

SYMBOL SCHEDULE – ELECTRICAL AND DIVISION 16 DOCUMENTS

SYMBOL		DESCRIPTION	SYMBOL		DESCRIPTION
CEILING	WALL		CEILING	WALL	
		FLUORESCENT LIGHT FIXTURE. LETTER DENOTES FIXTURE TYPE. SEE FIXTURE SCHEDULE.		SMOKE DETECTOR, MOUNTED ON CEILING.	
		FLUORESCENT LIGHT FIXTURE ON EMERGENCY CIRCUIT		SMOKE DETECTOR WITH SAMPLING TUBE (A/H UNITS).	
		HID OR INCANDESCENT LIGHT FIXTURE. SEE FIXTURE SCHEDULE.		FIRE ALARM CONTROL PANEL.	
		"EXIT" LIGHT FIXTURE (WITH OR WITHOUT DIRECTIONAL ARROWS) EXIT LIGHTS ON EMERGENCY CIRCUITS ARE NOT SHADED.		FIRE ALARM PULL STATION.	
		EMERGENCY BATTERY PACK FIXTURE.		FIRE ALARM COMBINATION AUDIO/VISUAL ANNUNCIATION UNIT.	
		SINGLE-POLE TOGGLE SWITCH.		FIRE ALARM HORN	
		CLOCK OUTLET WALL MOUNTED		FIRE ALARM STROBE	
		DUPLEX OUTLET, 15 AMP, 125V., NEMA 5-15R.		FIRE ALARM COMBINATION AUDIO/VISUAL ANNUNCIATION UNIT, MOUNTED ON CEILING.	
		DUPLEX OUTLET, 20A., 120V., NEMA 5-20R		HEAT DETECTOR.	
		DUPLEX OUTLET WITH WEATHERPROOF COVER.		SPECIAL CIRCUIT (E= EMERGENCY, T= TELEPHONE, TV.= TELEVISION, EX= EXISTING, ETC.	
		GROUND FAULT CIRCUIT INTERRUPTER DUPLEX OUTLET.		WIRING (IN CONDUIT) CONCEALED IN OR UNDER SLAB	
		QUADRAPLEX (2-15A., 125-VOLT, NEMA 5-15R MOUNTED IN ONE BOX.)		WIRING (IN CONDUIT) CONCEALED IN CEILING OR WALL	
		GROUND CONNECTION.		WIRING (IN CONDUIT) RUN EXPOSED	
		BRANCH CIRCUIT PANELBOARD.		EXISTING	
		DISTRIBUTION PANELBOARD.		EXISTING TO BE REMOVED	
		MANUAL MOTOR STARTING SWITCH.		WIRING (IN CONDUIT) RUN UNDER GROUND	
		DISCONNECT SWITCH. FUSED UNLESS OTHERWISE NOTED.		EXTEND EXISTING CONDUIT WITH NEW CONDUIT	
		MAGNETIC MOTOR STARTER. (SUPPLIED UNDER DIVISION 15000)		CIRCUIT TURNED UP	
		COMBINATION STARTER/DISCONNECT SWITCH. FUSED UNLESS OTHERWISE NOTED.		CIRCUIT TURNED DOWN	
		PULLBOX OR TROUGH		OUTDOOR AERIAL CONDUCTORS	
		MOTOR, SINGLE-PHASE, NUMERAL DENOTES HORSEPOWER.		AMP	
		MOTOR, THREE-PHASE, NUMERAL DENOTES HORSEPOWER.		VOLT	
		CIRCUIT BREAKER DEVICE		WIRE	
		SWITCH DEVICE.		POLE	
		FUSE.		CONDUIT	
		NORMALLY OPEN CONTACT.		GROUND	
		NORMALLY CLOSED CONTACT		CIRCUIT BREAKER	
		JUNCTION BOX WITH FIXTURE WHIP		AIR CONDITION	
		JUNCTION BOX		ABOVE FINISHED FLOOR	
		DOOR HOLDER/ RELEASE MECHANISM		WATER HEATER	
		VOLUME CONTROL.		GROUND FAULT INTERRUPTER	
		SECURITY SYSTEM COMPONENT-DOOR CONTACT.		NOTE REFERENCE	
		SECURITY SYSTEM MOTION DETECTOR.		HOMERUN TO PANELBOARD WITH NOMENCLATURE (LETTERS), CIRCUIT NUMBERS (NUMBERS), NUMBER OF PHASE AND NEUTRAL CONDUCTERS WHEN MORE THAN TWO (HASH MARKS), OPPOSITE SLANT DENOTES GROUND, NUMBER OF CIRCUITS (NUMBER OF ARROWS).	
		SECURITY SYSTEM-ROLL UP DOOR CONTACT.		DETAIL REFERENCE: "X" DENOTES DETAIL NUMBER "Y" DENOTES SHEET DETAIL IS REFERENCED FROM "Z" DENOTES SHEET DETAIL IS DRAWN ON	
		SECURITY SYSTEM-WINDOW CONTACT.		DETAIL: NUMBER DENOTES DETAIL NUMBER LETTER "E" DENOTES SHEET ON WHICH DETAIL IS DRAWN	
		SECURITY SYSTEM-GLASS BREAK DETECTOR.		FLOOR PLAN OR DRAWING OTHER THAN DETAIL.	
		SECURITY SYSTEM-TEMPERATURE SENSOR.			
		SECURITY SYSTEM KEYPAD.			

PANELBOARD SCHEDULE

PANEL DESIGNATION	DISTRIBUTION (D)	LIGHTING (L)	INTERRUPTING CAPACITY (I)	CIRCUIT BREAKER TYPE	SWITCH AND FUSE	SURFACE FLUSH	VOLTAGE	PHASE	WIRE	CIRCUIT PROTECTIVE DEVICE				DESCRIPTION OF CIRCUIT	
										MAIN BUS (AMPS)	MAIN BUS ONLY C. B. SIZE	QUANTITY	SWITCH SIZE		
HL1	(L)	(a)	•	•	•	•	480/277	3	4	100	MLG	2	1	20	STUDENT PARKING LOT LIGHTS
												1	1	20	FACULTY PARKING LIGHTS
												1	1	20	BUILDING MOUNTED LIGHTS
												2	1	20	SPARES
												18	1	20	SPACES
LL3	(L)	(2)	•	•	•	•	240/120	1	3	200	200	2	1	20	DIESEL SHOP LIGHTS
												2	2	15	DIESEL SHOP VENTILATION FANS
												1	2	50	AHU WITH SKW OF HEAT
												1	2	25	HEAT PUMP
												1	2	100	CARPENTRY SHOP PANEL
												3	2	30	EXISTING CIRCUITS
												3	1	20	EXISTING CIRCUITS
												3	1	20	SPARES
												18	1	20	SPACES

NOTES:
1.) INTERRUPTING CAPACITY:
MAX. 480 VOLT-(a)14KA; (b)18KA; (c)35KA; (d)65KA; (e)100KA; (f)150KA
MAX. 240 VOLT-(1)10KA; (2)22KA; (3)42KA; (4)65KA; (5)100KA; (6)200KA

GENERAL NOTES:
• ALL PANELS SHALL HAVE GROUND BARS AND SHALL BE INSTALLED GROUNDED TO CASE.
• ALL PANELS SHALL HAVE TYPE WRITTEN DIRECTORIES INSTALLED AND SHALL HAVE ENGRAVED PLASTIC LABELS INSTALLED ON COVER ILLUSTRATING PANEL DESIGNATION SHOWN ON DOCUMENTS.

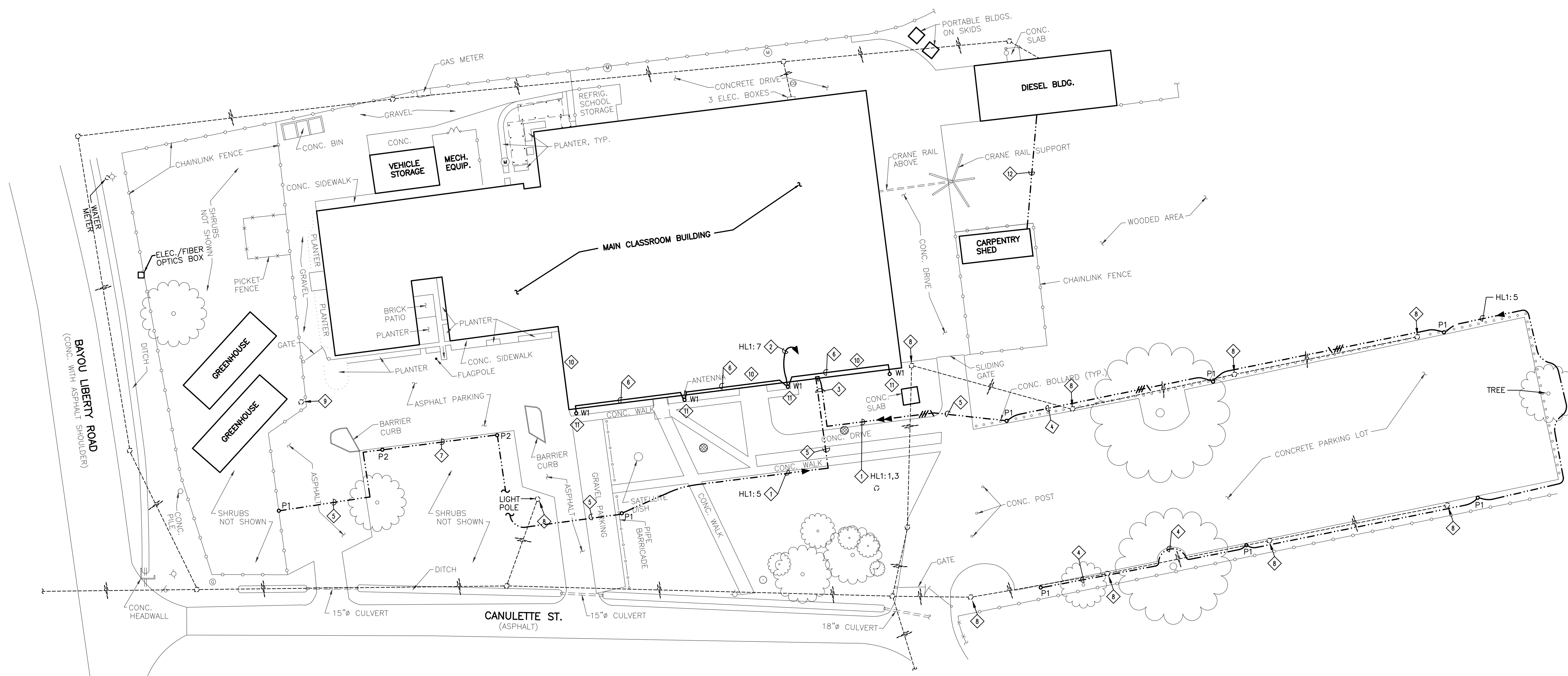
SPECIFIC NOTES:
◊ BEFORE ORDERING OR SUPPLYING CIRCUIT BREAKERS, THE CONTRACTOR SHALL TRACE OUT AND IDENTIFY EXISTING ACTIVE CIRCUITS. THE CONTRACTOR SHALL THEN ORDER THOSE C/B'S ONLY.

GENERAL NOTES:

- ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE - NFPA 70-1999.
- ALL EQUIPMENT INDICATED SHALL BE FOR USE INDOORS (NEMA 1); UNLESS NOTED OTHERWISE.
- ALL FUSED DISCONNECT SWITCHES SERVING EQUIPMENT SUPPLIED UNDER OTHER DIVISIONS OF THE WORK SHALL BE PROVIDED WITH FUSES AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER; UNLESS NOTED OTHERWISE.
- SEPARATE GREEN GROUND CONDUCTORS ARE REQUIRED FOR ALL RECEPTACLE AND FEEDER CIRCUITS; SEE SPECIFICATIONS.
- FIRESTOP MATERIALS (UL LISTED) ARE SPECIFIED IN SECTION 16010 AND ARE REQUIRED AT ALL PENETRATIONS THROUGH RATED FLOORS, WALLS, CEILING AND PARTITIONS.
- CONDUCTORS SHALL BE COLOR CODED PER N.E.C. AS DESCRIBED IN SECTION 16120. UTILIZE ONLY THE COLORS SPECIFIED AND IDENTIFY ALL CONDUCTORS AND BOXES AS NOTED IN SECTION 16075.
- WRITTEN SPECIFICATIONS DESCRIBING MATERIALS AND METHODS ARE PART OF DIVISION 16000 AND SHALL BE UTILIZED THROUGHOUT THE CONSTRUCTION OF THE PROJECT.

