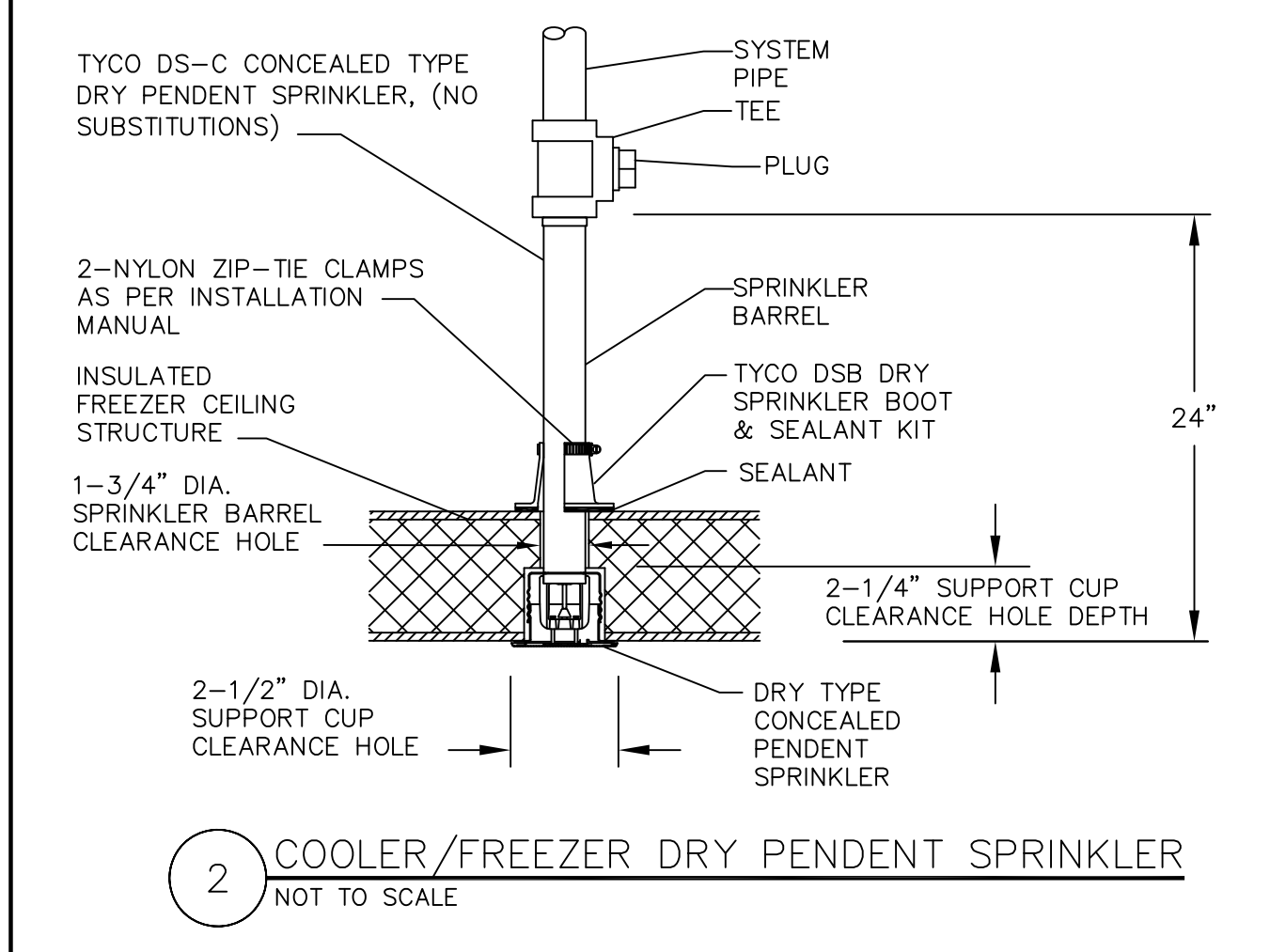
