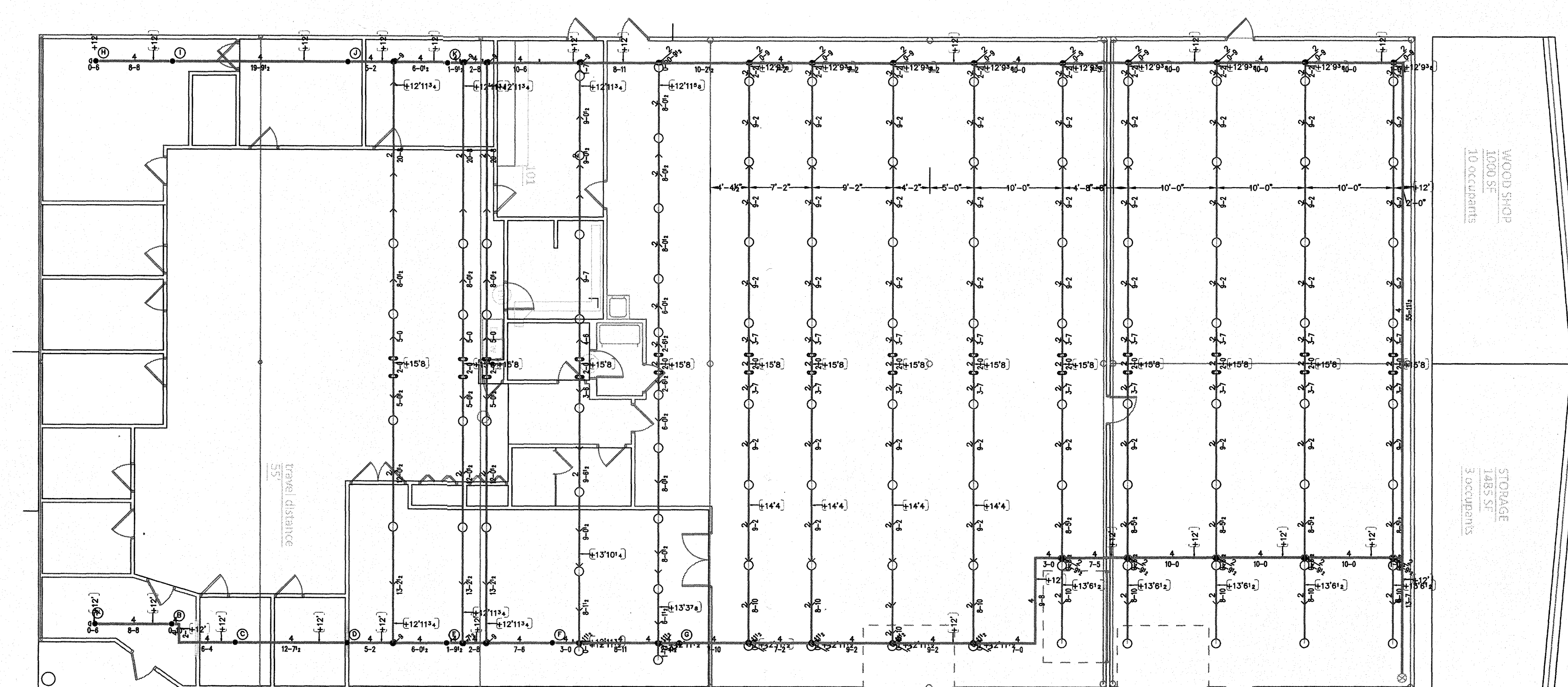
