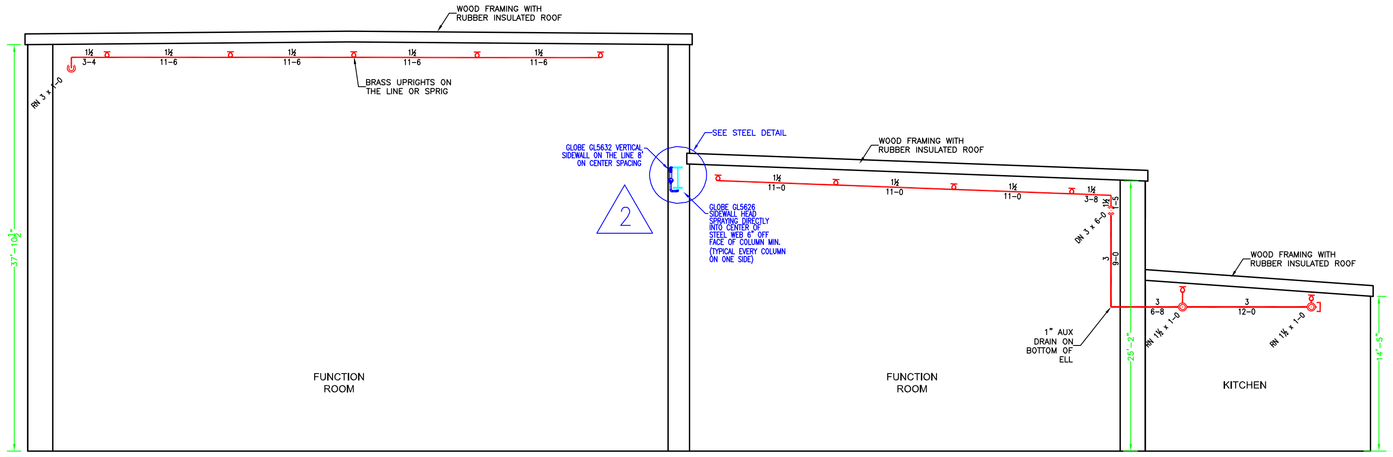
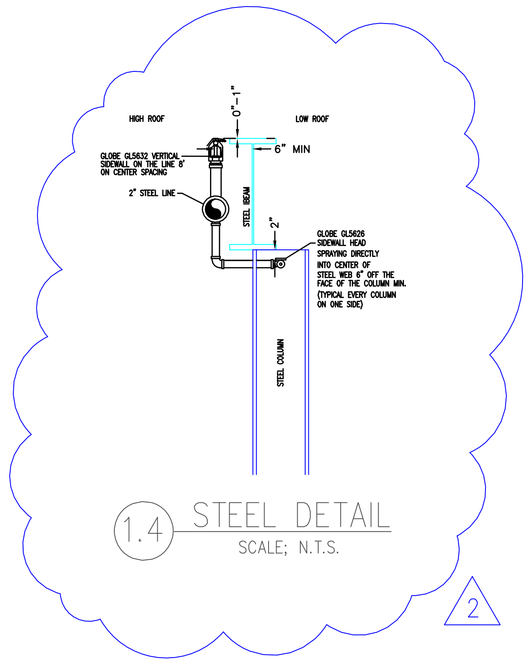


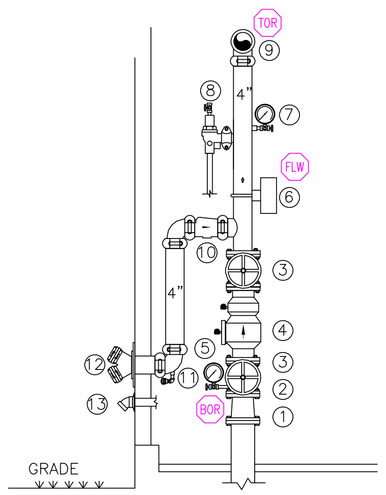
1.1 WEST SECTION 'A'
SCALE 1/8" = 1'-0"