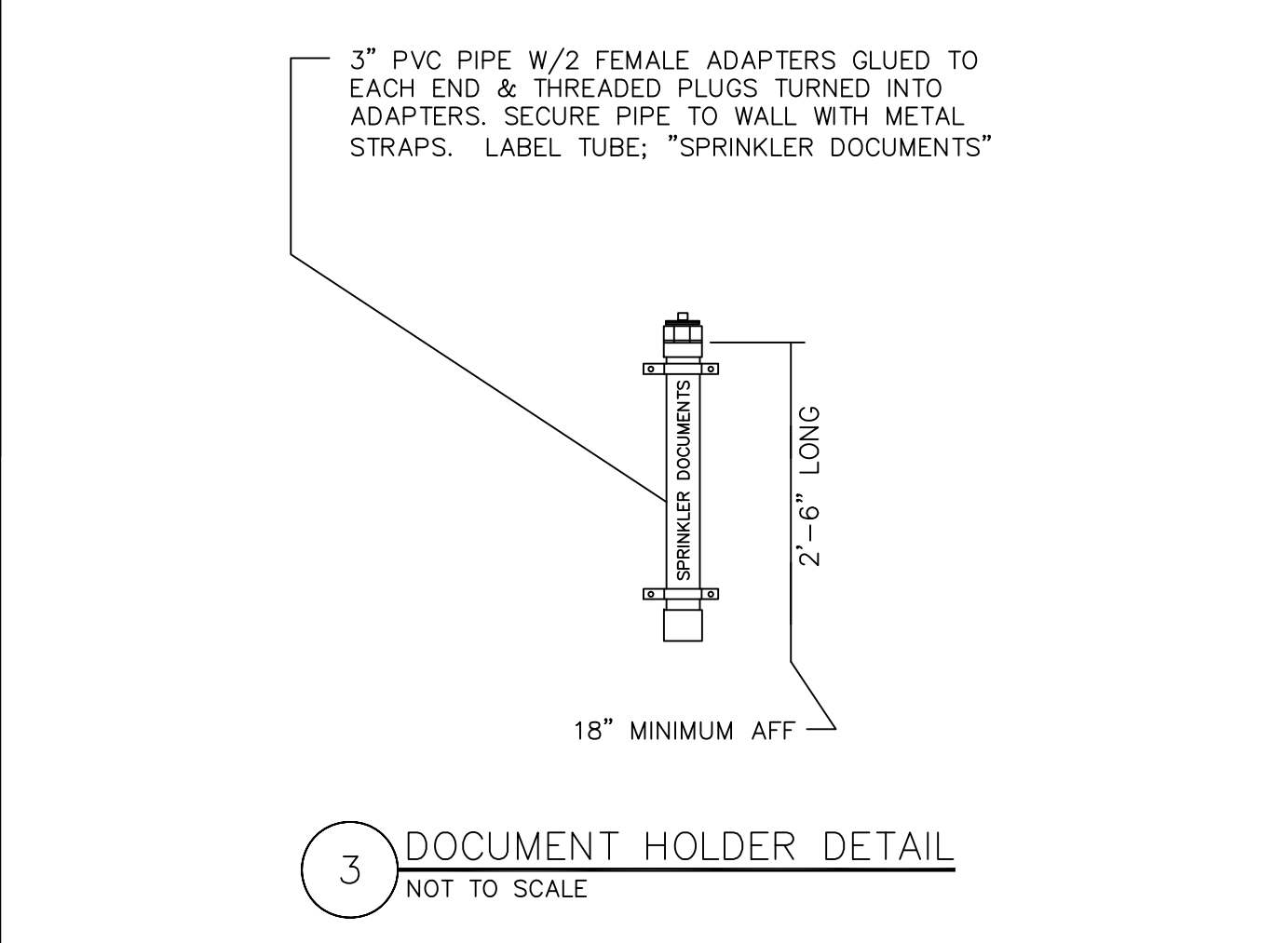


