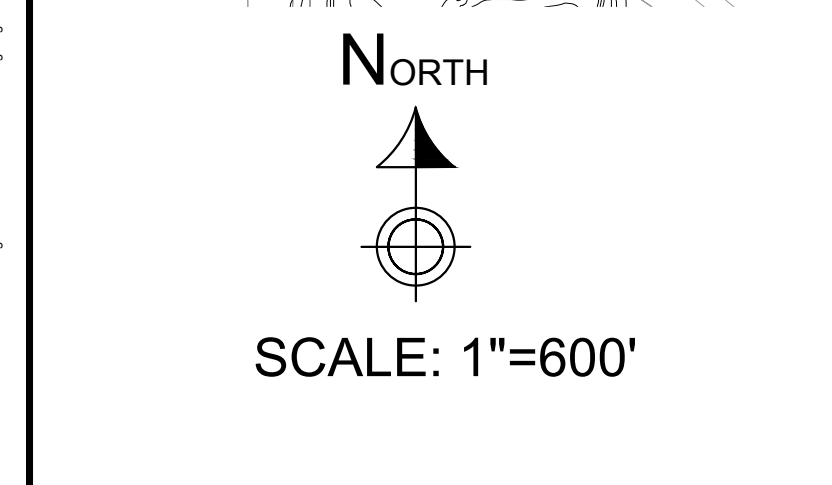
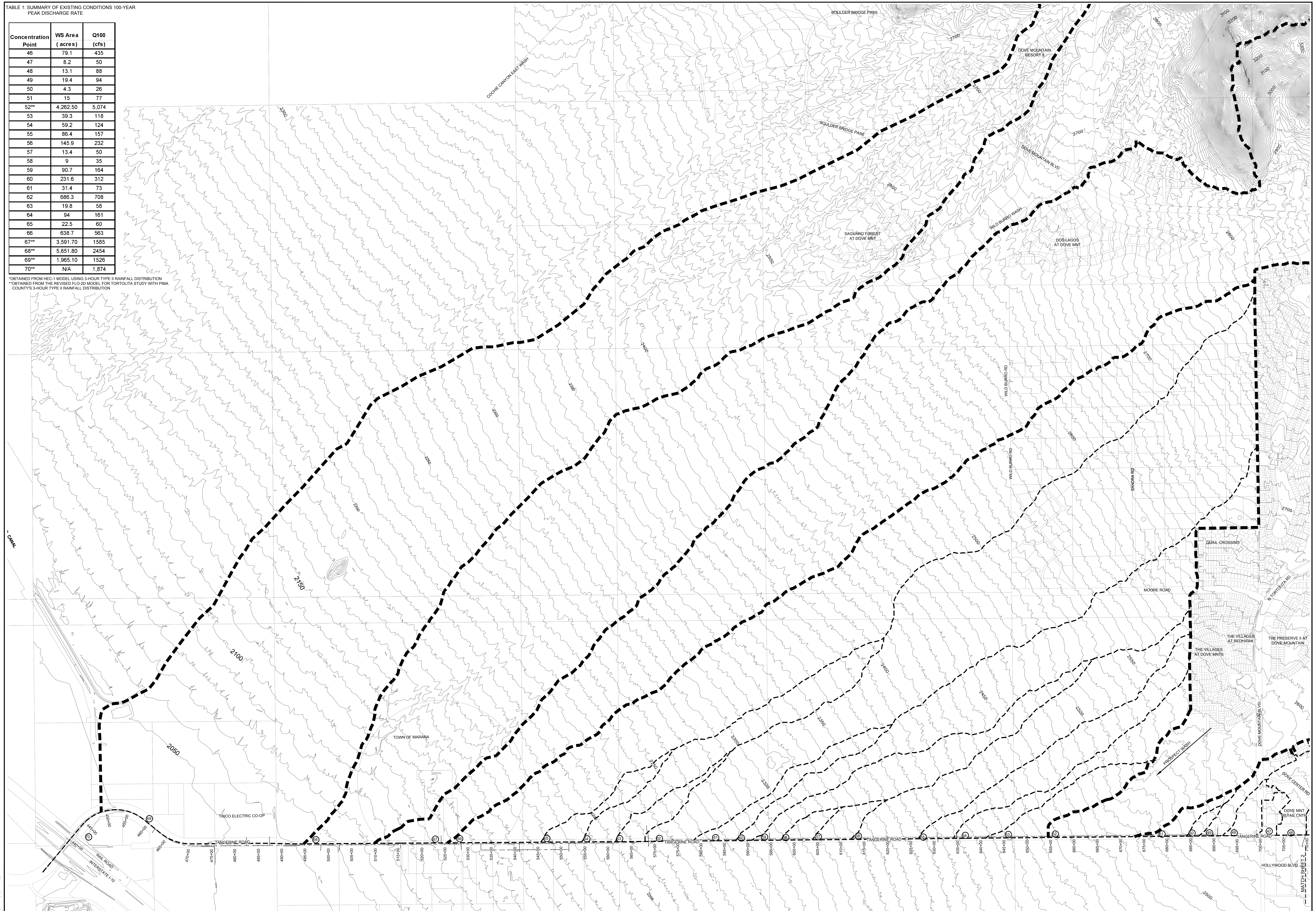


