

HYDRAULIC CALCULATIONS FOR SPRINKLER SYSTEM LOCATION : APARTMENT ON LEVEL-13

DESIGN DATA:

Remote Area Location : Apartment on Level - 13

System Type : Wet System

Hazard Type : Light Hazard System

Design Density : 0.10 gpm / sq. ft

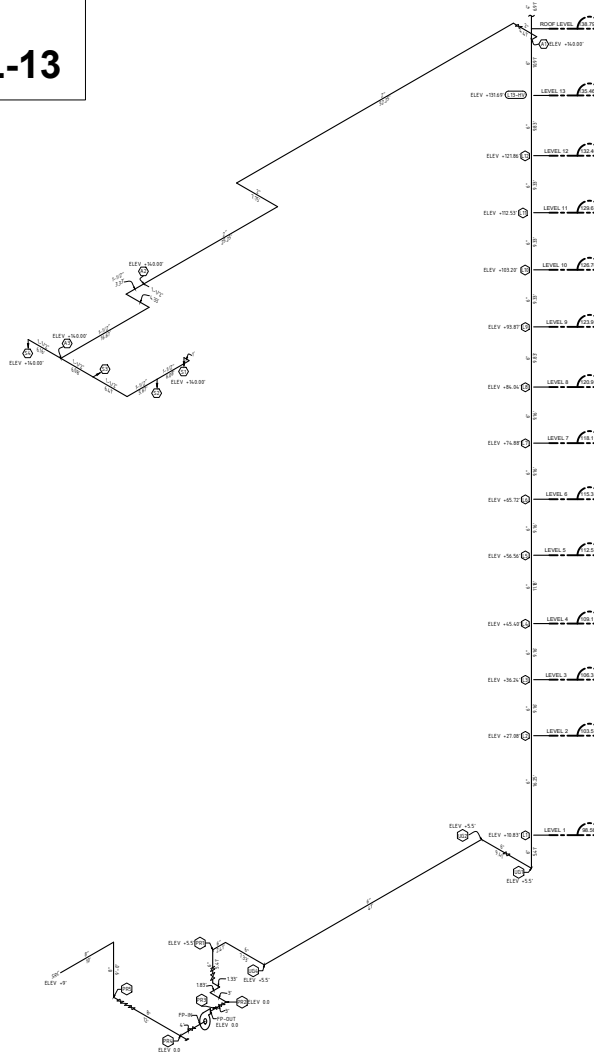
Remote Area : Maximum 04 Nos. Sprinkler Heads

Sprinkler Classification : Residential Sprinkler

Maximum sprinkler Coverage : 320 sq. ft

Sprinkler K- factor : K5.8

Exterior Hose System allowance :

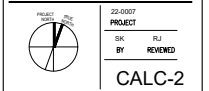


NO	DATE	DESCRIPTION
ISSUED/REVISION RECORD		

PROJECT
315 SPADINA MIXED-USE DEVELOPMENT
315-325 SPADINA AVENUE

DRAWING TITLE

HYDRAULIC CALCULATION
ISOMETRIC DIAGRAMS
SPRINKLER SYSTEM
APARTMENT OF LEVEL-13



Hydraulic Calculations

Project Name: 315 Spadina

DESIGN DATA:

Remote Area Location: Apartment on Level-13

System Type: Wet

Hazard: Light Hazard System

Design Density: 0.1 gpm/ sq. ft

Remote Area: Maximum 04 Nos. Sprinkler Head most demanding.

Sprinkler Classification: Residential Sprinklers

Maximum Sprinkler Coverage: 320 sq. ft

Sprinkler K-Factor: K8

CALCULATING END SPRINKLER FLOW IN REMOTE AREA

Design Density = 0.1 gpm/sq ft

Maximum area covered by one sprinkler = 320 sq. ft

Flow required at end sprinkler = 0.1 x 320 gpm

$$= 32 \text{ gpm}$$

CALCULATING END SPRINKLER PRESSURE

Using equation.

$$Q = K \times \sqrt{P}$$

Where, Q = Flow in gpm (gallons per minute)

K = Sprinkler constant given by manufacture data sheet

P = Pressure at sprinkler in psi (pound per square inch)

Once the flow (Q) is calculated, the required pressure (P) can be calculated by simply rearranging the above formula:

$$P = \left(\frac{Q}{K}\right)^2$$

$$Q = 32 \text{ gpm}$$

$$K = 5.8$$

Therefore, Pressure required at end sprinkler = $(32/5.8)^2 = 30.43 \text{ psi}$.

Therefore, our calculation shall start at Pressure P = 30.43 psi.

This pressure shall be inserted into hydraulic calculation software of minimum end conditions.

