

KEY PLAN - NTS

**DESIGN AREA "3"**  
 ORDINARY HAZARD GROUP 1 C=120  
 0.15 US GPM / SQ.FT. OVER 900 SQ.FT.  
 + WINDOW SPRINKLER SYSTEM  
 + 250 USGPM HOSE ALLOWANCE  
 AS PER NFPA 13 STANDARD 2013 EDITION

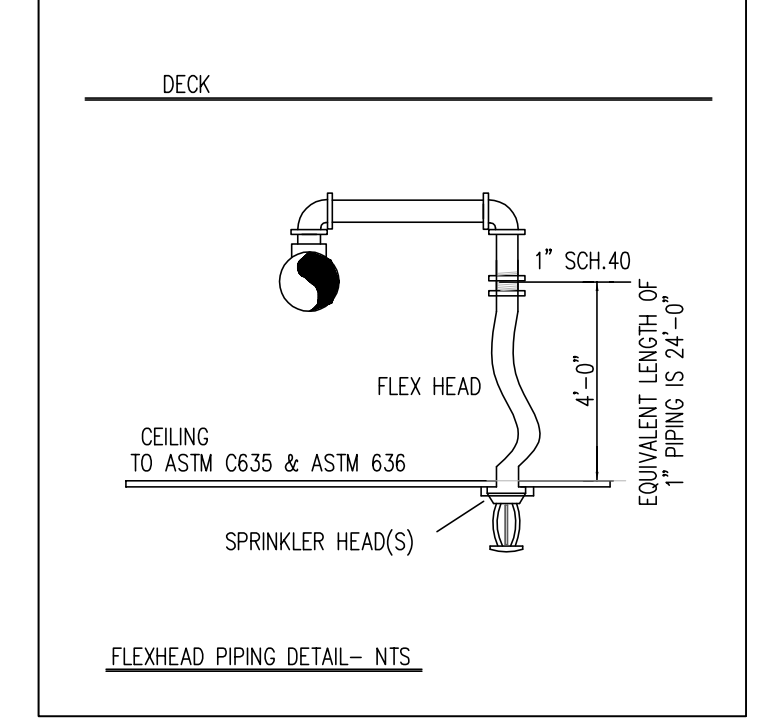
**DESIGN AREA "2"**  
 ORDINARY HAZARD GROUP 1 C=120  
 0.15 US GPM / SQ.FT. OVER 900 SQ.FT.  
 + 250 USGPM HOSE ALLOWANCE  
 AS PER NFPA 13 STANDARD 2013 EDITION

- NOTES:**
- WATER SUPPLY INFORMATION:  
 DONE BY: GENERAL SPRINKLERS INC.  
 - AT: 2383 HIGHWAY 2  
 CLARINGTON, ONTARIO
  - DATE: SEPTEMBER 20, 2022
  - STATIC: 71 PSI
  - RESIDUAL: 849 USGPM @ 67 PSI  
 869 USGPM @ 66 PSI  
 1288 USGPM @ 62 PSI
  - DESIGN BASED ON N.F.P.A.-13, 2013 EDITION & O.B.C. 2012 EDITION.
  - ALL MATERIAL TO BE UL/ULC AND FM LISTED.
  - ALL HANGERS TO BE INSTALLED AS PER NFPA 13, 2013 EDITION.
  - IN ALL LIGHT HAZARD OCCUPANCIES INSTALL QUICK RESPONSE SPRINKLER HEADS AS PER NFPA 13.
  - SPRINKLERS TO BE INSTALLED UNDER FIXED OBSTRUCTIONS (IN EXPOSED AREAS) OVER 48" IN WIDTH, AS PER NFPA 13.
  - SPRINKLER DEFLECTORS TO BE MAX. 12" & 1" MIN FROM DECK IN EXPOSED DECK AREAS.
  - INSTALL HIGH TEMPERATURE SPRINKLER HEADS WHERE LOCATED IN ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS & NEAR HEATING UNITS AS PER NFPA-13
  - ALL BRANCH LINES TO BE SIDE FED UNLESS NOTED OTHERWISE.
  - PIPING MATERIAL: - MAINS AND LINES TO BE SCHEDULE 10 PIPE (BLACK) FOR SIZES 1 1/2" & UP  
 - THREADED LINES TO BE SCHEDULE 40 PIPE (BLACK) FOR SIZE 1"
  - FITTING MATERIAL: - MAINS & LINES TO BE VICTALUC GROOVED FITTINGS
  - ALL DIMENSIONS ARE CENTRE TO CENTRE
  - TESTING IS TO OBC & NFPA 13 REQUIREMENTS

