

SEISMIC RESTRAINT TO BE DONE BY OTHERS.

NOTES

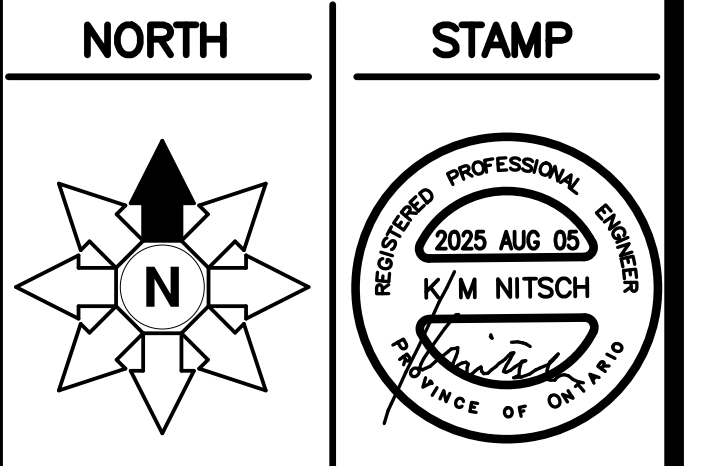
- THIS DRAWING ASSOCIATED CALCULATIONS AND SPECIFICATIONS SHALL BE REVIEWED BY THE DESIGNER PRIOR TO THE RETURNED AT THE COMPLETION OF THE WORK OR UPON REQUEST.
- THE SPRINKLER SYSTEM SHALL BE INSTALLED AS PER N.F.P.A. STANDARDS # 13, AND # 15.
- CONTRACTOR TO VERIFY FOR OFFSETS IN BRANCH LINES AND MAINS.
- ALL MATERIALS TO BE U.L.C. LISTED AND APPROVED BY LOCAL AGENCIES.
- UNDERGROUND WATERLINE TO BE INSTALLED ACCORDING TO THE AUTHORIZED AND INDICATED DEPT. OF PUBLIC WORKS.
- INSTALL HIGH PRESSURE TRENCH HEADS WHERE REQUIRED AS PER STANDARDS # 1.
- ALL INTERIOR GRS BRANCH LINE MEASUREMENTS ARE GIVEN (SCH 40 PIPE).
- CENTER LINE TO CENTER LINE (SCH 40 PIPE).
- ALL OTHER BRANCH LINE MEASUREMENTS ARE GIVEN AS CENTER LINE TO CENTER LINE (SCH 40 PIPE).
- MAIN MEASUREMENTS ARE GIVEN (WITH WALL) AS CENTER LINE TO CENTER LINE (SCH 40 PIPE).
- "C" DENOTES DEPTH OF CHIES FROM CENTER LINE OF PIPE TO UNDERSIDE OF CEILING.
- ON ENLIGHTEN ROSES NYPHLE.
- ON ENLIGHTEN ROSES CORNUS (PRESSURE) SWITCHES AND LOW PRESSURE SWITCHES TO BE CONNECTED TO FIRE.
- CONTRACTOR TO VISIT SITE TO DETERMINE EXACT LOCATION AND TYPE OF MANHOLES TO BE INSTALLED AS INDICATED BY THE DESIGNER PRIOR TO FABRICATION AND INSTALLATION.

APPARATUS BAY, KITCHEN, & STORAGE ROOMS
DESIGNED FOR ORDINARY HAZARD GROUP 1.
0.15 GPM PER SQ.FT.OVER 1500 SQ.FT.
PLUS 250 GPM FOR HOSES.
AS PER NFPA 13.

VEHICLE BAY SYSTEM DESIGNED FOR
ORDINARY HAZARD GROUP 1.
0.15 GPM PER SQ.FT.OVER 1950 SQ.FT.
(30% INCREASE FOR DRY SYSTEM.) PLUS
250 GPM FOR HOSES. AS PER NFPA 13.

DORMS, LOCKERS, GYM & OFFICES
DESIGNED FOR LIGHT HAZARD SPACING.
AS PER NFPA 13.