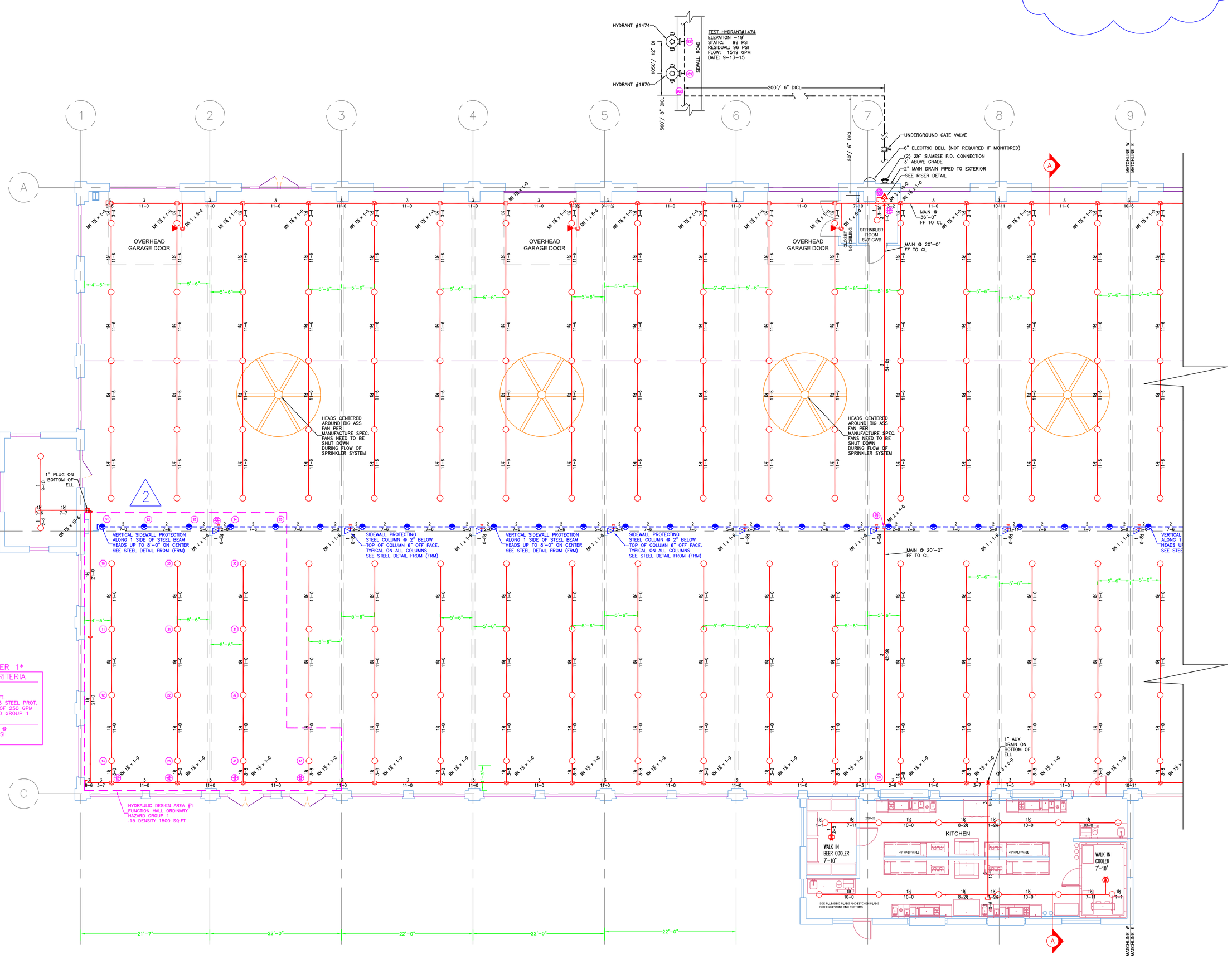
1.4 STEEL DETAIL
SCALE; N.T.S.