DATE: 5/25/2024HYDRAULIC CALC\SPRINKLER SYSTEM AT LEVEL 13 SUITE CALC.SDF

JOB TITLE: 315 Spadina

DEMAND CALCULATION ON LEVEL-13 APARTMENT

WATER SUPPLY DATA

SOURCE	STATIC	RESID.	FLOW	AVAIL.	TOTAL	REQ'D
NODE	PRESS.	PRESS.	@	PRESS.	@	PRESS.
TAG	(PSI)	(PSI)	(GPM)	(PSI)	(GPM)	(PSI)
SRC	75.0	64.0	1200.0	74.8	132.0	44.2

AGGREGATE FLOW ANALYSIS:

TOTAL FLOW AT SOURCE	132.0 GPM
TOTAL HOSE STREAM ALLOWANCE AT SOURCE	0.0 GPM
OTHER HOSE STREAM ALLOWANCES	0.0 GPM
TOTAL DISCHARGE FROM ACTIVE SPRINKLERS	132.0 GPM

NODE ANALYSIS DATA

NODE TAG	ELEVATION	NODE TYPE	PRESSURE	DISCHARGE
	(FT)		(PSI)	(GPM)
S1	140.0	K= 5.80	30.5	32.0
S2	140.0	K= 5.80	30.9	32.2
S3	140.0	K= 5.80	33.2	33.4
A3	140.0	K= 5.80	35.0	34.3
S4	140.0	- - - -	33.2	- - -
A2	140.0	- - - -	50.4	- - -
A1	140.0	- - - -	67.7	- - -
L13-HV	131.7	- - - -	71.4	- - -
L12	121.9	- - - -	75.6	- - -
L11	112.5	- - - -	79.7	- - -
L10	103.2	- - - -	83.7	- - -
L9	93.9	- - - -	87.8	- - -
L8	84.0	- - - -	92.0	- - -
L7	74.9	- - - -	96.0	- - -
L6	65.7	- - - -	100.0	- - -
L5	56.6	- - - -	104.0	- - -
L4	45.4	- - - -	108.8	- - -
L3	36.2	- - - -	112.8	- - -
L2	27.1	- - - -	116.8	- - -
L1	10.8	- - - -	123.8	- - -
UG1	5.5	- - - -	126.1	- - -
UG2	5.5	- - - -	126.1	- - -
UG4	5.5	- - - -	126.2	- - -
PR1	5.5	- - - -	126.2	- - -
PR2	0.0	- - - -	128.6	- - -
FP-OUT	0.0	- - - -	128.7	- - -
FP-IN	0.0	- - - -	48.1	- - -
PR3	0.0	- - - -	128.7	- - -
PR4	0.0	- - - -	48.1	- - -
PR5	0.0	- - - -	48.1	- - -
SRC	9.0	SOURCE	44.2	132.0

DATE: 5/25/2024HYDRAULIC CALC\SPRINKLER SYSTEM AT LEVEL 13 SUITE CALC.SDF

JOB TITLE: 315 Spadina

PIPE DATA

PIPE TAG	END	ELEV.	NOZ.	PT	DISC.	Q (GPM)	DIA (IN)	LENGTH	PRESS.	
	NODES	(FT)	(K)	(PSI)	(GPM)	VEL (FPS)	HW (C)	(FT)	SUM.	
							FL/FT		(PSI)	
Pipe: 1										
S1		140.0	5.8	30.5	32.0	-32.0 5.0	1.610 120	PL FTG	7.01 E	PF PE 0.4 0.0
S2		140.0	5.8	30.9	32.2		0.039	TL	11.01	PV
Pipe: 2										
S2		140.0	5.8	30.9	32.2	-64.3 10.1	1.610 120	PL FTG	12.08 E	PF PE 2.3 0.0
S3		140.0	5.8	33.2	33.4		0.140	TL	16.08	PV
Pipe: 3										
A3		140.0	5.8	35.0	34.3	97.7 15.4	1.610 120	PL FTG	6.08 ----	PF PE 1.8 0.0
S3		140.0	5.8	33.2	33.4		0.304	TL	6.08	PV
Pipe: 4										
S3		140.0	5.8	33.2	33.4	0.0 0.0	1.610 120	PL FTG	6.16 ----	PF PE 0.0 0.0
S4		140.0	0.0	33.2	0.0		0.000	TL	6.16	PV
Pipe: 7										
A3		140.0	5.8	35.0	34.3	-132.0 20.8	1.610 120	PL FTG	21.00 2E	PF PE 15.4 0.0
A2		140.0	0.0	50.4	0.0		0.530	TL	29.00	PV
Pipe: 8										
A2		140.0	0.0	50.4	0.0	-132.0 12.6	2.067 120	PL FTG	89.66 4EG	PF PE 17.4 0.0
A1		140.0	0.0	67.7	0.0		0.157	TL	110.66	PV
Pipe: 16										
A1		140.0	0.0	67.7	0.0	-132.0 1.5	6.065 120	PL FTG	10.91 ----	PF PE 0.0 3.6
L13-HV		131.7	0.0	71.4	0.0		0.001	TL	10.91	PV
Pipe: 17										
L13-HV		131.7	0.0	71.4	0.0	-132.0 1.5	6.065 120	PL FTG	9.83 ----	PF PE 0.0 4.3
L12		121.9	0.0	75.6	0.0		0.001	TL	9.83	PV
Pipe: 18										
L12		121.9	0.0	75.6	0.0	-132.0 1.5	6.065 120	PL FTG	9.33 ----	PF PE 0.0 4.0
L11		112.5	0.0	79.7	0.0		0.001	TL	9.33	PV
Pipe: 19										
L11		112.5	0.0	79.7	0.0	-132.0 1.5	6.065 120	PL FTG	9.33 ----	PF PE 0.0 4.0
L10		103.2	0.0	83.7	0.0		0.001	TL	9.33	PV
Pipe: 20										
L10		103.2	0.0	83.7	0.0	-132.0 1.5	6.065 120	PL FTG	9.33 ----	PF PE 0.0 4.0
L9		93.9	0.0	87.8	0.0		0.001	TL	9.33	PV
Pipe: 21										
L9		93.9	0.0	87.8	0.0	-132.0 1.5	6.065 120	PL FTG	9.83 ----	PF PE 0.0 4.3
L8		84.0	0.0	92.0	0.0		0.001	TL	9.83	PV
Pipe: 22										
L8		84.0	0.0	92.0	0.0	-132.0 1.5	6.065 120	PL FTG	9.16 ----	PF PE 0.0 4.0
L7		74.9	0.0	96.0	0.0		0.001	TL	9.16	PV
Pipe: 23										
L7		74.9	0.0	96.0	0.0	-132.0 1.5	6.065 120	PL FTG	9.16 ----	PF PE 0.0 4.0
L6		65.7	0.0	100.0	0.0		0.001	TL	9.16	PV

