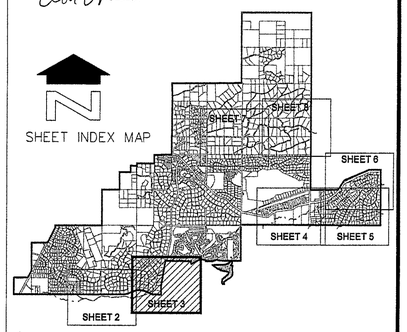
I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION

NOTES

1.) HORIZONTAL DATUM IS NAD 83 STATE PLANE GRID COORDINATES, ARIZONA CENTRAL ZONE.
2.) TOWN LIMITS APPROXIMATE.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 25396 ALAN D. REECE 7/27/04 Date Signed ARIZONA, U.S.A.

SHEET INDEX MAP



NO.	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

UNNAMED CENTRAL TRIBUTARY
TO CAVE CREEK
CAREFREE FLOODPLAIN DELINEATION
F.C.D. CONTRACT NO. 2000 C037

Registered Professional Engineer (Civil) CERTIFICATE NO. 24971 TONY A. BOKICH Date Signed 7-27-04 ARIZONA, U.S.A.

CH2MHILL

	BY	DATE
DESIGN	ROL	03/07/03
DESIGN CHK.	LAP	03/07/03
PLANS	ROL	09/04/03
PLANS CHK.	TAB	09/04/03

SHEET 3 OF 8

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 200' HORIZONTAL SCALE AND 2'CONTOUR INTERVALS.

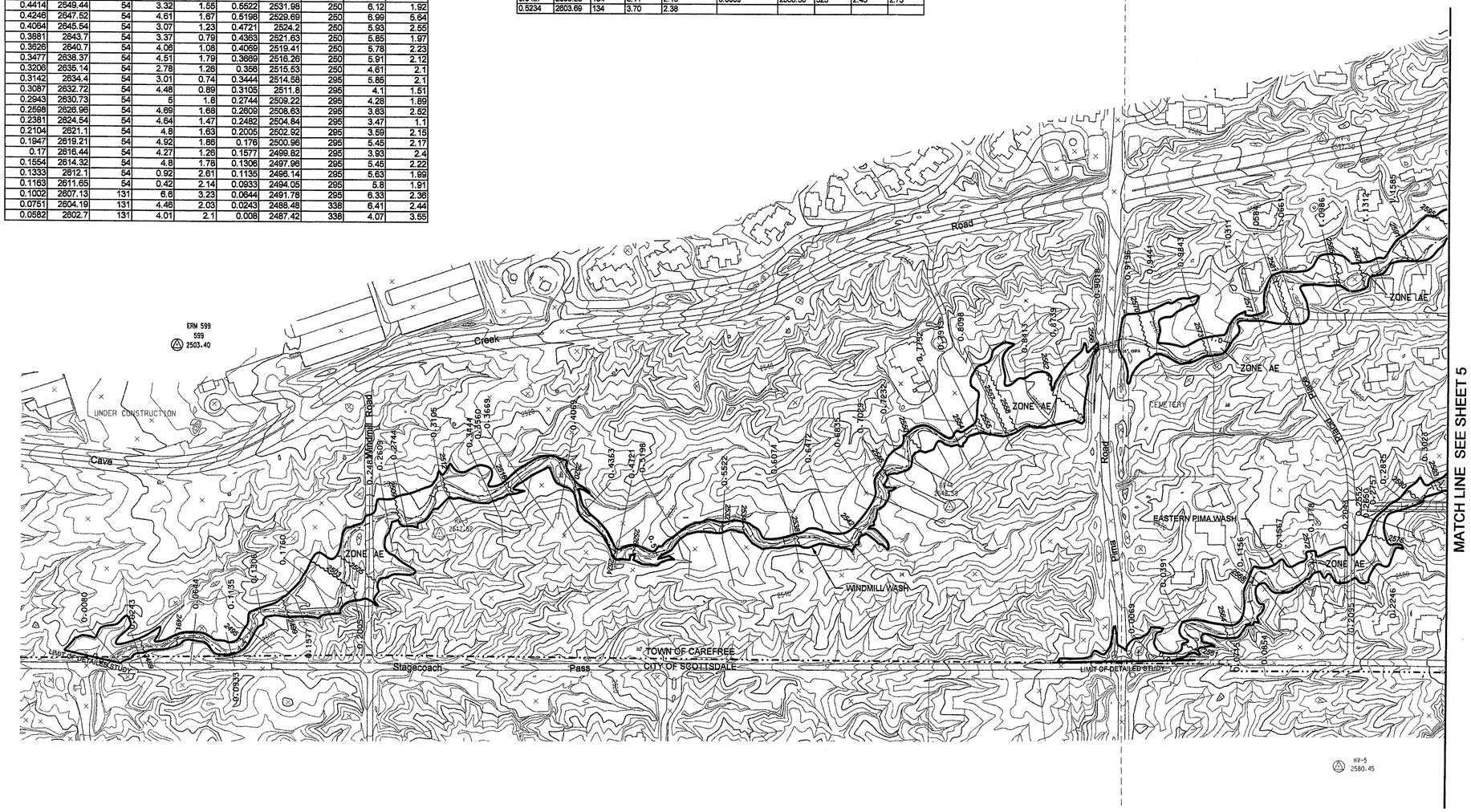
MAPPING COMPANY: M&B AERIAL (INTERNAL JOB # FCD-1184)

GROUND CONTROL SURVEY DATA PROVIDED BY AZTEC ENGINEERING

2944flp103.div 21-JUL-2004

WINDMILL WASH									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
North Branch					0.0395	2601.37	131	3.27	1.8
1.6576	2646.16	64	5.29	1.94	Combined Branch				
1.6069	2641.73	64	2.5	1.58	1.1975	2595.59	162	3.46	2.87
1.5545	2636.04	64	4.16	1.32	1.1585	2591.64	162	3.38	2.11
1.5334	2634.18	64	3.63	0.98	1.1312	2588.64	162	4.54	1.9
1.5241	2632.89	64	3.72	0.65	1.0986	2584.54	162	3.59	2.31
1.518	2631.73	64	4	0.99	1.0661	2581.93	162	2.48	1.58
1.4884	2628.39	64	4.52	1.72	1.0584	2580.7	162	3.41	0.98
1.4665	2625.6	64	5.33	2.05	1.0311	2577.22	162	5.97	2.73
1.4494	2624.48	64	4.65	1.74	0.9843	2573.23	162	3.66	2.04
1.4322	2622.37	64	3.98	1.48	0.9441	2569.84	162	5.31	2.25
1.4212	2621.5	64	4.75	1.35	0.9196	2569.7	198	1.35	3.76
1.3983	2620.22	64	2.09	2.92	0.9018	2566.1	198	5.75	1.78
1.3677	2615.61	64	0.94	3.39	0.8739	2563.38	198	2.81	2.07
1.3498	2615.61	64	0.62	3.87	0.8413	2560.22	198	2.25	2.17
1.3431	2615.61	64	0.34	4.13	0.8098	2557.08	198	0.92	1.97
1.3364	2612.98	64	1.65	2.54	0.7913	2554.53	198	5.64	1.63
1.3215	2612.99	64	0.45	4.23	0.7752	2553.66	198	4.59	2.14
1.311	2612.99	77	0.31	5.56	0.7232	2548.34	198	3.73	2.31
1.293	2607.4	131	4.38	2.91	0.7029	2545.95	198	6.08	1.85
1.263	2602.71	131	5.54	2.4	0.6835	2544.08	198	5.32	1.97
1.2388	2599.46	131	5.79	3.11	0.6472	2541.08	250	4.91	2.05
South Branch					0.6074	2537.71	250	5.36	1.99
0.4414	2549.44	54	3.32	1.56	0.5522	2531.98	250	6.12	1.92
0.4246	2547.62	54	4.61	1.67	0.5198	2529.69	250	6.99	5.64
0.4064	2545.54	54	3.07	1.23	0.4721	2524.2	250	5.93	2.56
0.3881	2543.7	54	3.37	0.79	0.4363	2521.63	250	5.85	1.97
0.3626	2540.7	54	4.06	1.08	0.4069	2519.41	250	5.78	2.23
0.3477	2538.37	54	4.51	1.79	0.3669	2516.26	250	5.91	2.12
0.3208	2535.14	54	2.78	1.26	0.358	2515.53	250	4.61	2.1
0.3142	2534.4	54	3.01	0.74	0.3444	2514.58	295	5.85	2.1
0.3087	2632.72	54	4.48	0.89	0.3105	2511.8	295	4.1	1.51
0.2943	2630.73	54	5	1.8	0.2744	2509.22	295	4.28	1.69
0.2598	2626.96	54	4.69	1.68	0.2609	2508.63	295	3.63	2.52
0.2381	2624.54	54	4.64	1.47	0.2482	2504.84	295	3.47	1.1
0.2104	2621.1	54	4.8	1.63	0.2005	2502.92	295	3.59	2.15
0.1947	2619.21	54	4.92	1.86	0.176	2500.96	295	5.45	2.17
0.17	2616.44	54	4.27	1.26	0.1577	2499.82	295	3.93	2.4
0.1554	2614.32	54	4.8	1.78	0.1306	2497.96	295	5.45	2.22
0.1333	2612.1	54	0.92	2.61	0.1135	2496.14	295	5.63	1.99
0.1163	2611.65	54	0.42	2.14	0.0933	2494.05	295	5.8	1.91
0.1002	2607.13	131	6.6	3.23	0.0644	2491.76	295	6.33	2.36
0.0751	2604.19	131	4.46	2.03	0.0243	2488.48	338	6.41	2.44
0.0582	2602.7	131	4.01	2.1	0.008	2487.42	338	4.07	3.55

EAST PIMA WASH									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
1.0178	2861.71	71	4.96	1.52	0.4988	2601.90	134	4.23	2.54
0.9929	2857.50	71	4.62	1.77	0.4801	2600.30	134	4.23	2.98
0.9653	2853.04	71	4.19	1.28	0.4600	2598.00	134	4.96	2.04
0.9247	2847.48	71	3.13	1.84	0.4379	2594.96	134	5.54	2.76
0.9088	2846.19	71	5.17	1.96	0.4040	2591.97	134	4.24	2.40
0.8993	2844.06	71	4.54	1.05	0.3869	2590.94	134	4.13	2.59
0.8747	2841.85	71	2.91	1.33	0.3722	2589.32	134	4.19	2.13
0.8560	2639.61	71	3.38	1.07	0.3547	2587.82	134	4.24	2.32
0.8342	2637.29	71	4.25	1.10	0.3381	2586.65	134	3.90	3.05
0.8168	2635.40	71	1.81	1.02	0.3265	2585.89	134	6.06	3.28
0.8111	2635.02	71	3.84	0.69	0.3023	2582.66	134	3.73	2.19
0.8056	2634.01	71	3.79	0.80	0.2875	2579.75	134	3.76	0.90
0.7866	2630.90	71	5.56	2.25	0.2757	2578.76	134	2.30	1.12
0.7661	2628.29	71	4.53	1.72	0.2650	2578.51	134	3.11	1.99
0.7351	2624.58	71	4.66	1.55	0.2552	2577.93	134	4.51	1.86
0.7049	2621.18	71	4.90	1.63	0.2246	2575.38	295	3.90	1.96
0.6852	2619.19	71	4.69	1.78	0.2095	2574.18	295	4.67	1.35
0.6541	2616.40	71	4.98	1.86	0.2043	2573.72	295	3.34	1.79
0.6387	2614.73	71	3.66	2.22	0.1778	2572.11	295	4.55	3.02
0.6098	2612.35	71	3.76	1.94	0.1567	2571.03	295	4.06	3.96
0.5931	2610.90	71	4.27	1.53	0.1156	2568.38	295	5.82	2.73
0.5707	2609.41	71	3.39	1.31	0.0854	2565.71	295	4.03	2.20
0.5548	2608.05	134	3.94	1.19	0.0715	2564.93	295	4.40	2.34
0.5494	2607.73	134	4.12	0.80	0.0391	2562.91	295	4.17	2.07
0.5427	2606.28	134	5.11	2.16	0.0069	2560.50	323	2.43	2.73
0.5234	2603.69	134	3.70	2.38					



LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	
SECTION LINE	
SECTION CORNER	26|25 / 35|36
CROSS SECTION	0.2185
FLOW DIVERSION (CFS)	581
SURVEY CONTROL, ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	2505
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
COUNTY, PARISH, STATE OR INTERNATIONAL BOUNDARY	County Boundary

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. CONVERSION FACTOR 1988 NAVD = -2.23 AVERAGE TO 1929 NGVD

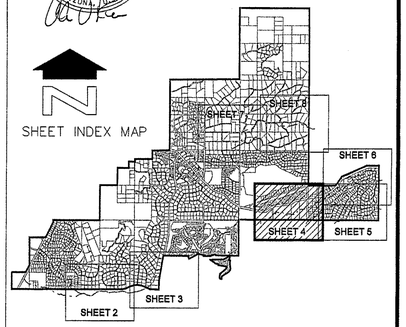
I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION

NOTES

1.) HORIZONTAL DATUM IS NAD 83 STATE PLANE GRID COORDINATES, ARIZONA CENTRAL ZONE.
2.) TOWN LIMITS APPROXIMATE.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 25396 ALAN D. REECE DATE SIGNED 7/27/04 ARIZONA, U.S.A.

SHEET INDEX MAP



NO.	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WINDMILL, EASTERN PIMA AND UNNAMED

CAREFREE FLOODPLAIN DELINEATION

F.C.D. CONTRACT NO. 2000 C037

Registered Professional Engineer (Civil) CERTIFICATE NO. 24971 TONY A. SOKOLICH DATE SIGNED 7-27-04 ARIZONA, U.S.A.

CH2MHILL

	BY	DATE
DESIGN	ROL	03/07/03
DESIGN CHK.	LAP	03/07/03
PLANS	ROL	09/04/03
PLANS CHK.	TAB	09/04/03

SHEET 4 OF 8

200' 0' 200'
SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: AUGUST 2, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS.

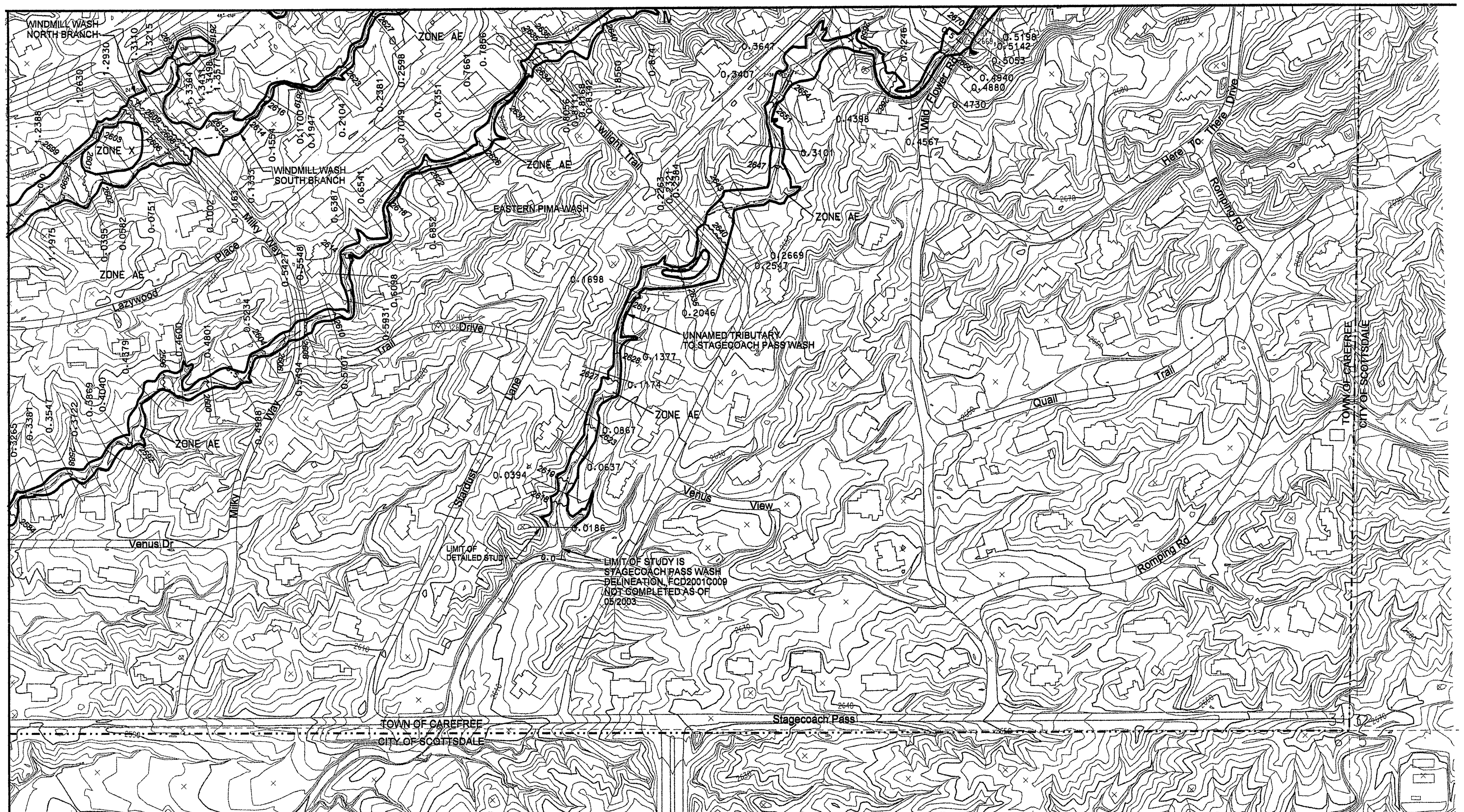
MAPPING COMPANY: M&B AERIAL (INTERNAL JOB # FCD-1184)

GROUND CONTROL SURVEY DATA PROVIDED BY AZTEC ENGINEERING

2944flp04.div 21-JUL-2004

MATCH LINE SEE SHEET 6

MATCH LINE SEE SHEET 4



WINDMILL WASH									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
North Branch					0.0395	2601.37	131	3.27	1.8
1.6576	2646.16	64	5.29	1.94	Combined Branch				
1.6069	2641.73	64	2.5	1.56	1.1975	2595.59	162	3.46	2.87
1.5545	2636.04	64	4.16	1.32	1.1585	2591.64	162	3.38	2.11
1.5334	2634.18	64	3.63	0.98	1.1312	2588.64	162	4.54	1.9
1.5241	2632.89	64	3.72	0.65	1.0986	2584.54	162	3.59	2.31
1.518	2631.73	64	4	0.99	1.0661	2581.93	162	2.48	1.58
1.4884	2628.39	64	4.52	1.72	1.0584	2580.7	162	3.41	0.98
1.4665	2625.6	64	5.33	2.05	1.0311	2577.22	162	5.97	2.73
1.4494	2624.48	64	4.65	1.74	0.9843	2573.23	162	3.66	2.04
1.4322	2622.37	64	3.98	1.48	0.9441	2569.84	162	5.31	2.25
1.4212	2621.5	64	4.75	1.35	0.9196	2569.7	198	1.35	3.76
1.3983	2620.22	64	2.09	2.92	0.9018	2566.1	198	5.75	1.78
1.3577	2615.61	64	0.94	3.39	0.8739	2563.38	198	2.81	2.07
1.3498	2615.61	64	0.62	3.87	0.8413	2560.22	198	2.25	2.17
1.3431	2615.61	64	0.34	4.13	0.8098	2557.08	198	0.92	1.97
1.3364	2612.98	64	1.65	2.54	0.7913	2554.53	198	5.64	1.63
1.3215	2612.99	64	0.45	4.23	0.7752	2553.56	198	4.59	2.14
1.311	2612.99	77	0.31	5.56	0.7232	2548.34	198	3.73	2.31
1.293	2607.4	131	4.38	2.91	0.7029	2545.95	198	6.08	1.85
1.263	2602.71	131	5.54	2.4	0.6835	2544.08	198	5.32	1.97
1.2388	2599.46	131	5.79	3.11	0.6472	2541.08	250	4.91	2.05
South Branch					0.6074	2537.71	250	5.36	1.99
0.4414	2649.44	54	3.32	1.55	0.5522	2531.98	250	6.12	1.92
0.4246	2647.52	54	4.61	1.67	0.5198	2529.69	250	6.99	5.64
0.4064	2645.54	54	3.07	1.23	0.4721	2524.2	250	5.93	2.55
0.3881	2643.7	54	3.37	0.79	0.4363	2521.63	250	5.85	1.97
0.3626	2640.7	54	4.06	1.08	0.4069	2519.41	250	5.78	2.23
0.3477	2638.37	54	4.51	1.79	0.3669	2516.26	250	5.91	2.12
0.3206	2635.14	54	2.78	1.26	0.356	2515.53	250	4.61	2.1
0.3142	2634.4	54	3.01	0.74	0.3444	2514.58	295	5.85	2.1
0.3087	2632.72	54	4.48	0.89	0.3105	2511.8	295	4.1	1.51
0.2943	2630.73	54	5	1.8	0.2744	2509.22	295	4.28	1.89
0.2598	2626.96	54	4.69	1.68	0.2609	2508.63	295	3.63	2.52
0.2381	2624.54	54	4.64	1.47	0.2482	2504.84	295	3.47	1.1
0.2104	2621.1	54	4.8	1.63	0.2005	2502.92	295	3.59	2.15
0.1947	2619.21	54	4.92	1.86	0.176	2500.96	295	5.45	2.17
0.17	2616.44	54	4.27	1.26	0.1577	2499.82	295	3.93	2.4
0.1554	2614.32	54	4.8	1.78	0.1306	2497.96	295	5.45	2.22
0.1333	2612.1	54	0.92	2.61	0.1135	2496.14	295	5.63	1.99
0.1163	2611.65	54	0.42	2.14	0.0933	2494.05	295	5.8	1.91
0.1002	2607.13	131	6.6	3.23	0.0644	2491.78	295	6.33	2.36
0.0751	2604.19	131	4.46	2.03	0.0243	2488.48	338	6.41	2.44
0.0582	2602.7	131	4.01	2.1	0.008	2487.42	338	4.07	3.55