SPRINKLER RISER COMPONENTS

1. 6" DICL UNDERGROUND
2. 6" X 4" FLANGED CONCENTRIC TO GATE VALVE
3. 4" OS&Y GATE VALVE WITH POTTER OSYSU-1 TAMPER SWITCH
4. 4" WILKINS 350AST BACKFLOW PREVENTER.
5. SUPPLY SIDE PRESSURE GAUGE.
6. POTTER VSR-F FLOW SWITCH
7. SYSTEM SIDE PRESSURE GAUGE
8. 2" TEST-N-DRAIN W/ RELIEF VALVE PIPED TO EXTERIOR (SEE PLAN FOR LOCATION)
9. 3" WET SYSTEM RISER TO ENTIRE BUILDING
10. 4" SWING CHECK VALVE FOR F.D.C. FEED 48" MINIMUM FROM EXTERIOR
11. 1/2" AUTOMATIC BALL DRIP
12. (2) 2 1/2" STORZ F.D.C. 36" ABOVE GRADE (SEE PLAN FOR LOCATION)
13. 2" MAIN DRAIN DISCHARGE TO EXTERIOR (SEE PLAN FOR LOCATION)

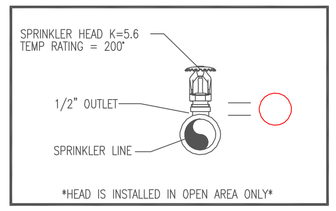


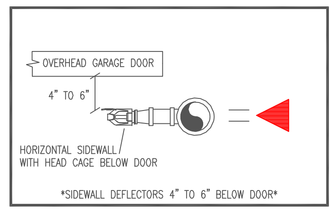
1.3 RISER DETAIL
SCALE: N.T.S.



1 WEST SECTION (WET)
TOTAL PROTECTED AREA 19,200 SQ.FT.
SCALE 1/8" = 1'-0"

DESIGN AREA NUMBER 1
HYDRAULIC DESIGN CRITERIA
LOCATION= FUNCTION AREA
TYPE OF SYSTEM= NFPA 13 WET
AREA OF OPERATION= 1500-SQ.FT.
NUMBER OF SPRINKLERS= 13 + 6 STEEL PROT.
DENSITY=.15 W/ HOSE DEMAND OF 250 GPM
HAZARD CLASS= ORDINARY HAZARD GROUP 1
HEAD SPACING= 121 SQ.FT.
SYSTEM DEMAND INCLUDING HOSE @
BASE OF RISER= 674-GPM 69-PSI.
SAFETY MARGIN= 27-PSI





1.2 SPRINKLER HEAD DETAIL
SCALE: N.T.S.

PROJECT DESCRIPTION

BUILDING CONST:
THE BUILDING IS 1 LEVEL OF NEW ASSEMBLY OCCUPANCY CONSTRUCTED OF WOOD-STEEL-BRICK FRAMING, FIBERGLASS INSULATION, AND GYP BOARD TYPE 3 CONSTRUCTION. STEEL SPRINKLER PIPING AS SHOWN ON PLAN.

BUILDING OCCUPANCY:
THE BUILDING IS A CHANGE OF USE TO NEW ASSEMBLY OCCUPANCY A2 OR A3.

SPRINKLER SYSTEM DESIGN:
NEW WET SYSTEM FOR THE ENTIRE BUILDING IN ACCORDANCE WITH NFPA 13 2016ed.

THE BUILDING USE GROUP IS ORDINARY HAZARD GROUP 1.

GC TO PROPERLY INSULATE AROUND SPRINKLER PIPING TO PREVENT WATER FILLED PIPE FROM FREEZING.

THE SPRINKLER SYSTEM IS DESIGNED TO MEET APPLICABLE CODE REGARDING AN NFPA 13 2016ed. WET SYSTEM.

HIGH TECH FIRE PROTECTION
P.O. BOX 156
MINOT, ME. 04258-0258
TEL:(207) 998-2551 FAX:(207) 998-4187
MAINE LICENSE # 102

GENERAL CONTRACTOR ON RECORD:
LANDRY FRENCH CONSTRUCTION
PM: NICK DUNCAN (207) 730-5566
CELL (207) 469-5527

SPECIAL APPLICATIONS:

LEGEND:
- RM/DN PIPE RISER UP OR DOWN
- AUXILIARY DRAIN
- PROPOSED SPRINKLER PIPE
- STEEL PROTECTION PIPE
- SYSTEM RISER
- PIPE PITCH ¼ MAINS ½ LINES
- HYDRAULIC CALC. POINT

DESIGN & SYSTEM NOTES:

ALL PIPING 1 1/2" & LARGER TO BE SCHEDULE 10 WITH GROOVED DUCTILE IRON FITTING.

