

ATTACHMENT A-2

Quantity of Storm Water Discharge
(Item C.4 of Form C)

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C.4 Quantity of Storm Water Discharge

Stormwater flow rates were calculated using the *Rules Relating to Storm Drainage Standards* (City and County of Honolulu, 2000) for drainage areas of 100 acres or less. A storm recurrence interval of 10 years was used to estimate the quantity of runoff.

Table 2-1

Site Number	On-Site Disturbed Area Runoff (cfs)
PID 496	32.4
PID 21	5.46
PID 246	2.69
PID 973	0.86
PID 223	9.45
Total	50.8

Table 2-1 summarizes stormwater runoff quantities calculated for each of the 5 project sites (**Tables 2-2** through **2-6** show the values used to determine these runoff quantities). Disturbed areas of the project sites are slopes adjacent to highways and adjacent areas (typically grassed areas) that will be used for staging. A one-half acre was assumed disturbed per each site due to the staging/storage area. The disturbed area runoff accounts for the anticipated storage/staging area.

Project Site 1 – PID 496

Table 2-2

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.40	3.16	25.6	32.36

Project Site 2 – PID 21

Table 2-3

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.40	2.56	5.33	5.46

Project Site 3 – PID 246**Table 2-4**

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.40	2.27	2.96	2.69

Project Site 4 – PID 973**Table 2-5**

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.40	2.28	0.94	0.86

Project Site 5 – PID 223**Table 2-6**

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.40	3.17	7.45	9.45