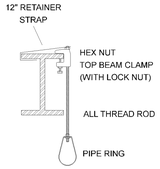
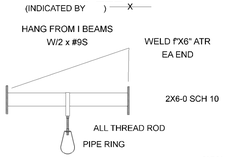
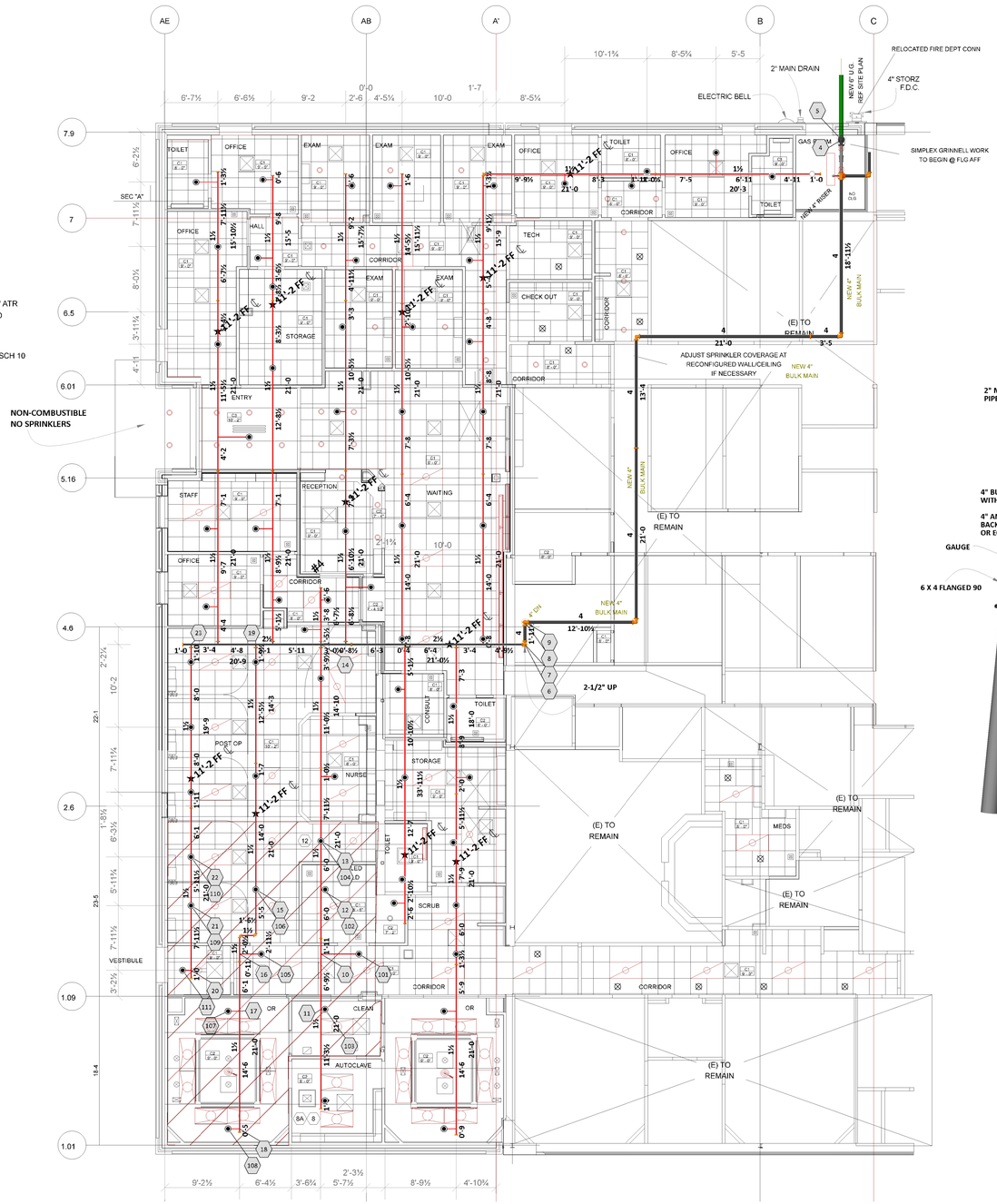
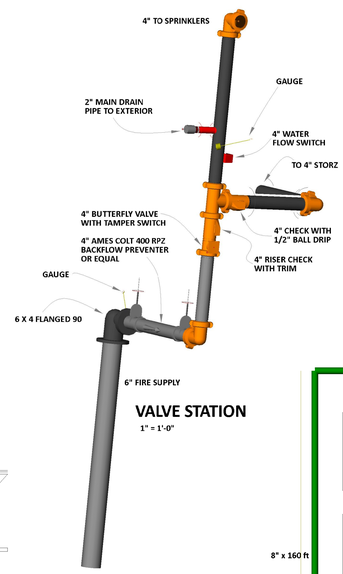
HANGER #9S
TOP BEAM CLAMP



