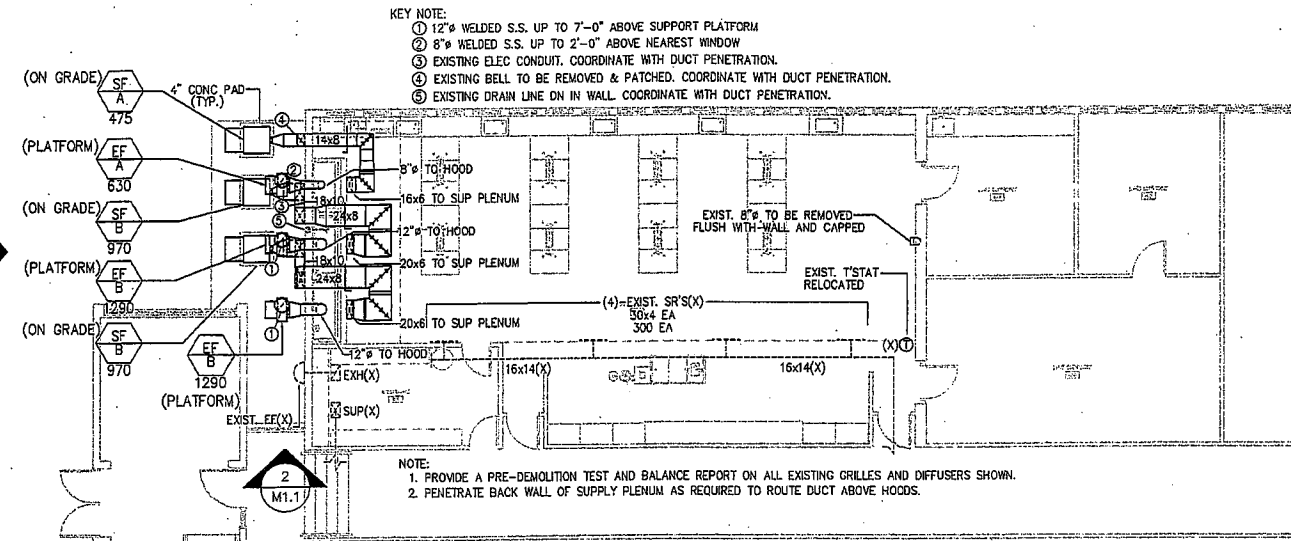
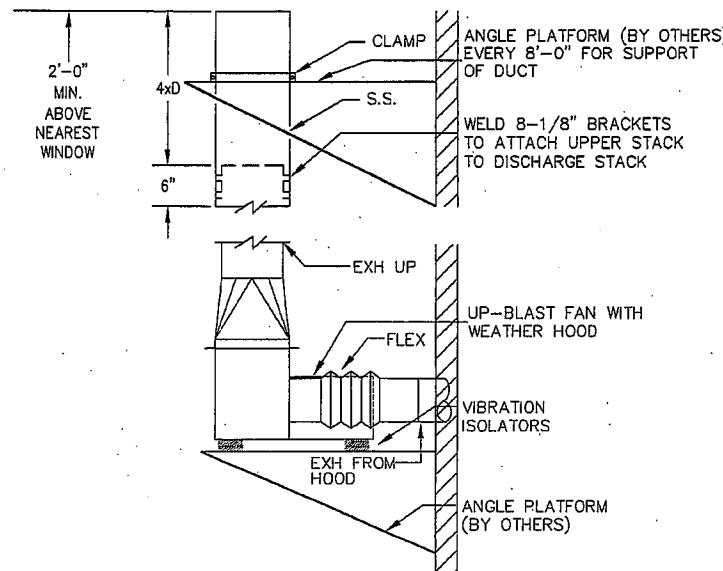


