Book 5 of 13

Glendale Peoria
Area Drainage Master Plan Update

HYDROLOGY REPORT

VOLUME HY 3 of 3

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GLENDALE

CITY OF PEORIA

Glendale Peoria
Area Drainage Master Plan Update

HYDROLOGY REPORT

VOLUME HY 3 of 3

Contract FCD 99-44

May 30, 2001

Prepared by:

Intelligent Engineering
Environmental *Solutions*

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VOLUME DESIGNATION

VOLUME ID	Volume Name	Number
DC	Data Collection	1
HY	Hydrology	2
PA	Potential Alternatives	3
AA	Alternative Analysis (Level II)	4
RA	Recommended Alternatives (Level III)	5
ZA	Zone A Floodplain Delineation	6
DS	Detailed (Section 15)	7
AL	Arrowhead Lakes Hydrology	8
AR	Administrative Report (Correspondence)	9

Note: Volume ID will be used for Section, Plate, Figure, and Table identifiers.

Glendale/Peoria Area Drainage Master Plan Update

FCD 99-44

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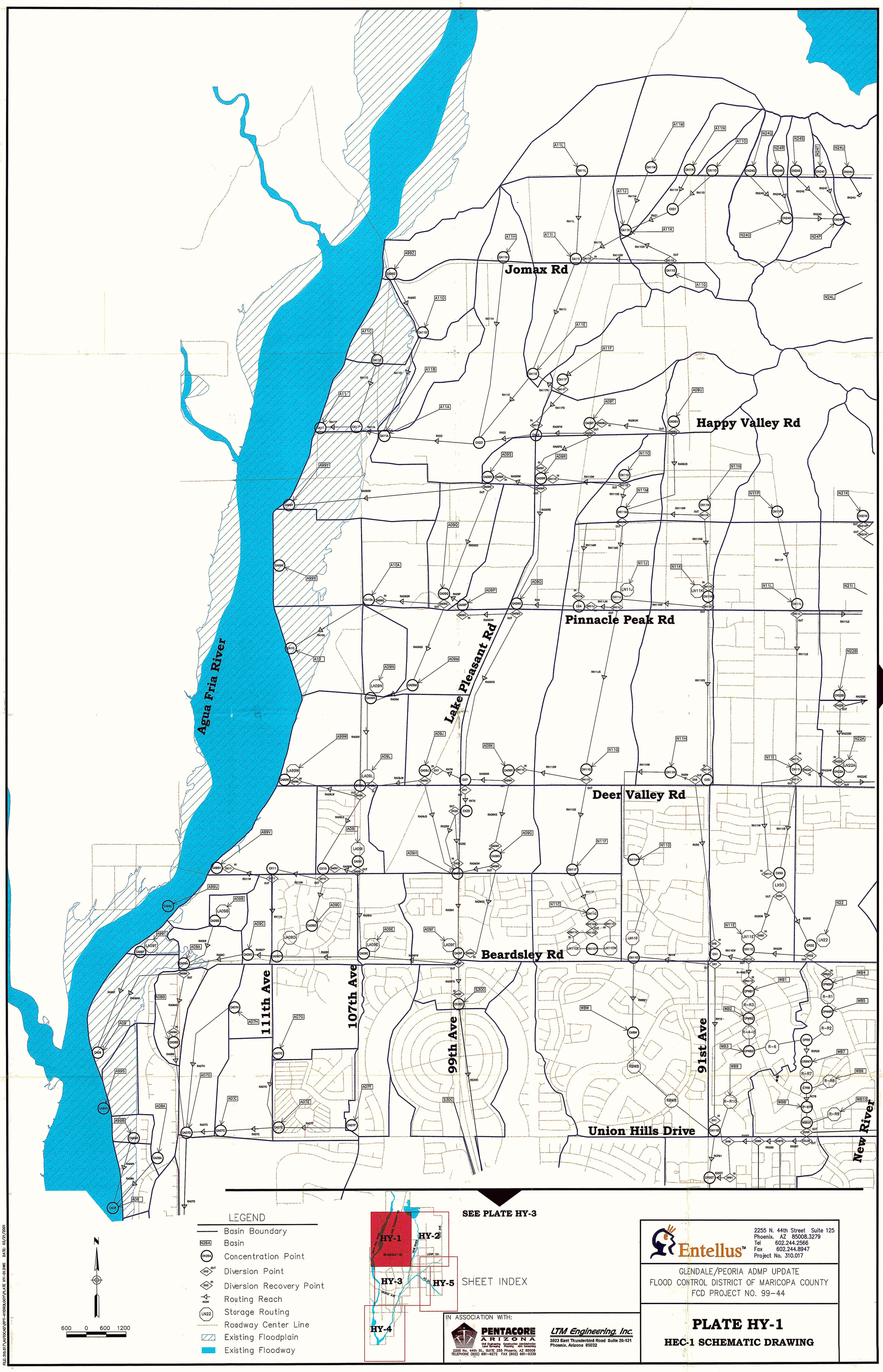
Jomax Rd
Happy Valley Rd
Pinnacle Peak Rd
Lake Pleasant Rd
Agua Fria River
Deer Valley Rd
Beardsley Rd
111th Ave
107th Ave
99th Ave
91st Ave
Union Hills Drive
New River
SEE PLATE HY-2
SEE PLATE HY-3
LEGEND
Basin Boundary
Basin
Concentration Point
Diversion Point
Diversion Recovery Point
Routing Reach
Storage Routing
Roadway Center Line
Existing Floodplain
Existing Floodway
600 0 600 1200
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GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44
PLATE HY-1
HEC-1 SCHEMATIC DRAWING
FILE:310.017\AUTOCAD\RPT-HYDROLOGY\PLATE HY-01.DWG DATE: 03/21/2001

