

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT

This is to certify that  
HIGH TECH FIRE PROTECTION CO, INC.  
PO BOX 156  
MINOT, ME 04258

For installation at  
18 LUTHER ST  
LOT 15

Job ID: 2012-11-5416-FAFS

CBL: 087- Z-015-001

has permission to install NFPA 13D sprinkler system

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

  
Fire Prevention Officer

\_\_\_\_\_  
Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY  
PENALTY FOR REMOVING THIS CARD

## **BUILDING PERMIT INSPECTION PROCEDURES**

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

**or email: [buildinginspections@portlandmaine.gov](mailto:buildinginspections@portlandmaine.gov)**

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

### **Final Fire**

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



# PORTLAND MAINE

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Director of Planning and Urban Development  
Jeff Levine

Job ID: 2012-11-5416-FAFS  
install NFPA 13D sprinkler system

For installation at:  
18 LUTHER ST  
LOT 15

CBL: 087-Z-015-001

## Conditions of Approval:

### Fire

1. The sprinkler system shall be installed in accordance with NFPA 13D.
2. All control valves shall be supervised in accordance with NFPA 13D. Pad locks shall only be installed on valves designed to be secured in the open position by pad lock.
3. A copy of the required state sprinkler permit with RMS signoff shall be provided prior to the final inspection.

**City of Portland, Maine - Building or Use Permit Application**

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2012-11-5416-FAFS	Date Applied: 11/16/2012	CBL: 087- Z-015-001	
Location of Construction: 26 LUTHER ST – LOT 15 PEAKS ISLAND	Owner Name: Volunteers of America – Northern New England	Owner Address: 14 MAINE STREET STE #301 BRUNSWICK, ME 04011	Phone:
Business Name:	Contractor Name: HIGH TECH FIRE PROTECTION	Contractor Address: 84 HACKETT MILLS ROAD POLAND, ME 04274	Phone: 998-2551
Lessee/Buyer's Name:	Phone:	Permit Type: Fire SUPPRESSION	Zone: C-55
Past Use:  New Single Family Dwelling	Proposed Use:  Same: Single Family Dwelling – to install a fire suppression system	Cost of Work: \$6,000.00  Fire Dept: 12/5/12 Signature: <i>[Signature]</i> <i>SB</i> <div><input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A</div>	CEO District:  Inspection: Use Group: Type:  Signature:
Proposed Project Description: water based fire suppression, lot #15		Pedestrian Activities District (P.A.D.)	

Permit Taken By: Gayle	<b>Zoning Approval</b>		
<ol style="list-style-type: none"><li>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</li><li>2. Building Permits do not include plumbing, septic or electrical work.</li><li>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</li></ol>	<b>Special Zone or Reviews</b> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan  ___ Maj ___ Min ___ MM Date: <i>OK - S</i> <i>11/20/12</i>	<b>Zoning Appeal</b> <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied  Date:	<b>Historic Preservation</b> <input checked="" type="checkbox"/> Not in Dist or Landmark <input type="checkbox"/> Does not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied  Date: <i>[Signature]</i>

**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the appication is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
------------------------	---------	------	-------

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE	DATE	PHONE
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# Water-Based Fire Suppression System Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

LOT 15

Installation address: 26 Luther Street - Peaks Island CBL: 087 2-015  
Exact location: (within structure) Entire Structure C-55  
Type of occupancy(s) (NFPA & ICC): Single Family Residential  
Building owner: Volunteers of America - Northern New England - 14 Main St Ste 3d  
Managing Supervisor (RMS): Jeremy A Foss License No: 808 Brunswick, ME  
Supervisor phone: (207) 998-2551 E-mail: JFoss@fairpoint.net 0406  
Installing contractor: High Tech Fire Protection License No: 102  
Contractor phone: (207) 998-2551 E-mail: HTFP@fairpoint.net  
The suppression work to be done will be: New: ☒ Renovation: ☐ Addition to existing system: ☐  
This is an amendment to an existing permit: Yes: ☐ NO: ☒ Permit no: \_\_\_\_\_  
NFPA Standard this system is designed to: 13D Edition: 2010

\*Non-NFPA systems are not approved for use within the City of Portland.

