

HYDRAULIC-SYSTEM
THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM.

LOCATION: **THIRD FLOOR**

No. OF SPRINKLERS: **8**
(1 OCCUPIED)

BASIS OF DESIGN:
1. DENSITY (GPM/SQFT.) **.1**
2. DESIGNED AREA OF DISCHARGE (GAL.) **980**

SYSTEM DEMAND:
1. WATER FLOW RATE (GPM) **166.37**
2. DESIGN PRESSURE AT THE BASE **73.331** (PSI)

HYDRAULIC DATA NAMEPLATE
TO BE MOUNTED AT SYSTEM RISER

(OFFICE) HYDRAULICALLY MOST REMOTE AREA
(1.1 GPM/SQFT. / 380 SQ.FT.)
(ELEV. @ HIGHEST HEAD = 148.00)

TO CONTINUE FOLLOWING HYDRAULIC REFERENCE NOTES SEE DWG #E-2156-95 MAIN BANK & TRUST SHEET 1 OF 1

GENERAL NOTES

SCOPE OF WORK:
EASTERN FIRE TO START AT 3" CAP OFF THE 4" STANDPIPE IN THE STAIRWELL TO INSTALL NEW SPRINKLER SYSTEM THROUGHOUT THIRD FLOOR TENANT SPACE ONLY UNLESS OTHERWISE SPECIFIED TO REMAIN IN ALL OTHER PORTIONS OF THE BUILDING.

ALL WIRING TO BE DONE BY OTHERS.

ALTHOUGH NOT SPECIFIED, SOME SPRINKLER HEADS HAVE BEEN SHOWN @ CENTERLINE OF TILE. ACTUAL ORIENTATION OF HEADS WITH RESPECT TO CEILING COMPONENTS WILL VARY ACCORDING TO FIELD CONDITIONS.

ALL DIMENSIONS ARE SHOWN FOR GENERAL LOCATION OF SPRINKLER HEADS. PIPING MAY VARY TO SUIT ACTUAL FIELD CONDITIONS.

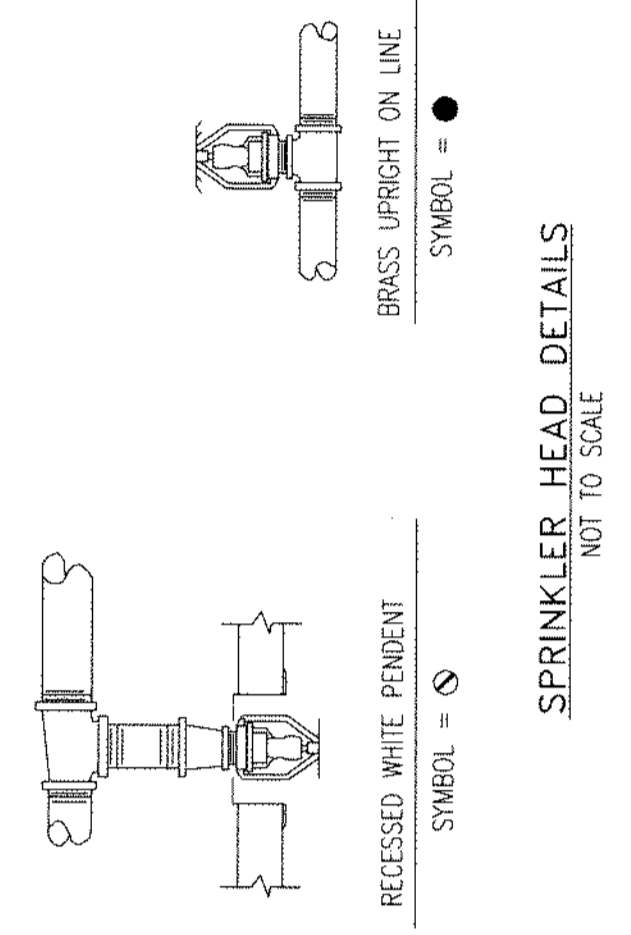
ACOUSTICAL CEILING TILE (ACT) TO BE LISTED NON-COMBUSTIBLE WITH UL FLAME SPREAD OF LESS THAN 25.