FIXTURE SCHEDULE

- F1 RECESSED CEILING MOUNTED EMERGENCY FIXTURE, MAINTENANCE FREE NICKEL-CADMIUM BATTERIES, 12 WATT SEALED BEAM LAMPS, DUAL VOLTAGE 120/277.
LITHONIA CAT # ELR4 N N1212 120/277
SURE-LITES CAT #RLM NC 029-39 120/277
- F2 CONTEMPORARY POLYCARBONATE EMERGENCY LIGHTING UNIT, MAINTENANCE FREE NICKEL-CADMIUM BATTERIES, 12 WATT SEALED BEAM LAMPS, DUAL VOLTAGE 120/277.
LITHONIA CAT #ELM4 N N1212 120/277
SURE-LITES CAT #CC3 WH NC
- F3 LED EXIT SIGN, POLYCARBONATE HOUSING, STENCIL FACE, WHITE HOUSING COLOR, SINGLE FACE, RED PANEL COLOR, DUAL VOLTAGE, MAINTENANCE FREE NICKEL CADMIUM BATTERY.
LITHONIA CAT # LOM S W 1 R 120/277 EL N
SURE-LITES CAT# CXC 6 1 70 R WH
- F4 LED EXIT SIGN WITH EMERGENCY HEADS, POLYCARBONATE HOUSING, STENCIL FACE, WHITE HOUSING COLOR, SINGLE FACE, RED PANEL COLOR, DUAL VOLTAGE, MAINTENANCE FREE NICKEL CADMIUM BATTERY.
LITHONIA CAT #LHM S W 1 R 120/277 N
SURE-LITES CAT # CXC 7 1 70 R WH
- F5 FLUORESCENT HEAVY DUTY TURRET INDUSTRIAL, 2 LAMP, 8' LENGTH, GENERIC ELECTRONIC BALLAST, 120 VOLT. LAMP F32T8/TL735.
LITHONIA CAT # TAFST 2 32 120 GEB
SURE-LITES CAT # E1VM -232- 120V-EB81
- F6 FLUORESCENT HEAVY DUTY TURRET INDUSTRIAL, 2 LAMP, 8' LENGTH, GENERIC ELECTRONIC BALLAST, 120 VOLT. INCLUDE A 1400 LUMEN EMERGENCY BATTERY PACK TO OPERATE TWO LAMPS. LAMP F32T8/TL735.
LITHONIA CAT # TAFST 2 32 120 GEB- EL14
METALUX CAT # E1VM -232- 120V-EB81-EL14"
- P1 HID POLE MOUNTED FIXTURE, TYPE 2 DISTRIBUTION, 400 WATT HIGH PRESSURE SODIUM 277 VOLT. POLE SHALL BE 30' ROUND TAPERED ALUMINUM POLE. LAMP C400S51.
MCGRAW EDISON CAT#CS72629
LITHONIA CAT# KAD 400S R2 277 RPD
- P1A SAME AS P1 EXCEPT INCLUDE HOUSE SIDE SHIELD FOR FIXTURE.
- P2 HID POLE MOUNTED FIXTURE, TYPE 4 DISTRIBUTION, 400 HIGH PRESSURE SODIUM, 277 VOLT. POLE SHALL BE 30' ROUND TAPERED ALUMINUM POLE. LAMP C400S51.
MCGRAW EDISON CAT#CS72649
LITHONIA CAT# KAD 400S R4 277 RPD
- P2A SAME AS P2 EXCEPT INCLUDE A HOUSE SIDE SHIELD FOR FIXTURE.
- W1 WALL MOUNTED HID FIXTURE, TYPE 4 DISTRIBUTION, 400 HIGH PRESSURE SODIUM, 277 VOLT. LAMP C400S51.
MCGRAW EDISON CAT#CA1472649 (FIXTURE)
LITHONIA CAT# KAD 400S R4 277 WMT



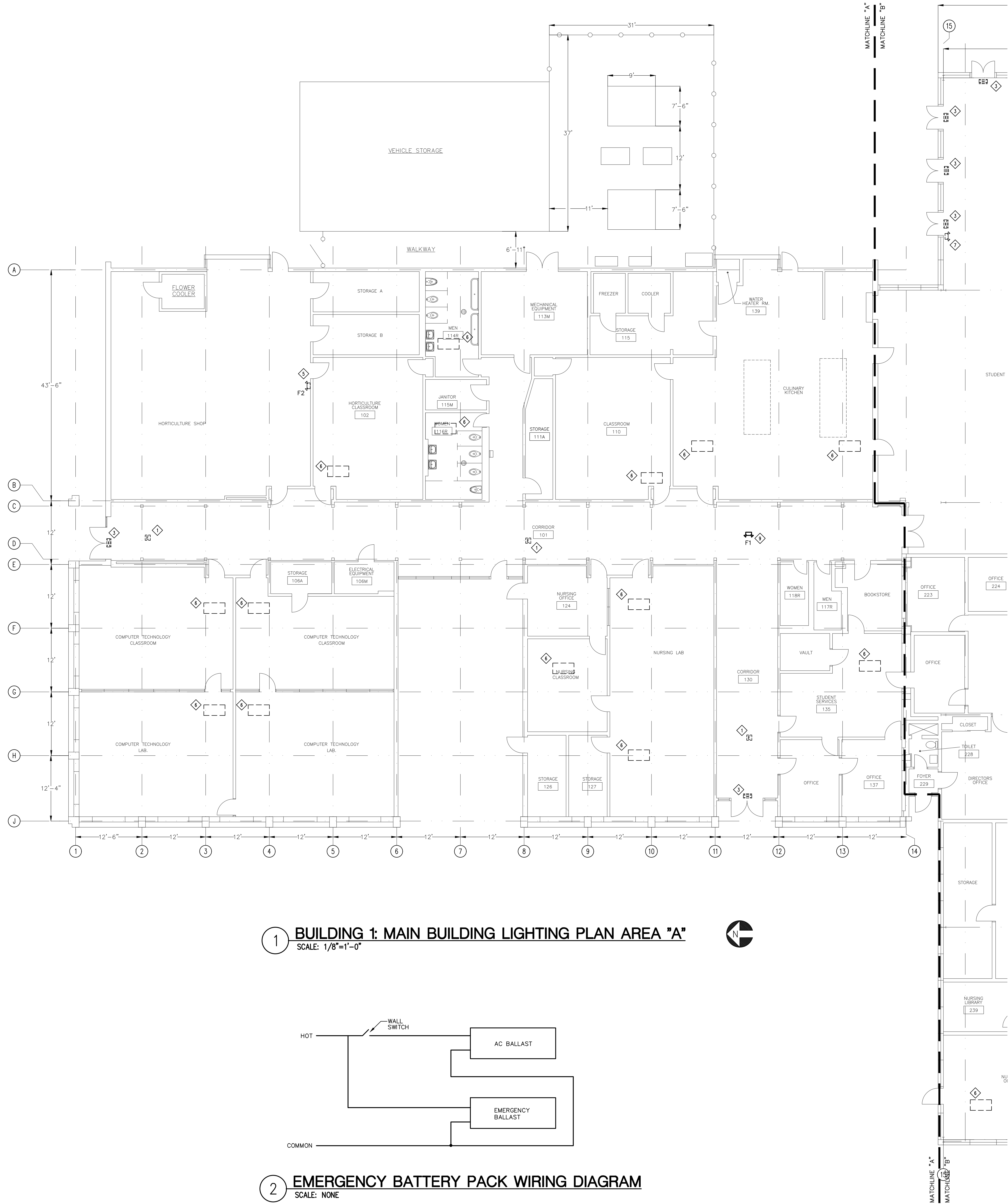
1 ELECTRICAL SITE PLAN
SCALE: 1"=40'-0"

SPECIFIC NOTES(SHEETS E2)

- 1. ROUTE 2#8, 1#10 GND IN PVC SCHEDULE 40 CONDUIT UNDERGROUND BACK TO NEW LIGHTING PANEL HL1 VIA LIGHTING CONTACTOR LC1. SEE LIGHTING CONTROL DIAGRAM ON SHEET E7.
- 2. ROUTE 2#10, 1#10 GND IN EMT CONDUIT BACK TO NEW LIGHTING PANEL HL1 VIA LIGHTING CONTACTOR LC1. SEE LIGHTING CONTROL DIAGRAM ON SHEET E7.
- 3. ROUTE PVC CONDUITS UNDER GRADE BEAM OF BUILDING AND STUB UP THROUGH CONCRETE FLOOR IN THE AUTO SHOP. TRANSITION FROM PVC TO RIGID STEEL CONDUIT AS CONDUIT ENTERS THE BUILDING.
- 4. CONTRACTOR SHALL HAND DIG WHEN ROUTING THROUGH TREE DRIP LINE. TAKE EXTRA CARE NOT TO DAMAGE THE TREE ROOTS. THE CONTRACTOR SHALL BE RESPONSIBLE IF THE TREE DIES.
- 5. ROUTE CONDUIT UNDERNEATH EXISTING CONCRETE ROAD OR ASPHALT PARKING LOT OR SIDEWALK. THE CONTRACTOR MAY EITHER JACK AND BORE UNDER THE ROAD OR MAY DIRECTIONAL BORE UNDER THE ROAD.
- 6. ROUTE CIRCUITRY ABOVE ACCESSIBLE CEILING IN CLASSROOM AND CORRIDOR AREAS IN THE BUILDING AND EXPOSED IN THE AUTO SHOP.
- 7. ROUTE UNDERGROUND CIRCUITRY AS CLOSE AS POSSIBLE TO THE EDGE OF THE PARKING LOT. BEFORE DIGGING IN THIS AREA COORDINATE WITH SLIDELL TECHNICAL COLLEGE'S HORTICULTURIST, PAUL VITALE.
- 8. COORDINATE WITH CLECO TO HAVE EXISTING CLECO LIGHT POLES AND OVERHEAD LINES REMOVED.
- 9. REMOVE EXISTING LIGHT POLE.
- 10. REMOVE ALL EXISTING ROOF MOUNTED FLOOD LIGHTS AND ALL ASSOCIATED WIRING BACK TO EXISTING PANEL.
- 11. WALL MOUNT FIXTURES ON BUILDING AS HIGH AS POSSIBLE.
- 12. REPLACE EXISTING OVERHEAD ELECTRICAL LINES BETWEEN DIESEL SHED AND CARPENTRY SHED.

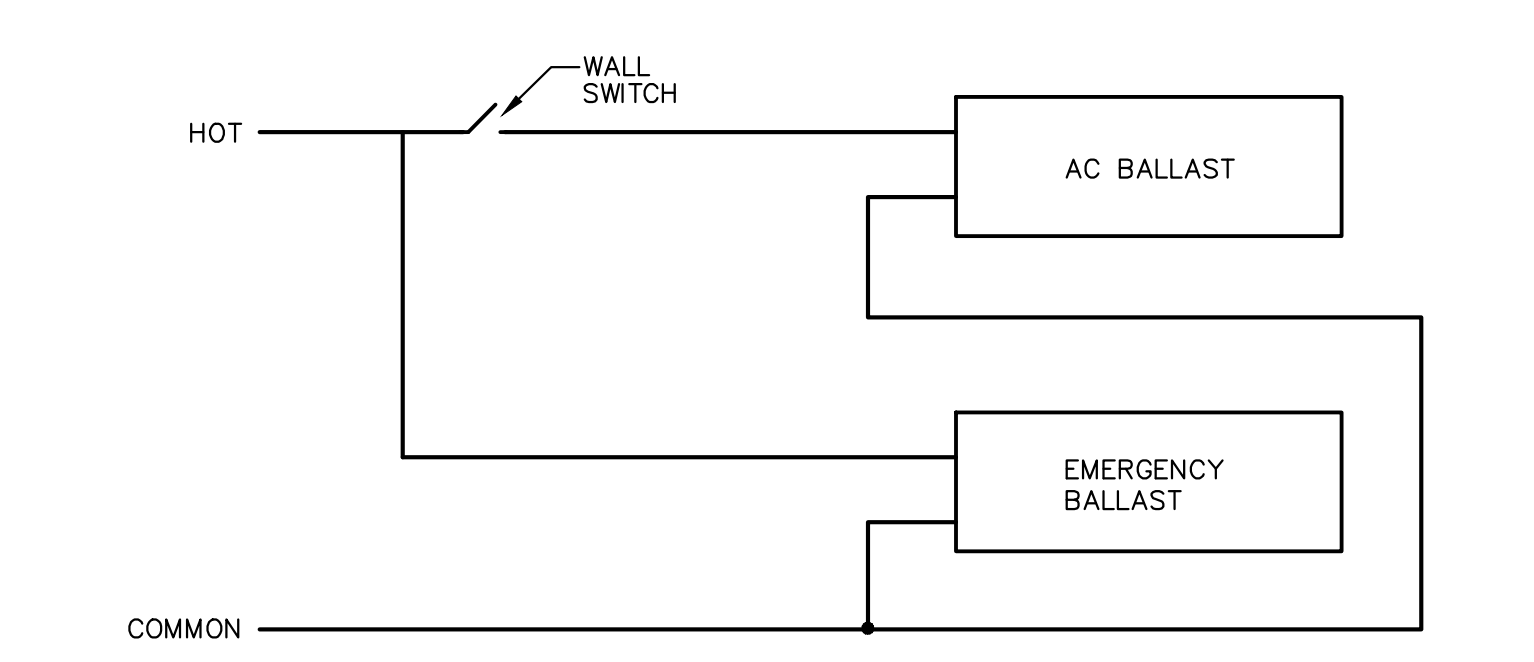
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PROJECT NO.	0958
CADD NO.	J:/0958/ELEC/E2.0
DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	ELECTRICAL SITE PLAN