THIS SHEET IS FOR REFERENCE ONLY

JOB SPECIFIC FIRE PROTECTION PLAN TO BE PREPARED BY FIRE PROTECTION CONTRACTOR AND MUST COMPLY WITH ALL MUNICIPAL CODES AND WALGREENS CO. SPECIFICATIONS AS STATED ON THIS SHEET AND SPECIFICATION SECTION 15300.



ENGINEER OF RECORD SHALL COORDINATE SPECIFIC REQUIREMENTS FOR THIS SHEET ACCORDINGLY TO PROVIDE A PERFORMANCE SPECIFICATION FOR THE CONTRACTOR TO DEVELOP AND PROVIDE DESIGN FOR.

- INSTALLATION NOTES**
- THE INSTALLATION OF THE SPRINKLER PIPING ABOVE THE CEILING SHALL NOT RESTRICT THE INSTALLING OR REMOVAL OF LIGHT FIXTURES, SPEAKERS, AND SIMILAR ITEMS.
 - WALGREENS DOES NOT REQUIRE SPRINKLERS TO BE LOCATED IN THE EXACT CENTER OF ACOUSTIC TILES OR AT THE QUARTER POINTS AS SHOWN.
 - SPRINKLERS INSTALLED LESS THAN 7 FEET ABOVE FINISHED FLOOR SHALL BE PROTECTED BY GUARDS.
 - WALGREENS SHALL LOCATE THE FIELD-DRILLED HOLES FOR DRY PENDENT SPRINKLERS WITHIN COOLER/FREEZER ROOF PANELS. PROVIDE SWING JOINTS AT DROPS ABOVE COOLER CONSTRUCTION TO ALLOW ALIGNMENT WITH DRY PENDENT SPRINKLER LOCATIONS.
 - SPRINKLERS SHALL BE INSTALLED WITH MANUFACTURER'S WRENCH AND/OR THE MANUFACTURER'S REQUIRED METHOD DESIGNATED FOR THAT PARTICULAR SPRINKLER. ANY SPRINKLER DAMAGED DURING INSTALLATION DUE TO THE USE OF NON-APPROVED METHODS AND/OR TOOLS SHALL BE REPLACED AT NO COST TO WALGREENS.

SPRINKLER SCHEDULE

LOCATION	HAZARD CLASS	HAZARD GROUP	COVERAGE	TYPE	FINISH	VERTICAL	SPACING MAX.-SF	RESPONSE	TEMP F	BULB	TYCO SERIES	ESCUTCHEON	TYCO DATA
ALL FINISHED CEILINGS	ORDINARY	II	EXTENDED	RECESSED	WHITE	PENDENT	400	STANDARD	155	RED	EC-11 OR 14	STYLE 40	TFP 220
	ORDINARY	II	STANDARD	RECESSED	WHITE	PENDENT	130	QUICK	155	RED	FRB	STYLE 20 OR 40	TFP 171
SERVICE W/O CEILING	ORDINARY	II	STANDARD	EXPOSED	BRASS	UPRIGHT	130	STANDARD	155	5MM	B	NA	TFP 151
GENERAL STOCK	EXTRA		STANDARD	EXPOSED	BRASS	UPRIGHT	100	STANDARD	286	BLUE	EL0-231B	NA	TFP 342
FREEZER / COOLER			STANDARD	CONCEALED	DRY	PENDENT	130	STANDARD	155	5MM	DS-C	W/DSB-2 KIT	TFP 515
DRIVE-THRU / TOTE	ORDINARY	II	EXTENDED	EXPOSED DRY	WHITE	HORZ. SIDEWALL	320	STANDARD	155	RED	DS-3	FLUSH ESCUTCHEON AND 16 FT. THROW	TFP 550
ONLY WHEN INDICATED	ORDINARY	II	STANDARD	CONCEALED	WHITE	PENDENT	130	QUICK	155	3MM	RF II	PART OF ASSEMBLY	TFP 181
GENERAL SALES, PHOTO (OPEN CEILING)	ORDINARY	II	STANDARD	EXPOSED	BRASS	UPRIGHT	130	STANDARD	155	RED	B	NA	TFP 151