THOMASBROWNARCHITECTS
197 SPADINA AVENUE, SUITE 500 | TORONTO ONTARIO | M5T 2C8



PROJECT

 **Stouffville**

 **York Region**

**FIRE STATION &
YORK REGION PRS
4902 AURORA RD.,
WHITCHURCH—
STOUFFVILLE, ONTARIO**

DWG TITLE

PROPOSED SPRINKLER LAYOUT AND DETAILS

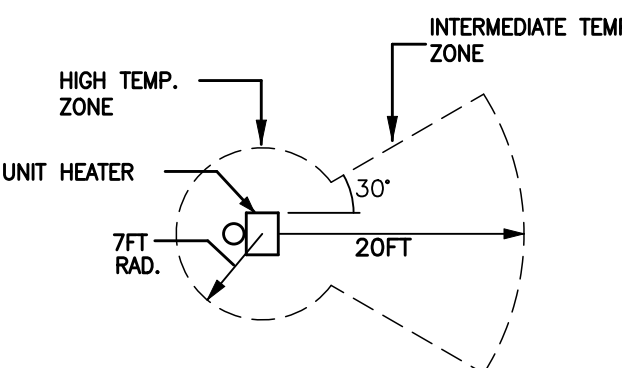
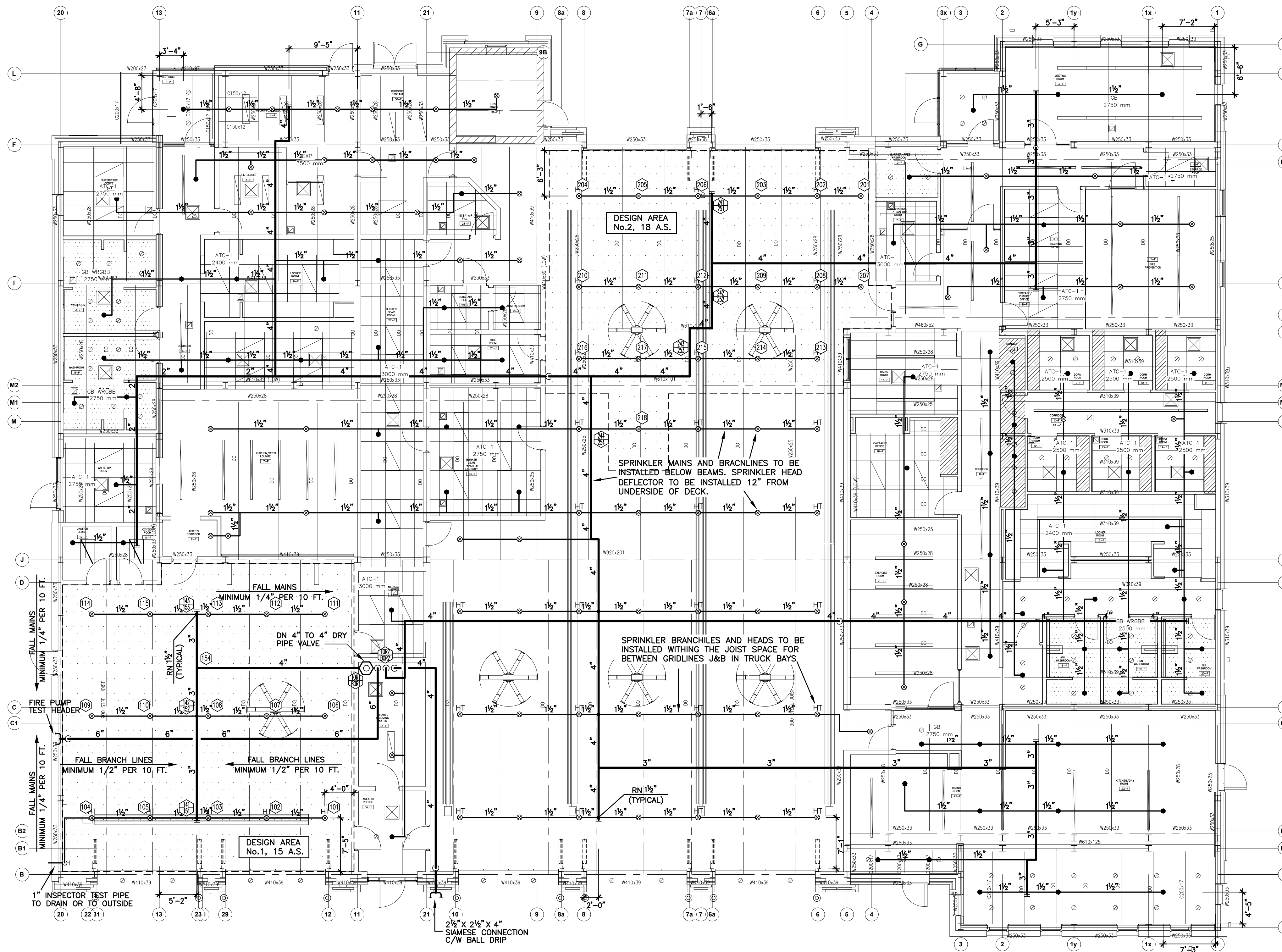
DATE	PROJECT NO.
AUGUST, 2025	