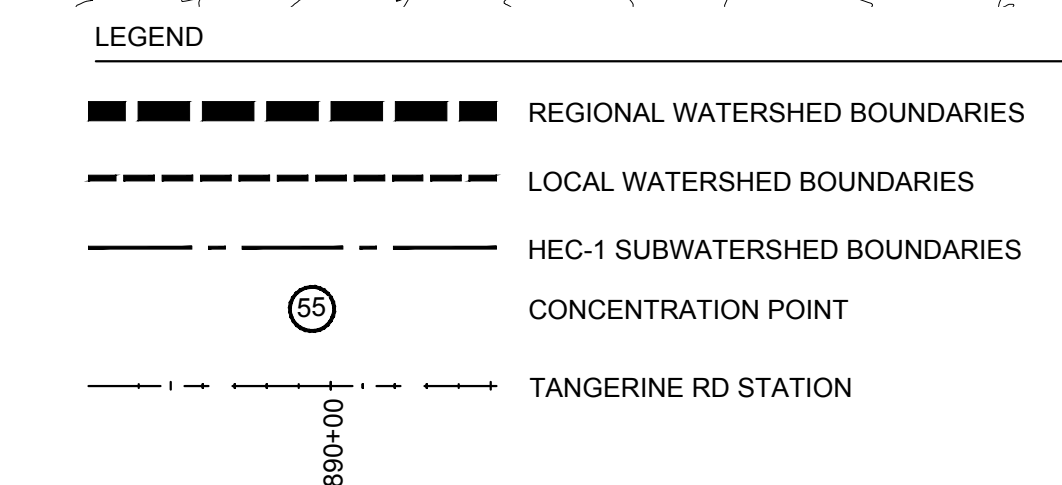
TABLE 1: SUMMARY OF EXISTING CONDITIONS 100-YEAR PEAK DISCHARGE RATE

Concentration Point	WS Area (acres)	Q100 (cfs)
46	79.1	435
47	8.2	50
48	13.1	88
49	19.4	94
50	4.3	26
51	15	77
52**	4,262.50	5,074
53	39.3	118
54	59.2	124
55	86.4	157
56	145.9	232
57	13.4	50
58	9	35
59	90.7	164
60	231.6	312
61	31.4	73
62	686.3	708
63	19.8	58
64	94	161
65	22.5	60
66	638.7	563
67**	3,591.70	1585
68**	5,651.80	2454
69**	1,965.10	1526
70**	N/A	1,874

*OBTAINED FROM HEC-1 MODEL USING 3-HOUR TYPE II RAINFALL DISTRIBUTION
 **OBTAINED FROM THE REVISED FLO-2D MODEL FOR TORTOLITA STUDY WITH PIMA COUNTY'S 3-HOUR TYPE II RAINFALL DISTRIBUTION



NOTES
 1. HORIZONTAL PROJECTION IS NAD 1983 HARN ARIZONA CENTRAL STATE PLANE TOPOGRAPHY-PAG 2000 NAVD88 10-FT CONTOUR INTERVAL



PROJECT NO.:	10-027
DESIGN:	JKW
CHECKER:	JLC
DRAWN:	BJK
DATE:	12/18/2012
REV. DATE:	
REV. DATE:	