EAST PIMA WASH									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
1.0178	2661.71	71	4.96	1.52	0.4988	2601.90	134	4.23	2.54
0.9929	2657.50	71	4.62	1.77	0.4801	2600.30	134	4.23	2.98
0.9653	2653.04	71	4.19	1.26	0.4600	2598.00	134	4.96	2.04
0.9247	2647.48	71	3.13	1.84	0.4379	2594.96	134	5.54	2.76
0.9088	2646.19	71	5.17	1.96	0.4040	2591.97	134	4.24	2.40
0.8993	2644.06	71	4.54	1.05	0.3869	2590.94	134	4.13	2.59
0.8747	2641.85	71	2.91	1.33	0.3722	2589.32	134	4.19	2.13
0.8560	2639.61	71	3.38	1.07	0.3547	2587.82	134	4.24	2.32
0.8342	2637.29	71	4.25	1.10	0.3381	2586.85	134	3.90	3.05
0.8168	2635.40	71	1.81	1.02	0.3265	2585.89	134	6.06	3.28
0.8111	2635.02	71	3.84	0.69	0.3023	2582.66	134	3.73	2.19
0.8056	2634.01	71	3.79	0.80	0.2875	2579.75	134	3.76	0.90
0.7856	2630.90	71	5.56	2.25	0.2757	2578.76	134	2.30	1.12
0.7661	2628.29	71	4.53	1.72	0.2650	2578.51	134	3.11	1.99
0.7351	2624.58	71	4.66	1.55	0.2552	2577.93	134	4.51	1.86
0.7049	2621.18	71	4.90	1.63	0.2246	2575.38	295	3.90	1.96
0.6852	2619.19	71	4.69	1.78	0.2095	2574.18	295	4.67	1.35
0.6541	2616.40	71	4.98	1.86	0.2043	2573.72	295	3.34	1.79
0.6387	2614.73	71	3.66	2.22	0.1778	2572.11	295	4.55	3.02
0.6098	2612.35	71	3.76	1.94	0.1567	2571.03	295	4.06	3.96
0.5931	2610.90	71	4.27	1.63	0.1156	2568.38	295	5.82	2.73
0.5707	2609.41	71	3.39	1.31	0.0854	2565.71	295	4.03	2.00
0.5548	2608.05	134	3.94	1.19	0.0715	2564.93	295	4.40	2.24
0.5494	2607.73	134	4.12	0.80	0.0391	2562.91	295	4.17	2.07
0.5427	2606.28	134	5.11	2.16	0.0069	2560.50	323	2.43	2.73
0.5234	2603.69	134	3.70	2.38					

UNNAMED TRIBUTARY TO STAGECOACH PASS WASH									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
0.8707	2712.74	84	5.55	2.26	0.4398	2661.51	152	3.50	2.51
0.8440	2710.16	84	5.40	2.33	0.4246	2659.92	152	5.16	1.94
0.8171	2706.75	84	5.17	1.63	0.4017	2657.81	152	2.71	1.53
0.7934	2704.78	84	4.22	1.83	0.3933	2657.30	152	4.54	1.44
0.7626	2702.49	84	1.28	1.80	0.3828	2656.96	225	3.19	2.51
0.7448	2697.97	84	6.45	2.63	0.3647	2656.48	225	0.92	3.84
0.7265	2694.21	84	5.95	2.47	0.3407	2651.27	225	6.19	1.96
0.6776	2688.71	84	5.49	2.73	0.3101	2648.77	225	6.05	2.57
0.6449	2685.17	84	6.17	2.64	0.2669	2644.43	225	4.52	1.82
0.6242	2682.71	84	6.83	2.81	0.2547	2642.99	225	5.23	1.88
0.6025	2679.48	152	4.89	2.56	0.2384	2640.79	225	3.97	0.92
0.5830	2679.15	152	2.10	4.76	0.2321	2640.00	225	2.18	1.21
0.5624	2674.56	152	5.37	2.13	0.2263	2639.66	225	4.03	1.83
0.5394	2672.02	152	4.24	1.80	0.2046	2635.08	225	5.39	2.33
0.5198	2671.10	152	2.79	2.74	0.1698	2631.76	225	6.68	2.40
0.5142	2670.47	152	4.42	2.73	0.1377	2628.33	225	5.35	3.14
0.5053	2669.86	152	4.26	2.85	0.1174	2627.24	225	5.43	2.87
0.4940	2669.64	152	1.62	4.67	0.0867	2623.77	225	4.48	3.18
0.4880	2666.04	152	5.72	1.90	0.0637	2620.57	225	5.40	2.45
0.4730	2664.42	152	5.18	2.79	0.0394	2618.33	225	6.50	3.06
0.4567	2662.62	152	5.82	2.41	0.0186	2617.10	225	1.71	3.71

200' 0' 200' 400'

SCALE: 1" = 200 FEET

CONTOUR INTERVAL = 2 FEET

FLIGHT DATES: AUGUST 2, 2001

LEGEND

- 100-YR FLOODPLAIN BOUNDARY
- FLOODWAY BOUNDARY
- HYDRAULIC BASE LINE WITH RIVER MILE
- SECTION LINE
- SECTION CORNER — 26 25 / 35 36
- CROSS SECTION — 0.2185
- FLOW DIVERSION (CFS) — 381
- SURVEY CONTROL, ELEVATION REFERENCE MARK
- BASE FLOOD ELEVATIONS — 2505
- ZONE DESIGNATIONS — ZONE AE
- CORPORATE LIMITS — Corporate Limits
- COUNTY, PARISH, STATE OR INTERNATIONAL BOUNDARY — County Boundary

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. CONVERSION FACTOR 1988 NAVD = -2.23 AVERAGE TO 1929 NGVD

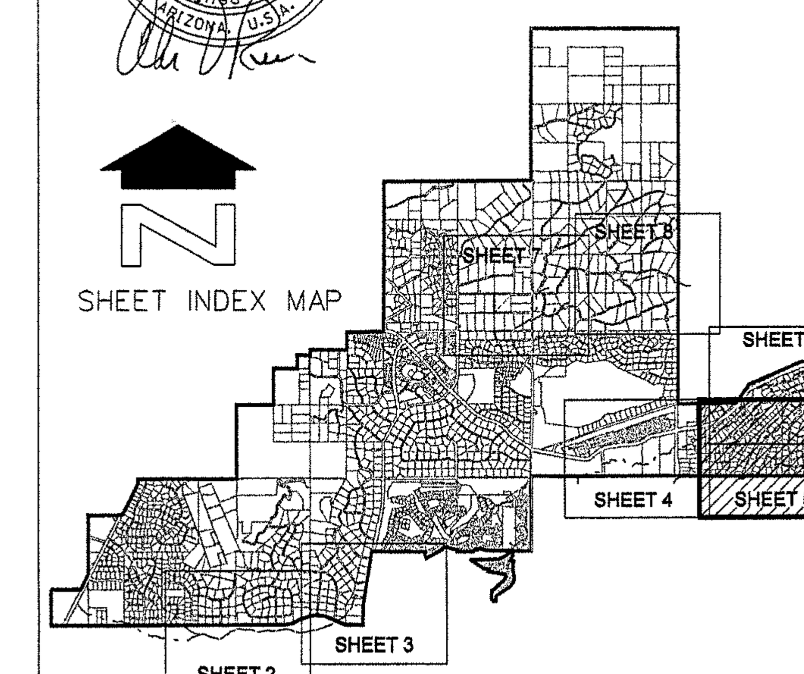
I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION

NOTES

1.) HORIZONTAL DATUM IS NAD 83 STATE PLANE GRID COORDINATES, ARIZONA CENTRAL ZONE.
2.) TOWN LIMITS APPROXIMATE.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 25396 ALAN D. REECE 7/27/04 ARIZONA, U.S.A.

SHEET INDEX MAP



NO.	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WINDMILL, EASTERN PIMA AND UNNAMED TRIBUTARY TO STAGECOACH PASS WASH

CAREFREE FLOODPLAIN DELINEATION

F.C.D. CONTRACT NO. 2000 C037

Registered Professional Engineer (Civil) CERTIFICATE NO. 24971 TONY A. BOKESHAL 7-27-04 ARIZONA, U.S.A.

CH2MHILL

	BY	DATE
DESIGN	ROL	03/07/03
DESIGN CHK.	LAP	03/07/03
PLANS	ROL	09/04/03
PLANS CHK.	TAB	09/04/03

SHEET 5 OF 8

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1" = 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS.

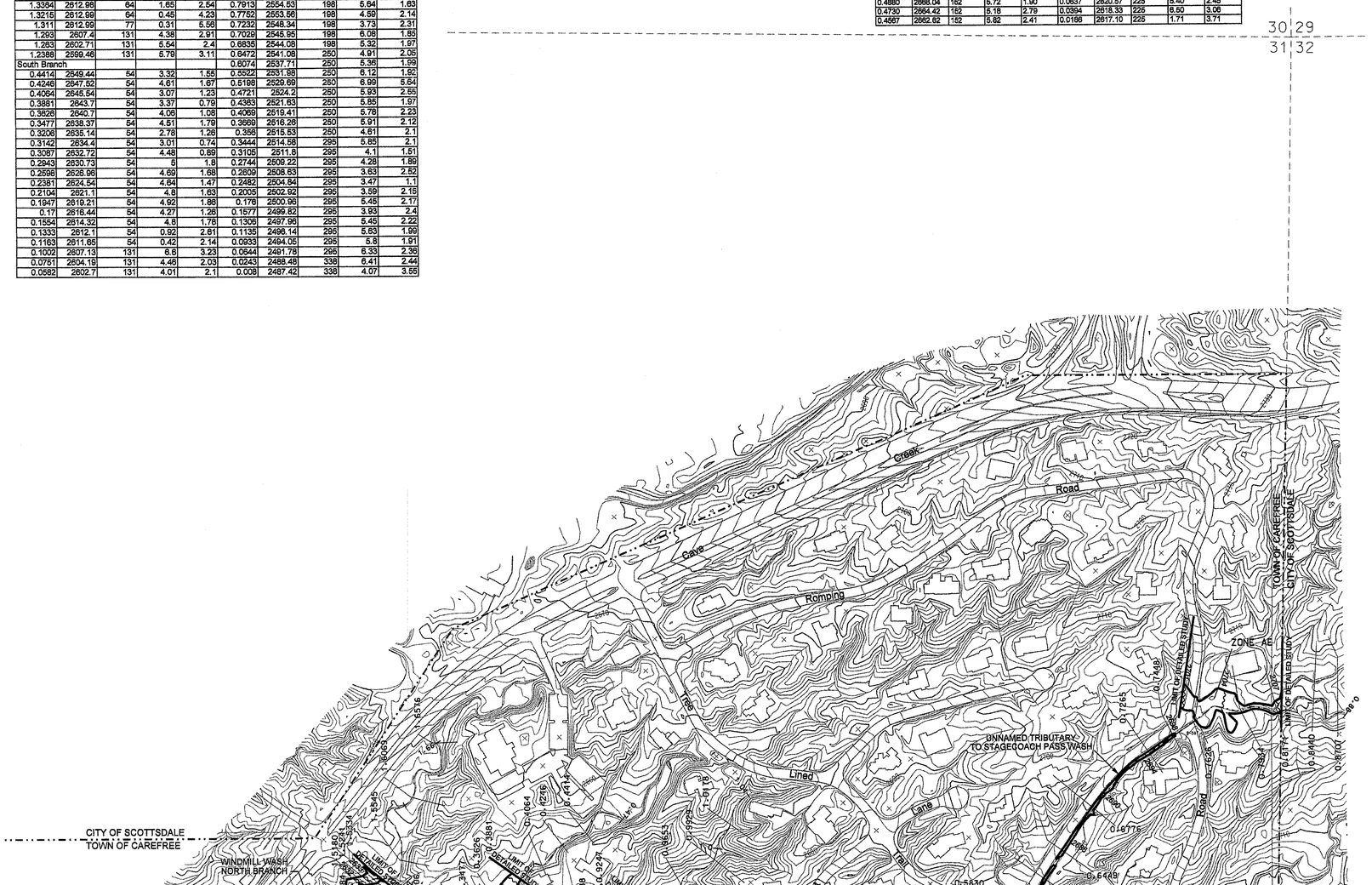
MAPPING COMPANY: M&B AERIAL (INTERNAL JOB # FCD-1184)

