EDGEMONT PHASE II
BUILDING 1

FIRE FLOW REQUIREMENT WORK SHEET

DATE: 11/15/19 CONTACT PHONE#: 303-442-5458
NAME OF PROJECT: EDGEMONT PHASE II
OWNER/DEVELOPER: KEVIN STONEBURNER
TOTAL BUILDING SQ.FT: 17,032
TYPE OF CONSTRUCTION (2015 IBC): IB
OCCUPANCY CLASSIFICATION (2015 IBC): R-2 WITH S-2 PARKING GARAGE
BUILDING SPRINKLERED/UNSPRINKLERED: SPRINKLERED

FIRE FLOW DEMAND (GPM): 1,500 DURATION (HRS): 2
MIN.# OF HYDRANTS: 1 AVERAGE SPACING (FT.): 500
MAX.DISTANCE FROM HYD.TO STREET OR ROAD: 250
(Please attach a vicinity map illustrating approx. location & distances to existing fire hydrants.)
NOTES:

USE TABLES ON FOLLOWING PAGE TO OBTAIN INFORMATION REQUIRED ABOVE.

QUESTIONS REGARDING THE ABOVE INFORMATION MAY BE DIRECTED TO THE FIRE DEPARTMENT AT 879-8216.

TABLES BELOW TAKEN FROM 2015 INTERNATIONAL FIRE CODE

TABLE B105.1(2): REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)					FIRE FLOW (gallons per minute)[b]	FLOW DURATION (hours)
Type IA and IB[a]	Type IIA and IIIA[a]	Type IV and V-A[a]	Type IIB and IIIB[a]	Type V-B[a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,800	1,500	
22,701-30,200	12,701-17,000	8,200-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
37,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	2
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	3
112,701-128,700	63,401-72,400	40,801-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-130,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	130,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43.401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	4
–	–	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
–	–	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
–	–	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
–	–	145,801-156,700	106,801-113,200	64,801-89,600	7,000	
–	–	156,701-187,900	113,201-121,300	69,601-74,600	7,250	
–	–	167,901-179,400	121,301-129,600	74,601-79,800	7,500	
–	–	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
–	–	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

For SI: 1 square foot = 0.0929 m2, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.
a. Types of construction are based on the *International Building Code*.
b. Measured at 20 psi residual pressure.

TABLE C102.1: REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS[a,b,c,f,g] (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT[d,f,g]
1,7500 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more[e]	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.
a. Reduce by 100 feet for dead-end streets or roads.
b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
d. Reduce by 50 feet for dead-end streets or roads.
e. One hydrant for each 1,000 gallons per minute or fraction thereof.
f. A 50-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Fire Code*.
g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*.

EDGEMONT PHASE II
BUILDING 2

FIRE FLOW REQUIREMENT WORK SHEET

DATE: 11/15/19 CONTACT PHONE#: 303-442-5458
NAME OF PROJECT: EDGEMONT PHASE II
OWNER/DEVELOPER: KEVIN STONEBURNER
TOTAL BUILDING SQ.FT: 21,290
TYPE OF CONSTRUCTION (2015 IBC): IB
OCCUPANCY CLASSIFICATION (2015 IBC): R-2 WITH S-2 PARKING GARAGE
BUILDING SPRINKLERED/UNSPRINKLERED: SPRINKLERED

FIRE FLOW DEMAND (GPM): 1,500 DURATION (HRS): 2
MIN.# OF HYDRANTS: 1 AVERAGE SPACING (FT.): 500
MAX.DISTANCE FROM HYD.TO STREET OR ROAD: 250
(Please attach a vicinity map illustrating approx. location & distances to existing fire hydrants.)
NOTES:

USE TABLES ON FOLLOWING PAGE TO OBTAIN INFORMATION REQUIRED ABOVE.

QUESTIONS REGARDING THE ABOVE INFORMATION MAY BE DIRECTED TO THE FIRE DEPARTMENT AT 879-8216.