DATE: 5/25/2024HYDRAULIC CALC\SPRINKLER SYSTEM AT LEVEL 13 SUITE CALC.SDF

JOB TITLE: 315 Spadina

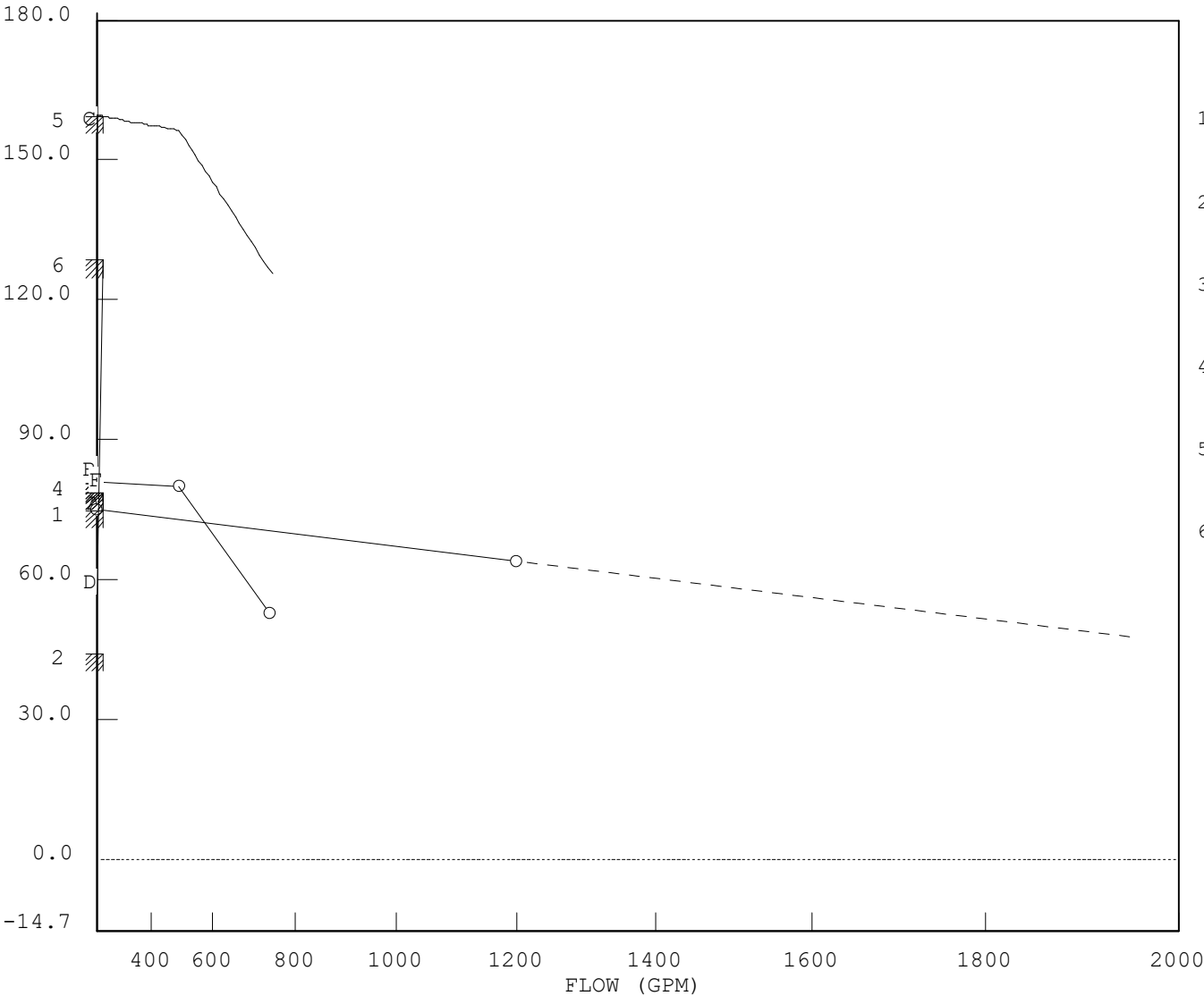
PIPE TAG	END	ELEV.	NOZ.	PT	DISC.	Q (GPM)	DIA (IN)	LENGTH	PRESS.	
NODES	(FT)	(K)	(PSI)	(GPM)	VEL (FPS)	HW (C)	FL/FT	(FT)	SUM.	(PSI)
Pipe: 24					-132.0	6.065	PL	9.16	PF	0.0
L6	65.7	0.0	100.0	0.0	1.5	120	FTG	----	PE	4.0
L5	56.6	0.0	104.0	0.0		0.001	TL	9.16	PV	
Pipe: 25					-132.0	6.065	PL	11.18	PF	0.0
L5	56.6	0.0	104.0	0.0	1.5	120	FTG	----	PE	4.8
L4	45.4	0.0	108.8	0.0		0.001	TL	11.18	PV	
Pipe: 26					-132.0	6.065	PL	9.16	PF	0.0
L4	45.4	0.0	108.8	0.0	1.5	120	FTG	----	PE	4.0
L3	36.2	0.0	112.8	0.0		0.001	TL	9.16	PV	
Pipe: 27					-132.0	6.065	PL	9.16	PF	0.0
L3	36.2	0.0	112.8	0.0	1.5	120	FTG	----	PE	4.0
L2	27.1	0.0	116.8	0.0		0.001	TL	9.16	PV	
Pipe: 28					-132.0	6.065	PL	16.25	PF	0.0
L2	27.1	0.0	116.8	0.0	1.5	120	FTG	----	PE	7.0
L1	10.8	0.0	123.8	0.0		0.001	TL	16.25	PV	
Pipe: 29					-132.0	6.065	PL	5.41	PF	0.0
L1	10.8	0.0	123.8	0.0	1.5	120	FTG	----	PE	2.3
UG1	5.5	0.0	126.1	0.0		0.001	TL	5.41	PV	
Pipe: 30					0.0	6.065	PL	9.41	PF	0.0
UG1	5.5	0.0	126.1	0.0	0.0	120	FTG	G	PE	0.0
UG2	5.5	0.0	126.1	0.0		0.000	TL	12.41	PV	
Pipe: 32					-132.0	6.065	PL	41.00	PF	0.0