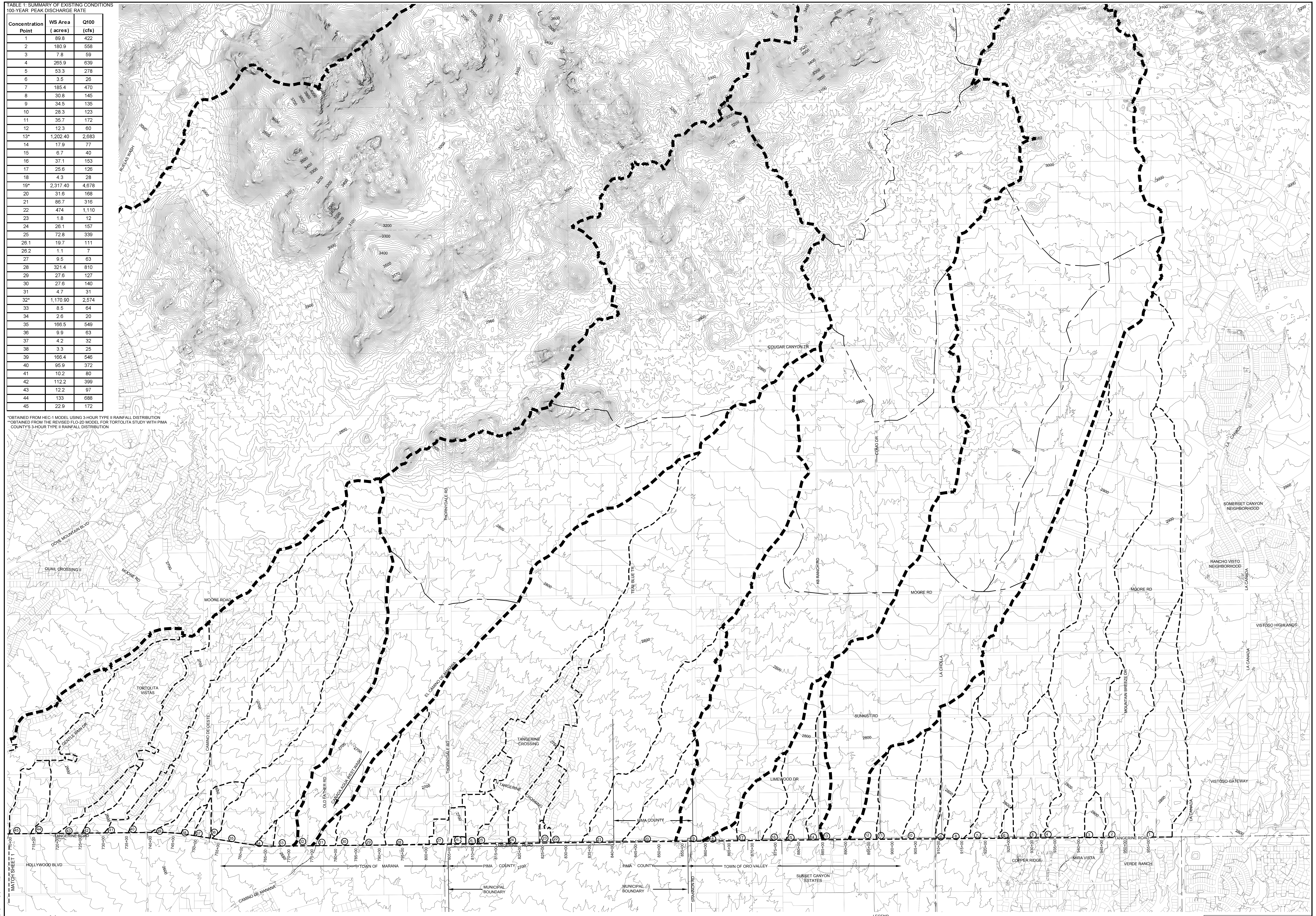
CMG DRAINAGE ENGINEERING, INC.
 3555 N. Mountain Ave. Tucson, Arizona 85719
 Phone (520) 882-4244 Fax (520) 888-1421