AIR DEVICES

- SUP SUPPLY
- RA. RETURN AIR
- EXH. EXHAUST
- Ø ROUND DUCT SYMBOL
- W X H RECTANGULAR DUCT
- [Symbol] RECTANGULAR SUPPLY DUCT FLOOR OR ROOF PENETRATION
- [Symbol] RECTANGULAR RETURN AIR OR EXHAUST DUCT FLOOR OR ROOF PENETRATION
- [Symbol] RECTANGULAR SUPPLY DUCT TURNING UP
- [Symbol] RECTANGULAR SUPPLY AIR DUCT TURNING DOWN
- [Symbol] RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING UP
- [Symbol] RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING DOWN
- [Symbol] ROUND DUCT TURNING UP
- [Symbol] ROUND DUCT TURNING DOWN
- [Symbol] MAXIMUM 5' FLEXIBLE DUCT ALL BRANCH DUCTS
- [Symbol] ELBOW WITH TURNING VANES FOR SUPPLY. FLAT OVAL SQUARE ELBOWS ONLY WHERE REQUIRED AND SHOWN.
- [Symbol] ROUND AND FLAT OVAL ELBOWS. DIE CAST THROUGH 5" ROUND, 5 PIECE 6" ROUND AND ABOVE
- [Symbol] CONICAL SPIN-IN WITH MANUAL DAMPER
- [Symbol] MANUAL DAMPER
- [Symbol] F.D. FIRE DAMPER
- [Symbol] EXISTING DUCTWORK OR EQUIPMENT
- [Symbol] EXISTING DUCTWORK OR EQUIPMENT TO BE REMOVED OR RELOCATED
- [Symbol] AUTOMATIC DAMPER
- [Symbol] 3/4" UNDERCUT DOOR BY GENERAL CONTRACTOR, HVAC CONTRACTOR TO COORDINATE.
- [Symbol] FLEXIBLE CONNECTION
- [Symbol] CONNECTION TO EXISTING
- [Symbol] T THERMOSTAT
- [Symbol] H HUMIDISTAT
- [Symbol] (X) EXISTING

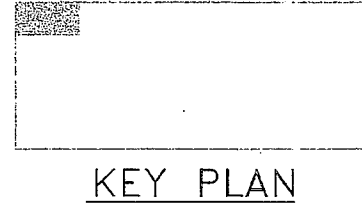
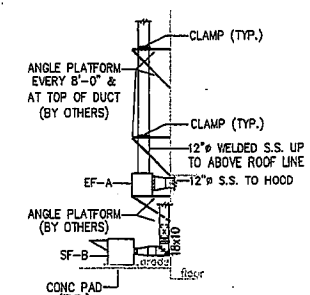
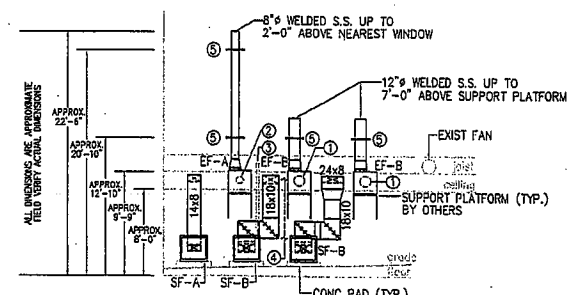


HVAC-PARTIAL FIRST FLOOR PLAN
NORTH 0 4' 8' 16'



FAN NO.	SERVES	TYPE	CFM	APPROX. S.P.	SELECTION CRITERIA	MOTOR		ACCESSORIES	CONTROL OR INTERLOCK WITH
						HP	VOLTAGE		
EF-A	LAB HOOD EXHAUST	VENT SET CENTRIFUGAL	630	1.0	9" DIA. WHEEL 1260 RPM	1/3	110/1/60	2,3,5,8,9	SWITCH ON FACE OF RESPECTIVE HOOD
EF-B QTY. 2	LAB HOOD EXHAUST	VENT SET CENTRIFUGAL	1290	1.0	10" DIA. WHEEL 1260 RPM	3/4	110/1/60	2,3,5,8,9	SWITCH ON FACE OF RESPECTIVE HOOD
SF-A	LAB HOOD SUPPLY	FILTERED CENTRIFUGAL MAKE UP	475	0.75	10.6" DIA. WHEEL 5.6 SONES MAX 1648 RPM	400 WATTS	110/1/60	1,3,5,8,9,17,19	RESPECTIVE EF-A
SF-B QTY. 2	LAB HOOD SUPPLY	FILTERED CENTRIFUGAL MAKE UP	970	0.75	10" DIA. WHEEL 872 RPM	1/3	110/1/60	2,3,5,8,9,17,19	RESPECTIVE EF-B

- FAN ACCESSORIES AND NOTES:**
- DIRECT DRIVE WITH FAN MOUNTED SOLID STATE SPEED CONTROL
 - BELT DRIVE
 - DISCONNECT SWITCH
 - PREFABRICATED INSULATED ROOF CURB
 - BACKDRAFT DAMPER
 - BIRDSCREEN
 - CEILING EXHAUST GRILLE
 - FLEXIBLE CONNECTION
 - WEATHERPROOF MOTOR ENCLOSURE
 - SPARK RESISTANT WHEEL
 - SPECIAL COATING
 - EXP. METAL FAN GUARD WITH ACCESS SECTION
 - FLAT ROOF DISCHARGE CAP
 - SLOPED ROOF DISCHARGE CAP
 - WALL DISCHARGE LOUVER
 - AUTOMATIC (MOTORIZED) DAMPER
 - PERMANENT FILTER
 - U.L. LABELED FOR GREASE LADEN AIR
 - HORIZONTAL DISCHARGE



