LSE LOCAL SOUND EQUIPMENT
MIC LOCAL SOUND SYSTEM JACK OUTLET
LSS LOCAL SOUND SYSTEM LARGE SPEAKER
LS LOCAL SOUND SYSTEM SPEAKER

H1 LOCAL SOUND SYSTEM

NO SCALE | TECHNOLOGY ~ DIVISION 17

A ADMIN PHONE
B CLASSROOM/STAFF PHONE
PA PAGING CONTROL
TC TELEPHONE MASTER CONTROL

G1 TELEPHONES

– | TECHNOLOGY ~ DIVISION 17

P▼ PAY TELEPHONE OUTLET ~ 44"AFF UNO
E▼ TELEPHONE OUTLET FOR ELEVATOR CONNECTION
WA WIRELESS ACCESS POINT CEILING MOUNTED
WA WIRELESS ACCESS POINT WALL MOUNTED

F1 MISCELLANEOUS TECHNOLOGY

NO SCALE | TECHNOLOGY ~ DIVISION 17

C CLOCK
LC LARGE CLOCK
S SPEAKER ~ CEILING MOUNTED
S SPEAKER ~ WALL MOUNTED
HS SPEAKER ~ HIGH OUTPUT ~ CEILING MOUNTED
SS LARGE SPEAKER
IC INTERCOM
C/S/IC CLOCK/SPEAKER/INTERCOM UNIT

NOTE: DIVISION 16 SHALL WIRE AND CONNECT 120 VOLT WIRING FOR THE CLOCKS IN EACH AREA TO CIRCUIT INDICATED. PROVIDE (2)#12+(1)#12G. PROVIDE TRANSFORMERS AS REQUIRED. LOW VOLTAGE AND SYSTEM WIRING BY DIVISION 17.

D1 CLOCKS AND SPEAKERS (P.A.)

NO SCALE | TECHNOLOGY ~ DIVISION 17

SEC SECURITY PANEL, MOUNT WITH TOP OF PANEL NOT MORE THAN 72"AFF
SAP ANNUNCIATOR, MOUNT WITH TOP OF PANEL NOT MORE THAN 72"AFF
SKP KEYPAD, MOUNT 48"AFF
SMP MOTION SENSOR, PASSIVE INFRARED (PIR), WALL MOUNTED 96"AFF
SMC MOTION SENSOR, PASSIVE INFRARED (PIR), CEILING MOUNTED
SMW MOTION SENSOR, MICROWAVE, WALL MOUNTED
SMC MOTION SENSOR, MICROWAVE, CEILING MOUNTED
SMD MOTION SENSOR, DUAL TECHNOLOGY, PIR/MICROWAVE, WALL MOUNTED
SSC MOTION SENSOR, DUAL TECHNOLOGY, PIR/MICROWAVE, CEILING MOUNTED
SCA CAMERA
SDC CARD ACCESS, MOUNT
SDR DOOR CONTACT, MAGNETIC LOCK
SDS DOOR RELEASE BUTTON
SSB DOOR SWITCH
SST BELL
SHN STROBE
SBL HORN
SX MAGNETIC DOOR LOCK
TRANSFORMER

F3 SECURITY SYSTEM

NO SCALE | TECHNOLOGY ~ DIVISION 17

1. PROVIDE BOXES, RACKS, ETC. WHERE INDICATED OR NEEDED
2. BOXES AND CONDUIT WITH PULL STRING TO 6" ABOVE NEAREST ACCESSIBLE CEILING (UNLESS NOTED OTHERWISE) BY DIVISION 16.
3. IN AREAS WITHOUT CEILINGS, CONDUIT PROVIDED TO NEAREST ACCESSIBLE CORRIDOR CEILING ~ 1" CONDUIT TO SINGLE GANG BOXES, 1 1/4" CONDUIT TO DOUBLE GANG BOXES.
4. WIRING OUTLETS, PLATES, AND CONNECTIONS BY DIVISION 17 (UNLESS NOTED OTHERWISE)
5. PROVIDE BLANK INSERTS FOR ALL OUTLET OPENINGS IN PLATES THAT ARE UNUSED