- GENERAL NOTES**
- THIS DRAWING DEFINES WALGREENS REQUIREMENTS FOR THE BUILDING FIRE SUPPRESSION SYSTEM AND THE BASIS FOR THE SPRINKLER CONTRACTOR'S SHOP DRAWING AND OTHER DOCUMENTS.
 - REFER TO AND COMPLY WITH SECTIONS 01 11 00 - SURVEYING OF WORK, 31 23 00 - SITE WORK/EXCAVATION, 33 10 00 - SITE MECHANICAL UTILITIES, 20 05 00 - COMMON WORK RESULTS FOR MECHANICAL AND 21 10 00 WATER-BASED FIRE SUPPRESSION SECTIONS OF THE SPECIFICATIONS.
 - DEVIATIONS FROM WALGREENS FIRE SUPPRESSION CRITERIA REQUIRED TO COMPLY WITH GOVERNING CODES AND/OR REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION (AHJ), SHALL BE SUBMITTED, IN WRITING, TO THE WALGREENS PROJECT ARCHITECT.
 - PROTOTYPE GENERAL STOCK ROOM SHALL ACCOMMODATE MERCHANDISE STORED TO 15 FEET ABOVE FINISH FLOOR.
 - IF HIGH-PILED STORAGE PERMIT OR LICENSE IS REQUIRED BY AHJ, A COMPLETED APPLICATION MUST BE INCLUDED IN THE FIRE SUPPRESSION SUBMITTALS TO WALGREENS.
 - CONTACT THE WALGREENS PROJECT ARCHITECT FOR PROJECTS REQUIRING A SPECIAL OR NON-PROTOTYPICAL DESIGN SUCH AS BASEMENT OR MEZZANINE STOCK ROOMS.
 - REFER TO DRAWING D-111 FOR WALGREEN FUTURE LOCATION.
 - COORDINATE DESIGN, CIVIL AND SURVEY DRAWINGS FOR HYDRANT AND WATER TAP LOCATIONS, SERVICE PIPING, AND ITEMS SUCH AS ON-SITE PITS AND VALVES.
 - REFER TO ELECTRICAL DRAWINGS FOR FIRE ALARM SYSTEM INFORMATION AND OTHER PROJECT SITE COMPONENTS OF THE FIRE SUPPRESSION SYSTEM.
 - THE FIRE SUPPRESSION SYSTEM SHALL PROVIDE THE SPECIFIED WATER FLOW DENSITIES FOR THE HAZARDS DEFINED USING THE AVAILABLE WATER SUPPLY.
 - PROVIDE AN APPROVED FIRE PUMP, A SMALL PRESSURE MAINTENANCE PUMP, CONTROLLER, WATER STORAGE AND OTHER SIMILAR COMPONENTS AS NECESSARY WHEN THE WATER PRESSURE, FLOW AND/OR DURATION ARE NOT ADEQUATE. TYPICALLY THIS IS NECESSARY WHEN THERE IS LESS THAN 30 PSIG RESIDUAL AT 1000 GPM. FLOW. STORAGE SHALL BE 90 MINUTES MINIMUM BASED ON EXTRA HAZARD OCCUPANCY/CLASSIFICATION.
 - HYDRAULIC CALCULATIONS FOR THE VARIOUS SPRINKLER SYSTEMS SHALL INCLUDE A 250 GPM OR GREATER ALLOWANCE FOR HOSE DEMANDS, AS REQUIRED BY NFPA, CODES, ORDINANCES AND/OR THE AHJ. FOR STORAGE ABOVE 12 FEET, INCLUDE A 500 GPM MINIMUM ALLOWANCE FOR HOSE DEMANDS.
 - SPRINKLERS FOR BUILDING ELEMENTS SUBJECT TO FREEZING SHALL BE SERVED BY A DRY SYSTEM OR AN ANTI-FREEZE SYSTEM.
 - ANTI-FREEZE SYSTEMS IN WALGREENS FACILITIES SHALL USE 40R USP FOOD GRADE GLYCERINE. THE SYSTEM INSTALLATION SHALL INCLUDE A BACKFLOW DEVICE AND AN EXPANSION CHAMBER LOCATED AT THE SPRINKLER RISER. THE ANTI-FREEZE SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 13.
 - THE FIRE SUPPRESSION DESIGN DRAWING(S), THE PIPING SHOP DRAWING(S) AND THE HYDRAULIC CALCULATIONS, SPECIFIC TO THE PROJECT, MUST BE REVIEWED AND RELEASED BY THE WALGREENS FACILITIES DEPARTMENT PRIOR TO SUBMITTING A FIRE PROTECTION PERMIT APPLICATION TO THE AHJ.

