

Memorandum

To: Chris Hawkins
From: Raul Passerini
CC: File (1411-1.1)
Date: July 30, 2013
Re: Town of Mountain Village IDF Curves

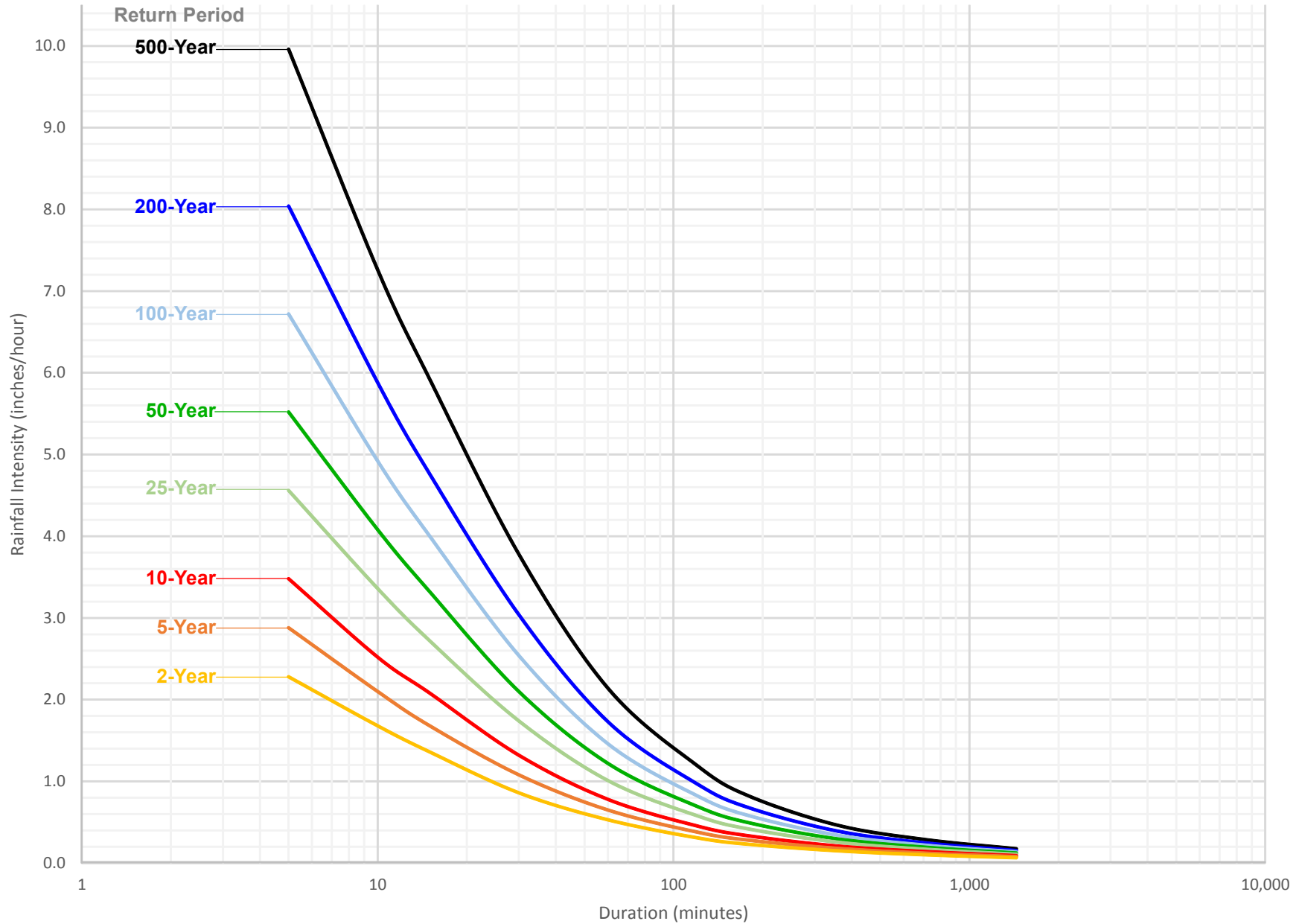
Chris,

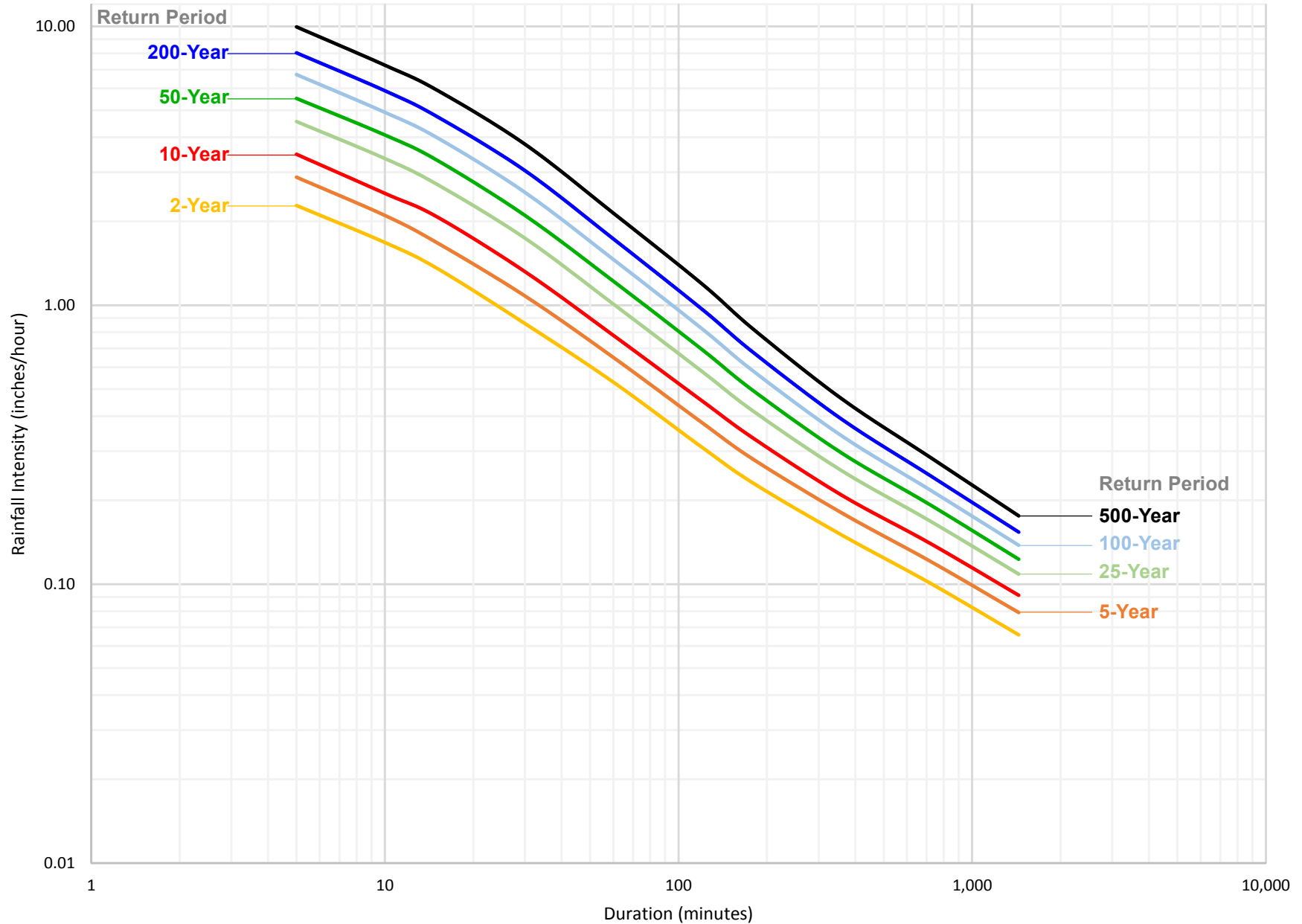
Enclosed please find the Intensity-Duration-Frequency (IDF) curves and associated tables developed for the Town of Mountain Village, Colorado. **Figure 1** displays the IDF curves with a logarithmic scale for the x-axis (storm duration). **Figure 2** presents the same IDF curves using logarithmic scales on both axes.

The curves were developed for the location of the centroid of the Town's boundary (Latitude 37.9323 degrees; Longitude -107.8578 degrees). Precipitation frequency data was obtained from the NOAA Atlas 14, Volume 8, Version 2.

Please contact us if you have any questions or require additional assistance.

Thank you,





Precipitation Duration-Frequency-Depth and Intensity-Duration-Frequency Tables

Site Name: **Town of Mountain Village, San Miguel County, CO**

File: **1411-1.1**

Date: **7/26/2013**

Table 1. Precipitation Duration-Frequency-Depth (DFD)

Duration	Rainfall Depth (inches) at Recurrence Interval							
	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	200-yr	500-yr