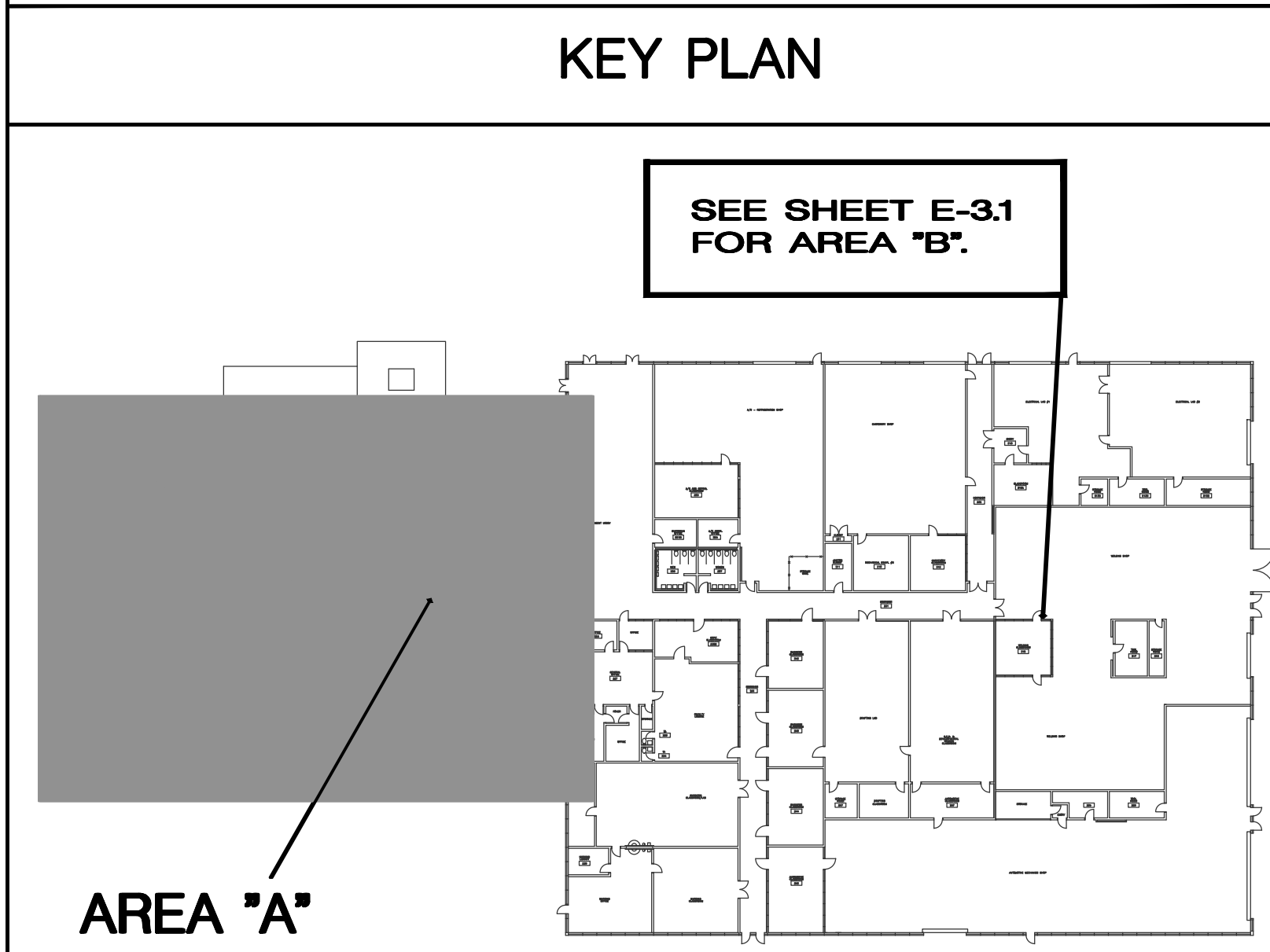


- SPECIFIC NOTES(SHEETS E3 AND E4)**
- 1. REPLACE EXISTING DECORATIVE SQUARE EMERGENCY FIXTURE MOUNTED ON CEILING WITH NEW EMERGENCY FIXTURE TYPE F1. SEE FIXTURE SCHEDULE. CONNECT NEW FIXTURE TO EXISTING CIRCUITRY CURRENTLY SERVING EXISTING FIXTURE.
 - 2. REPLACE EXISTING WALL MOUNTED EMERGENCY FIXTURE WITH NEW WALL MOUNTED FIXTURE TYPE F2. SEE FIXTURE SCHEDULE. CONNECT NEW FIXTURE TO EXISTING CIRCUITRY CURRENTLY SERVING EXISTING FIXTURE.
 - 3. REPLACE EXISTING EXIT SIGN WITH NEW LED EXIT SIGN FIXTURE TYPE F3. SEE FIXTURE SCHEDULE. CONNECT NEW FIXTURE TO EXISTING CIRCUITRY CURRENTLY SERVING EXISTING FIXTURE.
 - 4. REPLACE EXISTING EXIT SIGN WITH NEW LED EXIT SIGN WITH EMERGENCY LIGHTING HEADS TYPE F4. CONNECT NEW FIXTURE TO EXISTING CIRCUITRY CURRENTLY SERVING EXISTING FIXTURE.
 - 5. INSTALL NEW EMERGENCY FIXTURE ON WALL SHOWN AT 96". WIRE FIXTURE TO EXISTING LIGHTING CIRCUIT IN AREA. FIXTURE SHALL BE CONNECTED TO THE HOT WIRE.
 - 6. INSTALL EMERGENCY BATTERY PACK IN EXISTING 2'x4' FIXTURE IN CLASSROOM. ROUTE HOT WIRE FROM LIGHTING CIRCUIT IN AREA TO EMERGENCY BATTERY PACK. NEW BATTERY PACK SHALL BE BODINE CAT # B50 OR EQUIVALENT. SEE WIRING DIAGRAM ON THIS SHEET.
 - 7. EXISTING EMERGENCY FIXTURE TO REMAIN.
 - 8. REMOVE EXISTING EMERGENCY FIXTURE.
 - 9. RECESS MOUNT NEW EMERGENCY FIXTURE IN CEILING AT LOCATION SHOWN. CONNECT TO HOT WIRE OF LIGHTING CIRCUIT SERVING THE LIGHTS IN THE CORRIDOR.

1 BUILDING 1: MAIN BUILDING LIGHTING PLAN AREA "A"
SCALE: 1/8"=1'-0"



2 EMERGENCY BATTERY PACK WIRING DIAGRAM
SCALE: NONE

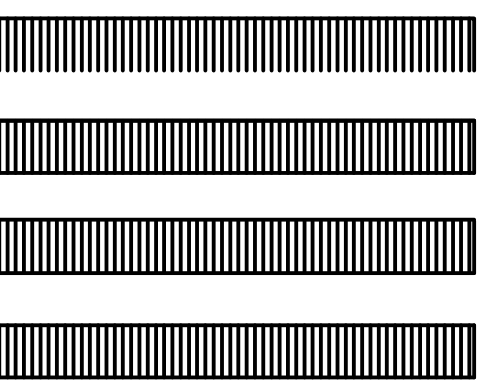


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PROJECT NO.	0958
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DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BUILDING 1: MAIN BUILDING LIGHTING PLAN AREA "A"

**Louisiana Technical College
Slidell Campus**

1000 Canulette Rd
Slidell, LA 70458



DATE	02/08/02
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PROJECT NO.	0958
CADD NO.	J./0958/ELEC/E3.1
DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BUILDING 1: MAIN BUILDING LIGHTING PLAN AREA "B"



1 BUILDING 1: MAIN BUILDING LIGHTING PLAN AREA "B"
SCALE: 1/8"=1'-0"

SEE SHEET E-3.0
FOR SPECIFIC
NOTES.

**Louisiana Technical College
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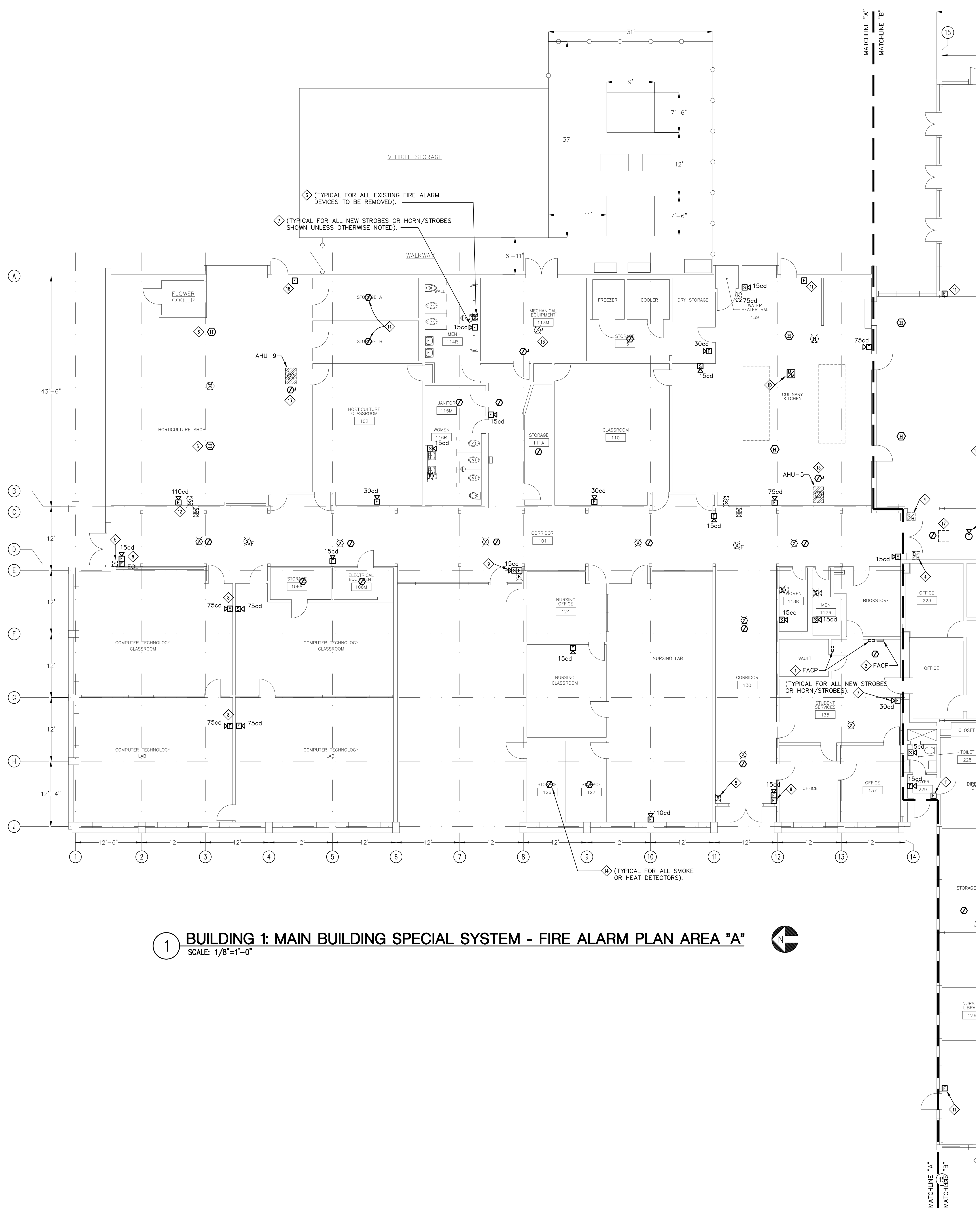
PROJECT NO.	0958
CADD NO.	J:/0958/ELEC/E3.3
DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BUILDING 1: MAIN BUILDING POWER PLAN AREA "B"



1 BUILDING 1: MAIN BUILDING POWER PLAN AREA "B"
SCALE: 1/8"=1'-0"



NOTE:
SEE SHEET E32 FOR
SPECIFIC NOTES.

