PORTLAND FIRE DEPARTMENT
Sprinkler Plan Review Request Form

CBL#: _____ Date: 6-16-09

Fire Marshal's Permit No: 8603 (see attached)

Address of Property where Alarm System will be Installed: 22 Park Avenue

Property Owner: Thaxter Company Phone No: _____

Owner's Address: 55 Bell Street Fax No: _____

Portland, ME 04103 Email: _____

Contractor Name: Eastern Fire Protection Phone: 207-784-1507

Address: 170 Kittyhawk Ave Fax No: 207-782-0566

Auburn, Maine Email: dstpierre@teameastern.com

PERMIT ISSUED
MAY 22 2009
CITY OF PORTLAND

Type of System: ☐ 13 ☐ 13D ☒ 13R ☐ Life Safety ☐

System Design: ☒ Wet ☐ Dry ☐ Pre-Action ☐ Deluge ☐

Number and Location of Zones: One Zone Pump & Tank

System Monitoring: ☒ Water Flow ☒ ~~Tamper~~ Pump Loss of Power ☒ Low ~~Air~~ Water

All sprinkler plans must be reviewed and approved by the State Fire Marshal prior to submission to the Portland Fire Department.
All sprinkler systems must meet or exceed the requirements of NFPA and the Portland Fire Department Sprinkler Ordinance, Chapter 305.

Sprinkler plans, including all applicable hydraulic calculations, must be submitted 10 days prior to scheduled meeting.

Fire Department Use Only

Applicant: _____ Date: _____

Fire Chief: _____ Date: _____

FD HTE #: _____

EASTERN FIRE PROTECTION
P.O. Box 1390
Kittyhawk Ave.
Auburn, ME 04210

PH # (207) 784-1507
FAX # (207) 782-0566

LETTER OF TRANSMITTAL

DATE 6-16-09	JOB NO. AU 4388
ATTENTION Building Inspection	
RE: 22 Park Avenue	

TO Portland City Hall - Bldg Insp
389 Congress Street
Portland, Maine 04101

WE ARE SENDING YOU ☑ Attached ☐ Under separate cover via _____ the following items:

☑ Shop drawings ☐ Descriptive data ☑ Hydraulic calculations
☐ Copy of letter ☐ Literature ☐ _____

QUANTITY	DRAWING NO.	DATE	DESCRIPTION	STATUS
1	1 of 2	4-28-09	Shop Drawing	C/E
1	2 of 2	4-28-09	Shop Drawing	C/E
1			Hydraulic Calculations (3)	C/E
1			Permit Application	E
1			State Fire Marshal's Permit	E

Status code
A. Approved
B. Approved as noted
(C.) Submitted for approval
D. Corrected & resubmitted
(E.) For your files
F. Refer to remarks

Please return written notification ~~copies each~~ indicating your approval and/or comments.

REMARKS Check for $240.00 was already sent with submittal dated 4-28-09. Check # 106214

COPY TO File

SIGNED Daniel R. St. Pierre

If enclosures are not as noted, kindly notify us at once

State of Maine
Department of Public Safety
Fire Sprinkler System Permit

8603

22 PARK AVENUE

Located at: 22 Park Avenue
In the Town of: Portland
Occupancy/Use: Residential
Type of System: NFPA 13R

Permission is hereby given to:

Eastern Fire Protection
PO Box 1390
Auburn, ME 042111390
Contractor License # **101**

according to plans submittal filed with the Licensing and Inspections Unit and are now approved.
This application form/plans are filed under log # **2091159** , and no departure from application form/plans shall be made without prior approval in writing. This permit is issued under the provisions of Title 32, Chapter 20, Section 12004-I. Nothing herein shall excuse the holder of this permit for failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions. Each permit issued shall be displayed/available at the site of construction.

This permit was issued on **5/4/2009** for a fee paid of **$100.00**

This permit will expire at midnight on *Saturday, October 31, 2009*

Anne H. Jordan
Commissioner

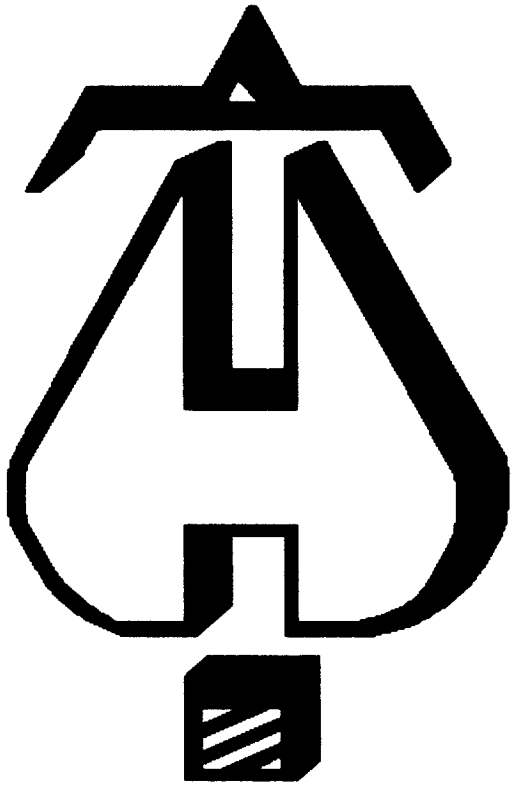
Fire Department Connection Location/Type per Local Fire Department

Within 30 days of the completion of a new fire sprinkler system or an addition to an existing fire sprinkler system, a fire sprinkler system contractor shall provide to the Licensing and Inspections Unit a copy of this permit signed and dated by the certified responsible managing supervisor representing that the fire sprinkler system has been installed according to specifications of the approved plan to the best of the supervisor's knowledge, information, and belief. This requirement is part of the sprinkler law, and neglect of this duty is grounds to not renew the contractor's license to do work in the State of Maine. All sprinkler licenses expire June 30th every year.

