

NOI FORM C, Figure 6

Kapolei Interchange Complex, Phase 3 - Flow Calculation for Each Drainage Area 10-Year

Existing Condition

Plate 1 = 2.300

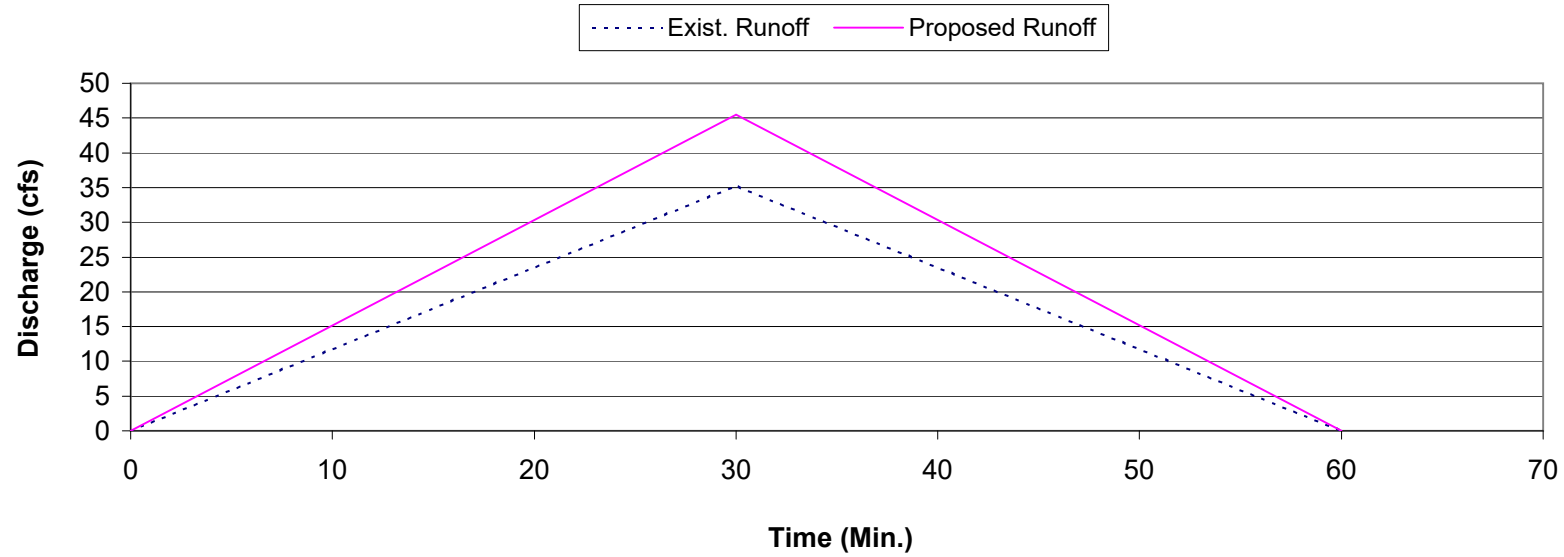
AREA	LANDSCAPED AREA (ACRE)	C1	PAVED AREA (ACRE)	C2	AREA WEIGHTED C	TOTAL AREA	LENGTH	SLOPE	PLATE 4 1-HR RAIN- FALL (INCH/HR)	INTENSITY (INCH/HR)	FLOW(CFS)
E1	0.639	0.60	0.000	0.90	0.60	0.639	350	2.30%	1.80	4.14	1.59
E2	3.536	0.60	0.023	0.90	0.60	3.559	350	1.50%	1.75	4.03	8.59
E3	1.293	0.60	0.000	0.90	0.60	1.293	90	4.35%	2.25	5.18	4.01
E4	0.524	0.60	0.000	0.90	0.60	0.524	110	4.50%	2.23	5.12	1.61
E5	0.506	0.60	0.073	0.90	0.64	0.579	55	12.85%	2.63	6.06	2.24
E6	0.433	0.60	0.423	0.90	0.75	0.856	70	9.15%	2.75	6.33	4.06
E7	0.134	0.60	0.283	0.90	0.80	0.416	82.22	5.67%	2.80	6.44	2.14
E8	0.018	0.60	0.243	0.90	0.88	0.262	207.5	1.65%	2.70	6.21	1.43
E9	0.005	0.60	0.059	0.90	0.88	0.064	100.32	2.24%	2.80	6.44	0.36
E10	0.210	0.60	0.422	0.90	0.80	0.632	84.68	3.59%	2.70	6.21	3.14
Offsite 1	0.325	0.60	0.913	0.90	0.82	1.238	125	3.00%	2.60	5.98	6.07
TOTAL	7.622		2.439			10.061					35.26

