GENERAL ELECTRICAL NOTES

- 1) ALL 120V, 20A CIRCUIT HOMERUNS OVER 50FT. SHALL BE #10 CU. MINIMUM, UNLESS NOTED OTHERWISE.
- 2) ALL 120V, 20A CIRCUIT HOMERUNS OVER 150FT, SHALL BE #8 CU. MINIMUM, UNLESS NOTED OTHERWISE.
- 3) ALL BRANCH CIRCUIT CONDUCTORS WILL BE SIZED PER NEC MINIMUM. THE MINIMUM ALLOWABLE BRANCH CIRCUIT CONDUCTOR SIZE IS #12 AWG COPPER. INCREASE CONDUCTOR SIZE FOR A PPLICATION PER NEC AND AS NOTED ON THE PLANS.
- 4) CONDUCTOR SIZES INDICATED ON CIRCUIT HOMERUNS OR IN SCHEDULES SHALL BE INSTALLED OVER THE ENTIRE LENGTH OF THE CIRCUIT UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 5) UP TO THREE PHASE CONDUCTORS, CORRESPONDING SWITCHLEGS AND NEUTRALS ARE ALLOWED IN THE SAME RACEWAY UNLESS INDICATED OTHERWISE ON THE DRAWINGS. DO NOT COMBINE HOMERUNS.
- 6) PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN ALL FEEDERS AND BRANCH CIRCUITS.
- 7) COMPLY WITH ARTICLE 210 OF THE NEC. PROVIDE A DEDICATED NEUTRAL FOR ALL 120V AND 277V CIRCUITS OR PROVIDE C.B. HANDLE TIES TO CONNECT POLES SERVING MULTI-WIRE CIRCUITS.
- 8) COORDINATE EXACT LOCATION OF LIGHTING FIXTURES IN MECH. ROOMS/SPACES WITH DUCTWORK INSTALLER PRIOR TO ROUGH-IN. LOCATE BELOW DUCTWORK (8'-0" A FF MINIMUM) CENTERED IN ROOM AS MUCH AS POSSIBLE
- 9) COORDINATE EXACT INSTALLATION REQUIREMENTS OF OUTLETS IN MILLWORK WITH A RCHITECTURAL DRAWINGS. A PPROVED SHOP DRAWINGS AND MILLWORK INSTALLER PRIOR TO ROUGH-IN.
- 10) VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL INSTALLER PRIOR TO ROUGH-IN.
- 11) REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES.
- 12) ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRINGS IN THEM.
- 13) ALL COMPUTER RECEPTAICLE CIRCUITS SHALL BE PROVIDED WITH A DEDICATED NEUTRAL FOR EACH PHASE CONDUCTOR
- 14) COORDINATE THE REQUIRED SIZE OF ALL CIRCUIT BREAKERS FEEDING EQUIPMENT, (I.E. MOTORS, HVAC EQUIPMENT, SPECIAL PURPOSE OUTLETS, OWNER FURNISHED EQUIPMENT ETC.) WITH A PPROVED EQUIPMENT SHOP DRAWINGS AND OWNER REPRESENTATIVES PRIOR TO ORDERING PANELBOARDS. BREAKERS SHALL BE SIZED PER THE NEC, THE EQUIPMENT NAME PLATE AND MANUFACTURERS RECOMMENDATIONS.
- 15) THE POWER COMPANY SHALL BE CONTACTED WITHIN 10 DAYS OF THE AWARD OF THE CONTRACT BY THE CONTRACTOR TO VERIFY THE ACTUAL AVAILABLE SHORT CIRCUIT FAULT CURRENT (SCC) AT THE TRANSFORMER SECONDARY BUSHINGS. THE CONTRACTOR SHALL PROVIDE ELECTRICAL DISTRIBUTION AND UTILIZATION EQUIPMENT AND PANELBOARDS WHICH HAVE AIC/WITHSTAND RATINGS GREATER THAN THE AVAILABLE SSC AT EACH POINT IN THE ELECTRICAL SYSTEM.
- 16) CONTRACTOR SHALL INCLUDE IN HIS BID THE TRANSPORT AND DISPOSAL OR RECYCLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL RULES, REGULATIONS AND GUIDELINES APPLICABLE.
 - A) CONTRACTOR SHALL COMPLY FULLY WITH FLORIDA STATUTE 403.7186 REGARDING MERCURY CONTAINING DEVICES AND LAMPS.
 - B) LAMPS, BALLASTS AND OTHER MATERIALS SHALL BE TRANSPORTED AND DISPOSED OF IN ACCORDANCE WITH ALL DEP AND EPA GUIDELINES.
 - C) THE CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATION THAT ALL MATERIALS WHERE RECYCLED OR DISPOSED OF PROPERLY PER THE GUIDE LINE NOTED A BOVE
- 17) EXISTING CONDITIONS AND UTILITIES INDICATED ARE TAKEN FROM EXISTING CONSTRUCTION DOCUMENTS, VARIOUS SURVEYS AND FIELD INVESTIGATIONS. IT IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COOPERATION WITH OTHER TRADES IN ROUTING AND/OR BURIAL DEPTHS AS DETERMINED DURING CONSTRUCTION AND AS DIRECTED BY THE ARCHITECT/ENGINEER MAY BE NECESSARY AND IT IS INTENDED THAT SUCH DEVIATIONS SHALL BE CONSIDERED A PART OF THIS CONTRACT. IT IS ALSO UNDERSTOOD THAT THE PLANS ARE NOT COMPLETELY TO SCALE THIS CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL SITE UTILITIES, ETC., PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.
- 18) LOCATE ALL EXISTING UTILITIES AND PROTECT THEM FROM DAMAGE.
- 19) ALL CONDUIT TO BE CONCEALED UNLESS IMPOSSIBLE DUE TO EXISTING CONDITIONS (I.E. EXPOSED STRUCTURAL CEILINGS, BUILDING EXTERIOR WALLS). CONCEAL ALL CONDUITS ABOVE CEILINGS OR WITHIN WALLS AND COUNTERS.
 - A) ALL NEW DEVICES TO BE FLUSH MOUNTED UNLESS SPECIFICALLY NOTED
 - B) INSTALL FLEXIBLE CONDUIT DOWN EXISTING WALLS TO NEW FLUSH OUTLETS. (IF EXISTING WALLS DO NOT CONTAIN HOLLOW VERTICAL CAVITIES AND IT IS NOT FEASIBLE TO CONCEAL THE CONDUIT THEN EXPOSED WIREWOLD PAINTED TO MATCH THE WALL SHALL BE USED).
- 20) EXISTING ELECTRICAL SERVICE: MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR SERVICE. DISABLE SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS. OBTAIN PERMISSION FROM OWNER AT LEAST 24 HOURS BEFORE PARTIALLY OR COMPLETELY DISABLING SYSTEM. MINIMIZE OUTAGE DURATION.
- 21) PANELBOARDS: CLEAN EXPOSED SURFACES AND CHECK TIGHTNESS OF ELECTRICAL CONNECTIONS. REPLACE DAMAGED CIRCUIT BREAKERS AND PROVIDE CLOSURE PLATES FOR VACANT POSITIONS. PROVIDE TYPED CIRCUIT DIRECTORY SHOWING REVISED CIRCUITING A RRANGEMENT.

	POWER	
φ	DUPLEX RECEPTACLE, 20 AMP, WITH FLUSH WALL OUTLET BOX.	а
Φ_{c}	DUPLEX RECEPTACLE CONNECTED TO ACUITY CONTROLS SWITCHING PACK nPP16, 20 AMP, WITH FLUSH WALL OUTLET BOX.	а
P	DUPLEX RECEPTACLE MOUNTED 2" ABOVE COUNTER BACKSPLASH, 20 AMP, WITH FLUSH WALL OUTLET BOX.	f
ФG	GFI DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER BACKSPLASH, 20 AMP, WITH FLUSH WALL OUTLET BOX.	f
ФEWC	GFI DUPLEX RECEPTACLE, 20 AMP, WITH WALL OUTLET BOX FOR ELECTRIC WATER COOLER. COORDINATE CONCEALMENT WITH EWC INSTALLER FOR MOUNTING REQUIREMENTS.	f
₽wpg	DUPLEX RECEPTACLE, WEATHERPROOF GFI AND SURFACE MTD. OUTLET BOX WITH IN-USE COVER.	а
■ 30	FLUSH WALL OUTLET BOX AND 30A, 125/250V, 3P, 4W, NEMA 14-30R RECEPTACLE.	а
⊕▼	CAST IRON FULLY ADJUSTABLE TWO-GANG FLOOR OUTLET BOX WITH (2) 20 AMP DUPLEX RECEPTACLES AND (1) TELECOMMUNICATIONS BLANK OUTLET WITH (1) 1"C. TO TTB/TTC (UNLESS OTHERWISE NOTED). PROVIDE CARPET OR TILE FLANGE. (PROVIDE SPECIAL RECEPTACLES, I.E. ISOLATED GROUND TYPE WHERE NOTED)	d
	DISCONNECT SWITCH. REFER TO EQUIPMENT FEEDER SCHEDULE FOR REQUIREMENTS (I.E. SIZE, FUSED, NON-FUSED, ETC.)	h
⊠ ^j	COMBINATION DISCONNECT/MOTOR STARTER	h
\$ _M	OUTLET BOX WITH 20 AMP, 1 POLE, MANUAL MOTOR CONTROLLER WITHOUT OVERLOADS (MSS). RATED 1 HP @ 120V; REFER TO EQUIPMENT FEEDER SCHEDULE.	f
	SURFACE MOUNTED SHUNT-TRIP BUTTON, LOCATE AND LABEL INACCORDANCE WITH	f
□/5	A.H.J., MOUNTED 54" TO TOP, UNLESS OTHERWISE NOTED. 120/208V PANELBOARD, SURFACE MOUNTED	h
		1
	LIGHTING	
<u> </u>	EXIT SIGN LIGHT FIXTURE WITH CEILING OUTLET BOX AND EMERGENCY BATTERY. SHADING INDICATES NUMBER OF FACES AND ORIENTATION, ARROWS. CONNECT TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES (OR TO LOCAL EMERGENCY LIGHTING CIRCUIT WHEN AVAILABLE)	f
\$ _{VS}	SINGLE POLE VACANCY SENSOR SWITCH WITH WALL OUTLET BOX. DUAL TECHNOLOGY WITH PASSIVE INFRARED/MICROPHONIC SENSING. MANUFACTURED BY SENSOR SWITCH MODEL #WSX PDT SA - OR APPROVED EQUAL. LOAD RATING 800W @120V	b
\$ _a	LOW VOLTAGE WALLPAD, WITH WALL OUTLET BOX. BY ACUITY CONTROLS, NLIGHT-PODM SERIES. FUNCTION AND NUMBER OF CHANNELS AS NOTED ON PLANS. CONNECTS TO NLIGHT LIGHTING CONTROL SYSTEM VIA CAT 5 CABLE. ("a" INDICATES SWITCH-LEG)	b
OS	LOW VOLTAGE OCCUPANCY SENSOR SWITCH, CEILING MOUNTED. DUAL TECHNOLOGY WITH PASSIVE INFRARED/MICROPHONIC SENSING. BY ACUITY CONTROLS nLIGHT #NCM PDT 10 U.O.N. CONNECTS WITH NLIGHT LIGHTING CONTROL SYSTEM VIA CAT 5 CABLE.	
DS	LOW VOLTAGE COMBINATION DAYLIGHT/OCCUPANCY SENSOR SWITCH, CEILING MOUNTED. DUAL TECHNOLOGY WITH PASSIVE INFRARED/MICROPHONIC AND DAYLIGHT. BY ACUITY CONTROLS nLIGHT #NCM PDT 10 ADCX, U.O.N. CONNECTS WITH nLIGHT LIGHTING CONTROL SYSTEM VIA CAT 5 CABLE.	
	FIRE ALARM	
F	MANUAL FIRE ALARM PULL STATION.	b
⊠◀	FIRE ALARM HORN/STROBE COMBINATION DEVICE. (15/75 CANDELA, U.O.N.)	I,
+X	FIRE ALARM STROBE. (15/75 CANDELA, U.O.N.)	I,
(2)==-	DUCT MOUNTED SMOKE DETECTOR. (S = SUPPLY; R = RETURN)	
●AH R	CONTROL RELAY "AIR HANDLING CONTROL"	
FACP	FIRE ALARM CONTROL PANEL	t
FAA	FIRE ALARM ANNUNCIATOR	b
CR	SECURITY AND ACCESS CONTROL CARD ACCESS READER, FLUSH MOUNTED. (PR = PROXIMITY)	t
DL	ELECTRIC DOOR STRIKE	
● RTE	"REQUEST-TO-EXIT" DOOR RELEASE SWITCH	b
DC	SECURITY DOOR CONTACT	
ML	MAGNETIC DOOR STRIKE	
SQCP	SECURITY CONTROL PANEL	n
	COMMUNICATION AND DATA	
	COMBINATION TELEPHONE/DATA WALL OUTLET BOX, FLUSH MOUNTED WITH BLANK	
▼	PLATE. PROVIDE (2) MINIMUM 1"C TO CEILING SPACE, U.O.N. TELEVISION OUTLET, FLUSH MOUNT, STUB INTO CEILING SPACE WITH 3/4"C. OR TO NEAREST TVTC.	n
TTB	TELEPHONE TERMINATION BOARD (OR SYSTEMS TERMINAL BOARD AS NOTED). FIRE RETARDANT TREATED PLYWOOD, $3/4$ " THICK x 8'-0" HEIGHT x WIDTH AS SHOWN ON PLANS. PAINT TO MATCH WALL WITH (2) COATS OF FIRE RETARDANT PAINT.	
	GROUNDING	
G	GROUND WIRE, CONCEALED (IN CONDUIT FOR ABOVE GROUND APPLICATIONS)	
——————————————————————————————————————	GROUND OR GROUND ROD AS NOTED	
(1.		