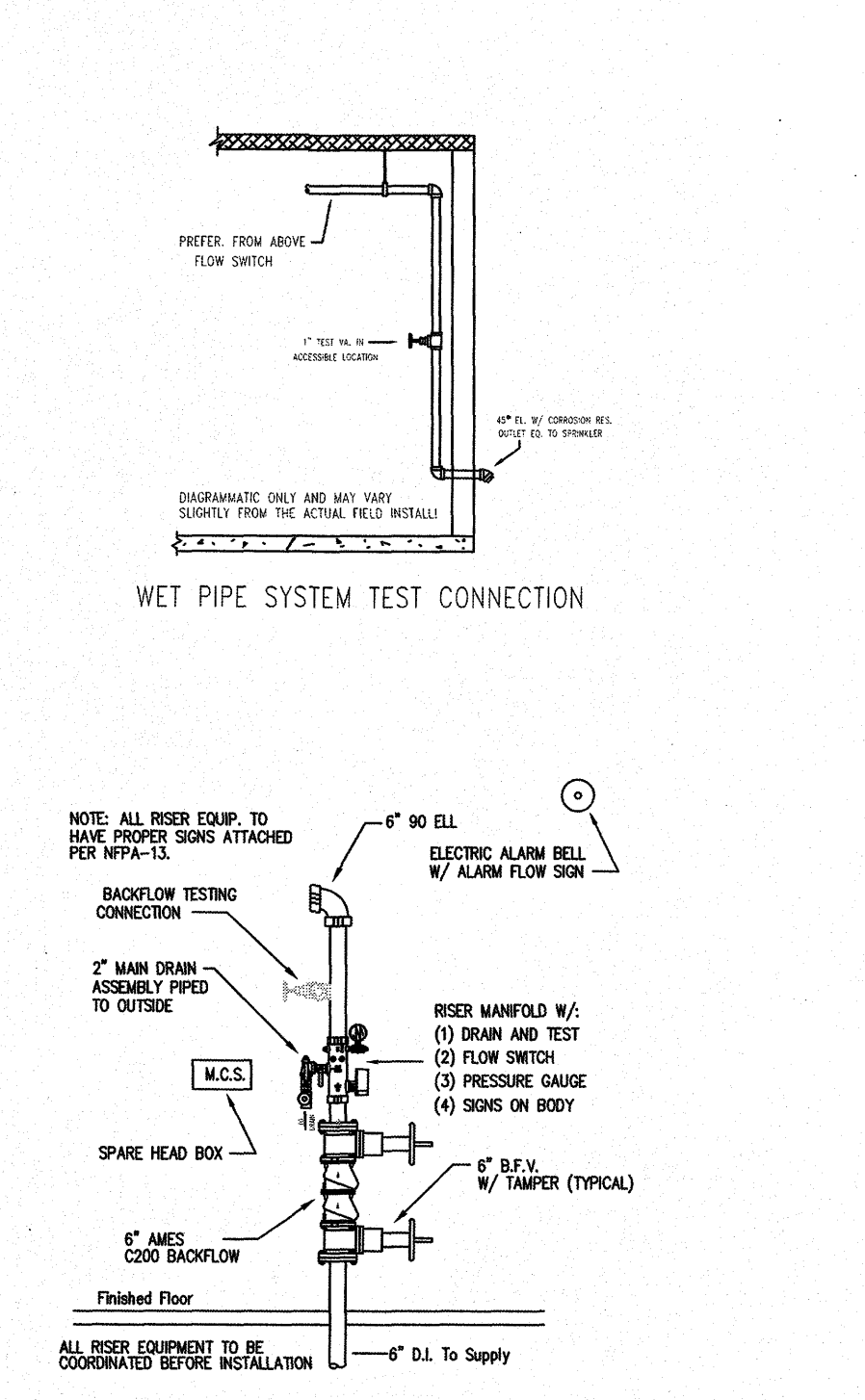