Job completed, tested and verified on date of _____

RMS for this job: Flynt William A.

RMS Signature: _____



. . . **Fire Protection by Computer Design**

Eastern Fire Protection
Auburn-Lewiston Ind. Airpark
P.O. Box 1390
Auburn, Maine 04211-1390
800-274-1507

Job Name	:	22 PARK AVENUE 3RD FLOOR PROOF
Drawing	:	WOOD
Location	:	PORTLAND, MAINE
Remote Area	:	WET
Contract	:	AU-4388-09
Data File	:	4388-22PARKAVE3RDFLR.WXF

HYDRAULIC DESIGN INFORMATION SHEET

Name - 22 PARK AVENUE 3RD FLOOR PROOF Date - 4/28/09
Location - PORTLAND, MAINE
Building - WOOD System No. - WET
Contractor - EASTERN FIRE PROTECTION Contract No. - AU-4388-09
Calculated By - DRS Drawing No. - 2 OF 2
Construction: (X) Combustible ( ) Non-Combustible Ceiling Height VARIES
OCCUPANCY - RESIDENTIAL

SYSTEM DESIGN

Type of Calculation: ( )NFPA 13 Residential (X)NFPA 13R ( )NFPA 13D
Number of Sprinklers Flowing: ( )1 ( )2 ( )4 (X)2
( )Other
( )Specific Ruling Made by Date

Listed Flow at Start Point - 13 Gpm System Type
Listed Pres. at Start Point - 7 Psi (X) Wet ( ) Dry
MAXIMUM LISTED SPACING 16 x 16 ( ) Deluge ( ) PreAction
Domestic Flow Added - Gpm Sprinkler or Nozzle
Additional Flow Added - Gpm Make TYCO Model LF-II
Elevation at Highest Outlet - 137.99Feet Size 1/2 K-Factor 4.9
Note: Temperature Rating 155

Calculation Summary Gpm Required 28 Psi Required 43 At PUMP
C-Factor Used: Overhead 150 Underground N/A

WATER SUPPLY

Water Flow Test:	Pump Data:	Tank or Reservoir:
Date of Test -	Rated Cap. 40	Cap. 825 GALS
Time of Test -	@ Psi 63	Elev. 101
Static (Psi) -	Elev. 101	
Residual (Psi) -	Other	Well
Flow (Gpm) -		Proof Flow Gpm
Elevation -		

Location: BASEMENT

Source of Information: PUMP MANUFACTURER'S DATA

Water Supply Curve (C)