SCALE 1:100

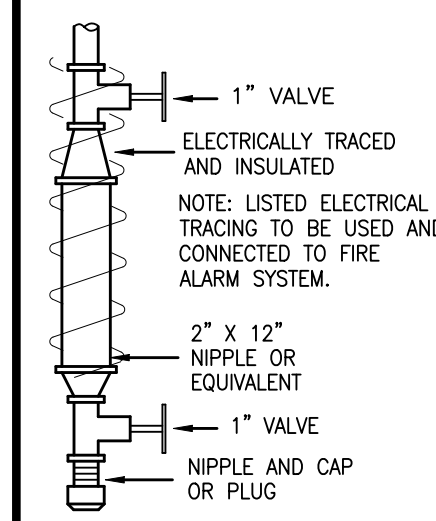
DWN BY G.K.	DWG NO.
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ISSUED FOR
REVISION NO.

OF 2



TEMPERATURE ZONES AT
UNIT HEATERS
N.T.S.



WHERE THE CAPACITY OF TRAPPED SECTIONS OF PIPE IS LESS THAN 5 GALLONS, THE AUXILIARY DRAIN SHALL CONSIST OF A VALVE NOT SMALLER THAN 1/2 IN. AND A PLUG OR A NIPPLE AND CAP.

WHERE THE CAPACITY OF ISOLATED TRAPPED SECTIONS OF SYSTEM PIPING IS MORE THAN 5 GALLONS, THE AUXILIARY DRAIN SHALL CONSIST OF TWO 1 IN. VALVES AND ONE 2 IN. BY 12 IN. CONDENSATE NIPPLE OR EQUIVALENT, ACCESSIBLY LOCATED.

DRUM DRIP DETAIL
N.T.S.

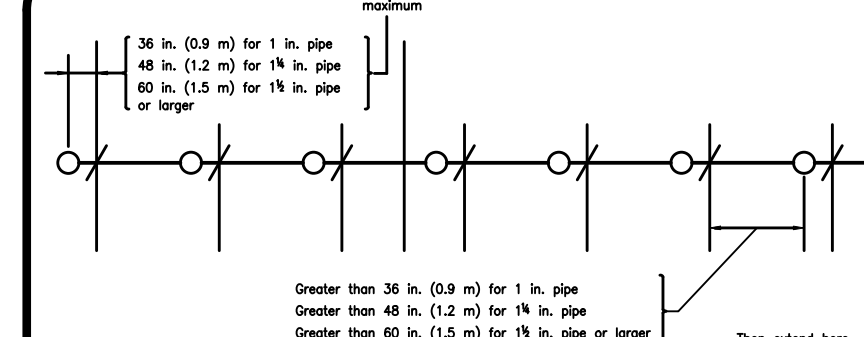


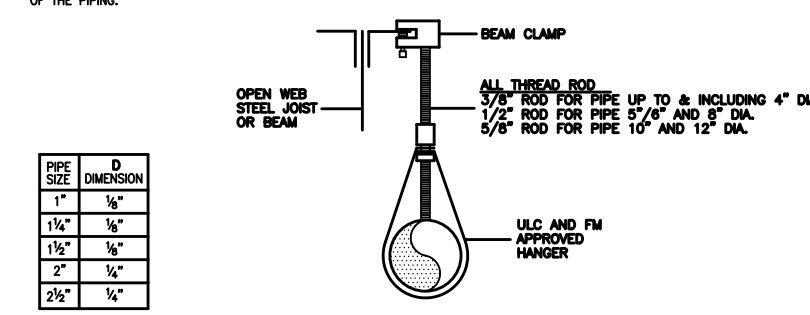
FIGURE A.9.2.3.4 Distance from Sprinkler to Hanger