OCCUPANCY DESCRIPTION AND CLASSIFICATION:
GENERAL OFFICES; LIGHT HAZARD
MECHANICAL & STORAGE AREAS; ORDINARY HAZARD I

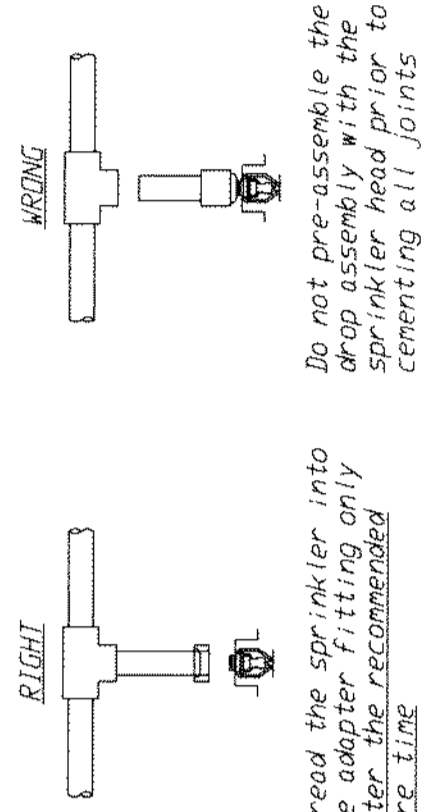
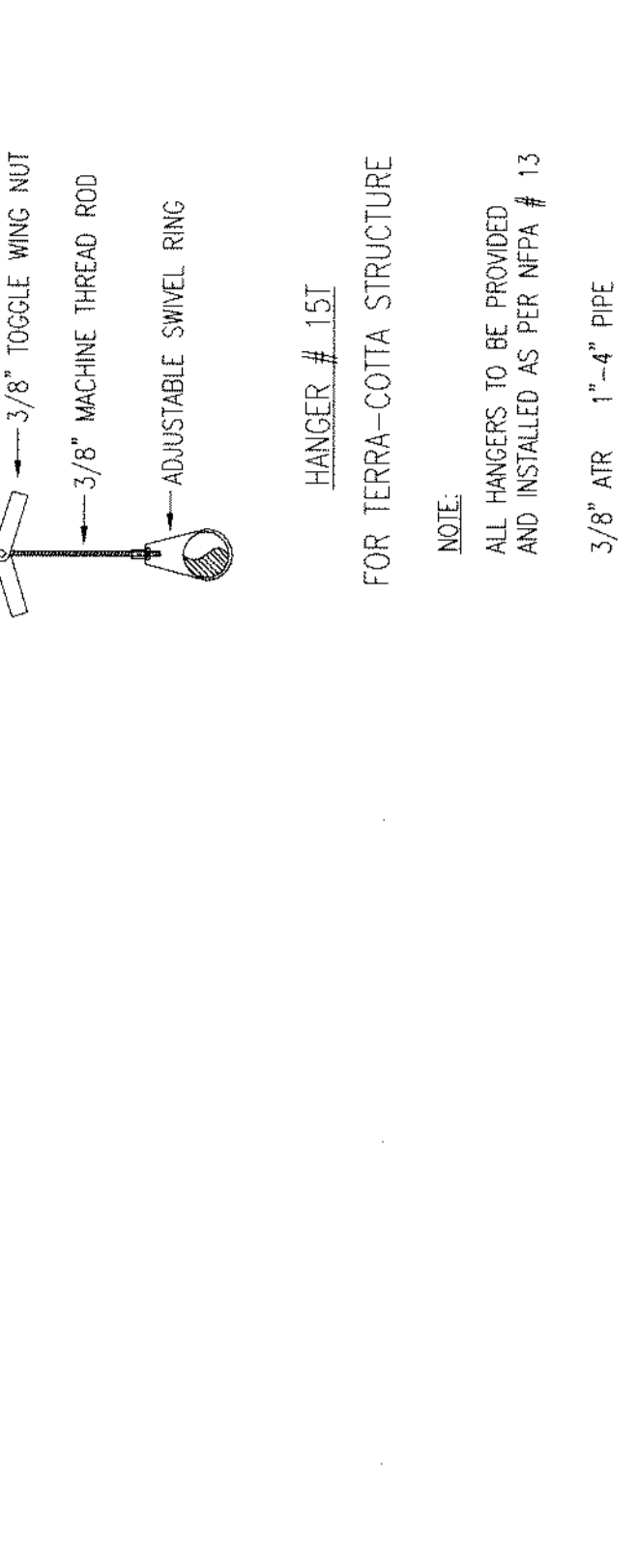
○ = INDICATES HYDRAULIC REFERENCE POINTS.