- FIRE HAZARD CLASSIFICATION INFORMATION**
- THE STOCK ROOM IS SEPARATED FROM OTHER AREAS OF THE BUILDING BY A FULL HEIGHT PARTITION.
 - THE BULK OF MERCHANDISE IS RECEIVED DETRASHED IN PLASTIC TOTES WITH THE EXCEPTION OF BULK ITEMS SUCH AS PAPER GOODS, WHICH ARE RECEIVED IN THEIR ORIGINAL CORRUGATED CARDBOARD BOXES. BULK ITEMS COMPRISE NOT MORE THAN 10% BY WEIGHT OF THE ENTIRE DELIVERY.
 - ITEMS RECEIVED IN TOTES ARE IMMEDIATELY PLACED ON SALES FLOOR WITH EXCESS PRODUCT STORED IN THE STOCK ROOM. PLASTIC TOTES ARE EMPTIED, STACKED AND AS A GENERAL RULE, PLACED IN AN EXTERIOR CORRAL FOR RETURN TO THE DISTRIBUTION CENTER ON THE NEXT STORE DELIVERY DAY. BULK ITEMS THAT CANNOT BE IMMEDIATELY PLACED ON THE SALES FLOOR ARE ALSO STORED IN THE STOCK ROOM.
 - PRODUCTS STORED ARE CLASS III, WITH MINIMAL EXCEPTIONS OF CLASS IV, SUCH AS LEVEL 2 AEROSOLS AND PRODUCTS CONTAINING GROUP A AND GROUP B PLASTICS.
 - THE BULK OF GROUP A PLASTICS STORED IS PACKAGING MATERIALS AND LIMITED PLASTIC PARTS. THE PERCENTAGE BY WEIGHT OF UNEXPANDED PLASTIC IS LESS THAN 15% WITH NO APPRECIABLE VOLUME OF EXPANDED PLASTICS. IN ACCORDANCE WITH IFC SECTION 2303.7.4 AND FIGURE 2303.7.4, THE PRODUCTS STORED MEET A CLASS IV COMMODITY CLASSIFICATION.
 - COMMODITIES STORED IN HIGH-PILED REMOTE AREAS ARE CLASS I THROUGH IV, NON-ENCAPSULATED. SPRINKLER DESIGN IS BASED ON CLASS IV; WORST CASE AS ALL CLASS IV AS DEFINED IN IFC 2303.2 THROUGH 2303.6 IN A MIXED ARRAY.
 - STORAGE CONFIGURATION IS FLOOR SUPPORTED, METAL, SINGLE-ROW OR WALL RACKS WITH METAL SHELVING WITH LARGER THAN 50% OPENINGS ALIGNED WITH AISLES AS DEFINED ON THE WALGREEN FUTURE PLAN.
 - NO FORKLIFTS ARE PERMITTED. ALL STOCK IS HAND PLACED. THE STOCK ROOM IS SECURED AT ALL TIMES AND IS ACCESSIBLE ONLY TO STAFF AND STAFF SUPERVISED VISITORS.