UG1	5.5	0.0	126.1	0.0	1.5	120	FTG	----	PE	0.0
UG4	5.5	0.0	126.2	0.0		0.001	TL	41.00	PV	
Pipe: 33					-132.0	6.065	PL	7.33	PF	0.0
UG4	5.5	0.0	126.2	0.0	1.5	120	FTG	ET	PE	0.0
PR1	5.5	0.0	126.2	0.0		0.001	TL	51.33	PV	
Pipe: 34					132.0	6.065	PL	11.57	PF	0.0
PR2	0.0	0.0	128.6	0.0	1.5	120	FTG	EGA	PE	-2.4
PR1	5.5	0.0	126.2	0.0		0.001	TL	56.57	PV	
Pipe: 35					132.0	6.065	PL	2.00	PF	0.0
PR3	0.0	0.0	128.7	0.0	1.5	120	FTG	ECG	PE	0.0
PR2	0.0	0.0	128.6	0.0		0.001	TL	51.00	PV	
Pipe: 36					132.0	6.065	PL	1.00	PF	0.0
FP-OUT	0.0	0.0	128.7	0.0	1.5	120	FTG	----	PE	0.0
PR3	0.0	0.0	128.7	0.0		0.001	TL	1.00	PV	
Pipe: 37										
FP-IN	0.0	0.0	48.1	0.0				500.0 gpm @ 80.0 psi		
FP-OUT	0.0	0.0	128.7	0.0				Avail.: 132.0 gpm @ 80.0 psi		
								Req'd.: 132.0 gpm @ 80.0 psi		
Pipe: 38					132.0	6.065	PL	4.00	PF	0.0
PR4	0.0	0.0	48.1	0.0	1.5	120	FTG	G	PE	0.0
FP-IN	0.0	0.0	48.1	0.0		0.001	TL	7.00	PV	
Pipe: 39					-132.0	7.981	PL	12.00	PF	0.0
PR4	0.0	0.0	48.1	0.0	0.8	120	FTG	2C2G	PE	0.0
PR5	0.0	0.0	48.1	0.0		0.000	TL	110.00	PV	

Static: 75.00 psi Resid: 64.00 psi Flow: 1200.0 gpm

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Note: (1) Dashed Lines indicate extrapolated values from Test Results