F.F. & INDICATES FINISH FLOOR UP TO CENTERLINE OF PIPE.

FOR RISER, SEE PLAN & WATER DATA SEE MAIN BANK & TRUST SECOND FLOOR & BASEMENT DWG #E-2156-95 SHEET 1 OF 1



SPRINKLER HEAD DETAILS
NOT TO SCALE



CIVC SPRINKLER HEAD INSTALLATION DETAIL
NOT TO SCALE

APPLYING GENERAL SETTING AND CURE TIMES

Prepare pipe by leveling outside end 10" to 15", deburring end and wiping any excess fittings. Apply a heavy, even coat of solvent cement to the outside of the pipe, a neat coat to the inside of the fitting socket and for pipe sizes 1 1/2" and larger, also coat the inside of the pipe. Leveling allows the cement to remain on the fitting socket inside wall.

A bead of solvent cement should be evident around the pipe and fitting. Indicate that sufficient cement was applied.

Wipe off excess cement on the outside of the joint. The solvents will evaporate, but the solvent cement inside the socket should remain.

WARNING: Applying the top coat of cement. Do not allow the cement to dry beyond the bottom of fitting socket. Excessive cement on the pipe and/or fitting can result in a weak joint. Failure to apply cement carefully could result in a weak joint. Refer to the cure time tables for minimum cure times prior to pressure testing.

Store cement in a warmer area when not in use and make sure they remain fluid. Do not allow the cement to freeze or become "jelly-like". Gelled cement shall be discarded.

Sprinkler heads shall be installed only after all the CIVC pipe and fittings, including the sprinkler head adapters, are solvent welded to the piping and allowed to cure for a minimum of 30 minutes. Sprinkler head fittings should be installed after the piping is cured. Allow sufficient time for the water way and threads are clear of any excess cement.

If it is an unacceptable practice to thread the sprinkler head into the adapter fitting prior to cementing the adapter to the pipe.

Once an installation is completed and cured, per the appropriate table, the system should be tested with water at 200 psi for 2 hours, or at 50 psi in excess of the maximum pressure when the maximum pressure to be maintained in the system is in excess of 150 psi, in accordance with the requirements established by NFPA 13.

For fire sprinkler systems in one and two family dwellings and mobile homes, the test pressure testing, the sprinkler system shall be filled with water and air bleed from the highest and farthest sprinkler head before test pressure is applied. Air or compressed gas should never be used for pressure testing. If a leak is found, the fitting must be cut out and discarded. A new section can be installed using couplings or unions. Unions should be used in accessible areas only.

NOTES:
Listings and approvals do not cover any painted CIVC fire sprinkler products. Water-base acrylic latex paint is the preferred and recommended paint to be used on fire sprinkler products. A list of these firestop systems can be found along with the listing information on line at www.elsewester.com. See also, these products. Unacceptable: Etal, Elastomeric, etc.

Referenced table is the recommended solvent for threaded connections to CIVC fire sprinkler products. When using Gray Grey White Thread Sealant, it should be applied to male threads only.

Firestop systems such as H-111 FS-type have been found to be compatible with CIVC fire sprinkler products. A list of these firestop systems can be found along with the listing information on line at www.elsewester.com. See also, these products. Unacceptable: Elastomeric, etc.

