

	2 PROD	
1.01		ALARM SYSTEM
	Α.	FIRE ALARM SYSTEM:
		1. PROVIDE ALL
		2. PROTECTED P
		3. FIX OR REPLA
		4. COMPLY WITH
		a. ADA S
		b. THE F
		c. APPL
		d. CONT
		e. NFPA
		FROM
		5. EVACUATION
		GENERAL EVA
		6. VOICE NOTIF
		7. GENERAL EVA
		ZONES ON TH
		8. PROGRAM NO
		9. FIRE ALARM C
	В.	SUPERVISING STATIO
		1. PUBLIC FIRE I
	C.	CIRCUITS:
	0.	1. INITIATING D
		2. SIGNALING LI
		3. NOTIFICATIO
	D.	POWER SOURCES:
	υ.	1. PRIMARY: DE
		2. SECONDARY:
		3. CAPACITY : SI
		4. EACH COMPU
		4. EACH COMPU
1 0 2 6		FETY SYSTEMS INTER
1.021	A.	SUPERVISION: PROVI
	В.	ALARM: PROVIDE ALA
	υ.	
1.03 (	COMPO	NENTS
		GENERAL:
	/	1. PROVIDE FLU
		2. PROVIDE LEG
	В.	FIRE ALARM CONTROL
	С.	MASTER CONTROL UN
	D.	INIATING DEVICES:
	υ.	1. ADDRESSABLE
		a. ADDR b. PROV
		AND
	F	

NOTIFICATION APPLIANCES: LOCKS AND KEYS: DELIVER KEYS TO OWNER



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## **DIVISION 28 - ELECTRONIC SAFETY AND SECURITY SECTION 286400** FIRE DETECTION AND ALARM

: PROVIDE ALTERATIONS TO AUTOMATIC FIRE DETECTION AND ALARM SYSTEM:

L COMPONENTS NECESSARY, REGARDLESS OF WHETHER SHOWN ON CONTRACT DOCUMENTS OR NOT. PREMISES: ENTIRE BUILDING SHOWN ON DRAWINGS

LACE ANY EXISTING DEVICES REQUIRED TO MAKE A FULLY COMPLETE AND FUNCTIONING SYSTEM. ITH THE FOLLOWING: WHERE REQUIREMENTS CONFLICT, ORDER OF PRECEDENCE OF REQUIREMENTS IS AS LISTED:

A STANDARDS.

E REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.

PLICABLE LOCAL CODES. NTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS).

A 72; WHERE THE WORD "SHOULD" IS IS USED CONSIDER THAT PROVIDION MANDATORY; WHERE CONFLICTS BETWEEN REQUIREMENTS REQUIRE DEVIATION OM NFPA 72, IDENTIFY DEVIATIONS CLEARLY ON DESIGN DOCUMENTS. IN ALARM: MULTIPLE SMOKE ZONES; ALLOW FOR EVACUATION NOTIFICATION OF ANY INDIVIDUAL ZONE OR COMBINATION OF ZONES, IN ADDITION TO

VACUATION OF ENTIRE PREMISES.

IFICATION: PROVIDE EMERGENCY VOICE/ALARM COMMUNICATIONS WITH MULTICHANNEL CAPABILITY: DIGITAL. VACUATION ZONES: EACH SMOKE ZONE IS CONSIDERED A GENERAL EVACUATION ZONE UNLESS OTHERWISE INDICATED, WITH ALARM NOTIFICATION IN ALL THE SAME FLOOR, ON THE FLOOR ABOVE, AND THE FLOOR BELOW.

NOTIFICATION ZONES AND VOICE MESSAGES AS DIRECTED BY OWNER.

1 CONTROL UNIT: NEW, LOCATED AT SUPERVISING STATION IONS AND FIRE DEPARTMENT CONNECTIONS:

E DEPARTMENT NOTIFICATION: BY ON-PREMISES SUPERVISING STATION.