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Engineer Mr. Dan Blockman	Discipline Mechanical
Alabama Reg./ Corp. Number 18992	Project Number CA1513-E 207012

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Jefferson State Community College

SCIENCE LAB RENOVATION AT CARSON HALL BUILDING BIRMINGHAM, AL **D7-002**



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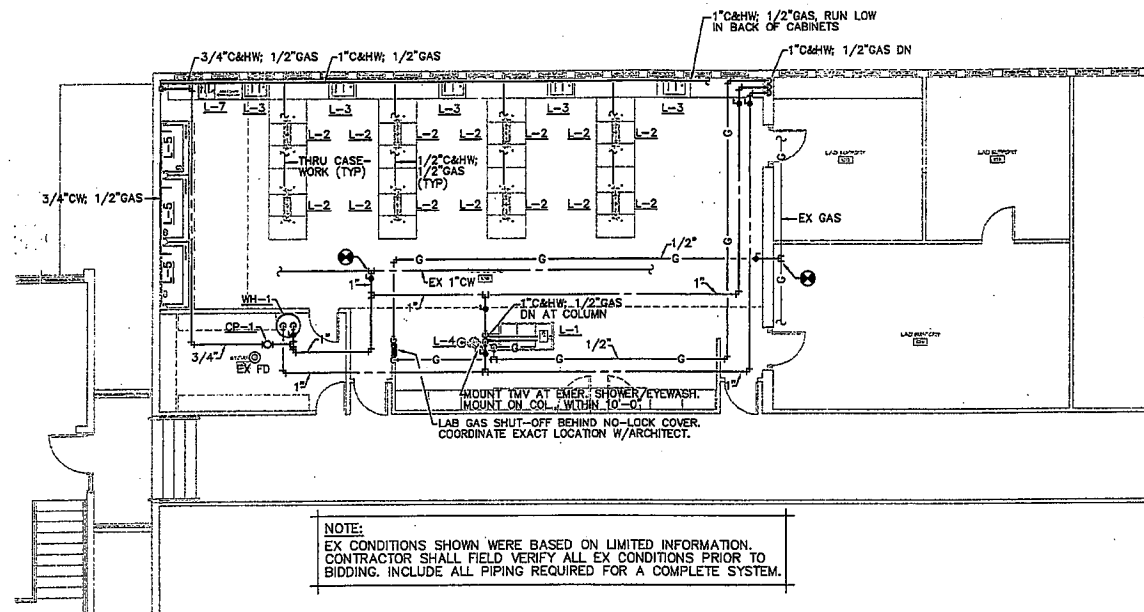
CONSTRUCTION DOCUMENTS	09.12.07

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PARTIAL FIRST FLOOR PLAN-HVAC

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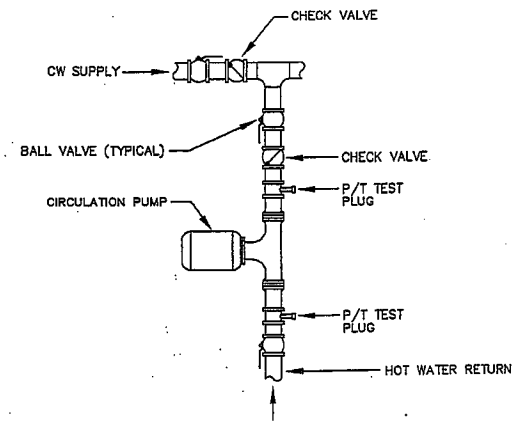
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PLUMBING - PRESSURE PIPING PLAN



NOTE:
EX CONDITIONS SHOWN WERE BASED ON LIMITED INFORMATION.
CONTRACTOR SHALL FIELD VERIFY ALL EX CONDITIONS PRIOR TO BIDDING. INCLUDE ALL PIPING REQUIRED FOR A COMPLETE SYSTEM.



DETAIL of CIRCULATION PUMP
NO SCALE

- GENERAL NOTES**
- LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE, VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
 - CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE AND ELEVATION OF ALL EXISTING SERVICES PRIOR TO INSTALLING ANY NEW PIPE.
 - WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.
 - ALL HORIZONTAL WATER AND VENT PIPING SHALL BE RUN ABOVE CEILING ON PLAN WHICH SHOWN UNLESS OTHERWISE NOTED.
 - ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN WHICH SHOWN UNLESS OTHERWISE NOTED.
 - COORDINATE ALL PIPE ROUTING TO AVOID CONFLICTS WITH STRUCTURAL MECHANICAL, AND ELECTRICAL FEATURES OF BUILDING.
 - ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.