Eastern Fire Protection
22 PARK AVENUE 3RD FLOOR PROOF

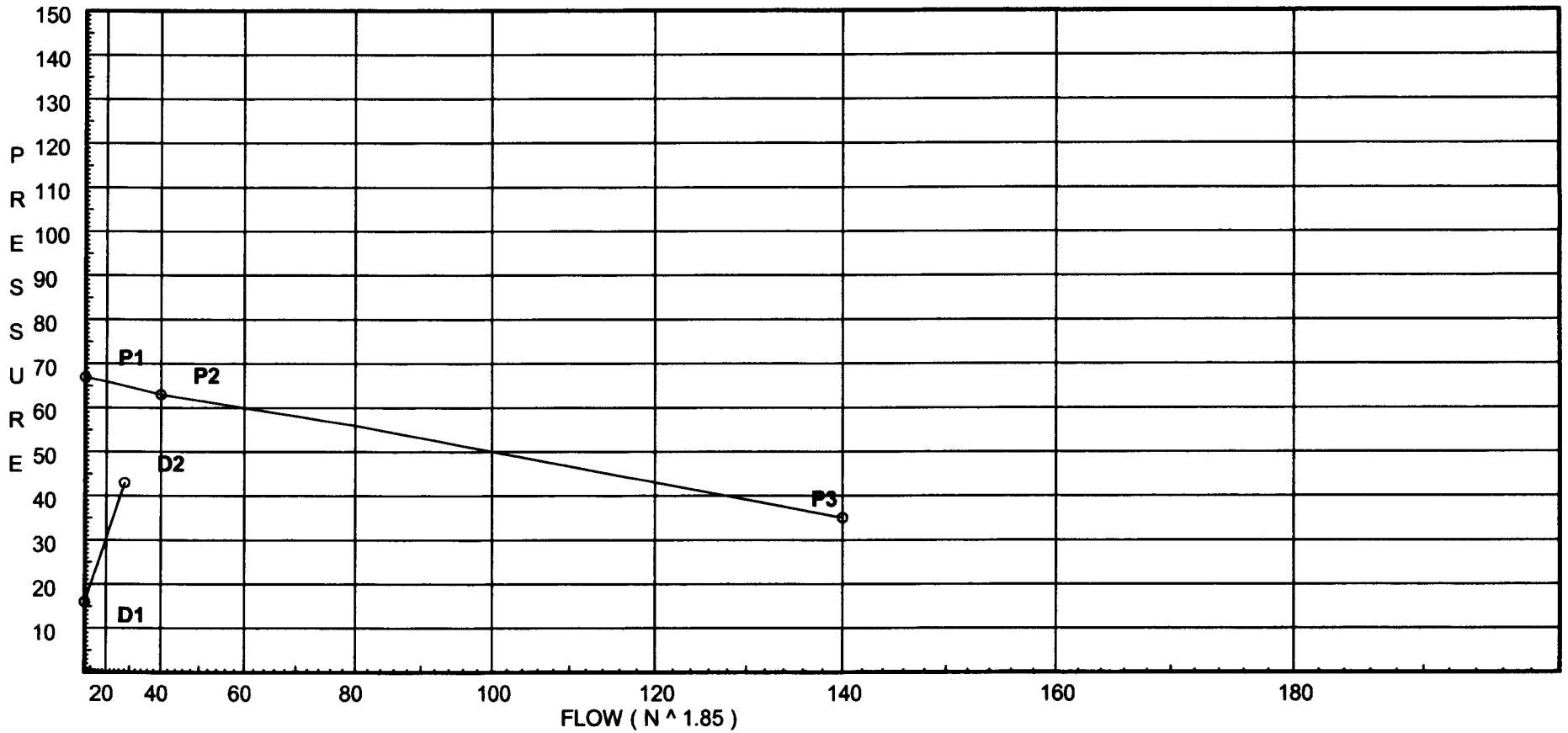
Date

Pump Data:

P1 - Pump Churn Pressure	: 67
P2 - Pump Rated Pressure	: 63
P2 - Pump Rated Flow	: 40
P3 - Pump Pressure @ Max Flow	: 35
P3 - Pump Max Flow	: 140

Demand:

D1 - Elevation	: 16.020
D2 - System Flow	: 27.9945
D2 - System Pressure	: 42.986
Hose (Adj City)	: _____
Hose (Demand)	: _____
D3 - System Demand	: 27.9945
Safety Margin	: 22.021



Fittings Used Summary

Fitting Legend

Abbrev.	Name	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
E	90' Standard Elbow	2	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
N	CPVC 90'Ell Harvel-Spears	7	7	7	8	9	11	12	13	0	0	0	0	0	0	0	0	0	0	0	0
O	CPVC Tee-Branch	3	3	5	6	8	10	12	15	0	0	0	0	0	0	0	0	0	0	0	0
S	Generic Swing Check Vlv	4	5	5	7	9	11	14	16	19	22	27	32	45	55	65	76	87	98	109	130
T	90' Flow Thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121

Units Summary

Diameter Units	Inches
Length Units	Feet
Flow Units	US Gallons per Minute
Pressure Units	Pounds per Square Inch

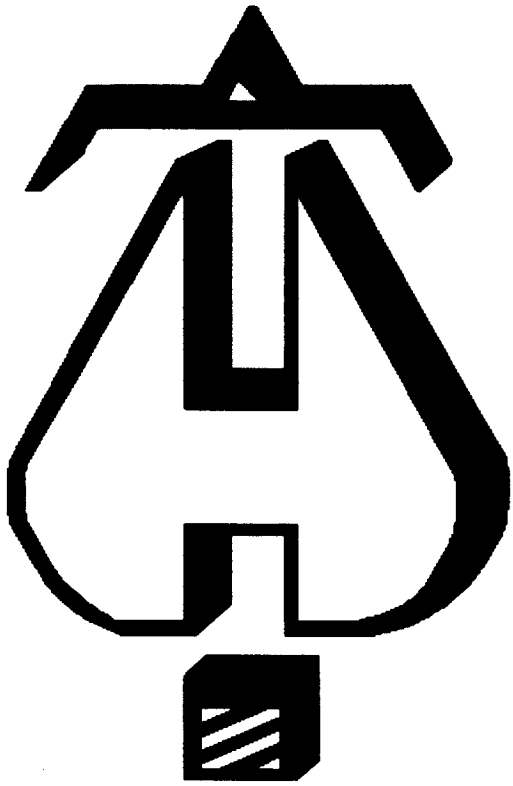
SUPPLY ANALYSIS

Node at Source	Static Pressure	Residual Pressure	Flow	Available Pressure	Total Demand	Required Pressure
PUMP	See Information on Pump Curve			65.007	0.0	42.986

NODE ANALYSIS

Node Tag	Elevation	Node Type	Pressure at Node	Discharge at Node	Notes
DRP1	0.0	4.9	7.0	12.96	
P1	137.99	4.83	7.2	12.96	K=K @ LIN1
P2	137.99	4.83	9.68	15.03	K=K @ LIN1
E	137.99		21.74		
F	127.26		26.6		
G	115.68		31.98		
H	115.68		32.26		
I	115.68		32.88		
J	115.68		33.24		
K	106.08		37.72		
L	106.08		38.11		
M	106.08		39.21		
TOR	105.25		40.75		
PUMP	101.0		42.99		