FIGURE 4: EXISTING CONDITIONS OFFSITE WATERSHED MAP FOR LOCAL WATERSHEDS

TABLE 1: SUMMARY OF EXISTING CONDITIONS 100-YEAR PEAK DISCHARGE RATE

Concentration Point	WS Area (acres)	Q100 (cfs)
1	89.8	422
2	180.9	558
3	7.8	59
4	265.9	639
5	53.3	278
6	3.5	26
7	185.4	470
8	30.8	145
9	34.5	135
10	28.3	123
11	35.7	172
12	12.3	60
13*	1,202.40	2,683
14	17.9	77
15	6.7	40
16	37.1	153
17	25.6	126
18	4.3	28
19*	2,317.40	4,678
20	31.6	168
21	86.7	316
22	474	1,110
23	1.8	12
24	26.1	157
25	72.8	339
26.1	19.7	111
26.2	1.1	7
27	9.5	63
28	321.4	810
29	27.6	127
30	27.6	140
31	4.7	31
32*	1,170.90	2,574
33	8.5	64
34	2.6	20
35	166.5	549
36	9.9	63
37	4.2	32
38	3.3	25
39	166.4	546
40	95.9	372
41	10.2	80
42	112.2	399
43	12.2	97
44	133	688
45	22.9	172

*OBTAINED FROM HEC-1 MODEL USING 3-HOUR TYPE II RAINFALL DISTRIBUTION
 **OBTAINED FROM THE REVISED FLO-2D MODEL FOR TORTOLITA STUDY WITH PIMA COUNTY'S 3-HOUR TYPE II RAINFALL DISTRIBUTION



NORTH
 SCALE: 1"=600'