WHEN MAXIMUM PRESSURES EXCEED 100 PSI
FOR BRANCH LINES ABOVE A CEILING SUPPLYING
PENDENT SPRINKLERS BELOW A CEILING

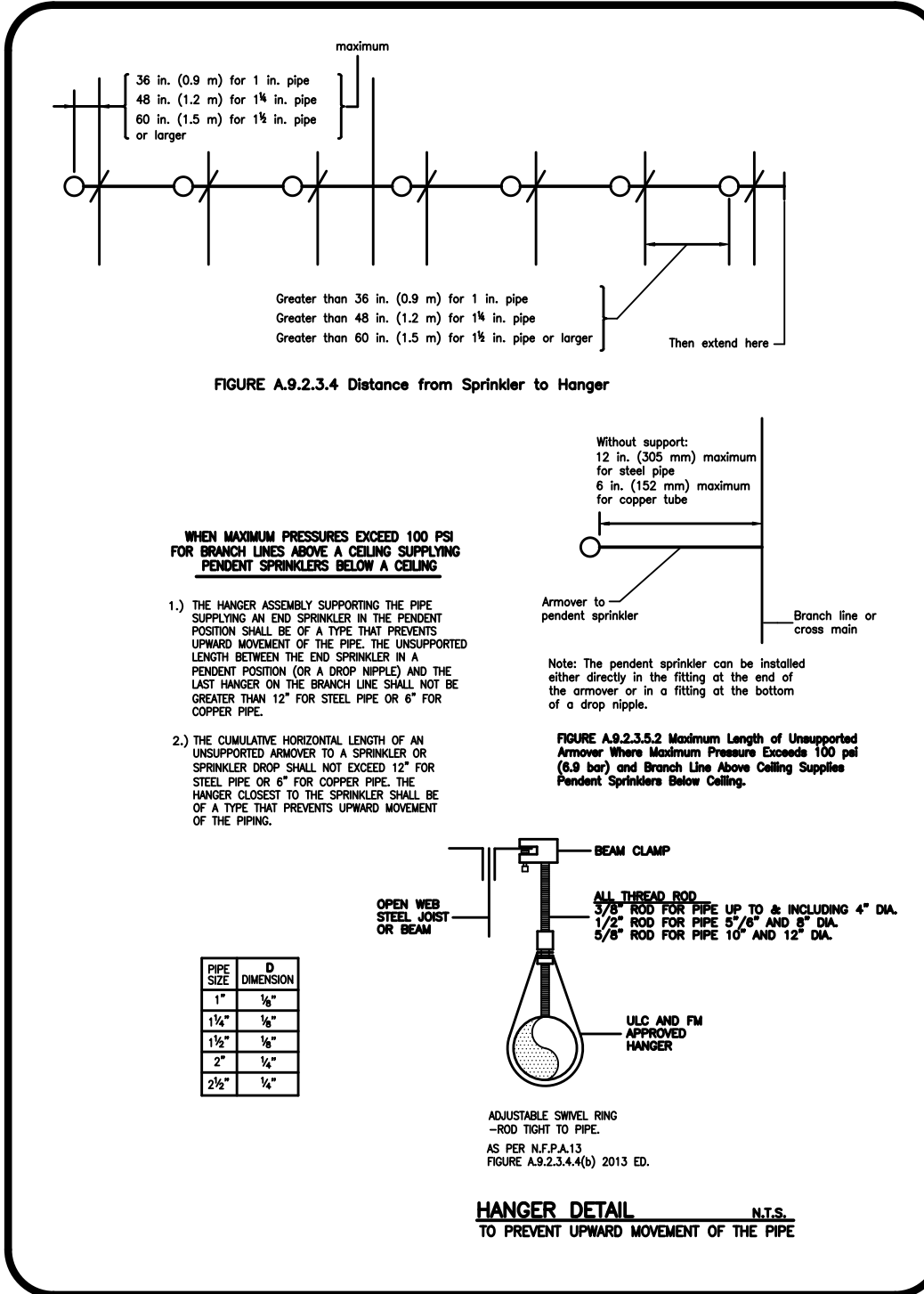
- 1.) THE HANGER ASSEMBLY SUPPORTING THE PIPE SUPPLYING AN END SPRINKLER IN THE PENDENT POSITION SHALL BE OF A TYPE THAT PREVENTS UPWARD MOVEMENT OF THE PIPE. THE UNSUPPORTED LENGTH BETWEEN THE END SPRINKLER IN A PENDENT POSITION (OR A DROP NIPPLE) AND THE LAST HANGER ON THE BRANCH LINE SHALL NOT BE GREATER THAN 12" FOR STEEL PIPE OR 6" FOR

Note: The pendent sprinkler can be installed either directly in the fitting at the end of the armover or in a fitting at the bottom of a drop nipple.