New River Dam

Jomax Rd

Happy Valley Rd

Pinnacle Peak Rd

Deer Valley Rd

Loop 101

Union Hills Drive

83rd Ave

75th Ave

67th Ave

59th Ave

51st Ave

New River

SEE PLATE HY-1

SEE PLATE HY-3

SEE PLATE HY-5

LEGEND

- Basin Boundary
- N26A Basin
- CN28A Concentration Point
- DX3 OUT Diversion Point
- DX3 IN Diversion Recovery Point
- RX3W Routing Reach
- LN22 Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

N

600 0 600 1200

HY-1 HY-2 HY-3 HY-4 HY-5

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PLATE HY-2

HEC-1 SCHEMATIC DRAWING

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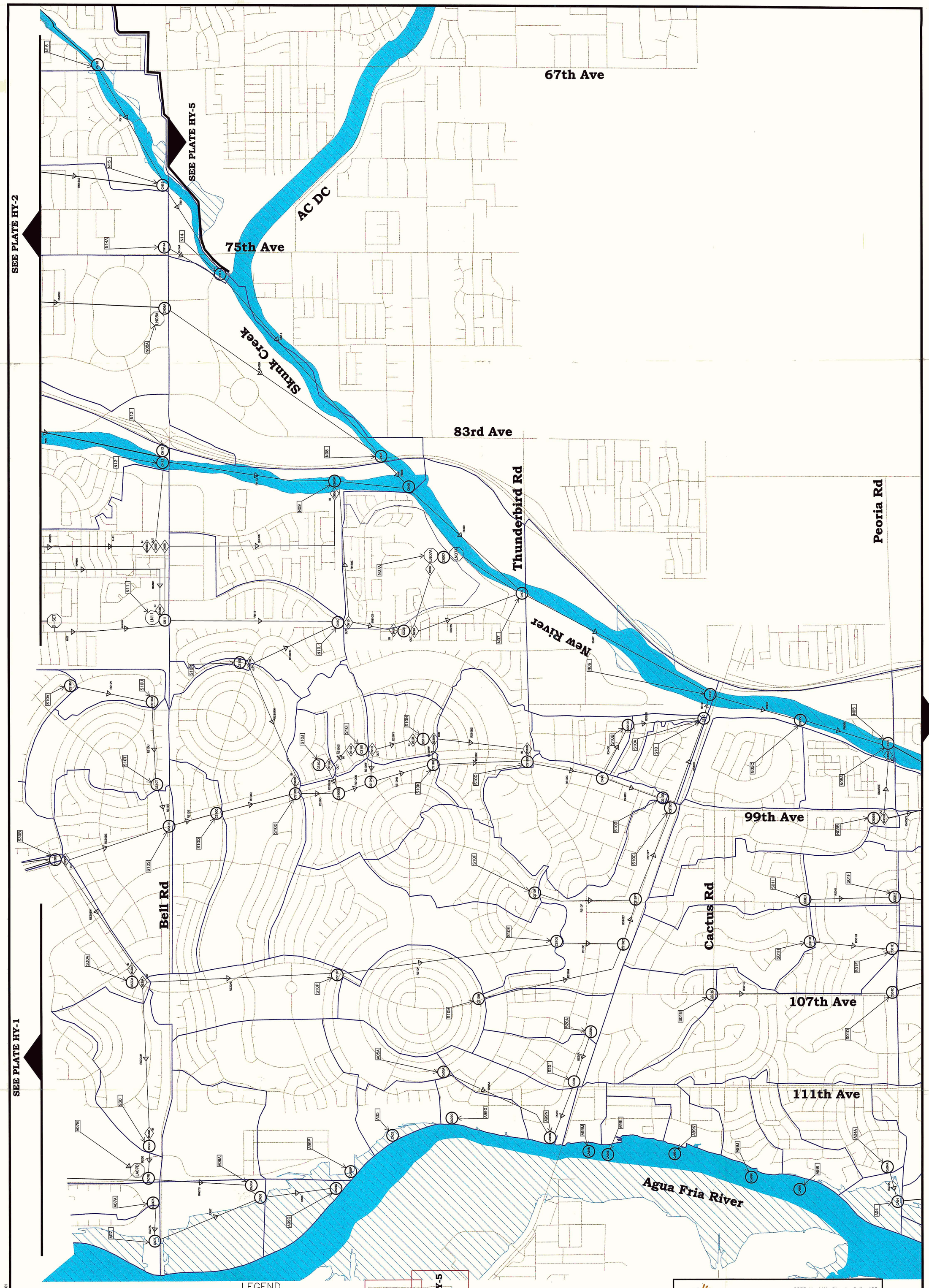

LEGEND

- Basin Boundary
- N26A Basin
- CN26A Concentration Point
- DIV3 OUT Diversion Point
- DIV3 IN Diversion Recovery Point
- RX3W Routing Reach
- LN22 Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200