PLUMBING LEGEND

—	SOIL OR WASTE LINE	P-#	PLUMBING FIXTURE NUMBER
- - -	VENT LINE	△	RISER DIAGRAM NUMBER
- - - -	COLD WATER LINE	AF	ABOVE FINISH FLOOR
- - - -	HOT WATER LINE	CO	CLEAN OUT
- - - -	HOT WATER RETURN LINE	ABV	ABOVE
- - - -	EX WATER LINE	WS	WASTE STACK
○	BALL VALVE	VS	VENT STACK
G	GAS PIPING	EX	EXISTING
⊥	GAS COCK	⊕	CONNECT TO EXISTING

WATER HEATER SCHEDULE

MARK	MANUFACTURER - MODEL	TYPE	STORAGE	GPH REC. 100 DEG. F.	REMARKS
WH-1	LOCHINVAR HSK18-80	ELEC.	80 GAL.	74	208V; 3 PHASE; 18 KW

CIRCULATION PUMP SCHEDULE

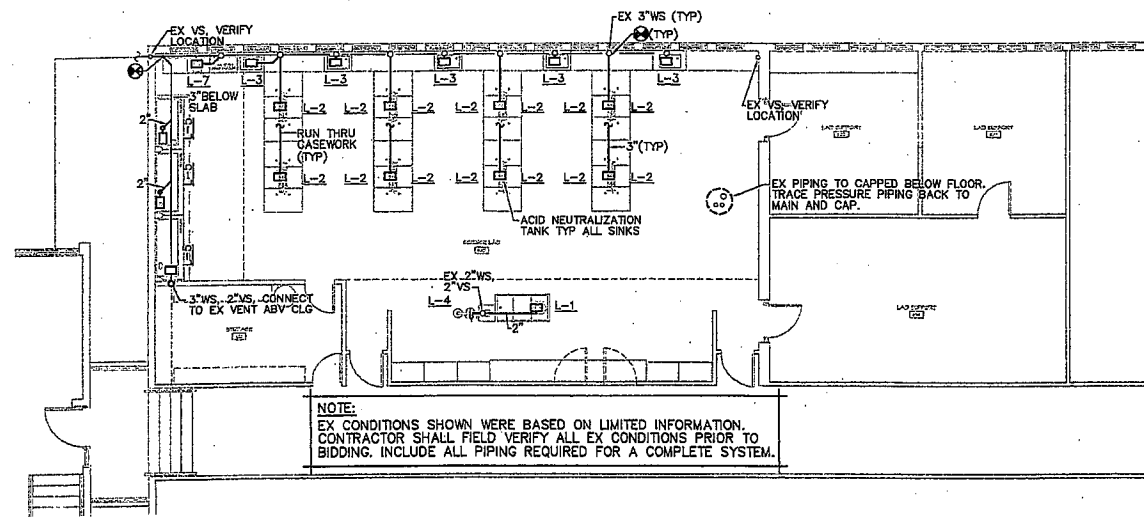
MARK	MANUFACTURER - MODEL	TYPE	H.P.	REMARKS
CP-1	ARMSTRONG S-35	IN-LINE	1/6	115V, 1 PHASE (SEE NOTE)

NOTE: PROVIDE B&G MODEL TO-1 AUTOMATIC TIMER AND AQ-3/4 AQUASTAT COMBINATION OR APPROVED EQUAL.

LAB EQUIPMENT CONNECTION SCHEDULE

MARK	FIXTURE	WASTE	CW	HW	GAS	REMARKS
L-1	TEACHER'S TABLE W/SINK	1-1/2"	1/2"	1/2"	1/2"	ROUGH & CONNECT
L-2	WORK STATION	1 1/2"	1/2"	1/2"	1/2"	ROUGH & CONNECT
L-3	LAB SINK	1-1/2"	1/2"	1/2"	-	ROUGH & CONNECT
L-4	EMERGENCY SHOWER/EYEWASH	1-1/2"	1"	1"	-	ROUGH & CONNECT
L-5	HOOD	1-1/2"	1/2"	-	1/2"	ROUGH & CONNECT
L-6	** NOT USED **					
L-7	ADA WORK STATION	1-1/2"	1/2"	1/2"	1/2"	ROUGH & CONNECT