Node1 to Node2	Elev1 Elev2	K Fact	Qa Qt	Nom Act	Fitting or Eqv.	Ln.	Pipe Ftng's Total	CFact Pf/Ft	Pt Pe Pf	******* Notes ******
DRP1	0	4.90	12.96	1	1O	5.0	1.500	150	7.000	
to						0.0	5.000		0.0	
LIN1	0		12.96	1.101		0.0	6.500	0.0305	0.198	Vel = 4.37
			0.0							
LIN1			12.96						7.198	K Factor = 4.83
P1	137.990	4.83	12.96	0.75	2N	14.0	12.375	150	7.198	K = K @ LIN1
to						0.0	14.000		0.0	
P2	137.990		12.96	0.874		0.0	26.375	0.0940	2.478	Vel = 6.93
P2	137.990	4.83	15.03	0.75	2O	6.0	24.920	150	9.676	K = K @ LIN1
to						0.0	6.000		0.0	
E	137.990		27.99	0.874		0.0	30.920	0.3902	12.065	Vel = 14.97
E	137.990		0.0	1.5		0.0	10.330	150	21.741	
to						0.0	0.0		4.647	
F	127.260		27.99	1.598		0.0	10.330	0.0206	0.213	Vel = 4.48
F	127.260		0.0	1.5	1E	5.828	11.580	150	26.601	
to						0.0	5.828		5.015	
G	115.680		27.99	1.598		0.0	17.408	0.0207	0.360	Vel = 4.48
G	115.680		0.0	1.5	1T	11.656	1.960	150	31.976	
to						0.0	11.656		0.0	
H	115.680		27.99	1.598		0.0	13.616	0.0206	0.281	Vel = 4.48
H	115.680		0.0	1.5	1T	11.656	18.330	150	32.257	
to						0.0	11.656		0.0	
I	115.680		27.99	1.598		0.0	29.986	0.0207	0.620	Vel = 4.48
I	115.680		0.0	1.5	1T	11.656	6.040	150	32.877	
to						0.0	11.656		0.0	
J	115.680		27.99	1.598		0.0	17.696	0.0206	0.365	Vel = 4.48
J	115.680		0.0	1.5	1E	5.828	9.580	150	33.242	
to						0.0	5.828		4.158	
K	106.080		27.99	1.598		0.0	15.408	0.0206	0.318	Vel = 4.48
K	106.080		0.0	1.5	1T	8.0	5.080	120	37.718	
to						0.0	8.000		0.0	
L	106.080		27.99	1.61		0.0	13.080	0.0301	0.394	Vel = 4.41
L	106.080		0.0	1.5	1T	8.0	28.420	120	38.112	
to						0.0	8.000		0.0	
M	106.080		27.99	1.61		0.0	36.420	0.0301	1.096	Vel = 4.41
M	106.080		0.0	1.5	2E	8.0	23.420	120	39.208	
to					1T	8.0	16.000		0.359	
TOR	105.250		27.99	1.61		0.0	39.420	0.0301	1.187	Vel = 4.41
TOR	105.250		0.0	1.5	1S	9.0	4.000	120	40.754	
to						0.0	9.000		1.841	
PUMP	101		27.99	1.61		0.0	13.000	0.0301	0.391	Vel = 4.41
			0.0							
PUMP			27.99						42.986	K Factor = 4.27



. . . **Fire Protection by Computer Design**

Eastern Fire Protection
Auburn-Lewiston Ind. Airpark
P.O. Box 1390
Auburn, Maine 04211-1390
800-274-1507

Job Name	:	22 PARK AVENUE 4TH FLOOR REMOTE
Drawing	:	WOOD
Location	:	PORTLAND, MAINE
Remote Area	:	WET
Contract	:	AU-4388-09
Data File	:	4388-22PARKAVE4THFLR.WXF

HYDRAULIC DESIGN INFORMATION SHEET

Name - 22 PARK AVENUE 4TH FLOOR REMOTE Date - 4/28/09
Location - PORTLAND, MAINE
Building - WOOD System No. - WET
Contractor - EASTERN FIRE PROTECTION Contract No. - AU-4388-09
Calculated By - DRS Drawing No. - 2 OF 2
Construction: (X) Combustible ( ) Non-Combustible Ceiling Height VARIES
OCCUPANCY - RESIDENTIAL

SYSTEM DESIGN

Type of Calculation: ( )NFPA 13 Residential (X)NFPA 13R ( )NFPA 13D
Number of Sprinklers Flowing: ( )1 ( )2 ( )4 (X)3
( )Other
( )Specific Ruling Made by Date

Listed Flow at Start Point - 13 Gpm System Type
Listed Pres. at Start Point - 7 Psi (X) Wet ( ) Dry
MAXIMUM LISTED SPACING 16 x 16 ( ) Deluge ( ) PreAction
Domestic Flow Added - Gpm Sprinkler or Nozzle
Additional Flow Added - Gpm Make TYCO Model LF-II
Elevation at Highest Outlet - 146.67Feet Size 1/2 K-Factor 4.9
Note: Temperature Rating 155

Calculation Summary Gpm Required 40.6 Psi Required 49.1 At PUMP
C-Factor Used: Overhead 150 Underground N/A

WATER SUPPLY

Water Flow Test:	Pump Data:	Tank or Reservoir:
Date of Test -	Rated Cap. 40	Cap. 825 GALS
Time of Test -	@ Psi 63	Elev. 101
Static (Psi) -	Elev. 101	
Residual (Psi) -	Other	Well
Flow (Gpm) -		Proof Flow Gpm
Elevation -		

Location: BASEMENT

Source of Information: PUMP MANUFACTURER'S DATA

Water Supply Curve (C)

