



SITE LAYOUT PLAN
SCALE: 1" = 20'

Table 18.4.5.1.2 Minimum Required Fire Flow and Flow Duration for Buildings

Fire Area (sq ft)		Fire Area (m ²)				Fire Flow (gpm)	Flow Duration (hours)
I(443), I(332), I(222)*	II(111), III(211)*	IV(211), V(111)*	II(000), III(200)*	V(000)*	3,785 for 1 min		
0-22,700	0-8,200	0-5,900			1,500	1.50	
22,701-46,300	8,201-16,400	5,901-11,800			3,601-4,800	1.50	
46,301-69,900	16,401-32,800	11,801-23,600			4,801-6,000	2.00	
69,901-93,500	32,801-65,600	23,601-47,200			6,001-7,200	2.50	
93,501-117,100	65,601-131,200	47,201-94,400			7,201-9,000	2.50	
117,101-140,700	131,201-262,400	94,401-188,800			9,001-11,000	2.50	
140,701-164,300	262,401-524,800	188,801-377,600			11,001-13,000	3.00	
164,301-187,900	524,801-1,049,600	377,601-755,200			13,001-15,000	3.00	
187,901-211,500	1,049,601-2,099,200	755,201-1,510,400			15,001-18,000	3.50	
211,501-235,100	2,099,201-4,198,400	1,510,401-3,020,800			18,001-21,000	3.50	
235,101-258,700	4,198,401-8,396,800	3,020,801-6,041,600			21,001-25,000	4.00	
258,701-282,300	8,396,801-16,793,600	6,041,601-12,083,200			25,001-30,000	4.00	
282,301-305,900	16,793,601-33,587,200	12,083,201-24,166,400			30,001-36,000	4.00	
305,901-329,500	33,587,201-67,174,400	24,166,401-48,338,800			36,001-43,000	4.00	
329,501-353,100	67,174,401-134,348,800	48,338,801-96,677,600			43,001-51,000	4.00	
353,101-376,700	134,348,801-268,697,600	96,677,601-193,355,200			51,001-60,000	4.00	
376,701-400,300	268,697,601-537,395,200	193,355,201-386,710,400			60,001-70,000	4.00	
400,301-423,900	537,395,201-1,074,790,400	386,710,401-773,420,800			70,001-81,000	4.00	
423,901-447,500	1,074,790,401-2,149,580,800	773,420,801-1,546,841,600			81,001-93,000	4.00	
447,501-471,100	2,149,580,801-4,299,161,600	1,546,841,601-3,093,683,200			93,001-106,000	4.00	
471,101-494,700	4,299,161,601-8,598,323,200	3,093,683,201-6,187,366,400			106,001-121,000	4.00	
494,701-518,300	8,598,323,201-17,196,646,400	6,187,366,401-12,373,292,800			121,001-138,000	4.00	
518,301-541,900	17,196,646,401-34,393,292,800	12,373,292,801-24,746,585,600			138,001-157,000	4.00	
541,901-565,500	34,393,292,801-68,786,585,600	24,746,585,601-49,493,171,200			157,001-178,000	4.00	
565,501-589,100	68,786,585,601-137,573,171,200	49,493,171,201-98,986,342,400			178,001-201,000	4.00	
589,101-612,700	137,573,171,201-275,146,342,400	98,986,342,401-197,972,684,800			201,001-227,000	4.00	
612,701-636,300	275,146,342,401-550,292,684,800	197,972,684,801-395,945,369,600			227,001-265,000	4.00	
636,301-659,900	550,292,684,801-1,100,585,369,600	395,945,369,601-791,890,739,200			265,001-306,000	4.00	
659,901-683,500	1,100,585,369,601-2,201,170,739,200	791,890,739,201-1,583,741,478,400			306,001-350,000	4.00	
683,501-707,100	2,201,170,739,201-4,402,341,478,400	1,583,741,478,401-3,167,482,956,800			350,001-400,000	4.00	
707,101-730,700	4,402,341,478,401-8,804,682,956,800	3,167,482,956,801-6,334,965,913,600			400,001-460,000	4.00	
730,701-754,300	8,804,682,956,801-17,609,365,913,600	6,334,965,913,601-12,669,931,827,200			460,001-530,000	4.00	