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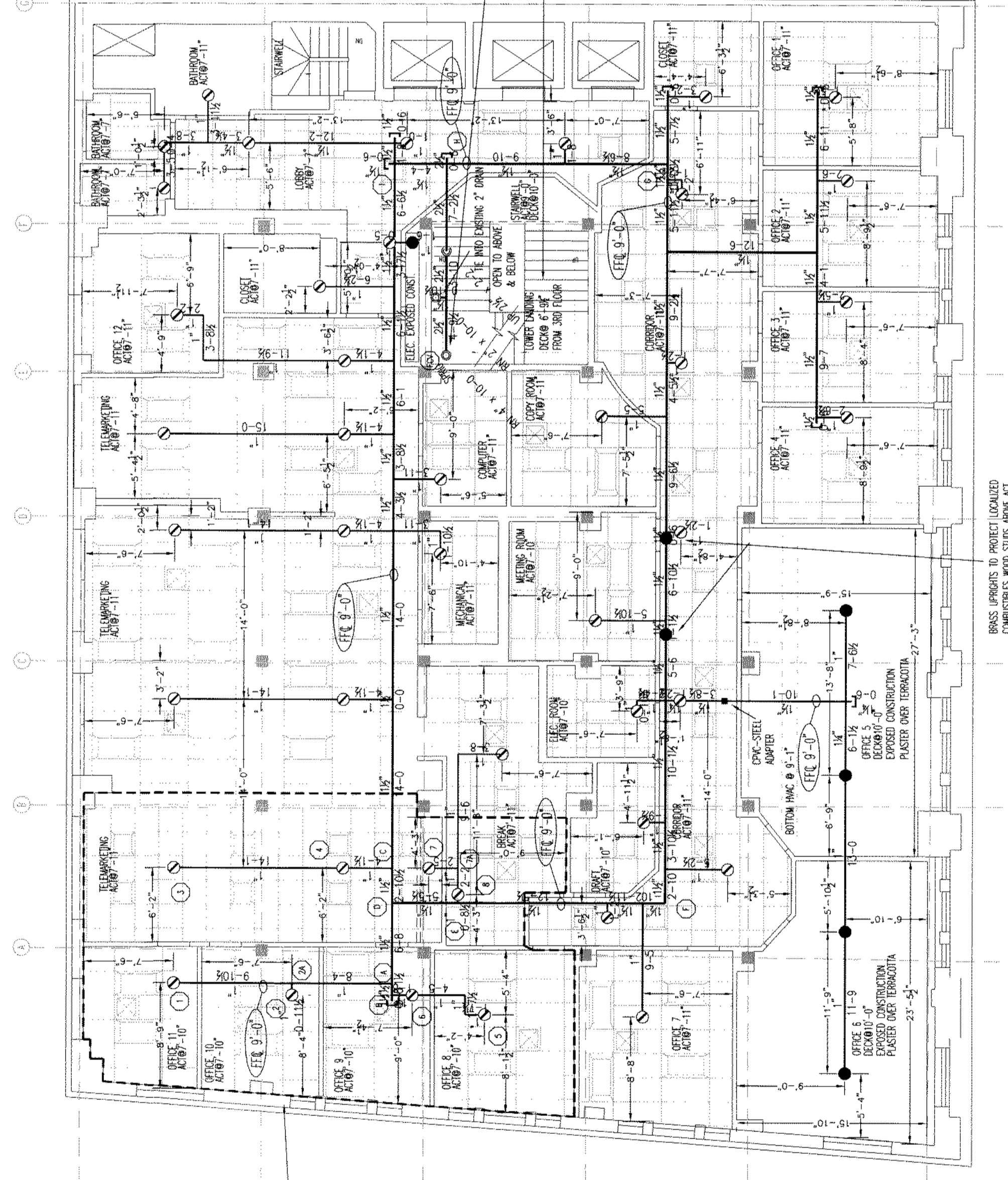
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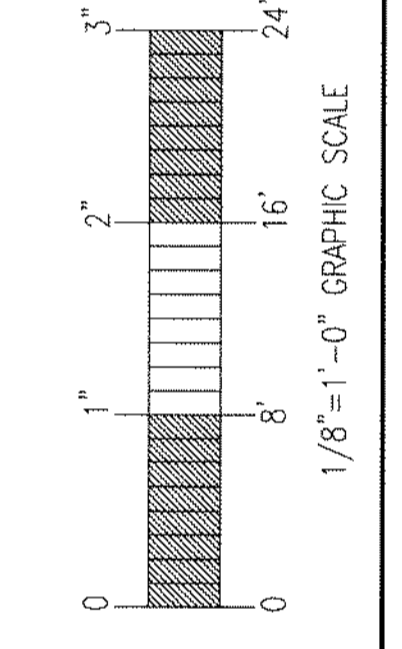
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FIRE SPRINKLER PLAN - THIRD FLOOR
SCALE: 1/8"=1'-0"
AREA PROTECTED: 6,480 SQ.FT.
FINISH FLOOR ELEVATION: 140'-0"
COLOR CODE:

Symbol	Count	Thread	K-Factor	Description	Note
●	7	1/2"	5.6	TYCO TY-R88 T213.200Z BRASS	on Line
○	43	1/2"	5.6	TYCO TY-R88 T213.200Z WHITE	on Drop

50 = Total Number of Heads This Floor



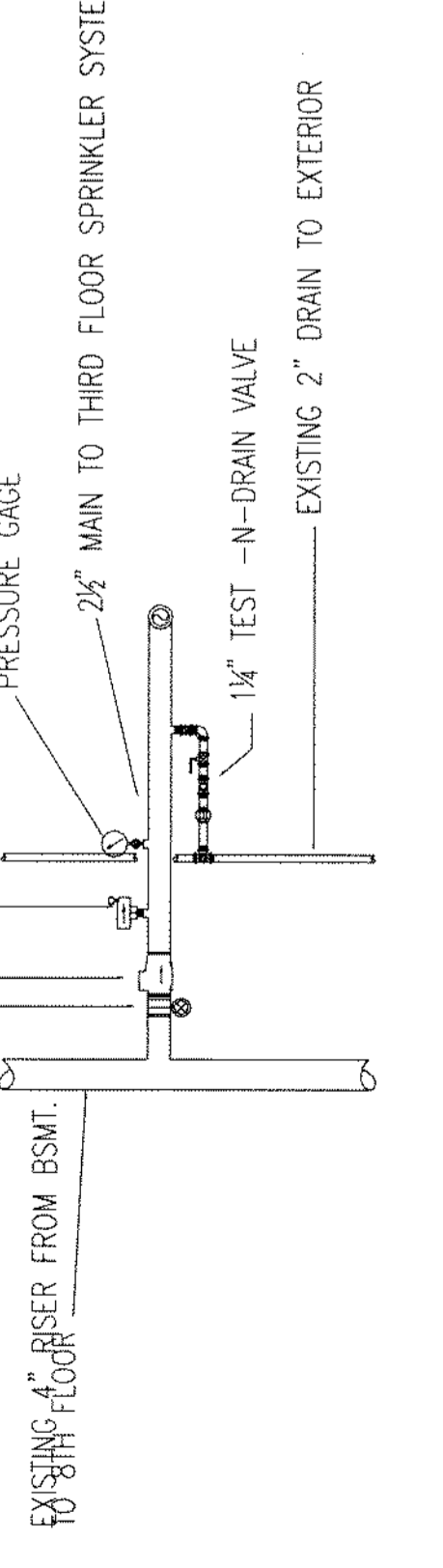
GENERAL NOTES

SPRINKLER SYSTEM INSTALLATION TO COMPLY WITH NFPA PAMPHLET # 13 (2010) EDITION

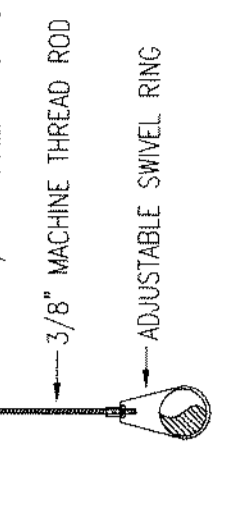
EXPOSED BRANCH LINE PIPING (1-1/2") TO BE BLACK SCHEDULE 40 JOINED BY THREADED DUCTILE IRON FITTINGS