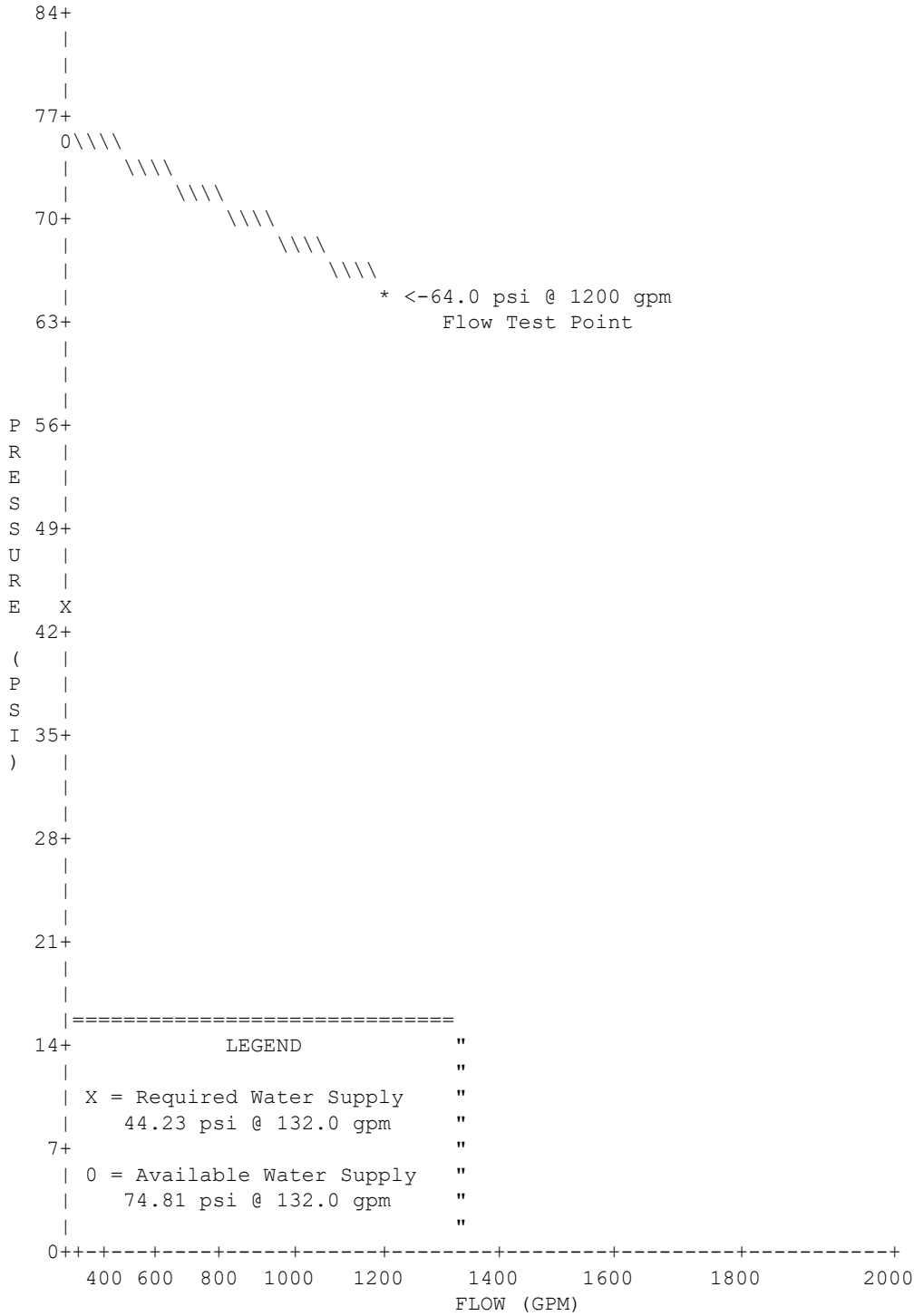
LEGEND

- 1 Pressure available at source
74.81 psi @ 131.9 gpm
- 2 Pressure required at source
44.12 psi @ 131.9 gpm
- 3 Pressure available from pump
80.59 psi @ 131.9 gpm
- 4 Pressure required from pump
80.59 psi @ 131.9 gpm
- 5 Total Pressure available at pump dschg.
159.27 psi @ 131.9 gpm
- 6 Total Pressure required at pump dschg.
128.57 psi @ 131.9 gpm
- A. Source Supply Curve
- B. Net Pump Supply Curve
- C. Pump Discharge Curve
- D. System Demand Curve
- F. Available at Pump Suction

DATE: 5/25/2024HYDRAULIC CALC\SPRINKLER SYSTEM AT LEVEL 13 SUITE CALC.SDF

JOB TITLE: 315 Spadina

WATER SUPPLY CURVE



DATE: 5/25/2024HYDRAULIC CALC\SPRINKLER SYSTEM AT LEVEL 13 SUITE CALC.SDF
JOB TITLE: 315 Spadina

SUPPLY CALCULATIONS ON LEVEL-13 APARTMENT

WATER SUPPLY DATA

SOURCE	STATIC	RESID.	FLOW	AVAIL.	TOTAL	REQ'D
NODE	PRESS.	PRESS.	@	PRESS.	@ DEMAND	PRESS.
TAG	(PSI)	(PSI)	(GPM)	(PSI)	(GPM)	(PSI)
SRC	75.0	64.0	1200.0	74.7	160.0	

AGGREGATE FLOW ANALYSIS:

TOTAL FLOW AT SOURCE	160.0 GPM
TOTAL HOSE STREAM ALLOWANCE AT SOURCE	0.0 GPM
OTHER HOSE STREAM ALLOWANCES	0.0 GPM
TOTAL DISCHARGE FROM ACTIVE SPRINKLERS	160.0 GPM

