	SPRINKLER LEGEND													
SYM	TYPE	FINISH	TEMP	K-FACTOR	NPT	SIN	MFG.	MODEL	.#	APPROVALS	RESPONSE	ESCUTCHEON	NOTES:	
•	RECESSED PENDENT	CHROME	155	5.6	1/2"	TY3231	TYCO	TY-FR	В	UL, FM	QUICK	STYLE 10	OFFICE AREAS W/ DROP CEILING	
,¢	UPRIGHT	BRASS	155	5.6	1/2"	TY3131	TYCO	TY-FR	В	UL, FM	QUICK	NONE	OUTDOOR CANOPY ABOVE COOLER/FREEZER BOXES	
	DRY PENDENT	CHROME	200	11.2	1"	TY5255	TYCO	DS-2		UL, FM	STANDARD	SEMI-RECESSED	COOLER & FREEZER AREAS W/ NON- ENCAPSULATED PALLET STOR. LIMIT TO 22'	
Ø	PENDENT	BRASS	212	25.2	1"	TY9226	TYCO	ESFR-2	25	UL, FM	ESFR	NONE	DRY SALES AREAS W/ NON-ENCAPSULATED PALLET STOR. LIMIT TO 31'; ROOF LIMIT TO 36'	
	SIDEWALL	BRASS	200	5.6	1/2"	TY3351	TYCO	TY-B	3	UL, FM	STANDARD	NONE	ROLL-UP DOORS	
4	DRY SIDEWALL	WHITE	200	5.6	1"	TY3355	TYCO	DS-1		UL, LPCB	STANDARD	STANDARD	TRASH CHUTE, ROLL-UP DOORS IN PERISHABLE	
Ø	UPRIGHT	BRASS	175	8.0	3/4"	TY4131	TYCO	TY-FR	В	UL, FM	STANDARD	NONE	IN-RACK- PROVIDE WATER SHIELD AND PROTECTIVE CAGE	
SPRINKLER SYSTEM DESIGN CRITERIA														
OFFICE AREAS (NON-COMBUSTIBLE, NON-STORAGE) SYSTEM TYPE: WET PIPE SYSTEM OCCUPANCY CLASS: LIGHT HAZARD DENSITY: 0.10 GPM/SQ FT AREA OF APPLICATION: 1,500 SQ FT			DRY SA SYSTEI OCCUP DENSIT AREA C	DRY SALES AREAS & GENERAL RECEIVING SYSTEM TYPE: WET PIPE SYSTEM - ESFR OCCUPANCY CLASS: CLASS I-IV TO 31' DENSITY: 1.0 GPM/SQ FT AREA OF APPLICATION: 1,200 SQ FT AF				REFRIC PERISI SYSTE OCCUF DENSI AREA (	EFRIGERATED & FREEZER STORAGE/SALES & ERISHABLE RECEIVING AREAEXTERIOR CANOPY AREASYSTEM TYPE:WET PIPE SYSTEM OCCUPANCY CLASS:SYSTEM TYPE:DRY PIPE SYSTE OCCUPANCY CLASS:COUPANCY CLASS:CLASS I, II & III TO 22' ENSITY:0.41 GPM/SQ FT AREA OF APPLICATION: 2,000 SQ FTDENSITY:0.20 GPM/SQ FT AREA OF APPLICATION: 1,950 SQ FT				ERIOR CANOPY AREAS TEM TYPE: DRY PIPE SYSTEM CUPANCY CLASS: ORDINARY GROUP II ISITY: 0.20 GPM/SQ FT A OF APPLICATION: 1,950 SQ FT	
PRODUCT MANUFACTURER			R	SCHEDULE TYPE						— SP ———	SPRINKLER	MAIN PIPING - WET		
MAINS ALLIED		SCH	SCH-10			STEEL					SPRINKLER	BRANCH PIPING - WET		
BRANCHLINES ALLIED		DYN	DYNAFLOW			STEEL				— DP ———	SPRINKLER	SPRINKLER PIPING - DRY PIPE		
GROOVED FITTINGS ANVIL		175-1	175-PSI			CAST-IRON				— F	FIRE HOSE PIPING			
THREADED FITTINGS ANVIL		175-1	175-PSI			DUCTILE-IRON				OS&Y	OUTSIDE SO	CREW & YOKE (W/ TAMPER SWITCH)		
UNDERGROUND PIPE REFER TO SITE DRAWINGS									<u>Ч WFS</u>	FLOW SWIT				
FREEZE PROTECTION (IF APPLICABLE.): BUILDING TO BE MAINTAINED AT 40°F BY OWNER									<u>13</u>					
DEFLECTOR DISTANCE: UN-OBSTRUCTED_CONSTRUCTION_DEFLECTOR_DISTANCE_6"-14"_MAX_BELOW_DECK									v.O.v.					