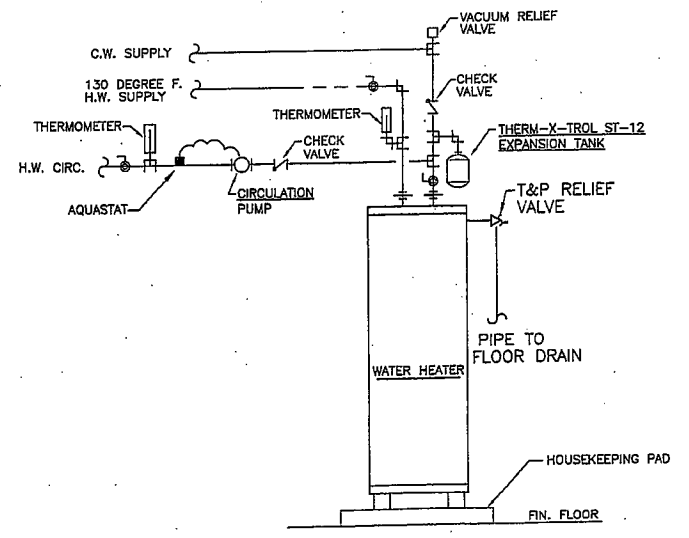
NOTE: ALL LAB SINKS AND HOOD SINKS SHALL HAVE POINT-OF-USE ACID NEUTRALIZATION TANKS. SEE PLUMBING SPECIFICATIONS.



PLUMBING - GRAVITY PIPING PLAN



NOTE:
EX CONDITIONS SHOWN WERE BASED ON LIMITED INFORMATION.
CONTRACTOR SHALL FIELD VERIFY ALL EX CONDITIONS PRIOR TO BIDDING. INCLUDE ALL PIPING REQUIRED FOR A COMPLETE SYSTEM.



DETAIL of PIPING at WATER HEATER
NO SCALE

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Engineer Mr. Don Blackman	Dickline Plumbing
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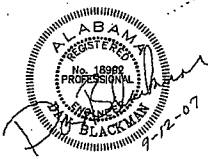
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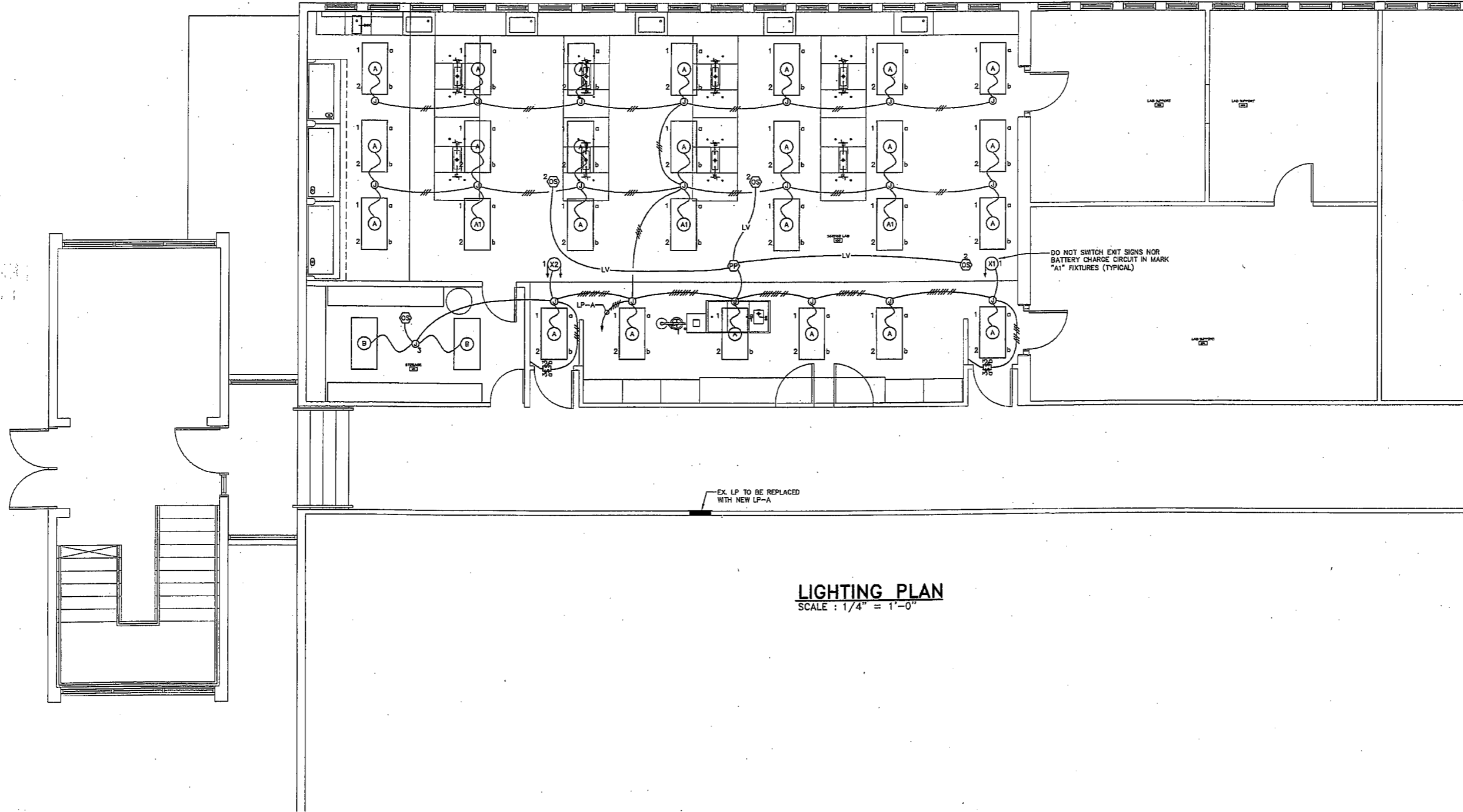