NODE ANALYSIS DATA

NODE TAG	ELEVATION	NODE TYPE	PRESSURE	DISCHARGE
	(FT)		(PSI)	(GPM)
S1	140.0	K= 5.80	44.9	38.8
S2	140.0	K= 5.80	45.5	39.1
S3	140.0	K= 5.80	48.7	40.5
A3	140.0	K= 5.80	51.3	41.6
S4	140.0	- - - -	48.7	- - -
A2	140.0	- - - -	73.3	- - -
A1	140.0	- - - -	98.1	- - -
L13-HV	131.7	- - - -	101.7	- - -
L12	121.9	- - - -	106.0	- - -
L11	112.5	- - - -	110.0	- - -
L10	103.2	- - - -	114.1	- - -
L9	93.9	- - - -	118.1	- - -
L8	84.0	- - - -	122.4	- - -
L7	74.9	- - - -	126.4	- - -
L6	65.7	- - - -	130.3	- - -
L5	56.6	- - - -	134.3	- - -
L4	45.4	- - - -	139.2	- - -
L3	36.2	- - - -	143.1	- - -
L2	27.1	- - - -	147.1	- - -
L1	10.8	- - - -	154.2	- - -
UG1	5.5	- - - -	156.5	- - -
UG2	5.5	- - - -	156.5	- - -
UG4	5.5	- - - -	156.6	- - -
PR1	5.5	- - - -	156.6	- - -
PR2	0.0	- - - -	159.1	- - -
FP-OUT	0.0	- - - -	159.1	- - -
FP-IN	0.0	- - - -	78.6	- - -
PR3	0.0	- - - -	159.1	- - -
PR4	0.0	- - - -	78.6	- - -
PR5	0.0	- - - -	78.6	- - -
SRC	9.0	SOURCE	74.7	160.0

DATE: 5/25/2024HYDRAULIC CALC\SPRINKLER SYSTEM AT LEVEL 13 SUITE CALC.SDF

JOB TITLE: 315 Spadina

PIPE DATA

PIPE TAG	END	ELEV.	NOZ.	PT	DISC.	Q (GPM)	VEL (FPS)	DIA (IN)	HW (C)	LENGTH	PRESS.	SUM.
	NODES	(FT)	(K)	(PSI)	(GPM)				FL/FT	(FT)		(PSI)
	Pipe: 1						-38.8	1.610	PL	7.01	PF	0.6
S1		140.0	5.8	44.9	38.8	6.1		120	FTG	E	PE	0.0
S2		140.0	5.8	45.5	39.1			0.055	TL	11.01	PV	
	Pipe: 2						-78.0	1.610	PL	12.08	PF	3.2
S2		140.0	5.8	45.5	39.1	12.3		120	FTG	E	PE	0.0
S3		140.0	5.8	48.7	40.5			0.200	TL	16.08	PV	
	Pipe: 3						118.4	1.610	PL	6.08	PF	2.6
A3		140.0	5.8	51.3	41.6	18.7		120	FTG	----	PE	0.0
S3		140.0	5.8	48.7	40.5			0.434	TL	6.08	PV	
	Pipe: 4						0.0	1.610	PL	6.16	PF	0.0
S3		140.0	5.8	48.7	40.5	0.0		120	FTG	----	PE	0.0
S4		140.0	0.0	48.7	0.0			0.000	TL	6.16	PV	
	Pipe: 7						-160.0	1.610	PL	21.00	PF	21.9
A3		140.0	5.8	51.3	41.6	25.2		120	FTG	2E	PE	0.0
A2		140.0	0.0	73.3	0.0			0.757	TL	29.00	PV	
	Pipe: 8						-160.0	2.067	PL	89.66	PF	24.8
A2		140.0	0.0	73.3	0.0	15.3		120	FTG	4EG	PE	0.0
A1		140.0	0.0	98.1	0.0			0.224	TL	110.66	PV	
	Pipe: 16						-160.0	6.065	PL	10.91	PF	0.0
A1		140.0	0.0	98.1	0.0	1.8		120	FTG	----	PE	3.6
L13-HV		131.7	0.0	101.7	0.0			0.001	TL	10.91	PV	
	Pipe: 17						-160.0	6.065	PL	9.83	PF	0.0
L13-HV		131.7	0.0	101.7	0.0	1.8		120	FTG	----	PE	4.3
L12		121.9	0.0	106.0	0.0			0.001	TL	9.83	PV	
	Pipe: 18						-160.0	6.065	PL	9.33	PF	0.0
L12		121.9	0.0	106.0	0.0	1.8		120	FTG	----	PE	4.0
L11		112.5	0.0	110.0	0.0			0.001	TL	9.33	PV	
	Pipe: 19						-160.0	6.065	PL	9.33	PF	0.0
L11		112.5	0.0	110.0	0.0	1.8		120	FTG	----	PE	4.0
L10		103.2	0.0	114.1	0.0			0.001	TL	9.33	PV	
	Pipe: 20						-160.0	6.065	PL	9.33	PF	0.0
L10		103.2	0.0	114.1	0.0	1.8		120	FTG	----	PE	4.0
L9		93.9	0.0	118.1	0.0			0.001	TL	9.33	PV	
	Pipe: 21						-160.0	6.065	PL	9.83	PF	0.0
L9		93.9	0.0	118.1	0.0	1.8		120	FTG	----	PE	4.3
L8		84.0	0.0	122.4	0.0			0.001	TL	9.83	PV	
	Pipe: 22						-160.0	6.065	PL	9.16	PF	0.0
L8		84.0	0.0	122.4	0.0	1.8		120	FTG	----	PE	4.0
L7		74.9	0.0	126.4	0.0			0.001	TL	9.16	PV	
	Pipe: 23						-160.0	6.065	PL	9.16	PF	0.0
L7		74.9	0.0	126.4	0.0	1.8		120	FTG	----	PE	4.0
L6		65.7	0.0	130.3	0.0			0.001	TL	9.16	PV	