OFFICE PLAN
SCALE: 1/8"=1'-0"



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



RISER DETAIL
SCALE: NOT TO SCALE

M.C.S. FIRE PROTECTION NOTES

- PLANS CONFORM TO THE 2013 EDITION OF NFPA 13 AND LOCAL A.H.J. REQUIREMENTS.
- ALL THREADED PIPE 2" & SMALLER IS SCH. 40. ALL GROOVED PIPE 1-1/2" & LARGER IS SCH. 10. ALL UNDERGROUND IS DUCTILE IRON.
- ALL FITTINGS PER NFPA 13 TO BE GROOVED FITTINGS AND COUPLINGS FOR SCH. 10 PIPE AND GROOVED, CAST OR MALLEABLE IRON SCREWED FITTINGS FOR SCH. 40 PIPE.
- FOR BUILDING OCCUPANCY, ALL SPRINKLERS SHALL HAVE THEIR DEFLECTORS INSTALLED BELOW ROOF AND/OR CEILING ASSEMBLIES BETWEEN 1" TO 12" MAXIMUM, DEPENDING ON THE TYPE OF ROOF AND/OR CEILING CONSTRUCTION CLASSIFICATION.
- OTHERS ARE RESPONSIBLE FOR MAINTAINING BUILDING TEMPERATURE AT ABOVE FREEZING.
- THE UNSUPPORTED LENGTH BETWEEN THE END SPRINKLER AND THE LAST HANGER SHALL NOT BE MORE THAN 36" FOR 1" PIPE, OR 48" FOR 1-1/4" PIPE.
- ALL ARMORERS GREATER THAN 24" SHALL BE SUPPORTED BY A HANGER.
- 1" TO 4" PIPE TO BE SUPPORTED WITH 3/8" ALL THREAD ROD AND 3/8" HANGER ASSEMBLIES. 5" TO 6" PIPE TO BE SUPPORTED WITH 1/2" ALL THREAD ROD AND 1/2" HANGER ASSEMBLIES.
- CONTROL VALVES TO BE PROVIDED WITH TAMPER SWITCHES INSTALLED BY M.C.S. & CONNECTED TO FIRE DEPARTMENT REMOTE STATION. WIRING BY OTHERS.
- NO COMBUSTIBLE CONSTRUCTION WILL BE ABOVE THE CEILINGS, BELOW FLOORS, OR IN ANY CONCEALED SPACES UNLESS PROTECTED BY SPRINKLERS.
- IF HORIZONTAL OVERHEAD DOORS ARE PROVIDED, SPRINKLER PROTECTION SHALL BE PROVIDED BOTH ABOVE AND BELOW THE DOORS (UNLESS NOTED OTHERWISE).
- BEFORE ANY SPRINKLER PIPING IS CONCEALED THE SPRINKLER CONTRACTOR SHALL NOTIFY LOCAL A.H.J. INSPECTOR 48 HOURS IN ADVANCE, SO THAT THE FIRE INSPECTOR CAN INSPECT THE SYSTEMS PIPING FOR CONFORMANCE WITH CODE REQUIREMENTS.
- HYDROSTATICALLY TEST ALL NEW SPRINKLER PIPING AT 200psi FOR 2 HOURS. NOTIFY LOCAL A.H.J. AND/OR PROPER AUTHORITIES 48 HOURS PRIOR TO TEST.
- ALL OFFICE AND BREAKROOM AND RESTROOMS ARE CLASSIFIED AS LIGHT HAZARD OCCUPANCIES.
- MEZZANINE, AND STORAGE CLOSETS ARE CLASSIFIED AS ORDINARY HAZARD OCCUPANCIES.
- WAREHOUSE IS CLASSIFIED AS EXTRA HAZARD GROUP 2 OCCUPANCIES.

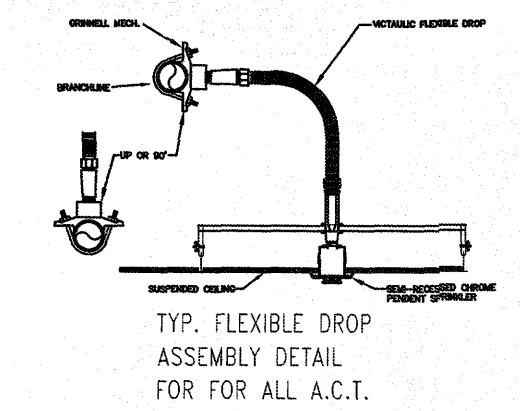
HYDRAULIC DESIGN DATA

A.H.J., ROANOKE COUNTY
DESIGN STD., NFPA 13 2013 EDITION
PIPE TYPES
MAINS, SCHEDULE 10
BRANCHES, SCHEDULE 10/40
SPRINKLER ORIFICE 1/2" K= 5.6

AREA LOCATION, REMOTE AREA #2
OF FLOWING SPRINKLERS, 8
DENSITY, 10 G.P.M./SQ.FT. 900
REMOTE AREA, 802 SQ.FT.

