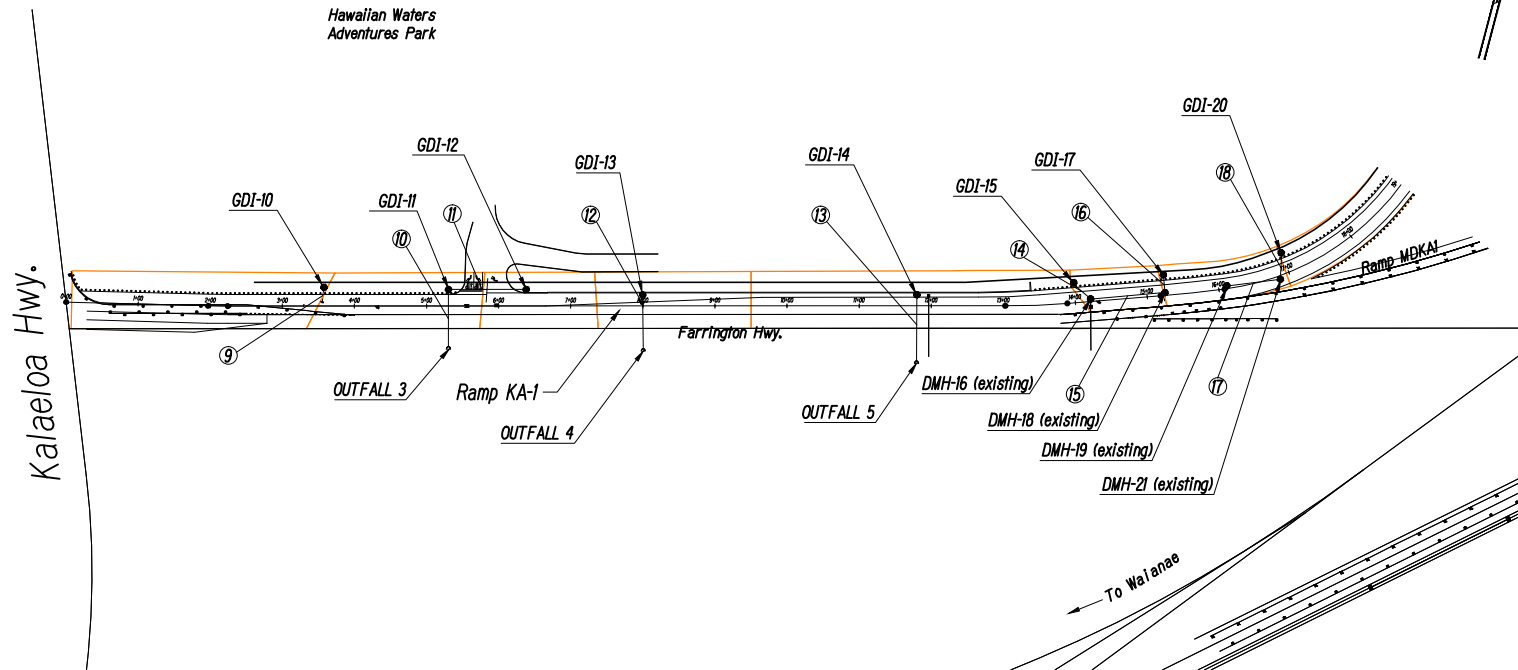


HYDRAULIC DATA								
PIPE	⑨	⑩	⑪	⑫	⑬	⑭	⑯	⑰
24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT
Q (cfs)	3.87	4.24	1.76	2.39	5.16	0.99	1.37	2.09
A (ac)	0.63	0.40	0.28	0.39	0.83	0.16	0.22	0.34
V (fps)	4.21	5.30	3.58	5.39	6.50	3.51	6.84	5.37
So (ft/ft)	0.0100	0.0076	0.0051	0.0127	0.0115	0.0100	0.0400	0.0141



Inlet	A (acres)	Q50 (cfs)
GDI-9	0.21	1.30
GDI-10	0.63	3.87
GDI-11	0.40	2.48
GDI-12	0.28	1.76
GDI-13	0.39	2.39
GDI-14	0.83	5.16
GDI-15	0.16	0.99
GDI-17	0.22	1.37
GDI-20	0.34	2.09