- WATER DENSITIES AND SPRINKLER SPECIFICATIONS**
- GENERAL STOCK AND RECEIVING AREAS WITH STORAGE UP TO 15 FEET ABOVE FLOOR (PROTOTYPICAL DESIGN): PROVIDE SPRINKLER PROTECTION WITH A WATER FLOW DENSITY OF 0.35 GPM PER SF CALCULATED OVER THE ENTIRE STOCK AREA, NOT TO EXCEED 2000SF. THIS DENSITY IS BASED ON NFPA 13, 2002 EDITION, TABLE 12.3.2.1.2, FIGURE 12.3.2.1.2(d) CURVE "G" AND FIGURE 12.3.2.1.5.1. TABLE 12.3.1.2 REFERS TO FIGURE 12.3.2.1.1(D) AND FROM FIGURE 12.3.2.1.2(d), 2,000 SF AND CURVE "G" CORRESPOND TO 0.58 GPM/SF FURTHER FROM FIGURE 12.3.2.1.5.1 DENSITY REDUCTION FACTOR FOR RACK HEIGHT IS 60%. THEREFORE 0.58 GPM/SF x 60% = 0.35 GPM/SF OVER 2,000 SF. HOWEVER THE AREA REDUCTION RULE ALLOWS THE DENSITY TO MULTIPLIED BY THE ACTUAL SF OF THE AREA IF LESS THAN 2,000 SF. IN-RACK SPRINKLERS ARE NOT USED IN THIS DESIGN.
 - GENERAL STOCK AREAS WITH STORAGE 12 FEET OR LESS ABOVE FLOOR (WALGREENS APPROVAL REQUIRED): PROVIDE SPRINKLER PROTECTION WITH A WATER FLOW DENSITY OF 0.20 GPM PER SF CALCULATED OVER THE ENTIRE STOCK AREA, NOT TO EXCEED 2000 SF.
 - GENERAL STOCK AREAS WITH STORAGE CAPABILITY GREATER THAN 15 FEET ABOVE FLOOR: CONTACT THE WALGREENS PROJECT ARCHITECT FOR DIRECTION ON THE SPECIFIC PROJECT.
 - ALL GENERAL STOCK AREAS: SPRINKLERS SHALL BE UPRIGHT, STANDARD RESPONSE WITH CEILING SPRINKLER DEFLECTORS LOCATED 1" TO 12" BELOW BOTTOM OF ROOF DECK PER NFPA 13(8.6.4.1.1.1). PROVIDE MINIMUM CLEARANCE OF 18" FROM DEFLECTOR TO TOP OF STORAGE PILE PER NFPA 13(8.6.6.1.1). LOCATE SPRINKLERS OVER AISLES.
 - LOCATIONS OTHER THAN GENERAL STOCK AREAS: SPRINKLERS SHALL PROVIDE A DENSITY OF 0.20 GPM PER SF CALCULATED OVER THE MOST HYDRAULICALLY DEMANDING 1,500 SF (OR 5 SPRINKLERS MINIMUM) PER NFPA 13, 2002 EDITION, ORDINARY HAZARD, GROUP II (FIGURE 11.2.3.1.5 & SECTION 11.2.3.2.2.4).
 - GENERAL SALES & PHOTO (OPEN CEILING): SPRINKLER LAYOUT SHALL BE BASED ON EXTENDED COVERAGE OR STANDARD COVERAGE. DESIRED SPRINKLER SPACING FOR EXTENDED COVERAGE IS 16 FEET ON CENTER, NOT TO EXCEED A MAXIMUM OF 20 FEET.
 - GENERAL SALES & PHOTO (OPEN CEILING): INSTALL THE SPRINKLERS WITHIN THE NFPA 13 PRESCRIBED DISTANCE FROM CEILING WITH THE DEFLECTOR LOCATED 1" TO 12" BELOW THE BOTTOM OF THE ROOF DECK PER NFPA 13.
 - ARCHITECTURAL REFLECTED CEILING PLAN: COORDINATE AND LOCATE ALL SPRINKLERS ON THIS DRAWING, A121.
 - TOWER ELEMENT OVER MAIN ENTRANCE: PROVIDE AUTOMATIC SPRINKLER PROTECTION IF REQUIRED BY THE AHJ. THE DESIGN SHALL PREVENT SPRINKLER WATER FROM FREEZING. PROVIDE HEAT, A DRY-PIPE SYSTEM OR THE ANTI-FREEZE SYSTEM, AS SPECIFIED.
 - DRIVE-THRU PHARMACY CANOPY SOFFIT: WALGREENS DOES NOT REQUIRE SPRINKLER PROTECTION WHERE THE CANOPY OR ROOF IS OF NON-COMBUSTIBLE CONSTRUCTION OR LIMITED COMBUSTIBLE CONSTRUCTION. PROVIDE AUTOMATIC SPRINKLER PROTECTION IF REQUIRED BY NFPA (8.14.7.2), CODES, ORDINANCES AND/OR THE AHJ. SIDEWALL SPRINKLERS, IF INSTALLED, SHALL HAVE COVERAGE RATED FOR FULL WIDTH OF CANOPY.
 - OTHER EXTERIOR BUILDING ELEMENTS: COMBUSTIBLE CONSTRUCTION SHALL BE SPRINKLERED.