DEMAND AT BASE OF RISER
FLOW, 435.5 G.P.M.
PRESSURE, 32.7 P.S.I.
INSIDE HOSE STREAM, 0 G.P.M.

DEMAND AT SOURCE CONNECTION
FLOW, 435 G.P.M.
PRESSURE, 32.7 P.S.I.
OUTSIDE HOSE STREAM, 100 G.P.M.



REVISION NOTE
THE VAULT AND UNDERGROUND WAS MOVED TO THE RIGHT 3 FOOT.. ALSO THE RUN IN WAS MOVED TO THE SIDE OF THE BUILDING.

NOTE: ALL UPRIGHT SPRINKLERS TO BE 1"-12" BELOW ROOF DECK!

NOTE: ALL SPRINKLER HEADS IN THE WAREHOUSE ARE SPACED FOR EXTRA HAZARD GROUP 2!

NOTE: ALL SPRINKLER HEADS IN THE OFFICE ARE SPACED FOR LIGHT HAZARD!

NOTE: ALL SPRINKLER HEADS ABOVE THE OFFICE AREA ARE SPACED FOR ORDINARY HAZARD GROUP 2!

SCOPE OF WORK

MAGIC CITY SPRINKLER HAS BEEN CONTRACTED TO DESIGN & INSTALL A NEW WET AUTOMATIC SPRINKLER SYSTEM FOR DAVIDSON HOUSE ON COMMONWEALTH DR. IN ROANOKE CO., VA PLANS CONFORM TO THE NFPA-13 2013 EDITION. AND THE LOCAL AUTHORITY HAVING JURISDICTION. MAGIC CITY SPRINKLER IS NOT RESPONSIBLE FOR THE INSTALLATION OF UNDERGROUND PIPING, VAULT INSTALLATION, NOR CONNECTING TO THE CITY WATER MAIN. IT IS TO BE INSTALLED AND SUBMITTED BY OTHER.