DATE: 5/25/2024HYDRAULIC CALC\SPRINKLER SYSTEM AT LEVEL 13 SUITE CALC.SDF

JOB TITLE: 315 Spadina

PIPE TAG	END	ELEV.	NOZ.	PT	DISC.	Q (GPM)	DIA (IN)	LENGTH	PRESS.	
NODES	(FT)	(K)	(PSI)	(GPM)	VEL (FPS)	HW (C)	FL/FT	(FT)	SUM.	(PSI)
Pipe: 24					-160.0	6.065	PL	9.16	PF	0.0
L6	65.7	0.0	130.3	0.0	1.8	120	FTG	----	PE	4.0
L5	56.6	0.0	134.3	0.0		0.001	TL	9.16	PV	
Pipe: 25					-160.0	6.065	PL	11.18	PF	0.0
L5	56.6	0.0	134.3	0.0	1.8	120	FTG	----	PE	4.8
L4	45.4	0.0	139.2	0.0		0.001	TL	11.18	PV	
Pipe: 26					-160.0	6.065	PL	9.16	PF	0.0
L4	45.4	0.0	139.2	0.0	1.8	120	FTG	----	PE	4.0
L3	36.2	0.0	143.1	0.0		0.001	TL	9.16	PV	
Pipe: 27					-160.0	6.065	PL	9.16	PF	0.0
L3	36.2	0.0	143.1	0.0	1.8	120	FTG	----	PE	4.0
L2	27.1	0.0	147.1	0.0		0.001	TL	9.16	PV	
Pipe: 28					-160.0	6.065	PL	16.25	PF	0.0
L2	27.1	0.0	147.1	0.0	1.8	120	FTG	----	PE	7.0
L1	10.8	0.0	154.2	0.0		0.001	TL	16.25	PV	
Pipe: 29					-160.0	6.065	PL	5.41	PF	0.0
L1	10.8	0.0	154.2	0.0	1.8	120	FTG	----	PE	2.3
UG1	5.5	0.0	156.5	0.0		0.001	TL	5.41	PV	
Pipe: 30					0.0	6.065	PL	9.41	PF	0.0
UG1	5.5	0.0	156.5	0.0	0.0	120	FTG	G	PE	0.0
UG2	5.5	0.0	156.5	0.0		0.000	TL	12.41	PV	
Pipe: 32					-160.0	6.065	PL	41.00	PF	0.0
UG1	5.5	0.0	156.5	0.0	1.8	120	FTG	----	PE	0.0
UG4	5.5	0.0	156.6	0.0		0.001	TL	41.00	PV	
Pipe: 33					-160.0	6.065	PL	7.33	PF	0.1
UG4	5.5	0.0	156.6	0.0	1.8	120	FTG	ET	PE	0.0
PR1	5.5	0.0	156.6	0.0		0.001	TL	51.33	PV	
Pipe: 34					160.0	6.065	PL	11.57	PF	0.1
PR2	0.0	0.0	159.1	0.0	1.8	120	FTG	EGA	PE	-2.4
PR1	5.5	0.0	156.6	0.0		0.001	TL	56.57	PV	
Pipe: 35					160.0	6.065	PL	2.00	PF	0.1
PR3	0.0	0.0	159.1	0.0	1.8	120	FTG	ECG	PE	0.0
PR2	0.0	0.0	159.1	0.0		0.001	TL	51.00	PV	
Pipe: 36					160.0	6.065	PL	1.00	PF	0.0
FP-OUT	0.0	0.0	159.1	0.0	1.8	120	FTG	----	PE	0.0
PR3	0.0	0.0	159.1	0.0		0.001	TL	1.00	PV	
Pipe: 37										
FP-IN	0.0	0.0	78.6	0.0				500.0 gpm @ 80.0 psi		
FP-OUT	0.0	0.0	159.1	0.0				Avail.: 160.0 gpm @ 80.0 psi		
								Req'd.: 160.0 gpm @ 80.0 psi		
Pipe: 38					160.0	6.065	PL	4.00	PF	0.0
PR4	0.0	0.0	78.6	0.0	1.8	120	FTG	G	PE	0.0
FP-IN	0.0	0.0	78.6	0.0		0.001	TL	7.00	PV	
Pipe: 39					-160.0	7.981	PL	12.00	PF	0.0
PR4	0.0	0.0	78.6	0.0	1.0	120	FTG	2C2G	PE	0.0
PR5	0.0	0.0	78.6	0.0		0.000	TL	110.00	PV	