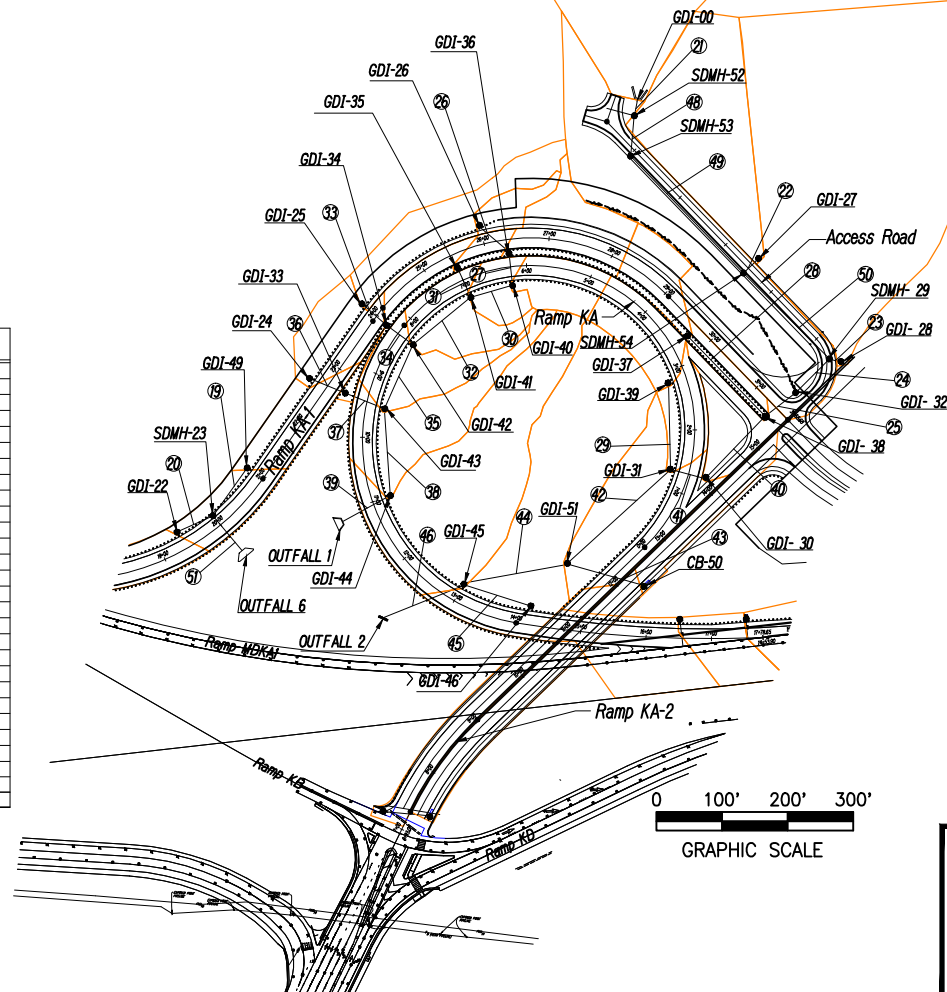


INTERSTATE ROUTE H-1, ADDITION AND MODIFICATION OF FREEWAY ACCESS
Palailai Interchange to Makakilo Interchange (Kapolei Interchange Complex)
Phase 2

PHASE 2 DRAINAGE MAP

FIGURE 4

Inlet	A (acres)	Q50 (cfs)
GDI-00	23.01	11317
GDI-22	0.24	1.47
GDI-24	0.33	2.02
GDI-25	0.46	1.42
GDI-26	0.12	0.41
GDI-27	1.00	1.95
GDI-28	3.84	7.52
GDI-29	0.53	2.78
GDI-30	0.28	1.74
GDI-31	0.21	1.29
GDI-32	1.04	6.44
GDI-33	0.03	0.18
GDI-34	0.14	0.89
GDI-35	0.07	0.43
GDI-36	0.39	2.42
GDI-37	0.23	1.45
GDI-38	0.11	0.65
GDI-39	0.29	1.82
GDI-40	0.22	1.38
GDI-41	0.16	0.70
GDI-42	0.33	1.33
GDI-43	0.34	1.31
GDI-44	0.53	1.76
GDI-45	1.35	3.75
GDI-46	1.90	5.35
GDI-49	0.27	1.66
CB-50	0.21	1.33
GDI-51	0.70	3.18