GROUND CONTROL SURVEY DATA PROVIDED BY AZTEC ENGINEERING

2944flp105.dlv 21-JUL-2004

WINDMILL WASH									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
North Branch					0.0395	2601.37	131	3.27	1.8
1.6576	2846.16	64	5.29	1.94	Combined Branch				
1.6069	2841.73	64	2.5	1.56	1.1975	2595.59	162	3.46	2.87
1.5545	2836.04	64	4.16	1.32	1.1585	2591.64	162	3.38	2.11
1.5334	2834.18	64	3.63	0.98	1.1312	2588.64	162	4.54	1.9
1.5241	2832.89	64	3.72	0.85	1.0986	2584.54	162	3.59	2.31
1.516	2831.73	64	4	0.99	1.0561	2581.93	162	2.48	1.58
1.4884	2828.39	64	4.52	1.72	1.0584	2580.7	162	3.41	0.98
1.4665	2825.6	64	5.33	2.05	1.0311	2577.22	162	5.97	2.73
1.4464	2824.48	64	4.65	1.74	0.9843	2573.23	162	3.66	2.04
1.4322	2822.37	64	3.98	1.48	0.9441	2569.84	162	5.31	2.25
1.4212	2821.5	64	4.75	1.35	0.9198	2569.7	198	1.35	3.76
1.3983	2820.22	64	2.09	2.92	0.9016	2566.1	198	5.75	1.76
1.3577	2815.61	64	0.94	3.39	0.8739	2563.38	198	2.81	2.07
1.3498	2815.61	64	0.82	3.87	0.8413	2560.22	198	2.25	2.17
1.3431	2815.61	64	0.34	4.13	0.8098	2557.08	198	0.92	1.97
1.3364	2812.98	64	1.65	2.54	0.7913	2554.53	198	5.64	1.63
1.3215	2812.99	64	0.45	4.23	0.7752	2553.56	198	4.59	2.14
1.311	2812.99	77	0.31	5.56	0.7232	2548.34	198	3.73	2.31
1.293	2607.4	131	4.38	2.91	0.7029	2545.95	198	6.06	1.85
1.283	2602.71	131	5.54	2.4	0.6835	2544.05	198	5.32	1.97
1.2388	2599.46	131	5.79	3.11	0.6472	2541.08	250	4.91	2.05
South Branch					0.6074	2537.71	250	5.36	1.99
0.4414	2649.44	54	3.32	1.55	0.5522	2531.98	250	6.12	1.92
0.4246	2647.52	54	4.61	1.67	0.5198	2529.69	250	6.99	5.64
0.4064	2645.54	54	3.07	1.23	0.4721	2524.2	250	5.93	2.65
0.3851	2643.7	54	3.37	0.79	0.4383	2521.63	250	5.85	1.97
0.3628	2640.7	54	4.06	1.08	0.4069	2519.41	250	5.78	2.23
0.3477	2638.37	54	4.51	1.79	0.3669	2516.28	250	5.91	2.12
0.3206	2635.14	54	2.78	1.28	0.356	2515.53	250	4.61	2.1
0.3142	2634.4	54	3.01	0.74	0.3444	2514.58	295	5.85	2.1
0.3087	2632.72	54	4.48	0.89	0.3105	2511.8	295	4.1	1.51
0.2943	2630.73	54	6	1.8	0.2744	2509.22	295	4.28	1.86
0.2598	2626.96	54	4.69	1.68	0.2609	2508.63	295	3.63	2.52
0.2381	2624.54	54	4.64	1.47	0.2482	2504.84	295	3.47	1.1
0.2104	2621.1	54	4.8	1.63	0.2005	2502.92	295	3.59	2.15
0.1947	2619.21	54	4.92	1.88	0.176	2500.96	295	5.45	2.17
0.17	2618.44	54	4.27	1.28	0.1577	2499.82	295	3.93	2.4
0.1554	2614.32	54	4.8	1.78	0.1308	2497.96	295	5.45	2.22
0.1333	2612.1	54	0.92	2.61	0.1135	2496.14	295	5.63	1.99
0.1163	2611.65	54	0.42	2.14	0.0933	2494.05	295	5.8	1.91
0.1002	2607.13	131	6.6	3.23	0.0644	2491.78	295	6.33	2.36
0.0751	2604.19	131	4.46	2.03	0.0243	2488.48	338	6.41	2.44
0.0582	2602.7	131	4.01	2.1	0.008	2487.42	338	4.07	3.55

UNNAMED TRIBUTARY TO STAGECOACH PASS WASH									
R.S.	FP	Q (CFS)	V (FPS)	D (FT)	R.S.	FP	Q (CFS)	V (FPS)	D (FT)
0.8707	2712.74	64	5.55	2.28	0.4398	2661.51	152	3.50	2.51
0.8440	2710.16	64	5.40	2.33	0.4246	2659.92	152	5.16	1.94
0.8171	2706.75	64	5.17	1.63	0.4017	2657.81	152	2.71	1.63
0.7934	2704.76	64	4.22	1.53	0.3833	2657.30	152	4.54	1.44
0.7628	2702.49	64	1.28	1.80	0.3628	2656.96	225	3.19	2.51
0.7448	2697.97	64	6.45	2.63	0.3647	2656.48	225	0.92	3.84
0.7285	2694.21	64	5.95	2.47	0.3407	2651.27	225	6.19	1.96
0.6776	2688.71	64	5.49	2.73	0.3101	2648.77	225	6.05	2.67
0.6449	2685.17	64	6.17	2.64	0.2869	2644.43	225	4.52	1.82
0.6242	2682.71	64	6.83	2.81	0.2547	2642.99	225	5.23	1.88
0.6025	2679.48	152	4.89	2.56	0.2384	2640.79	225	3.97	0.92
0.5830	2678.15	152	2.10	4.76	0.2321	2640.00	225	2.18	1.21
0.5624	2674.56	152	5.37	2.13	0.2263	2639.66	225	4.03	1.83
0.5394	2672.02	152	4.24	1.80	0.2046	2635.08	225	5.39	2.33
0.5198	2671.10	152	2.79	2.74	0.1698	2631.76	225	6.68	2.40
0.5142	2670.47	152	4.42	2.73	0.1377	2628.33	225	5.35	3.14
0.5053	2669.89	152	4.29	2.85	0.1174	2627.24	225	5.43	2.87
0.4940	2669.64	152	1.62	4.67	0.0867	2623.77	225	4.48	3.18
0.4880	2668.04	152	5.72	1.90	0.0637	2620.57	225	5.40	2.45
0.4730	2664.42	152	5.18	2.79	0.0394	2618.33	225	6.60	3.06
0.4567	2662.62	152	5.82	2.41	0.0166	2617.10	225	1.71	3.71



200' 0' 200' 400'

SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: AUGUST 2, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS.

MAPPING COMPANY: M&B AERIAL
(INTERNAL JOB # FCD-1184)

GROUND CONTROL SURVEY DATA
PROVIDED BY AZTEC ENGINEERING

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	2.0
SECTION LINE	
SECTION CORNER	26 25 / 35 36
CROSS SECTION	0.2185
FLOW DIVERSION (CFS)	381
SURVEY CONTROL, ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	2505
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
COUNTY, PARISH, STATE OR INTERNATIONAL BOUNDARY	County Boundary

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. CONVERSION FACTOR 1988 NAVD = -2.23 AVERAGE TO 1929 NGVD

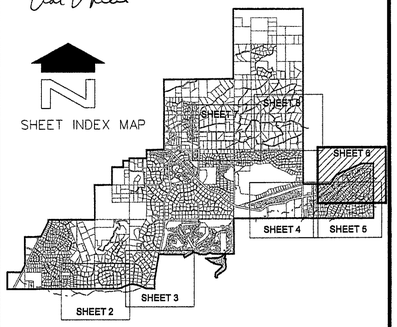
I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION

NOTES

1.) HORIZONTAL DATUM IS NAD 83 STATE PLANE GRID COORDINATES, ARIZONA CENTRAL ZONE.
2.) TOWN LIMITS APPROXIMATE.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 25396 ALAN D. REECE Date Signed 7/27/04 ARIZONA, U.S.A.

SHEET INDEX MAP



NO.	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WINDMILL, PIMA AND UNNAMED TRIBUTARY TO STAGECOACH PASS WASH CAREFREE FLOODPLAIN DELINEATION

F.C.D. CONTRACT NO. 2000 C037

Registered Professional Engineer (Civil) CERTIFICATE NO. 24971 TONYA BOKICH 7-27-04 Date Signed ARIZONA, U.S.A.

