

SUN CREST MEADOWS-100-YEAR

Drainage Calculations

January 24, 2017

BASIN A:

RAINFALL: 100-YR, 1-HOUR	1.71	INCHES	STORAGE REQUIREMENT FROM ENTITY
BASIN AREA (SF):	2,393,205	SF	
BASIN AREA (AC):	54.94	AC	
100% IMPERVIOUSNESS	1.00		
BASIN WEIGHTED 'C':	0.25		
RAINFALL ON BASIN (100%):	341,032	CF	100% RAINFALL FOR STORAGE EVENT
RUNOFF FROM ON BASIN (PER 'C')	85,258	CF	100% RUNOFF FOR STORAGE EVENT
RAINFALL PER IDF:			
INTENSITY AT 24 HRS:	0.119	IN/HR	24-HR RATE FOR CHOSEN EVENT
VOLUME = I*(T=24 HRS)*A*C	142,396	CF	24-HR RUNOFF - MIGHT NOT BE APPLIC.
PREC. VS. IDF COMPARISON	-57138	CF	ONLY APPLIC. IF COMPARING 24-HR. EVENT

BASIN A (AREA):	2,393,205	SF
SUMP ROCK PERIMETER (LF)	0	LF
SUMP ROCK HEIGHT	0	LF
SUMP PERC SF	0	SF
PERCOLATION RATE (IN/HR)	0.00	IN/HR
PERCOLATION (CFS)	0.0000	CFS
PERCOLATION PER 5 MINUTES	0.0	CF
NUMBER OF SUMPS	0	

Duration (min)	Storm Intensity (in/hr)	Weighted 'C"	Subbasin Area (sq.ft)	Stormwater Flow (cfs)	Accumulated inflow (cf)	MH / Rock Storage (cf)	Metered Outflow Rate (cfs)	Total Outflow (cf)	Metered Outflow (cfs)	Other Outflow (cf)	Required Storage (cf)	Available Storage (cf)
5	6.52	0.25	2,393,205	89.55	26,866	-	0.0000	-	0.000	-	26,866	-
10	4.95	0.25	2,393,205	67.99	40,793	-	0.0000	-	0.000	-	40,793	-
15	4.09	0.25	2,393,205	56.18	50,559	-	0.0000	-	0.000	-	50,559	-
30	2.76	0.25	2,393,205	37.91	68,236	-	0.0000	-	0.000	-	68,236	-
60	1.71	0.25	2,393,205	23.49	84,553	-	0.0000	-	0.000	-	84,553	-
120	0.93	0.25	2,393,205	12.76	91,871	-	0.0000	-	0.000	-	91,871	-
180	0.63	0.25	2,393,205	8.71	94,047	-	0.0000	-	0.000	-	94,047	-
360	0.35	0.25	2,393,205	4.85	104,727	-	0.0000	-	0.000	-	104,727	-
720	0.22	0.25	2,393,205	2.95	127,572	-	0.0000	-	0.000	-	127,572	-
1440	0.12	0.25	2,393,205	1.634	142,396	-	0.0000	-	0.000	-	142,396	-