#### DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT



This is to certify that

DEAN & ALLYN, INC.

PO BOX 709 - 116 LEWISTON RD

GRAY, ME 04039

Job ID: 2012-04-3739-SF

For installation at 11 BALLPARK DR SINGLE-FAMILY

CBL: 371- A-046-001

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



## PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life . www.portlandmaine.gov

Director of Planning and Urban Development Penny St. Louis

Job ID: 2012-04-3739-SF install NFPA 13D sprinkler system For installation at: 11 BALLPARK DR SINGLE-FAMILY CBL: <u>371- A-046-001</u>

#### **Conditions of Approval:**

#### Fire

The sprinkler system shall be installed in accordance with NFPA 13D. A compliance letter is required.

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.

Application requires State Fire Marshal approval.

## 2012-04-3739 2012-449/35

One- or Two-family Fire Sprinkler Permit

One- or Two-family Fire	Sprinkler Permit
If you or the property owner owes real estate or proper	ty taxes or user charges on any property sefore permits of any kind are accepted.
within the city, payment arrangements must be made by the second of the property owner owes real estate of property owner owner owes real estate of property owner ow	Ny
Installation address: 11 Ballpark	DRIVE
Building owner: Maria DiMillo	Phone: 879 2217
Installer: Dean and Allyn INC	Phone: 657 5644
Total sq/ft of building floor space per unit:	Single-family home
Sq/ft of sprinklered floor space per unit:	Two-family home
Is this a multipurpose piping system? Y $/$ $(N)$	Sprinkler piping uses Pex? Y / (N)
Water supply: Municipal Water	Stored water Other
Include electronic copy of approved State Sprin	nkler Permit plans:
Additional cost to the owner for the home fire	sprinkler system for <u>each</u> dwelling
unit minus costs necessary for domestic needs	(See below): <b>A=</b> 5700
Attach cost breakdown: A City plum	mbing permit has been pulled:
	5704
	COST OF WORK: 5706  (A times number of units)
This is a "stand alone" sprinkler system	(A times number of units)
enrinkler system	
RECEIVED	NO FEE REQUIRED
RECEIVED	
JUN 1 3 2012	

Dept. of Building Inspections City of Portland Maine

Additional information and Frequently asked questions about home fire sprinkler systems may be found at

#### www.portlandmaine.gov/fireprevention.

Sprinkler system cost must deduct costs that would have been incurred if the system did not provide sprinkler service. In a well pump system it would include the difference between the well pump to be installed and the one that would have been installed if there were no sprinkler demand on the system. Includes additional piping and valves that are required only because of NFPA Standard 13D, and not already required for domestic needs. Includes cost of sprinkler heads and additional installation costs.