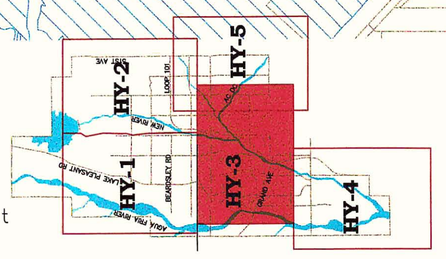

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PLATE HY-3

HEC-1 SCHEMATIC DRAWING

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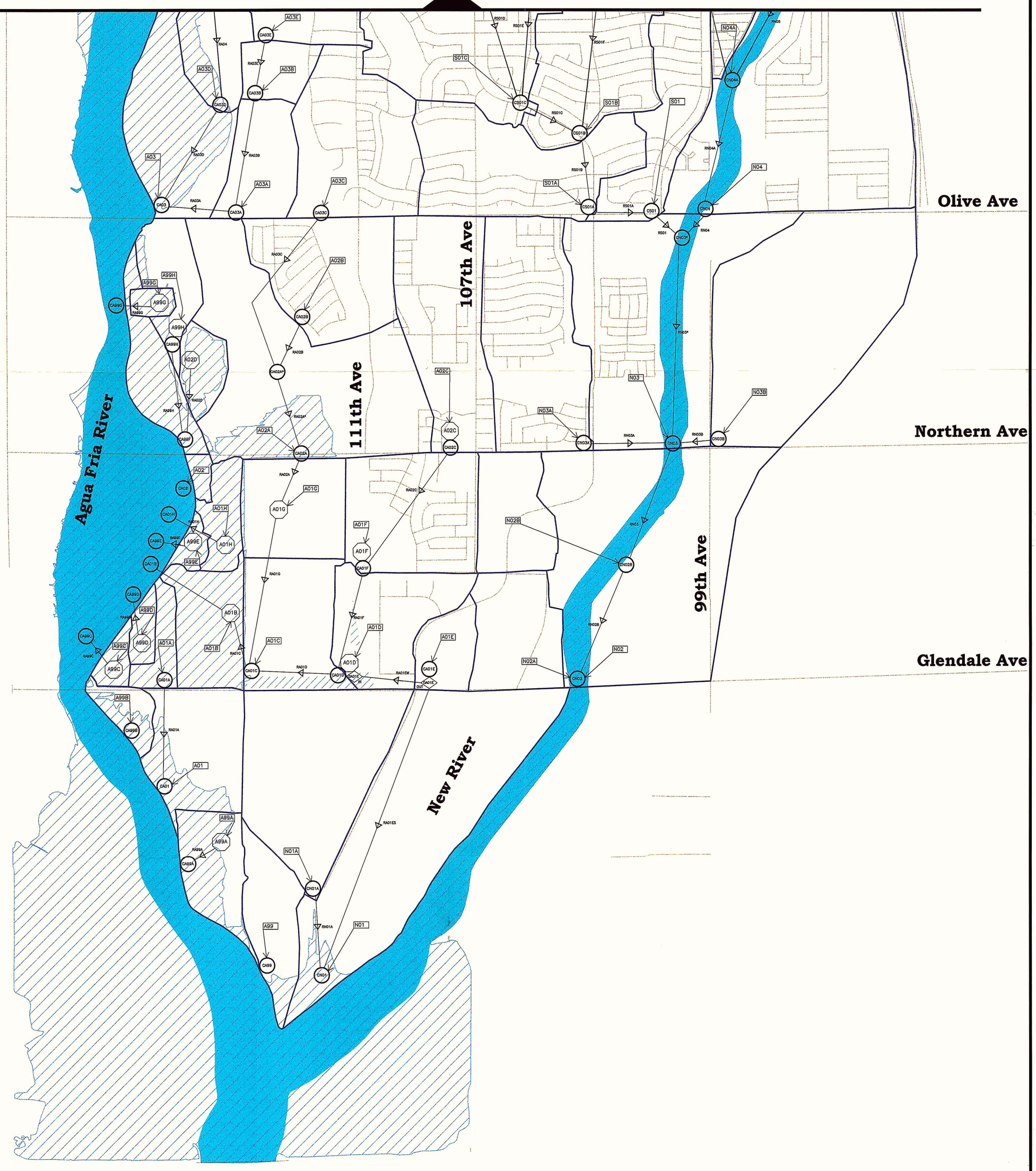
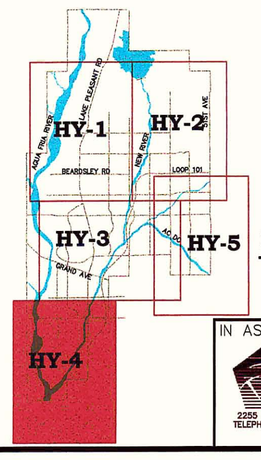


LEGEND

- Basin Boundary
- Basin
- Concentration Point
- Diversion Point
- Diversion Recovery Point
- Routing Reach
- Storage Routing
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

N

600 0 600 1200



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HEC-1 SCHEMATIC DRAWING

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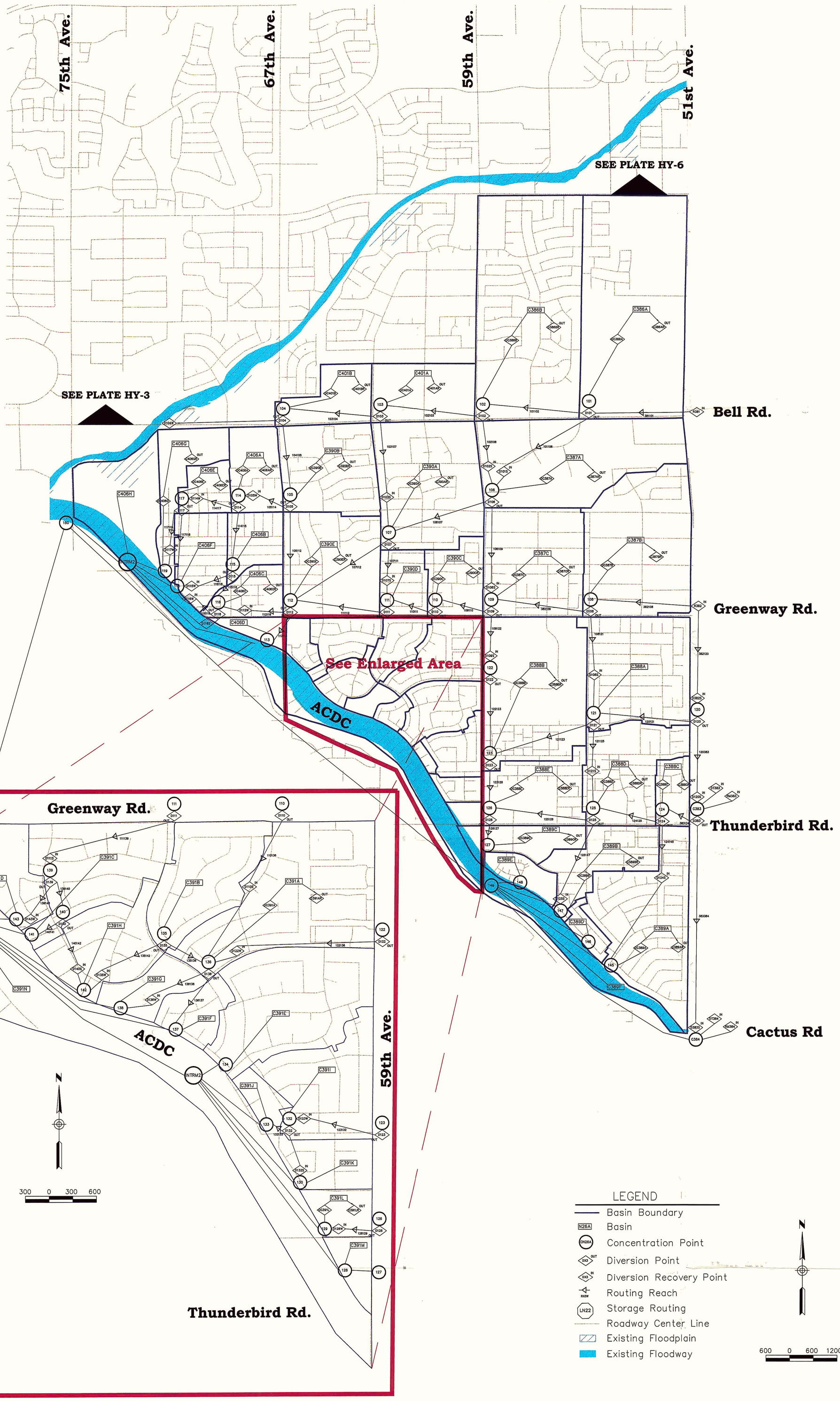