CH2MHILL

	BY	DATE
DESIGN	RDL	03/07/03
DESIGN CHK.	LAP	03/07/03
PLANS	RDL	09/04/03
PLANS CHK.	TAB	09/04/03

SHEET 6 OF 8

2944fip06.div 21-JUL-2004

GALLOWAY WASH MIDDLE BRANCH												
R.S.	FP	FW	Q (CFS)	V (FPS)	D (FT)		R.S.	FP	FW	Q (CFS)	V (FPS)	D (FT)
Middle Branch 2												
0.2437	2462.65	2463.20	209	3.12	1.68		0.9386	2513.66	2513.95	2153	5.50	3.39
0.2045	2458.98	2459.33	228	4.32	1.64		0.9152	2510.67	2511.08	2179	6.29	2.98
0.1760	2455.75	2456.37	228	4.25	1.26		0.8808	2506.43	2506.91	2179	6.75	2.96
0.1568	2453.81	2454.24	228	4.07	1.18		0.8441	2501.84	2502.32	2179	6.86	2.45
0.1295	2451.00	2451.55	228	3.60	1.52		0.8041	2498.89	2497.40	2179	5.78	1.85
0.1105	2449.20	2449.70	228	4.33	1.38		0.7560	2491.34	2491.39	2179	6.35	2.89
0.1010	2448.40	2448.69	247	4.92	1.32		0.7272	2487.63	2488.09	2179	5.82	2.57
0.0954	2447.75	2447.86	247	4.11	2.09		0.6777	2481.71	2481.71	2179	5.79	3.44
0.0792	2444.93	2445.01	247	3.98	1.07		0.6468	2477.93	2478.34	2204	7.03	3.09
0.0439	2439.81	2440.23	247	4.12	1.81		0.6954	2472.24	2472.47	2204	5.75	3.37
Middle Branch							0.5644	2468.70	2468.97	2204	5.70	3.02
1.6190	2599.95	2600.45	2094	5.25	3.35		0.5272	2464.27	2464.49	2210	5.98	3.12
1.6060	2596.35	2597.22	2094	7.54	4.36		0.5212	2463.79	2464.03	2210	5.36	3.11
1.5884	2593.49	2594.31	2124	5.60	2.91		0.5157	2463.25	2463.49	2210	5.44	3.74
1.5702	2590.43	2590.44	2124	7.84	4.79		0.5006	2459.60	2460.14	2210	8.33	3.83
1.5371	2587.34	2587.91	2124	3.39	5.97		0.4858	2458.26	2458.45	2210	7.57	4.59
1.5177	2584.71	2585.29	2124	3.78	5.92		0.4697	2455.57	2455.57	2210	9.58	3.72
1.4952	2581.75	2581.79	2124	5.00	5.40		0.4428	2452.44	2452.48	2210	8.92	3.53
1.4639	2578.24	2578.57	2124	4.48	5.09		0.4243	2450.23	2450.19	2210	8.63	3.51
1.4317	2573.67	2574.22	2153	4.95	4.19		0.4037	2448.12	2448.07	2210	7.52	3.91
1.4056	2570.55	2571.08	2153	5.11	3.91		0.3785	2445.02	2444.94	2210	8.34	4.00
1.3816	2567.77	2568.37	2153	5.58	3.62		0.3517	2442.41	2442.37	2210	6.13	4.84
1.3579	2565.15	2565.91	2153	5.74	3.40		Combined					
1.3323	2562.27	2562.85	2153	5.73	3.45		0.3065	2438.66	2438.62	2423	8.70	4.40
1.2985	2558.94	2559.48	2153	5.38	3.75		0.2629	2430.38	2430.40	2423	9.50	3.19
1.2690	2555.13	2555.73	2153	4.93	3.43		0.2268	2426.94	2426.92	2423	10.18	4.01
1.2355	2551.21	2551.48	2153	5.09	3.23		0.2090	2424.87	2424.90	2423	10.23	4.07
1.1974	2546.81	2547.33	2153	4.99	3.27		0.1766	2421.55	2421.87	2423	10.45	4.37
1.1695	2545.45	2545.70	2153	5.49	2.98		0.1637	2419.93	2419.93	2423	9.91	4.35
1.1825	2543.69	2544.64	2153	6.59	5.24		0.1462	2417.32	2417.30	2423	9.92	3.91
1.1546	2539.25	2539.37	2153	7.33	4.27		0.1223	2414.89	2414.82	2423	8.86	3.81
1.1116	2534.97	2535.08	2153	6.62	4.42		0.1024	2411.49	2411.44	2423	9.60	3.36
1.0780	2532.01	2532.53	2153	6.06	4.92		0.0806	2408.73	2408.73	2423	9.71	3.54
1.0256	2524.78	2524.81	2153	6.01	4.21		0.0643	2406.96	2406.98	2423	9.20	3.60
0.9784	2519.32	2519.66	2153	6.15	4.29		0.0415	2404.07	2404.13	2423	8.94	3.40
0.9552	2516.30	2516.51	2153	5.32	3.98		0.0164	2400.03	2400.03	2423	8.33	2.98
							0.0000	2398.16	2398.17	2423	8.64	2.73

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	
SECTION LINE	
SECTION CORNER	26 25 / 35 36
CROSS SECTION	0.2155
FLOW DIVERSION (CFS)	381
SURVEY CONTROL, ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	2605
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
COUNTY, PARISH, STATE OR INTERNATIONAL BOUNDARY	County Boundary

ELEVATION REFERENCE MARKS

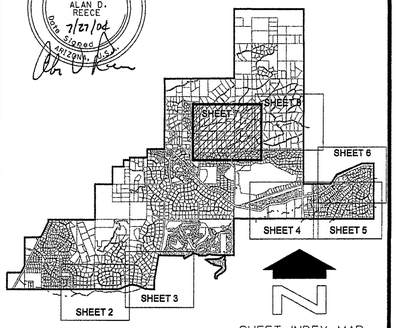
NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. CONVERSION FACTOR 1988 NAVD = -2.23 AVERAGE TO 1929 NGVD

I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION
FEMA 5	2373.71	BRASS CAP N: 1,028,893.59 E: 699,813.40
FEMA 6	2443.33	BRASS CAP N: 1,028,625.68 E: 702,432.55

NOTES

1.) HORIZONTAL DATUM IS NAD 83 STATE PLANE GRID COORDINATES, ARIZONA CENTRAL ZONE.
2.) TOWN LIMITS APPROXIMATE.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 25396 ALAN D. REECE 7/27/04 Date Signed Arizona, U.S.A.



SHEET INDEX MAP

NO.	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

GALLOWAY WASH MIDDLE BRANCH

CAREFREE FLOODPLAIN DELINEATION

F.C.D. CONTRACT NO. 2000 C037

Registered Professional Engineer CERTIFICATE NO. 24971 TONY A. ROK 7-27-04 Date Signed ARIZONA, U.S.A.

CH2MHILL

	BY	DATE
DESIGN	ROL	03/07/03
DESIGN CHK.	LAP	03/07/03
PLANS	ROL	09/04/03
PLANS CHK.	TAB	09/04/03

SHEET 7 OF 8

200' 0' 200' 400'

SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: AUGUST 2, 2001

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS.

MAPPING COMPANY: M&B AERIAL (INTERNAL JOB # FCD-1184)

GROUND CONTROL SURVEY DATA PROVIDED BY AZTEC ENGINEERING

2944fip107.div 21-JUL-2004

GALLOWAY WASH MIDDLE BRANCH												
R.S.	FP	FW	Q (CFS)	V (FPS)	D (FT)		R.S.	FP	FW	Q (CFS)	V (FPS)	D (FT)
Middle Branch 2												
0.2437	2462.85	2463.20	209	3.12	1.68		0.9366	2513.86	2513.95	2153	5.50	3.39
0.2045	2458.98	2459.33	228	4.32	1.64		0.9152	2510.67	2511.08	2179	6.29	2.98
0.1760	2455.75	2456.37	228	4.25	1.28		0.8808	2506.43	2506.81	2179	6.75	2.98
0.1568	2453.81	2454.24	228	4.07	1.18		0.8441	2501.84	2502.32	2179	6.86	2.45
0.1295	2451.00	2451.55	228	3.60	1.52		0.8041	2496.89	2497.40	2179	5.78	1.85
0.1105	2449.20	2449.70	228	4.33	1.38		0.7560	2491.34	2491.39	2179	6.35	2.89
0.1010	2448.40	2448.69	247	4.92	1.32		0.7272	2487.63	2488.09	2179	5.82	2.57
0.0954	2447.75	2447.88	247	4.11	2.09		0.6777	2481.71	2481.71	2179	5.79	3.44
0.0792	2444.93	2445.01	247	3.98	1.07		0.6468	2477.93	2478.34	2204	7.03	3.09
0.0439	2439.81	2440.23	247	4.12	1.81		0.5954	2472.24	2472.47	2204	5.75	3.37
Middle Branch							0.5644	2468.70	2468.97	2204	5.70	3.02
1.6190	2599.95	2600.45	2094	5.25	3.35		0.5272	2464.27	2464.49	2210	5.98	3.12
1.6060	2596.35	2597.22	2094	7.54	4.36		0.5212	2463.79	2464.03	2210	5.36	3.11
1.5684	2593.49	2594.31	2124	5.60	2.91		0.5157	2463.25	2463.49	2210	5.44	3.74
1.5702	2590.43	2590.44	2124	7.84	4.79		0.5006	2459.60	2460.14	2210	8.33	3.83
1.5371	2587.34	2587.91	2124	3.39	5.97		0.4858	2458.26	2458.45	2210	7.57	4.59
1.5177	2584.71	2585.29	2124	3.78	5.92		0.4697	2455.57	2455.57	2210	9.68	3.72
1.4952	2581.75	2581.79	2124	5.00	5.40		0.4428	2452.44	2452.46	2210	8.92	3.53
1.4639	2578.24	2578.57	2124	4.48	5.09		0.4243	2450.23	2450.19	2210	8.63	3.51
1.4317	2573.67	2574.22	2153	4.95	4.19		0.4037	2448.12	2448.07	2210	7.52	3.91
1.4058	2570.55	2571.06	2153	5.11	3.91		0.3785	2445.02	2444.94	2210	8.34	4.00
1.3816	2567.77	2568.37	2153	5.58	3.62		0.3517	2442.41	2442.37	2210	6.13	4.84
1.3579	2565.15	2565.91	2153	5.74	3.40		Combined					
1.3323	2562.27	2562.85	2153	5.73	3.45		0.3065	2436.66	2436.82	2423	8.70	4.40
1.2985	2558.94	2559.48	2153	5.38	3.75		0.2629	2430.38	2430.40	2423	9.60	3.19
1.2690	2555.13	2555.73	2153	4.93	3.43		0.2268	2426.94	2426.92	2423	10.18	4.01
1.2355	2551.21	2551.48	2153	5.09	3.23		0.2090	2424.87	2424.90	2423	10.23	4.07
1.1974	2546.81	2547.33	2153	4.99	3.27		0.1766	2421.55	2421.87	2423	10.45	4.37
1.1895	2545.45	2545.70	2153	5.49	2.98		0.1637	2419.93	2419.93	2423	9.91	4.35
1.1825	2543.69	2544.64	2153	6.59	5.24		0.1462	2417.32	2417.30	2423	8.92	3.91
1.1546	2539.25	2539.37	2153	7.33	4.27		0.1223	2414.89	2414.82	2423	8.66	3.81
1.1118	2534.97	2535.08	2153	8.62	4.42		0.1024	2411.49	2411.44	2423	9.60	3.36
1.0780	2532.01	2532.53	2153	6.06	4.92		0.0806	2408.73	2408.73	2423	9.71	3.54
1.0256	2524.78	2524.81	2153	6.01	4.21		0.0643	2406.96	2406.96	2423	9.20	3.60
0.9784	2519.32	2519.66	2153	6.15	4.29		0.0415	2404.07	2404.13	2423	8.94	3.40
0.9552	2516.30	2516.51	2153	5.32	3.98		0.0184	2400.03	2400.03	2423	8.33	2.98
							0.0000	2398.16	2398.17	2423	8.64	2.73

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	
SECTION LINE	
SECTION CORNER	26 25 / 35 36
CROSS SECTION	0.2185
FLOW DIVERSION (CFS)	381
SURVEY CONTROL, ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	2505
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	Corporate Limits
COUNTY, PARISH, STATE OR INTERNATIONAL BOUNDARY	County Boundary

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. CONVERSION FACTOR 1988 NAVD = -2.23 AVERAGE TO 1929 NGVD

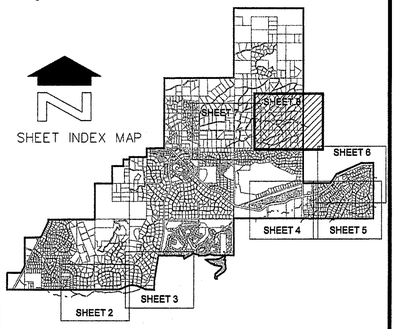
I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION

NOTES

1.) HORIZONTAL DATUM IS NAD 83 STATE PLANE GRID COORDINATES, ARIZONA CENTRAL ZONE.
2.) TOWN LIMITS APPROXIMATE.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 25396 ALAN D. REECE 7/27/04 Date Signed ARIZONA U.S.A.

