

TABLE 1
FULL BUILD-OUT SCENARIO⁽¹⁾
(ALL SITE RUN-OFF COLLECTED AND DETAINED)

Storm Frequency	Run-off Toward Douglas Avenue Prior to Project (cfs)	Stormwater Basin Outlet with Reducer (cfs)	Flow through Emergency Spillway (cfs) ⁽²⁾	Peak Elevation in Basin (Ft.)
2	4.67	1.19	0.00	504.24
10	21.53	1.59	0.00	507.33
25	33.29	1.75	0.00	508.75
50	38.69	1.81	0.00	509.35
100	50.04	1.92	0.00	510.51
		Pipe Capacity at Douglas Avenue is 4.6 cfs		

Notes:

⁽¹⁾ Calculations based on site characteristic data as submitted by Grever & Ward, Inc.

⁽²⁾ 0.00 cfs indicates that the emergency spillway is not receiving flow from the stormwater basin.

5.42cfs significantly exceeds Yorkville's 0.5cfs requirement

TABLE 2

CURRENT CONDITION SCENARIO (STORMWATER BASIN + BYPASS)⁽¹⁾

Storm Frequency	Bypass Flow (cfs)	Outlet from Basin (cfs)	Total Outflow from Site (cfs) ⁽²⁾	12-inch Village Pipe Capacity (cfs)
2	0.32	1.19	1.43	4.6
10	2.45	1.56	3.74	4.6
25	4.06	1.70	5.42	4.6
50	4.82	1.75	6.19	4.6
100	6.42	1.86	7.81	4.6

Notes:

⁽¹⁾ Current build-out based on existing site conditions based on SCE observations on June 11, 2008.

⁽²⁾ Total outflow from site is bypass flow combined with outlet from basin routed through the grassed swale and measured at catch basin "C".

As noted in the tables above, both scenarios indicate that run-off from the modeled storm events that enters the stormwater management basin is contained within the stormwater management basin without over topping through the spillway. This condition was required by the Village of Yorkville in its letter from the Village Engineer dated January 11, 2001.