### City of Portland, Maine - Building or Use Permit Application 389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Date Applied: 6/13/2012		CBL: 371- A-046-001			
Owner Name: BALL PARK DRIVE DEVELOPMENT LLC		67 HAVERTY WA	Phone:		
Contractor Name: Dean & Allyn Inc.			Phone: <b>657-5646</b>		
Phone:		Permit Type: FAFS	Zone: R-2		
Proposed Use: Same: Single Family	dwelling	Cost of Work: \$6,000.00		p. 4	CEO District:
	_	Fire Dept:	Approved w/ Co Denied N/A	nlitions	Inspection: Use Group: Type:
n:				<i>,</i> 	Signature:
			Zoning Approva		
does not preclude the ng applicable State and include plumbing, id if work is not started the date of issuance. validate a building	Shorelar Shorelar Flood Zo	ls one sion	Zoning Appeal  Variance Miscellaneous Conditional Use Interpretation Approved Denied  Date:	Not in Dis  Does not  Requires  Approved	
	Owner Name: BALL PARK DRIVE DEVELOPMENT LLC  Contractor Name: Dean & Allyn Inc.  Phone:  Proposed Use: Same: Single Family to install fire suppresystem  a:  does not preclude the ng applicable State and include plumbing, d if work is not started the date of issuance. validate a building	Owner Name: BALL PARK DRIVE DEVELOPMENT LLC  Contractor Name: Dean & Allyn Inc.  Phone:  Proposed Use: Same: Single Family dwelling to install fire suppression system  Special Z  does not preclude the ng applicable State and include plumbing, d if work is not started the date of issuance. validate a building	Owner Name: BALL PARK DRIVE DEVELOPMENT LLC  Contractor Name: Dean & Allyn Inc.  Contractor Name: Dean & Allyn Inc.  Contractor Name: Dean & Allyn Inc.  Contractor Addr 116 Lewiston Road  Cost of Work: \$6,000.00  Fire Dept: \$\$ignature: \$\$J\$\$\$\$ignature: \$\$J\$	Owner Name: BALL PARK DRIVE DEVELOPMENT LLC  Contractor Name: Dean & Allyn Inc.  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Proposed Use: Same: Single Family dwelling to install fire suppression system  Cost of Work: 56,000.00  Fire Dept:  Cost of Work: 56,000.00  Fire Dept:  Cost of Work: 56,000.00  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Cost of Work: 56,000.00  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Contractor Name: Denied  Approved	Owner Name: BALL PARK DRIVE DEVELOPMENT LLC  Owner Address: 67 HAVERTY WAY, PORTLAND, ME 04103  Contractor Name: Dean & Allyn Inc.  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Phone:  Permit Type: FAFS  Cost of Work: \$6,000.00  Fire Dept:  Approved a for address  Signature:  Pedestrian Activities District (P.A.D.)  Denied  Special Zone or Reviews  and if work is not started the date of issuance. Approved  and if work is not started the date of issuance.  Site Plan  Owner Address: 67 HAVERTY WAY, PORTLAND, ME 04103  Contractor Address: 116 Lewiston Road, Gray, ME 04039  Fire Dept:  Approved and Conditions  Approved  Not in Display.  Approved  Approved

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
DECDONICIDI E DEDCON IN CHADGE (	OF WODE TITLE	DATE	DHONE

#### **BUILDING PERMIT INSPECTION PROCEDURES**

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

or email: buildinginspections@portlandmaine.gov

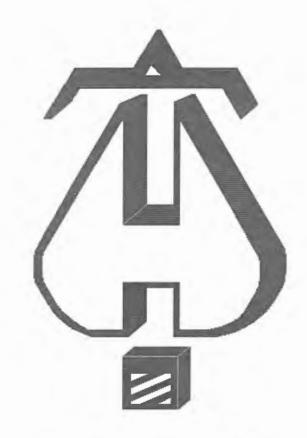
With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need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



. . . Fire Protection by Computer Design

DEAN & ALLYN, INC. PO BOX 709 116 LEWISTON ROAD GRAY, MAINE 04039 207-657-5646

Job Name : DIMILLO RESIDENCE

Building

Location

: 11 BALLPARK DRIVE PORTLAND MAINE

System

: ONE

Contract

: C121088

Data File : BALLPARK DRIVE.WXF

#### HYDRAULIC DESIGN INFORMATION SHEET

```
Date - 6-9-12
Name - DIMILLO RESIDENCE
Location - 11 BALLPARK DRIVE PORTLAND MAINE
                                                   System No. - ONE
Building -
                                                   Contract No. - C121088
Contractor - DEAN AND ALLYN, INC.
                                                   Drawing No. - 1 OF 1
Calculated By - H. KING Dr
Construction: (X) Combustible () Non-Combustible
                                                       Ceiling Height 8'
OCCUPANCY - RESIDENCE
    Type of Calculation: ( )NFPA 13 Residential ( )NFPA 13R
                                                               (X) NFPA 13D
S
    Number of Sprinklers Flowing: ( )1 (X)2
                                                 ()4 ()
Y
S
    ()Other
Т
    ( ) Specific Ruling
                                         Made by
                                                              Date
E
                                                           System Type
    Listed Flow at Start Point - 13
                                       Gpm
M
                                                  (X) Wet
    Listed Pres. at Start Point - 7
                                       Psi
                                                           ( ) Dry
    MAXIMUM LISTED SPACING 16 x 16
                                                 ( ) Deluge
                                                               ( ) PreAction
D
                             - 5
                                                  Sprinkler or Nozzle
    Domestic Flow Added
                                       Gpm
Ε
                                             Make VIKING Model FREEDOM
     Additional Flow Added
                                       Gpm
S
Ι
     Elevation at Highest Outlet - 10' Feet Size
                                                              K-Factor 4.9
     Note: CUSHION 22.1 PSI
                                             Temperature Rating 155
G
N
                                  Psi Required 47.9
                                                         CITY
Calculation Gpm Required 31.3
                                    Overhead 120
                                                          Underground 120
            C-Factor Used:
Summary
                                                        Tank or Reservoir:
                                 Pump Data:
   Water Flow Test:
W
   Date of Test - 2007
                                Rated Cap.
                                                      Cap.
A
                                                      Elev.
Т
   Time of Test
                                @ Psi
   Static (Psi) - 70
                                Elev.
E
                                                            Well
   Residual (Psi) - 69
                                Other
R
    Flow (Gpm)
                                                      Proof Flow Gpm
                  - 838
- 0
S
    Elevation
    Location: BALLPARK DRIVE
P
Ρ
    Source of Information: P W D
L
Y
```