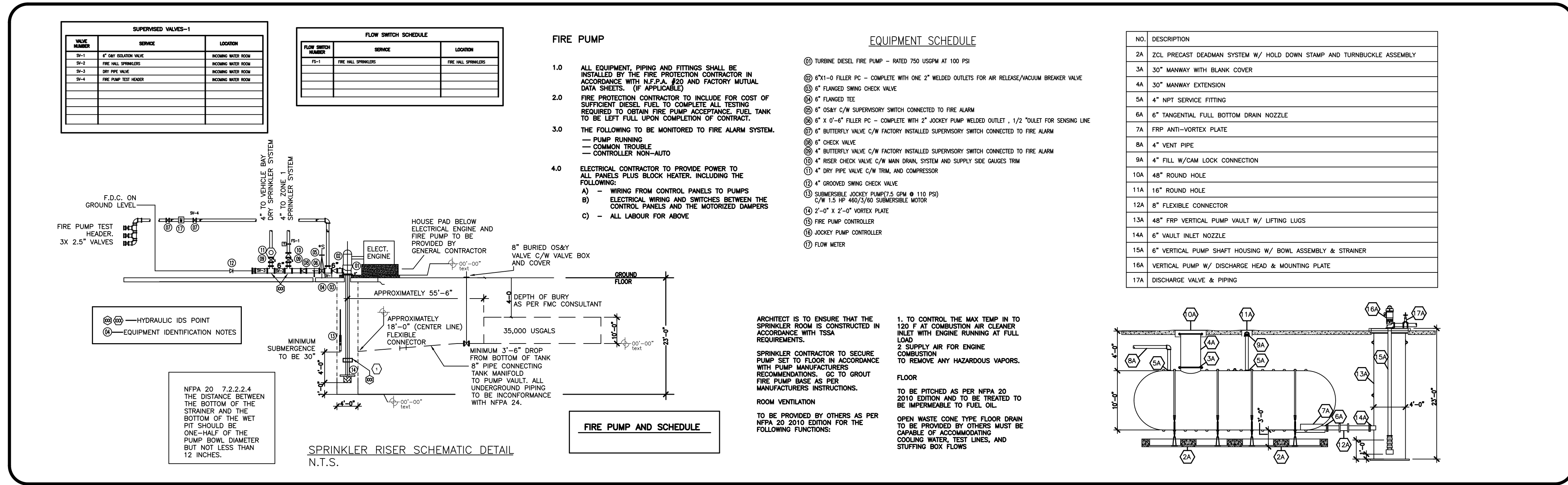
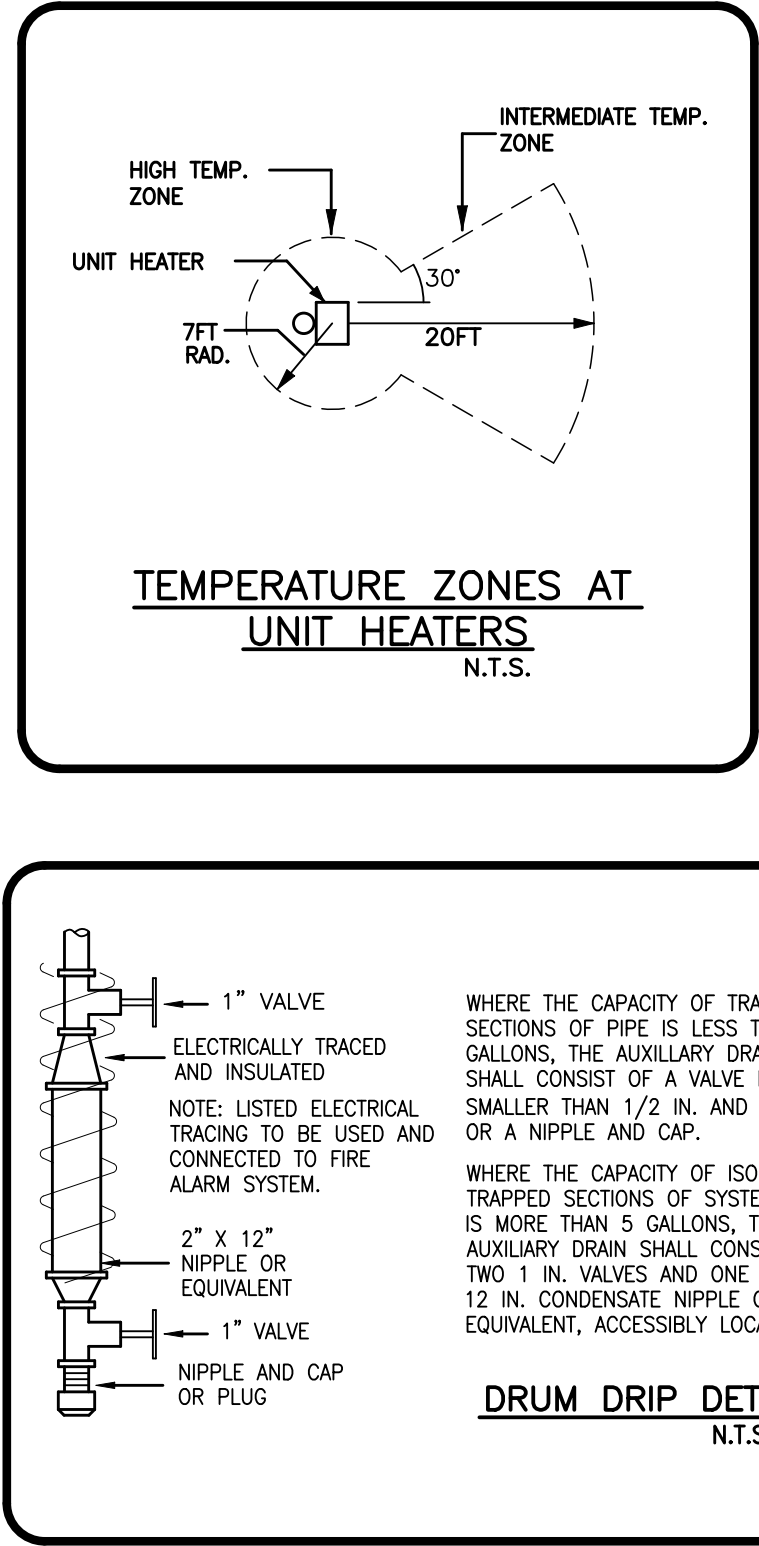
FIGURE A.9.2.3.5.2 Maximum Length of Unsupported Armorer Where Maximum Pressure Exceeds 100 psi (6.9 bar) and Branch Line Above Ceiling Supplies Pendent Sprinklers Below Ceiling.