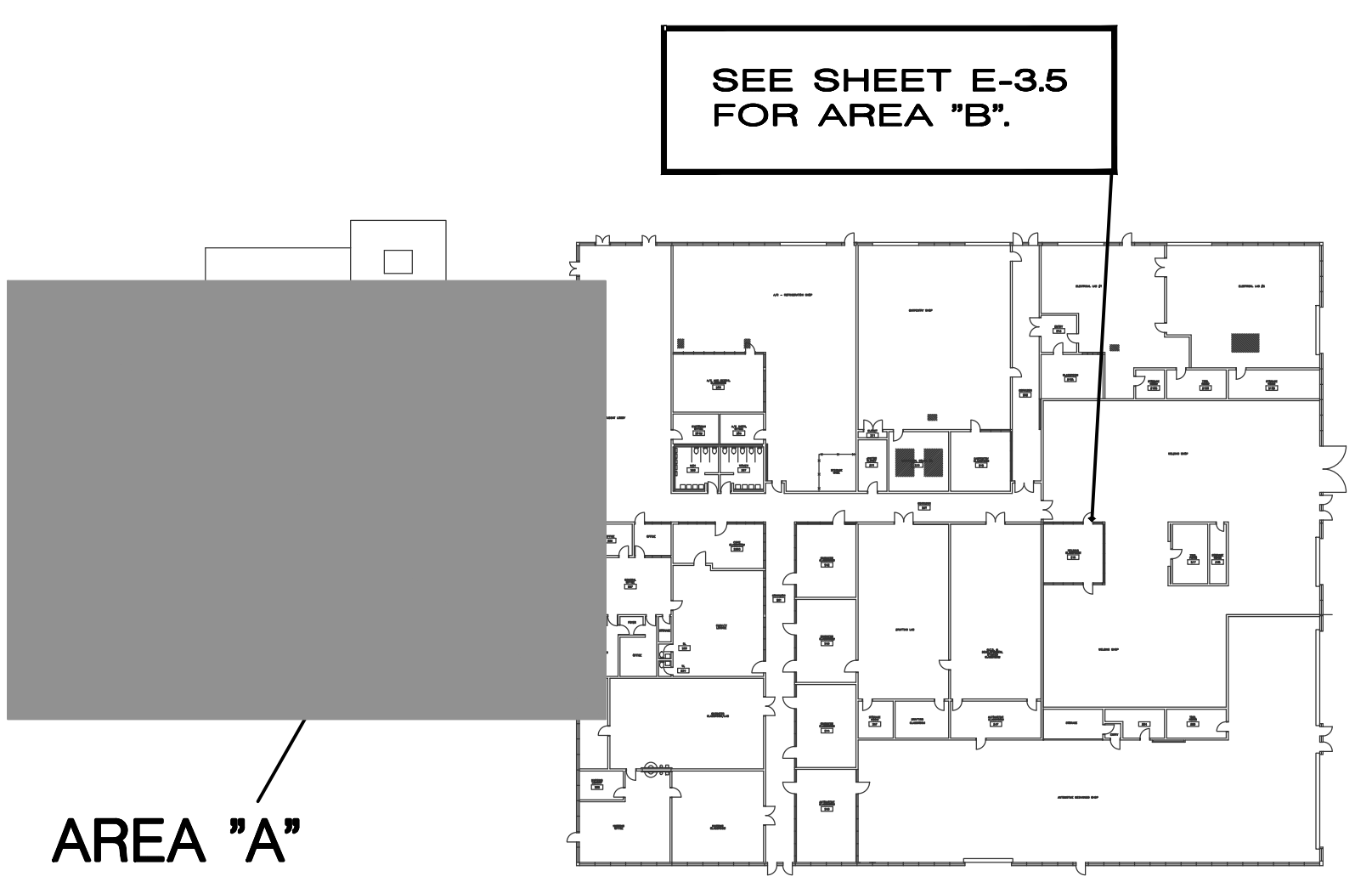


1 BUILDING 1: MAIN BUILDING SPECIAL SYSTEM - FIRE ALARM PLAN AREA "A"
SCALE: 1/8"=1'-0"

SPECIFIC NOTES(SHEET E3.4 AND E3.5)

- 1 REMOVE EXISTING FIRE ALARM CONTROL PANELS AND ALL ASSOCIATED CONDUIT, WIRING AND DEVICES. THE REMOVAL OF THE EXISTING SYSTEM SHALL NOT TAKE PLACE UNTIL AFTER THE NEW FIRE ALARM SYSTEM IS IN PLACE AND IS FULLY OPERATIONAL. THE CONTRACTOR SHALL PATCH AND PAINT AND REPAIR ALL WALLS AND CEILING AREAS WHERE PREVIOUS PANELS WERE REMOVED. CONTRACTOR SHALL ALSO REPLACE ANY DAMAGED ACOUSTICAL CEILING TILES.
- 2 INSTALL NEW FIRE ALARM CONTROL PANEL SURFACE MOUNTED ON WALL SHOWN. PICKUP 120 VOLT POWER FROM SAME CIRCUITRY, WHICH IS CURRENTLY SERVING THE EXISTING FACP. ALSO PICK UP TELEPHONE LINE CURRENTLY CONNECT TO EXISTING FACP.
- 3 REMOVE EXISTING FIRE ALARM DEVICE AND ALL ASSOCIATED WIRING AND CONDUIT. THE REMOVAL OF THIS DEVICE SHALL TAKE PLACE ONLY AFTER NEW FIRE ALARM SYSTEM AND ALL DEVICES ARE INSTALLED AND ARE OPERATIONAL.
- 4 PROVIDE CONTROL MODULE TO RELEASE DOOR HOLDERS.
- 5 REMOVE EXISTING RECESSED FIRE ALARM PULLSTATION AND INSTALL A BLANK COVER PLATE. THE BLANK COVER PLATE SHALL BE PAINTED THE SAME COLOR AS EXISTING WALL. THE REMOVAL OF THIS DEVICE SHALL TAKE PLACE ONLY AFTER NEW FIRE ALARM SYSTEM AND ALL DEVICES ARE INSTALLED AND ARE OPERATIONAL.
- 6 INSTALL DETECTOR TYPE SHOWN IN CEILING AREA OF SHOP. THE DEVICES SHALL BE MOUNTED TO THE BOTTOM OF STRUCTURAL BEAMS IN SHOP.
- 7 SURFACE MOUNT NEW STROBE OR NEW HORN/STROBE DEVICE ON WALL AT 80" TO BOTTOM OF DEVICE. FROM DEVICE ROUTE WIRING IN WIREMOLD RACEWAY TO ABOVE ACCESSIBLE CEILING. ONCE ABOVE THE ACCESSIBLE CEILING, ROUTE WIRING IN EMT CONDUIT.
- 8 IN LOCATIONS WHERE FIRE ALARM DEVICES ARE SHOWN BACK TO BACK ON A COMMON WALL, ROUTE THE SURFACE MOUNTED RACEWAY FROM ABOVE ACCESSIBLE CEILING DOWN TO ONLY ONE DEVICE. TO WIRE THE OTHER DEVICE STUB THRU WALL INTO BACK OF OTHER SURFACE DEVICE.
- 9 INSTALL A NEW SURFACE MOUNTED HORN/STROBE AT 80" TO BOTTOM OF DEVICE AND A NEW SURFACE MOUNTED PULLSTATION AT 44" FROM DEVICE ROUTE WIRING IN WIREMOLD RACEWAY TO ABOVE ACCESSIBLE CEILING. ONCE ABOVE THE ACCESSIBLE CEILING, ROUTE WIRING IN EMT CONDUIT.
- 10 PROVIDE MONITOR MODULE AT EACH KITCHEN HOOD TO MONITOR STATUS OF EXTINGUISHING SYSTEM. ALSO PROVIDE CONTROL MODULE AT KITCHEN HOOD TO SHUT OFF GAS CONTROL VALVE TO KITCHEN EQUIPMENT.
- 11 INSTALL NEW SURFACE MOUNTED PULLSTATION AT 44". FROM DEVICE ROUTE WIRING IN WIREMOLD RACEWAY TO ABOVE ACCESSIBLE CEILING. ONCE ABOVE THE ACCESSIBLE CEILING, ROUTE WIRING IN EMT CONDUIT.
- 12 SURFACE MOUNT NEW STROBE OR HORN/STROBE ON WALL IN SHOP AREA AT 80" TO BOTTOM OF DEVICE.
- 13 INSTALL NEW DUCT DETECTOR DOWNSTREAM OF THE AIR FILTER AND AHEAD OF ANY BRANCH CONNECTIONS OF AIR HANDLING UNIT SHOWN.
- 14 INSTALL DETECTOR TYPE SHOWN ON CEILING. ROUTE WIRING ABOVE CEILING BACK TO FACP.
- 15 INSTALL NEW CEILING MOUNTED HORN/ STROBE AT LOCATION SHOWN.
- 16 INSTALL CEILING MOUNTED STROBE OR HORN/STROBE IN SHOP. MOUNT DEVICE TO BOTTOM OF STRUCTURAL BEAM IN AREA.
- 17 SMOKE EXHAUST HATCH. ADDRESSABLE SMOKE DETECTOR SHALL BE CONTAIN A DRY CONTACT IN BASE. UPON SENSING SMOKE THE DRY CONTACT SHALL CLOSE AND SEND CONTROL CURRENT TO MELT FUSIBLE LINK TO OPEN HATCH.
- 18 SURFACE MOUNT NEW PULLSTATION ON WALL IN SHOP AREA.