Download a new copy of this document from  
[www.portlandmaine.gov/fire](http://www.portlandmaine.gov/fire) for every submittal. Attach all working documents and complete approved submittals as may be required by the State Fire Marshal's Office on electronic PDF's in addition to full sized plans.

Contractor shall verify location and type of all FDCs shall be approved in writing by the Fire Prevention Bureau.

Submit all information to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.

Prior to acceptance of any fire protection system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with NFPA and the Fire Department Technical Standard(s).

COST OF WORK: \$6,000

PERMIT FEE: \$80

(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

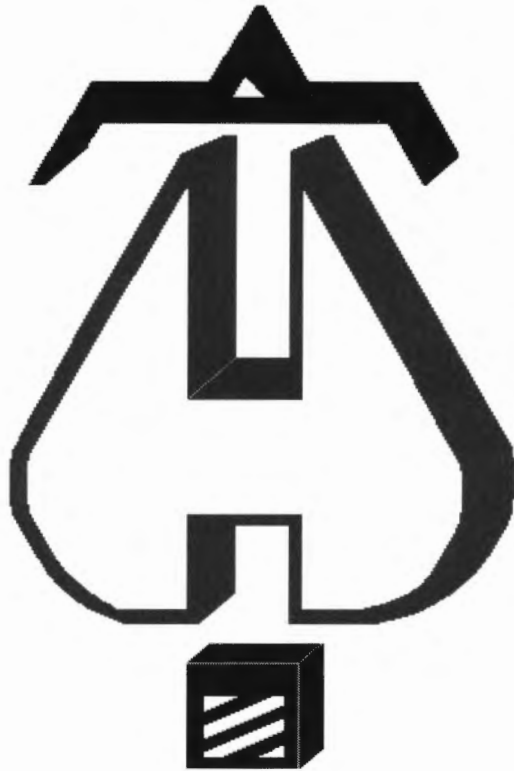
RECEIVED

NOV 16 2012

Dept of Building Inspections  
City of Portland

Applicant signature: \_\_\_\_\_

Date: 10/02/2012



... Fire Protection by Computer Design

HIGH TECH FIRE PROTECTION  
84 HACKETT MILLS ROAD  
POLAND, ME 04274  
998-2551

Job Name : Second Floor Calc.  
Building : Lot #15 Homestart Colonial  
Location : 26 Luther Street - Peaks Island  
System : NFPA 13D  
Contract : 021312-3  
Data File : Second Floor Calc.wxf

HYDRAULIC DESIGN INFORMATION SHEET

Name - Second Floor Bedroom Calc. Date - 10/02/2012  
Location - 26 Luther Street - Peaks Island  
Building - Lot #15 Homestart Colonial System No. - NFPA 13D  
Contractor - High Tech Fire Protection Contract No. - 021312-3  
Calculated By - Jeremy A Foss Drawing No. - FP-1.1  
Construction: (X) Combustible ( ) Non-Combustible Ceiling Height 8'-0"  
OCCUPANCY - Single Family Residential

S Type of Calculation: ( ) NFPA 13 Residential ( ) NFPA 13R (X) NFPA 13D  
Y Number of Sprinklers Flowing: ( ) 1 (X) 2 ( ) 4 ( )  
S ( ) Other  
T ( ) Specific Ruling Made by Date  
E  
M Listed Flow at Start Point - 14 Gpm System Type  
Listed Pres. at Start Point - 10.2 Psi (X) Wet ( ) Dry  
D MAXIMUM LISTED SPACING 14' x 14' ( ) Deluge ( ) PreAction  
E Domestic Flow Added - 0 Gpm Sprinkler or Nozzle  
S Additional Flow Added - 0 Gpm Make Reliable Model F1 Res 44  
I Elevation at Highest Outlet - 22.5 Feet Size 1/2" K-Factor 4.4  
G Note: Temperature Rating 155  
N