DEVICE CIRCUITS (IDC): CLASS B, STYLE A. LINE CIRCUITS (SLC) WITHIN SINGLE BUILDING: CLASS B, STYLE 0.5. TON APPLIANCE CIRCUITS (NAC): CLASS B, STYLE W.

DEDICATED BRANCH CIRCUITS OF THE FACILITY POWER DISTRIBUTION SYSTEM.

Y: STORAGE BATTERIES. SUFFICIENT TO OPERAT ENTIRE SYSTEM OF PERIOD SPECIFIED BY NFPA 72.

PUTER SYSTEM: PROVIDE UNINTERRUPTABLE POWER SUPPLY (UPS).

RFACES VIDE SUPERVISORY SIGNALS IN ACCORDANCE WITH NFPA 72 FOR THE FOLLOWING: LARM INITIATION IN ACCORDANCE WITH NFPA 72 FOR THE FOLLOWING:

LUSH MOUNTED UNITS WHERE INSTALLED IN FINISH AREAS; IN UNFINISHED AREAS, SURFACE MOUNTED UNITS ARE ACCEPTABLE. EGIBLE, PERMANENT LABELS FOR EACH CONTROL DEVICE USING IDENTIFICATION USED IN OPERATION AND MAINTENANCE DATA. DL UNITS: ANALOG ADDRESSABLE TYPE; LISTED, CLASSIFIED, AND LABELED AS SUITABLE FOR THE PURPOSE INTENDED. IT:

LE SYSTEMS:

DRESSABLE DEVICES: INDIVIDUALLY IDENTIFIABLE BY ADDRESSABLE FIRE ALARM CONTROL UNIT.

OVIDE SUITABLE ADDRESSABLE INTERFACE MODULES AS INDICATED OR AS REQUIRED FOR CONNECTION TO CONVENTIONAL (NON-ADDRESSABLE\_ DEVICES D OPTHER COMPONENTS THAT PROVIDE A DRY CLOSURE OUTPUT.

CIRCUIT CONDUCTORS: COPPER OR OPTICAL FIBER, PROVIDE 200 FEET EXTRA; COLOR CODE AND LABEL

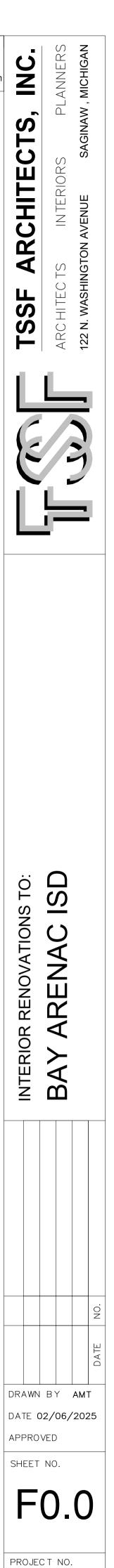
SURGE PROTECTION: IN ACCORDANCE WITH IEEE C62.41.2 CATEGORY B COMBINATION WAVEFORM AND NFPA 70; EXCEPT FOR OPTICAL FIBER CONDUCTORS.