TABLES BELOW TAKEN FROM 2015 INTERNATIONAL FIRE CODE

TABLE B105.1(2): REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)					FIRE FLOW (gallons per minute)[b]	FLOW DURATION (hours)
Type IA and IB[a]	Type IIA and IIIA[a]	Type IV and V-A[a]	Type IIB and IIIB[a]	Type V-B[a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	
22,701-30,200	12,701-17,000	8,200-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	2
37,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	3
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-130,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	130,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43.401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	4
–	–	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
–	–	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
–	–	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
–	–	145,801-156,700	106,801-113,200	64,801-69,600	7,000	
–	–	156,701-167,900	113,201-121,300	69,601-74,600	7,250	
–	–	167,901-179,400	121,301-129,600	74,601-79,800	7,500	
–	–	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
–	–	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

For SI: 1 square foot = 0.0929 m2, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.
a. Types of construction are based on the *International Building Code*.
b. Measured at 20 psi residual pressure.

TABLE C102.1: REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS[a,b,c,f,g] (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT[d,f,g]
1,7500 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more[e]	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.
a. Reduce by 100 feet for dead-end streets or roads.
b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
d. Reduce by 50 feet for dead-end streets or roads.
e. One hydrant for each 1,000 gallons per minute or fraction thereof.
f. A 50-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Fire Code*.
g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*.

EDGEMONT PHASE II
BUILDING 3

FIRE FLOW REQUIREMENT WORK SHEET

DATE: 11/15/19 CONTACT PHONE#: 303-442-5458
NAME OF PROJECT: EDGEMONT PHASE II
OWNER/DEVELOPER: KEVIN STONEBURNER
TOTAL BUILDING SQ.FT: 21,290
TYPE OF CONSTRUCTION (2015 IBC): IB
OCCUPANCY CLASSIFICATION (2015 IBC): R-2 WITH S-2 PARKING GARAGE
BUILDING SPRINKLERED/UNSPRINKLERED: SPRINKLERED

FIRE FLOW DEMAND (GPM): 1,500 DURATION (HRS): 2
MIN.# OF HYDRANTS: 1 AVERAGE SPACING (FT.): 500
MAX.DISTANCE FROM HYD.TO STREET OR ROAD: 250
(Please attach a vicinity map illustrating approx. location & distances to existing fire hydrants.)
NOTES:

USE TABLES ON FOLLOWING PAGE TO OBTAIN INFORMATION REQUIRED ABOVE.

QUESTIONS REGARDING THE ABOVE INFORMATION MAY BE DIRECTED TO THE FIRE DEPARTMENT AT 879-8216.

TABLES BELOW TAKEN FROM 2015 INTERNATIONAL FIRE CODE

TABLE B105.1(2): REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)					FIRE FLOW (gallons per minute)[b]	FLOW DURATION (hours)
Type IA and IB[a]	Type IIA and IIIA[a]	Type IV and V-A[a]	Type IIB and IIIB[a]	Type V-B[a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	
22,701-30,200	12,701-17,000	8,200-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
37,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	2
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	3
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
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164,201-183,400	92,401-130,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	130,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43.401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	4
--	--	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
--	--	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
--	--	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
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--	--	156,701-167,900	113,201-121,300	69,601-74,600	7,250	
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--	--	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
--	--	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

For SI: 1 square foot = 0.0929 m2, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.
a. Types of construction are based on the *International Building Code*.
b. Measured at 20 psi residual pressure.

TABLE C102.1: REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS[a,b,c,f,g] (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT[d,f,g]
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2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
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7,500 or more	8 or more[e]	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.
a. Reduce by 100 feet for dead-end streets or roads.
b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
d. Reduce by 50 feet for dead-end streets or roads.
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g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*.

EDGEMONT PHASE II
BUILDING 4

FIRE FLOW REQUIREMENT WORK SHEET

DATE: 11/15/19 CONTACT PHONE#: 303-442-5458
NAME OF PROJECT: EDGEMONT PHASE II
OWNER/DEVELOPER: KEVIN STONEBURNER
TOTAL BUILDING SQ.FT: 21,290
TYPE OF CONSTRUCTION (2015 IBC): IB
OCCUPANCY CLASSIFICATION (2015 IBC): R-2 WITH S-2 PARKING GARAGE
BUILDING SPRINKLERED/UNSPRINKLERED: SPRINKLERED

FIRE FLOW DEMAND (GPM): 1,500 DURATION (HRS): 2
MIN.# OF HYDRANTS: 1 AVERAGE SPACING (FT.): 500
MAX.DISTANCE FROM HYD.TO STREET OR ROAD: 250
(Please attach a vicinity map illustrating approx. location & distances to existing fire hydrants.)
NOTES:

USE TABLES ON FOLLOWING PAGE TO OBTAIN INFORMATION REQUIRED ABOVE.