#### Fittings Used Summary

	N & ALLYN, INC. LLO RESIDENCE																		age 2 ate 6	2 S-9-12	
	Legend v. Name	1/2	3/4	1	11/4	1½	2	21/2	3	31/2	4	5	6	8	10	12	14	16	18	20	24
E G T	NFPA 13 90' Standard Elbow NFPA 13 Gate Valve NFPA 13 90' Flow thru Tee	1 0 3	2 0 4	2 0 5	3 0 6	4 0 8	5 1 10	6 1 12	7 1 15	8 1 17	10 2 20	12 2 25	14 3 30	18 4 35	22 5 50	27 6 60	35 7 71	40 8 81	45 10 91	50 11 101	61 13 121

#### **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

DEAN & ALLYN, INC. DIMILLO RESIDENCE

Page 3 Date 6-9-12

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Reg.
	40.0	4.0	7.0		10.00	0.05	050	7.0
1A	10.0	4.9	7.0	na	12.96	0.05	256	7.0
1	10.0	K = K @ 1	7.35	na	12.96			
2	10.0	K = K @ 1	7.77	na	13.33			
10	10.0		10.13	na				
11	0.0		16.96	na				
12	0.0		24.63	na				
TR	0.0		26.14	na				
FF	0.0		38.15	na	5.0			
CTY	6.0		47.93	na				