HYDRAULIC DESIGN DATA

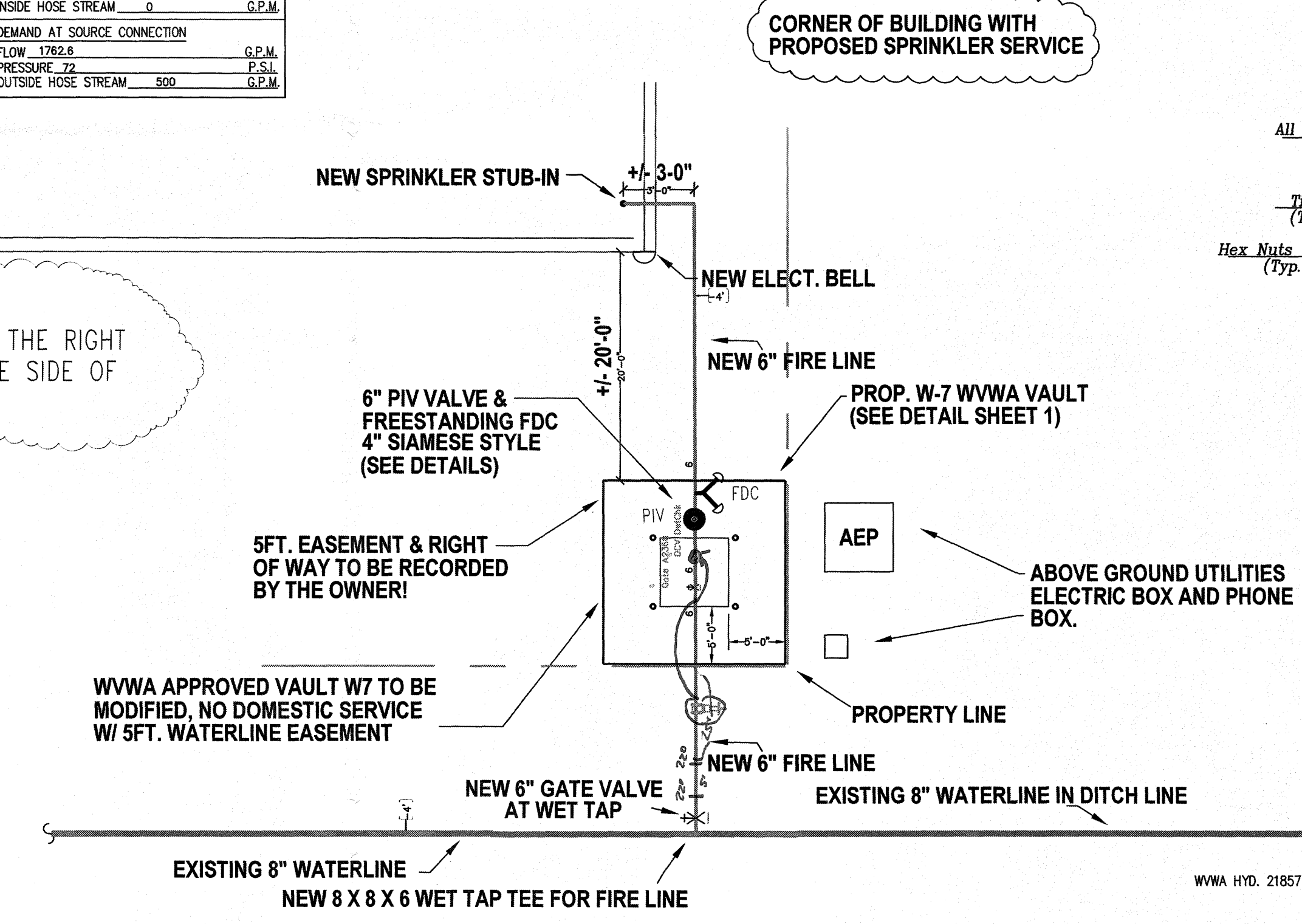
A.H.J., ROANOKE COUNTY
DESIGN STD., NFPA 13 2013 EDITION
PIPE TYPES
MAINS, SCHEDULE 10
BRANCHES, SCHEDULE 10/40
SPRINKLER ORIFICE 3/4" K= 11.2

AREA LOCATION, REMOTE AREA #1
OF FLOWING SPRINKLERS, 34
DENSITY, 40 G.P.M./SQ.FT. 2500
REMOTE AREA, 2228 SQ.FT.