QUESTIONS REGARDING THE ABOVE INFORMATION MAY BE DIRECTED TO THE FIRE DEPARTMENT AT 879-8216.

TABLES BELOW TAKEN FROM 2015 INTERNATIONAL FIRE CODE

TABLE B105.1(2): REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)					FIRE FLOW (gallons per minute)[b]	FLOW DURATION (hours)
Type IA and IB[a]	Type IIA and IIIA[a]	Type IV and V-A[a]	Type IIB and IIIB[a]	Type V-B[a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	
22,701-30,200	12,701-17,000	8,200-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	2
37,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	3
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
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145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-130,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	130,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43.401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	4
–	–	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
–	–	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
–	–	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
–	–	145,801-156,700	106,801-113,200	64,801-69,600	7,000	
–	–	156,701-167,900	113,201-121,300	69,601-74,600	7,250	
–	–	167,901-179,400	121,301-129,600	74,601-79,800	7,500	
–	–	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
–	–	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

For SI: 1 square foot = 0.0929 m2, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.
a. Types of construction are based on the *International Building Code*.
b. Measured at 20 psi residual pressure.

TABLE C102.1: REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS[a,b,c,f,g] (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT[d,f,g]
1,7500 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more[e]	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.
a. Reduce by 100 feet for dead-end streets or roads.
b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
d. Reduce by 50 feet for dead-end streets or roads.
e. One hydrant for each 1,000 gallons per minute or fraction thereof.
f. A 50-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Fire Code*.
g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*.

EDGEMONT PHASE II
BUILDING 5

FIRE FLOW REQUIREMENT WORK SHEET

DATE: 11/15/19 CONTACT PHONE#: 303-442-5458
NAME OF PROJECT: EDGEMONT PHASE II
OWNER/DEVELOPER: KEVIN STONEBURNER
TOTAL BUILDING SQ.FT: 21,290
TYPE OF CONSTRUCTION (2015 IBC): IB
OCCUPANCY CLASSIFICATION (2015 IBC): R-2 WITH S-2 PARKING GARAGE
BUILDING SPRINKLERED/UNSPRINKLERED: SPRINKLERED

FIRE FLOW DEMAND (GPM): 1,500 DURATION (HRS): 2
MIN.# OF HYDRANTS: 1 AVERAGE SPACING (FT.): 500
MAX.DISTANCE FROM HYD.TO STREET OR ROAD: 250
(Please attach a vicinity map illustrating approx. location & distances to existing fire hydrants.)
NOTES:

USE TABLES ON FOLLOWING PAGE TO OBTAIN INFORMATION REQUIRED ABOVE.

QUESTIONS REGARDING THE ABOVE INFORMATION MAY BE DIRECTED TO THE FIRE DEPARTMENT AT 879-8216.

TABLES BELOW TAKEN FROM 2015 INTERNATIONAL FIRE CODE

TABLE B105.1(2): REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)					FIRE FLOW (gallons per minute)[b]	FLOW DURATION (hours)
Type IA and IB[a]	Type IIA and IIIA[a]	Type IV and V-A[a]	Type IIB and IIIB[a]	Type V-B[a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	
22,701-30,200	12,701-17,000	8,200-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
37,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	2
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	3
112,701-128,700	63,401-72,400	40,801-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-130,100	59,101-86,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	130,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,801-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43,401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	4
--	--	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
--	--	125,501-135,500	90,801-97,900	55,701-60,200	6,500	
--	--	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
--	--	145,801-158,700	106,801-113,200	64,801-69,600	7,000	
--	--	156,701-167,900	113,201-121,300	69,601-74,600	7,250	
--	--	187,901-179,400	121,301-129,600	74,601-79,800	7,500	
--	--	179,401-191,400	129,801-138,300	79,801-85,100	7,750	
--	--	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

For SI: 1 square foot = 0.0929 m2, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.
a. Types of construction are based on the *International Building Code*.
b. Measured at 20 psi residual pressure.

TABLE C102.1: REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS[a,b,c,f,g] (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT[d,f,g]
1,7500 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	8	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more[e]	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.
a. Reduce by 100 feet for dead-end streets or roads.
b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
d. Reduce by 50 feet for dead-end streets or roads.
e. One hydrant for each 1,000 gallons per minute or fraction thereof.
f. A 50-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Fire Code*.
g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*.