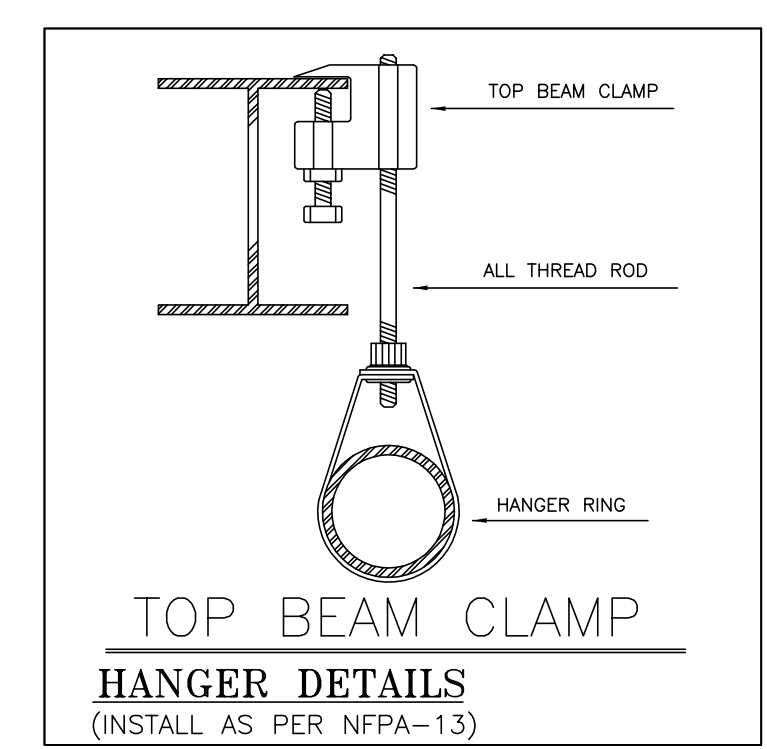
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  - TESTING IS TO OBC & NFPA 13 REQUIREMENTS

**HYDRAULIC CALCULATIONS:**  
 DESIGN CRITERIA AS PER NFPA 13 STANDARD

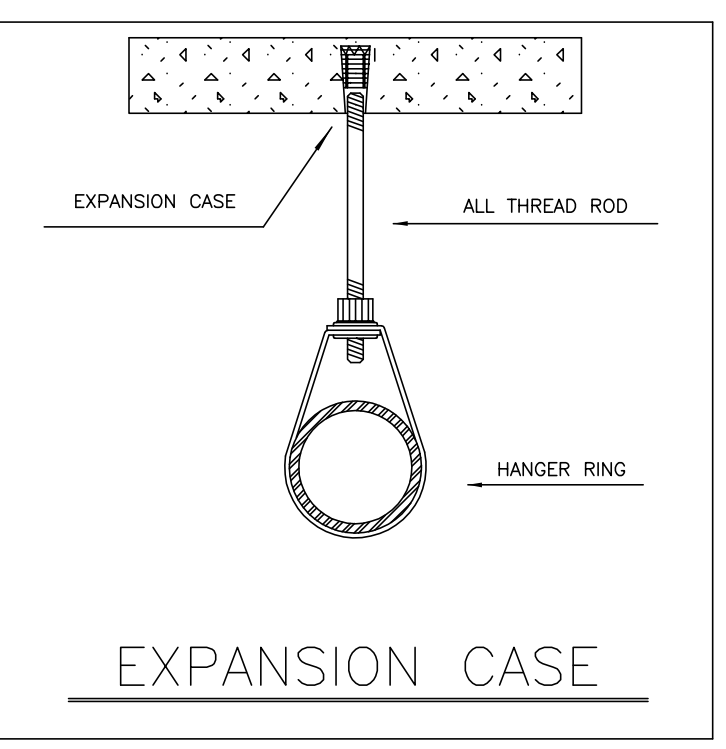
- CALCULATION #1  
 SECOND FLOOR ZONE - FILE STORAGE  
 - WET SYSTEM, C=120  
 - ORDINARY HAZARD GROUP 2  
 - 0.20 USGPM/SQ.FT. OVER 900 SQ.FT.  
 - 250 USGPM HOSE ALLOWANCE
- CALCULATION #2  
 SERVICE ZONE - SERVICE RECEPTION  
 - WET SYSTEM, C=120  
 - ORDINARY HAZARD GROUP 1  
 - 0.15 USGPM/SQ.FT. OVER 900 SQ.FT.  
 - 250 USGPM HOSE ALLOWANCE
- CALCULATION #3  
 SERVICE ZONE - SERVICE RECEPTION  
 + WINDOW SPRINKLER ZONE  
 - WET SYSTEM, C=120  
 - ORDINARY HAZARD GROUP 1  
 - 0.15 USGPM/SQ.FT. OVER 900 SQ.FT.  
 - 250 USGPM HOSE ALLOWANCE