KEY PLAN



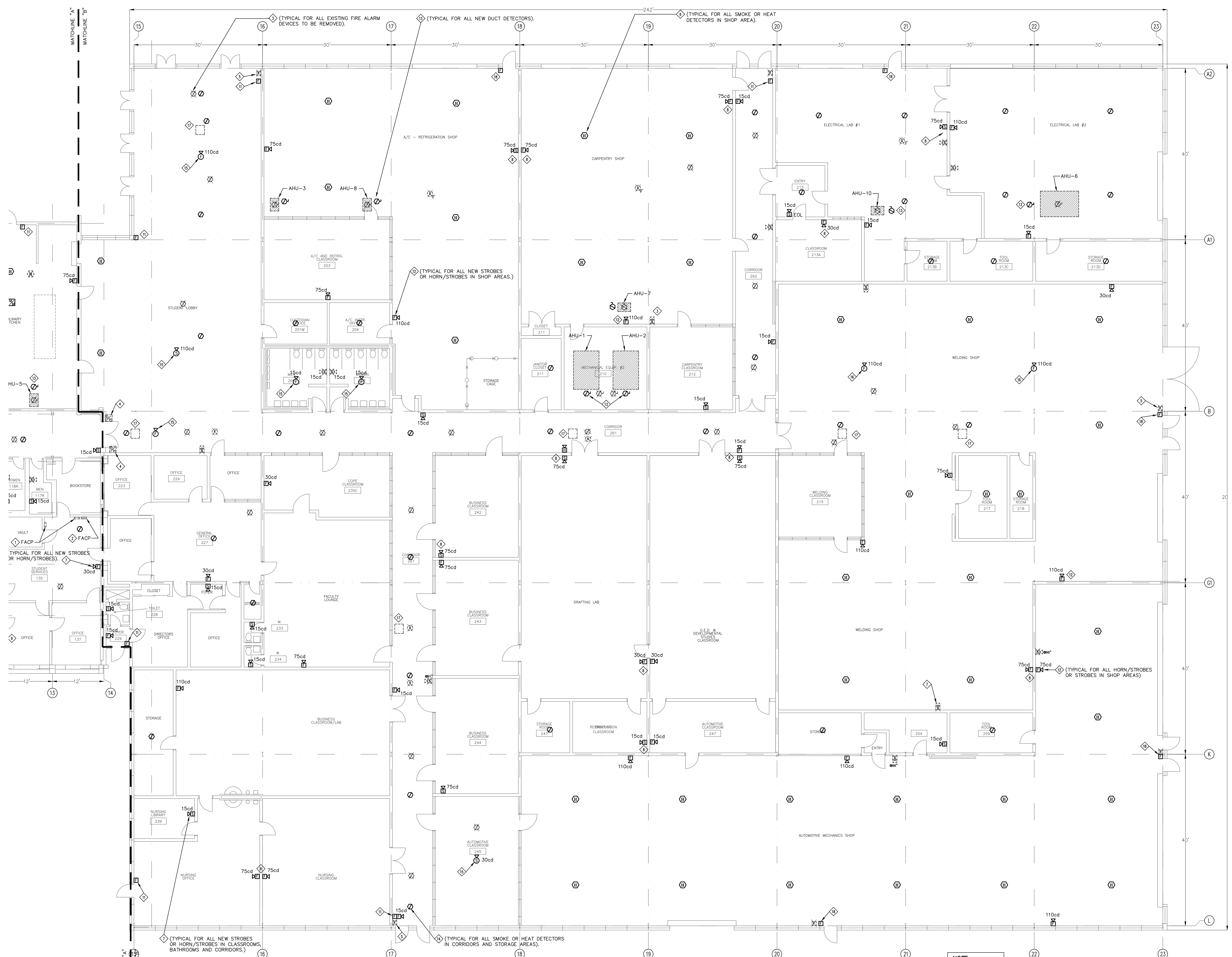
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PROJECT NO.	0958
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DRAWING TITLE	BUILDING 1: MAIN BUILDING SPECIAL SYSTEM - FIRE ALARM PLAN AREA "A"

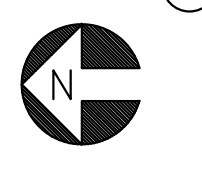
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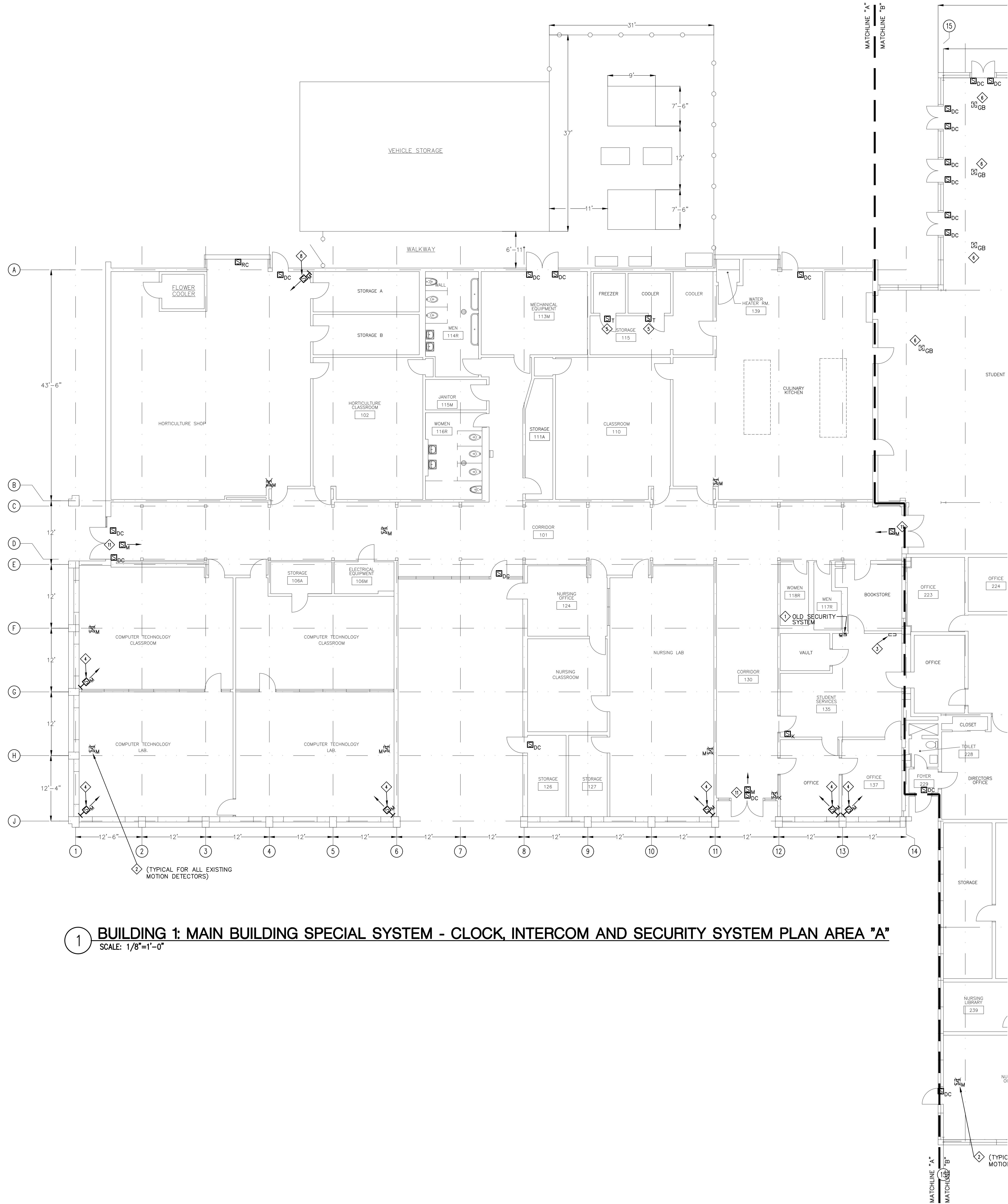
PROJECT NO.	0958
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DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BUILDING 1: MAIN BUILDING SPECIAL SYSTEM - FIRE ALARM PLAN AREA "B"



1 BUILDING 1: MAIN BUILDING SPECIAL SYSTEM - FIRE ALARM PLAN AREA "B"
SCALE: 1/8"=1'-0"



NOTE:
SEE SHEET E34 FOR
SPECIFIC NOTES.

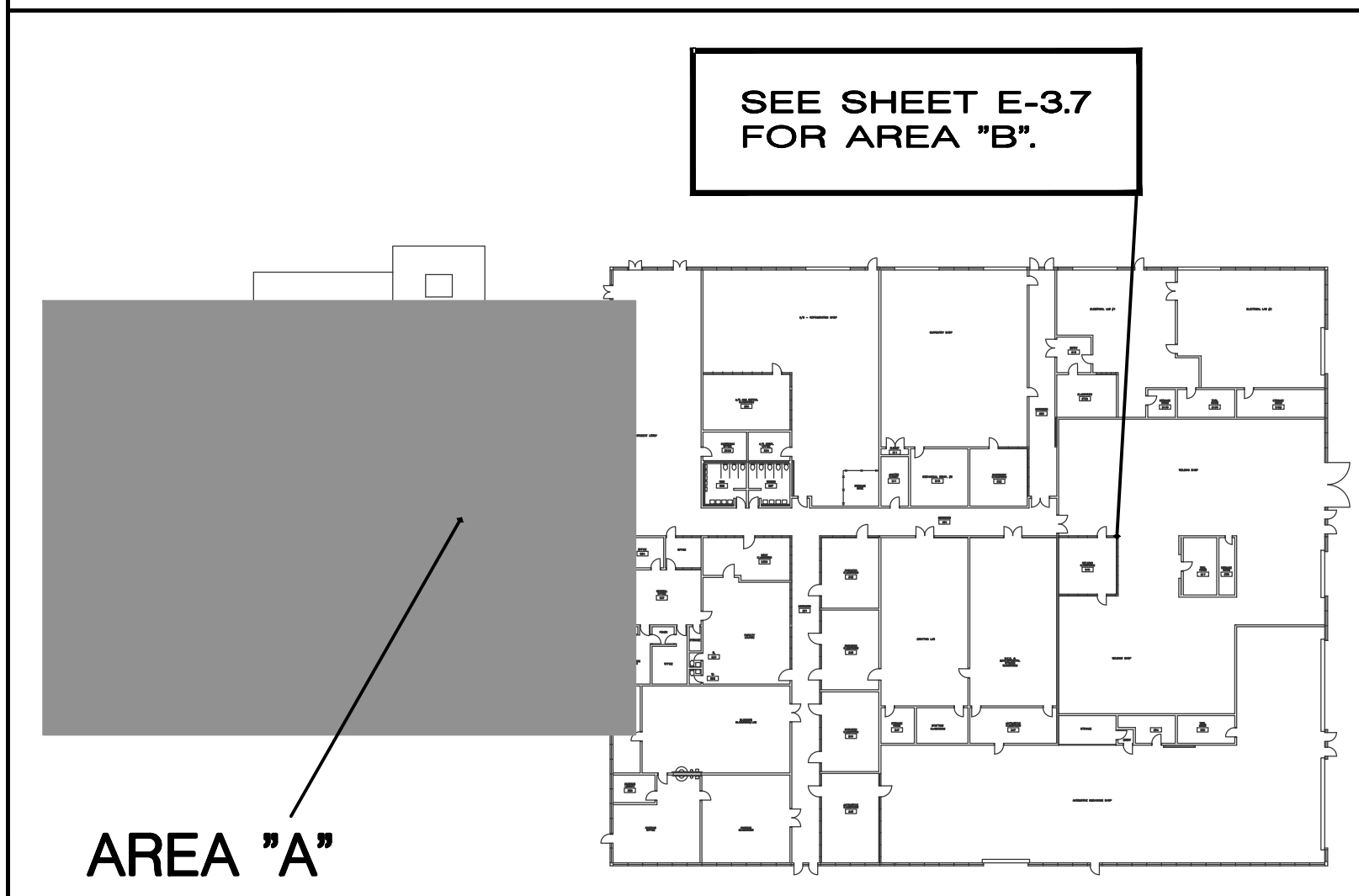


1 BUILDING 1: MAIN BUILDING SPECIAL SYSTEM - CLOCK, INTERCOM AND SECURITY SYSTEM PLAN AREA "A"
SCALE: 1/8"=1'-0"

SPECIFIC NOTES (SHEETS E3.6 AND E3.7)

- 1. ONCE NEW SECURITY SYSTEM IS INSTALLED REMOVE EXISTING SECURITY PANEL AND ALL DEVICES, WIRING AND CONDUIT. THE CONTRACTOR SHALL PATCH, PAINT, AND REPAIR ALL WALLS AND CEILING AREAS WHERE EXISTING DEVICES WERE REMOVED. CONTRACTOR SHALL ALSO REPLACE ANY DAMAGED ACOUSTICAL CEILING TILES.
- 2. REMOVE EXISTING MOTION DETECTOR AND ALL ASSOCIATED WIRING.
- 3. SURFACE MOUNT NEW SECURITY SYSTEM WALL SHOWN. WIRING FROM NEW PANEL TO CEILING SHALL BE RUN IN EMT CONDUIT. CONDUIT SHALL BE PAINTED TO MATCH WALL COLOR.
- 4. WALL MOUNT NEW MOTION DETECTOR IN CORNER OF ROOM. THE NEW MOTION DETECTOR SHALL HAVE A COVERAGE PATTERN THAT WILL COVER THE OUTSIDE PERIMETER WALLS. ROUTE WIRING FROM DETECTOR IN WIREMOLD SURFACE RACEWAY TO ABOVE ACCESSIBLE CEILING. ONCE ABOVE THE CEILING ROUTE WIRING IN EMT CONDUIT.
- 5. PROVIDE MONITOR OF CONTACT CLOSURE OF EXISTING TEMPERATURE SENSORS IN WALK-IN COOLER AND FREEZER.
- 6. REPLACE EXISTING GLASS BREAK SECURITY DEVICES WITH NEW GLASS BREAK DEVICES AND WIRE BACK TO NEW SECURITY SYSTEM..
- 7. REMOVE ALL EXISTING WINDOW CONTACTS IN ROOM AND ALL ASSOCIATED WIRING.
- 8. WALL MOUNT NEW MOTION DETECTOR IN CORNER OF ROOM. THE NEW MOTION DETECTOR SHALL HAVE A COVERAGE PATTERN THAT WILL COVER THE OUTSIDE PERIMETER WALLS.
- 9. REPLACE EXISTING WALL MOUNTED MOTION DETECTOR WITH NEW WALL MOUNTED MOTION DETECTOR. INSTALL NEW WIRING IN SHOP AREA IN EMT CONDUIT. NEW DETECTOR SHALL PROVIDE BARRIER COVERAGE.
- 10. INSTALL NEW WALL MOUNTED MOTION DETECTOR ON WALL SHOWN. THIS DETECTOR SHALL PROVIDE BARRIER COVERAGE.
- 11. INSTALL MOTION SENSOR ON CEILING. THE ARROW SHOWS THE DIRECTION OF COVERAGE THAT NEEDS TO BE PROVIDED. THIS DETECTOR SHALL PROVIDE COVERAGE PATTERN FOR THE CORRIDOR.
- 12. INSTALL MOTION SENSOR ON CEILING. THIS DETECTOR SHALL PROVIDE A 360 DEGREE COVERAGE PATTERN FOR THIS ENTIRE AREA.