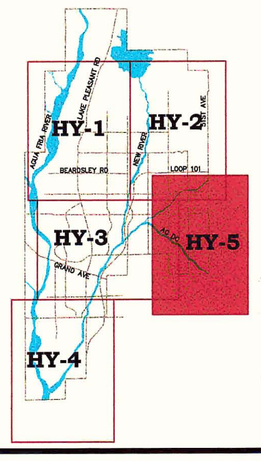

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PLATE HY-5E
EXISTING CONDITION HEC-1 SCHEMATIC DRAWING

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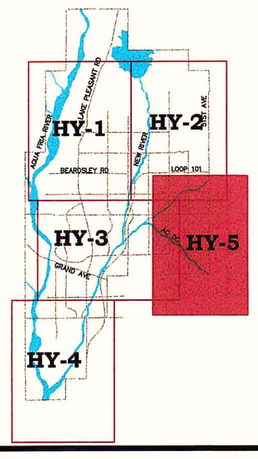

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PLATE HY-5F
FUTURE CONDITION
HEC-1 SCHEMATIC DRAWING

FILE:310.017\AUTOCAD\RPT-HYDROLOGY\PLATE HY-05F.DWG DATE: 03/21/2001

Jomax Rd

Happy Valley Rd

Pinnacle Peak Rd

Deer Valley Rd

Beardsley Rd

Union Hills Drive

Agua Fria River

Lake Pleasant Rd

111th Ave

107th Ave

99th Ave

91st Ave

SEE PLATE HY-7

SEE PLATE HY-8

LEGEND

- Basin Boundary
- N26A Basin
- CN26A Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200

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PLATE HY-6

HYDROLOGY MAP

FILE: 310.017\AUTOCAD\RPT-HYDROLOGY\PLATE HY-06.DWG DATE: 3/21/2000

New River Dam

Jomax Rd

Happy Valley Rd

Pinnacle Peak Rd

Deer Valley Rd

83rd Ave

75th Ave

New River

Loop 101

59th Ave

67th Ave

51st Ave

Union Hills Drive

SEE PLATE HY-6

SEE PLATE HY-8

SEE PLATE HY-10

LEGEND

- Basin Boundary
- N26A Basin
- CN28A Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

N

600 0 600 1200

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PLATE HY-7

HYDROLOGY MAP

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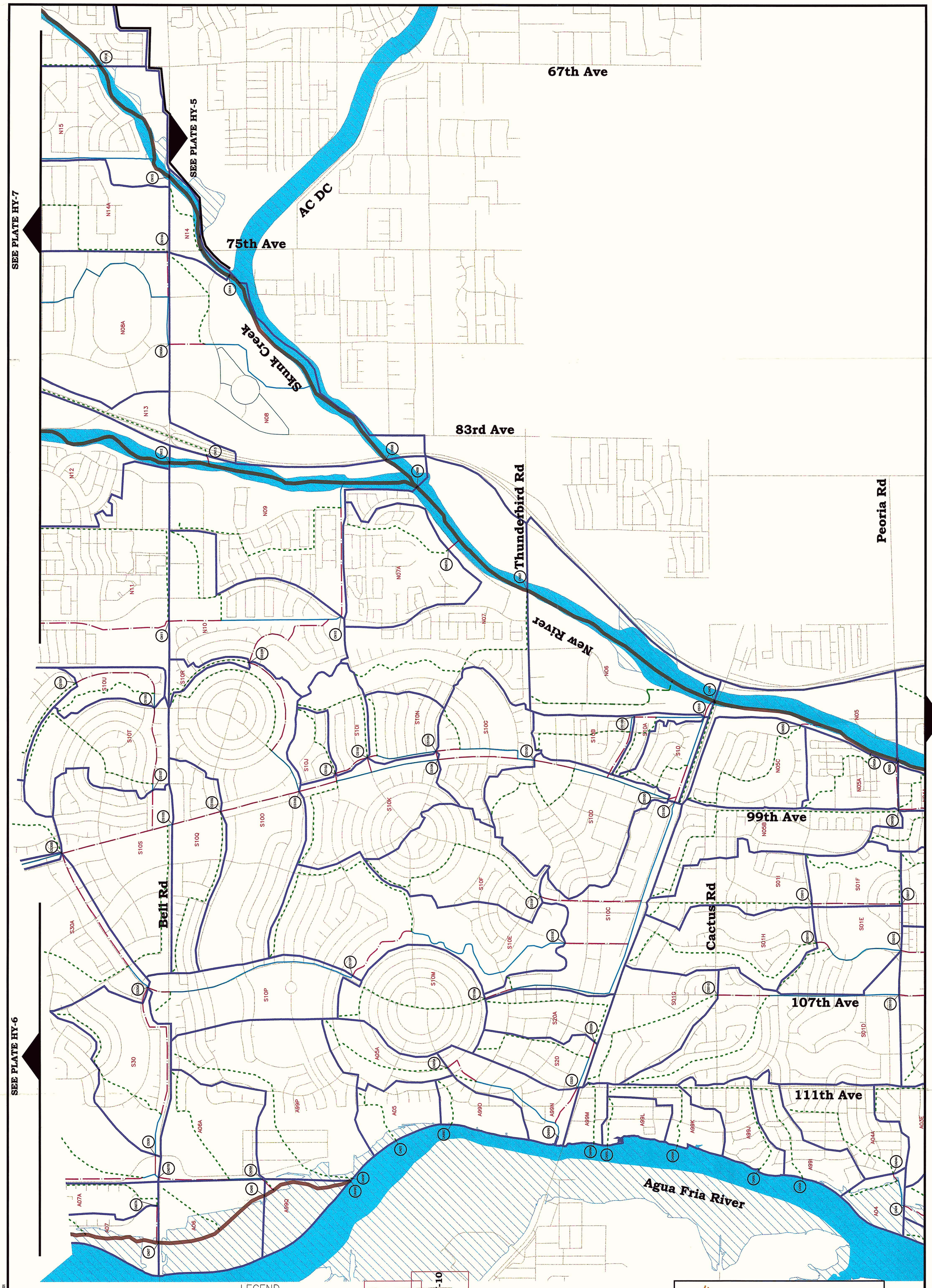