DECK SPRINKLER HEAD DETAIL - NTS

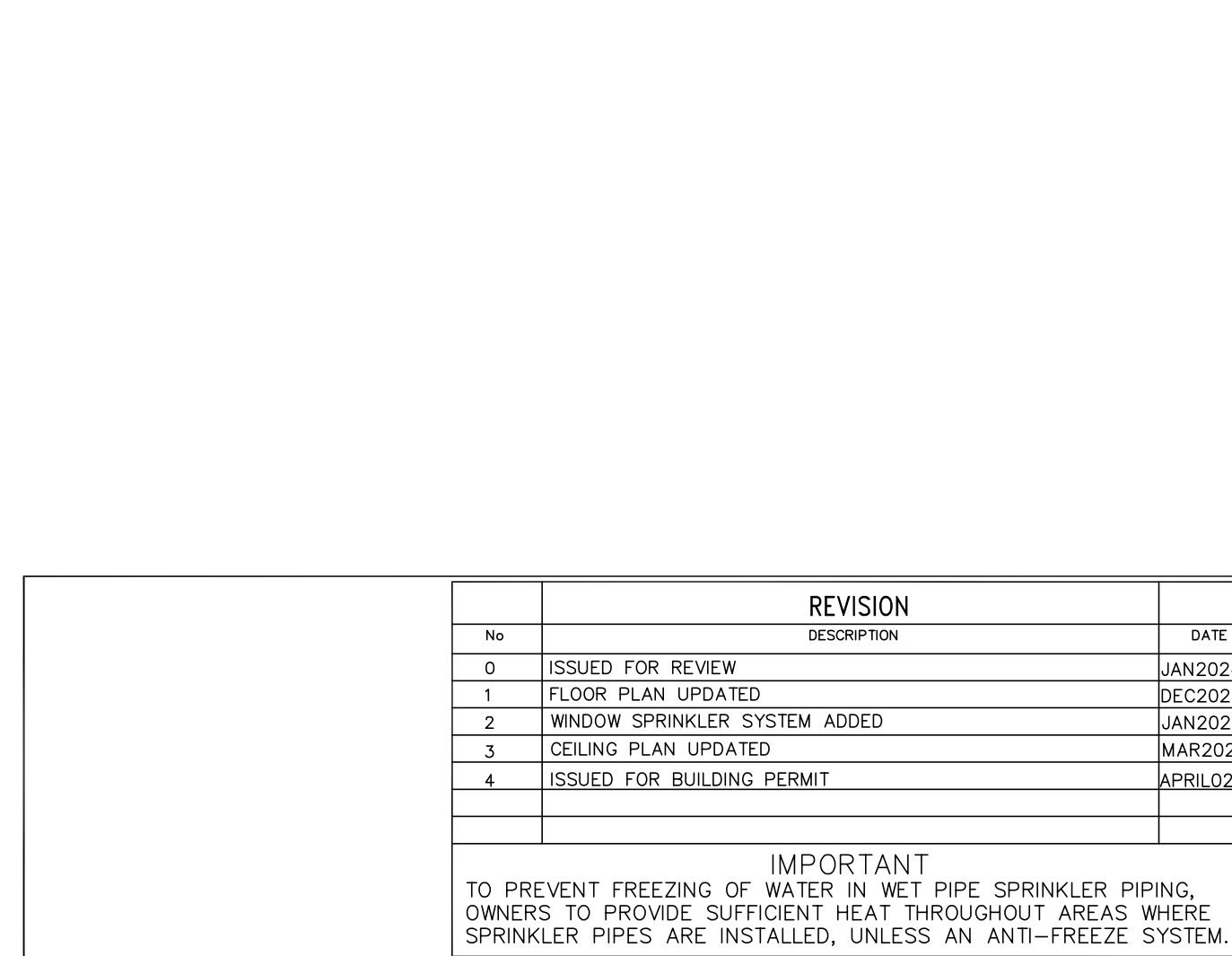
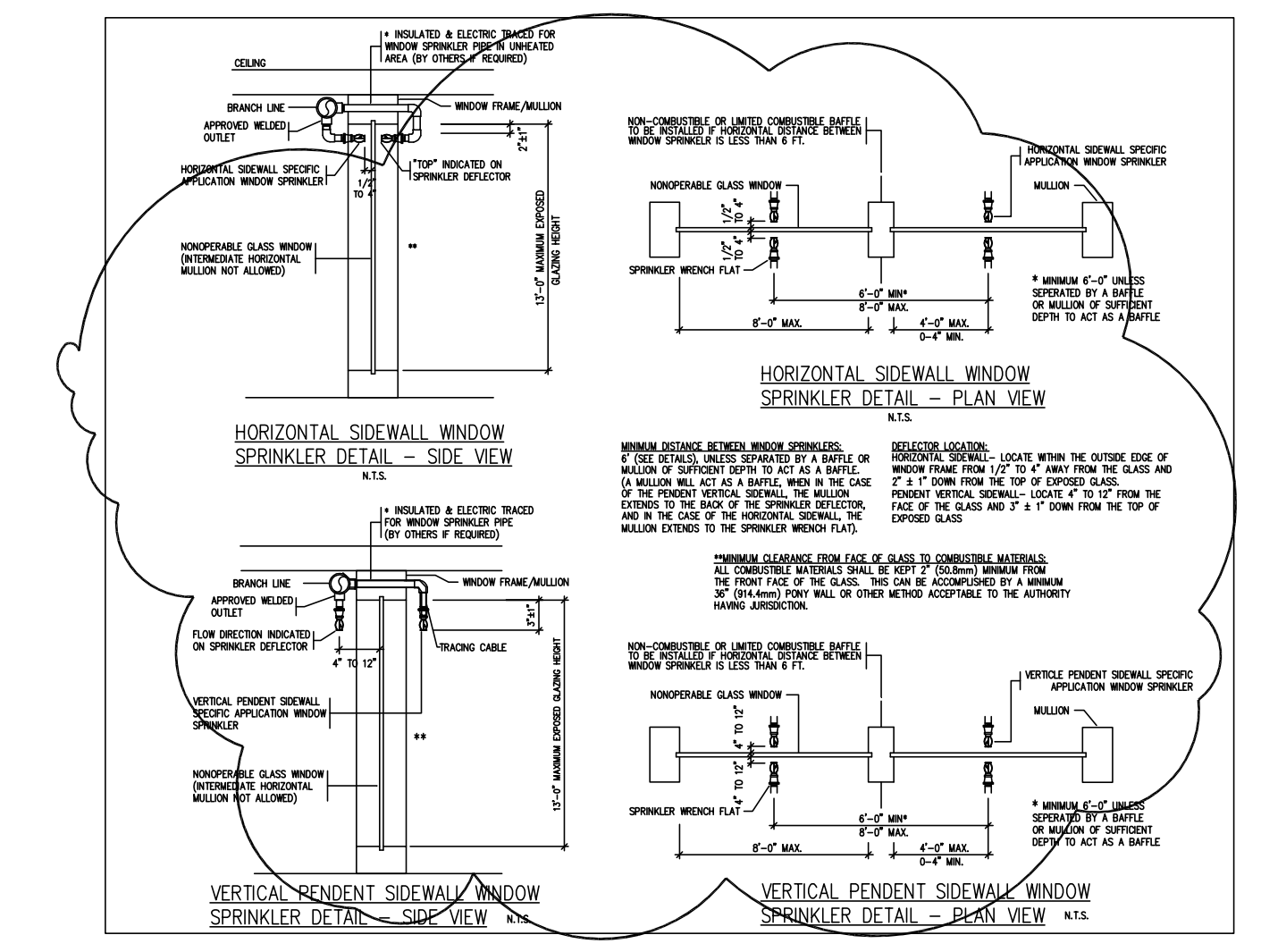