OFFICE AREAS (NON-COMBUSTIBLE, NON	-STORAGE)	DRY SALES AREAS & GENER	REFF PERI	FRIGERATED & FREEZER STORAGE/SALES RISHABLE RECEIVING AREA			
SYSTEM TYPE: WE OCCUPANCY CLASS: LIC DENSITY: 0.1 AREA OF APPLICATION: 1,5	ET PIPE SYSTEM GHT HAZARD 10 GPM/SQ FT 500 SQ FT	OCCUPANCY CLASS: CLA DENSITY: 1.0 ( AREA OF APPLICATION: 1,20	SS I-IV TO 31' GPM/SQ FT 0 SQ FT	SYST OCC DENS AREA	EM TYPE: JPANCY CLASS: SITY: A OF APPLICATION	WET PIPE SYSTEM CLASS I, II & III TO 2 0.41 GPM/SQ FT J: 2,000 SQ FT	22'
PRODUCT	MANUFACTURER	SCHEDULE	TYPE			SP	
MAINS	ALLIED	SCH-10	STEEL				╞
BRANCHLINES	ALLIED	DYNAFLOW	STEEL			DP	╞
GROOVED FITTINGS	ANVIL	175-PSI	CAST-IRON			OS&Y	╞
THREADED FITTINGS ANVIL		175-PSI	DUCTILE-IRON			□	╞
UNDERGROUND PIPE		TS	╞				
FREEZE PROTECTION (IF AF		V.O.V.	╞				
DEFLECTOR DISTANCE: UN	OBSTRUCTED_CONSTR	UCTION_DEFLECTOR_DISTAI	NCE_6"-14"_MAX_BELOW	_DECK		X X-X	

[													
	EQUIPMENT SCHEDULE												
			DESIGN DATA		ELECTRICAL								
ITEM	SERVICE	MFR.	No.	LOCATION	CAPACITY	TDH	H.P.	R.P.M.	VOLTS	PHASE	HZ.	REMARKS	
FP 1	ELECTRIC DRIVEN FIRE PUMP	AC FIRE PUMP	8100 8X8X17F	PUMP ROOM	1,500 GPM	100 PSI	125 HP	1750	460	3	60	PROVIDE TORNA TECH JPS CONTROLLER PROVIDE ALL TRIM AND APPURTENANCES, INSTALL AND MAKE ALL CONNECTIONS AND TEST IN ACCORDANCE WITH NFPA REQUIREMENTS.	
JP 1	JOCKEY PUMP	GRUNDFOS	CR3-8	PUMP ROOM	15 GPM	110 PSI	2 HP	3500	460	3	60	PROVIDE TORNA TECH JP CONTROLLER PROVIDE ALL TRIM AND APPURTENANCES, INSTALL AND MAKE ALL CONNECTIONS AND TEST IN ACCORDANCE WITH NFPA REQUIREMENTS.	