MAIN PIPING (2-1/2-4") TO BE SCHEDULE # 10 BLACK WITH GROOVED ENDS & WELDED OUTLETS JOINED BY MECHANICAL COUPLINGS

OWNER TO PROVIDE SUFFICIENT HEAT THROUGHOUT BUILDING TO PREVENT FREEZING OF WATER FILLED SPRINKLER PIPING AND EQUIPMENT. (40 F)

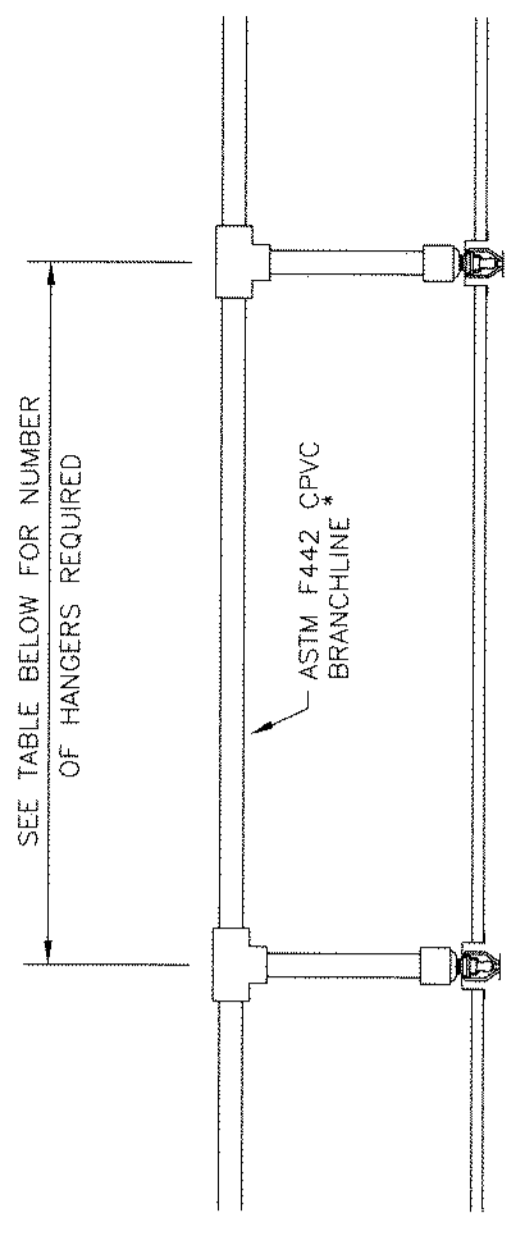


"FOVA" DETAIL
SCALE: N.T.S.