5-min	0.19	0.24	0.29	0.38	0.46	0.56	0.67	0.83
10-min	0.28	0.35	0.42	0.56	0.68	0.82	0.98	1.21
15-min	0.34	0.42	0.52	0.68	0.83	1.00	1.19	1.48
30-min	0.43	0.54	0.66	0.87	1.05	1.27	1.52	1.89
1-hr	0.53	0.65	0.78	1.01	1.22	1.46	1.73	2.14
2-hr	0.62	0.76	0.91	1.16	1.39	1.65	1.94	2.39
3-hr	0.69	0.84	1.00	1.25	1.48	1.74	2.03	2.46
6-hr	0.90	1.08	1.25	1.53	1.77	2.04	2.34	2.77
12-hr	1.21	1.45	1.68	2.02	2.31	2.61	2.94	3.42
24-hr	1.58	1.90	2.19	2.61	2.95	3.31	3.69	4.22

Source: NOAA Atlas 14, Volume 8, Version 2 - Point Precipitation Frequency Estimates at the Centroid of Town of Mountain Village (LAT=37.9323; LON=-107.8578).

Table 2. Precipitation Intensity-Duration-Frequency (IDF)

Duration	Rainfall Intensity (inches/hour) at Recurrence Interval							
	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	200-Year	500-Year
5-min	2.28	2.88	3.48	4.56	5.52	6.72	8.04	9.96
10-min	1.68	2.10	2.52	3.36	4.08	4.92	5.88	7.26
15-min	1.36	1.68	2.08	2.72	3.32	4.00	4.76	5.92
30-min	0.86	1.08	1.32	1.74	2.10	2.54	3.04	3.78
1-hr	0.53	0.65	0.78	1.01	1.22	1.46	1.73	2.14
2-hr	0.31	0.38	0.46	0.58	0.70	0.83	0.97	1.20
3-hr	0.23	0.28	0.33	0.42	0.49	0.58	0.68	0.82
6-hr	0.15	0.18	0.21	0.26	0.30	0.34	0.39	0.46
12-hr	0.10	0.12	0.14	0.17	0.19	0.22	0.25	0.29
24-hr	0.07	0.08	0.09	0.11	0.12	0.14	0.15	0.18