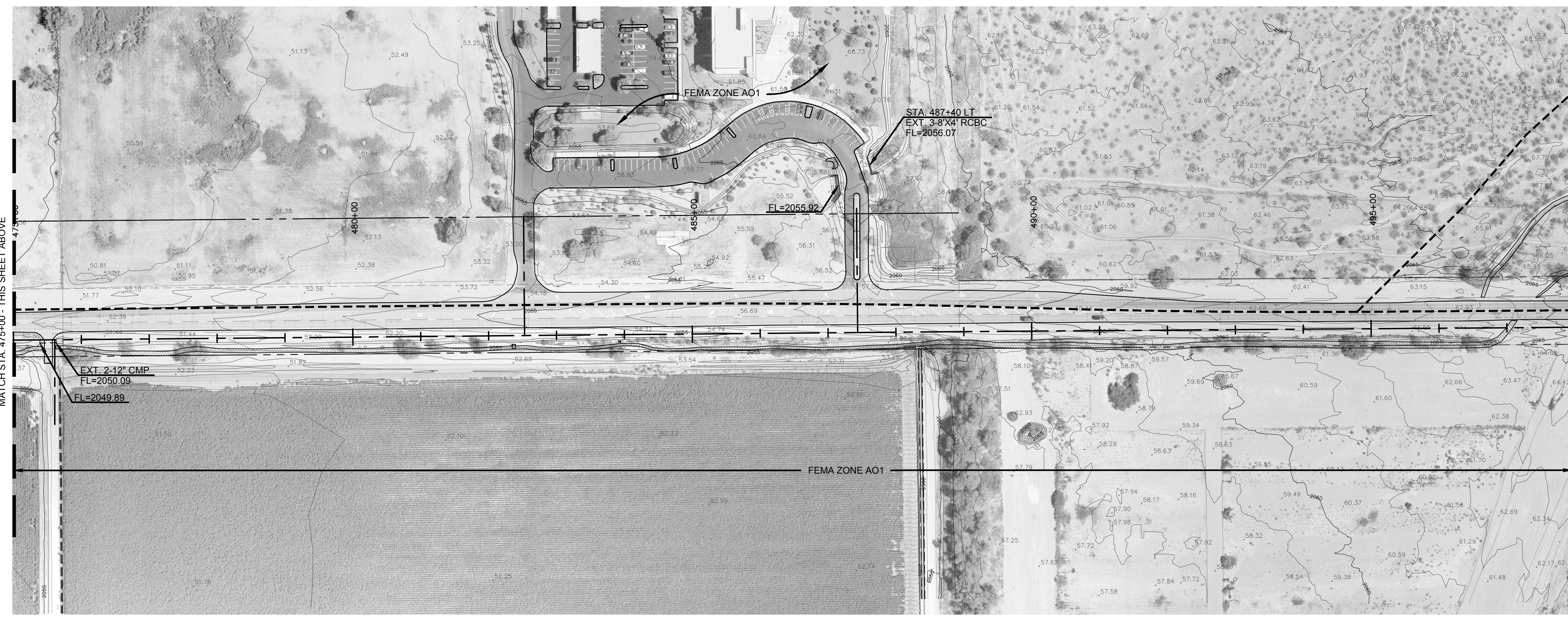
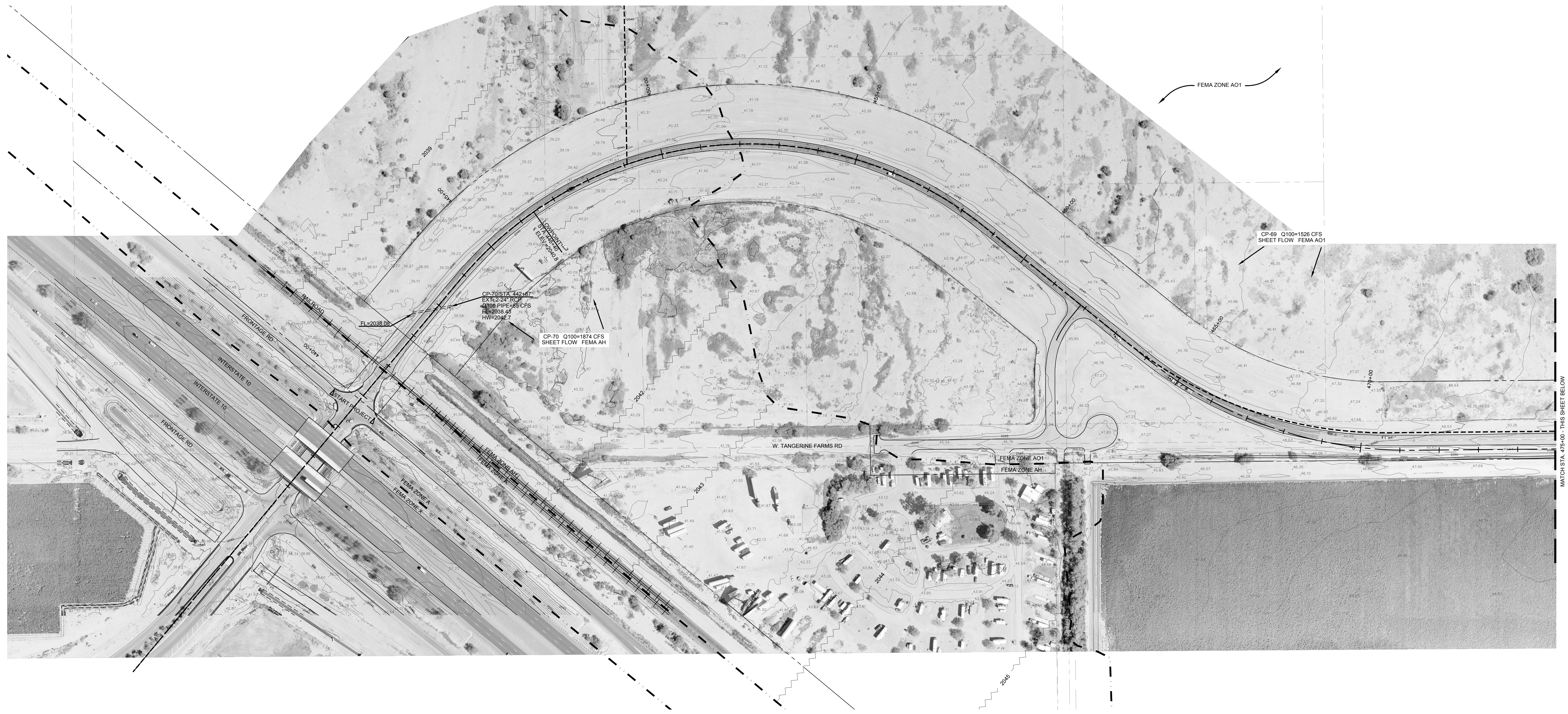
NOTES
 1. HORIZONTAL PROJECTION IS NAD 1983 HARN ARIZONA CENTRAL STATE PLANE. TOPOGRAPHY MAG 2000 NAVD83 10-FT CONTOUR INTERVAL.