754,301-777,900	17,609,365,913,601-35,218,731,827,200	12,669,931,827,201-25,337,463,654,400			530,001-610,000	4.00	
777,901-801,500	35,218,731,827,201-70,437,463,654,400	25,337,463,654,401-50,674,927,308,800			610,001-700,000	4.00	
801,501-825,100	70,437,463,654,401-140,874,927,308,800	50,674,927,308,801-101,349,854,617,600			700,001-800,000	4.00	
825,101-848,700	140,874,927,308,801-281,749,854,617,600	101,349,854,617,601-202,699,709,235,200			800,001-910,000	4.00	
848,701-872,300	281,749,854,617,601-563,499,709,235,200	202,699,709,235,201-405,399,418,470,400			910,001-1,030,000	4.00	
872,301-895,900	563,499,709,235,201-1,126,999,418,470,400	405,399,418,470,401-810,798,836,940,800			1,030,001-1,170,000	4.00	
895,901-919,500	1,126,999,418,470,401-2,253,998,836,940,800	810,798,836,940,801-1,621,597,673,881,600			1,170,001-1,330,000	4.00	
919,501-943,100	2,253,998,836,940,801-4,507,997,673,881,600	1,621,597,673,881,601-3,243,195,347,763,200			1,330,001-1,510,000	4.00	
943,101-966,700	4,507,997,673,881,601-9,015,995,347,763,200	3,243,195,347,763,201-6,486,390,695,526,400			1,510,001-1,710,000	4.00	
966,701-990,300	9,015,995,347,763,201-18,031,990,695,526,400	6,486,390,695,526,401-12,972,781,391,052,800			1,710,001-1,930,000	4.00	
990,301-1,013,900	18,031,990,695,526,401-36,063,981,391,052,800	12,972,781,391,052,801-25,945,562,782,105,600			1,930,001-2,170,000	4.00	
1,013,901-1,037,500	36,063,981,391,052,801-72,127,962,782,105,600	25,945,562,782,105,601-51,891,125,564,211,200			2,170,001-2,430,000	4.00	
1,037,501-1,061,100	72,127,962,782,105,601-144,255,925,564,211,200	51,891,125,564,211,201-103,781,251,128,422,400			2,430,001-2,810,000	4.00	
1,061,101-1,084,700	144,255,925,564,211,201-288,511,851,128,422,400	103,781,251,128,422,401-207,562,502,256,844,800			2,810,001-3,310,000	4.00	
1,084,701-1,108,300	288,511,851,128,422,401-577,023,702,256,844,800	207,562,502,256,844,801-415,125,004,513,689,600			3,310,001-3,940,000	4.00	
1,108,301-1,131,900	577,023,702,256,844,801-1,154,047,404,513,689,600	415,125,004,513,689,601-830,251,009,027,379,179,200			3,940,001-4,700,000	4.00	
1,131,901-1,155,500	1,154,047,404,513,689,601-2,308,094,809,027,379,179,200	830,251,009,027,379,179,201-1,660,182,418,054,758,358,400			4,700,001-5,590,000	4.00	
1,155,501-1,179,100	2,308,094,809,027,379,179,201-4,616,189,618,054,758,358,400	1,660,182,418,054,758,358,401-3,320,379,236,116,716,716,800			5,590,001-6,610,000	4.00	
1,179,101-1,202,700	4,616,189,618,054,758,358,401-9,232,379,236,116,716,716,800	3,320,379,236,116,716,716,801-6,640,758,472,233,433,433,600			6,610,001-7,960,000	4.00	
1,202,701-1,226,300	9,232,379,236,116,716,716,801-18,464,758,472,233,433,433,600	6,640,758,472,233,433,433,601-13,281,516,944,466,867,267,200			7,960,001-9,550,000	4.00	
1,226,301-1,249,900	18,464,758,472,233,433,433,601-36,929,516,944,466,867,267,200	13,281,516,944,466,867,267,201-26,563,033,888,933,734,534,400			9,550,001-11,380,000	4.00	
1,249,901-1,273,500	36,929,516,944,466,867,267,201-73,859,033,888,933,734,534,400	26,563,033,888,933,734,534,401-53,126,067,777,867,469,068,800			11,380,001-13,560,000	4.00	