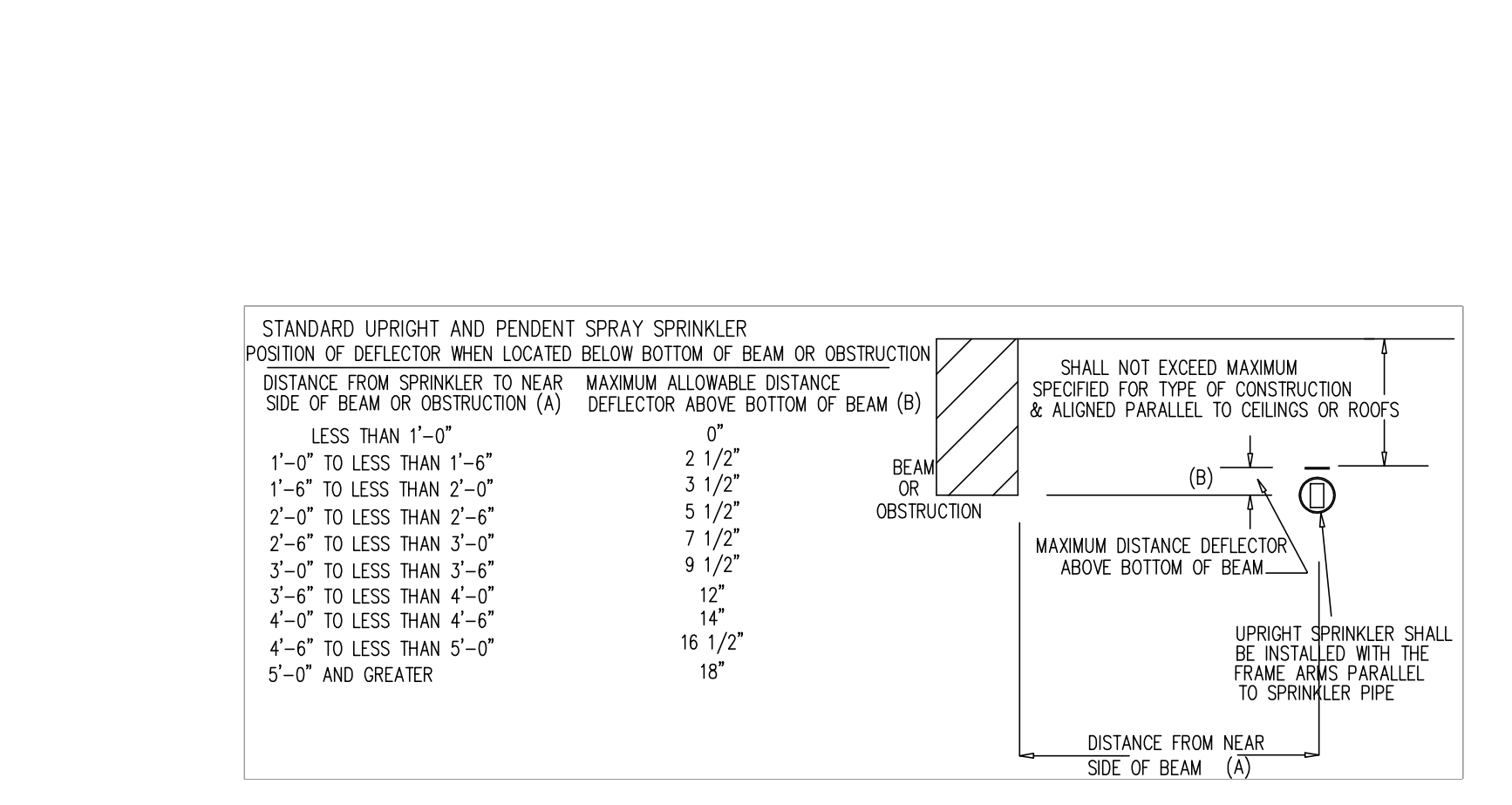