Eastern Fire Protection
22 PARK AVENUE 4TH FLOOR REMOTE

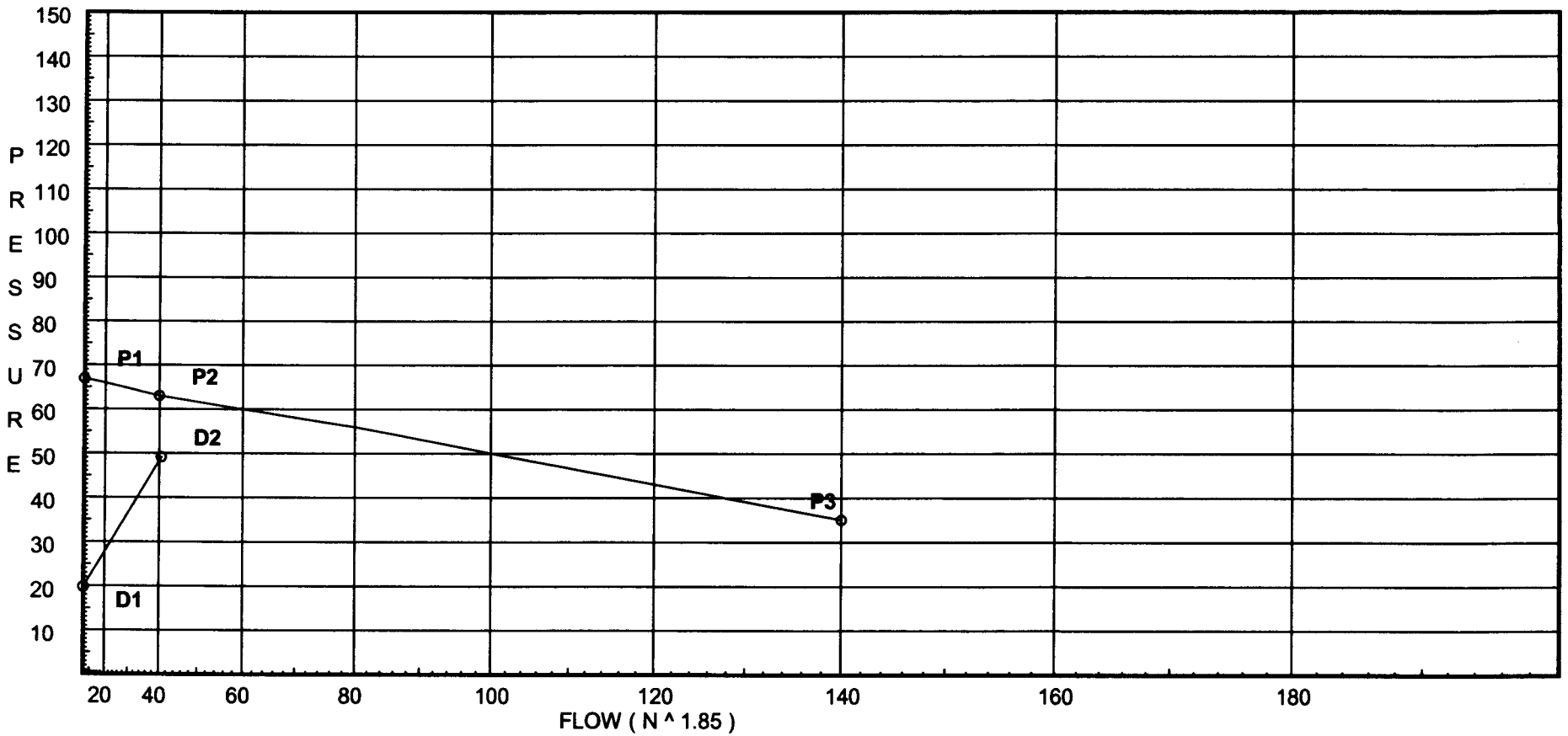
Date

Pump Data:

P1 - Pump Churn Pressure	:	67
P2 - Pump Rated Pressure	:	63
P2 - Pump Rated Flow	:	40
P3 - Pump Pressure @ Max Flow	:	35
P3 - Pump Max Flow	:	140

Demand:

D1 - Elevation	:	19.780
D2 - System Flow	:	40.6091
D2 - System Pressure	:	49.152
Hose (Adj City)	:	_____
Hose (Demand)	:	_____
D3 - System Demand	:	40.6091
Safety Margin	:	13.772



Fittings Used Summary

Fitting Legend

Abbrev.	Name	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
E	90' Standard Elbow	2	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
N	CPVC 90'Ell Harvel-Spears	7	7	7	8	9	11	12	13	0	0	0	0	0	0	0	0	0	0	0	0
O	CPVC Tee-Branch	3	3	5	6	8	10	12	15	0	0	0	0	0	0	0	0	0	0	0	0
S	Generic Swing Check Vlv	4	5	5	7	9	11	14	16	19	22	27	32	45	55	65	76	87	98	109	130
T	90' Flow Thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121

Units Summary

Diameter Units	Inches
Length Units	Feet
Flow Units	US Gallons per Minute
Pressure Units	Pounds per Square Inch