1,273,501-1,297,100	73,859,033,888,933,734,534,401-147,718,067,777,867,469,068,800	53,126,067,777,867,469,068,801-106,252,135,545,737,938,137,600			13,560,001-16,140,000	4.00	
1,297,101-1,320,700	147,718,067,777,867,469,068,801-295,436,135,545,737,938,137,600	106,252,135,545,737,938,137,601-212,504,271,091,475,875,275,200			16,140,001-19,140,000	4.00	
1,320,701-1,344,300	295,436,135,545,737,938,137,601-590,872,271,091,475,875,275,200	212,504,271,091,475,875,275,201-425,008,542,181,951,750,550,400			19,140,001-22,580,000	4.00	
1,344,301-1,367,900	590,872,271,091,475,875,275,201-1,181,744,542,181,951,750,550,400	425,008,542,181,951,750,550,401-850,017,084,363,901,501,100,800			22,580,001-27,420,000	4.00	
1,367,901-1,391,500	1,181,744,542,181,951,750,550,401-2,363,489,084,363,901,501,100,800	850,017,084,363,901,501,100,801-1,700,978,168,727,802,002,201,600			27,420,001-33,700,000	4.00	
1,391,501-1,415,100	2,363,489,084,363,901,501,100,801-4,726,978,168,727,802,002,201,600	1,700,978,168,727,802,002,201,601-3,401,956,337,455,604,404,400			33,700,001-41,420,000	4.00	
1,415,101-1,438,700	4,726,978,168,727,802,002,201,601-9,453,956,337,455,604,404,400	3,401,956,337,455,604,404,401-6,803,912,674,908,808,800			41,420,001-50,700,000	4.00	
1,438,701-1,462,300	9,453,956,337,455,604,404,401-18,907,912,674,908,808,800	6,803,912,674,908,808,801-13,607,825,349,817,617,617,600			50,700,001-61,400,000	4.00	
1,462,301-1,485,900	18,907,912,674,908,808,801-37,815,825,349,817,617,617,600	13,607,825,349,817,617,617,601-27,215,650,699,635,235,235,200			61,400,001-74,600,000	4.00	
1,485,901-1,509,500	37,815,825,349,817,617,617,601-75,631,650,699,635,235,235,200	27,215,650,699,635,235,235,201-54,431,301,399,270,470,470,400			74,600,001-90,100,000	4.00	
1,509,501-1,533,100	75,631,650,699,635,235,235,201-151,263,301,399,270,470,470,400	54,431,301,399,270,470,470,401-108,862,602,798,940,940,800			90,100,001-108,100,000	4.00	
1,533,101-1,556,700	151,263,301,399,270,470,470,401-302,526,602,798,940,940,800	108,862,602,798,940,940,801-217,725,205,597,881,881,600			108,100,001-129,100,000	4.00	
1,556,701-1,580,300	302,526,602,798,940,940,801-605,053,205,597,881,881,600	217,725,205,597,881,881,601-435,450,411,195,763,763,200			129,100,001-153,100,000	4.00	
1,580,301-1,603,900	605,053,205,597,881,881,601-1,210,106,411,195,763,763,200	435,450,411,195,763,763,201-870,900,822,387,527,527,400			153,100,001-181,100,000	4.00	
1,603,901-1,627,500	1,210,106,411,195,763,763,201-2,420,212,822,387,527,527,400	870,900,822,387,527,527,401-1,741,421,644,775,055,054,800			181,100,001-213,100,000	4.00	
1,627,501-1,651,100	2,420,212,822,387,527,527,401-4,840,425,644,775,055,054,800	1,741,421,644,775,055,054,801-3,482,843,289,550,110,110,400			213,100,001-250,100,000	4.00	
1,651,101-1,674,700	4,840,425,644,775,055,054,801-9,680,851,289,550,110,110,400	3,482,843,289,550,110,110,401-6,965,702,579,100,220,200			250,100,001-292,100,000	4.00	
1,674,701-1,698,300	9,680,851,289,550,110,110,401-19,						