SIZE OF PIPE SECTION (INCHES) LENGTH OF SECTION (FEET-INCHES)

1.)	CONTRACTOR SHALL PROVIDE COMPLETE FIRE SUPPRESSION SYSTEMS IN CONFORMANCE	20.)	ALL MAINS TO BE SCHEDULE # 10 WITH GROOVED FITTINGS.
	WITH THE AUTHORITY HAVING JURISDICTION (AHJ), THE BUILDING CODE IN AFFECT, THE ACCEPTED EDITION OF N E P.A. 13, ANY AND ALL LOCAL CODES THAT MAY BE IN AFFECT AND	21.)	ALL BRANCH LINES TO BE DYNAFLOW THINWALL WITH WELDED OR ROLLED FITTINGS
	ALL REQUIREMENTS BY THE INSURANCE CARRIER.	22.)	SPRINKLER HEADS TO BE INSTALLED IN THE CENTERLINE OF CEILING TILES.
2.)	COMPLY WITH REQUIREMENTS OF OWNER'S INSURANCE UNDERWRITER FOR SUBMITTALS, APPROVALS, MATERIALS, INSTALLATION, INSPECTIONS AND TESTING .	23.)	FIRE DEPARTMENT CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL FIRE DEPARTMENT. CONTRACTOR TO VERIFY PRIOR TO INSTALLATION.
3.)	INSTALLER'S QUALIFICATIONS: A QUALIFIED FIRM THAT IS EXPERIENCED (MINIMUM OF 5 PREVIOUS PROJECTS SIMILAR IN SIZE AND SCOPE TO THE PROJECT) IN SUCH WORK, FAMILIAR WITH PRECAUTIONS REQUIRED, AND IN COMPLIANCE WITH THE REQUIREMENTS	24.)	FINAL LOCATION OF THE FIRE DEPARTMENT CONNECTION SHALL BE CONFIRMED AND LOCATED WHERE APPROVED BY THE FIRE MARSHAL AND VERIFIED BY THIS CONTRACTOR BEFORE INSTALLATION.
4.)	CONTRACTOR SHALL PERFORM FIELD ACCEPTANCE TESTS OF EACH FIRE PROTECTION SYSTEM. FLUSH, TEST AND INSPECT SPRINKLER PIPING SYSTEMS ACCORDING TO NFPA 13	25.)	CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SEISMIC BRACING REQUIREMENTS FOR THIS PROJECT. ALL PIPING AND EQUIPMENT SHALL BE INSTALLED IN COMPLIANCE WITH BUILDING CODE REQUIREMENTS.
5.)	CHAPTER "SYSTEM ACCEPTANCE." CONTRACTOR SHALL COORDINATE COMPLETE SPRINKLER LAY-OUT WITH CEILINGS,	26.)	SHOP DRAWINGS BEARING THE APPROVAL OF THE INSURANCE UNDERWRITER SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE BEFORE ANY WORK IS STARTED.
·	LIGHTING, HVAC DIFFUSERS & ROOFTOP UNITS, ETC. DURING PRE-CONSTRUCTION MEETINGS. CONFLICTS CAUSED BY LACK OF COORDINATION WILL RESULT IN CORRECTING	27.)	SPRINKLER HEADS LOCATED IN ALL AREAS WITH CEILINGS SHALL BE PENDANT TYPE. SPRINKLERS LOCATED IN AREAS WITHOUT CEILINGS SHALL BE AS INDICATED.
6.)	FURNISH SPRINKLER CABINETS OF FINISHED STEEL AND HINGED COVER SIMILAR TO POTTER-ROEMER FIG. 6162 WITH SPACE FOR A MINIMUM OF 6 SPARE SPRINKLERS OF EACH TYPE PLUS SPRINKLER WRENCH, SUITABLE FOR WALL MOUNTING.	28.)	ANY QUESTIONS CONCERNING WHAT THE INSURANCE UNDERWRITER WILL REQUIRE IN ORDER TO APPROVE THE COMPLETED INSTALLATION (PIPING SIZING, LOCATION OF RISERS TEST STATIONS, HYDRANTS, ALARMS, ETC.) THE BIDDER SHALL CONSULT WITH THE INSURANCE UNDERWRITER BEFORE SUBMITTING HIS BID. FAILURE TO CONSULT WITH THE
7.)	FURNISH SIX (6) EXTRA SPRINKLER HEADS OF EACH TYPE AND ASSOCIATED WRENCHES.		INSURANCE UNDERWRITER DOES NOT RELIEVE THIS CONTRACTOR FROM HIS RESPONSIBILITY BY THE COMPLETION OF ANY AND ALL WORK REQUIRED WITH NO EXTRA