TOP BEAM CLAMP HANGER DETAILS (INSTALL AS PER NFPA-13)



EXPANSION CASE

GROUND FLOOR SPRINKLER LAYOUT  
 SCALE: 1/8"=1'-0"

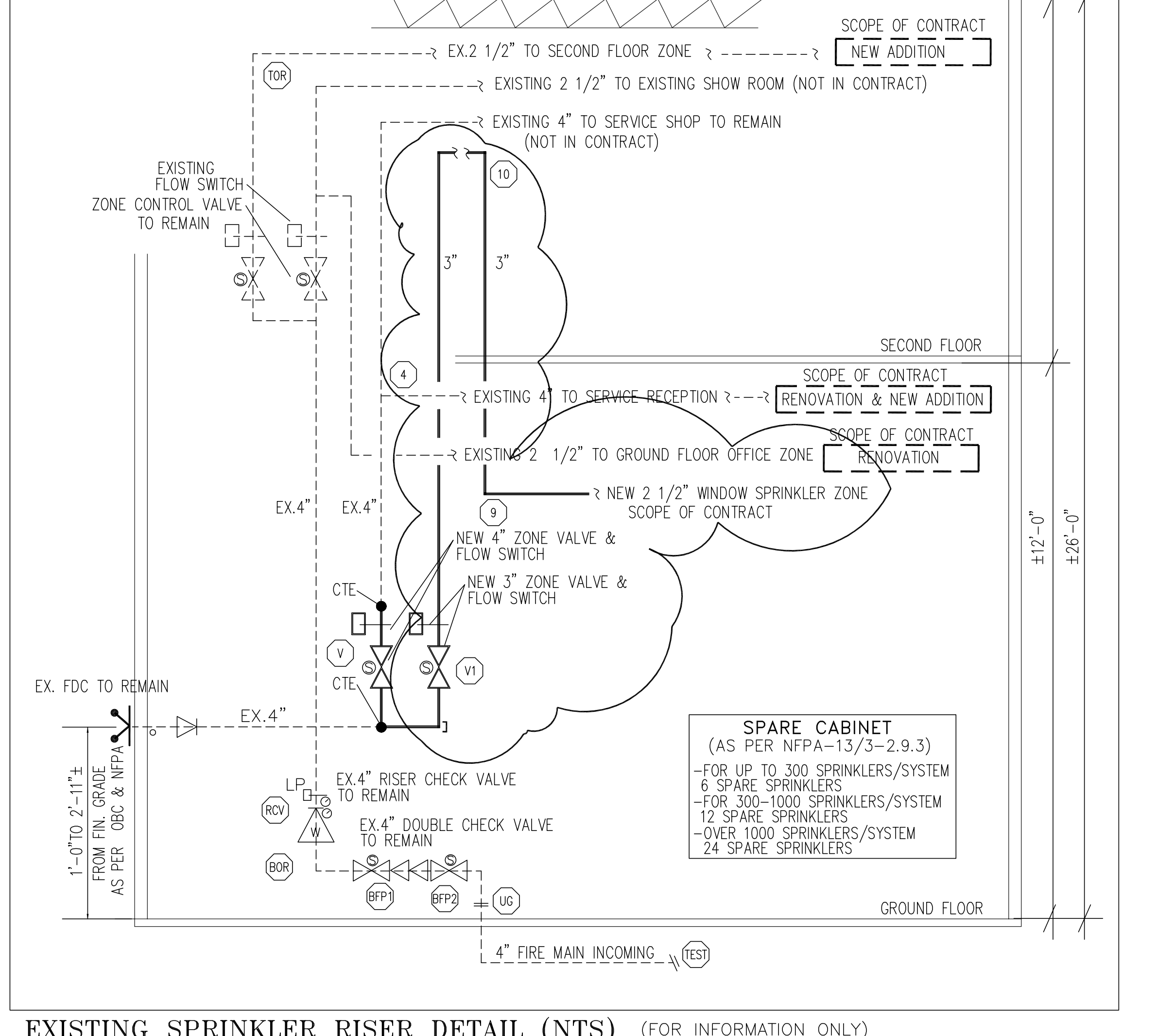


**SPRINKLER SCHEDULE & LEGEND**

NO	REVISION	DATE	SYMBOL	SPRINKLER DESCRIPTION	DEFLECTOR	TEMP.	FINISH	QTY.	
0	ISSUED FOR REVIEW	JAN2024		RECESSED, QUICK RESPONSE	RA1414	1/2"	5.6	155F	CHROME 173
1	FLOOR PLAN UPDATED	DEC2024		UPRIGHT, QUICK RESPONSE	RA1425	1/2"	5.6	155F	BRASS 49
2	WINDOW SPRINKLER SYSTEM ADDED	JAN2025		EXTENDED COV. SIDEWALL	3/4"	8.0	155F	CHROME 1	