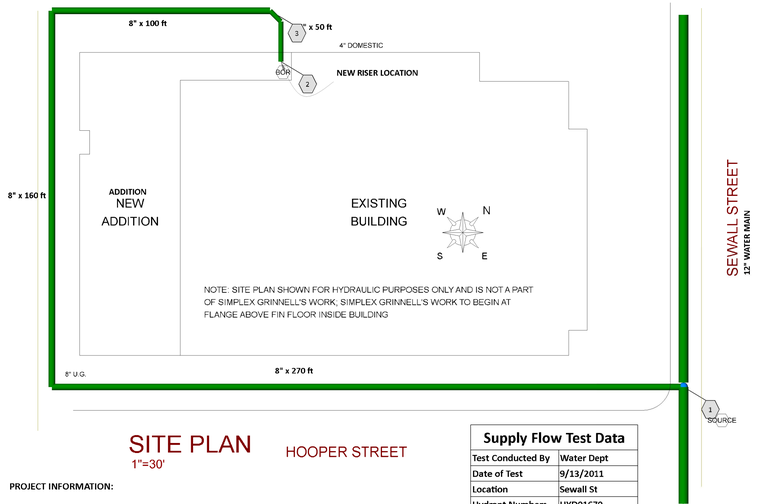
HANGER #1T
TRAPEZE







VALVE STATION
1" = 1'-0"



SITE PLAN
1"=30'

HOOPER STREET

INSTALLATION INFORMATION

MAXIMUM DISTANCE BETWEEN HANGERS

NOMINAL PIPE SIZE (in.)	3/4"	1"	1 1/4	1 1/2"	2"	2 1/2"	3"	4"	6"	8"
STEEL PIPE EXCEPT THREADED LIGHTWALL	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
THREADED LIGHTWALL	N/A	12-0	12-0	12-0	12-0	15-0	15-0	N/A	N/A	N/A
COPPER TUBE	8-0	8-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A	N/A

Distance from side of obstruction to sprinkler.	Maximum distance of deflector above bottom of obstruction.
Less than 1 ft	0 inches
1 ft to less than 1'-6"	2-1/2 inches
1'-6" to less than 2'-0"	3-1/2 inches
2 ft to less than 2'-6"	5-1/2 inches
2'-6" to less than 3'-0"	7-1/2 inches
3 ft to less than 3'-6"	9-1/2 inches
3'-6" to less than 4'-0"	12 inches
4 ft to less than 4'-6"	14 inches
4'-6" to less than 5'-0"	16-1/2 inches
5 ft to less than 5'-6"	18 inches
5'-6" to less than 6'-0"	20 inches
6 ft to less than 6'-6"	24 inches
6'-6" to less than 7'-0"	30 inches
7 ft to less than 7'-6"	35 inches
NFPA 13 [2010] TABLE 8.6.5.1.2	

Sprinkler Legend

Symbol	Manufacturer	SIN/Model	Quantity	K-Factor	Type	Size	Response	Orifice	Finish	Temperature	Note
◉	Tyco	TY3231	66	5.6	Pendent	½	Quick	½"	Chrome	155°F	
⊗	Tyco	TY3231	12	5.6	Pendent	½	Quick	½"	Chrome	155°F	Relocate from Existing
○	Tyco	TY3131	1	5.6	Upright	½	Quick	½"	Brass	155°F	TYFRB
			Total = 79								

Supply Flow Test Data

Test Conducted By	Water Dept
Date of Test	9/13/2011
Location	Sewall St
Hydrant Numbers	HYD01670
Hydrant Elevation	0 FT
Static Pressure	98.000
Residual Pressure:	92.000
Flow	1519.00
Outside Hose Flow	100.00

Hydraulic Information

Remote Area 1 - Offices	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY	0.100gpm/ft² for 904.00ft² (Actual 909.32ft²)
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	11
K-FACTOR	5.6
TOTAL WATER REQUIRED	332.88
TOTAL PRESSURE REQUIRED	49.885
BASE of RISER (gpm)	232.88
BASE of RISER (psi)	35.205
SAFETY MARGIN (psi)	+47.753 (48.9%)