SHEET INDEX MAP



NO.	REVISION	BY	DATE
2			
1			

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

GALLOWAY WASH MIDDLE BRANCH

CAREFREE FLOODPLAIN DELINEATION

F.C.D. CONTRACT NO. 2000 C037

200' 0' 200' 400'

SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET
FLIGHT DATES: AUGUST 2, 2001

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 24971 TERRY A. HERZOG 7-27-04 Date Signed ARIZONA, U.S.A.

CH2MHILL

	BY	DATE
DESIGN	ROL	03/07/03
DESIGN CHK.	LAP	03/07/03
PLANS	ROL	09/04/03
PLANS CHK.	TAB	09/04/03

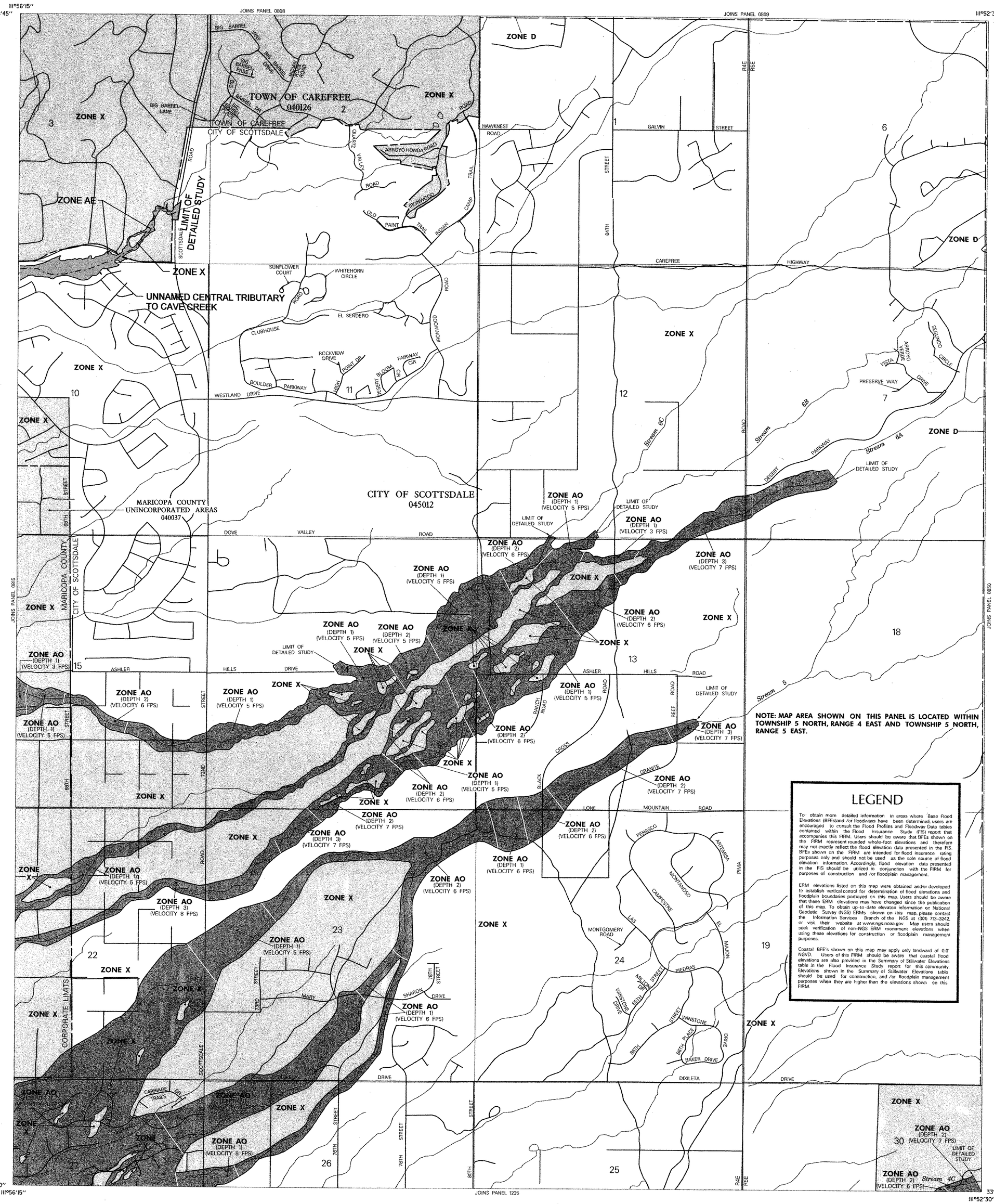
SHEET 8 OF 8

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS FOR 1"= 200' HORIZONTAL SCALE AND 2'CONTOUR INTERVALS.

MAPPING COMPANY: M&B AERIAL (INTERNAL JOB # FCD-1184)

GROUND CONTROL SURVEY DATA PROVIDED BY AZTEC ENGINEERING

2944flp108.div 21-JUL-2004



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

ZONE A No base flood elevations determined.

ZONE AE Base flood elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE A99 To be protected from 100-year flood by Federal flood protection system under construction ; no base flood elevations determined.

ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.

ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

ZONE X Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

ZONE X Areas determined to be outside 500-year floodplain.

ZONE D Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

Identified 1983 — Identified 1990 — Otherwise Protected Areas

Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

513 — Base Flood Elevation Line; Elevation in Feet. See Map Index for Elevation Datum.

D — D — Cross Section Line

(EL. 987) — Base Flood Elevation in Feet Where Uniform Within Zone. See Map Index for Elevation Datum.

RM7 × — Elevation Reference Mark

• M2 — River Mile

97°07'30", 32°22'30" — Horizontal Coordinates Based on North American Datum of 1927 (NAD 27) Projection.

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFE's, and for any information on floodway delineations, prior to use of this map for property purchase or construction purposes.

Areas of Special Flood Hazard (100-year flood) include Zones A, AE, A1-A30, AH, AO, A99, V, VE and V1-V30.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Refer to Floodway Data Table where floodway width is shown at 1/20 inch.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

This map may incorporate approximate boundaries of Coastal Barrier Resource System Units and /or Otherwise Protected Areas established under the Coastal Barrier Improvement Act of 1990 (PL 101-591).

For community map revision history prior to countywide mapping, see Section 6.0 of the Flood Insurance Study Report.

For adjoining map panels and base map source see separately printed Map Index.

MAP REPOSITORY
Refer to Repository Listing on Map Index

EFFECTIVE DATE OF
COUNTYWIDE FLOOD INSURANCE RATE MAP:
APRIL 15, 1988

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL:
DECEMBER 3, 1993

Map revised July 19, 2001 to update corporate limits, to change base flood elevations, to add base flood elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to change zone designations, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 638-6620.

N

APPROXIMATE SCALE IN FEET
1000 0 1000

LEGEND

To obtain more detailed information in areas where Base Flood Elevations (BFEs)and /or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations and therefore may not exactly reflect the flood elevation data presented in the FIS. BFEs shown on the FIRM are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and /or floodplain management.

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NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA AND INCORPORATED AREAS

PANEL 820 OF 4350
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CAREFREE, TOWN OF	040126	0820	F
MARICOPA COUNTY, UNINCORPORATED AREAS	040037	0820	F
SCOTTSDALE, CITY OF	045012	0820	F