GROUND BUS BAR

DESCRIPTION

LINEAR DIRECT-INDIRECT SUSPENDED FIXTURE

SUSPENDED LED HIGH BAY FIXTURE

R2 2X4 RECESSED PERFORMANCE FULL LENSE

4' SURFACE LENSED STRIP LIGHT

4' LENSED STRIP LIGHT WITH WIRE GUARD

EXTERIOR LED WALL LIGHT FIXTURE

UNIVERSAL EXIT SIGN WITH BATTERY

ADJUSTABLE WET LOCATION RECESSED DOWNLIGHT

4" RECESSED DOWNLIGHT

TYPE

LS

R1

SG

EW

SYMBOL LEGEND NOTES:

- 1. THE COLOR OF ALL DEVICES SHALL BE SELECTED BY THE ARCHITECT. COVER PLATES SHALL BE #302 SMOOTH STAINLESS STEEL, UNLESS OTHERWISE NOTED.
- 2. SCREENED ELECTRICAL ITEM DENOTES EXISTING.
- 3. "R" BY DEVICE DENOTES EXISTING TO BE REMOVED COMPLETELY.
- 4. "H" BY DEVICE DENOTES DEVICE TO BE MOUNTED HORIZONTALLY.
- 5. ALL DIMENSIONS INDICATED ARE TO THE BOTTOM OF FIXTURE, OUTLET, OR EQUIPMENT AND SHALL BE THE DIMENSIONS USED UNLESS INDICATED OTHERWISE ON THE DRAWINGS. DIMENSIONS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS ARE TO THE BOTTOM OF THE FIXTURE, OUTLET, OR EQUIPMENT UNLESS INDICATED OTHERWISE. ALL MOUNTING HEIGHTS SHALL COMPLY WITH ADA REQUIREMENTS. VERIFY AND COORDINATE THE EXACT HEIGHT AND LOCATION OF ALL FIXTURES, OUTLETS, AND EQUIPMENT WITH ALL DOCUMENTS AND DISCIPLINES (I.E., ARCHITECTURAL, STRUCTURAL, HVAC, PLUMBING, FIRE PROTECTION, KITCHEN EQUIPMENT, MILLWORK, ETC.) PRIOR TO ROUGH-IN; ADJUST TO MEET ALL REQUIREMENTS.
- 6. ALL SYMBOLS INDICATED IN THIS LEGEND MAY NOT BE USED ON THE PLANS.
- 7. ALL WIRING DEVICES SHALL BE PROVIDED WITH A GROUNDING TERMINAL SCREW.
- 8. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 9. U.O.N. = UNLESS OTHERWISE NOTED. 10. A.H.J. = AUTHORITY HAVING JURISDICTION.
- 11. A.F.F. = ABOVE FINISHED FLOOR
- 12. ELECTRICAL CONTRACTOR TO PROVIDE PULL STRINGS IN ALL CONDUIT(S).

REMARKS:

LIGHTING FIXTURE SCHEDULE

MOUNTING

SUSPENDED

SUSPENDED

RECESSED

RECESSED

SURFACE

RECESSED

SURFACE

SURFACE

SUSPENDED

WATTS

29.1

97.3

32.1

70.39

SOURCE

LED, 3500K

LED, 3500K

LED, 3500K

LED, 3500K

LED

LED, 4000K N/A

44.5 LED, 45W, 3500K

44.5 LED, 45W, 3500K

13.3 LED, 4000K

DIMMING

0-10V

0-10V

0-10V

0-10V

N/A

MODEL

HP-4-ID-4ft-S-S-835

HBB-16P-120-DX-35K-80

Z4RDL20835WOCDZ10U

2-CA-G-40B-835-4-DS-UNV-DIM-DSC

FSS-4-55L-835-UNV-DIM

FSS-4-55L-835-UNV-DIM-FSSWG4

OC750-L1L15-R55

WPF-70W-40K

VA-4-SA

MANUFACTURER

FINELITE

PEACH TREE

LIGHTOLIER

DAY-BRITE

DAY-BRITE

DAY-BRITE

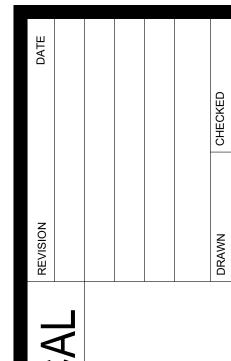
LUMINIS

TGS

BEGHELLI

- a. MOUNTED 16" ABOVE FINISHED FLOOR TO THE BOTTOM.
- b. MOUNTED 44" ABOVE FINISHED FLOOR TO THE BOTTOM.
- c. MOUNTED 50" ABOVE FINISHED FLOOR TO THE BOTTOM. d. OUTLET BOX SHALL BE SIZED PER SYSTEM INSTALLERS REQUIREMENTS.
- e. SUPPORT OUTLET BOX FROM STRUCTURE WITH (1) 3/8" ALL THREADS MINIMUM. BOXES LARGER THAN 25" SQUARE INCHES SHALL BE SUPPORTED WITH (2) 3/8" ALL THREADS MINIMUM. f. JUNCTION/OUTLET BOX SHALL BE SIZED AS REQUIRED FOR CONDUCTOR/DEVICES
- FILL PER N.E.C. THREADED CONDUIT HUBS SHALL BE SIZED AND CONFIGURED AS REQUIRED FOR APPLICATION.
- h. PROVIDE KINDORF MOUNTING RACK FOR FREE STANDING APPLICATIONS. KINDORF SHALL BE PAINTED FOR EXTERIOR APPLICATIONS.
- i. WHEN SURFACE JUNCTION BOX SYMBOL IS COMBINED WITH DEVICE SYMBOL, PROVIDE APPROPRIATE SURFACE PLATE FOR OUTLET APPLICATION. MAINTAIN WORKING CLEARANCES IN STRICT ACCORDANCE WITH N.E.C. COORDINATE EXACT LOCATION OF EQUIPMENT WITH ALL DISCIPLINES (I.E.
- ARCHITECTURAL, STRUCTURAL, HVAC, PLUMBING, FIRE PROTECTION, KITCHEN EQUIPMENT, MILLWORK, ETC.) PRIOR TO ROUGH-IN TO MAINTAIN CLEARANCES. k. "NL" INDICATES FIXTURE CONNECTED AHEAD OF ALL SWITCHES FOR 24 HOUR
- NIGHTLIGHT OPERATION. I. MOUNTED 80" ABOVE FINISHED FLOOR TO BOTTOM.
- m. ALL STROBES SHALL BE ADJUSTABLE INTENSITY TYPE SET AT 75cd UNLESS OTHERWISE NOTED.
- n. MOUNTED 72" ABOVE FINISHED FLOOR TO THE TOP.



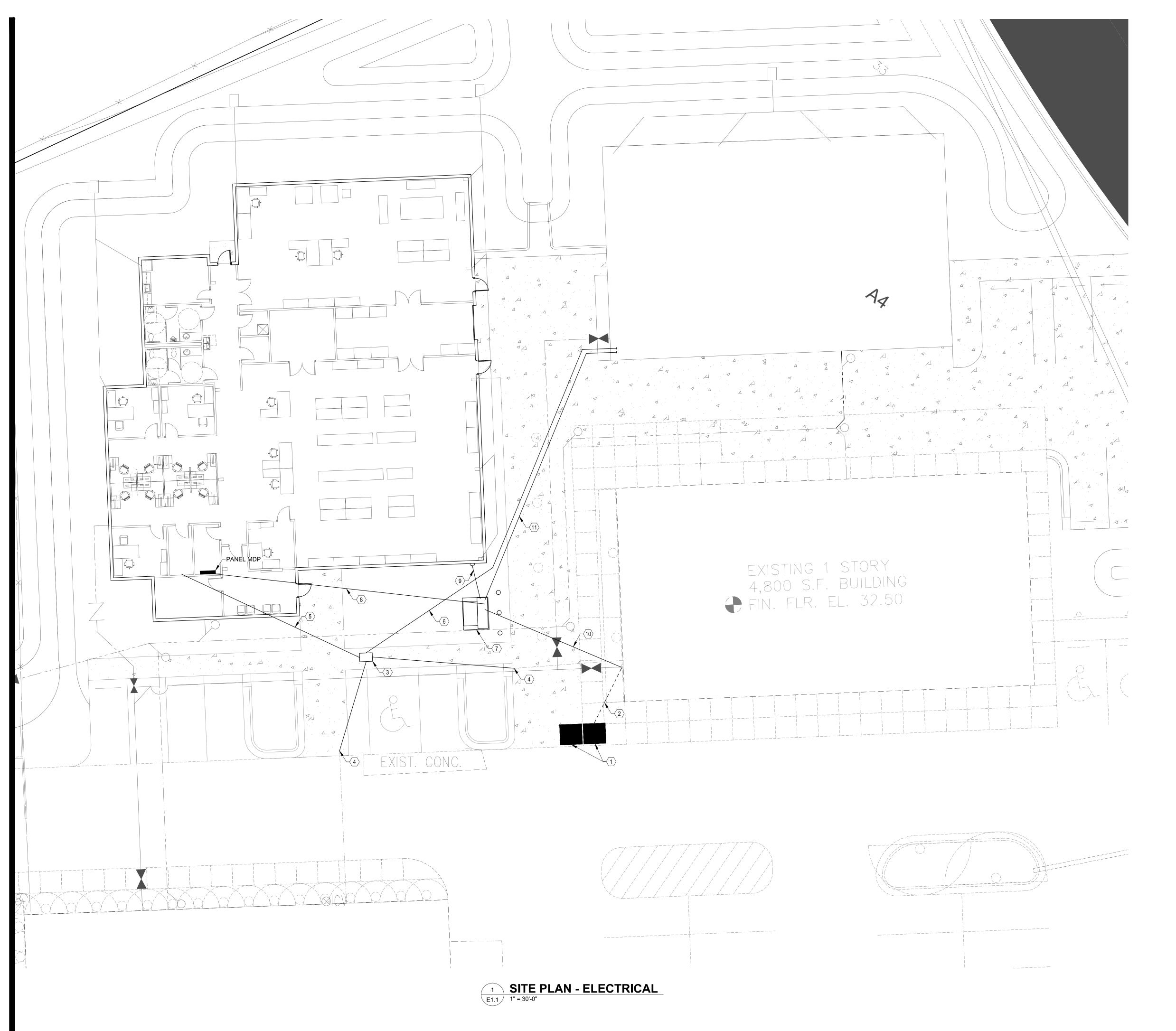


TRIC

A AEV

ENE **D** /20 8

COMMENTS SUSPEND USING AIRCRAFT CABLE, DUAL CIRCUIT WIRING SUSPEND USING AIRCRAFT CABLE SUSPEND USING AIRCRAFT CABLE



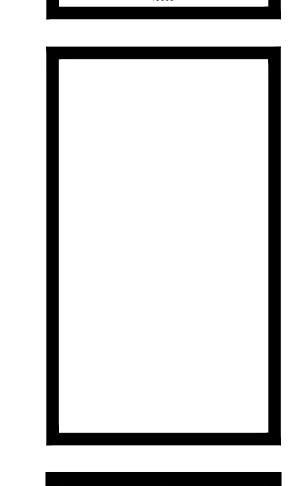
GENERAL NOTES

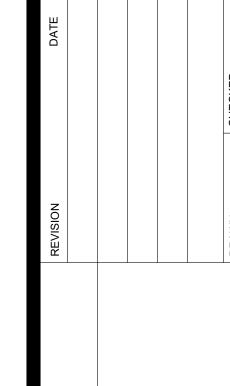
- 1. COORDINATE WITH FP&L FOR INSTALLATION OF THE NEW TRANSFORMER AND THE PRIMARY CONDUITS.
- 2. COORDINATE WITH ERAU PRIOR TO DEMOLITION OF THE EXISTING TRANSFORMERS AND SECONDARY CONDUITS TO EXISTING BUILDING
- 3. PROVIDE AND INSTALL NEW LAMICOID NAMEPLATES FOR EXISTING WAREHOUSE BUILDING PANELS INDICATING 208VAC OPERATING