ALL PIPING 1 1/4" & SMALLER TO BE SCHEDULE 40 WITH APPROPRIATE FITTING.

POSITION, LOCATION, SPACING, AND USE OF SPRINKLERS SHALL BE IN ACCORDANCE WITH NFPA 13.

POSITION, LOCATION, SPACING, AND USE OF HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13.

HYDRAULIC CALCULATION PROCEDURES HAVE BEEN DONE IN ACCORDANCE WITH NFPA 13. (SEE PLANS FOR LOCATION OF REMOTE AREAS, HYDRAULIC REFERENCE POINTS, AND SYSTEM DEMANDS.)

HIGH TECH FIRE PROTECTION IS TO BEGIN WORK AT 6" MAIN 1' AFF INSIDE OF BUILDING.

DIMENSIONS AND LOCATIONS GIVEN FOR SPRINKLER HEADS AND PIPE MAY VARY TO ACCOMMODATE ACTUAL FIELD CONDITIONS.

OWNER TO PROVIDE ADEQUATE HEAT THROUGHOUT BUILDING TO PROTECT WATER FILLED PIPING AND EQUIPMENT FROM FREEZING TEMPERATURES.

ONLY TRI-SEAL TYPE COUPLINGS TO BE INSTALLED ON DRY AND OR PRE-ACTION SYSTEMS.

OWNER IS RESPONSIBLE TO MAINTAIN THE SPRINKLER SYSTEM IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 25, "INSPECTION, TESTING, & MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS" AND/ OR ALL APPLICABLE FEDERAL, STATE, AND/OR LOCAL LAWS, CODES AND ORDINANCES.

ALL MECHANICAL, ELECTRICAL AND PLUMBING TRADES TO COORDINATE THEIR WORK WITH SPRINKLER CONTRACTOR.

ALL ELECTRIC WORK IS TO BE DONE BY OTHERS.

HEAD LEGEND:

GLOBE*
MODEL GL5615
158 /200°
K=5.6
1/2" BRASS UPRIGHT ON THE LINE
DEFLECTORS 1" TO 6" BELOW COMBUSTIBLE CEILINGS

GLOBE*
MODEL GL5626
3 /200°
K=5.6
1/2" BRASS HORIZONTAL SIDEWALL WITH CAGE
DELECTOR 4" TO 6" BELOW OVERHEAD DOOR

GLOBE*
MODEL GL5635
2 /200°
K=5.6
1" DRY PENDENT CHROME IN COOLERS 2PC DEEP ESC.

GLOBE*
MODEL GL5632
22 /200°
K=5.6
1/2" VERTICAL SIDEWALL ON SPRIGS ON THE LINE UP TO 8' SPACING

GLOBE*
MODEL GL5626
7 /200°
K=5.6
1/2" BRASS HORIZONTAL SIDEWALL FOR COLUMNS
DELECTOR 2" BELOW TOP OF COLUMN

THESE ARE FOR STEEL PROTECTION ONLY PER F.R.M. PERFORMANCE BASED DESIGN

TOTAL HEADS ON THIS SHEET: 195

SCALE: 1/8"=1'-0"

REVISIONS:

NO.	DATE:	DESCRIPTION:
2	2/14/17	STEEL PROTECTION F.R.M.

DATE: DECEMBER 30, 2016
DESIGNER: ED POULIN (RMS# 515)
NICET LEVEL: IV CERT # 108534
CHECKED BY: J. FOSS

LOCATION:
1 THOMPSONS POINT
PORTLAND, ME

DRAWING TITLE:
BRICK SOUTH
AT THOMPSONS POINT
(MATCHLINE-W)
FIRE PROTECTION PLAN
(NFPA 13 2016ed.)

DRAWING NO.:
FP-01 REVISED