Service Area	1.0331 Acres	
Max WSEL	25.44 ft	
FL at Outfall	16.95 ft	
Assumed Rest. Size	6 inches	0.19635
Watershed	Armand Bayou	

3 Year Flow

Runoff Coefficient (C)	**0.9**	C = 0.90; for Developed Property
Time of Concentration (TC)	25.06 minutes	TC = (10*((A)$^{0.1761}$))+15; from COH design guide
b	77.27	COH standard
d	17.1	COH standard
e	0.8075	COH standard
Rainfall Intensity (I)	3.77 in/hour	I = b / ((d+TC)^{e}); from COH design guide
Flow (Q)	3.50 cfs	Q = C*I*A; rational equation

10 Year Flow

Runoff Coefficient (C)	**0.9**	C = 0.90; for Developed Property
Time of Concentration (TC)	25.06 minutes	TC = (10*((A)$^{0.1761}$))+15; from COH design guide
b	93.53	COH standard
d	18.9	COH standard
e	0.7742	COH standard
Rainfall Intensity (I)	5.00 in/hour	I = b / ((d+TC)^{e}); from COH design guide
Flow (Q)	4.65 cfs	Q = C*I*A; rational equation

100 Year Flow

Runoff Coefficient (C)	**0.9**	C = 0.90; for Developed Property
Time of Concentration (TC)	25.06 minutes	TC = (10*((A)$^{0.1761}$))+15; from COH design guide
b	125.4	COH standard
d	21.8	COH standard
e	0.75	COH standard
Rainfall Intensity (I)	7.00 in/hour	I = b / ((d+TC)^{e}); from COH design guide
Flow (Q)	6.51 cfs	Q = C*I*A; rational equation

Restrictor (Pipe)

Pipe Diameter (6" min)	8 inches	D=(Q^.5)/(2.25*(H^.25))
Actual Outflow	6.27 cfs	Q=C*A*((2*g*H)^2); where C=0.8 for pipe restrictor

Detention Volume

Detention Rate	0.55 AF/Ac	Specified by HCPID
Detention Volume (100 yr)	0.57 AF	= 916.70 CY = 24,751 CF

10-year Pipe Head

Total Rainfall (10 yr)	7.8 in	for Particular Watershed (see Watersheds Tab)
Total Rainfall (100 yr)	13.5 in	for Particular Watershed (see Watersheds Tab)
Detention Rate (10 year)	0.32 AF/Ac	DR=(10 yr/100 yr)*(0.65 AF/Ac)
Detention Volume (10 yr)	0.33 AF	= 533.36 CY = 14,401 CF
10 year WSEL	25.44 ft	from Detention Pond Volume sheet
Actual Outflow	6.27 cfs	Q=C*A*((2*g*H)^2); where C=0.8 for pipe restrictor