LEGEND
 - - - - - REGIONAL WATERSHED BOUNDARIES
 - - - - - LOCAL WATERSHED BOUNDARIES
 - - - - - HEC-1 SUBWATERSHED BOUNDARIES
 (C) CONCENTRATION POINT
 - - - - - TANGERINE RD STATION

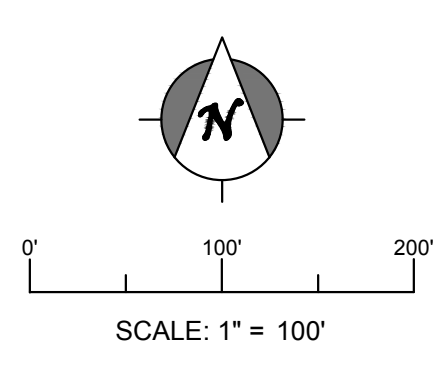
PROJECT NO: 10-027
 DESIGN: JKW
 CHECKER: JLC
 DRAWN: BJK
 DATE: 12/19/2012
 REV. DATE: -
 REV. DATE: -



FIGURE 4:
 EXISTING CONDITIONS
 OFFSITE WATERSHED MAP
 FOR LOCAL WATERSHEDS
 SHEET 2/2



SHEET 1	SHEET 2	SHEET 3	SHEET 4	SHEET 5	SHEET 6
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- NOTES:**
1. VERTICAL DATUM = NAVD88
 2. AERIAL PHOTO, TOPOGRAPHY (1 FT. CONTOUR INTERVAL) AND FIELD SURVEY INFORMATION PROVIDED BY PSOMAS.
 3. SECTION 404 WATERS OF THE U.S. JURISDICTIONAL LIMITS PROVIDED BY THE TOWN OF MARANA.
 4. FEMA FLOODPLAIN INFORMATION PER FEMA FIRM PANELS: 04019C1045L, 04019C1065L, 04019C1070L AND 04019C1080L.