EDGEMONT PHASE II
BUILDING 6a, 6b & AMENITY

FIRE FLOW REQUIREMENT WORK SHEET

DATE: 11/15/19 CONTACT PHONE#: 303-442-5458
NAME OF PROJECT: EDGEMONT PHASE II
OWNER/DEVELOPER: KEVIN STONEBURNER
TOTAL BUILDING SQ.FT: 47,363 (TOTAL FOR BLDG 6a, Bldg 6b & Amenity
TYPE OF CONSTRUCTION (2015 IBC): IB
OCCUPANCY CLASSIFICATION (2015 IBC): R-2 WITH S-2 PARKING GARAGE
BUILDING SPRINKLERED/UNSPRINKLERED: SPRINKLERED

FIRE FLOW DEMAND (GPM): 2,250 DURATION (HRS): 2
MIN.# OF HYDRANTS: 2 AVERAGE SPACING (FT.): 450
MAX.DISTANCE FROM HYD.TO STREET OR ROAD: 225
(Please attach a vicinity map illustrating approx. location & distances to existing fire hydrants.)
NOTES: FIFE FLOW DEMAND CONSIDERING 2 BUILDINGS PLUS AMENITY SPACE - EACH BUILDING HAS 1,500 GPM & 1 HYDRANT REQUIREMENT

USE TABLES ON FOLLOWING PAGE TO OBTAIN INFORMATION REQUIRED ABOVE.

QUESTIONS REGARDING THE ABOVE INFORMATION MAY BE DIRECTED TO THE FIRE DEPARTMENT AT 879-8216.

TABLES BELOW TAKEN FROM 2015 INTERNATIONAL FIRE CODE

TABLE B105.1(2): REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)					FIRE FLOW (gallons per minute)[b]	FLOW DURATION (hours)
Type IA and IB[a]	Type IIA and IIIA[a]	Type IV and V-A[a]	Type IIB and IIIB[a]	Type V-B[a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	
22,701-30,200	12,701-17,000	8,200-10,900	5,901-7,900	3,801-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
37,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	2
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,800	25,901-29,300	15,601-18,000	3,500	3
112,701-128,700	83,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-130,100	59,101-68,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	130,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	38,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43.401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	4
--	--	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
--	--	125,501-135,500	90,801-97,900	55,701-60,200	6,500	
--	--	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
--	--	145,801-156,700	106,801-113,200	64,801-89,600	7,000	
--	--	156,701-167,900	113,201-121,300	89,601-74,600	7,250	
--	--	167,901-179,400	121,301-129,800	74,601-79,800	7,500	
--	--	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
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3,000	3	400	225
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7,500 or more	8 or more[e]	200	120

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g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*.

REQUEST FOR FIRE FLOW AVAILABILITY FORM

PROJECT NAME: Edgemont Phase II

PROPERTY LOCATION: Vacant portion of Edgemont Parcel

LEGAL DESCRIPTION: Expanstion Property shown on Edgemont Condo-Bldg A

(ATTACH SKETCH PLAN)

OWNER OR DEVELOPER'S NAME: Steamboat Ski-In Ski-Out, LLC (c/o Landmark)

ADDRESS: 465 Bayfront Pl, Naples, FL 34102

CONTACT PHONE: attn: Erik Griepentrog, 970-846-2592

INFORMATION IN THE FOLLOWING BOX MUST BE COMPLETED BY AN AUTHORIZED REPRESENTATIVE OF STEAMBOAT SPRINGS WATER DISTRICT.

FIRE FLOW DEMAND FOR PROJECTS IN GALLONS PER MINUTE IS: TBD
(ATTACH COMPUTATION SHEET)

THE AVAILABLE FIRE FLOW IS:_____G.P.M. AS DETERMINED BY

(METHOD): To be determined. Will be based on computer model from MWW district consultant. Engineering costs to be born by developer based on MWW District Rules and Regulations.

BY:_____ DATE

(Must be signed by representative from City Utility Dept. or Mt. Werner Water & Sanitation, whichever is applicable.)

I the undersigned request the available fire flow at said project and agree to pay all costs associated with obtaining such information.

Costs are based on time and materials for obtaining such information from available records and performing actual field tests for computation of flows in G.P.M. at a residual of 20 P.S.I.

RB
SIGNATURE

Dist Engineer
TITLE

DATE 11/11/19