LEGEND

- Basin Boundary
- N26A Basin
- CN26A Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200

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PLATE HY-8

HYDROLOGY MAP

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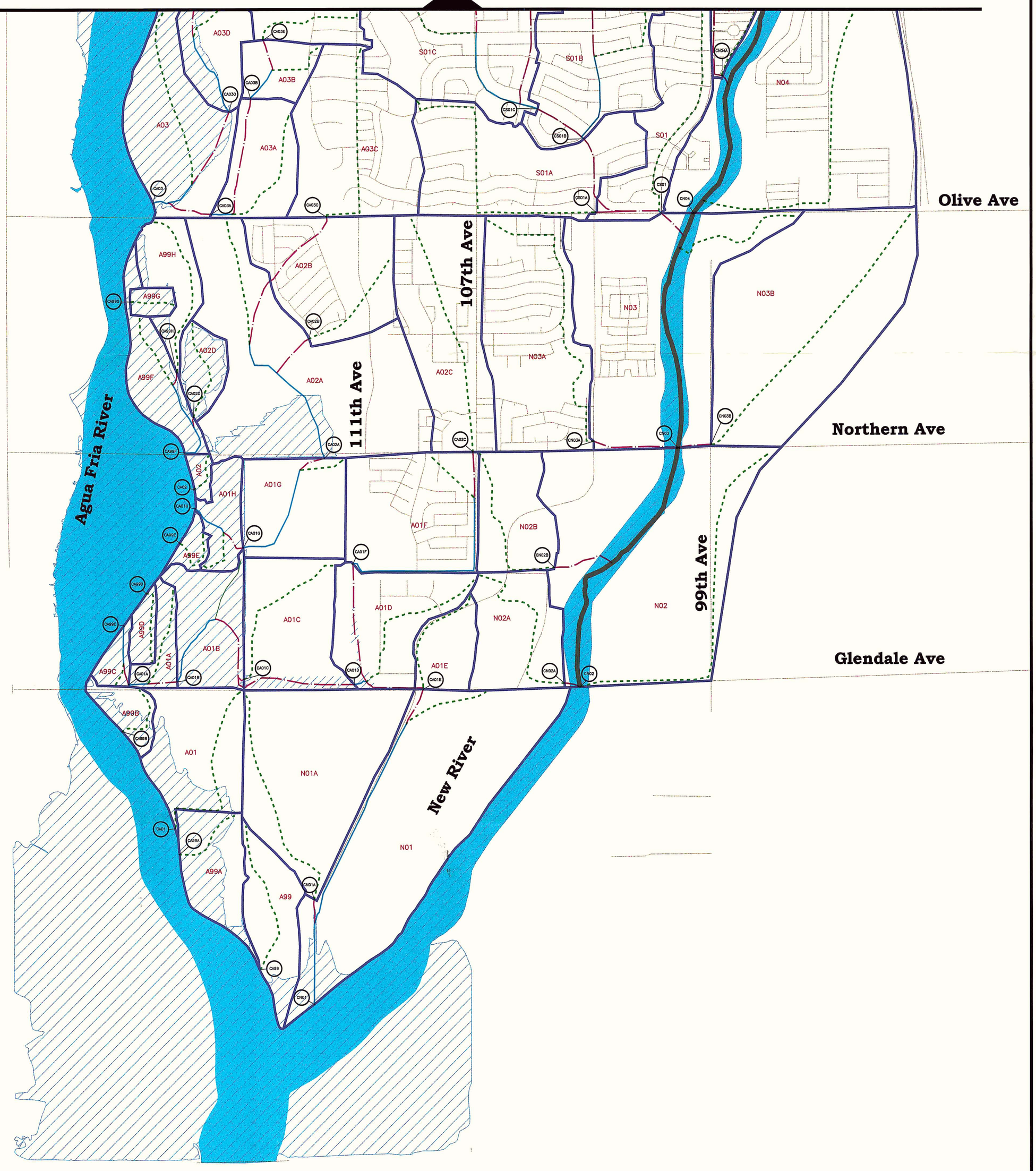
SEE PLATE HY-8



LEGEND

- Basin Boundary
- N26A Basin
- CN26A Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