HANGER DETAIL N.T.S.
TO PREVENT UPWARD MOVEMENT OF THE PIPE



- ### GENERAL SPECIFICATIONS
- 1.0 THESE DRAWINGS ARE FOR PERMIT, AND FOR PRICING, AND MUST BE ADHERED TO FOR INSTALLATION. IF CONTRACTOR WISHES TO ALTER DRAWINGS, THEN HE IS RESPONSIBLE FOR OBTAINING RE-APPROVALS.
- 2.0 CONTRACTOR TO SUPPLY AND INSTALL A COMPLETE AND FULLY OPERATIONAL AUTOMATIC SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS AND AS INDICATED IN THE SPECIFICATIONS AND CONFORMING TO N.F.P.A. REQUIREMENTS, O.B.C. REQUIREMENTS AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES.
- 3.0 UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL TEST THE SYSTEM AND SUBMIT TO THE ENGINEER COMPLETED CONTRACTORS TEST CERTIFICATE STATING THAT THE SYSTEMS HAVE BEEN INSTALLED, TESTED AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION IN ACCORDANCE WITH N.F.P.A.#13, LATEST OR APPLICABLE EDITION.
- 4.0 ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL CODES, STANDARDS BY-LAWS AND AUTHORITIES HAVING JURISDICTION.
- 5.0 SYSTEMS TO BE INSTALLED AS PER N.F.P.A. STANDARDS, AND LOCAL AUTHORITIES.
- 6.0 SPRINKLER CONTRACTOR TO CO-ORDINATE INSTALLATION WITH EXISTING SITE CONDITIONS AND ACCEPT RESPONSIBILITY FOR AND COST OF MAKING ADJUSTMENTS TO PIPING TO AVOID INTERFERENCE WITH MECHANICAL, ELECTRICAL AND OTHER BUILDING COMPONENTS.
- 7.0 SPRINKLER CONTRACTOR TO ALLOW FOR OFFSETS IN SPRINKLER PIPING AND MUST SUPPLY AND INSTALL TRAP/TEE HANGERS WHERE REQUIRED. HANGERS FOR MAINS TO BE INSTALLED AT PANEL POINTS OF JOISTS.
- * 8.0 ALL SPRINKLER VALVES TO BE SUPERVISED, AND U.L.C. LISTED.
- * 9.0 SPRINKLER CONTRACTOR TO ALLOW FOR ADDITIONAL PRESSURE SWITCHES WHERE REQUIRED FOR ALARM SYSTEM.
- 10.0 CONTRACTOR TO ALLOW IN PRICE FOR SUFFICIENT PIPE AND FITTINGS TO BE INSTALLED WHERE SHOWN ON DRAWINGS. A 5 FT. RADIUS OF THE LOCATION SHOWN ON DRAWINGS.
- 11.0 ALL MATERIALS USED IN THE INSTALLATION OF THE SPRINKLER SYSTEM SHALL BE CHANDLER MAKE, UNLESS SPECIFICALLY APPROVED IN WRITING PRIOR TO INSTALLATION BY THE ENGINEER, ARCHITECT OR ENGINEERS RESPONSIBLE FOR THE SYSTEM DESIGN.
- 12.0 ALL SPRINKLER EQUIPMENT SHALL BE OF ONE MANUFACTURER FROM THE FOLLOWING:
GRINELL, VISING, CENTRAL, RELIABLE OR APPROVED EQUAL. ALL SHALL BE U.L.C. LISTED FOR THEIR SPECIFIC APPLICATION.
- 13.0 DRAWINGS ARE NOT TO BE SOLED.
- 14.0 THESE DRAWINGS ARE THE PROPERTY OF THE ENGINEERS AND SHALL NOT BE ALTERED WITHOUT APPROVAL. DRAWINGS SHALL BE RETURNED UPON REQUEST.
- 15.0 SPRINKLER HEADS SHALL BE U.L.C. LISTED AND SHALL BE THE TYPE AND TEMPERATURE RATING SPECIFIED ON THE DRAWINGS.
- 16.0 PROVIDE SPARE SPRINKLER HEADS AND WRENCH IN A METAL CABINET MOUNTED ON THE WALL NEAR THE MAIN SPRINKLER VALVE HEADER, AMOUNT AS PER N.F.P.A. STANDARD # 13 LATEST OR APPLICABLE EDITION.
- 17.0 SPRINKLERS OF SUITABLE TEMPERATURE RATING SHALL BE INSTALLED NEAR HEATING EQUIPMENT AS SPECIFIED IN N.F.P.A. STANDARD # 13 LATEST OR APPLICABLE EDITION.
- 18.0 PROVIDE ALL NECESSARY TRIM REQUIRED FOR ALARM CHECK VALVES TO COMPLY WITH APPLICABLE CODES AND REQUIREMENTS.
- 19.0 PENDENT SPRINKLERS INSTALLED WHERE SUSPENDED CEILING TILES OR DRYWALL OCCUR ARE TO BE EQUIPPED WITH TWO PIECE ESCUTCHEONS. (WHERE APPLICABLE)
- 20.0 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE FIRE PROTECTION SYSTEM AND FOR CO-ORDINATION WITH ALL SITE CONDITIONS. BEFORE COMMENCING WORKS, EXAMINE THE SITE AND THE EXISTING CONDITIONS AND REPORT IMMEDIATELY TO THE ENGINEER ANY DEFECT OR INTERFERENCE AFFECTING THE COMPLETION OF THE WORK OR THE GUARANTEE OF THIS CONTRACTOR.
- 21.0 CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB AND REPORT DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- * 22.0 PROVIDE FLOW ALARM DEVICES, SUPERVISORY SWITCHES AND PRESSURE SWITCHES IN LIGHT HAZARD OCCUPANCIES (i.e. OFFICES, SCHOOLS ETC.) TO BE QUICK RESPONSE TYPE.
- CONTRACTOR TO PROVIDE ADEQUATE DRAINS AS REQUIRED BY N.F.P.A.#13 AND DISCHARGE TO A LOCATION TO SUIT SITE CONDITIONS.
- * DENOTES " IF APPLICABLE "



OWNER (OR OTHERS) TO PROVIDE ADEQUATE HEAT IN ALL AREAS OF BUILDING SUBJECT TO FREEZING THAT ARE PROTECTED BY A WET TYPE SPRINKLER SYSTEM.

ALL GLASS BULB TYPE SPRINKLERS TO BE OF RECENT ISSUE, MANUFACTURE DATE OF AT LEAST YEAR 2010.

SEISMIC RESTRAINT TO BE DONE BY OTHERS.