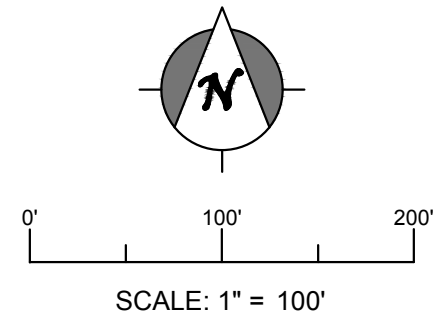
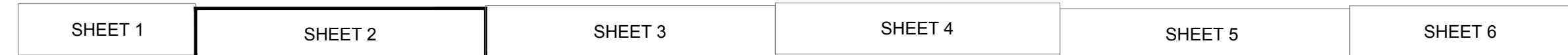
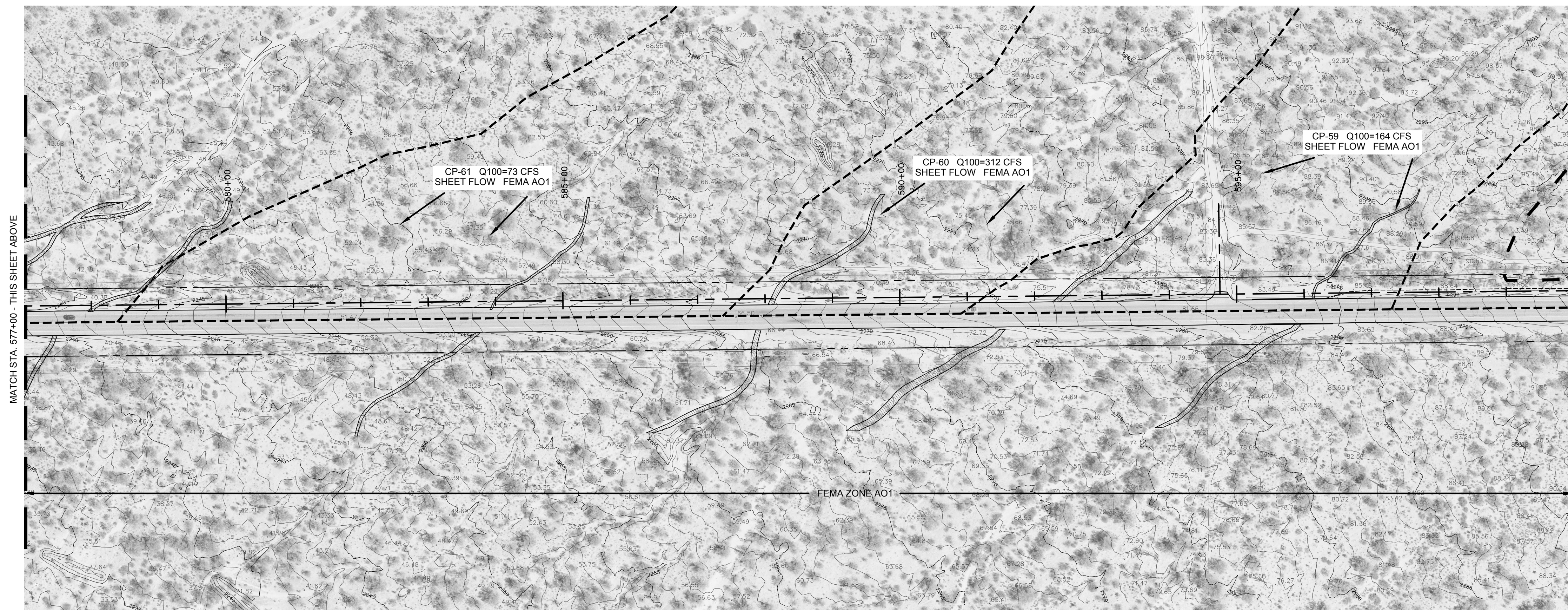
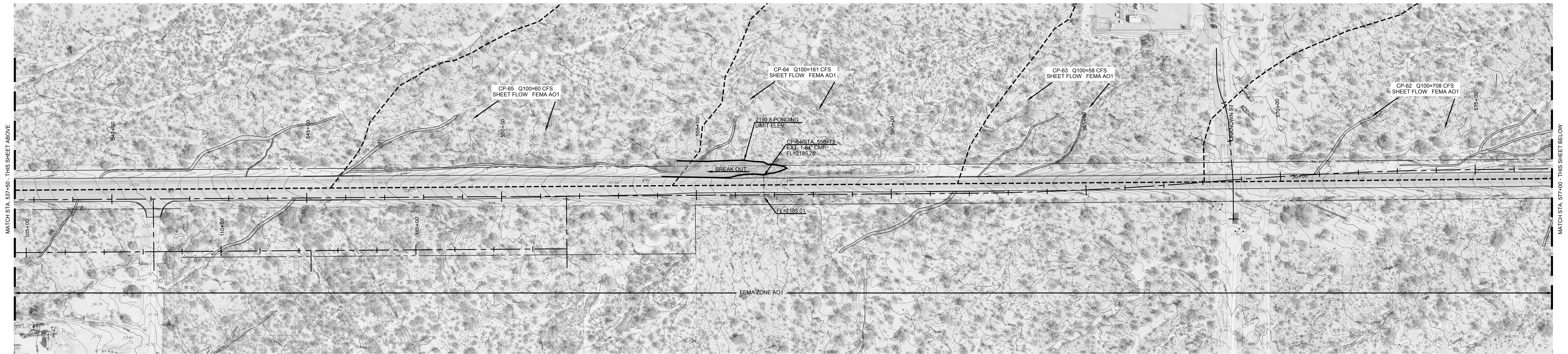
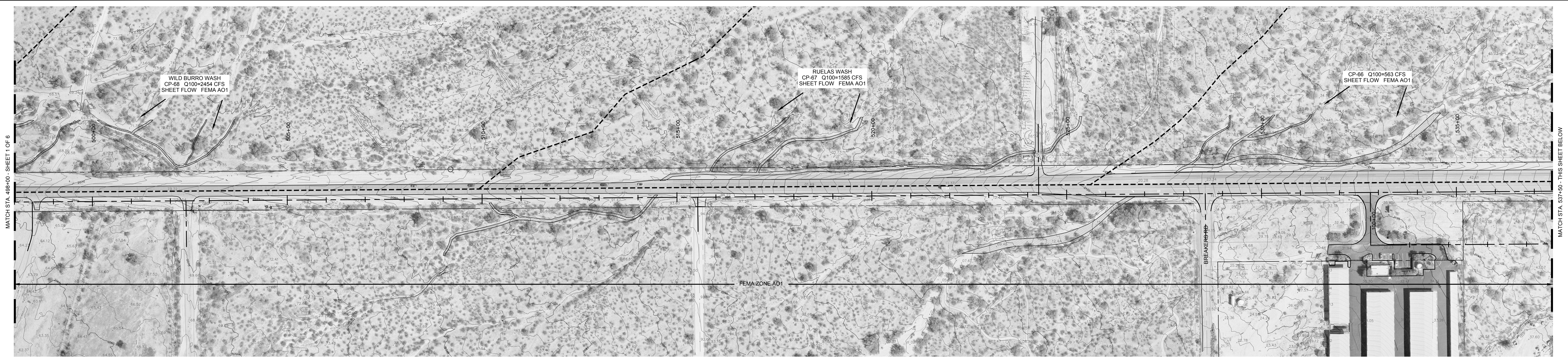
LEGEND	
	FEMA FLOODPLAIN LIMITS
	WATERSHED BOUNDARY
	ESTIMATED PONDING/100-YR FLOODPLAIN LIMITS
	CROSS-SECTION ID WITH 100-YR WATER SURFACE ELEVATION
	RIGHT OF WAY LINE
	EXISTING EASEMENT LINES
	PROPERTY BOUNDARY
	404 JURISDICTIONAL WATERS
	FEMA FIRM 100-YR BASE FLOOD ELEVATIONS