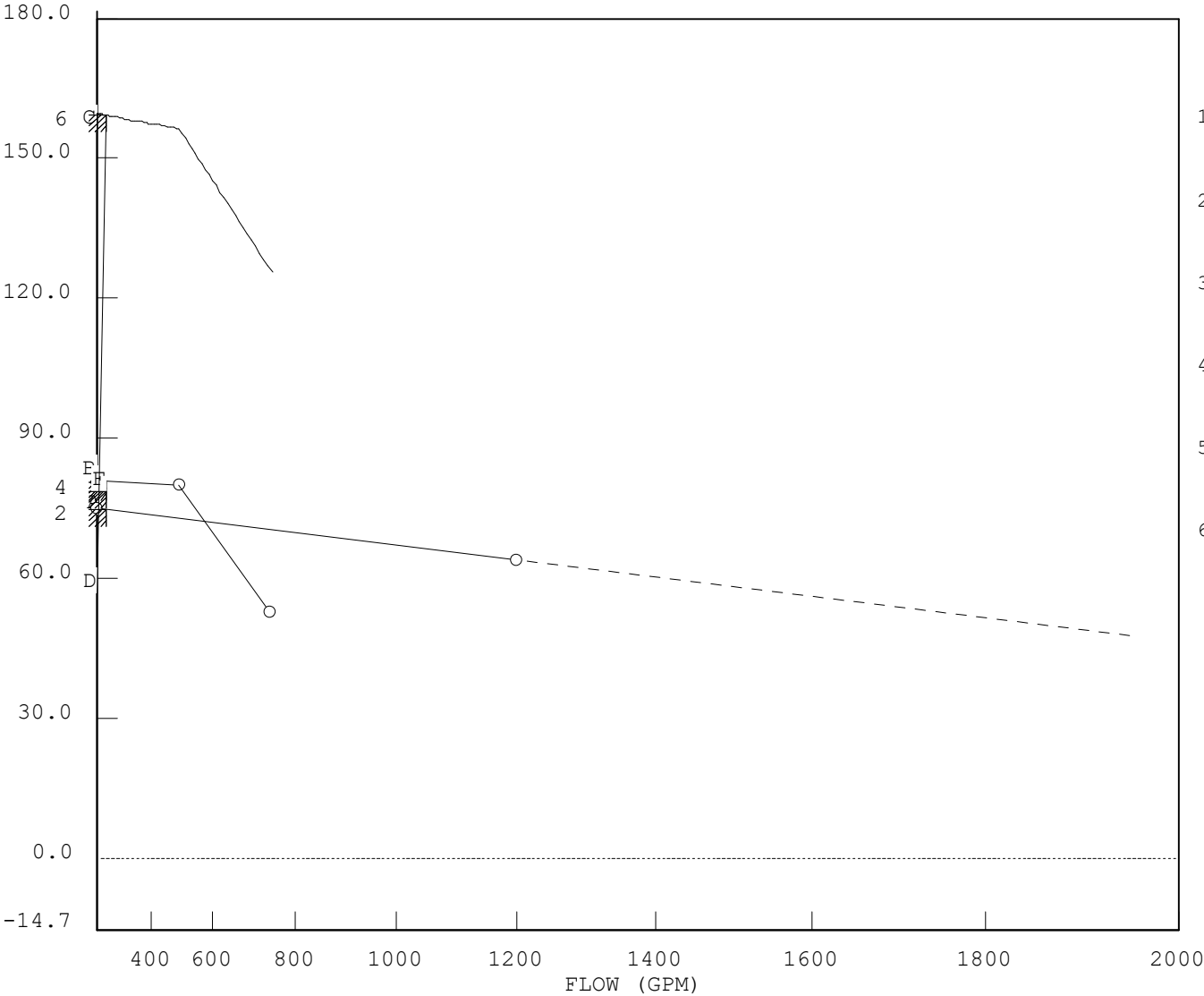
WATER SUPPLY ANALYSIS

Static: 75.00 psi Resid: 64.00 psi Flow: 1200.0 gpm

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Note: (1) Dashed Lines indicate extrapolated values from Test Results

LEGEND

- 1 Pressure available at source
74.74 psi @ 160.0 gpm
- 2 Pressure required at source
74.74 psi @ 160.0 gpm
- 3 Pressure available from pump
80.54 psi @ 160.0 gpm
- 4 Pressure required from pump
80.54 psi @ 160.0 gpm
- 5 Total Pressure available at pump dschg.
159.12 psi @ 160.0 gpm
- 6 Total Pressure required at pump dschg.
159.13 psi @ 160.0 gpm
- A. Source Supply Curve
- B. Net Pump Supply Curve
- C. Pump Discharge Curve
- D. System Demand Curve
- F. Available at Pump Suction

DATE: 5/25/2024HYDRAULIC CALC\SPRINKLER SYSTEM AT LEVEL 13 SUITE CALC.SDF

JOB TITLE: 315 Spadina

WATER SUPPLY CURVE