KEY PLAN

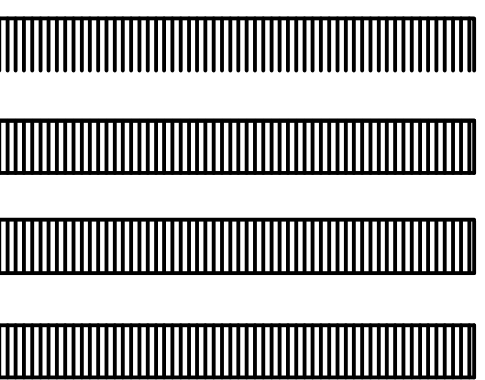


DATE	02/08/02
REVISION	"AS BUILT" - 4/14/03

PROJECT NO.	0958
CADD NO.	J:/0958/ELEC/E3.6
DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BUILDING 1: MAIN BUILDING SPECIAL SYSTEM - SECURITY SYSTEM PLAN AREA "A"

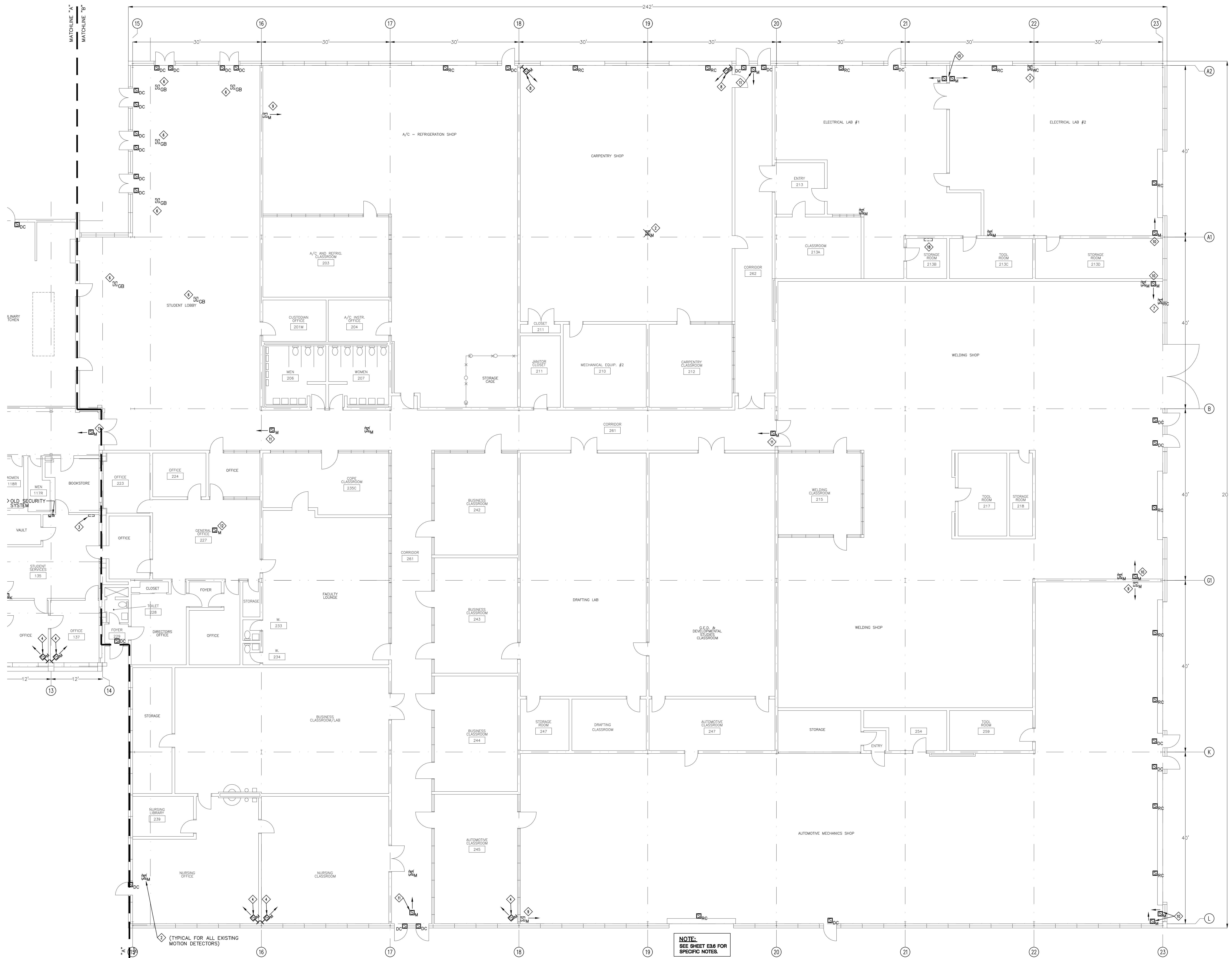
**Louisiana Technical College
Slidell Campus**

1000 Canulette Rd
Slidell, LA 70458



DATE	02/08/02
REVISION	"AS BUILT" - 4/14/03

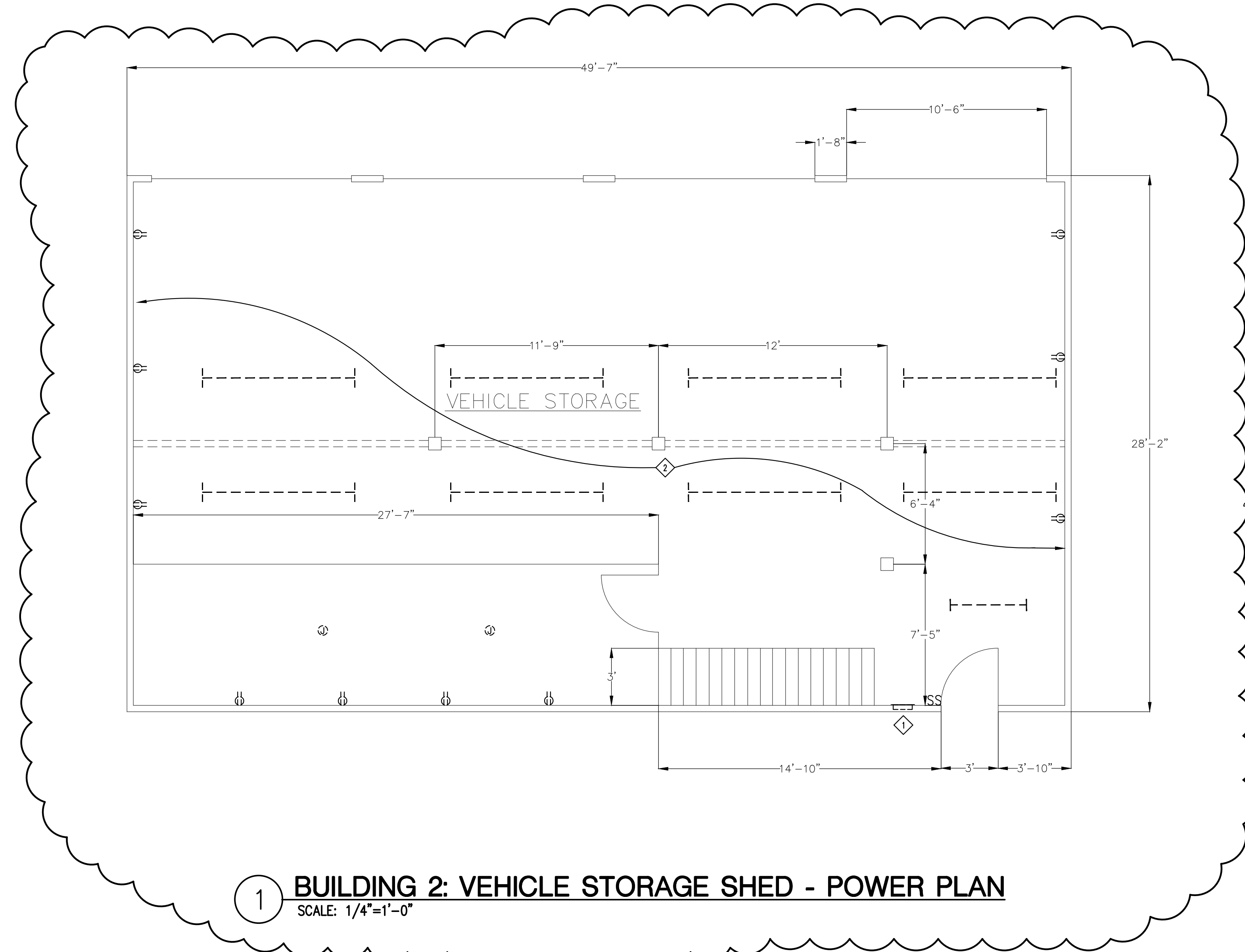
PROJECT NO.	0958
CADD NO.	J:/0958/ELEC/E3.7
DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BUILDING 1: MAIN BUILDING SECURITY SYSTEM PLAN - AREA "B"



1 BUILDING 1: MAIN BUILDING SPECIAL SYSTEM - CLOCK, INTERCOM AND SECURITY SYSTEM PLAN AREA "B"
SCALE: 1/8"=1'-0"

DATE	02/08/02
REVISION	"AS BUILT" - 4/14/03

PROJECT NO.	0958
CADD NO.	J: /0958/ELEC/E4.0
DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BLDG.2: VEH. STORAGE SHED BLDG.4: CARPENTRY SHED POWER PLAN