D3 TECHNOLOGY GENERAL NOTES

NO SCALE

[1] PROVIDE FITTINGS AS NEEDED FOR THE FLOOR BOXES. PROVIDE ALL NECESSARY HARDWARE TO INSTALL OUTLETS COMPLETELY AS SPECIFIED BY THE FLOOR BOX MANUFACTURER

SYMBOL	MTG HT AFF UNO	DESCRIPTION	KEY NOTE	CONDUIT SIZE	BOX TYPE: SINGLE GANG DEVICE RING IN 4X4SQ	BOX TYPE: DOUBLE GANG – SEE DETAIL ET101 E3	BOX TYPE: DOUBLE GANG – SEE DETAIL ET101 E6	BOX TYPE: FLUSH UNDERFLOOR ~ BY DIVISION 16	BOX TYPE: FOUR GANG – SEE DETAIL ET101 E8	OUTLET TYPE: 8–WIRE, 8 POSITION CAT 5e VOICE OUTLET	OUTLET TYPE: MTRJ, VF–45, OPTI–JACK	OUTLET TYPE: 8–WIRE, 8 POSITION CAT 5e OUTLET	OUTLET TYPE: RJ–45 WITH SS WALL PHONE PLATE	OUTLET TYPE: F TYPE OUTLET	OUTLET TYPE: RCA BULKHEAD	OUTLET TYPE: BLANK	OUTLET TYPE: –	CABLING: 2–STRAND 50/125um OPTICAL FIBER	CABLING: CATEGORY 5e 4–PAIR UTP	CABLING: RG–59 75 OHM COAX	CABLING: RG–11 75 OHM COAX	CABLING: –
A–	18"	ADMINISTRATIVE OUTLET		1"		X				1	1					4		1	1			
A2–	18"	ADMINISTRATIVE OUTLET		1"		X				2	2					2		2	1			
A3–	18"	ADMINISTRATIVE OUTLET		1"		X				1	2					3		1	2			
A4–	48"	WORKROOM OUTLET		1 1/4"		X				2	4							4	2			
D–	18"	DATA OUTLET		1"		X					1					5		1				
D2–	18"	DATA OUTLET		1"		X					2					4		2				
D4–	18"	DATA OUTLET		1"		X					4					2		4				
M–	18"	TECHNOLOGY ACCESS OUTLET		1 1/4"			X			1	1			1		9		1	1		1	
P–	45"	WALL PHONE OUTLET		3/4"	X								1			0			1			
T–	18"	TEACHER PRESENTATION OUTLET		(1)1 1/4" + (1)1"					X	1	1	1		1	3	11		1	2	3	1	
V–	18"	VIDEO/CATV OUTLET		1"	X									1		5					1	
TV–	18"	TV/PRESENTATION OUTLET		1 1/4"			X					1		1	3	7			1	3	1	
A	–	FLOOR DATA OUTLET	1	1 1/4"				X			6					6		6				
B	–	FLOOR DATA OUTLET	1	1 1/4"				X			8					4		8				