8.)	CONTRACTOR SHALL SUBMIT PRODUCT DATA FOR EACH TYPE SPRINKLER HEAD, VALVE, PIPING SPECIALTY AND FIRE PROTECTION SPECIALTY.	29.)	CHARGES TO THE OWNER. SPRINKLER HEADS SHALL NOT INTERFERE WITH LIGHTING FIXTURES, SPEAKERS, AIR
9.)	INSTALL SPRINKLER PIPING TO PROVIDE FOR SYSTEM DRAINAGE IN ACCORDANCE WITH NFPA 13.		CONDITIONING DIFFUSERS AND GRILLES, ETC. COORDINATE WITH ARCHITECT'S REFLECTE CEILING PRIOR TO SUBMITTING SHOP DRAWING.
10.)	INSTALL TEST CONNECTION SIZED AND LOCATED IN ACCORDANCE WITH NFPA 13 COMPLETE WITH SHUT-OFF VALVE. TEST CONNECTIONS MAY ALSO SERVE AS DRAIN PIPES.	30.)	ALL SPRINKLER PIPING SHALL BE RUN AS HIGH AS POSSIBLE. ALL MAINS SHALL BE RUN IN THE JOIST WEBBING IF POSSIBLE TO AVOID DAMAGE DUE TO STORE OPERATIONS.
11.)	FLUSH TEST AND INSPECT SPRINKLER PIPING SYSTEMS IN ACCORDANCE WITH NFPA 13.	• • • •	COORDINATE LOCATIONS WITH GENERAL CONTRACTOR'S FIELD REPRESENTATIVE.
12.)	HANGERS AND SUPPORTS SHALL COMPLY WITH NFPA 13. SUPPORT SPACING AND	31.)	EXACT LOCATION OF SPRINKLER HEADS AND PIPING SHALL BE COORDINATED WITH OTHER TRADES BEFORE INSTALLATION.
	WRITTEN INSTRUCTIONS FOR RIGID SYSTEMS. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATION SECTION FOR VIBRATION ISOLATION AND SEISMIC RESTRAINTS.	32.)	SPRINKLER HEADS LOCATED IN COOLER & FREEZER AREAS SHALL BE ALIGNED WITH RACKING UPRIGHT SUPPORTS WHERE POSSIBLE TO AVOID DAMAGE FROM PALLET LIFTS DURING ROUTINE STORE OPERATIONS. CONTRACTOR SHALL OBTAIN FINAL RACKING
13.)	CONTRACTOR FOR THIS WORK SHALL CAREFULLY REVIEW AND ACQUAINT HIMSELF WITH DRAWINGS OF ALL TRADES IN ORDER THAT HE FULLY UNDERSTAND THE WORK REQUIRED. HE SHALL FIELD MEASURE AND VERIFY ALL DIMENSIONS, CONDITIONS AND COORDINATION ISSUES REFORE PROCEEDING WITH THE WORK	33.)	DRY PENDANT HEADS IN COOLER & FREEZER AREAS SHALL HAVE PROPER EXTENTION WHICH SHALL BE BASED ON TEMPERATURE OF AREA SERVED. (MINIMUM 18")
14.)	CONTRACTOR TO PAY FOR AND SUPPLY ALL DUMPSTERS FOR DEBRIS REMOVALS. COORDINATE AND OBTAIN APPROVAL FOR DUMPSTER LOCATIONS ON SITE AND DEBRIS REMOVAL ROUTES WITH OWNER.	34.)	AS THE ACTUAL LIFE SPAN OF THE SPRINKLER SYSTEM IS DEPENDENT ON MANY VARIABLES INCLUDING BUT NOT LIMITED TO WATER QUALITY AND ATMOSPHERIC CONDITIONS. THE ENGINEER ASSUMES NOT LABILITY OF RESPONSIBILITY OF THE EXPECTED LIFE SPAN OF TH
15.)	SPRINKLER SYSTEM SHALL BE TESTED IN ACCORDANCE WITH NFPA-13. REPLACE PIPING SYSTEM COMPONENTS WHICH DO NOT PASS THE TEST PROCEDURES SPECIFIED AND RETEST REPAIRED PORTIONS OF THE SYSTEM.		SPRINKLER SYSTEM DO TO MICRO-BIOLOGICALLY INFLUENCED CORROSION (MIC). THE SPRINKLER CONTRACTOR AND/OR THE GENERAL CONTRACTOR SHALL HAVE THE SPRINKLER SYSTEMS TESTED AND TREATED (IF NECESSARY) FOR PROTECTION AGAINST
16.)	CONTRACTOR SHOP DRAWINGS SHALL INCLUDE ALL FIRE MAIN RESTRAINING DETAILS PER NFPA 24 SECTION 8-6.2.	35.)	MICKU-BIOLUGICALLY INFLUENCED CORKUSION (MIC). SPRINKLER INSTALL IN COOLER/FREEZER
			AT DIVE TILADA DAED WITH WIIN OF 10 OF DIVERTIFE FUR RIAFRA