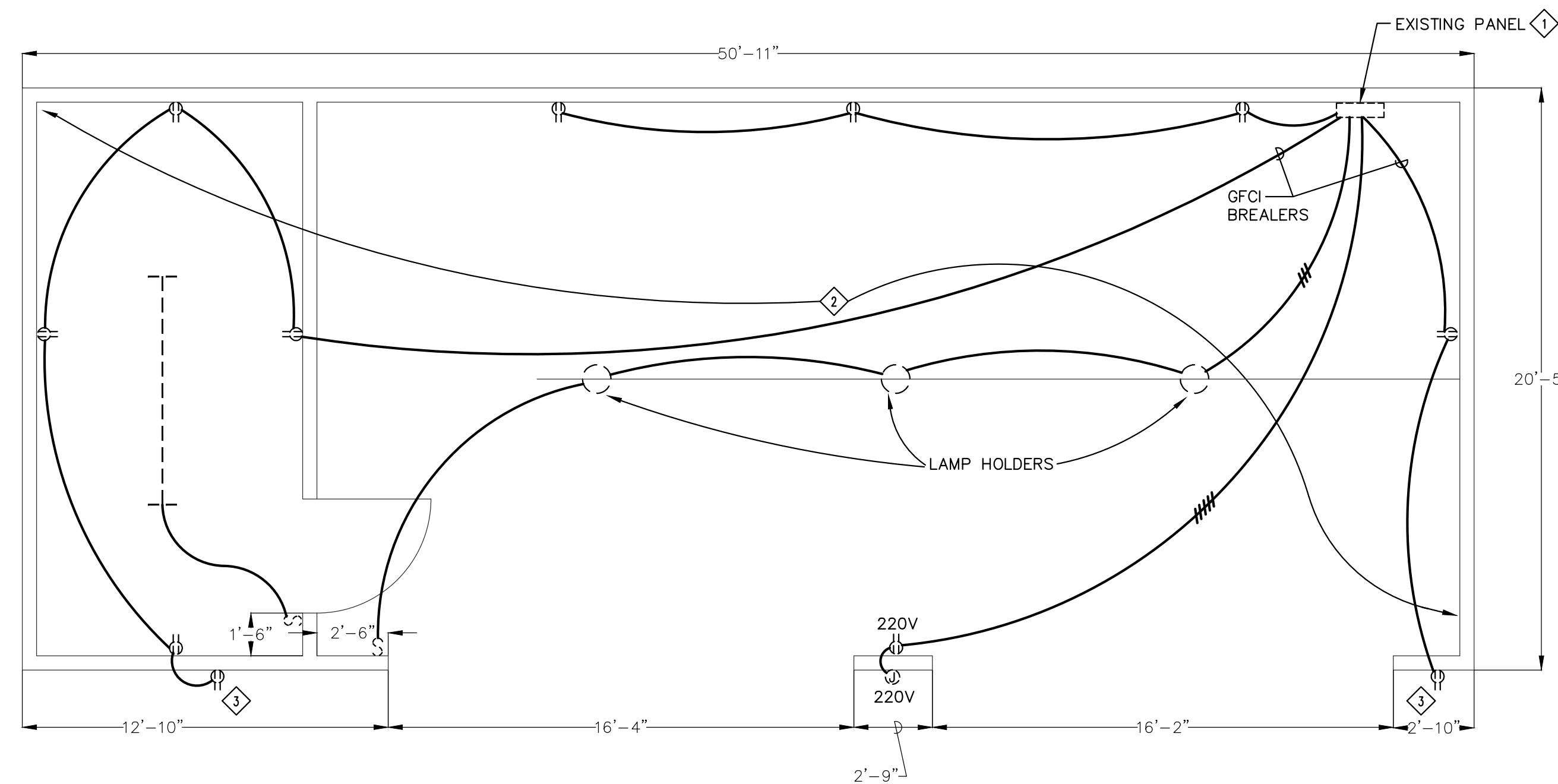


1 BUILDING 2: VEHICLE STORAGE SHED - POWER PLAN
SCALE: 1/4"=1'-0"

SPECIFIC NOTES (BUILDING 2)

- ① REPLACE EXISTING PANEL WITH NEW PANEL. NEW PANEL SHALL BE RATED 100 AMP, 120/240 VOLT, SINGLE PHASE, 3 WIRE, AND CONTAIN 20 POLES. THE PANEL SHALL COME WITH A MAIN BREAKER AND 3- 20 AMP, 1 POLE C/B'S. THE 20 AMP CIRCUIT BREAKERS ARE SERVING THE EXISTING LIGHTING AND DEVICES IN THE BUILDING. USING A #8 GROUND ELECTRODE CONDUCTOR BOND THE EQUIPMENT GROUND BUS TO EXISTING GROUND ROD AND COLD WATER PIPE. DO NOT BOND NEUTRAL BUS TO GROUNDING ELECTRODE (PER NEC 250-32(4)(1) THRU (3)).
- ② REPLACE ALL EXISTING NONMETALLIC SHEATHED CABLE CURRENTLY FEEDING THE LIGHTS AND THE DEVICES IN THE BUILDING WITH MC CABLE. CIRCUIT THE BUILDING AS PREVIOUS CIRCUITED. IT APPEARS THAT THREE 20 AMP CIRCUITS ARE USED TO SERVE ALL THE LIGHTS AND RECEPTACLES.

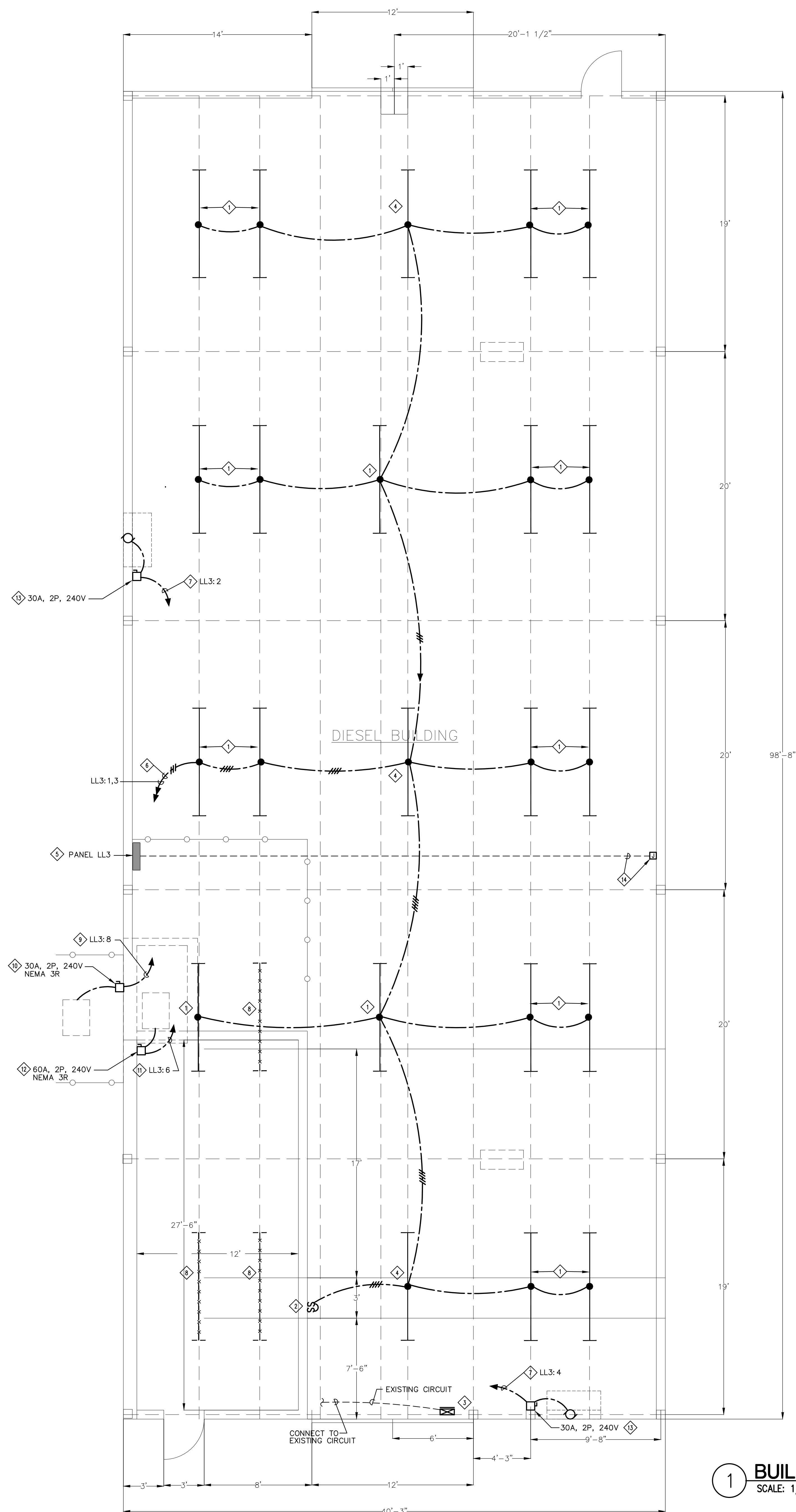
THIS WORK WAS REMOVED FROM CONTRACT. CREDIT TO OWNER UNDER CHANGE ORDER 001.



2 BUILDING 4: CARPENTRY SHED - POWER PLAN
SCALE: 1/4"=1'-0"

SPECIFIC NOTES (BUILDING 4)

- ① EXISTING CROUSE HINDS PANEL, 125 AMP, 120/240 VOLT, SINGLE PHASE, 3 WIRE. THE PANEL HAS THE FOLLOWING CIRCUIT BREAKERS: ONE 30 AMP, 2 POLE, THREE 20 AMP, 2 POLE, TWO 20 AMP 1 POLE.
- ② REPLACE ALL EXISTING NONMETALLIC SHEATHED CABLE CURRENTLY FEEDING THE LIGHTS AND THE DEVICES IN THE BUILDING WITH EMT CONDUIT AND TYPE THWN CABLE. CIRCUIT THE BUILDING AS PREVIOUS CIRCUITED.
- ③ REPLACE EXISTING RECEPTACLE WITH NEW GFCI RECEPTACLE.



1 BUILDING 3: DIESEL SHED - ELECTRICAL PLAN
SCALE: 1/4"=1'-0"

SPECIFIC NOTES(SHEET E5.0)

- 1 REPLACE EXISTING 8' STRIP FIXTURE WITH NEW SURFACE FIXTURE TYPE F5. REWIRE NEW FIXTURE AS SHOWN.
- 2 SURFACE MOUNT NEW LIGHT SWITCHES FOR SHOP AREA NEXT TO ENTRANCE DOOR FOR CLASSROOM.
- 3 REPLACE EXISTING EXIT SIGN WITH NEW EXIT SIGN TYPE F3.
- 4 REPLACE EXISTING 8' FIXTURE WITH NEW FIXTURE TYPE F6. REWIRE FIXTURE AS SHOWN.
- 5 REPLACE EXISTING 200 AMP. SINGLE PHASE, 240/120 VOLT PANEL AND ATTACHED LOAD CENTER PANEL WITH NEW PANEL "LL3". SEE PANELBOARD SCHEDULE FOR ALL NEW C/B FOR LL3. IN ADDITION TO THE C/B INCLUDED IN THE PANEL SCHEDULE, TRACE OUT AND IDENTIFY ALL EXISTING ACTIVE CIRCUITS AND PROVIDE BRANCH CIRCUIT BREAKERS TO SERVE THOSE EXISTING CIRCUITS. CONNECT EXISTING CIRCUITS TO NEW PANEL. USING A #4 GROUNDING CONDUCTOR BOND NEUTRAL AND GROUND BUS OF PANEL TO A 5/8" X 10' COPPER CLAD GROUND ROD, COLD WATER PIPE AND BUILDING STEEL.
- 6 ROUTE CIRCUITRY EXPOSED IN EMT CONDUIT BACK TO DESIGNATED PANEL.
- 7 ROUTE 2 #12, 1#12 GND IN 3/4" EMT CONDUIT EXPOSED BACK TO 15 AMP, 2 POLE, C/B IN DESIGNATED PANEL.
- 8 REMOVE EXISTING 8' FIXTURE AND ALL ASSOCIATED CONDUIT AND WIRING.
- 9 ROUTE 2 #10, 1#10 GND IN 3/4" EMT CONDUIT EXPOSED BACK TO 25 AMP, 2 POLE, C/B IN DESIGNATED PANEL.
- 10 REMOVE EXISTING DISCONNECT AND ALL ASSOCIATED WIRING TO EXISTING HEAT PUMP. INSTALL NEW DISCONNECT AND CIRCUITRY AS SHOWN FOR NEW HEAT PUMP.
- 11 ROUTE 2 #8, 1#10 GND IN 1" EMT CONDUIT EXPOSED BACK TO 50 AMP, 2 POLE, C/B IN DESIGNATED PANEL.
- 12 REMOVE EXISTING DISCONNECT AND ALL ASSOCIATED WIRING TO EXISTING AHU. INSTALL NEW DISCONNECT AND CIRCUITRY AS SHOWN FOR NEW AHU.
- 13 REMOVE EXISTING DISCONNECT AND ALL ASSOCIATED WIRING TO EXISTING WALL FAN. INSTALL NEW DISCONNECT AND CIRCUITRY AS SHOWN FOR NEW WALL FAN.
- 14 EXISTING JUNCTION BOX AND CIRCUITRY FOR CARPENTRY SHOP TO REMAIN. CONNECT EXISTING CIRCUITRY TO NEW 100 AMP C/B IN NEW PANEL. NOTE THIS CIRCUITRY SHALL BE SPLICED IN THE EXISTING JUNCTION BOX AND EXTENDED AS NOTED ON SHEET E2.