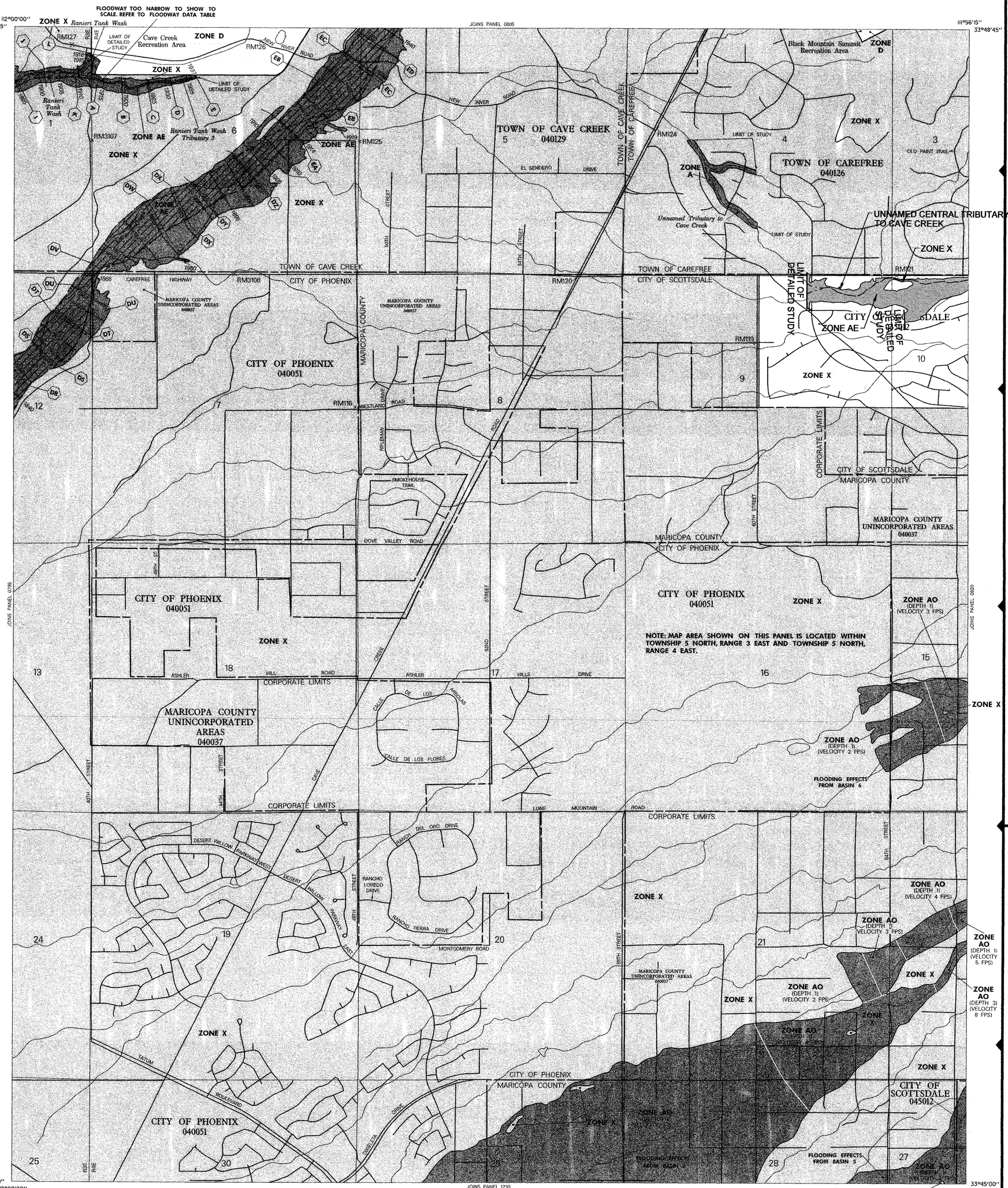
MAP NUMBER
04013C0820 F

MAP REVISED:
JULY 19, 2001

Federal Emergency Management Agency

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FEET NGVD)	DESCRIPTION OF LOCATION
RM116	1951.02	Government Land Office brass cap at quarter corner of sections 7 and 8, T5N, R4E, in fence corner at northwest corner of intersection of 48th Street and Westland Road, brass cap sets 1 foot above ground.
RM119	2113.05	Top of pavement at centerline intersection of 60th Street and road to the west, 0.25 mile south of the north quarter corner of section 3, T5N, R4E.
RM120	2038.93	Top of pavement at centerline intersection of Cave Creek Road and Carefree Highway.
RM121	2178.13	Top of pavement at centerline of Carefree Highway at cattle guard, near the northeast corner of section 9, T5N, R4E.
RM124	2045.41	U.S. Geological Survey brass cap, in concrete post projecting 0.5 foot above ground, 75 feet east of the junction of Cave Creek and New River Roads, marked 9-HRP 1963.
RM125	1955.51	Chiseled square in rock projecting 0.5 foot above ground, 1 mile west of the junction of Cave Creek and New River Roads, 36 feet south of New River Road at road to the north.
RM126	1960.07	Chiseled square in rock projecting 0.5 foot above ground, 1.5 miles west of the junction of Cave Creek and New River Roads, 42 feet south of New River Road.
RM127	1923.60	U.S. Geological Survey brass cap, in concrete post projecting 0.5 foot above ground, 2.3 miles west of the junction of Cave Creek and New River Roads, 39 feet north of New River Road and 2.0 feet east of fence at north end of cattle guard, marked 8 HRP 1963.
RM3106	1908.08	Located at the top of brass cap in a handhole at the south quarter corner of section 6, T5N, R4E.
RM3107	1914.48	Located at the top of brass cap in a handhole at the west quarter corner of section 6, T5N, R4E.



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LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** No base flood elevations determined.
- **ZONE AE** Base flood elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction ; no base flood elevations determined.
- **ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside 500-year floodplain.
- **ZONE D** Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

Identified 1983 | Identified 1990 | Otherwise Protected Areas

Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- ~~~513~~~ Base Flood Elevation Line; Elevation in Feet. See Map Index for Elevation Datum.
- (D)———(D) Cross Section Line
- (EL 987) Base Flood Elevation in Feet Where Uniform Within Zone. See Map Index for Elevation Datum.
- RM7 × Elevation Reference Mark
- ● M2 River Mile
- 97°07'30", 32°22'30" Horizontal Coordinates Based on North American Datum of 1927 (NAD 27) Projection.

NOTES

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For adjoining map panels and base map source see separately printed Map Index.

MAP REPOSITORY
Refer to Repository Listing on Map Index

EFFECTIVE DATE OF
COUNTYWIDE FLOOD INSURANCE RATE MAP:
APRIL 15, 1988

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL:
SEPTEMBER 29, 1989, DECEMBER 3, 1993, SEPTEMBER 30, 1995

Map revised July 19, 2001 to update corporate limits, to change base flood elevations, to add base flood elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to change zone designations, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

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APPROXIMATE SCALE IN FEET
1000 0 1000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA AND INCORPORATED AREAS

PANEL 815 OF 4350
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS: COMMUNITY	NUMBER	PANEL	SUFFIX
CAREFREE, TOWN OF	040126	0815	H
CAVE CREEK, TOWN OF	040129	0815	H
MARICOPA COUNTY UNINCORPORATED AREAS	040037	0815	H
PHOENIX, CITY OF	040051	0815	H
SCOTTSDALE, CITY OF	045012	0815	H

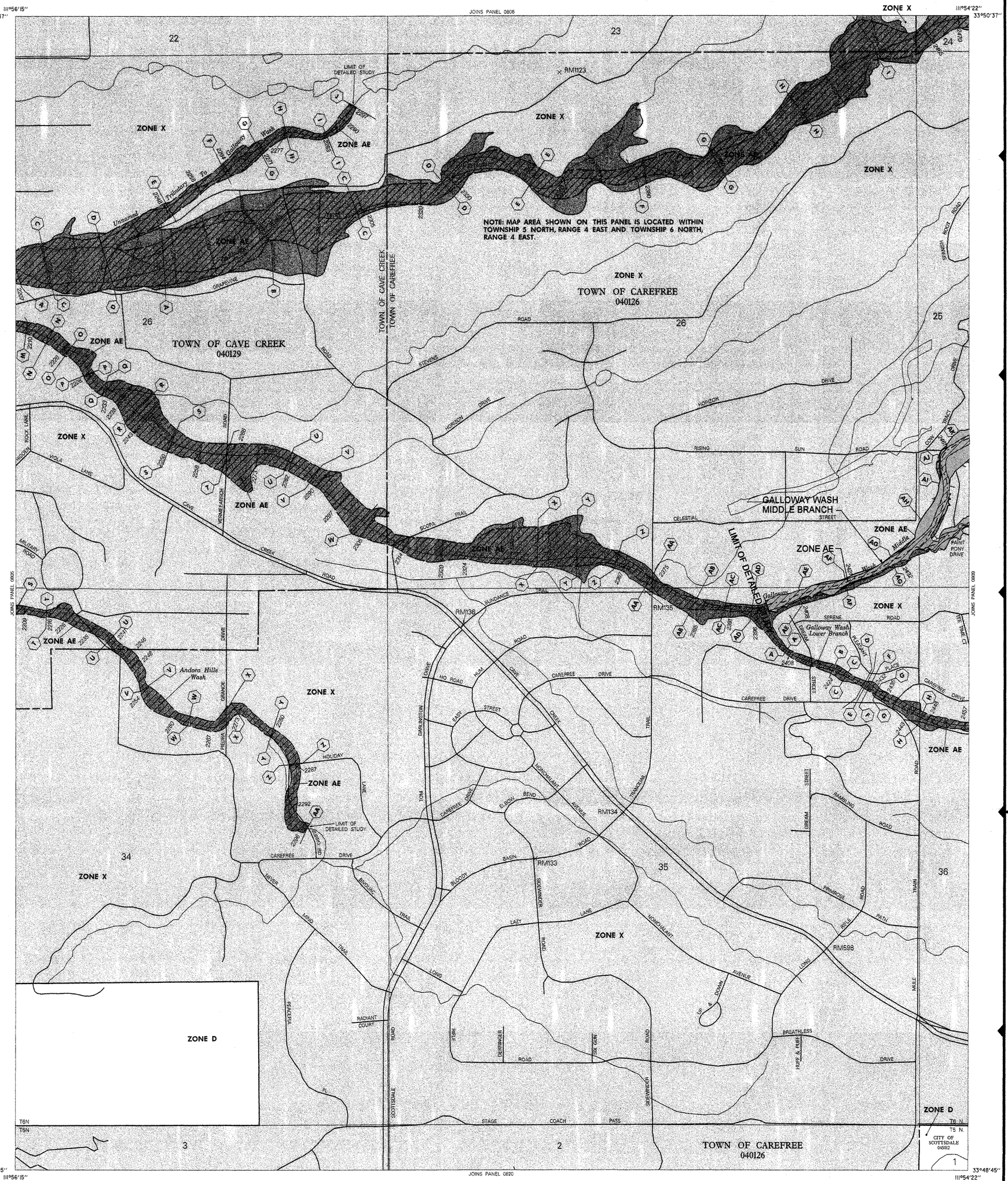
MAP NUMBER
04013C0815 H

MAP REVISED:
JULY 19, 2001

Federal Emergency Management Agency

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FEET NGVD)	DESCRIPTION OF LOCATION
RM133	2373.54	Top of pavement at centerline intersection of Sidewinder and Bloody Basin Roads.
RM134	2389.00	Top of pavement at centerline intersection of Cave Creek and Bloody Basin Roads.
RM135	2375.04	Top square of concrete base at northwest corner of intersection of Sundance and Tranquil Trails.
RM136	2344.24	Rim of handhole at centerline intersection of Cave Creek and Scottsdale Roads.
RM598	2445.00	Intersection of Cave Creek Road and Long Rifle Road South, copper nail and washer.
RM1123	2406.61	Brass cap in headwall N85W, 1708 feet to the approximate northeast corner of section 27, T6N, R4E.



LEGEND

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LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

ZONE A No base flood elevations determined.

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ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE A99 To be protected from 100-year flood by Federal flood protection system under construction ; no base flood elevations determined.

ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.

ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

ZONE X Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

ZONE X Areas determined to be outside 500-year floodplain.

ZONE D Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

Identified 1983 | Identified 1990 | Otherwise Protected Areas

Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

513 — Base Flood Elevation Line; Elevation in Feet. See Map Index for Elevation Datum.

D — D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone. See Map Index for Elevation Datum.

RM7 × — Elevation Reference Mark

● M2 — River Mile

97°07'30", 32°22'30" — Horizontal Coordinates Based on North American Datum of 1927 (NAD 27) Projection.