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PLUMBING PIPING PLAN

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LIGHTING PLAN
SCALE : 1/4" = 1'-0"

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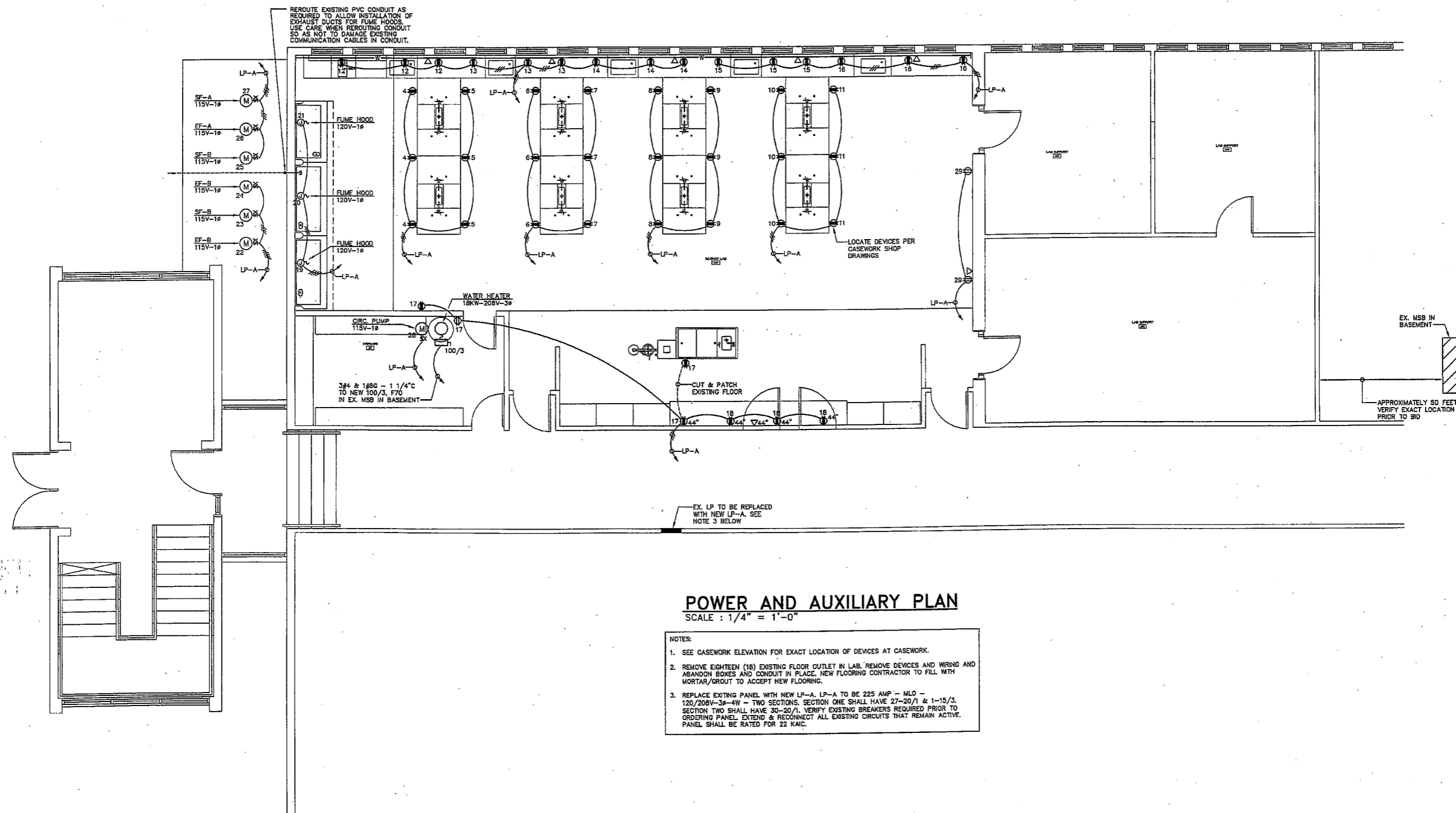
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LIGHTING PLAN