3	CEILING PLAN UPDATED	MAR2025		SIDEWALL, QUICK RESPONSE	RA1485	1/2"	5.6	155F	CHROME 3
4	ISSUED FOR BUILDING PERMIT	APRIL2025		WINDOW SPRINKLER	1/2"	5.6	155F	CHROME 34	

--- EXISTING SPRINKLER PIPING

**IMPORTANT**  
 TO PREVENT FREEZING OF WATER IN WET PIPE SPRINKLER PIPING, OWNERS TO PROVIDE SUFFICIENT HEAT THROUGHOUT AREAS WHERE SPRINKLER PIPES ARE INSTALLED, UNLESS AN ANTI-FREEZE SYSTEM.



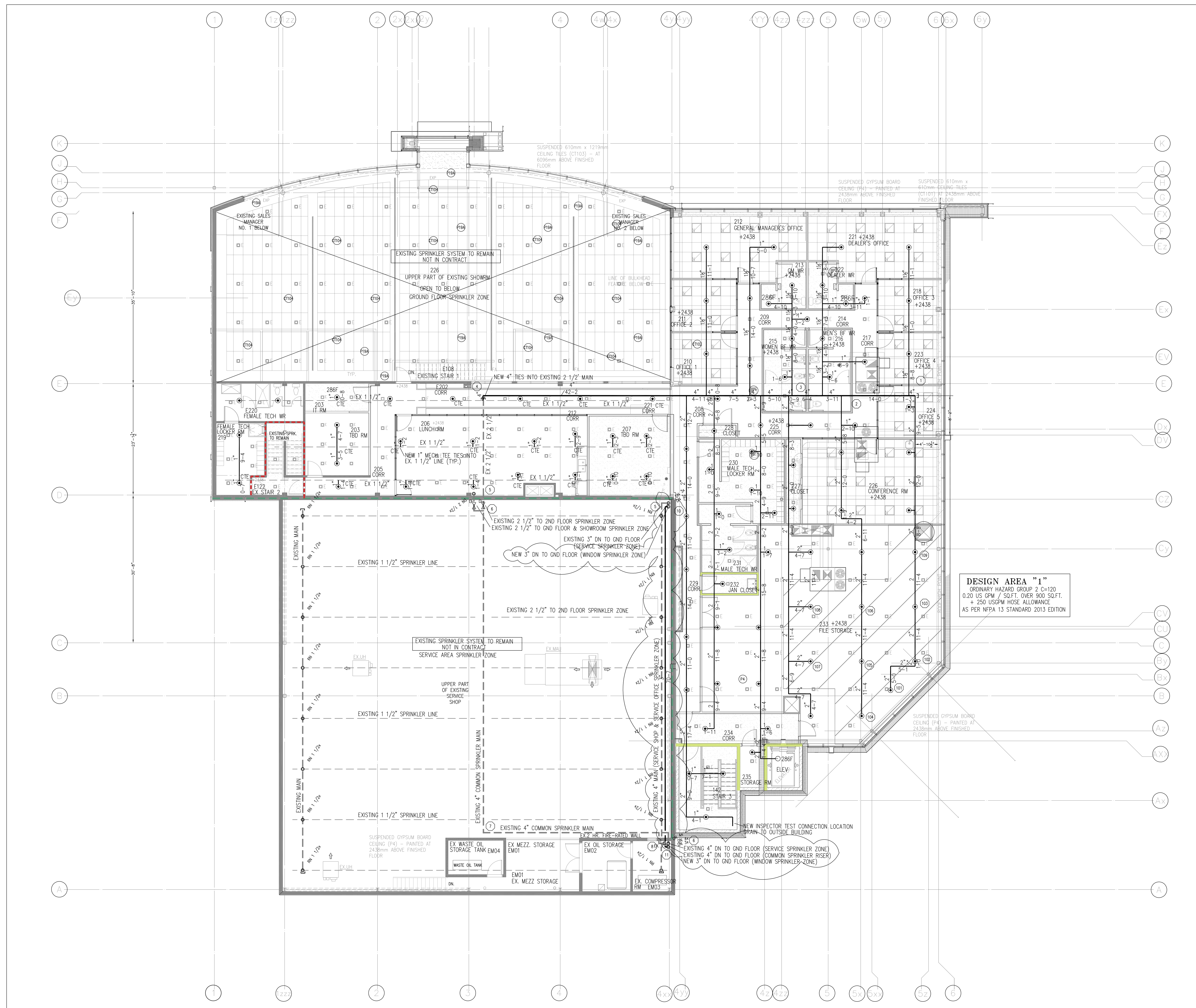
EXISTING SPRINKLER RISER DETAIL (NTS) (FOR INFORMATION ONLY)