REFERENCE NOTES

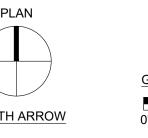
- (1) COORDINATE WITH FP&L FOR REMOVAL OF EXISTING 240/120 VAC SINGLE PHASE TRANSFORMERS.
- (2) REMOVE EXISTING SECONDARY FEEDER FROM EXISTING TRANSFORMERS TO WAREHOUSE BUILDING METER.
- 3 PULL BACK COMMUNICATIONS CABLE FROM EXISTING WAREHOUSE BUILDING TO MAINTENANCE OFFICE BUILDING AND RELOCATE EXISTING PULLBOX.
- (4) INTERCEPT AND REROUTE COMMUNICATIONS CONDUITS TO RELOCATED COMMUNICATIONS PULLBOX.
- 5 INSTALL TWO 3 INCH SCH 40 PVC CONDUITS FROM RELOCATED COMMUNICATIONS PULLBOX TO THE PRINT SHOP COMMUNICATIONS ROOM. STUB UP CONDUITS ADJACENT TO TTB
- $\langle 6 \rangle$ INSTALL TWO 3 INCH SCH 40 PVC CONDUITS FROM THE RELOCATED PULLBOX TO FUTURE BUILDING LOCATION. INSTALL TRACER WIRES AND CAP BELOW GRADE.
- $\langle 7 \rangle$ INSTALL NEW TRANSFORMER PAD AND COORDINATE INSTALLATION OF NEW TRANSFORMER WITH FP&L.
- 8 INSTALL NEW SERVICE CONDUCTORS IN SCH 40 PVC CONDUITS FROM TRANSFORMER SECONDARY TO PANEL MDP. SEE PANEL FEEDER SCHEDULE ON SHEET E6.1 FOR CONDUIT AND CONDUCTOR SIZING.
- 9 INSTALL METER CONDUIT FROM TRANSFORMER SECONDARY CONDUIT TO METER BASE PER THE METER DETAIL ON SHEET E5.1.
- (10) INSTALL NEW SERVICE CONDUCTORS IN SCH 40 PVC CONDUITS FROM TRANSFORMER SECONDARY TO WAREHOUSE BUILDING METER BASE. SEE PANEL FEEDER SCHEDULE ON SHEET E6.1 FOR CONDUIT AND CONDUCTOR SIZING.
- (11) INSTALL THREE 4 INCH CONDUITS FROM TRANSFORMER SECONDARY CABINET TO FUTURE BUILDING LOCATION. INSTALL TRACER WIRE AND CAP CONDUITS BELOW GRADE. MAINTAIN 12" MIN SPACING BETWEEN POWER AND DATA CONDUITS.

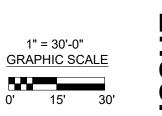






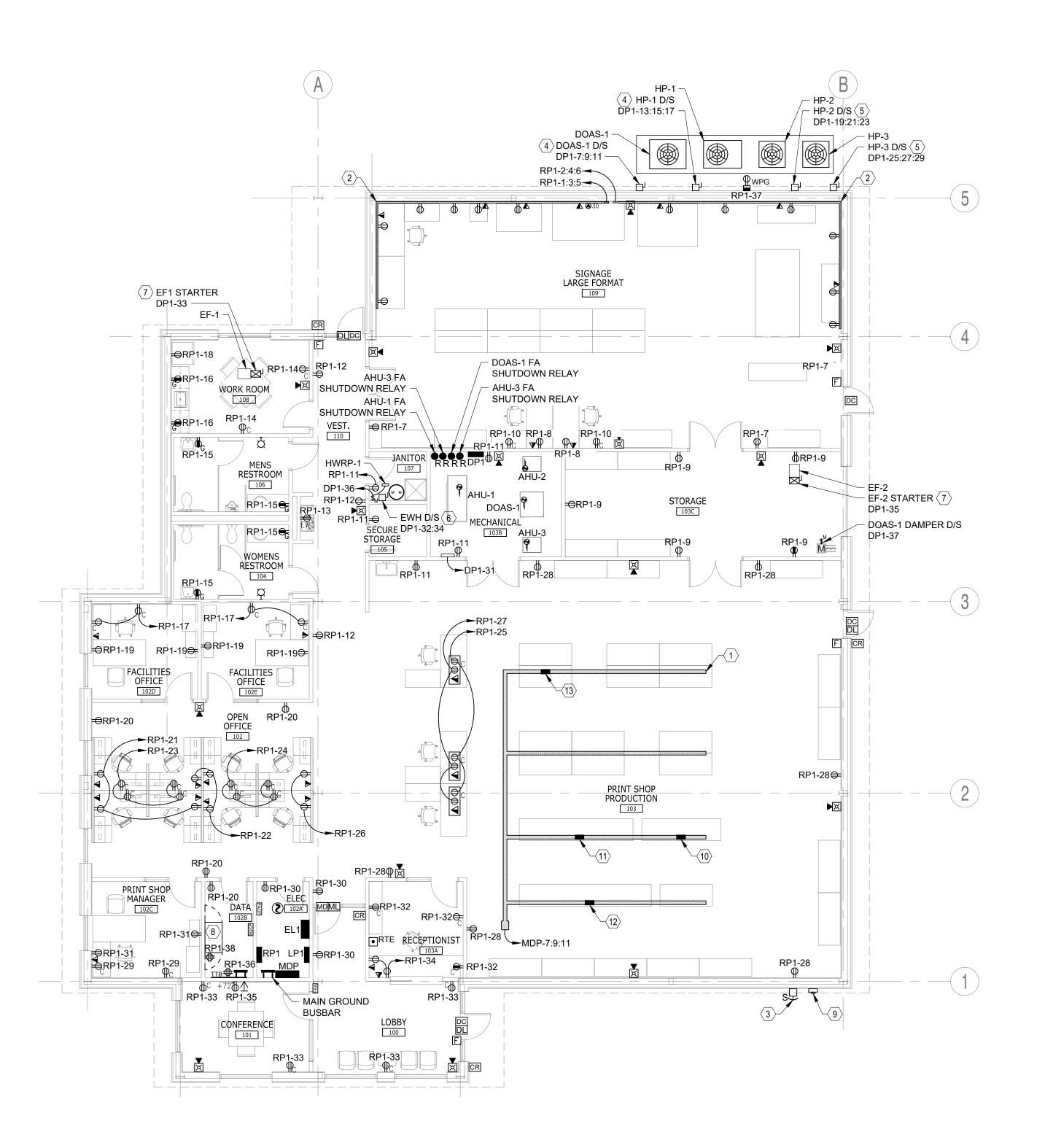
ELECTRICAL





NOTE:

PROVIDE AND INSTALL A UL MASTER LABEL LIGHTNING PROTECTION SYSTEM IN ACCORDANCE WITH UL 96 AND NFPA 780. SEE SPECIFICATIONS SECTION 264113 FOR DETAILS.



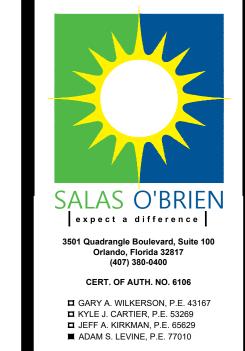
1 FLOOR PLAN - POWER AND SYSTEMS
1/8" = 1'-0"

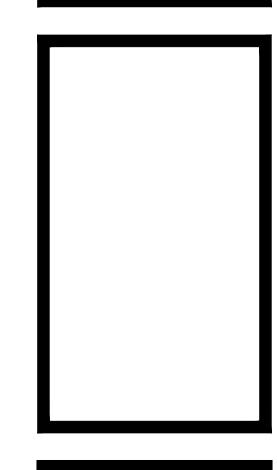
GENERAL NOTES

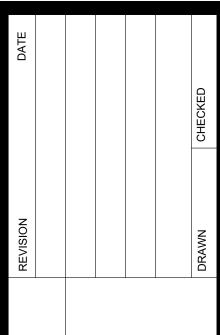
- 1. FURNITURE SYSTEM RECEPTACLES ARE APPROXIMATE. FINAL CONFIGURATION TO BE COORDINATED WITH CHOSEN FURNITURE MANUFACTURER.
- 2. PROVIDE ONE SPARE FOR EACH TYPE OF MODULE FOR STARLINE PLUG-IN RACEWAY
- 3. PROVIDE ONE SPARE FOR EACH TYPE OF PLUG-IN UNIT FOR STARLINE TRACK BUSWAY.
- 4. PROVIDE AND INSTALL TWO CAT 6 CABLES TO FROM COMMUNICATIONS RACK IN ROOM 102B TO EACH DATA/TELEPHONE RECEPTACLE

REFERENCE NOTES

- (1) PROVIDE AND INSTALL STARLINE 225A TRACK BUSWAY 12 INCHES ABOVE CENTERLINE OF HVAC DUCTWORK.
- 2 PROVIDE AND INSTALL STARLINE 60A POWER AND DATA PLUG-IN RACEWAY MOUNTED AT 36 INCHES AFF. PROVIDE PLUG MODULES AS INDICATED ON DRAWINGS.
- (3) INSTALL PANEL MDP SHUNT TRIP. PROVIDE A PERMANENT PLAQUE IN ACCORDANCE WITH AHJ AND 225.37, NEC 2014 IDENTIFYING THE BUTTON AS "MAIN POWER SHUNT TRIP".
- PROVIDE AND INSTALL 240VAC, 60A, 3P DISCONNECT SWITCH IN A NEMA 3R ENCLOSURE.
- $\langle 5 \rangle$ PROVIDE AND INSTALL 240VAC, 30A, 3P DISCONNECT SWITCH IN A NEMA 3R ENCLOSURE.
- (6) PROVIDE AND INSTALL 240VAC, 30A, 2P DISCONNECT SWITCH IN A NEMA 1 ENCLOSURE TO SERVICE EWH.
- $\langle 7 \rangle$ NEMA 00 COMBINATION MOTOR STARTER.
- (8) RELOCATE EXISTING COMMUNICATIONS RACK FROM MAINTENANCE WAREHOUSE TO PRINT SHOP. COORDINATE WITH ERAU PRIOR TO INSTALLATION.
- (9) INSTALL METER BASE. SEE SHEET E5.1 FOR METER MOUNTING DETAILS.
- (10) PROVIDE AND INSTALL STARLINE TRACK BUSWAY PLUG-IN UNIT EQUIPPED WITH ONE NEMA 6-15R RECEPTACLE AND TWO NEMA 5-15R RECEPTACLES ON 15 FOOT CORDS. EACH RECEPTACLE TO BE PROVIDED WITH OVER CURRENT PROTECTION.
- (11) PROVIDE AND INSTALL STARLINE TRACK BUSWAY PLUG-IN UNIT EQUIPPED WITH ONE NEMA 14-50R RECEPTACLE, ONE NEMA 14-30R RECEPTACLE, AND TWO NEMA 6-20R RECEPTACLES ON 15 FOOT CORDS. EACH RECEPTACLE TO BE PROVIDED WITH OVER CURRENT PROTECTION.
- PROVIDE AND INSTALL STARLINE TRACK BUSWAY PLUG-IN UNIT EQUIPPED WITH ONE NEMA 14-30R RECEPTACLE AND SIX NEMA 5-15R RECEPTACLES ON 15 FOOT CORDS. EACH RECEPTACLE TO BE PROVIDED WITH OVER CURRENT PROTECTION.
- (13) PROVIDE AND INSTALL STARLINE TRACK BUSWAY PLUG-IN UNIT EQUIPPED WITH FOUR NEMA 5-15R RECEPTACLES ON 15 FOOT CORDS. EACH RECEPTACLE TO BE PROVIDED WITH OVER CURRENT