Calculation Gpm Required 29 Psi Required 46 At Test  
Summary C-Factor Used: Overhead 150 Underground 140

W Water Flow Test: Pump Data: Tank or Reservoir:  
A Date of Test - 08/19/2004 Rated Cap. Cap.  
T Time of Test - @ Psi Elev.  
E Static (Psi) - 84 Elev.  
R Residual (Psi) - 78 Other Well  
Flow (Gpm) - 237 Proof Flow Gpm  
S Elevation - 0

P Location: Test Hydrant Located at Corner of Island and Church Avenues

P  
L Source of Information: Portland Water District  
Y

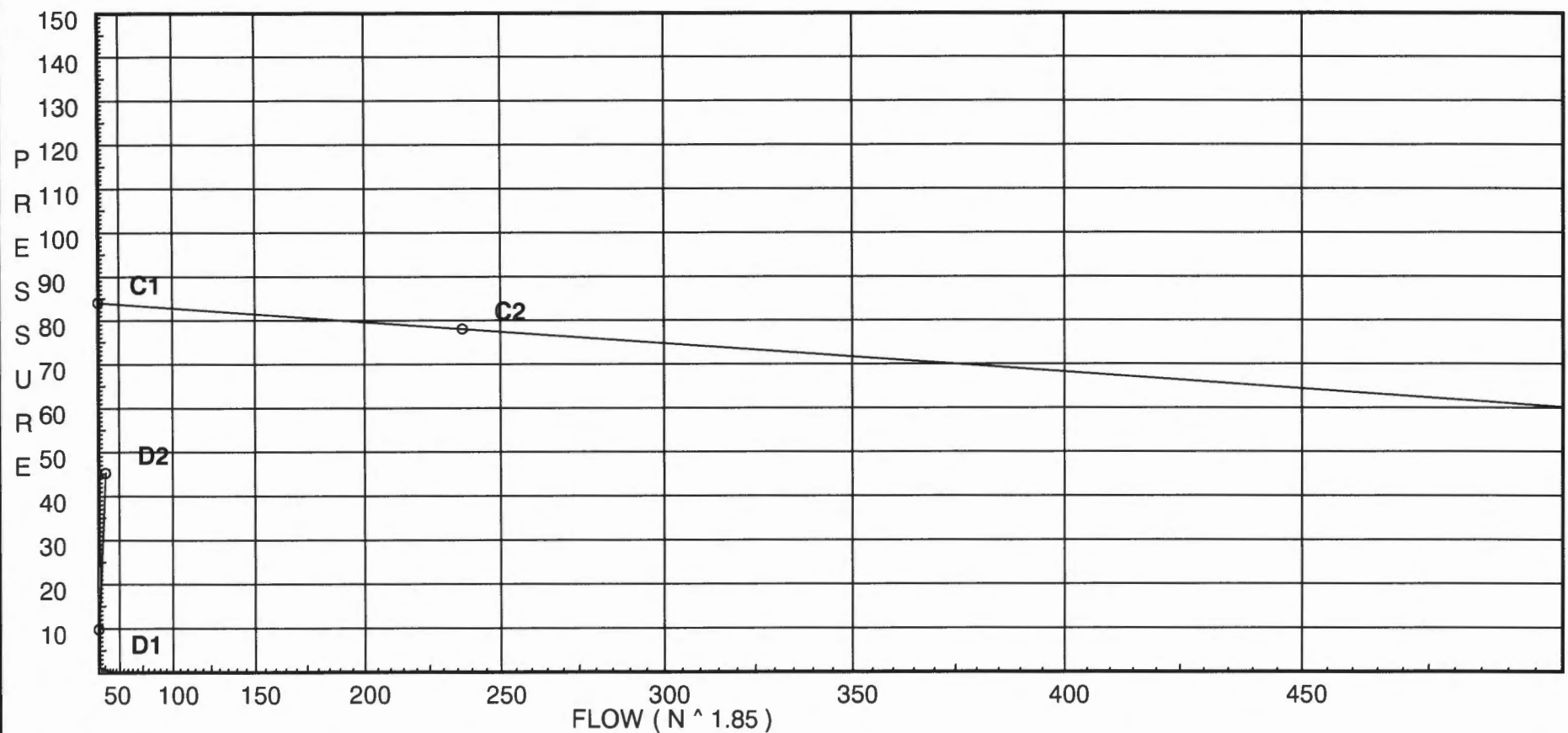
# Water Supply Curve (C)