19.) X - X DENOTES LENGTH OF PIPE (FT. - IN.) FROM CENTER TO CENTER OF FITTINGS. 3 GENERAL SPRINKLER NOTES

17.) ALL PIPE AND FITTINGS TO CONFORM TO NFPA 13.

18.) (X'-X") DENOTES CENTER LINE OF PIPE A.F.F.

- NTION
- Y VARIABLES, NS. THE SPAN OF THE ). THE AGAINST
- B) INSULATE RISER PIPE ABOVE FREEZER WITH AT LEAST 16" ARMFLEX 1/2" TO PREVENT
- CONDENSATE BUILD UP ROLLING DOWN INTO SPRINKLER TRIGGER C) ALL PENETRATIONS DOUBLE SEALED TOP AND BOTTOM TO AVOID ANY CHANCE OF
- CONDENSATION FORMING AT TRIGGER PIN D) SPRINKLER HEADS SHOULD NOT BE INSTALLED CLOSE TO ELECTRIC DEFROST HEATERS IN
- EVAPS E) SPRINKLER HEADS SHOULD NOT BE INSTALLED IN FRONT OF THE WIND CHILL OF EVAP FANS

OCCUPANCY TYPE	MERCANTILE ( WHOLESALE MARKET)					
LOCATION	DANBURY ROAD					
	BREWSTER, NY					
GOVERNING CODES						
BUILDING CODE: 202 FIRE CODE: 202 NFPA CODE: NFF	0 BUILDING CODE OF NEW YORK STATE 0 FIRE CODE OF NEW YORK STATE PA 13, NFPA 14, NFPA 20, NFPA 72					



DWG #	DRAWING TITLE						
FP-1.0	FIRE PROTECTION OVERVIEW SHEET						
FP-2.0	FIRE PROTECTION FLOOR PLAN						
FP-2.1	FIRE PROTECTION PUMP AND TANK DETAILS						
FP-3.0	FIRE PROTECTION DETAILS						
5 DRAWING INDEX							