SUPPLY ANALYSIS

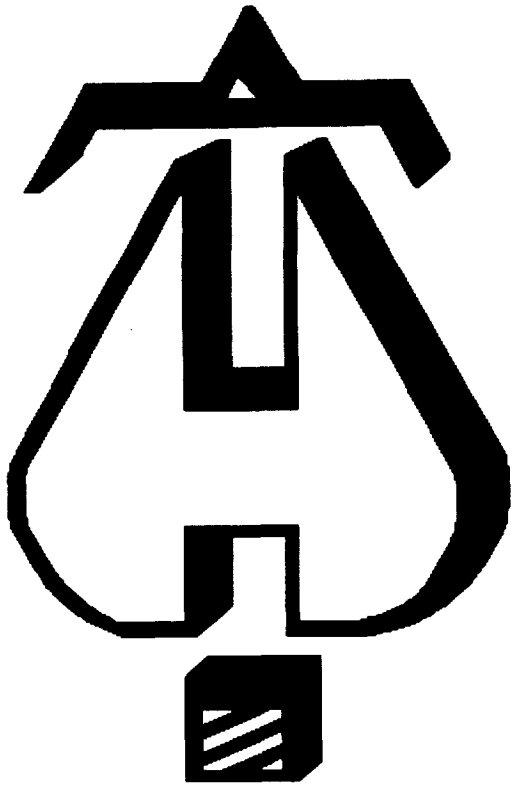
Node at Source	Static Pressure	Residual Pressure	Flow	Available Pressure	Total Demand	Required Pressure
PUMP	See Information on Pump Curve			62.924	0.0	49.152

NODE ANALYSIS

Node Tag	Elevation	Node Type	Pressure at Node	Discharge at Node	Notes
DRP1	0.0	4.9	7.0	12.96	
1	146.67	4.83	7.2	12.96	K=K @ LIN1
2	146.67	4.83	7.55	13.28	K=K @ LIN1
3	146.67	4.83	8.84	14.37	K=K @ LIN1
A	149.75		12.22		
B	145.92		16.68		
C	137.99		20.69		
D	137.99		22.09		
E	137.99		22.73		
F	127.26		27.81		
G	115.68		33.54		
H	115.68		34.1		
I	115.68		35.33		
J	115.68		36.06		
K	106.08		40.85		
L	106.08		41.63		
M	106.08		43.81		
TOR	105.25		46.53		
PUMP	101.0		49.15		

Node1 to Node2	Elev1 Elev2	K Fact	Qa Qt	Nom Act	Fitting or Eqv.	Ln.	Pipe Ftng's Total	CFact Pf/Ft	Pt Pe Pf	******* Notes ******
DRP1	0	4.90	12.96	1	1O	5.0	1.500	150	7.000	
to						0.0	5.000		0.0	
LIN1	0		12.96	1.101		0.0	6.500	0.0305	0.198	Vel = 4.37
			0.0							
LIN1			12.96						7.198	K Factor = 4.83
1	146.670	4.83	12.96	1		0.0	11.500	150	7.198	K = K @ LIN1
to						0.0	0.0		0.0	
2	146.670		12.96	1.101		0.0	11.500	0.0305	0.351	Vel = 4.37
2	146.670	4.83	13.28	1		0.0	11.500	150	7.549	K = K @ LIN1
to						0.0	0.0		0.0	
3	146.670		26.24	1.101		0.0	11.500	0.1124	1.293	Vel = 8.84
3	146.670	4.83	14.37	1	1O	5.0	6.670	150	8.842	K = K @ LIN1
to					1N	7.0	12.000		-1.334	
A	149.750		40.61	1.101		0.0	18.670	0.2523	4.710	Vel = 13.69
A	149.750		0.0	1.5	2E	11.656	20.000	150	12.218	
to					2T	23.312	48.081		1.659	
B	145.920		40.61	1.598	1S	13.113	68.081	0.0411	2.798	Vel = 6.50
B	145.920		0.0	1.5	1E	5.828	8.330	150	16.675	
to						0.0	5.828		3.434	
C	137.990		40.61	1.598		0.0	14.158	0.0412	0.583	Vel = 6.50
C	137.990		0.0	1.5	1T	11.656	22.250	150	20.692	
to						0.0	11.656		0.0	
D	137.990		40.61	1.598		0.0	33.906	0.0411	1.393	Vel = 6.50
D	137.990		0.0	1.5	1T	11.656	4.125	150	22.085	
to						0.0	11.656		0.0	
E	137.990		40.61	1.598		0.0	15.781	0.0411	0.649	Vel = 6.50
E	137.990		0.0	1.5		0.0	10.330	150	22.734	
to						0.0	0.0		4.647	
F	127.260		40.61	1.598		0.0	10.330	0.0411	0.425	Vel = 6.50
F	127.260		0.0	1.5	1E	5.828	11.580	150	27.806	
to						0.0	5.828		5.015	
G	115.680		40.61	1.598		0.0	17.408	0.0411	0.716	Vel = 6.50
G	115.680		0.0	1.5	1T	11.656	1.960	150	33.537	
to						0.0	11.656		0.0	
H	115.680		40.61	1.598		0.0	13.616	0.0411	0.559	Vel = 6.50
H	115.680		0.0	1.5	1T	11.656	18.330	150	34.096	
to						0.0	11.656		0.0	
I	115.680		40.61	1.598		0.0	29.986	0.0411	1.233	Vel = 6.50
I	115.680		0.0	1.5	1T	11.656	6.040	150	35.329	
to						0.0	11.656		0.0	
J	115.680		40.61	1.598		0.0	17.696	0.0411	0.727	Vel = 6.50
J	115.680		0.0	1.5	1E	5.828	9.580	150	36.056	
to						0.0	5.828		4.158	
K	106.080		40.61	1.598		0.0	15.408	0.0411	0.633	Vel = 6.50
K	106.080		0.0	1.5	1T	8.0	5.080	120	40.847	
to						0.0	8.000		0.0	
L	106.080		40.61	1.61		0.0	13.080	0.0599	0.784	Vel = 6.40
L	106.080		0.0	1.5	1T	8.0	28.420	120	41.631	
to						0.0	8.000		0.0	
M	106.080		40.61	1.61		0.0	36.420	0.0599	2.181	Vel = 6.40