HIGH TECH FIRE PROTECTION  
Second Floor Calc.

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Date 10/2/2012

City Water Supply:  
C1 - Static Pressure : 84  
C2 - Residual Pressure: 78  
C2 - Residual Flow : 237

Demand:  
D1 - Elevation : 9.745  
D2 - System Flow : 28.4275  
D2 - System Pressure : 45.233  
Hose ( Adj City ) :  
Hose ( Demand ) :  
D3 - System Demand : 28.4275  
Safety Margin : 38.649





# Fittings Used Summary

HIGH TECH FIRE PROTECTION  
Second Floor Calc.

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Date 10/2/2012

Fitting Legend		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	14	16	18	20	24
Abbrev. Name																					
E	90' Standard Elbow	2	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
G	Generic Gate Valve	0	0	1	1	1	1	1	1	1	2	2	3	4	5	6	7	8	10	11	13
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
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
Z	Generic Flow Switch	2	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
Zik	Wilkins 950XL	Fitting generates a Fixed Loss Based on Flow																			

## Units Summary

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

Note: Fitting Legend provides equivalent pipe lengths for fittings types of various diameters. Equivalent lengths shown are standard for actual diameters of Sched 40 pipe and CFactors of 120 except as noted with \*. The fittings marked with a \* show equivalent lengths values supplied by manufacturers based on specific pipe diameters and CFactors and they require no adjustment. All values for fittings not marked with a \* will be adjusted in the calculation for CFactors of other than 120 and diameters other than Sched 40 per NFPA.

# Pressure / Flow Summary - STANDARD

HIGH-TECH FIRE PROTECTION  
Second Floor Calc.

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Date 10/2/2012

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
201	22.5	4.4	10.2	na	14.05	0.05	196	10.2
A1	14.5		14.2	na				
A2	14.5		14.67	na				
A3	13.5		15.39	na				
A4	13.5		15.92	na				
202	22.5	4.4	10.67	na	14.38	0.05	196	10.2
A5	14.5		14.69	na				
A6	14.5		14.99	na				
A7	13.5		15.72	na				
A8	13.5		16.23	na				
A9	13.5		18.56	na				
A10	4.5		24.13	na				
TOR	4.5		29.17	na				
BOR	1.0		32.56	na				
BASE	1.0		43.89	na				
H1	3.0		43.91	na				
H2	-1.0		45.65	na				
H3	-11.0		49.99	na				
H4	0.0		45.23	na				
TEST	0.0		45.23	na				

The maximum velocity is 10.55 and it occurs in the pipe between nodes A10 and TOR