The maximum velocity is 10.55 and it occurs in the pipe between nodes FF and CTY

DEAN & ALLYN, INC. DIMILLO RESIDENCE Page 4 Date 6-9-12

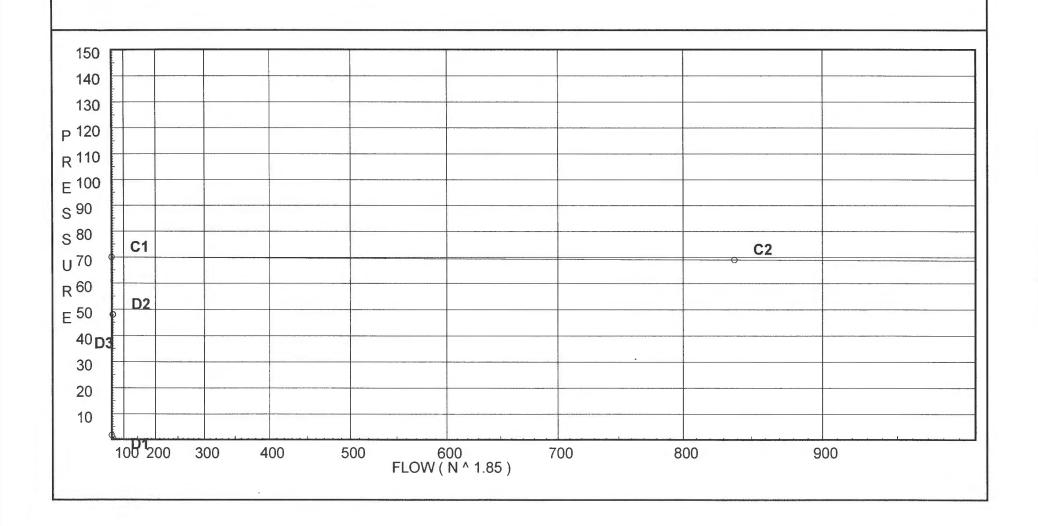
Hyd. Ref. Point	Qa Dia. "C" Qt Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	****** Notes *****
4.0	40.00 4.040	4T 50	4 000	7 000		I/ Factor - 4.00
1A to	12.96 1.049 120.0	1T 5.0 0.0	1.000 5.000	7.000 0.0		K Factor = 4.90
1	12.96 0.0583	0.0	6.000	0.350		Vel = 4.81
	0.0 12.96		1	7.350		K Factor = 4.78
1	12.96 1.049	3T 15.0	32.600	7.350		K Factor @ node 1
to	120.0	0.0	15.000	0.0		The state of the state of
10	12.96 0.0584	0.0	47.600	2.778		Vel = 4.81
	0.0 12.96			10.128		K Factor = 4.07
2	13.33 1.049	2T 10.0	28.300	7.774		K Factor @ node 1
to	120.0	0.0	10.000	0.0		
10	13.33 0.0615	0.0	38.300	2.354		Vel = 4.95
10	12.97 1.049	1E 2.0	9.600	10.128		
to 11	120.0 26.3 0.2159	0.0 0.0	2.000 11.600	4.331 2.504		Vel = 9.76
11	0.0 1.049	2T 10.0	25.500	16.963		Vei - 9.70
to	120.0	0.0	10.000	0.0		
12	26.3 0.2159	0.0	35.500	7.666		Vel = 9.76
12	0.0 1.049	1E 2.0	5.000	24.629		
to	120.0	0.0	2.000	0.0		
TR	26.3 0.2159	0.0	7.000	1.511		Vel = 9.76
TR	-0.01 1.049	1Z 0.0	7.300	26.140		
to	120.0	0.0	2.000	10.000		* Fixed loss = 10
FF	26.29 0.2159	0.0	9.300	2.008		Vel = 9.76
FF	5.01 1.101	1G 0.0	45.000	38.148		Qa = 5
to	120.0	1T 6.328	7.594	-2.599		V-I - 40.55
CTY	31.3 0.2354	0.0	52.594	12.382		Vel = 10.55
	0.0 31.30		- Ann and St. An 1975 ST. An 1975	47.931		K Factor = 4.52

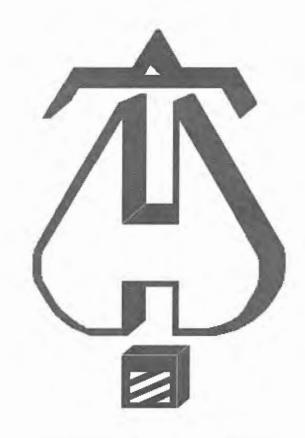
Page 5 Date 6-9-12

City Water Supply: C1 - Static Pressure : 70 C2 - Residual Pressure: 69 C2 - Residual Flow : 838

Demand:
D1 - Elevation
D2 - System Flow
D2 - System Pressure
Hose (Demand)
D3 - System Demand
Safety Margin 1.732 26.297 47.931

5 31.297 22.067





. . . Fire Protection by Computer Design

DEAN & ALLYN, INC. PO BOX 709 116 LEWISTON ROAD GRAY, MAINE 04039 207-657-5646

Job Name : DIMILLO RESIDENCE

Building

Location : 11 BALLPARK DRIVE PORTLAND MAINE

System : ONE

Contract : C121088

Data File : BALLPARK DRIVE.WXF

#### HYDRAULIC DESIGN INFORMATION SHEET

Name - DIMILLO RESIDENCE Date - 6-9-12 Location - 11 BALLPARK DRIVE PORTLAND MAINE System No. - ONE Building -Contract No. - C121088 Drawing No. - 1 OF 1 Contractor - DEAN AND ALLYN, INC. Calculated By - H. KING I Construction: (X) Combustible ( ) Non-Combustible Ceiling Height 8' OCCUPANCY - RESIDENCE Type of Calculation: ( )NFPA 13 Residential ( )NFPA 13R (X)NFPA 13D Υ Number of Sprinklers Flowing: ( )1 (X)2 ()4 S ()Other Т ( )Specific Ruling Made by Date  $\mathbf{E}$ System Type Listed Flow at Start Point - 13 M Gpm Listed Pres. at Start Point - 7 (X) Wet () Dry Psi D MAXIMUM LISTED SPACING 16 x 16 ( ) PreAction ( ) Deluge - 5 E Domestic Flow Added Sprinkler or Nozzle Gpm S Additional Flow Added Gpm Make VIKING Model FREEDOM Elevation at Highest Outlet - 10' Ι Feet Size K-Factor 4.9 Note: CUSHION 22.1 PSI Temperature Rating 155 G N Calculation Gpm Required 31.3 Psi Required 47.9 CITY Overhead 120 Summary C-Factor Used: Underground 120 Water Flow Test: W Pump Data: Tank or Reservoir: Α Date of Test - 2007 Rated Cap. Cap. T Time of Test @ Psi Elev. - 70 Ē Static (Psi) Elev. Residual (Psi) - 69 R Other Well - 838 Flow (Gpm) Proof Flow Gpm - 0 Elevation Location: BALLPARK DRIVE P Ρ Source of Information: P W D L Υ