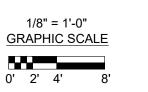
POWER AND SYSTEMS

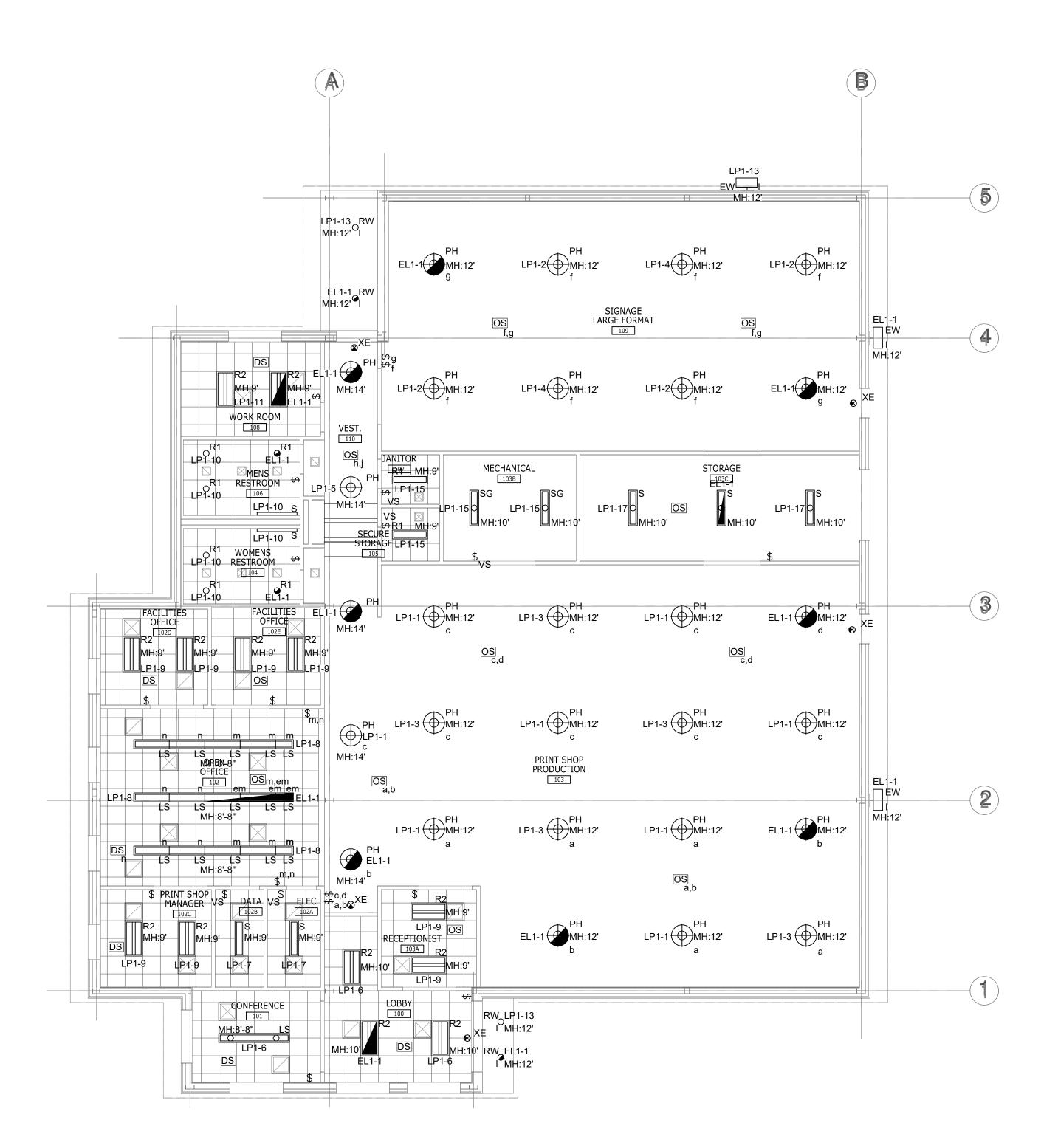
EMBRY-RIDDLE AERONAUTICAL UNIVERSIT NEW PRINT SHOP BUILDING

AN 8/7/2019

FOR BID





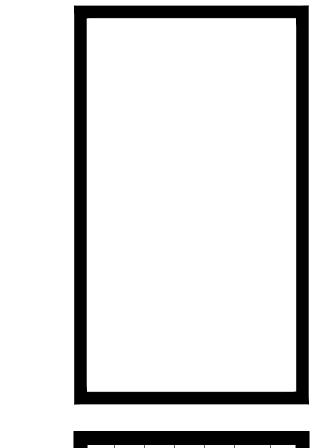


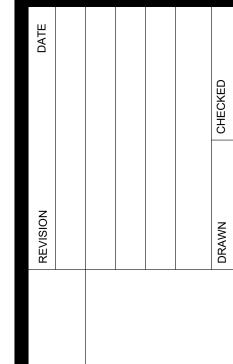
1 REFLECTED CEILING PLAN - ELECTRICAL
1/8" = 1'-0"

GENERAL NOTES

- ALL 120VAC NORMAL POWER LIGHTING CIRCUITS ARE FED FROM PANEL 'LP1'.
- ALL 120VAC EMERGENCY/LIFE SAFETY LIGHTING CIRCUITS ARE FED FROM EM LIGHTING INVERTER PANEL EL1.
- 3. CONTRACTOR TO PROVIDE AND INSTALL ALL COMPONENTS AND CABLING NECESSARY FOR A COMPLETE AND FUNCTIONAL LIGHTING CONTROL SYSTEM. SEE LIGHTING CONTROL DIAGRAMS ON SHEET E6.3 FOR DETAILS.







TED CEILING PLAN - ELECTRICAL

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

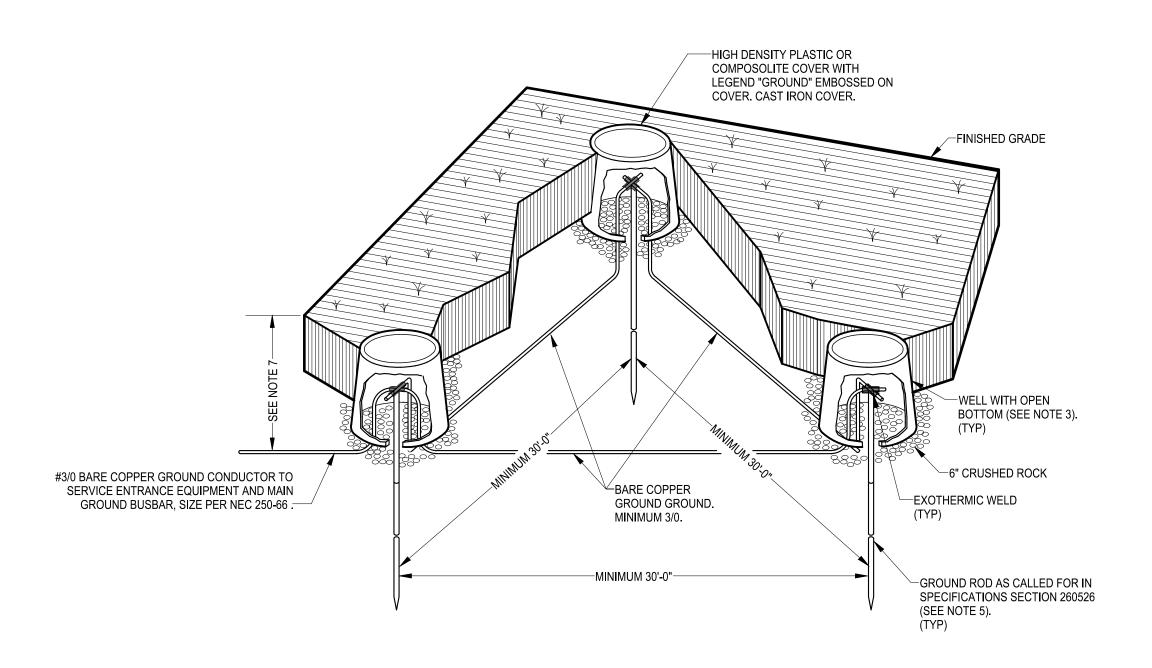
NEW PRINT SHOP BUILDING

R BID - 8/7/2019
REFLECTED CEILING PLAN

ISSUE FOR BID - 8

Date 07/12/2019 RFFI F

E1.3



NOTES:

1) SEE SPECIFICATION SECTION 260526.

2) NOT FOR USE IN PAVED, ETC. LOCATIONS.

3) INCREASE DEPTH, DIAMETER, SIZE, ETC. IF REQUIRED DUE TO INSTALLATION AND ACCESS REQUIREMENTS.

4) CONCRETE COVERS ARE NOT ACCEPTABLE.

5) IF THREE RODS IN A DELTA CONFIGURATION DOES NOT PROVIDE SPECIFIED RESISTANCE, CHANGE ROD LENGTHS FOR MINIMUM SPECIFIED AS REQUIRED TO PROVIDE SPECIFIED RESISTANCE.

6) MEASUREMENT OF RESISTANCE VALUES TO PROVIDE COMPLIANCE WITH SPECIFIED RESISTANCE SHALL BE WITH GROUND RODS CONNECTED IN DELTA CONFIGURATION BUT DISCONNECTED FROM EQUIPMENT OR BUSBAR BEING GROUNDED.

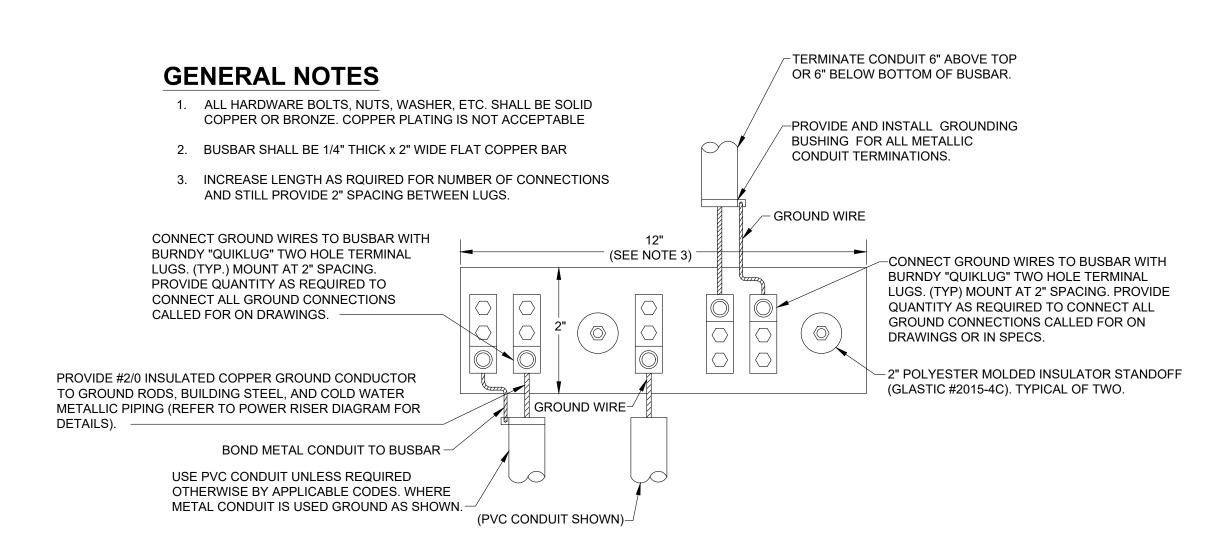
7) DEPTH PER CODES, 1'-0" MINIMUM.