Node1 to Node2	Elev1 Elev2	K Fact	Qa Qt	Nom Act	Fitting or Eqv.	Ln.	Pipe Ftng's Total	CFact Pf/Ft	Pt Pe Pf	*******	Notes	******
M	106.080		0.0	1.5	2E	8.0	23.420	120	43.812			
to					1T	8.0	16.000		0.359			
TOR	105.250		40.61	1.61		0.0	39.420	0.0599	2.361	Vel = 6.40		
TOR	105.250		0.0	1.5	1S	9.0	4.000	120	46.532			
to						0.0	9.000		1.841			
PUMP	101		40.61	1.61		0.0	13.000	0.0599	0.779	Vel = 6.40		
			0.0									
PUMP			40.61						49.152	K Factor = 5.79		



. . . **Fire Protection by Computer Design**

Eastern Fire Protection
Auburn-Lewiston Ind. Airpark
P.O. Box 1390
Auburn, Maine 04211-1390
800-274-1507

Job Name	:	22 PARK AVENUE BASEMENT PROOF
Drawing	:	1 OF 1
Location	:	22 PARK AVENUE, PORTLAND, MAINE
Remote Area	:	
Contract	:	AU-4388-09
Data File	:	4388-22PARKAVEBASEMENT.WXF

HYDRAULIC CALCULATIONS
for

Project name: 22 PARK AVENUE BASEMENT PROOF
Location: 22 PARK AVENUE, PORTLAND, MAINE
Drawing no: 1 OF 1
Date: 4/27/09

Design

Remote area number:
Remote area location: BASEMENT
Occupancy classification: ORDINARY HAZARD I
Density: .15 - Gpm/SqFt
Area of application: 4 HEADS - SqFt
Coverage per sprinkler: 75 - SqFt
Type of sprinklers calculated: TYCO, TY-FRB, BRASS UPRIGHT, 4.2K, 1/2"
No. of sprinklers calculated: 4
In-rack demand: - GPM
Hose streams: 0 - GPM
Total water required (including hose streams): 54.6 - GPM @ 49.8 - Psi
Type of system: PUMP & TANK
Volume of dry or preaction system: - Gal

Water supply information

Date:
Location:
Source:

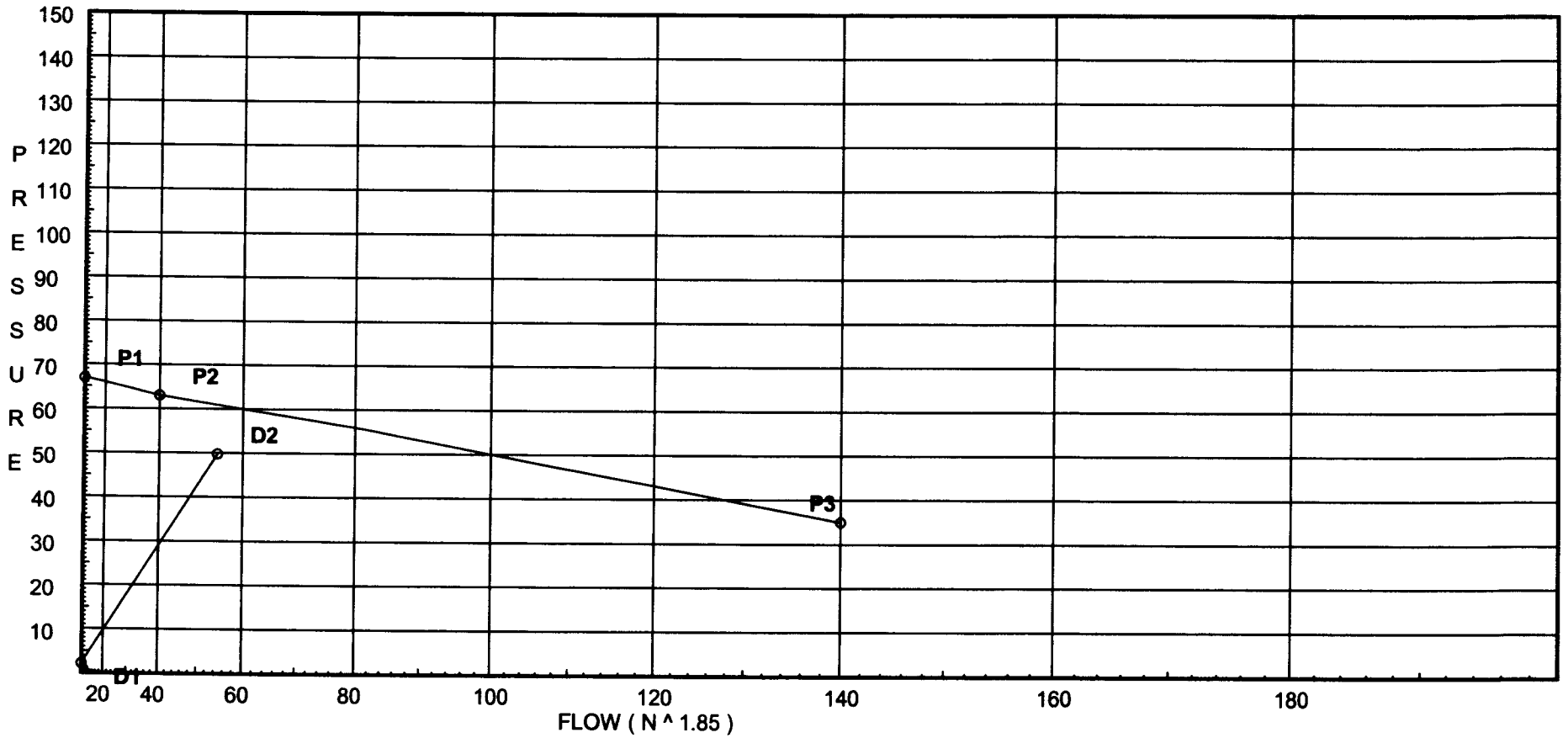
Name of contractor: Eastern Fire Protection
Address: Auburn-Lewiston Ind. Airpark / P.O. Box 1390 / Auburn, Maine
Phone number: 800-274-1507
Name of designer: DRS
Authority having jurisdiction: PORTLAND FIRE DEPARTMENT
Notes: (Include peaking information or gridded systems here.) BASEMENT (4) HEAD CALCULATION PER RULING BY ERIC ELLIS, STATE FIRE MARSHAL'S OFFICE.