Hyd. Ref. Point	Qa  Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
201 to A1	14.05  14.05	1.101 150.0 0.0354	1N  0.0	7.0 0.0 0.0	8.000 7.000 15.000	10.200 3.465 0.531		K Factor = 4.40	
A1 to A2	0.0  14.05	1.101 150.0 0.0354	1N 1O 0.0	7.0 5.0 0.0	1.500 12.000 13.500	14.196 0.0 0.478		Vel = 4.73	
A2 to A3	0.0  14.05	1.101 150.0 0.0355	1N  0.0	7.0 0.0 0.0	1.000 7.000 8.000	14.674 0.433 0.284		Vel = 4.73	
A3 to A4	0.0  14.05	1.101 150.0 0.0354	2O  0.0	10.0 0.0 0.0	4.900 10.000 14.900	15.391 0.0 0.527		Vel = 4.73	
A4 to A8	0.0  14.05	1.101 150.0 0.0355	  0.0	0.0 0.0 0.0	8.800 0.0 8.800	15.918 0.0 0.312		Vel = 4.73	
	0.0 14.05					16.230		K Factor = 3.49	
*P									
202 to A5	14.38  14.38	1.101 150.0 0.0369	1N  0.0	7.0 0.0 0.0	8.000 7.000 15.000	10.674 3.465 0.553		K Factor = 4.40	
A5 to A6	0.0  14.38	1.101 150.0 0.0370	1N  0.0	7.0 0.0 0.0	1.000 7.000 8.000	14.692 0.0 0.296		Vel = 4.85	
A6 to A7	0.0  14.38	1.101 150.0 0.0370	1N  0.0	7.0 0.0 0.0	1.000 7.000 8.000	14.988 0.433 0.296		Vel = 4.85	
A7 to A8	0.0  14.38	1.101 150.0 0.0369	2O  0.0	10.0 0.0 0.0	3.900 10.000 13.900	15.717 0.0 0.513		Vel = 4.85	
A8 to A9	14.05  28.43	1.101 150.0 0.1304	2N  0.0	14.0 0.0 0.0	3.900 14.000 17.900	16.230 0.0 2.334		Vel = 9.58	
A9 to A10	0.0  28.43	1.101 150.0 0.1304	1E  0.0	3.825 0.0 0.0	9.000 3.825 12.825	18.564 3.898 1.672		Vel = 9.58	
A10 to TOR	0.0  28.43	1.049 120.0 0.2494	2E  0.0	4.0 0.0 0.0	16.200 4.000 20.200	24.134 0.0 5.038		Vel = 10.55	
TOR to BOR	0.0  28.43	1.049 120.0 0.2495	1Z 1E 0.0	2.0 2.0 0.0	3.500 4.000 7.500	29.172 1.516 1.871		Vel = 10.55	

Hyd. Ref. Point	Qa  Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
BOR to BASE	0.0 28.43	1.049 120.0 0.2492	1Zik 1E	0.0 2.0 0.0	3.000 2.000 5.000	32.559 10.086 1.246		* Fixed loss = 10.086 Vel = 10.55	
	0.0 28.43					43.891		K Factor = 4.29	
*P									
BASE to H1	28.43	1.72 150.0 0.0148	1E 1G 1T	3.087 0.617 6.174	50.000 9.879 59.879	43.891 -0.866 0.889		Vel = 3.93	
H1 to H2	0.0 28.43	8.27 140.0 0.0	1T	55.354 0.0 0.0	450.000 55.354 505.354	43.914 1.732 0.005		Vel = 0.17	
H2 to H3	0.0 28.43	8.23 100.0 0.0	1E	14.92 0.0 0.0	750.000 14.920 764.920	45.651 4.331 0.012		Vel = 0.17	
H3 to H4	0.0 28.43	12.34 140.0 0.0		0.0 0.0 0.0	360.000 0.0 360.000	49.994 -4.764 0.0		Vel = 0.08	
H4 to TEST	0.0 28.43	6.16 140.0 0.0	1E 1G 1T	20.084 4.304 43.037	15.000 67.425 82.425	45.230 0.0 0.003		Vel = 0.31	
	0.0 28.43					45.233		K Factor = 4.23	



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## Receipts Details:

**Tender Information:** Check , BusinessName: HighTech Fire Protection, Check Number: 18355\$80.00

**Tender Amount:** 80.00

## Receipt Header:

**Cashier Id:** gguertin

**Receipt Date:** 11/16/2012

**Receipt Number:** 50317

## Receipt Details:

Referance ID:	8768	Fee Type:	BP-Constr
Receipt Number:	0	Payment Date:	
Transaction Amount:	80.00	Charge Amount:	80.00
Job ID: Job ID: 2012-11-5416-FAFS - water based fire suppression			
Additional Comments: 26 Luther St.			

Thank You for your Payment!