HYDRAULIC DATA				
	(19)	(20)	(21)	(22)
PIPE	24" CULVERT	24" CULVERT	60" CULVERT	60" CULVERT
Q (cfs)	1.66	1.47	11317	1.95
A (ac)	0.27	0.24	23.01	1.00
V (fps)	8.58	4.03	39.21	6.33
So (ft/ft)	0.0648	0.0083	0.1916	0.0238
	(23)	(24)	(25)	(26)
PIPE	24" CULVERT	60" CULVERT	60" CULVERT	60" CULVERT
Q (cfs)	7.52	122.65	132.57	0.41
A (ac)	3.84	26.85	1.60	0.12
V (fps)	7.92	15.34	14.33	2.49
So (ft/ft)	0.0217	0.0132	0.0103	0.0063
	(27)	(28)	(29)	(30)
PIPE	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT
Q (cfs)	2.82	1.45	1.82	4.20
A (ac)	0.39	0.23	0.29	0.22
V (fps)	8.39	6.68	8.05	11.42
So (ft/ft)	0.0388	0.0357	0.0500	0.0667
	(31)	(32)	(33)	(34)
PIPE	24" CULVERT	60" CULVERT	24" CULVERT	24" CULVERT
Q (cfs)	0.43	5.33	1.42	2.31
A (ac)	0.07	0.16	0.46	0.14
V (fps)	6.15	12.27	3.55	9.63
So (ft/ft)	0.0800	0.0670	0.0060	0.0680
	(35)	(36)	(37)	(38)
PIPE	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT
Q (cfs)	8.98	2.02	2.20	12.49
A (ac)	0.33	0.33	0.03	0.34
V (fps)	14.38	3.71	6.00	15.26
So (ft/ft)	0.0682	0.0051	0.0185	0.0619
	(39)	(40)	(41)	(42)
PIPE	24" CULVERT	60" CULVERT	60" CULVERT	60" CULVERT
Q (cfs)	14.25	134.67	136.42	139.53
A (ac)	0.53	0.11	0.28	0.21
V (fps)	17.45	11.26	33.65	30.92
So (ft/ft)	0.0812	0.0054	0.0069	0.0828
	(43)	(44)	(45)	(46)
PIPE	24" CULVERT	60" CULVERT	36" CULVERT	60" CULVERT
Q (cfs)	1.33	144.04	5.35	153.14
A (ac)	0.21	0.70	1.90	1.35
V (fps)	10.90	26.88	5.45	15.30
So (ft/ft)	0.1563	0.0546	0.0077	0.0112
	(48)	(49)	(50)	(51)
PIPE	60" CULVERT	60" CULVERT	60" CULVERT	60" CULVERT
Q (cfs)	11317	11317	11317	313
A (ac)	23.01	23.01	24.01	0.51
V (fps)	42.67	31.83	34.80	10.91
So (ft/ft)	0.2435	0.1064	0.1349	0.0750

