

ATTACHMENT A-5

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. A correction factor of 2.4 (Plate 4 of the *Rules Relating to Storm Drainage Standards*) was used to calculate the Rainfall Intensity at each site.

Table 2-1

Site Number	On-Site Disturbed Area Runoff (cfs)
PID 445	4.41
PID 230	9.00
PID 241	2.62
PID 57	3.86
PID 110	5.23
PID 907	4.08
Total	29.19

Table 2-1 summarizes stormwater runoff quantities calculated for each of the 6 project sites (**Tables 2-2** through **2-7** 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 445

Table 2-2

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.65	6.72	1.01	4.41

Project Site 2 – PID 230

Table 2-3

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.65	6.72	2.06	9.00

Project Site 3 – PID 241

Table 2-4

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.65	6.72	0.60	2.62

Project Site 4 - 57

Table 2-5

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.65	6.00	0.99	3.86

Project Site 5 – PID 110**Table 2-6**

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.65	6.00	1.34	5.23

Project Site 6 – PID 907**Table 2-7**

Description	Runoff Coefficient	Rainfall Intensity (in/hr)	Exposed Area (ac)	Flow Rate (cfs)
On-Site Disturbed Area	0.65	6.60	0.95	4.08

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