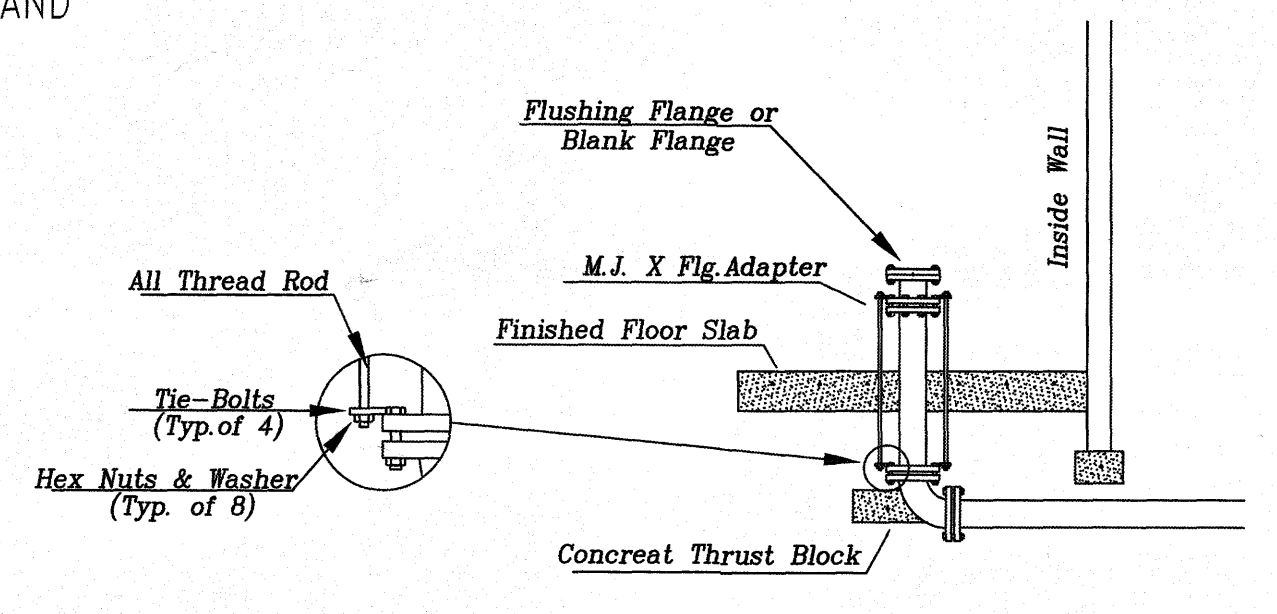
DEMAND AT BASE OF RISER
FLOW, 1763 G.P.M.
PRESSURE, 72 P.S.I.
INSIDE HOSE STREAM, 0 G.P.M.

DEMAND AT SOURCE CONNECTION
FLOW, 1762.6 G.P.M.
PRESSURE, 72 P.S.I.
OUTSIDE HOSE STREAM, 500 G.P.M.

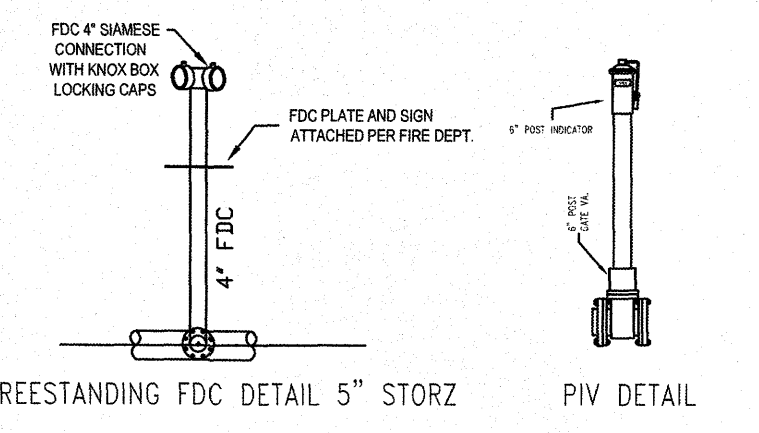
THE VAULT AND UNDERGROUND DETAIL IS FOR DESIGN PURPOSES ONLY, ALL UNDERGROUND WORK EXCLUDING 5' OUT IS TO BE INSTALLED AND SUBMITTED BY OTHERS!



SITE PLAN
SCALE: NOT TO SCALE



TYPICAL STUB-IN DETAIL



FREESTANDING FDC DETAIL 5" STORZ

Material - 6" Class 350 DIP U.S.P.V.C
6" A.P.C. TAPPING Valve
18" to Right "off"

WATER INFORMATION

Static: 99 psi
Residual: 87 psi
Flow: 1866 gpm
Test by: W.V.W.A.
Test performed: 12-20-2019