AUTHORITY HAVING JURISDICTION (AHJ)

NAME: _____

TELEPHONE: _____

CONTACT PERSON: _____

SYSTEM DESIGNED PER: _____

WATER FLOW INFORMATION

SOURCE OF TEST DATA: _____

LOCATION OF TEST: _____

HYDRANT NUMBERS: _____

DATE OF TEST: _____

TIME OF TEST: _____

STATIC PRESSURE: _____ P.S.I.

RESIDUAL PRESSURE: _____ P.S.I.

FLOW: _____ G.P.M.

Walgreens

Facilities Planning And Design 106 Wilmot Rd., Deerfield, IL 60015
Tel (847) 940-2500

CONSULTANT PROJECT NO. _____

PROJECT TYPE _____

DRAWINGS/SPECIFICATIONS BY:

WALGREENS

LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:

WALGREENS CONTRACTOR

LANDLORD'S CONTRACTOR (TURNKEY CONSTRUCTION)

STORE	BUILDING
NEW <input checked="" type="checkbox"/>	NEW <input checked="" type="checkbox"/>
REMODELING <input type="checkbox"/>	EXISTING <input type="checkbox"/>
RELOCATION <input type="checkbox"/>	NEW SHELL ONLY <input type="checkbox"/>
OTHERS <input type="checkbox"/>	

ENGINEER OF RECORD SHALL REQUEST MOST RECENT FLOW TEST DATA AND COMPLETE THE INFORMATION IN THE TABLE BELOW TO BE INCLUDED IN THESE CONTRACT DOCUMENTS.

DATE	BY	DESCRIPTION	CONST

REVISIONS

CERTIFICATION AND SEAL

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA AND SIGNIFIED BY MY HAND AND SEAL.

STORE NUMBER 15121

WALGREENS

141 CARMICHAEL HUDSON, WI

DRAWING TITLE
FIRE SUPPRESSION PLAN

CADD PLOT:	SCALE:	DRAWING NO.
VOID PLOT:	DRAWN BY:	FP1.1
SUPERSEDES PLAN DATED:	DATE:	
REVIEWED BY:		OF DWGS.