Proposed Condition

Plate 1 = 2.300

AREA	LANDSCAPED AREA (ACRE)	C1	PAVED AREA (ACRE)	C2	AREA WEIGHTED C	TOTAL AREA	LENGTH	SLOPE	PLATE 4 1-HR RAIN- FALL (INCH/HR)	INTENSITY (INCH/HR)	FLOW(CFS)
P1	0.046	0.60	0.211	0.90	0.85	0.257	260	5.70%	2.63	6.06	1.32
P2	0.046	0.60	0.210	0.90	0.85	0.256	260	5.60%	2.63	6.06	1.32
P3	0.025	0.60	0.249	0.90	0.87	0.274	300	4.40%	2.63	6.06	1.44
P4	0.027	0.60	0.244	0.90	0.87	0.271	310	4.35%	2.63	6.06	1.43
P5	0.019	0.60	0.175	0.90	0.87	0.194	210	3.00%	2.70	6.21	1.05
P6	0.019	0.60	0.167	0.90	0.87	0.186	210	3.15%	2.70	6.21	1.00
P7	0.013	0.60	0.068	0.90	0.85	0.081	140	3.05%	2.70	6.21	0.43
P8	0.012	0.60	0.072	0.90	0.86	0.084	130	3.25%	2.78	6.38	0.46
P9	0.612	0.60	0.185	0.90	0.67	0.797	280	9.85%	2.23	5.12	2.73
P10	0.236	0.60	0.000	0.90	0.60	0.236	500	1.00%	1.57	3.60	0.51
P11	1.134	0.60	0.024	0.90	0.61	1.158	200	14.70%	2.24	5.16	3.64
P12	0.548	0.60	0.096	0.90	0.64	0.644	250	8.10%	2.18	5.00	2.06
P13	0.200	0.60	0.393	0.90	0.80	0.593	145	14.00%	2.70	6.21	2.95
P14	0.027	0.60	0.227	0.90	0.87	0.254	30	1.00%	2.80	6.44	1.42
P15	0.024	0.60	0.270	0.90	0.88	0.294	40	1.50%	2.80	6.44	1.67
P16	0.000	0.60	0.189	0.90	0.90	0.189	220	1.60%	2.73	6.27	1.07
P17	0.000	0.60	0.160	0.90	0.90	0.160	195	3.60%	2.80	6.44	0.93
P18	0.000	0.60	0.110	0.90	0.90	0.110	195	3.15%	2.80	6.44	0.64
P19	0.022	0.60	0.355	0.90	0.88	0.377	105	1.00%	2.75	6.33	2.10
P20	0.132	0.60	0.122	0.90	0.74	0.254	25	25.00%	2.80	6.44	1.21
P21	0.000	0.60	0.106	0.90	0.90	0.106	55	1.00%	2.80	6.44	0.61
P22	0.064	0.60	0.142	0.90	0.81	0.206	25	2.00%	2.80	6.44	1.07
P23	0.471	0.60	0.000	0.90	0.60	0.471	140	2.50%	2.03	4.66	1.32
P24	0.051	0.60	0.357	0.90	0.86	0.408	225	0.96%	2.50	5.75	2.02
P25	0.003	0.60	0.16	0.90	0.89	0.161	205	2.05%	2.80	6.44	0.92
P26	0.022	0.60	0.200	0.90	0.87	0.222	245	4.62%	2.80	6.44	1.25
P27	0.013	0.60	0.05	0.90	0.84	0.064	135	3.76%	2.65	6.10	0.33
P28	0.030	0.60	0.204	0.90	0.86	0.234	260	3.37%	2.60	5.98	1.20
P29	0.052	0.60	0.23	0.90	0.85	0.285	260	0.89%	2.45	5.64	1.36
Offsite 1	0.325	0.60	0.913	0.90	0.82	1.238	125	3.00%	2.60	5.98	6.07
TOTAL	4.172		5.891			10.064					45.53

Hydrograph 10yr-1hr



Existing

Time (min)	Flow (cfs)
0	0
30	35.26
60	0

Proposed

Time (min)	Flow (cfs)
0	0
30	45.53
60	0

Exist. Runoff Volume	63468.0 ft ³
Proposed Runoff Volume	81954.4 ft ³
Detention Voume Required	18486.4 ft ³