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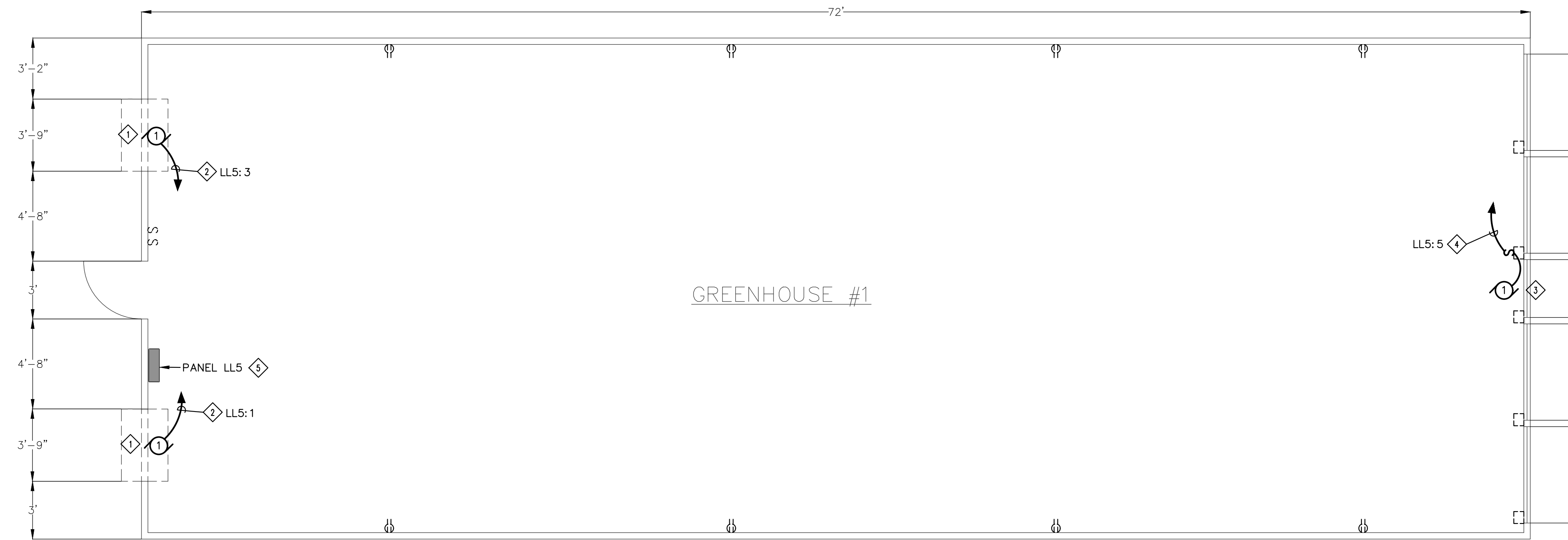
PROJECT NO.	0958
CADD NO.	J:/0958/ELEC/E5.0
DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BUILDING 3: DIESEL SHED ELECTRICAL PLAN

DATE	02/08/02
REVISION	"AS BUILT" - 4/14/03

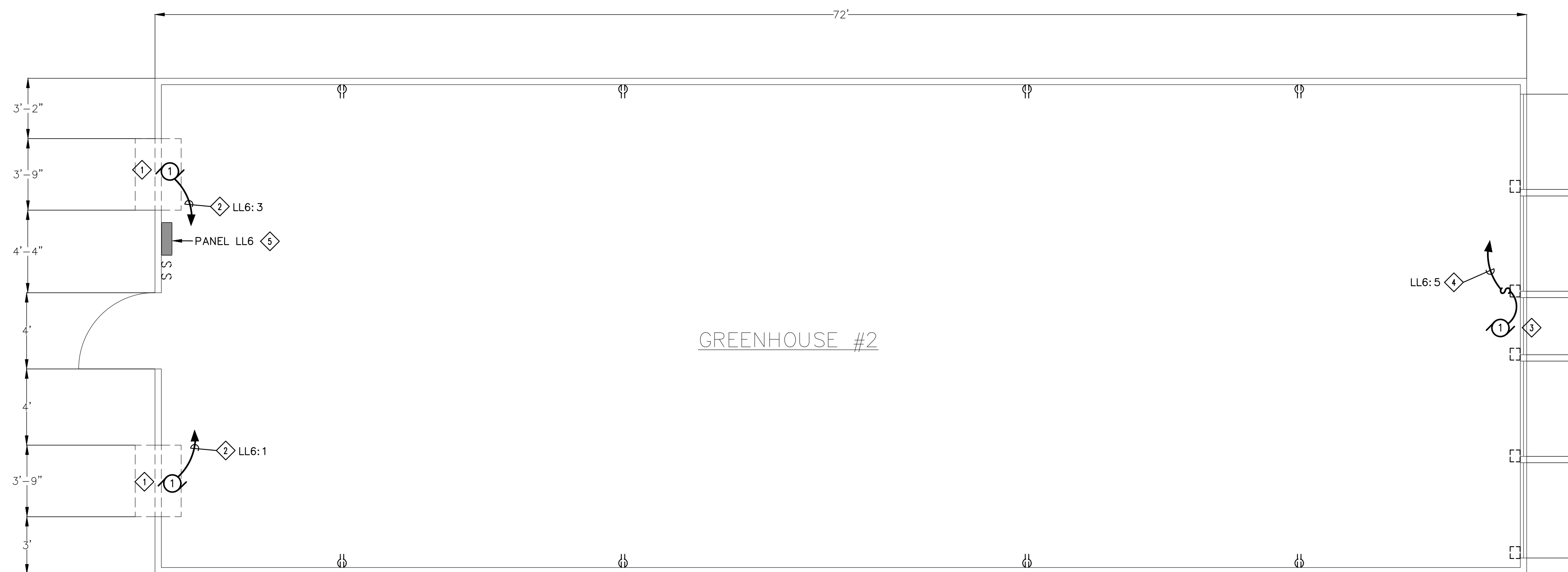
PROJECT NO.	0958
CADD NO.	J:/0958/ELEC/E6.0
DRAWN BY	K.A.M.
CHECKED BY	R.E.N.
DRAWING TITLE	BUILDING 5: GREENHOUSE #1 BUILDING 6: GREENHOUSE #2 POWER PLAN

SPECIFIC NOTES (SHEET E6.0)

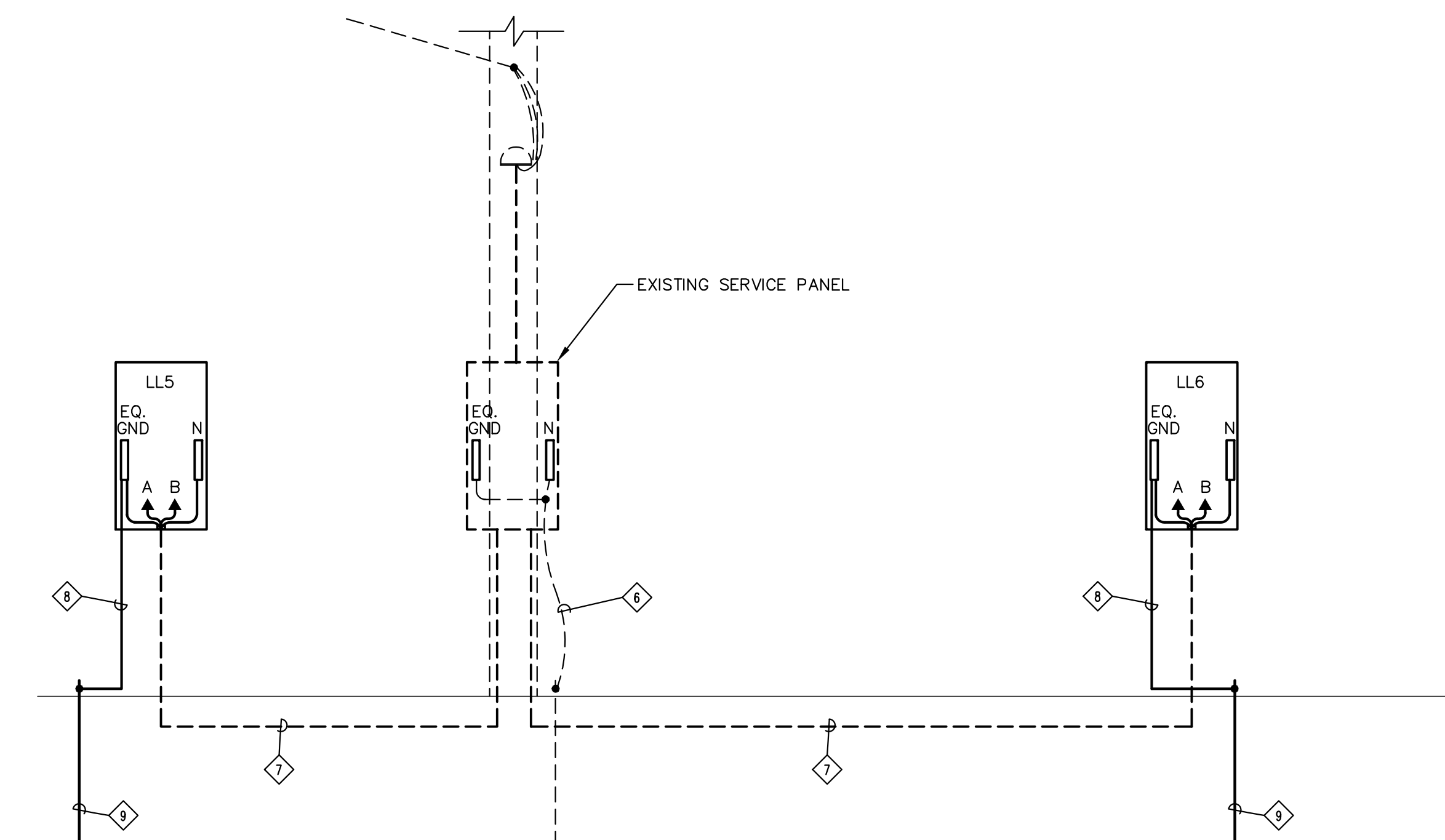
- 1 DISCONNECT EXISTING FAN AND REMOVE ALL ASSOCIATED CONDUIT AND WIRE BACK TO PANEL.
- 2 FROM NEW FAN ROUTE 2 #12, 1#12 GND IN 3/4" CONDUIT BACK EXPOSED TO 20 AMP, 1 POLE, C/B IN DESIGNATED PANEL.
- 3 DISCONNECT EXISTING PUMP AND REMOVE ALL ASSOCIATED CONDUIT AND WIRE BACK TO PANEL.
- 4 FROM NEW PUMP ROUTE 2 #12, 1#12 GND IN 3/4" CONDUIT BACK EXPOSED TO 20 AMP, 1 POLE, C/B IN DESIGNATED PANEL.
- 5 REPLACE EXISTING PANEL WITH NEW 100 AMP, 120/240 VOLT SINGLE PHASE, 3 WIRE, 20 POLE, NEMA 3R PANEL. PROVIDE A 100 AMP MAIN C/B. CONNECT ALL EXISTING CIRCUITS TO NEW PANEL. SEE PANELBOARD SCHEDULE AND GREENHOUSE ONE LINE DIAGRAM FOR MORE INFORMATION.
- 6 VERIFY THAT NEUTRAL AND GROUND ARE BONDED TO GROUNDING ELECTRODE. IF THE NEUTRAL AND GROUND ARE NOT BONDED TO GROUNDING ELECTRODE, THEN USING A #4 GROUNDING CONDUCTOR BOND NEUTRAL AND GROUND TO GROUNDING ELECTRODE. INSTALL GROUNDING CONDUCTOR IN 1" CONDUIT FOR PHYSICAL PROTECTION.
- 7 VERIFY THAT A #8 EQUIPMENT GROUNDING CONDUCTOR IS INCLUDED IN THE EXISTING SERVICE FEEDER TO EACH GREENHOUSE PANEL. IF THERE IS NO EQUIPMENT GROUNDING CONDUCTOR, THEN PULL A #8 GROUNDING CONDUCTOR IN EXISTING FEEDER CONDUIT.
- 8 USING A #8 GROUND ELECTRODE CONDUCTOR BOND THE EQUIPMENT GROUND BUS TO EXISTING GROUND ROD AND COLD WATER PIPE. DO NOT BOND NEUTRAL BUS TO GROUNDING ELECTRODE. (PER NEC 230-32(d)(1) THRU (3)).
- 9 VERIFY THAT THERE IS A GROUNDING ELECTRODE. IF NONE EXIST THEN DRIVE A 5/8" X 10' GROUND ROD.



1 **BUILDING 5: GREENHOUSE ONE - POWER PLAN**
SCALE: 1/4"=1'-0"



2 **BUILDING 6: GREENHOUSE TWO - POWER PLAN**
SCALE: 1/4"=1'-0"



3 **GREENHOUSE ONE LINE DIAGRAM**
SCALE: NONE