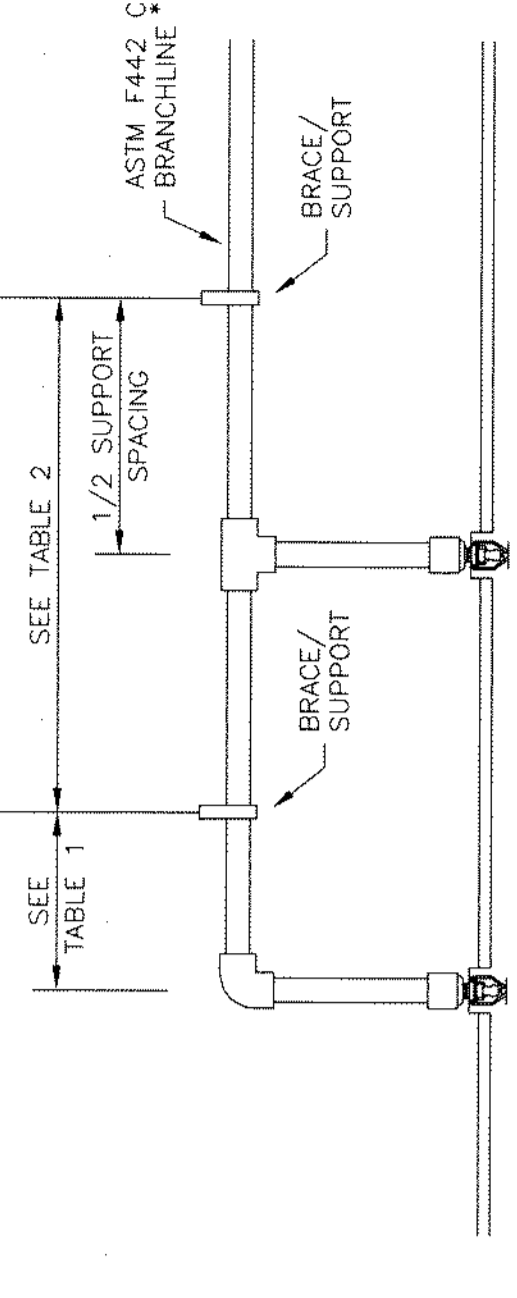
HANGER #151
FOR TERRA-COTTA STRUCTURE

NOTE:
ALL HANGERS TO BE PROVIDED AND INSTALLED AS PER MEPA # 13
3/8" AIR 1"-4" PIPE



MINIMUM ALLOWABLE HANGERS PER LENGTH OF PIPE

NATIONAL SANITATION FOUNDATION (NSF) APPROVED FOR USE WITH POURABLE WATER



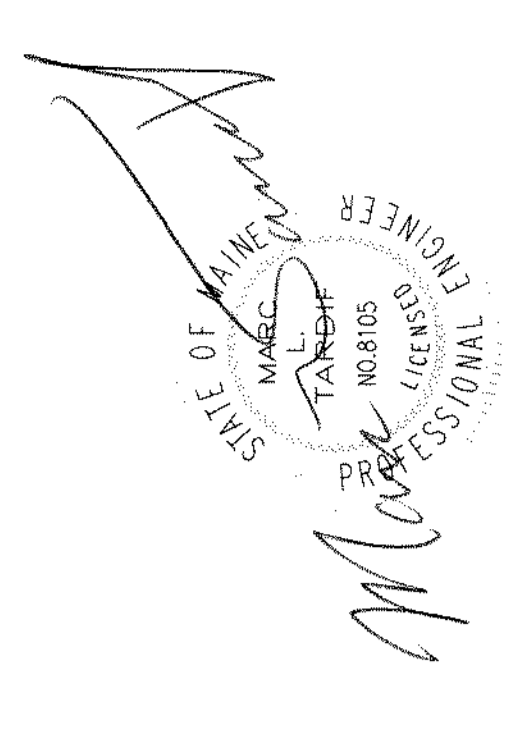
PIPE SIZE	MAXIMUM SUPPORT SPACING
3/4"	< 100 psi
1"	> 100 psi
1-1/4"	12"
1-1/2"	16"
1-3/4"	24"

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TABLE 2
MAXIMUM SUPPORT SPACING DISTANCE IN-LINE SPRINKLER HEAD DROP TEE

PIPE SIZE	SYSTEM PRESSURE
3/4"	< 100 psi
1"	> 100 psi
1-1/4"	4'
1-1/2"	6'
1-3/4"	7'

CIVC HANGER INSTALLATION DETAIL
NOT TO SCALE



465 CONGRESS ST.
THIRD FLOOR
PORTLAND, ME

CONTRACT WITH: OWNER

EASTERN FIRE PROTECTION
AIRBURY/LEWISTON INDUSTRIAL AIRPARK, AUBURN, MAINE 04210

DATE: 04/16/13

DWG. NO. 1 OF 1

JOB NUMBER AU-5019-13

SCALE AS NOTED

DATE	REVISIONS
4/16/13	SUBMITTAL PLAN

REQUIRED APPROVALS
OWNER / ARCHITECT
STATE FIRE MARSHAL
PORTLAND FIRE DEPARTMENT

REVISIONS
OWNER / ARCHITECT
STATE FIRE MARSHAL
PORTLAND FIRE DEPARTMENT

OWNER / ARCHITECT

STATE FIRE MARSHAL

PORTLAND FIRE DEPARTMENT

DRAWN BY

INSET LEVEL

CERT. #

CHECKED BY

INSET LEVEL III

CERT. # 095574

CONTRACTOR LICENSE # 101

CONTRACTOR BUS. # 368