Water Supply Curve (C)

Eastern Fire Protection
22 PARK AVENUE BASEMENT PROOF

Date

Pump Data:		Demand:	
P1 - Pump Churn Pressure	: 67	D1 - Elevation	: 2.200
P2 - Pump Rated Pressure	: 63	D2 - System Flow	: 54.6305
P2 - Pump Rated Flow	: 40	D2 - System Pressure	: 49.751
P3 - Pump Pressure @ Max Flow	: 35	Hose (Adj City)	:
P3 - Pump Max Flow	: 140	Hose (Demand)	:
		D3 - System Demand	: 54.6305
		Safety Margin	: 11.153



Fittings Used Summary

Fitting Legend Abbrev.	Name	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
E	90' Standard Elbow	2	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
S	Generic Swing Check Vlv	4	5	5	7	9	11	14	16	19	22	27	32	45	55	65	76	87	98	109	130
T	90' Flow Thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121

Units Summary

Diameter Units	Inches
Length Units	Feet
Flow Units	US Gallons per Minute
Pressure Units	Pounds per Square Inch

SUPPLY ANALYSIS

Node at Source	Static Pressure	Residual Pressure	Flow	Available Pressure	Total Demand	Required Pressure
PUMP	See Information on Pump Curve			60.904	0.0	49.751

NODE ANALYSIS

Node Tag	Elevation	Node Type	Pressure at Node	Discharge at Node	Notes
SPG1	0.0	4.2	9.0	12.6	
1B	106.08	4.12	9.33	12.6	K=K @ LIN1
2B	106.08	4.12	9.7	12.85	K=K @ LIN1
3B	106.08	4.12	11.06	13.71	K=K @ LIN1
4B	106.08	4.12	14.07	15.47	K=K @ LIN1
AB	106.08		42.6		
TOR	105.25		46.56		
PUMP	101.0		49.75		

Node1 to Node2	Elev1 Elev2	K Fact	Qa Qt	Nom Act	Fitting or Eqv.	Ln.	Pipe Ftng's Total	CFact Pf/Ft	Pt Pe Pf	******* Notes ******
SPG1	0	4.20	12.60	1	1T	5.0	1.000	120	9.000	
to						0.0	5.000		0.0	
LIN1	0		12.6	1.049		0.0	6.000	0.0553	0.332	Vel = 4.68
			0.0							
LIN1			12.60						9.332	K Factor = 4.12
1B	106.080	4.12	12.60	1		0.0	6.670	120	9.332	K = K @ LIN1
to						0.0	0.0		0.0	
2B	106.080		12.6	1.049		0.0	6.670	0.0553	0.369	Vel = 4.68
2B	106.080	4.12	12.85	1		0.0	6.670	120	9.701	K = K @ LIN1
to						0.0	0.0		0.0	
3B	106.080		25.45	1.049		0.0	6.670	0.2033	1.356	Vel = 9.45
3B	106.080	4.12	13.71	1		0.0	6.670	120	11.057	K = K @ LIN1
to						0.0	0.0		0.0	
4B	106.080		39.16	1.049		0.0	6.670	0.4510	3.008	Vel = 14.54
4B	106.080	4.12	15.47	1	1T	5.0	29.170	120	14.065	K = K @ LIN1
to						0.0	5.000		0.0	
AB	106.080		54.63	1.049		0.0	34.170	0.8351	28.535	Vel = 20.28
AB	106.080		0.0	1.5	3E	12.0	14.750	120	42.600	
to					1T	8.0	20.000		0.359	
TOR	105.250		54.63	1.61		0.0	34.750	0.1037	3.603	Vel = 8.61
TOR	105.250		0.0	1.5	1S	9.0	4.000	120	46.562	
to						0.0	9.000		1.841	
PUMP	101		54.63	1.61		0.0	13.000	0.1037	1.348	Vel = 8.61
			0.0							
PUMP			54.63						49.751	K Factor = 7.75

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

to schedule your inspections as agreed upon

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

A Pre-construction Meeting will take place upon receipt of your building permit.

__X__ **Final inspection required at completion of work.**

__X__ **Sprinkler report must be submitted to this office prior to final**

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection.

If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.

CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED.

_____ _____

Signature of Applicant/Designee Date

_____ _____

Signature of Inspections Official Date

CBL: 036 D009001 **Building Permit #:** 09-0404