#### Fittings Used Summary

#### DEAN & ALLYN, INC. DIMILLO RESIDENCE

DIMIL	LO RESIDENCE																		age 2 ate 6	<u>2</u> S-9-12	
Fitting Abbrev	Legend . Name	1/2	3/4	1	11/4	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
E G T	NFPA 13 90' Standard Elbow NFPA 13 Gate Valve NFPA 13 90' Flow thru Tee	1 0 3	2 0 4	2 0 5	3 0 6	4 0 8	5 1 10	6 1 12	7 1 15	8 1 17	10 2 20	12 2 25	14 3 30	18 4 35	22 5 50	27 6 60	35 7 71	40 8 81	45 10 91	50 11 101	61 13 121

Units Summary

Diameter Units

Inches Feet

Length Units 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

DEAN & ALLYN, INC. DIMILLO RESIDENCE

Page 3 Date 6-9-12

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
4.4	40.0	4.0	7.0	***	12.06	0.05	256	7.0
1A	10.0	4.9	7.0	na	12.96	0.05	250	7.0
1	10.0	K = K @ 1	7.35	na	12.96			
2	10.0	K = K @ 1	7.77	na	13.33			
10	10.0		10.13	na				
11	0.0		16.96	na				
12	0.0		24.63	na				
TR	0.0		26.14	na				
FF	0.0		38.15	na	5.0			
CTY	6.0		47.93	na				