**CLARINGTON TOYOTA**  
 10 SPICER SQUARE  
 BOWMANVILLE, ONTARIO, L1C 5M2  
**GROUND FLOOR SPRINKLER LAYOUT & DETAILS**

**General Sprinklers Inc.**  
 315 Deerhide Crescent, Unit 3, Weston, Ontario, CANADA M9M 2Z2  
 PHONE (416) 748-1175 FAX (416) 748-1948

**NORTH**

DESIGNER: ML  
 SCALE: AS SHOWN  
 CHECK BY: LM  
 FILE NUMBER: D023-167  
 APPROVAL: FD  
 DATE: JANUARY 2024  
 DRAWING NO.: SP1/2



**SECOND FLOOR SPRINKLER LAYOUT**  
SCALE: 1/8"=1'-0"

REVISION			SPRINKLER SCHEDULE & LEGEND					
NO.	DESCRIPTION	DATE	SYMBOL	SPRINKLER DESCRIPTION	DEF. °C	TEMP.	FINISH	QTY.
0	ISSUED FOR REVIEW	JAN2024	○	RECESSED, QUICK RESPONSE	RAT1414	1/2"	5.6	155F
1	FLOOR PLAN UPDATED	DEC2024	○	UPRIGHT, QUICK RESPONSE	RAT1425	1/2"	5.6	286F
2	WINDOW SPRINKLER SYSTEM ADDED	JAN2025	○	EXISTING SPRINKLER PIPING				
3	CEILING PLAN UPDATED	MAR2025						
4	ISSUED FOR BUILDING PERMIT	APRIL02,25						

**IMPORTANT**  
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**CLARINGTON TOYOTA**  
10 SPICER SQUARE  
BOWMANVILLE, ONTARIO, L1C 5M2  
**SECOND FLOOR SPRINKLER LAYOUT**

**General Sprinklers Inc.**

315 Deerhide Crescent, Unit 3, Weston, Ontario, CANADA M9M 2Z2  
PHONE (416) 748-1175 FAX (416) 748-1548

<b>NORTH</b>	
DESIGNER	ML
SCALE	AS SHOWN
CHECK BY	MM
FILE NUMBER	D023-167
APPROVAL	FD
DATE	JANUARY 2024
DRAWING NO.	SP2/2