REVISIONS		
ISSUED FOR REVIEW		AUG.05/25

- ### NOTES
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- DIMENSIONS TAKE PRECEDENCE OVER SCALE.
- THE SPRINKLER SYSTEM IS TO BE INSTALLED AS PER N.F.P.A. STANDARD # 13, AND O.B.C. STANDARDS, IF APPLICABLE.
- CONTRACTOR TO INCLUDE FOR OFFSETS IN BRANCH LINES AND MAINS WHERE REQUIRED.
- SPRINKLERS SHALL BE U.L.C. LISTED AND APPROVED BY LOCAL AUTHORITIES.
- UNDERGROUND WATERMAIN TO BE INSTALLED ACCORDING TO LOCAL AUTHORITIES AND INSURANCE CO. STANDARDS, IF APPLICABLE.
- INSTALL HIGH TEMPERATURE HEADS WHERE REQUIRED AS PER N.F.P.A. STANDARD # 13, AND O.B.C. STANDARDS, IF APPLICABLE.
- ALL WIRELESS BRANCH LINE MEASUREMENTS ARE GIVEN AS CENTER LINE TO CENTER LINE DIMENSIONS.
- ALL MAIN MEASUREMENTS ARE GIVEN AS CENTER LINE TO CENTER LINE DIMENSIONS. (TWO WALL PIPE)
- DENOTES DISTANCE IN INCHES FROM CENTER LINE OF PIPE TO UNDERGIRD OF CEILING.
- IN DENOTES NEAR NIPPLE.
- ON DENOTES DOWN.
- PRESSURE MONITORING SWITCHES TO BE CONNECTED TO FIRE ALARM SYSTEM. (IF A.S. IS INSTALLED) AS REQUIRED ON DRAWINGS. CONTRACTOR TO VISIT SITE TO DETERMINE EXACT LOCATION AND ELEVATION OF MAINS. TO BE INSTALLED AS REQUIRED ON DRAWINGS. ANY MAJOR DISCREPANCIES ARE TO BE REPORTED TO THE DESIGNER PRIOR TO FABRICATION AND INSTALLATION.

DESIGN CRITERIA

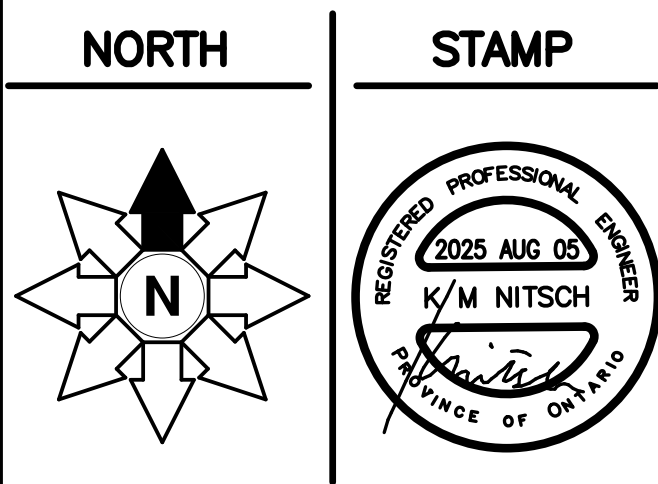
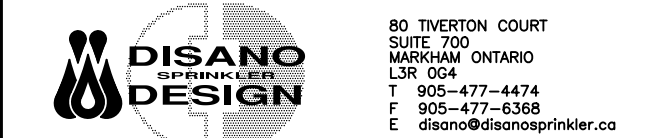
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DORMS, LOCKERS, GYM & OFFICES DESIGNED FOR LIGHT HAZARD SPACING. AS PER NFPA 13.

SYMBOL	DESCRIPTION
⊗	QUICK RESPONSE 1/2" 165°F UPRIGHT
⊗ HT	QUICK RESPONSE 1/2" 286°F UPRIGHT
●	QUICK RESPONSE 1/2" 165°F PENDENT
● HT	QUICK RESPONSE 1/2" 286°F PENDENT

THOMASBROWNARCHITECTS
187 SPADINA AVENUE, SUITE 500 1 TORONTO ONTARIO M5T 2C8



PROJECT
Stouffville
York Region
FIRE STATION & YORK REGION PRS
4902 AURORA RD.,
WHITCHURCH—
STOUFFVILLE, ONTARIO

DWG TITLE	
DETAILS	
DATE AUGUST, 2025	PROJECT NO. 25-15123
SCALE 1:100	
DWN BY G.K.	DWG NO. SP2
ISSUED FOR REVISION NO.	OF 2