The maximum velocity is 10.55 and it occurs in the pipe between nodes FF and CTY

Point							
to 120.0 0.0 5.000 0.0 10.0 12.96 0.0583 0.0 6.000 0.350 Vel = 4.81    1	Ref.	"C"	or	Ftng's	Pe	Pv	****** Notes *****
to 120.0 0.0 5.000 0.0 10.0 12.96 0.0583 0.0 6.000 0.350 Vel = 4.81    1							
1         12.96         0.0583         0.0         6.000         0.350         Vel = 4.81           0.0         12.96         7.350         K Factor = 4.78           1         12.96         1.049         3T 15.0         32.600         7.350         K Factor @ node 1           10         12.96         0.0584         0.0         47.600         2.778         Vel = 4.81           0.0         12.96         0.0584         0.0         47.600         2.778         Vel = 4.81           0.0         12.96         0.0584         0.0         47.600         2.778         Vel = 4.81           0.0         12.96         0.0584         0.0         28.300         7.774         K Factor = 4.07           2         13.33         1.049         2T 10.0         28.300         7.774         K Factor @ node 1           10         12.00         0.0         10.000         0.0         0.0         10.00           10         12.97         1.049         1E 2.0         9.600         10.128         Vel = 4.95           10         12.97         1.049         2T 10.0         25.500         16.963         Vel = 9.76           11         0.0         1.049							K Factor = 4.90
12.96							Vel = 4.81
1 12.96 1.049 3T 15.0 32.600 7.350 K Factor @ node 1 to 120.0 0.0 15.000 0.0					7.350		K Factor = 4.78
10							K Factor @ node 1
0.0 12.96  10.128  K Factor = 4.07  2 13.33 1.049 2T 10.0 28.300 7.774  K Factor @ node 1  to 120.0 0.0 10.000 0.0  10 13.33 0.0615 0.0 38.300 2.354  Vel = 4.95  10 12.97 1.049 1E 2.0 9.600 10.128  to 120.0 0.0 11.600 2.504  Vel = 9.76  11 0.0 1.049 2T 10.0 25.500 16.963  to 120.0 0.0 10.000 0.0  12 26.3 0.2159 0.0 35.500 7.666  Vel = 9.76  12 0.0 1.049 1E 2.0 5.000 24.629  to 120.0 0.0 2.000 0.0  TR 26.3 0.2159 0.0 7.000 1.511  Vel = 9.76  TR -0.01 1.049 1Z 0.0 7.300 26.140  to 120.0 0.0 2.000 10.000  TF 26.29 0.2159 0.0 9.300 2.008  FF 26.29 0.2159 0.0 9.300 2.008  FF 5.01 1.101 1G 0.0 45.000 38.148  to 120.0 17.6328 7.594 -2.599  CTY 31.3 0.2354 0.0 52.594 12.382  Vel = 10.55							Vol - 191
12.96	10	A 17 17 17 17 17 17 17 17 17 17 17 17 17	0.0	47.000	2.110		VCI - 4.01
to 120.0 0.0 10.000 0.0 10.000 10.0 10.000 10.0 10.000 10.0 13.33 0.0615 0.0 38.300 2.354 Vel = 4.95 10 12.97 1.049 1E 2.0 9.600 10.128 10 120.0 0.0 2.000 4.331 11 26.3 0.2159 0.0 11.600 2.504 Vel = 9.76 11 0.0 1.049 2T 10.0 25.500 16.963 10 120.0 0.0 10.000 0.0 12 26.3 0.2159 0.0 35.500 7.666 Vel = 9.76 12 0.0 1.049 1E 2.0 5.000 24.629 10 120.0 0.0 2.000 0.0 1.511 Vel = 9.76 12 0.0 1.049 1E 2.0 5.000 24.629 10 120.0 0.0 7.000 1.511 Vel = 9.76 12 0.0 1.049 1Z 0.0 7.300 26.140 10 120.0 120.0 0.0 2.000 10.000 *Fixed loss = 10 120.0 120.0 0.0 2.000 10.000 *Fixed loss = 10 120.0 FF 26.29 0.2159 0.0 9.300 2.008 Vel = 9.76 12 0.0 1.101 1G 0.0 45.000 38.148 Qa = 5 10 120.0 17 6.328 7.594 -2.599 10.0 12.382 Vel = 10.55 10.00 10.000 10.					10.128		K Factor = 4.07
10       13.33       0.0615       0.0       38.300       2.354       Vel = 4.95         10       12.97       1.049       1E       2.0       9.600       10.128         to       120.0       0.0       2.000       4.331         11       26.3       0.2159       0.0       11.600       2.504       Vel = 9.76         11       0.0       1.049       2T       10.0       25.500       16.963         to       120.0       0.0       10.000       0.0         12       26.3       0.2159       0.0       35.500       7.666       Vel = 9.76         12       0.0       1.049       1E       2.0       5.000       24.629       26.3       0.2159       0.0       7.300       26.140       26.140       26.140       26.140       26.140       26.140       26.140       26.140       26.140       26.140       26.140       26.140       26.140       26.140       26.140							K Factor @ node 1