WELL:

INSIDE DIMENSIONS: 12" MINIMUM HEIGHT: 18" MINIMUM

MATERIAL: STRUCTURAL PLASTIC, CONCRETE, OR COMPOSOLITE MANUFACTURER: QUAZITE OR BROOKS PRODUCTS

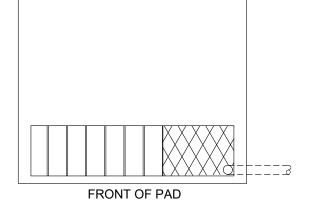
MAIN SERVICE GROUND



2 MAIN GROUND BUSBAR E5.1 NOT TO SCALE

GENERAL NOTES

- COORDINATE METER REQUIREMENTS WITH BEVERLY HUTTO OF FLORIDA POWER AND LIGHT, 386-322-3439.
- 2. 40 FOOT MAX DISTANCE BETWEEN METER AND TRANSFORMER BASED ON 600:5 CT RATIO.

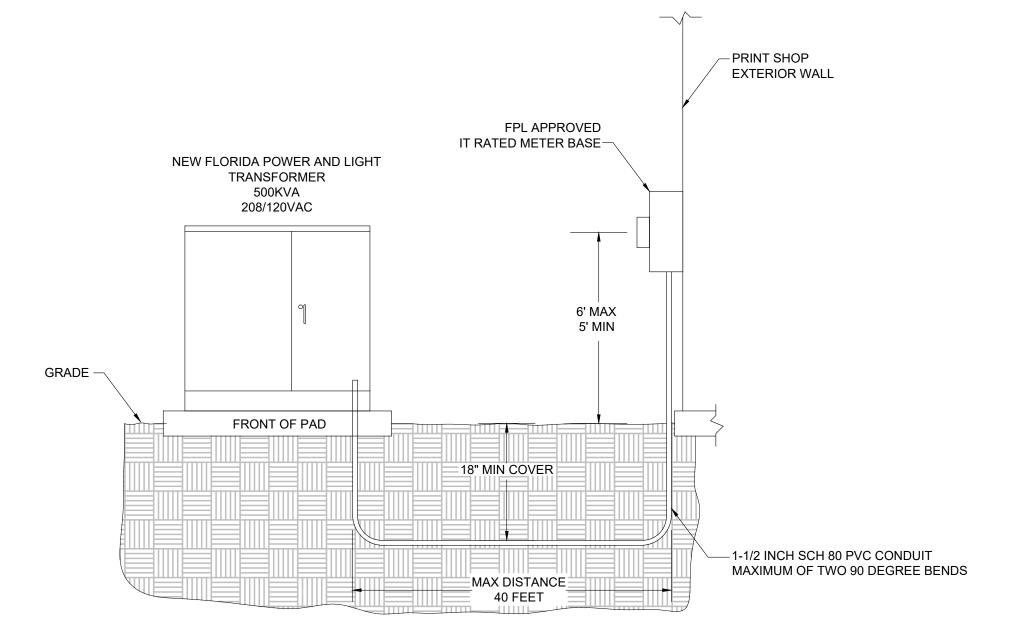


LEGEND

SPACE RESERVED FOR SERVICE CONDUIT AND CONDUCTORS

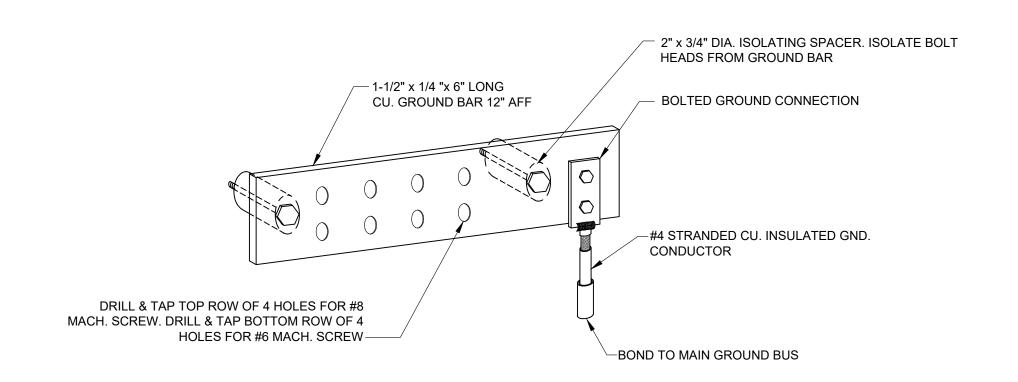
SPACE RESERVED FOR FPL CONDUIT AND CONDUCTORS

PLAN VIEW

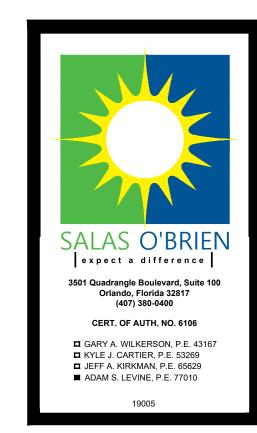


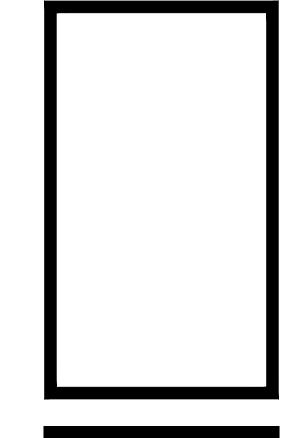
ELEVATION VIEW

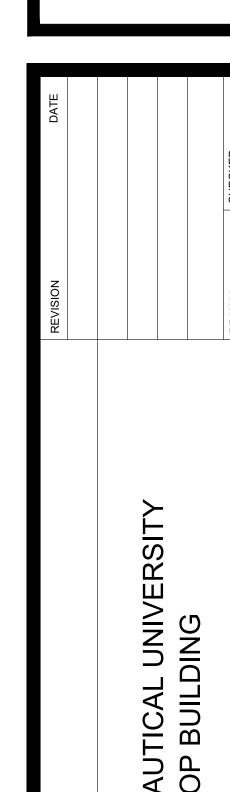
METER DETAIL E5.1 NOT TO SCALE



TTB GROUND BUSBAR
E5.1 NOT TO SCALE







ECTRICAL

8/7/201

BID

OR

RIDDLI NEW F

PANEL FE	EDE	R SC	HEDI	JLE											
JOB NUMBER:	JOB NUMBER: 19005 DATE:														
FEEDER	CI	RCUIT BREAK	ER	FEEDER	FEEDER	FEEDER				FEEDER					
FEEDING	AMP SIZE	VOLTS	PHASE	CAPACITY	LENGTH	VOLT DROP	PARALLEL	PHASE	NEUTRAL	GROUND	ISOLATED	COPPER/	CONDUIT		
						%	RUNS	WIRE	WIRE	WIRE	GROUND	ALUMINUM	SIZE		
MDP	800	208	3	840	100	0.67	2	#600	#600	N/A	N/A	COPPER	4"		
DP1	400	208	3	420	75	0.50	1	#600	#600	#3	N/A	COPPER	4"		
RP1	200	208	3	200	13	0.14	1	#3/0	#3/0	#6	N/A	COPPER	2"		
LP1	100	208	3	100	13	0.22	1	#3	#3	#8	N/A	COPPER	1-1/4"		
EL1	20	120	1	20	8	0.43	1	#12	#12	#12	N/A	COPPER	1/2"		
WAREHOUSE METER BASE	200	208	3	200	40	0.42	1	#3/0	#3/0	#6	N/A	COPPER	2"		

JOB NUMBER:	18041																				DATE:	7/10/19	
EQUIPMENT	VOLTS	PH	NEUT	MOTOR		ADDITIO	NAL	HEATER	ROR	MISC	TOTAL	PNL.	DISCON	NECT	STARTER		VOLTAGE	WIRE	NEUT	GND	#	CONDUIT	NOTES
DESCRIPTION			Υ	(LARGE	ST)	MOTOR	S	LIGHTIN	G LOAD	AMPS	AMPS	C.B.	SIZE	FUSE	SIZE	TYPE	DROP	PER	WIRE	WRE	OF	SIZE	i
			OR	H.P.	FLA	H.P.	FLA	KW	AMPS			SIZE	AMPS	SIZE	NEMA			PHASE			RUNS		ĺ
			N									AMPS		AMPS									i
DOAS-1	208	3	N		42.00						42	50	60	NF			1.84%	#8		#10	1	3/4"	ĺ
DOAS-1 OUTSIDE UNIT	208	3	N		5.00						5	15	20	NF			0.79%	#12		#12	1	1/2"	ĺ
HP-1	208	3	N		33.00						33	45	60	NF			2.21%	#8		#10	1	3/4"	
HP-2	208	3	N		18.00						18	30	30	NF			1.98%	#10		#10	1	1/2"	
HP-3	208	3	N		18.00						18	30	30	NF			2.06%	#10		#10	1	1/2"	ĺ
AHU-1	208	3	N		51.00						51	60					1.34%	#6		#10	1	1"	i
AHU-2	208	3	N		8.00						8	15					0.83%	#12		#12	1	1/2"	i
AHU-3	208	3	N		8.00						8	15					0.85%	#12		#12	1	1/2"	
AHU-2 HEATER	208	3	Y						42.0		42	45					1.84%	#8	#8	#10	1	1"	
AHU-3 HEATER	208	3	Y						42.0		42	45					1.59%	#8	#8	#10	1	1"	
EF-1	120	1	Υ							1.0	1	20			00		0.24%	#12	#12	#12	1	1/2"	d
EF-2	120	1	Y							1.0	1	20			00		0.26%	#12	#12	#12	1	1/2"	d
DOAS-1 DAMPER	120	1	Y							3.0	3	20	20	NF			0.64%	#12	#12	#12	1	1/2"	
EWH-1	208	1	Y							22.0	22	30	30	NF			1.51%	#10	#10	#10	1	1/2"	
HWRP-1	120	1	Y							4.0	4	15	20	NF			0.74%	#12	#12	#12	1	1/2"	
BAS CONTROLLER	120	1	Y							2.0	2	20					0.34%	#12	#12	#12	1	1/2"	
N PLUG-IN RACEWAY	208	3	Υ							40.0	40	60	 				1.80%	#6	#6	#10	1	1"	
S PLUG-IN RACEWAY	208	3	Y							45.0	45	60	 				1.94%	#6	#6	#10	1	1"	
TRACK BUSWAY	208	3	Y							119.0	119	225	-				0.32%	#4/0	#4/0	#4	1	2-1/2"	
SENERAL NOTES:													NOTES	:					L				
1) - PROVIDE DISC. SW. AT 2) - C.B., STARTER, DISC. MANUFACTURER. VE 3) - PROVIDE NEMA OUTD 4) - COORDINATE STARTE 5) - E.C. TO VERIFY THAT REQUIRED FOR STAR 6) - INCREASE CONDUCTO ACTUAL CIRCUIT LEN 7) - TOTAL AMPS SHOWN 1 8) - VOLTAGE DROP BASE	& FUSE S RIFY REC DOR RAT R TYPE N C.B.'S FO TING C.B DR SIZES GTHS AS DO NOT II	SIZES QUIRE ED EN MTH E DR MC . TO E AS RE INSTA	SHOWN MENTS NCLOSUI EQUIPME OTORS A BE INCRE EQUIRED ALLED. DE NON-	FOR REF WITH APP RES FOR INT PROV IRE SUFF EASED TO TO MAIN	FERENC PROVED ALL DIS VIDER. FICIENT DIA MAX NTAIN A	E ONLY, EQUIPME C. SWS N TO ALLOV OF 225% MAXIMUI OADS.	SIZE AS ENT SHO MOUNTE V START OF LAR M OF 3%	RECOMIND DRAWING DOUT DOUT DOUT DOUT DOUT DOUT DOUT DOUT	MENDED INGS. DORS. MOTOR, OTOR F.I	BY EQUI IF A.			(b) - CO (c) - CO (d) - CO	NNECT V NNECT T NNECT V	/IA LINE VOI /IA CONTRO TO LOCAL LI /IA STARTE /IA UNIT MT	OL DEVI IGHTING R FURI	CES FUR G SWITCH NISHED B	NISHED B' LEG FRO / MECH. (Y MECH. M OCCUP CONTRAC	CONTRA PANCY SE CTOR.	CTOR. ENSOR.	ĸ	
ABBREVIATIONS:	OTESTS	ND 0 5	,					ION-FUS		04D E! E	N 45 N 7												
ICP = MOTOR CIRCUIT PE				NB 8"	_				OVER LO	JAD ELĒ	IVIEN I												
		AL MAIT			E .		I = NFM	A I ENCL	OSLIRE				I										
MMS = MAN. MTR. STARTE				IND FILO																			
//MS = MAN. MTR. STARTE //SS =MOTOR STARTING 2 /FD = VARIABLE FREQ. DR	0A SW. W	/ITHOU		AND PILO	1		3R = NE	MA 3R E	NCLOSU I.P. STAIN														

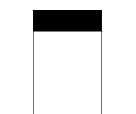
GENERAL NOTES

- 1. SEE SPECIFICATIONS SECTIONS 260519 AND 260533 FOR CONDUCTOR AND CONDUIT INFORMATION.
- 2. COORDINATE TRANSFORMER REQUIREMENTS WITH BEVERLY HUTTO OF FLORIDA POWER AND LIGHT, 386-322-3439.