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JRA JOB NO. 2707



POWER AND AUXILIARY PLAN
SCALE : 1/4" = 1'-0"

- NOTES:
- SEE CASEWORK ELEVATION FOR EXACT LOCATION OF DEVICES AT CASEWORK.
 - REMOVE EIGHTEEN (18) EXISTING FLOOR OUTLET IN LAB. REMOVE DEVICES AND WIRING AND ABANDON BOXES AND CONDUIT IN PLACE. NEW FLOORING CONTRACTOR TO FILL WITH MORTAR/GROUT TO ACCEPT NEW FLOORING.
 - REPLACE EXISTING PANEL WITH NEW LP-A. LP-A TO BE 225 AMP - MLO - 120/208V-3φ-4W - TWO SECTIONS. SECTION ONE SHALL HAVE 27-20/1 & 1-15/3. SECTION TWO SHALL HAVE 30-20/1. VERIFY EXISTING BREAKERS REQUIRED PRIOR TO ORDERING PANEL. EXTEND & RECONNECT ALL EXISTING CIRCUITS THAT REMAIN ACTIVE. PANEL SHALL BE RATED FOR 22 KAIC.

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POWER AND AUXILIARY PLAN

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TRA JOB NO. 27017

LIGHTING FIXTURE SCHEDULE									
MARK	FIXTURE MFG.	CATALOG NO.	VOLTAGE	LAMPS			MOUNTING HEIGHT	MOUNTING TYPE	REMARKS
				NO. FIXT.	WATTS/TYP.	TYPE			
A	LITHONIA COLUMBIA DAY-BRITE	2SP80-332-A12.125-GE8	120	3	32	T8 4100k	CEILING	RECESSED	NOTE 1,2,3
A1	LITHONIA COLUMBIA DAY-BRITE	2SP80-332-A12.125-GE8-EL	120	3	32	T8 4100k	CEILING	RECESSED	NOTE 1,2,3
B	LITHONIA COLUMBIA DAY-BRITE	2SP80-232-A12.125-GE8	120	2	32	T8 4100k	CEILING	RECESSED	NOTE 1,3
X1	LITHONIA COLUMBIA DAY-BRITE	LES1C-ELN	120	FURNISHED BY MANUFACTURER			CEILING OR AB. DOOR	OUTLET BOX	
X2	LITHONIA COLUMBIA DAY-BRITE	LES2C-ELN	120	FURNISHED BY MANUFACTURER			CEILING OR AB. DOOR	OUTLET BOX	

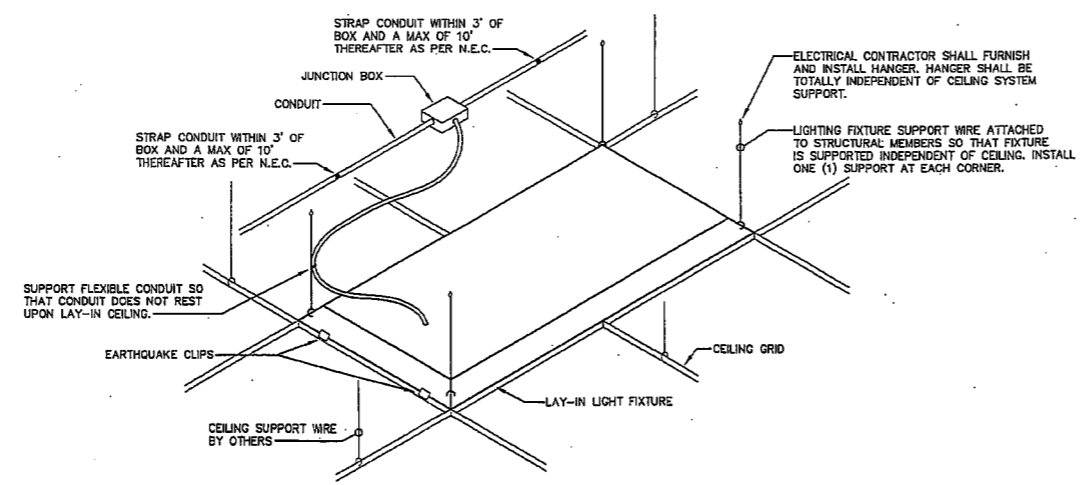
LIGHTING FIXTURE SCHEDULE NOTES:
 1. FURNISH WITH ALUMINUM DOOR FRAME.
 2. FURNISH WITH BALLASTS AS REQUIRED TO EFFECT MULTI-SWITCHING.
 3. FIXTURE SHALL BE GASKETED.