F5 FIRE ALARM SYSTEM

NO SCALE

FACP FIRE ALARM CONTROL PANEL, MOUNT WITH TOP OF PANEL NOT MORE THAN 72"AFF
FAA FIRE ALARM ANNUNCIATOR, MOUNT WITH TOP OF PANEL NOT MORE THAN 72"AFF
SMOKE DETECTOR
SS SINGLE STATION SMOKE DETECTOR WITH AUDIBLE INDICATING APPLIANCE, MOUNT 80"AFF TO BOTTOM OR 6" BELOW CEILING WHICHEVER IS LOWER
SS AV SINGLE STATION SMOKE DETECTOR WITH AUDIBLE/VISUAL INDICATING APPLIANCE, MOUNT 80"AFF TO BOTTOM OR 6" BELOW CEILING WHICHEVER IS LOWER
HEAT DETECTOR
DUCT SMOKE DETECTOR
RTS REMOTE TEST/INDICATOR FOR DUCT SMOKES, MOUNT ON CEILING BENEATH UNIT, OR WALL MOUNT WHERE INDICATED ON PLANS
F MANUAL PULL STATION, MOUNT 48"AFF
F AUDIO/VISUAL INDICATING APPLIANCE, CANDELA AS NOTED ON PLANS, MOUNT 80"AFF TO BOTTOM OR 6" BELOW CEILING WHICHEVER IS LOWER
F VISUAL INDICATING APPLIANCE, CANDELA AS NOTED ON PLANS, MOUNT 80"AFF TO BOTTOM OR 6" BELOW CEILING WHICHEVER IS LOWER
S SPEAKER/STROBE, CANDELA AS NOTED ON PLANS, MOUNT 80"AFF TO BOTTOM OR 6" BELOW CEILING WHICHEVER IS LOWER
MDH MAGNETIC DOOR HOLD OPEN DEVICE
SPRINKLER SYSTEM WATER FLOW SWITCH ~ PROVIDED UNDER DIVISION 15 ~ WIRED UNDER DIVISION 16
SPRINKLER SYSTEM TAMPER SWITCH ~ PROVIDED UNDER DIVISION 15 ~ WIRED UNDER DIVISION 16
SPRINKLER SYSTEM ALARM CHECK VALVE PRESSURE SWITCH ~ PROVIDED UNDER DIVISION 15 ~ WIRED UNDER DIVISION 16
SPRINKLER SYSTEM EXCESS PRESSURE PUMP ~ PROVIDED UNDER DIVISION 15 ~ WIRED UNDER DIVISION 16
K KNOX BOX, MOUNT

D5 FLOOR AND CEILING DEVICES

NO SCALE

F DUPLEX 20A, 125V, 2P, 3W, NEMA 5–20R RECEPTACLE ~ MOUNTED IN FLUSH FLOOR BOX
F DOUBLE DUPLEX 20A, 125V, 2P, 3W, NEMA 5–20R RECEPTACLE ~ MOUNTED IN FLUSH FLOOR BOX
F J JUNCTION BOX ~ MOUNTED IN FLUSH FLOOR BOX
F E EMPTY FLUSH FLOOR BOX
DUPLEX RECEPTACLE ~ 20A, 125V ~ PEDESTAL MOUNTED
1 SINGLE 20A, 125V, 2P, 3W, NEMA 5–20R ~ PEDESTAL MOUNTED
J JUNCTION BOX ~ PEDESTAL MOUNTED
C DUPLEX 20A, 125V, 2P, 3W, NEMA 5–20R RECEPTACLE ~ FLUSH MOUNTED IN CEILING
C DOUBLE DUPLEX RECEPTACLE ~ FLUSH MOUNTED IN CEILING
C D DATA OUTLET ~ FLUSH MOUNTED IN CEILING ~ SEE SCHEDULE FOR TYPE

NOTE

SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION INTO THE DESIGN

AFF	ABOVE FINISHED FLOOR
UNO	UNLESS NOTED OTHERWISE
WP	WEATHERPROOF
BRKRS	CIRCUIT BREAKERS
P/O	PART OF
WG	WIREGUARD
CB	CIRCUIT BREAKER
MT	MOUNT
(E)	EXISTING ITEM TO REMAIN
(R)	REMOVE ITEM AND TURN OVER TO OWNER
(ER)	RELOCATED ITEM AT NEW LOCATION
(RL)	REMOVE AND RELOCATE

C9 ABBREVIATIONS

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F7 LIGHT SWITCHES

NO SCALE

~ CENTERLINE 48" AFF ~

$a LIGHT SWITCH ~ LOW VOLTAGE MOMENTARY, UNO LETTER INDICATES SWITCHING
$3 THREE–WAY LIGHT SWITCH
$4 FOUR–WAY LIGHT SWITCH
$2 TWO–POLE SWITCH
$K KEY OPERATED SWITCH ~ LOW VOLTAGE MOMENTARY, UNO
$P SINGLE POLE SWITCH WITH RED PILOT LIGHT ~ RED LIGHT SHALL GLOW WHEN CIRCUIT IS ENERGIZED
$a $b MULTI–GANGED SWITCHES ~ GANG UNDER ONE PLATE ~ LETTER INDICATES SWITCHING
OS OCCUPANCY SENSOR SWITCH, WALL MOUNTED
OS OCCUPANCY SENSOR SWITCH, CEILING MOUNTED
$D INCANDESCENT DIMMER SWITCH
$FD FLUORESCENT DIMMER SWITCH
$F $F HANDICAP SWITCHES FOR HOOD LIGHT AND FAN
$T TIMER SWITCH
LTC LIGHTING TIME CLOCK
LC LIGHTING CONTACTOR