600 0 600 1200

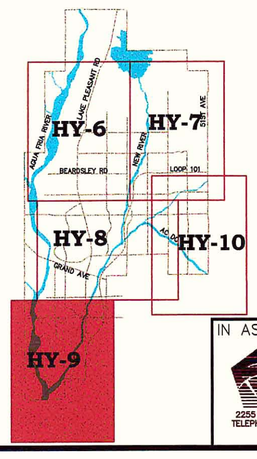


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PLATE HY-9

HYDROLOGY MAP

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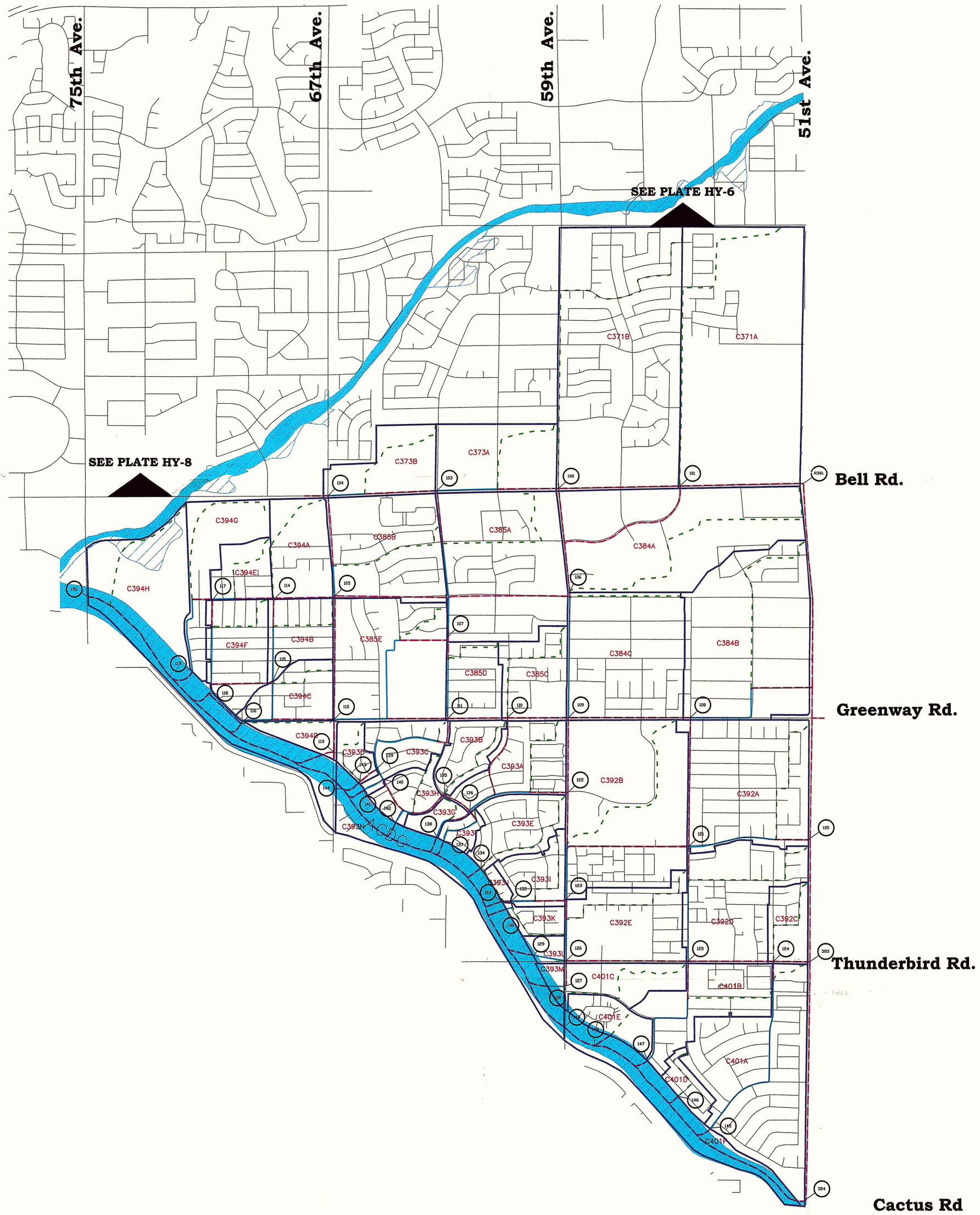

N

600 0 600 1200

LEGEND

- Basin Boundary
- N26A Basin
- (CN28A) Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

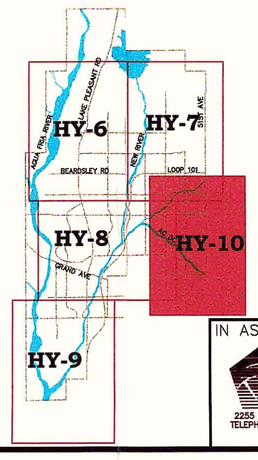

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PLATE HY-10F
FUTURE CONDITION HYDROLOGY MAP

FILE:310.017\AUTOCAD\RPT-HYDROLOGY\PLATE HY-10F.DWG DATE: 03/21/2001

N

600 0 600 1200

LEGEND

- Basin Boundary
- N26A Basin
- CN26A Concentration Point
- Time of Concentration
- Routes
- Route and Time of Concentration
- Stream
- Roadway Center Line
- Existing Floodplain
- Existing Floodway