GENERAL ELECTRICAL NOTES

- CONTRACTOR SHALL VISIT THE SITE OF THE WORK PRIOR TO SUBMITTING BID TO EXAMINE CAREFULLY LOCAL CONDITIONS AND DIFFICULTIES TO BE ENCOUNTERED. ANY DISCREPANCY BETWEEN PLANS AND EXISTING CONDITIONS SHALL IMMEDIATELY BE CALLED TO THE ATTENTION OF THE ARCHITECT.
- THIS CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS FOR ALL MECHANICAL EQUIPMENT FROM MANUFACTURER'S RECOMMENDATIONS PRIOR TO ROUGHING IN CONDUIT AND SHALL ADJUST CONDUIT SIZE, WIRE SIZE AND CIRCUIT PROTECTION SIZE ACCORDINGLY. IF REQUIREMENTS ARE LARGER THAN CALLED FOR ON ELECTRICAL PLANS NOTIFY ARCHITECT IMMEDIATELY.
- REMOVE ALL EXISTING ELECTRICAL EQUIPMENT AND WIRING MADE OBSOLETE BY THIS RENOVATION AND DISPOSE OF AS DIRECTED BY THE ARCHITECT.
- EXISTING PANEL DIRECTORY CARDS MODIFIED BY THIS RENOVATION SHALL BE RETYPED TO INDICATE CONNECTED CIRCUITS.
- THIS CONTRACTOR SHALL FURNISH ALL MATERIALS AND LABOR NECESSARY TO EXTEND CIRCUITS AND MAKE RECONNECTIONS TO ANY ACTIVE ELECTRICAL DEVICES ON WHICH THE BRANCH CIRCUIT IS INTERRUPTED BY THIS ALTERATION. CARE SHALL BE TAKEN TO INSURE THAT EXISTING PANEL AND FEEDER RATINGS ARE NOT EXCEEDED.

GENERAL ELECTRICAL LEGEND

- (A)² FIXTURE OUTLET - CEILING - SURFACE OR PENDANT MOUNTED - INCANDESCENT OR H.I.D. - FIXTURE MARK "A", CIRCUIT NO.2 (TYP.).
- (O) FIXTURE OUTLET - CEILING - RECESSED - FLUORESCENT.
- (X) FIXTURE OUTLET - EXIT LIGHT - DIRECTIONAL ARROWS AS INDICATED.
- (D) WALL OUTLET - DUPLEX - 20A - 125V - 2P - 3W - GROUNDING - HUBBELL 5362.
- (G) WALL OUTLET - DUPLEX - 20A - 125V - 2P - 3W - GROUNDING - "GFI" TYPE - HUBBELL GF-5362.
- (J) CEILING OUTLET - JUNCTION BOX.
- (Q) WALL OUTLET - JUNCTION BOX - FLUSH MOUNTED.
- (---) BRANCH CIRCUIT - CONCEALED IN WALLS OR CEILING.
- (---) BRANCH CIRCUIT - CONCEALED IN FLOOR SLAB OR DIRT FILL.
- (---) BRANCH CIRCUIT - HOMERUN (---) 2 NO.12, (---) 3 NO.12, ETC.
- (~) FLEXIBLE CONNECTION TO EQUIPMENT.
- (S) SWITCH OUTLET - S.P.S.T. - 20A - 120-277VAC - HUBBELL 1221.
- (3S) SWITCH OUTLET - 3 WAY - 20A - 120-277VAC - HUBBELL 1223.
- (S0) SWITCH OUTLET - CONTROLS OUTLET "0", ETC.
- (SX) SWITCH OUTLET - MANUAL MOTOR STARTER - TOGGLE TYPE - 2 POLE - SQUARE "D" TYPE KS-1.
- (OS) OCCUPANCY SENSOR - CEILING MOUNTED - WATTSTOPPER DT-355.
- (OS)² OCCUPANCY SENSOR - CEILING MOUNTED - WATTSTOPPER DT-300.
- (OP) OCCUPANCY SENSOR - POWER PACK - WATTSTOPPER LC-100.
- (■) LIGHTING PANEL.
- (M) MOTOR OUTLET - SIZE AS SHOWN.
- (▽) COMPUTER OUTLET - WALL - WITH 1" E.C. TO ABOVE LAY-IN CEILING.
- (□) DISCONNECT SWITCH - NONFUSED.
- (-W-) WIREMOLD 4000 ALUMINUM RACEWAY WITH DIVIDER TO SEPARATE POWER AND DATA.



LAY-IN FIXTURE SUPPORT DETAIL
 SCALE: NONE

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D7-002



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LEGEND, NOTES & SCHEDULES

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