QUICK RESPONSE AREA REDUCTION
* WET SYSTEM
* LH or OH
* 20 FT MAX CEILING HT
Y = -3 * CLG / 2 + 55
FOR CLG <10 FT, Y = 40% REDUCTION
FOR CLG >20 FT, Y = 0% REDUCTION
THIS CLG = 10'-2" = 39.75% REDUCTION
1,500 SQFT - 39.75% = 904 SQFT

PROJECT INFORMATION:

SCOPE:
The fire protection project consists of installing new heads and piping in the 2013 Addition. Spaces that are inside the existing building must be checked to see if the sprinkler protection has been compromised, and if compromised, sprinklers must be relocated. Also, the existing riser was relocated to part of the new building and a new 4" bulk main is run to connect new and existing sprinkler pipe. A new 4" Wilkens 375 RPZ back-flow (or equal) is installed at the new riser location. Existing piping and heads to remain in existing building.

WATER SUPPLY:
This is a wet system supplied by a 6" underground main connected to an 8" partial loop around the building, connected to a 12" main (public water supply).

PIPE TYPES:
All areas, fire sprinkler pipe is either steel schedule 10 with mechanical fittings, or steel schedule 40 with threaded fittings.

CONSTRUCTION TYPE:
Construction type is standard metal studs with GWB for walls. A flat metal roof is supported by metal beams and steel joists.

CODE REFERENCES:
* Design and installation to conform to NFPA 13 2010 Edition
* Design and installation to conform to State Code, Local Fire and Building Departments.

General Notes:
* HANGER INSTALLATION AND SPACING SHALL BE IN ACCORDANCE WITH N.F.P.A. #13
* ALL EQUIPMENT TO BE UL LISTED FOR FIRE PROTECTION USE.
* FIELD FOREMAN TO VERIFY LOCATION OF HIGH TEMPERATURE SPRINKLERS AND INSTALL HIGH TEMPERATURE SPRINKLERS IN ACCORDANCE WITH N.F.P.A. #13
* IF REQUIRED, SLEEVES THROUGH WALLS AND FLOORS SHALL BE SCH. 10 LW. GALVANIZED AND PACKED WITH NONCOMBUSTIBLE, SMOKE PROOF, AND WATERPROOF FIRE SEALANT.
* OWNER SHALL PROVIDE ADEQUATE HEAT IN ALL AREAS ENCLOSING WET TYPE SPRINKLER PIPING TO PREVENT FREEZING AND FAILURE OF AUTOMATIC SPRINKLER SYSTEMS.
* PIPING DIMENSIONS SHOWN ON PLAN ARE CUT MEASURES UNLESS NOTED OTHERWISE.

CONTRACTOR: # 398
Simplex Grinnell
20 Thomas Drive
Westbrook, ME 04092
207-842-6440

RMS: # 546
Rory Goff
124 Temple Rd
Sharon, NH 03459
603-289-0490
cfpconnect@gmail.com

Contractor:
Simplex Grinnell LP
20 Thomas Drive
Westbrook, ME 04092

Project:
Eyecare Medical Group
53 Sewall St
Portland, ME

ADDITION/ RENOVATION PIPING

Project/Contract no.: CFP131

SCALE 1/8"=1'-0"

Drawn by: RPG

Date: 12/17/2013

Approval by: Fire Dept.

Engineer's Stamp:

SHEET NUMBER

FP-1
OF 1

NOTE: USE OF THESE PLANS BY THE INSTALLING CONTRACTOR SHALL INDICATE ACCEPTANCE OF ALL THE INFORMATION PROVIDED ON THESE PLANS AND SHALL TRANSFER FINAL RESPONSIBILITY OF THE CORRECTNESS OF THE SYSTEM TO THE INSTALLING CONTRACTOR. ANY DESIGN ERRORS SHALL
NOTE: ADDITIONAL SPRINKLER HEADS OVER AND ABOVE THOSE SPECIFICALLY NOTED ON THESE DRAWINGS MAYBE REQUIRED DEPENDING ON THE REQUIRED ROUTING AROUND TRUSSES, HVAC DUCTWORK, HOODS AND OTHER SIMILAR OBSTRUCTIONS. FIELD VERIFY EXISTING CONDITIONS DURING CONSTR