NOTES

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MAP REPOSITORY
Refer to Repository Listing on Map Index

EFFECTIVE DATE OF
COUNTYWIDE FLOOD INSURANCE RATE MAP:
APRIL 15, 1988

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL:
SEPTEMBER 29, 1989, SEPTEMBER 4, 1991, DECEMBER 3, 1993

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APPROXIMATE SCALE IN FEET
500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA AND INCORPORATED AREAS

PANEL 808 OF 4350
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS: COMMUNITY	NUMBER	PANEL	SUFFIX
CAREFREE, TOWN OF	040126	0808	H
CAVE CREEK, TOWN OF	040129	0808	H
SCOTTSDALE, CITY OF	045012	0808	H

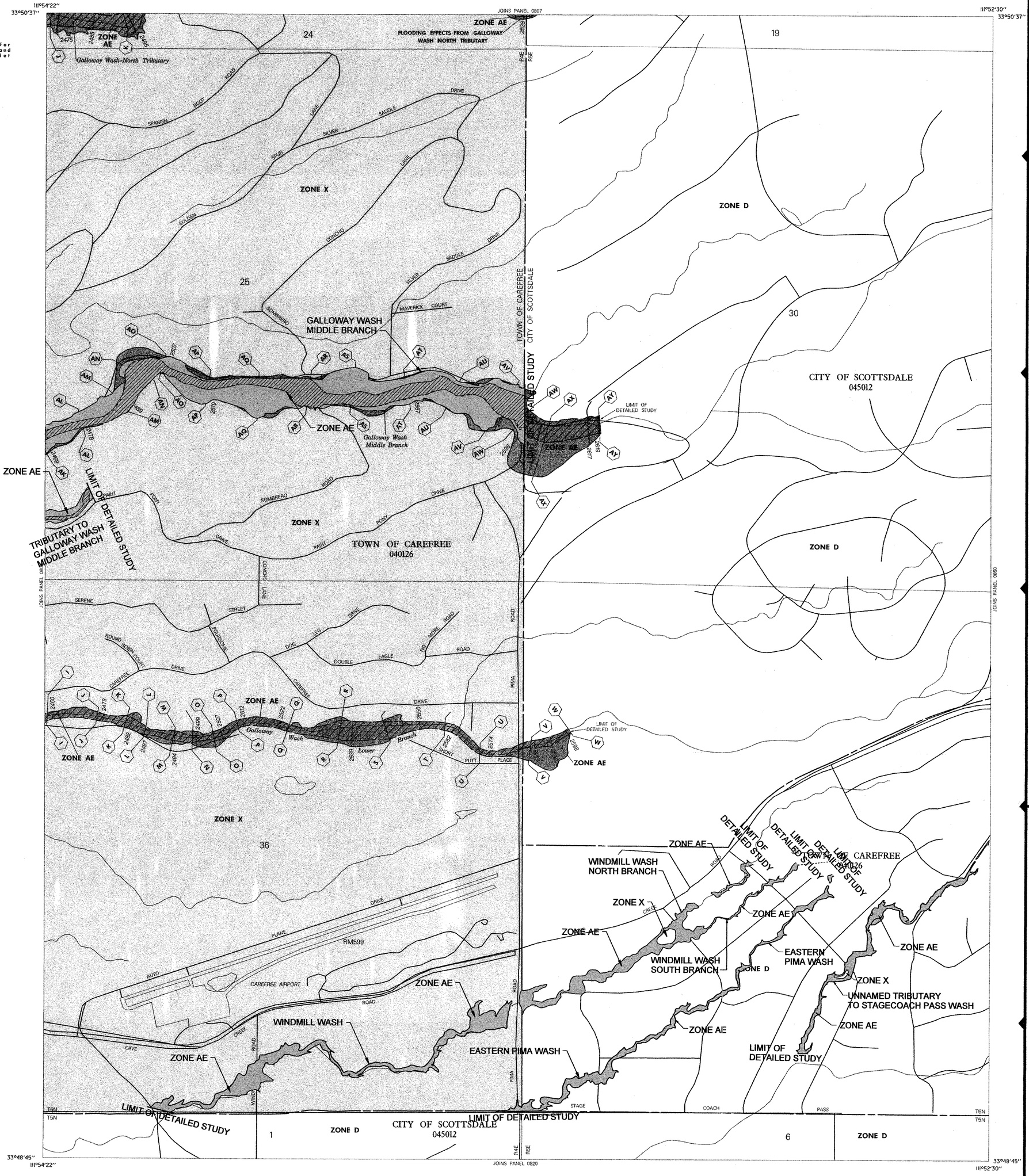
MAP NUMBER 04013C0808 H

MAP REVISED: JULY 19, 2001

Federal Emergency Management Agency

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FEET NGVD)	DESCRIPTION OF LOCATION
RM599	2503.56	Carefree Airport, in island for fuel pump, in concrete slab and flush with surface, standard tablet stamped 21 HRP 1963 2504.



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D — D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone. See Map Index for Elevation Datum.

RM7 × — Elevation Reference Mark

● M2 — River Mile

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For adjoining map panels and base map source see separately printed Map Index.

MAP REPOSITORY
Refer to Repository Listing on Map Index

EFFECTIVE DATE OF
COUNTYWIDE FLOOD INSURANCE RATE MAP:
APRIL 15, 1998

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL:
SEPTEMBER 29, 1989, SEPTEMBER 4, 1991, DECEMBER 3, 1992

Map revised July 19, 2001 to update corporate limits, to change base flood elevations, to add base flood elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to change zone designations, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET
500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA AND INCORPORATED AREAS

PANEL 809 OF 4350
(SEE MAP INDEX FOR PANELS NOT PRINTED)

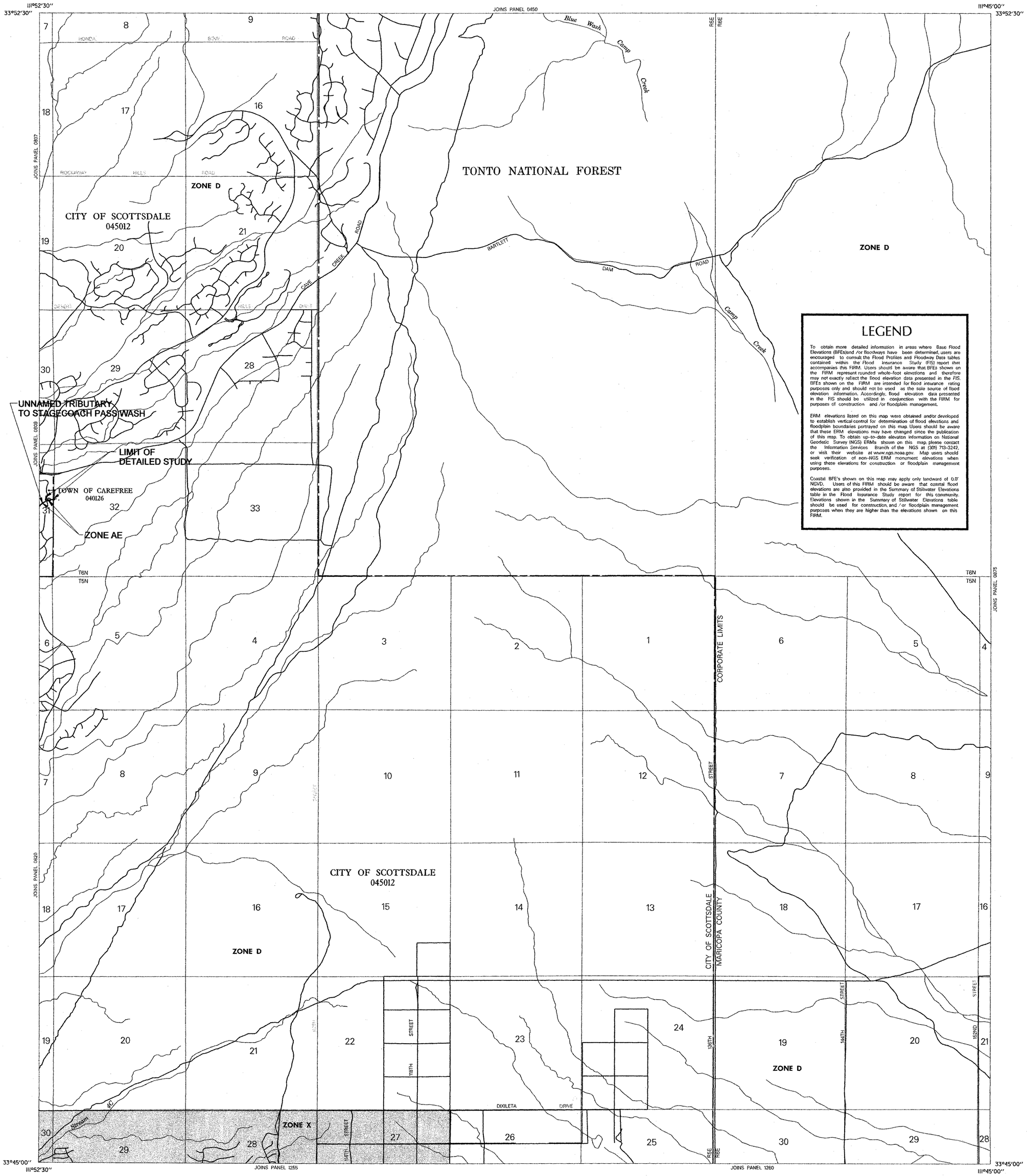
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CAREFREE, TOWN OF	040126	0809	H
SCOTTSDALE, CITY OF	045012	0809	H

MAP NUMBER 04013C0809 H

MAP REVISED: JULY 19, 2001

Federal Emergency Management Agency



LEGEND

To obtain more detailed information in areas where Base Flood Elevations (BFEs)and /or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations and therefore may not exactly reflect the flood elevation data presented in the FIS. BFEs shown on the FIRM are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and /or floodplain management.

ERM elevations listed on this map were obtained and/or developed to establish vertical control for determination of flood elevations and floodplain boundaries portrayed on this map. Users should be aware that these ERM elevations may have changed since the publication of this map. To obtain up-to-date elevation information on National Geodetic Survey (NGS) ERMs shown on this map please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov. Map users should seek verification of non-NGS ERM monument elevations when using these elevations for construction or floodplain management purposes.

Coastal BFE's shown on this map may apply only landward of 0.0' NGVD. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and /or floodplain management purposes when they are higher than the elevations shown on this FIRM.

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

ZONE A No base flood elevations determined.

ZONE AE Base flood elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE A99 To be protected from 100-year flood by Federal flood protection system under construction ; no base flood elevations determined.

ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.

ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

ZONE X Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

ZONE X Areas determined to be outside 500-year floodplain.

ZONE D Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

Identified 1983 | Identified 1990 | Otherwise Protected Areas

Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones

~~~513~~~ Base Flood Elevation Line; Elevation in Feet. See Map Index for Elevation Datum.

D — D Cross Section Line

(EL 987) Base Flood Elevation in Feet Where Uniform Within Zone. See Map Index for Elevation Datum.

RM7 × Elevation Reference Mark

● M2 River Mile

97°07'30", 32°22'30" Horizontal Coordinates Based on North American Datum of 1927 (NAD 27) Projection.

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFE's, and for any information on floodway delineations, prior to use of this map for property purchase or construction purposes.

Areas of Special Flood Hazard (100-year flood) include Zones A, AE, A1-A30, AH, AO, A99, V, VE and V1-V30.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Refer to Floodway Data Table where floodway width is shown at 1/20 inch.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

This map may incorporate approximate boundaries of Coastal Barrier Resource System Units and /or Otherwise Protected Areas established under the Coastal Barrier Improvement Act of 1990 (PL 101-591).

For community map revision history prior to countywide mapping, see Section 6.0 of the Flood Insurance Study Report.

For adjoining map panels and base map source see separately printed Map Index.

MAP REPOSITORY
Refer to Repository Listing on Map Index

EFFECTIVE DATE OF
COUNTYWIDE FLOOD INSURANCE RATE MAP:
APRIL 15, 1998

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL:

Map revised July 19, 2001 to update corporate limits, to change base flood elevations, to add base flood elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to change zone designations, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

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APPROXIMATE SCALE IN FEET
2000 0 2000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA AND INCORPORATED AREAS

PANEL 850 OF 4350
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS: COMMUNITY	NUMBER	PANEL	SUFFIX
CAREFREE, TOWN OF	040126	0850	E
MARICOPA COUNTY, UNINCORPORATED AREAS	040037	0850	E
SCOTTSDALE, CITY OF	045012	0850	E

MAP NUMBER
04013C0850 E

MAP REVISED:
JULY 19, 2001

Federal Emergency Management Agency
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