D7 SINGLE RECEPTACLES

NO SCALE

PANELBOARD ~ SURFACE MOUNTED
PANELBOARD ~ FLUSH MOUNTED
FUSED DISCONNECT SWITCH
NON–FUSED DISCONNECT SWITCH
00 MOTOR STARTER ~ NUMBER INDICATES NEMA SIZE
00 COMBINATION MOTOR STARTER/FUSED DISCONNECT
MOTOR ~ NUMBER INDICATES HORSEPOWER
M METER AND CABINET
J JUNCTION BOX ~ CEILING MOUNTED
J JUNCTION BOX ~ WALL MOUNTED
J JUNCTION BOX ~ FLOOR MOUNTED
J JUNCTION BOX ~ PEDESTAL MOUNTED
T# TRANSFORMER ~ NUMBER INDICATES DESIGNATION SEE TRANSFORMER SCHEDULE
VFD VARIABLE FREQUENCY DRIVE
TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR
E EMERGENCY SHUTOFF SWITCH ~ WALL MOUNTED 48" TO CENTERLINE ~ PROVIDE TAMPER–PROOF COVER
CONDUIT TURNING UP
CONDUIT TURNING DOWN
WIRING UNDERGROUND OR UNDERSLAB
HOMERUN ~ (2)#12+(1)#12G UNO (EXCEPT COMPUTER AND LIGHTING CIRCUITS: (1)#12+(1)#10N+(1)#12G UNO)
SINGLE–PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT
3–PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT
L~20A,1P INDICATES 20A,1P LOCKING CIRCUIT BREAKER
FLEXIBLE CONNECTION
GROUNDING SYSTEM
PP PUSH PADDLE FOR POWER DOOR OPERATOR ~ FURNISHED BY DIVISION 8, WIRED BY DIVISION 16

A7 POWER DISTRIBUTION

NO SCALE

F9 LUMINAIRES

NO SCALE

LIGHT FIXTURE ~ RECESSED TROFFER ~ TYPICAL
F1 ~ INDICATES LIGHT FIXTURE TYPE ON LUMINAIRE SCHEDULE
a ~ LOWER CASE LETTER INDICATES SWITCHING ~ TYPICAL
2 ~ NUMBER INDICATES CIRCUITING ~ TYPICAL
HATCHING INDICATES FIXTURE WITH ONE LAMP ON EMERGENCY BATTERY/BALLAST
RECESSED DOWNLIGHT
WALL MOUNTED LIGHT FIXTURE ~ TYPICAL
CEILING SURFACE OR PENDANT LIGHT FIXTURE ~ TYPICAL
BP# EMER BATTERY UNIT WITH NO HEADS, MT 7'–6"AFF
BP# ~ INDICATES BATTERY UNIT DESIGNATION
2 ~ NUMBER INDICATES CIRCUITING
BP# EMER BATTERY UNIT WITH INTEGRAL HEADS, MT 7'–6"AFF
BP# ~ INDICATES BATTERY UNIT DESIGNATION
2 ~ NUMBER INDICATES CIRCUITING
BP# SINGLE REMOTE EMERGENCY LIGHT HEAD, MOUNT 7'–6"AFF
BP# INDICATES BATTERY UNIT CONNECTED TO
BP# DOUBLE REMOTE EMERGENCY LIGHT HEAD, MOUNT 7'–6"AFF
BP# INDICATES BATTERY UNIT CONNECTED TO
EXIT SIGN, CEILING MOUNTED, SHADING INDICATES FACE(S)
ARROWHEAD INDICATES CHEVRON(S) REQUIRED
2 ~ NUMBER INDICATES CIRCUIT NUMBER
EXIT SIGN, WALL MOUNTED, SHADING INDICATES FACE(S)
MOUNT AT 7'–6"AFF OR OVER DOOR
2 ~ NUMBER INDICATES CIRCUIT NUMBER
RB REMOTE BALLAST ~ ALLOW 9" IN ALL DIRECTIONS BETWEEN BALLASTS