REFERENCE NOTES

- (1) CONTRACTOR TO PROVIDE METER BASE, SUPPORT, AND CONDUIT FROM TRANSFORMER SECONDARY CABINET TO METER BASE. SEE METER DETAILS ON SHEET E5.1.
- 2 BOND NEUTRAL AND GROUND IN PANEL MDP USING #3/0 AWG BARE COPPER CONDUCTOR.
- 3 BOND PANEL MDP EQUIPMENT GROUND TO MGB USING #1/0 AWG BARE COPPER CONDUCTOR.
- $\fbox{4}$ BOND MDP NEUTRAL BUS TO MAIN SERVICE GROUND USING #3/0 AWG BARE COPPER CONDUCTOR.
- 5 BOND MGB TO MAIN SERVICE GROUND USING #3/0 AWG BARE COPPER CONDUCTOR.
- $\fbox{6}$ SEE DETAIL ON SHEET E5.1 FOR MGB DETAILS.

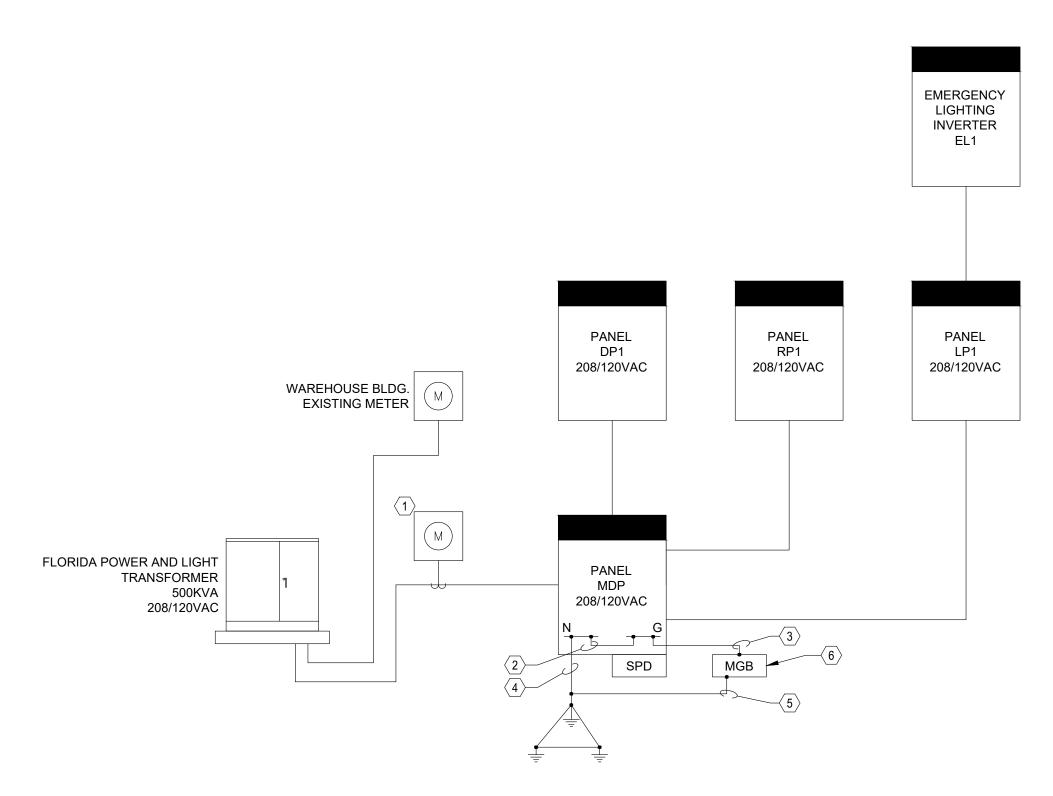
RISER LEGEND:



NEW PANEL

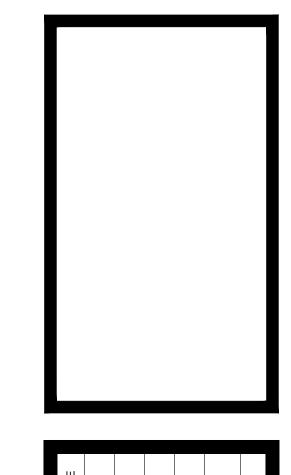


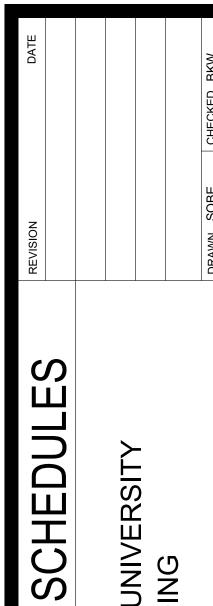
UTILITY METER SOCKET







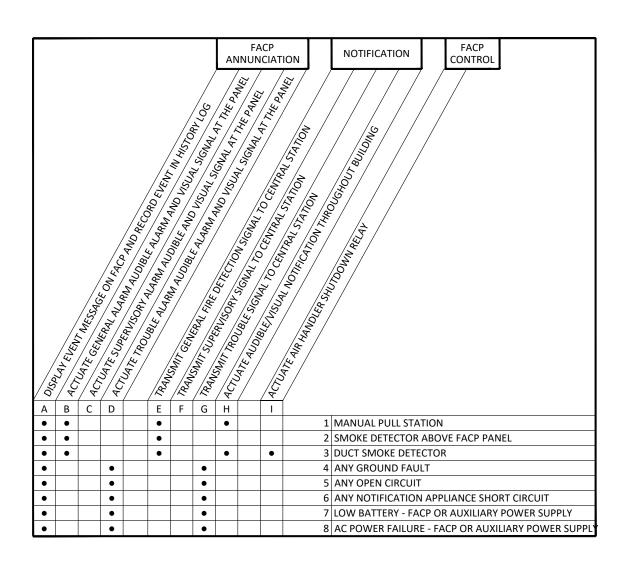




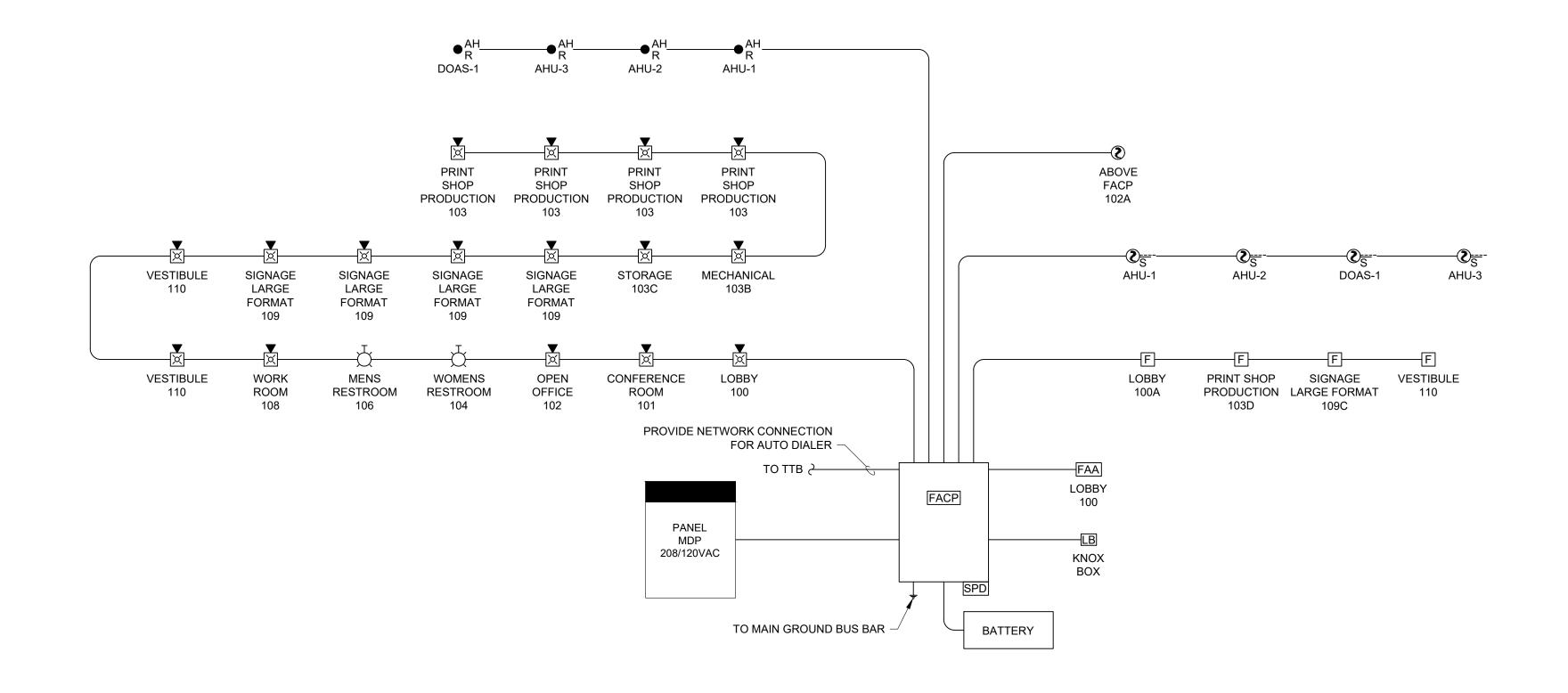
EMBRY-RIDDLE AERONAUTICAL UNIVERSIT NEW PRINT SHOP BUILDING

DIAGRAM AND FEEDER 8/7/2019 RISER **FOR BID**

ISSUE



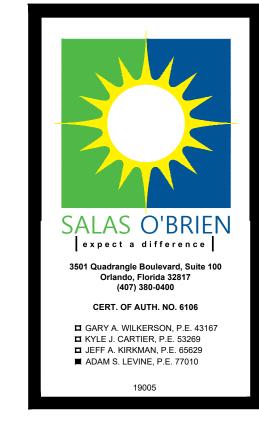
FIRE ALARM INPUT/OUTPUT MATRIX 2 FIR E6.2 NTS

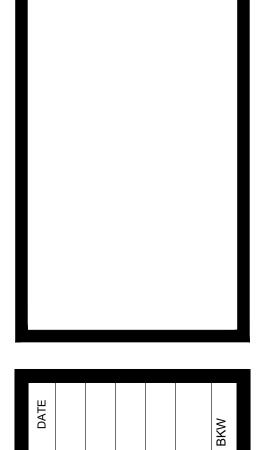


FIRE ALARM RISER DIAGRAM 1 FIR E6.2 NTS

GENERAL NOTES

- PROVIDE SURGE SUPPRESSION TO 120V AND ALL LOW VOLTAGE CIRCUITS LEAVING AND/OR ENTERING THE BUILDING(S).
- 2. ALL CABLES BELOW GRADE LEVEL SHALL BE RATED FOR WET LOCATION
- 3. SECONDARY POWER SUPPLY CAPACITY SHALL BE 24 HOURS, STAND-BY WITH 15 MINUTES OF ALARM. BATTERY BACK-UP SHALL NOT BE LOADED MORE THAN 80%.
- 4. NOTIFICATION APPLIANCE CIRCUITS SHALL NOT BE LOADED MORE THAN 80% OF ITS LISTED OUTPUT.
- 5. VOLTAGE DROP ON ALL CIRCUITS SHALL BE NO GREATER THAN 5%.
- 6. VERIFY FINAL LOCATIONS OF DUCT SMOKE DETECTORS WITH MECHANICAL CONTRACTOR.
- 7. PROVIDE #6 GROUND CONDUCTOR FROM MAIN GROUND BUS BAR TO EACH EQUIPMENT PANEL AND TERMINAL.
- 8. REFER TO FLOOR PLANS AND SITE PLANS FOR ACTUAL FIRE ALARM DEVICE LOCATION AND QUANTITY.
- 9. FIRE ALARM SYSTEM SHALL BE INSTALLED IN CONDUIT.
- 10. ALL WORK SHALL CONFORM TO THE FLORIDA ADMINISTRATIVE CODE (FAC) 61G15-32.008.