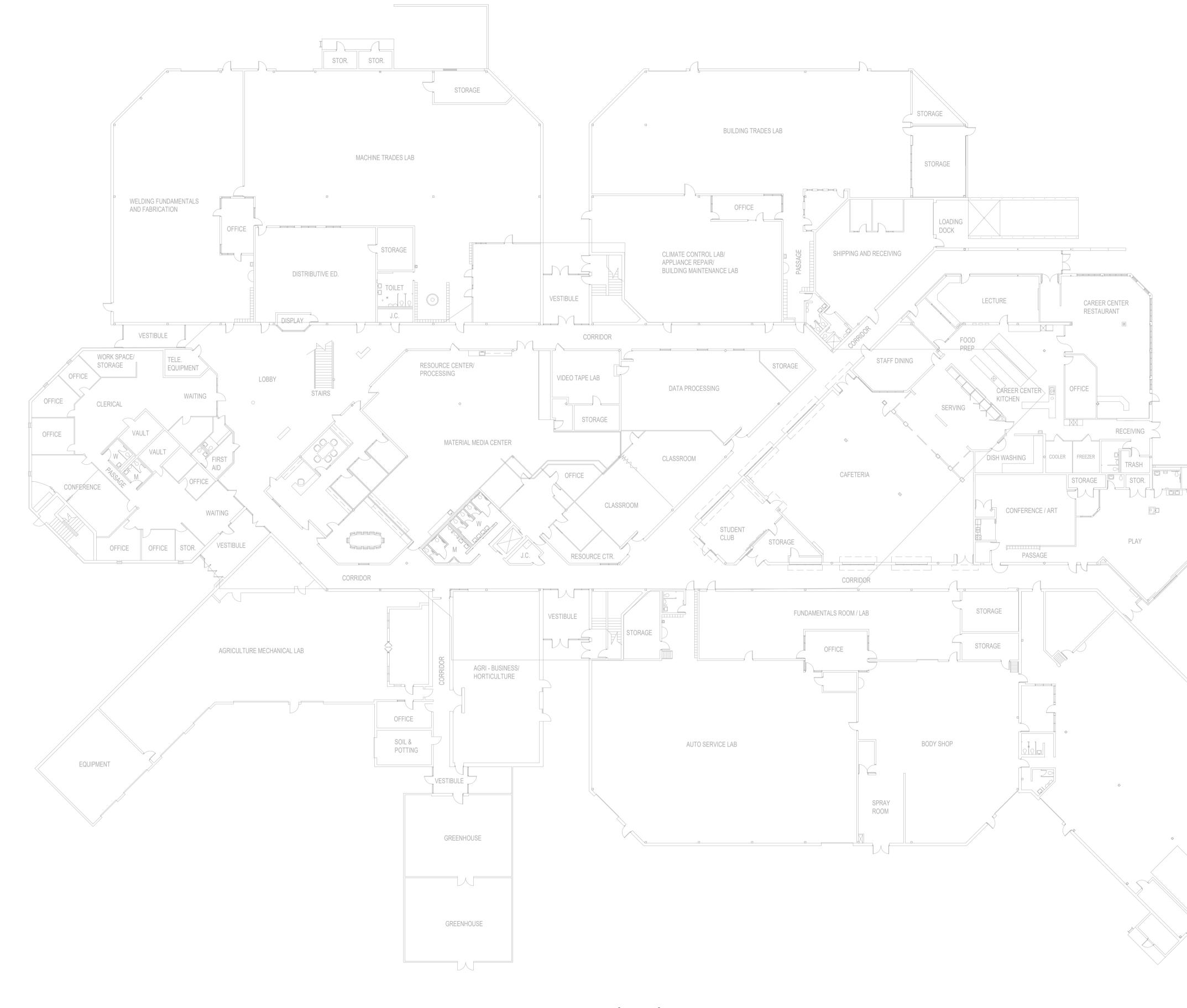
INSTRUCTION CHARTS: PRINTED INSTRUCTION CHART FOR OPERATORS, SHOWING STEPS TO BE TAKEN WHEN A SIGNAL IS RECIEVED (NORMAL, ALARM, SUPERVISORY, AND TROUBLE); EASILY READABLE FROM NORMAL OPERATORS STATION. FRAME: STAINLESS STEEL OR ALUMINUM WITH POLYCARBONATE OR GLASS COVER.

PROVIDE ONE FOR EACH CONTROL UNIT WHERE OPERATIONS ARE TO BE PERFORMED.

OBTAIN APPROVAL OF OWNER PRIOR TO MOUNTING; MOUNT IN LOCATION ACCEPTABLE TO OWNER.