PRELIMINARY

CMG DRAINAGE ENGINEERING, INC.
 3555 N. Mountain Ave. Tucson, Arizona 85719
 Phone (520) 882-4244 Fax (520) 888-1421

PROJECT NO:	10-027
DESIGN:	JKW
CHECKED:	JLC
DRAWN:	CRB
DATE:	02/28/2012
REV DATE:	12/20/2012
REV DATE:	
REV DATE:	

**FIGURE 5
 EXISTING DRAINAGE
 CONDITIONS**
 TANGERINE ROAD
 1-10 TO LA CANADA DR.
 SHEET 1 OF 6



- NOTES:**
1. VERTICAL DATUM = NAVD88
 2. AERIAL PHOTO, TOPOGRAPHY (1 FT CONTOUR INTERVAL) AND FIELD SURVEY INFORMATION PROVIDED BY PSOMAS.
 3. SECTION 404 WATERS OF THE U.S. JURISDICTIONAL LIMITS PROVIDED BY THE TOWN OF MARANA.
 4. FEMA FLOODPLAIN INFORMATION PER FEMA FIRM PANELS: 04019C1045L, 04019C1065L, 04019C1070L AND 04019C1080L.

LEGEND	
	FEMA FLOODPLAIN LIMITS
	WATERSHED BOUNDARY
	ESTIMATED PONDING/100-YR FLOODPLAIN LIMITS
	CROSS-SECTION ID WITH 100-YR WATER SURFACE ELEVATION
	RIGHT OF WAY LINE
	EXISTING EASEMENT LINES
	PROPERTY BOUNDARY
	404 JURISDICTIONAL WATERS
	FEMA FIRM 100-YR BASE FLOOD ELEVATIONS

PRELIMINARY

PROJECT NO: 10-027

DESIGN: JKW

CHECKED: JLC

DRAWN: CRB

DATE: 02/28/2012

REV DATE: 12/20/2012

REV DATE:

REV DATE:

3555 N. Mountain Ave. Tucson, Arizona 85719
Phone (520) 882-4244 Fax (520) 888-1421

FIGURE 5

EXISTING DRAINAGE

CONDITIONS

TANGERINE ROAD

1-10 TO LA CANADA DR.

SHEET 2 OF 6