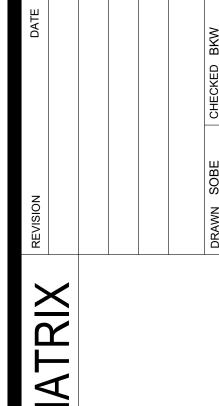


DIAGRAM AND I/O MATRIX EMBRY-RIDDLE AERONAUTICAL UNIVERSITY NEW PRINT SHOP BUILDING

RISER 8/7/2019 ARM AL

BID

FOR

ISSUE

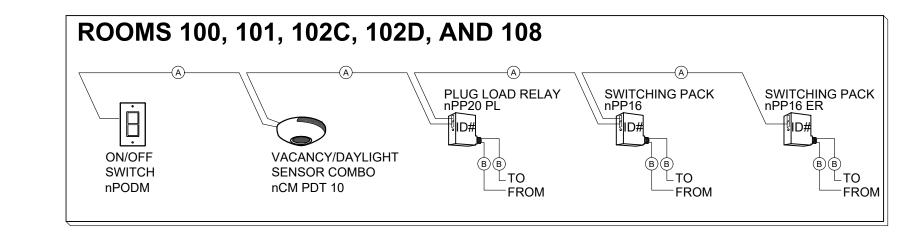
WIRE LEGEND CAT 5e

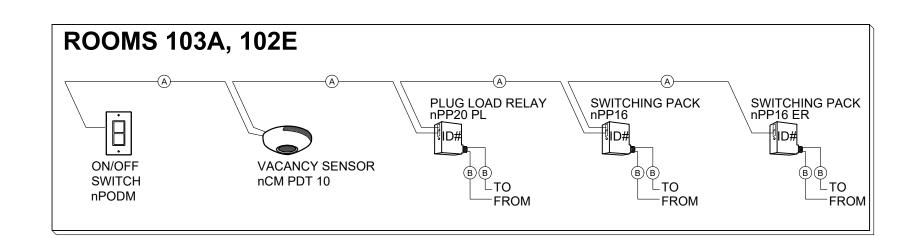
(LOW VOLTAGE)

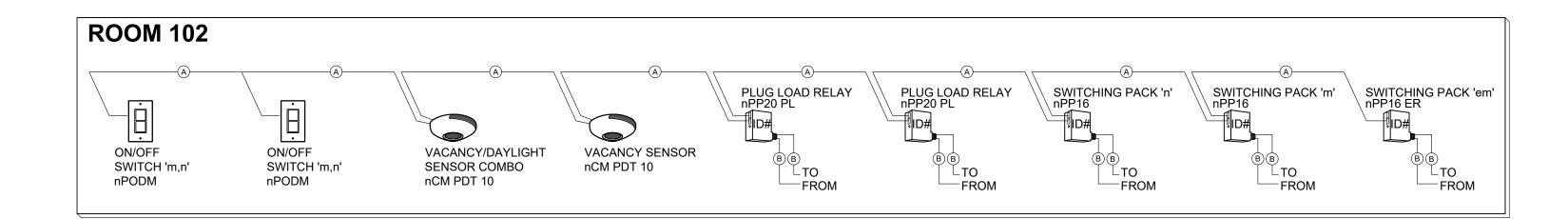
B CLASS 1
(LINE VOLTAGE)

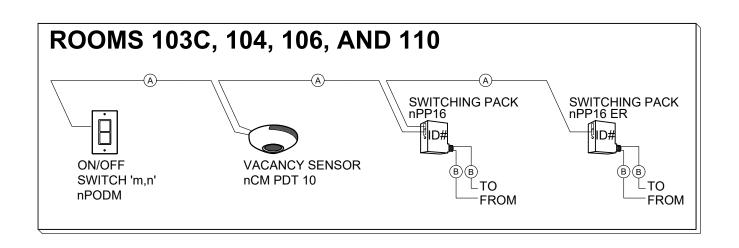
NOTE: PROVIDE EMERGENCY
LIGHTING OVERRIDE POWER/RELAY
PACK AS REQUIRED IN ALL AREAS
WITH EMERGENCY FIXTURES.

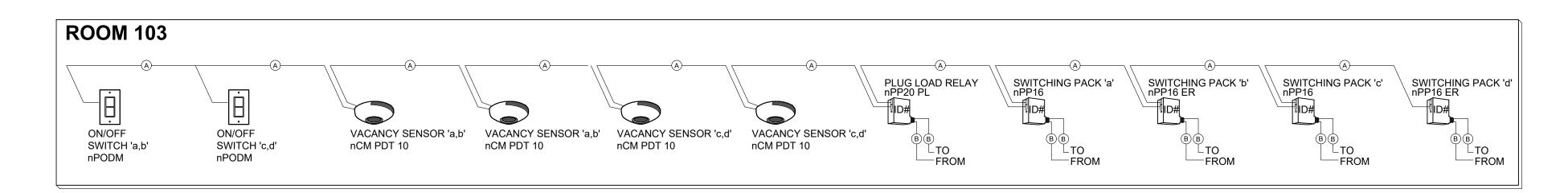
ALL LIGHTING CONTROL PRODUCTS
ARE MANUFACTURED BY "ACUITY
CONTROLS". SUBSTITUTIONS ARE
ALLOWED (SUBJECT TO APPROVAL).

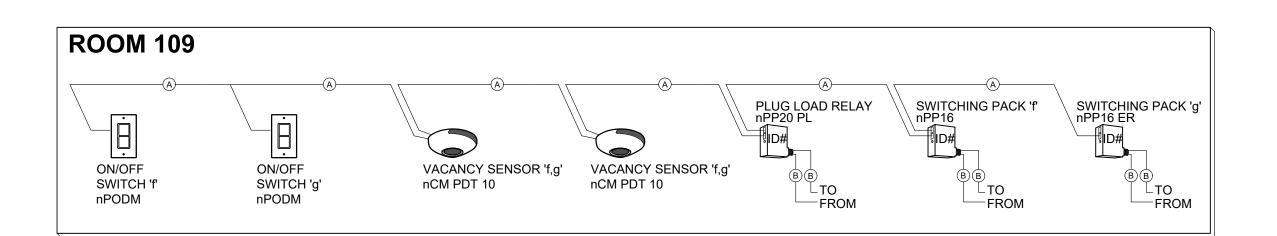














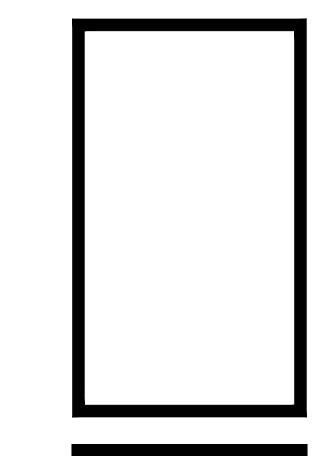
GENERAL NOTES

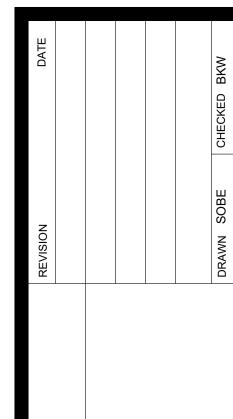
- THE LIGHTING CONTROL DIAGRAMS ON THIS SHEET REPRESENT A GENERIC LAYOUT OF THE COMPONENTS THAT ARE REQUIRED USING THE ACUITY CONTROLS SYSTEM.
- PROVIDE PROPER QUANTITY AND TYPE OF OCCUPANCY SENSORS, SWITCHES, SWITCH PACKS, DAYLIGHT SENSORS, ETC. PER CODE REQUIREMENT FOR EACH SPACE.
- 3. FOLLOW MANUFACTURER INSTRUCTIONS FOR PROPER PRODUCT PLACEMENT, INSTALLATION, WIRING, AND OPERATION.

SEQUENCE OF OPERATIONS

- GENERAL LIGHTING AUTO ON TO 50% AND CONTROLLED RECEPTACLES AUTO ON WHEN OCCUPANCY DETECTED.
- 2. MANUAL ON/OFF/DIM GENERAL LIGHTING WITH DIMMER SWITCHES.
- 3. LIGHTING IN DAYLIGHT ZONE WILL CONTINUOUSLY DIM BASED ON DAYLIGHT CONTRIBUTION TO MAINTAIN AT LEAST 35fc AT TASK LEVEL.
- 4. AUTO OFF ALL LIGHTING AND CONTROLLED RECEPTACLES WITHIN 20 MINUTES OF OCCUPANTS LEAVING.
- 5. EMERGENCY LIGHTING TRANSFERS TO EMERGENCY POWER SOURCE AND FULL ON WITH LOSS OF NORMAL POWER.







IG CONTROL DIAGRAMS

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

NEW PRINT SHOP BUILDING

R BID - 8/7/2019
LIGHTING CONTROL E

no. SOBE 19005 LIGH st no.

FOR

ISSUE

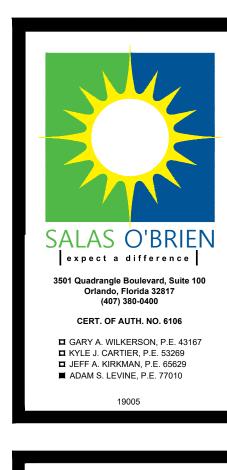
VOLTS I	L-N : 120	MAIN (NOITAC	IS REQ	UIRED		PAI	NEL:	MDP							ENCLOSURE DATA	
VOLTS I	PH.: 208	S.E. R	ATED:	YES				MCB:	800	AMPS						NEMA: 1	
PHASE :	: 3	GFI P	ROT.:	N/A				MLO:	N/A	AMPS						SECTIONS: 1	
MOUNT	ING : SURFACE	SHUNT	TRIP:	YES												WIDTH/SECT.: 32	
MFR : S	SQ. D.						PRO	VIDE N	IEW P	ANEL						DEPTH: 9.5	
TYPE : I	HCM																
		AIC RA	ATING (FULLY	RATED	OR SE	RIES RA	ATED):	42	KA (M	NIMUM	I, SEE S	SPECIF	CATION	NS)		
NOTES	DESCRIPTION	LOAD	AMPS	AMPS	AMPS	C.B.	C.B.	CKT.	CKT.	C.B.	C.B.	AMPS	AMPS	AMPS	LOAD	DESCRIPTION	NOTES
		CONN				AMPS	POLES	NUM.	NUM.	POLES	AMPS				CONN		
	PANEL RP1	155	150			225	3	1	2	3	100	9			9	PANEL LP1	
	====	155		150		===	===	3	4	===	===		9		9	====	
	====	155			150	===	===	5	6	===	===			9	9	====	
	TRACK BUSWAY	119	119			225	3	7	8	3	400	285			285	PANEL DP1	
	====	119		119		===	===	9	10	===	===		285		285	====	
	====	119			119	===	===	11	12	===	1===			285	285	====	
3	FACP	5	5			20	3	13	14	3	20	3			3	SQCP	
	SPACE			0		===	===	15	16	3	30		0			SPD	
	SPACE				0	===	===	17	18	===	===			0		====	
	SPACE		0			===	===	19	20	===	===	0				====	
	562) : AMP 2 : AMP 2 : AMP	S PHAS	SE B						AC		CONN. EC DEM			206		
PANEL	NOTES:																
1)	REFER TO PANEL FEED	ER SCH	EDULE	FOR C	ONDUC	TOR A	ND CON	NDUIT R	EQUIR	EMENTS	S.						
2)	REFER TO EQUIPMENT	FEEDEF	R SCHE	DULE F	OR CO	NDUCT	OR AN	D CONE	UIT RE	QUIREM	MENTS.						
3)	FACP CIRCUIT BREAKER	R TO BE	IDENT	IFIED IN	ACCO	RDANC	E WITH	NEC 76	60.41(B)								