10       12.97       1.049       1E       2.0       9.600       10.128         to       120.0       0.0       2.000       4.331         11       26.3       0.2159       0.0       11.600       2.504       Vel = 9.76         11       0.0       1.049       2T       10.0       25.500       16.963         to       120.0       0.0       10.000       0.0         12       26.3       0.2159       0.0       35.500       7.666       Vel = 9.76         12       0.0       1.049       1E       2.0       5.000       24.629       24.629       24.629       24.629       24.629       26.3       0.2159       0.0       7.000       1.511       Vel = 9.76         TR       26.3       0.2159       0.0       7.300       26.140	to						Val = 4.05
to 120.0 0.0 2.000 4.331 11 26.3 0.2159 0.0 11.600 2.504 Vel = 9.76  11 0.0 1.049 2T 10.0 25.500 16.963 to 120.0 0.0 10.000 0.0 12 26.3 0.2159 0.0 35.500 7.666 Vel = 9.76  12 0.0 1.049 1E 2.0 5.000 24.629 to 120.0 0.0 2.000 0.0 TR 26.3 0.2159 0.0 7.000 1.511 Vel = 9.76  TR -0.01 1.049 1Z 0.0 7.300 26.140 to 120.0 0.0 2.000 10.000 *Fixed loss = 10 FF 26.29 0.2159 0.0 9.300 2.008 Vel = 9.76  FF 5.01 1.101 1G 0.0 45.000 38.148 to 120.0 1T 6.328 7.594 -2.599 CTY 31.3 0.2354 0.0 52.594 12.382 Vel = 10.55							VEI - 4.90
11	to			2.000	4.331		
to 120.0 0.0 10.000 0.0 12 26.3 0.2159 0.0 35.500 7.666 Vel = 9.76  12 0.0 1.049 1E 2.0 5.000 24.629 to 120.0 0.0 7.000 1.511 Vel = 9.76  TR 26.3 0.2159 0.0 7.300 26.140 to 120.0 0.0 2.000 10.000 *Fixed loss = 10 FF 26.29 0.2159 0.0 9.300 2.008 Vel = 9.76  FF 5.01 1.101 1G 0.0 45.000 38.148 Qa = 5 to 120.0 1T 6.328 7.594 -2.599 CTY 31.3 0.2354 0.0 52.594 12.382 Vel = 10.55	11	26.3 0.2159					Vel = 9.76
12       26.3       0.2159       0.0       35.500       7.666       Vel = 9.76         12       0.0       1.049       1E       2.0       5.000       24.629         to       120.0       0.0       2.000       0.0         TR       26.3       0.2159       0.0       7.300       26.140         TR       -0.01       1.049       1Z       0.0       7.300       26.140         to       120.0       0.0       2.000       10.000       * Fixed loss = 10         FF       26.29       0.2159       0.0       9.300       2.008       Vel = 9.76         FF       5.01       1.101       1G       0.0       45.000       38.148       Qa = 5         to       120.0       1T       6.328       7.594       -2.599         CTY       31.3       0.2354       0.0       52.594       12.382       Vel = 10.55							
12							Vel = 9.76
TR 26.3 0.2159 0.0 7.000 1.511 Vel = 9.76  TR -0.01 1.049 1Z 0.0 7.300 26.140  to 120.0 0.0 2.000 10.000 * Fixed loss = 10  FF 26.29 0.2159 0.0 9.300 2.008 Vel = 9.76  FF 5.01 1.101 1G 0.0 45.000 38.148 Qa = 5  to 120.0 1T 6.328 7.594 -2.599  CTY 31.3 0.2354 0.0 52.594 12.382 Vel = 10.55							
TR -0.01 1.049 1Z 0.0 7.300 26.140 to 120.0 0.0 2.000 10.000 *Fixed loss = 10 FF 26.29 0.2159 0.0 9.300 2.008 Vel = 9.76  FF 5.01 1.101 1G 0.0 45.000 38.148 Qa = 5 to 120.0 1T 6.328 7.594 -2.599 CTY 31.3 0.2354 0.0 52.594 12.382 Vel = 10.55	to_						) / I = 0.70
to 120.0 0.0 2.000 10.000 * Fixed loss = 10 FF 26.29 0.2159 0.0 9.300 2.008 Vel = 9.76 FF 5.01 1.101 1G 0.0 45.000 38.148 Qa = 5 to 120.0 1T 6.328 7.594 -2.599 CTY 31.3 0.2354 0.0 52.594 12.382 Vel = 10.55 0.0							Vel = 9.76
FF     26.29     0.2159     0.0     9.300     2.008     Vel = 9.76       FF     5.01     1.101     1G     0.0     45.000     38.148     Qa = 5       to     120.0     1T     6.328     7.594     -2.599       CTY     31.3     0.2354     0.0     52.594     12.382     Vel = 10.55       0.0							* Fixed loss = 10
FF 5.01 1.101 1G 0.0 45.000 38.148 Qa = 5 to 120.0 1T 6.328 7.594 -2.599 CTY 31.3 0.2354 0.0 52.594 12.382 Vel = 10.55							
CTY 31.3 0.2354 0.0 52.594 12.382 Vel = 10.55							Qa = 5
0.0	to						Val - 40.55
	CIY		0.0	52.594	12.382		vei = 10.55
		0.0 31.30			47.931		K Factor = 4.52

City Water Supply:
C1 - Static Pressure : 70
C2 - Residual Pressure: 69
C2 - Residual Flow : 838