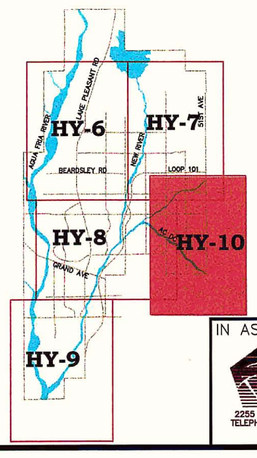

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PLATE HY-10E
EXISTING CONDITION HYDROLOGY MAP

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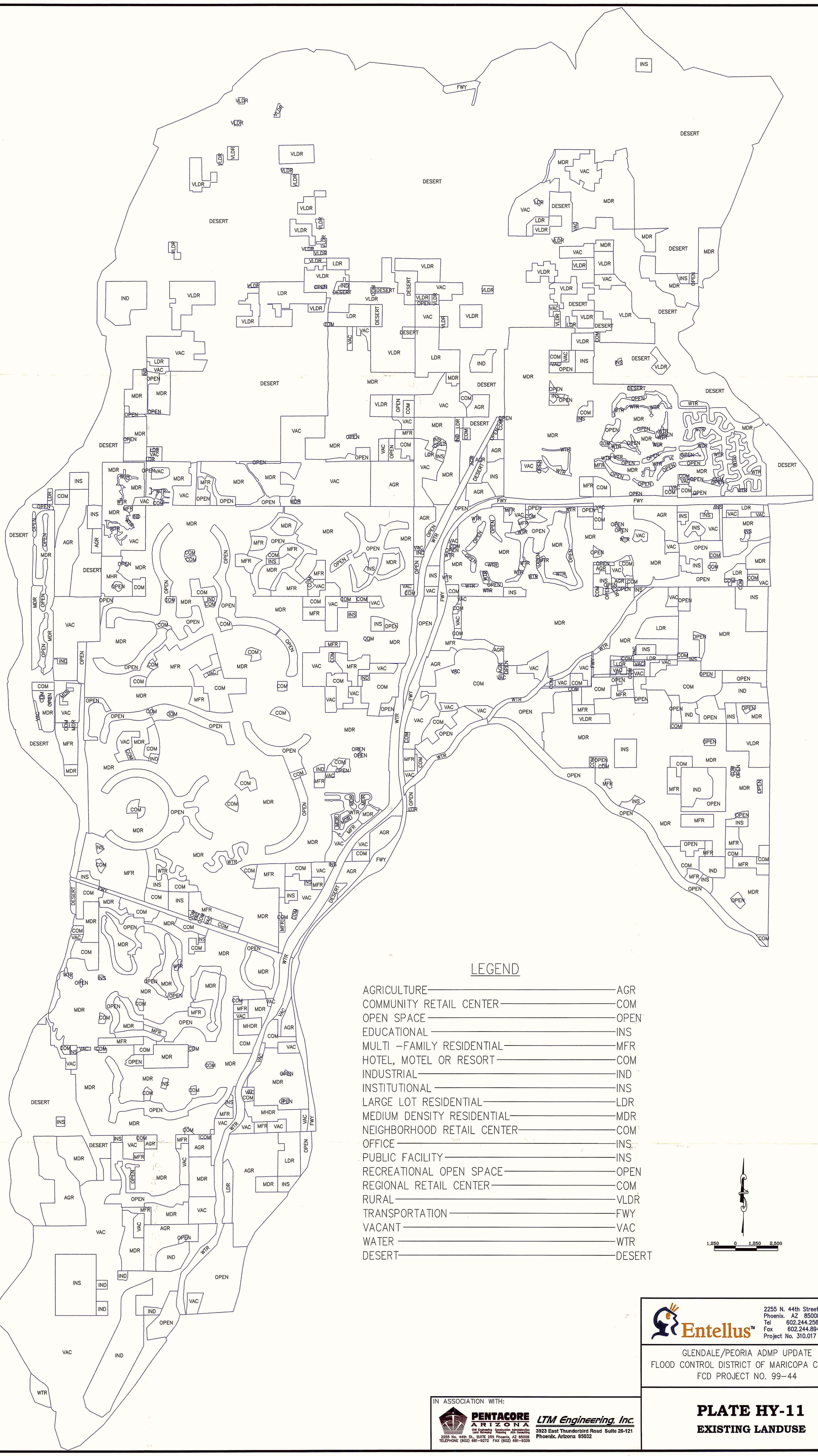

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PLATE HY-11

EXISTING LANDUSE

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LEGEND

AGRICULTURE	AGR
COMMUNITY RETAIL CENTER	COM
DEDICATED OPEN SPACE	OPEN
EDUCATIONAL	INS
HIGH DENSITY RESIDENTIAL	MFR
HOTEL, MOTEL OR RESORT	COM
INDUSTRIAL	IND
INSTITUTIONAL	INS
LARGE LOT RESIDENTIAL	LDR
MEDIUM DENSITY RESIDENTIAL	MDR
NEIGHBORHOOD RETAIL CENTER	COM
OFFICE	INS
PUBLIC FACILITY	INS
RECREATIONAL OPEN SPACE	OPEN
REGIONAL RETAIL CENTER	COM
RURAL	VLDR
TRANSPORTATION	FWY
VACANT	VAC
WATER	WTR

1,250 0 1,250 2,500

Entellus™
2255 N. 44th Street Suite 125
Phoenix. AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
Project No. 310.017