A9 GENERAL NOTES

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1. BRANCH CIRCUIT WIRING NOT SHOWN. WIRE AND CONNECT ELECTRICAL ITEMS TO CIRCUITS INDICATED.
2. DISCONNECT, REMOVE, RELOCATE, AND RECONNECT ELECTRICAL CONDUIT, WIRING, DEVICES, BOXES, FIXTURES, EQUIPMENT, ETC. AS INDICATED AND AS REQUIRED TO FACILITATE STRUCTURAL AND ARCHITECTURAL MODIFICATIONS. WHERE ELECTRICAL ITEMS ARE REMOVED, REMOVE CONDUIT AND WIRING BACK TO SOURCE.
3. DO NOT SCALE THE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
4. THE LOCATION OF EQUIPMENT, OUTLETS, ETC. AS GIVEN ON THE DRAWINGS, IS APPROXIMATE. IT SHALL BE UNDERSTOOD THAT THESE LOCATIONS ARE SUBJECT TO MODIFICATION AS MAY BE FOUND NECESSARY OR DESIRABLE AT THE TIME OF INSTALLATION IN ORDER TO MEET STRUCTURAL/ARCHITECTURAL REQUIREMENTS. SUCH CHANGES SHALL BE MADE WITHOUT EXTRA CHARGE.
5. ALL ELECTRICAL DEVICES, WHEN INSTALLED, SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. COVER PLATES SHALL BE INSTALLED AFTER FINISH MATERIALS HAVE BEEN APPLIED.
6. COORDINATE ALL WORK WITH OTHER DIVISIONS. VERIFY EXACT POWER REQUIREMENTS OF MECHANICAL EQUIPMENT WITH DIVISION 15. POWER WIRING FOR EQUIPMENT & CONTROL IS TO BE PERFORMED BY DIVISION 16. CONTROL WIRING BY DIVISION 15.
7. A BUILDING LIGHTING CONTROL SYSTEM IS TO BE PROVIDED. REFER TO SPECIFICATIONS AND LIGHTING PLANS.

D9 RECEPTACLES

NO SCALE

~ MOUNT WITH CENTERLINE 18"AFF UNO ~
~ MOUNT EXTERIOR WITH CENTERLINE 24"AFG UNO ~
DUPLEX RECEPTACLE ~ 20A, 125V
GFCI TYPE DUPLEX RECEPTACLE ~ MOUNT 44"AFF UNO
WP GFCI RECEPTACLE WITH WEATHERPROOF COVER
WP GFCI RECEPTACLE IN WP ENCLOSURE ON ROOF
DOUBLE DUPLEX RECEPTACLE
DOUBLE DUPLEX RECEPTACLE CONNECTED TO COMPUTER PANEL
GFCI DOUBLE DUPLEX RECEPTACLE ~ MOUNT 44"AFF UNO
OVERHEAD RECEPTACLE DROP ~ SEE DETAIL –– ON SHEET ––

~PROVIDE MATCHING CORD AND PLUG~
20A, 125V, 2P, 3W, NEMA 5–20R
30A, 250V, 2P, 3W, NEMA 6–30R
20A, 125V, 2P, 3W, NEMA L5–20R (TWISTLOCK)
50A RANGE RECEPTACLE~250V,2P,3W, NEMA 14–50R, (3)#8+(1)#10 TO 40A,2P CIRCUIT BREAKER
30A DRYER RECEPTACLE~250V,2P,3W, GROUNDING, NEMA 14–30R, (3)#10+(1)#10G TO 30A,2P CIRCUIT BREAKER
SINGLE RECEPTACLE, 20A, 125V, NEMA 5–20R MOUNT 18"AFF IN ELEVATOR SHAFT FOR ELEVATOR SUMP PUMP

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DRAWING:
ELECTRICAL LEGEND NOTES AND ABBREVIATIONS

REVISIONS:

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SHEET:
E-000

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