4. PROVIDE EXTRA COPY WITH OPERATION AND MAINTENANCE DATA SUBMITTAL.









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## FIRE ALARM SYSTEM NOTES:

THESE DRAWINGS ARE THE PROPERTY OF THE ARCHITECT/ENGINEER AND ARE NOT TO BE REUSED OR REPRODUCED WITHOUT THEIR WRITTEN PERMISSION. THIS DRAWING IS COPYWRITTEN

- 1. RACEWAYS CONTAINING CONDUCTORS IDENTIFIED AS "FIRE PROTECTIVE ALARM SYSTEM" CONDUCTORS SHALL NOT CONTAIN ANY OTHER CONDUCTORS AND NO AC CURRENT CARRYING CONDUCTORS WILL BE ALLOWED IN THE SAME RACEWAY WITH THE DC FIRE ALARM DETECTION AND SIGNALING CONDUCTORS.
- 2. ALL EQUIPMENT SHALL BE LISTED BY UNDERWRITERS LABORATORIES, INC., OR AS ACCEPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION. THE FIRE ALARM SYSTEM IN ITS ENTIRETY SHALL BE IN COMPLIANCE WITH ALL APPLICABLE FIRE AND ELECTRICAL CODES.
- 3. SUBMIT SHOP DRAWINGS AND MANUFACTURER'S LITERATURE. SUBMIT WIRING DIAGRAMS SHOWING LOCATION OF ALL DEVICES, REQUIRED WIRING AND OTHER PERTINENT INFORMATION. THE ARCHITECT AND ENGINEER WILL APPROVE ALL EQUIPMENT SUBMITTALS. MANUFACTURER'S ORIGINAL CATALOG DATA AND DESCRIPTIVE INFORMATION SHALL BE SUPPLIED FOR ALL MAJOR COMPONENTS OF THE EQUIPMENT TO BE SUPPLIED. SUFFICIENT INFORMATION SHALL BE SUPPLIED SO THAT THE EXACT FUNCTION IS KNOWN OF EACH INSTALLED DEVICE. INCOMPLETE SHOP DRAWINGS WILL BE SENT BACK TO THE SUPPLIER "REJECTED".
- 4. FURNISH AND INSTALL AN AUTOMATIC FIRE DETECTION SYSTEM INCLUDING FLOW SWITCHES AND TAMPER SWITCHES, AUDIBLE AND VISUAL DEVICE, ALL WIRING, CONDUIT AND CONNECTIONS TO ALL DEVICES. PROVIDE ALL ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- 5. THE SPECIFIED EQUIPMENT SHALL BE PROVIDED BY A SINGLE MANUFACTURER, WHO CAN SHOW PROOF OF HAVING SATISFACTORILY ENGINEERED AND FURNISHED COMPARABLE SYSTEMS.
- 6. THE COMPLETE FIRE ALARM SYSTEM SHALL BE INSTALLED BY, OR UNDER THE SUPERVISION OF STATE LICENSED FIRE ALARM SYSTEM INSTALLER.
- 7. ELECTRICAL CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED BY STATE AND LOCAL LAWS AND ORDINANCES AND PAY ALL FEES AND EXPENSES IN CONNECTION THEREWITH AS A PART OF THEIR WORK UNDER THIS CONTRACT. CONTRACTOR IS TO SUBMIT SHOP DRAWINGS TO FIRE MARSHALL AND PAY ALL FEES CONNECTED WITH THEIR APPROVAL OF FIRE ALARM SYSTEM. SUBMIT ONLY FIRE MARSHALL APPROVED SHOP DRAWINGS TO ENGINEER.
- 8. UPON COMPLETION OF WORK, FURNISH OWNER CERTIFICATES OF FINAL INSPECTION AND APPROVAL FROM AUTHORITIES HAVING JURISDICTION.
- 9. EQUIPMENT AND MATERIALS SHALL BE U.L. APPROVED.
- 10. ALL WIRING FOR FIRE ALARM SYSTEM TO BE COPPER. NO ALUMINUM IS ALLOWED ON THIS PROJECT.
- 11. WIRING SHALL BE INSTALLED IN STEEL ELECTRICAL METAL TUBING (EMT).
- 12. HOLES THROUGH WALLS OR PARTITIONS REQUIRED FOR ELECTRICAL WORK SHALL BE NEATLY CUT TO SIZE. PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE FIRESTOPPED BY APPROVED METHODS AND MATERIALS.