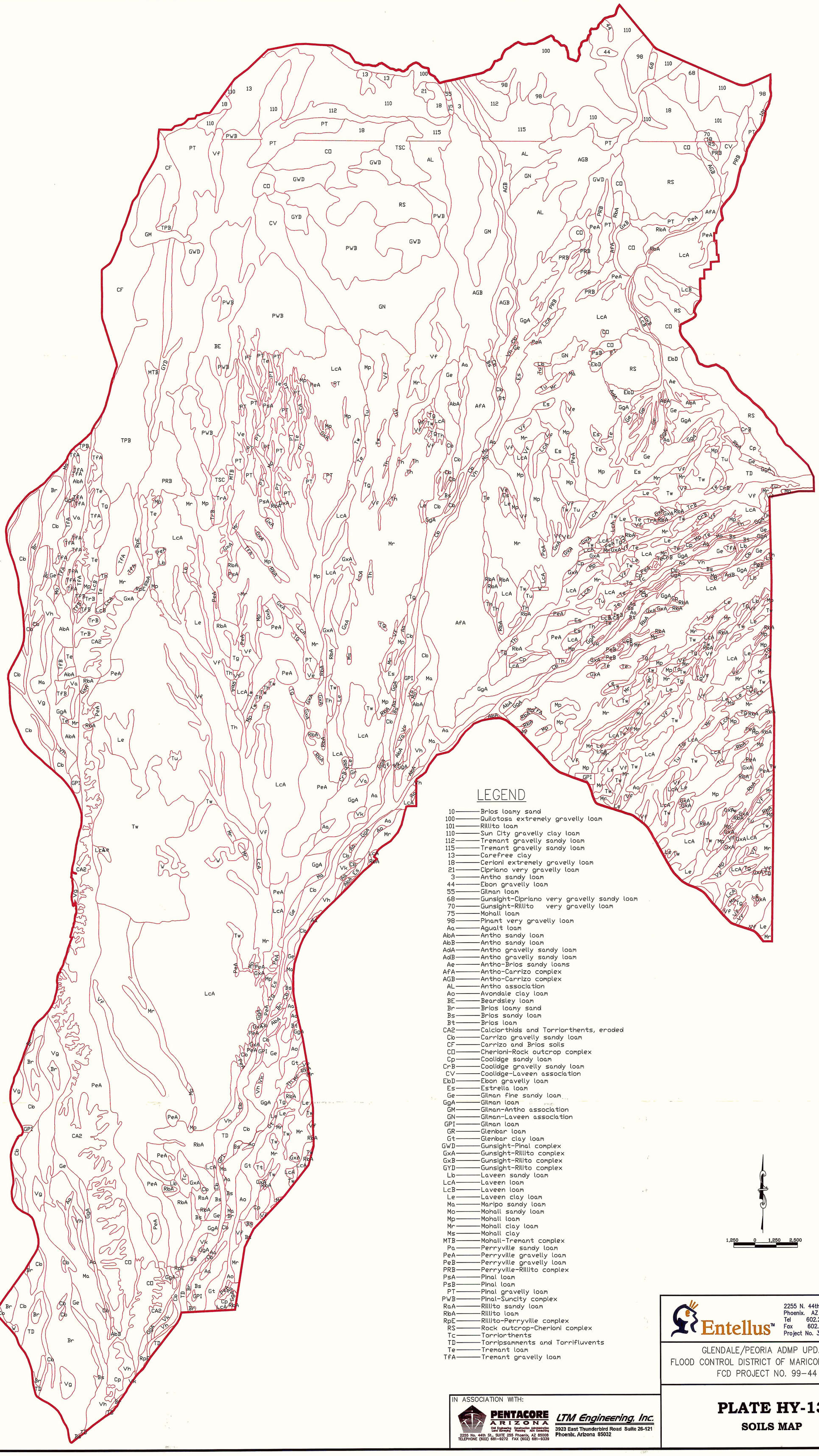
GLENDALE/PEORIA ADMP UPDATE
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
FCD PROJECT NO. 99-44

IN ASSOCIATION WITH:
PENTACORE ARIZONA
Civil Engineering Land Surveying Construction Planning Administration ADA Consulting
2255 No. 44th St., SUITE 255 Phoenix, AZ 85008
TELEPHONE (602) 681-9272 FAX (602) 681-9339
LTM Engineering, Inc.
3923 East Thunderbird Road Suite 26-121
Phoenix, Arizona 85032

PLATE HY-12

FUTURE LANDUSE

FILE: R:310/310017/AUTOCAD/RPT-HYDROLOGY\PLATE HY-12.DWG DATE: 3/21/2001



LEGEND

10	Brios loamy sand
100	Quilotosa extremely gravelly loam
101	Rillito loam
110	Sun City gravelly clay loam
112	Tremant gravelly sandy loam
115	Tremant gravelly sandy loam
13	Carefree clay
18	Cerioni extremely gravelly loam
21	Cipriano very gravelly loam
3	Antho sandy loam
44	Ebon gravelly loam
55	Gilman loam
68	Gunsight-Cipriano very gravelly sandy loam
70	Gunsight-Rillito very gravelly loam
75	Mohall loam
98	Pinant very gravelly loam
Aa	Agualt loam
AbA	Antho sandy loam
AbB	Antho sandy loam
AdA	Antho gravelly sandy loam
AdB	Antho gravelly sandy loam
Ae	Antho-Brios sandy loams
AfA	Antho-Carrizo complex
AGB	Antho-Carrizo complex
AL	Antho association
Ao	Avondale clay loam
BE	Beardsley loam
Br	Brios loamy sand
Bs	Brios sandy loam
Bt	Brios loam
CA2	Calciorthids and Torriorthents, eroded
Cb	Carrizo gravelly sandy loam
CF	Carrizo and Brios soils
CD	Cherioni-Rock outcrop complex
Cp	Coolidge sandy loam
CrB	Coolidge gravelly sandy loam
CV	Coolidge-Laveen association
EbD	Ebon gravelly loam
Es	Estrella loam
Ge	Gilman fine sandy loam
GgA	Gilman loam
GM	Gilman-Antho association
GN	Gilman-Laveen association
GPI	Gilman loam
GR	Glenbar loam
Gt	Glenbar clay loam
GWD	Gunsight-Pinal complex
GxA	Gunsight-Rillito complex
GxB	Gunsight-Rillito complex
GYD	Gunsight-Rillito complex
Lb	Laveen sandy loam
LcA	Laveen loam
LcB	Laveen loam
Le	Laveen clay loam
Ma	Maripo sandy loam
Mo	Mohall sandy loam
Mp	Mohall loam
Mr	Mohall clay loam
Ms	Mohall clay
MTB	Mohall-Tremant complex
Pa	Perryville sandy loam
PeA	Perryville gravelly loam
PeB	Perryville gravelly loam
PRB	Perryville-Rillito complex
PsA	Pinal loam
PsB	Pinal loam
PT	Pinal gravelly loam
PWB	Pinal-Suncity complex
RaA	Rillito sandy loam
RbA	Rillito loam
RpE	Rillito-Perryville complex
RS	Rock outcrop-Cherioni complex
Tc	Torriorthents
TD	Torripsamments and Torrifluvents
Te	Tremant loam
TfA	Tremant gravelly loam

1,250 0 1,250 2,500

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PLATE HY-13

SOILS MAP

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