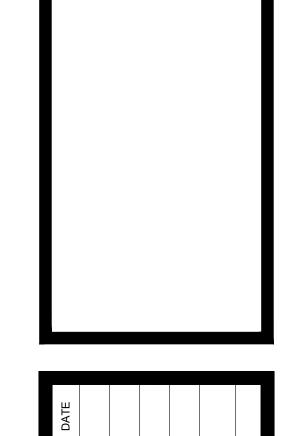
VOLTO	L-N : 120	MAIN (DTION	IS DEO	LIIDED		DAI	NEL :	DD1							ENCLOSURE DATA	
	L-IN : 120 PH. : 208	S.E. R.			UINED		I AI		N/A	VMDS						NEMA: 1	
PHASE		GFI P						MLO:		AMPS						SECTIONS: 1	
								IVILU .	400	AIVIPS							
	ING: SURFACE	SHUNT	IRIP.	N/A			DDO	UDE N	IEW D	A N I = I						WIDTH/SECT.: 20	
MFR : S							PRO	VIDE	IEW P	ANEL						DEPTH: 5.75	
TYPE :	NQOD	AIC RA	TING (FULLY	RATED	OR SE	RIES RA	ATED):	22	KA (MI	NIMUM	, SEE S	PECIFI	CATIO	NS)		
NOTES	DESCRIPTION	LOAD	AMPS	AMPS	AMPS	C.B.	C.B.	CKT.	CKT.	C.B.	C.B.	AMPS	AMPS	AMPS	LOAD	DESCRIPTION	NOTES
		CONN				AMPS	POLES	NUM.	NUM.	POLES	AMPS				CONN		
	DOAS-1	42	42			50	3	1	2	3	60	51			51	AHU-1	
	====	42		42		===	===	3	4	===	===		51		51	====	
	====	42			42	===	===	5	6	===	===			51	51	====	
	DOAS-1 OUTSIDE UNIT	5	5			15	3	7	8	3	15	8			8	AHU-2	
	====	5		5		===	===	9	10	===	===		8		8	====	
	====	5			5		===	11	12	===	===:			8	8	====	
	HP-1	33	33			45	3	13	14	3	45	42			42	AHU-2 HEATER	
	====	33		33		===	===	15	16	===	===		42		42	====	
	====	33			33	===	===	17	18	===	===			42	42	====	
	HP-2	18	18			30	3	19	20	3	15	8			8	AHU-3	
	====	18		18		===	===	21	22	===	===		8		8	====	
	====	18			18	===	===	23	24	===	===			8	8	====	
	HP-3	18	18			30	3	25	26	3	45	42			42	AHU-3 HEATER	
	====	18		18		===	===	27	28	===	===		42		42	====	
	===	18			18	===	===	29	30	===	===			42	42	====	
	BAS CONTROLLER	2	2			20	1	31	32	2	30	22			-	EWH-1	-
	EF-1	1		1		20	1	33	34	===	===		22		22	====	
	EF-2	1			1	20	1	35	36	1	15			4	4	HWRP-1	
	DOAS-1 DAMPER	3	3			20	1	37	38	1	20	0				SPARE	
	SPARE			0		20	1	39	40	1	20		0			SPARE	
	SPARE			Ť	0	20	1	41	42	1	20		Ė	0		SPARE	
PANEL	290 272	4 : AMP 0 : AMP 2 : AMP	S PHAS	SE B						AC	TUAL C	CONN. EC DEM		285	KVA 103 103		

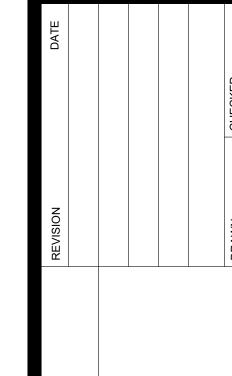
OLTS L	-N : 120	MAIN C	PTION	SREQ	UIRED		PAN	NEL:	LP1							ENCLOSURE DATA	
OLTS F	PH. : 208	S.E. R	ATED:	N/A				MCB:	N/AA	AMPS						NEMA: 1	
HASE :	3	GFI P	ROT.:	N/A				MLO:	100	AMPS						SECTIONS: 1	
OUNTI	NG: SURFACE	SHUNT	TRIP:	N/A												WIDTH/SECT.: 20	
FR:S	Q. D.															DEPTH: 5.75	
YPE: N																	
		AIC RA	TING (FULLY	RATE	OR SE	RIES RA	ATED):	22	KA (MI	NIMUM	, SEE S	PECIFI	CATIO	NS)		
OTES	DESCRIPTION	LOAD	AMPS	AMPS	AMPS	C.B.	C.B.	CKT.	CKT.	C.B.	C.B.	AMPS	AMPS	AMPS	LOAD	DESCRIPTION	NOTES
		CONN				AMPS	POLES	NUM.	NUM.	POLES	AMPS				CONN		
	PRINT SHOP PRODUCTION	778	6			20	1	1	2	1	20	3			389	LARGE FORMAT	
	PRINT SHOP PRODUCTION	487		4		20	1	3	4	1	20		2		195	LARGE FORMAT	
	CORRIDOR	97			1	20	1	5	6	1	20			1	99	LOBBY / CONF	
	ELEC / COMM RM	40	0			20	1	7	8	1	20	2			291	OPEN OFFICE	
	OFFICES / RECEPTION	257		2		20	1	9	10	1	20		0		53	REST ROOMS	
	WORK ROOM	32			0	20	1	11	12	1	20			0	10	PANEL ELP1	
	EXTERIOR LIGHTS	97	1			20	1	13	14	1	20	0				SPARE	
	MECH / JAN / SEC STRG	178		1		20	1	15	16	1	20		0			SPARE	
	STORAGE RM	134			1	20	1	17	18	1	20			0		SPARE	
	SPARE		0			20	1	19	20	1	20	0				SPARE	
	SPARE			0		20	1	21	22	1	20		0			SPARE	
	SPARE				0	20	1	23	24	1	20			0		SPARE	
	SPARE		0			20	1	25	26	1	20	0				SPARE	
	SPARE			0		20	1	27	28	1	20		0			SPARE	
	SPARE				0	20	1	29	30	1	20			0		SPARE	
	SPACE		0			===	===	31	32	===	===	0				SPACE	
	SPACE			0		===	===	33	34	===	===		0			SPACE	
	SPACE				0	===	===	35	36	===	===			0		SPACE	
	SPACE		0			===	===	37	38	===	===	0				SPACE	
	SPACE			0		===	===	39	40	===	===		0			SPACE	
	SPACE				0	===	===	41	42	===	===			0		SPACE	
														AMPS	KVA		
	13	: AMP	S PHAS	SE A						AC	TUAL C	ONN. L	OAD :				
	10	: AMP	S PHAS	E B							NI	EC DEM	IAND :	9	3		
	3	: AMP	S PHAS	E C													
ANEL N	IOTES:																
1)	REFER TO PANEL FEEDER	SCHEDU	LE FO	R CON	DUCTO	OR AND	CONDU	IIT REQ	UIREME	NTS.							
2)	REFER TO EQUIPMENT FE	EDER SC	HEDIII	EEOD	CONIE	NICTOR	ANDC	ONDLIIT	PEOU	DEMEN	TQ						

VOLTS L-N: 120	PANEL:	EL1	ENCLOSURE DATA
VOLTS PH: N/A	MCB:	30 AMPS	NEMA: 1
PHASE: 1	MLO :	N/A AMPS	SECTIONS: 1
MFR: MYERS			WDTH/SECT.: 25
TYPE: 1EM2S			DEPTH: 11
AIC	RATING (FULLY RATED OR SERIES RATED):	10 KA (MINIMUM, SEE SPECIFICATION	S)
NOTES DESCRIPTION	LOAD AMPS AMPS C.B. C.B. CKT.		
	CONN AMPS POLES NUM.		
INTERIOR EMERGENCY	1155 10 20 1 1		
		AMPS ACTUAL CONN. LOAD: 10	VA 1155
PANEL NOTES: 1) 1.6 KVA EMERG. LTG. IN	IVERTER WTH 120V INPUT/OUTPUT.		

101	211 000							VEL:								ENCLOSURE DATA	
I - I	PH. : 208		ATED:						N/A							NEMA: 1	
PHASE :			ROT.:					MLO :	225	AMPS						SECTIONS: 1	
		SHUNT	TRIP:	N/A												WIDTH/SECT.: 20	
/IFR : S							PRO	VIDE N	IEW P	ANEL						DEPTH: 5.75	
TYPE : N	NQOD	AIC RA	ATING (FULLY	RATED	OR SE	RIES R	ATED):	22	KA (MI	NIMUM	, SEE S	PECIFI	CATION	1 S)		
NOTES	DESCRIPTION	LOAD	AMPS	AMPS	AMPS		C.B. POLES	CKT.	CKT.	C.B. POLES	C.B.	AMPS	AMPS	AMPS	LOAD		NOTES
	DM 400 LABOT FORMAT	45	45			60	3	1	2	3	60	40			40	DM 400 LABOE FORMAT	
	RM 109 LARGE FORMAT	45		45		===	===	3	4	===	===		40		40	RM 109 LARGE FORMAT	
	SOUTH PLUG-IN RACEWAY	45			45	===	===	5	6	===	===			40	40	NORTH PLUG-IN RACEWAY	
	RM 109 RECEPTACLES	3	5			20	1	7	8	1	20	8			2	RM 109 WORK STATIONS	
	RM 103C RECEPTACLES	5		8		20	1	9	10	1	20		3		2	RM 109 WORK STATIONS	
3	RM 103B,105,107 RECEP	5			8	20	1	11	12	1	20			5	3	RM 110 RECEPTACLES	
3	EWC	1	1			20	1	13	14	1	20	3			2	RM 108 RECEPTACLES	
	RESTROOM RECEPTACLES	4		6		20	1	15	16	1	20		3		2	RM 108 GFI RECEPTACLES	
	RM 102D, 102E RECEP	4			6	20	1	17	18	1	20			11	11	RM 108 REFRIGERATOR	
	RM 102D, 102E RECEP	4	16			20	1	19	20	1	20	5			3	RM 102 WALL RECEP	
	RM 102 FURNITURE	3		12		20	1	21	22	1	20		12		3	RM 102 FURNITURE	
	RM 102 FURNITURE	4			6	20	1	23	24	1	20			6	4	RM 102 FURNITURE	
	RM 103 WORK STATIONS	3	5			20	1	25	26	1	20	8				RM 102 FURNITURE	
	RM 103 WORK STATIONS	3		12		20	1	27	28	1	20		9			RM 103 WALL RECEPTACLE	
	RM 102C RECEPTACLES	2			3	20	1	29	30	1	20			6	4	RM 102B, 102A RECEP	
	RM 102C RECEPTACLES	2	8			20	1	31	32	1	20	5			3	RM 103A RECEPTACLES	
	RM 100, 101 RECEPTACLE	4		6		20	1	33	34	1	20		8		2	RM 103A RECEPTACLES	
	RM 101 TV RECEPTACLE	1			4	20	1	35	36	1	20			8	2	RM 102B TTB RECEP	
	WEST OUTSIDE RECEP	1	2			20	1	37	38	1	20	8			2	RM 102B RACK RECEP	
	SPARE			0		20	1	39	40	1	20		0			SPARE	
	SPARE				0	20	1	41	42	1	20			0		SPARE	
	163	: AMP : AMP	S PHAS	SE B						AC	TUAL C	CONN. EC DEM			56		
PANEL N	NOTES:																
	REFER TO PANEL FEEDER	SCHEDI	JI E FO	R CONI	DUCTO	R AND	CONDU	IIT REO	UIREME	NTS							
,	REFER TO EQUIPMENT FEE										TS						
,	PROVIDE GFI TYPE CIRCUIT			LION	JUND	COTOR	AND		NEGU	ILIVILIN	, O.						







EMBRY-RIDDLE AERONAUTICAL UNIVERSITY NEW PRINT SHOP BUILDING

ISSUE FOR BID - 8/7/2019

Date O7/12/2019
Job no. SOBE 19005
Sheet no.

Sheet no.

EMBRY-RIDDI E AFRONALITE

E7.1