DENNIS W. HAYES
CERTIFICATION NO. 119886
CERTIFICATION LEVEL 3
SENIOR TECHNICIAN

Contractor: Jack St. Clair
Inspector: Brian Whitcraft

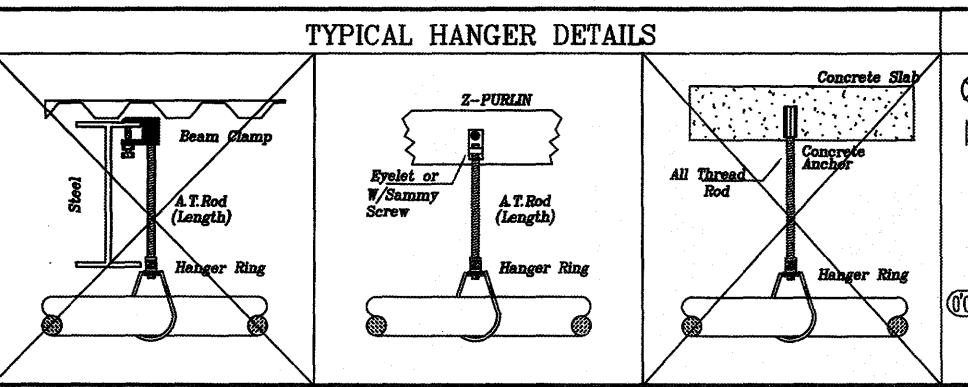
JOB NORTH

QTY. SYM. MAKE FINISH TEMP K NPT MFG. MODEL SIN No. ESCUTCHEON

44	OR-SSP	CHROME	155	5.6	1/2"	TYCO	TY-FRB	TY3231	S. RECESSED
102	OR-SSU	BRASS	155	11.2	3/4"	TYCO	TY-EL0	TY5151	N/A
3	OR-HSW	CHROME	155	5.6	1/2"	TYCO	TY-FRB	TY3231	N/A

149 TOTAL THIS SHEET PROJECT TOTAL 149

- GENERAL NOTES**
- ALL PIPE 2" AND SMALLER TO BE SCHEDULE 10 AND/OR 40 STEEL PIPE. PIPE 2-1/2" AND LARGER TO BE SCHEDULE 10 AND/OR 40 STEEL PIPE.
 - ALL SPRINKLER SYSTEM MATERIALS TO BE U.L. LISTED AND/OR FACTORY MUTUAL APPROVED.
 - PIPE HANGERS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF NFPA 13 2010.
 - IT IS THE RESPONSIBILITY OF THE OWNER TO PROVIDE AND MAINTAIN HEAT IN ALL AREAS OF SPRINKLER SYSTEM SUBJECT TO FREEZING.
 - PAINTING AND PATCHING BY OTHERS.
 - ELECTRICAL WIRING BY OTHERS.
 - SPRINKLER HEADS ARE NOT REQUIRED TO BE CENTERED IN CEILING TILES ONE WAY.



- SYMBOL LEGEND**
- SYSTEM RISER - SEE RISER DETAIL
 - SYSTEM CONTROL VALVE
 - PIPE RISE OR DROP
 - NEW PIPE
 - EXISTING PIPE
 - PIPE HANGER
 - GROOVED COUPLING
 - PIPE CENTERLINE ABOVE FINISHED FLOOR
 - DISTANCE BELOW DECK IN INCHES TO CENTERLINE OF PIPE
 - HYDRAULIC NODE OR REFERENCE POINT
 - PIPE CAP
 - SPRINKLER MAIN LINE PIPE TAG
 - SPRINKLER BRANCH LINE PIPE TAG
 - CDPC BACKFLOW PREVENTER W/ TAMPER SWITCHES
 - FIRE DEPARTMENT CONNECTION
 - ACTUAL CUT LENGTH OF PIPE
 - DIMENSION FROM STEEL OR WALL

REVISIONS

DATE	DESCRIPTION	BY
1/6/2020	SUBMITTED	TO
5/28/2020	RESUBMITTED	TO

Magic City Sprinkler, Inc.
7601 GRANBY STREET N.E., ROANOKE, VIRGINIA 24012 (540)345-9818

DAVIDSON HOUSE
6410 COMMONWEALTH DR. ROANOKE, VA 24018

FIRE PROTECTION PLAN

Drawn by: T. OBENCHAIN Permit # Insp. Tel #
Checked by: D.H. File name: Job no. 7628-19
Scale: 1/8"=1'-0" UNO Date: 1/6/2020 Sheet 1 of 1

6/2/2020

AS-built