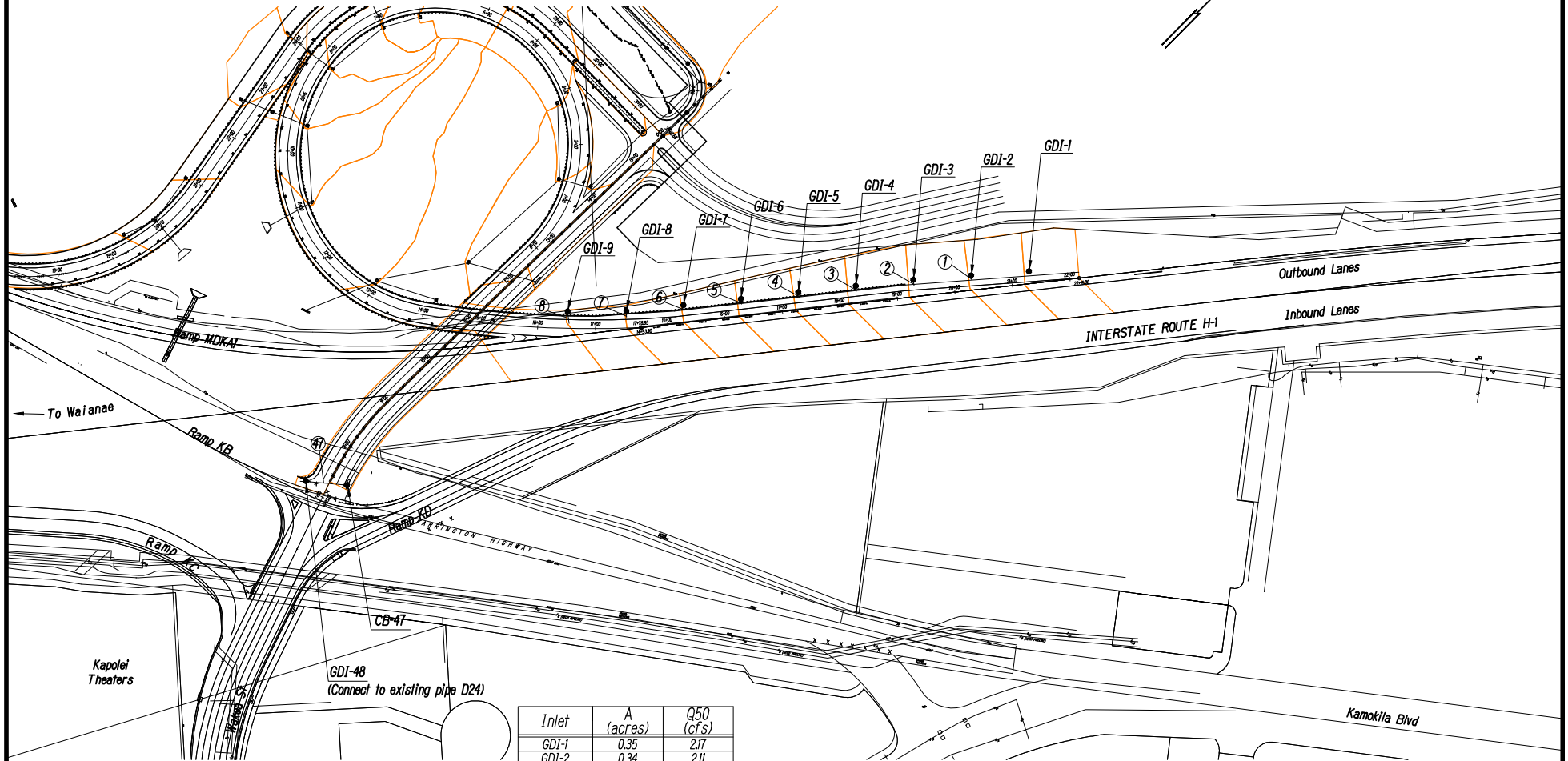
INTERSTATE ROUTE H-1, ADDITION AND MODIFICATION OF FREEWAY ACCESS
Palali Interchange to Makakilo Interchange (Kapolei Interchange Complex)
Phase 2

PHASE 2 DRAINAGE MAP

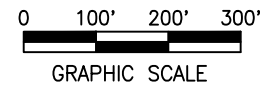
FIGURE 5

HYDRAULIC DATA

	①	②	③	④	⑤	⑥	⑦	⑧	⑨
PIPE	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT	24" CULVERT
Q (cfs)	2.11	1.98	1.92	1.80	1.67	1.49	1.43	1.30	2.68
A (ac)	0.34	0.32	0.31	0.29	0.27	0.24	0.23	0.21	0.43
V (fps)	11.18	9.37	3.75	6.40	3.60	3.85	3.33	3.46	7.35
So (ft/ft)	0.1129	0.0718	0.0055	0.0264	0.0055	0.0067	0.0050	0.0060	0.0278



Inlet	A (acres)	Q50 (cfs)
GDI-1	0.35	2.17
GDI-2	0.34	2.11
GDI-3	0.32	1.98
GDI-4	0.31	1.92
GDI-5	0.29	1.80
GDI-6	0.27	1.67
GDI-7	0.24	1.49
GDI-8	0.23	1.43
GDI-9	0.21	1.30
CB-47	0.43	2.68
GDI-48	0.38	2.34



INTERSTATE ROUTE H-1, ADDITION AND MODIFICATION OF FREEWAY ACCESS
Palailai Interchange to Makakilo Interchange (Kapolei Interchange Complex)
Phase 2

PHASE 2 DRAINAGE MAP

FIGURE 6