

ELECTRICAL NOTES

- THESE NOTES APPLY TO ENTIRE PROJECT:
- A. CODES. ALL ELECTRICAL WORK SHALL COMPLY WITH THE DRAWINGS AND SPECIFICATIONS, THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL CODES, WHICHEVER IS MORE STRINGENT.
- B. ENERGY CODE. LIGHT FIXTURES ARE TO COMPLY WITH THE FLORIDA ENERGY CODE. FULL COMPLIANCE WITH THE ENERGY CODE IS REQUIRED, WITH PROVISIONS FOR AUTOMATIC SHUT OFF LIGHTING.
- C. CONDUCTORS. ALL CONDUCTORS ARE TO BE COPPER THIN UNLESS OTHERWISE SHOWN OR REQUIRED BY CODES. ALL POWER CONDUITS ARE TO CONTAIN A GROUND WIRE.
- D. RACEWAYS. RIGID GALVANIZED CONDUIT AND ELECTRICAL METAL TUBING IS TO BE USED IN INTERIOR SPACES.
- E. HVAC. THE ELECTRICAL CONTRACTOR IS TO COORDINATE WITH THE HEATING, VENTILATING AND AIR CONDITIONING (HVAC) TRADE TO MAKE CERTAIN ALL POWER CIRCUITS, CONTROL CIRCUITS AND CONDUITS ARE INCLUDED IN THE BIDS. ALL HVAC EQUIPMENT IS TO BE INSTALLED BY THE HVAC CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL MEET WITH THE ELECTRICAL, SEAR SHALL BE APPROVED BY THE POWER COMPANY. THE ELECTRICAL CONTRACTOR SHALL MEET WITH THE POWER COMPANY PRIOR TO BIDDING TO DETERMINE ALL FEATURES, FUNCTIONS AND LOCATIONS OF SERVICE. FURTHERMORE, THE ELECTRICAL CONTRACTOR IS TO MAINTAIN CONTINUOUS CONTACT WITH THE POWER COMPANY DURING THE PROJECT, AND IS TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY CHANGE PROPOSED. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE SERVICE THOROUGHLY AND DOCUMENT THE COORDINATION.
- H. TELEPHONE. THE ELECTRICAL CONTRACTOR IS TO ARRANGE FOR TELEPHONE SERVICE. PRIOR TO BIDDING, THE ELECTRICAL CONTRACTOR IS TO MEET WITH THE TELEPHONE COMPANY AND COORDINATE THE LOCATION OF THE SERVICE POINT ON THE PROPERTY LINE. THE INCOMING SERVICE CABLE (GROUNDING, ETC. IN ADDITION, THE ELECTRICAL CONTRACTOR IS TO INSTALL TELEPHONE CABLES (8/24 CATEGORY 6 CABLE) TO TELEPHONE OUTLET POINTS THROUGHOUT THE PROJECT. ALL CABLES ARE TO BE RADIAL WITH INDIVIDUAL HOME RUNS TO TELEPHONE BACKBOARD OR TERMINAL. DO NOT LOOP FROM OUTLET TO OUTLET.
- I. DRAWINGS. THE ELECTRICAL CONTRACTOR IS TO OBTAIN A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING, AND IS TO BECOME THOROUGHLY FAMILIAR WITH THE ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, AND LANDSCAPING FEATURES OF THE PROJECT. PRIOR TO BIDDING, THE ELECTRICAL CONTRACTOR IS TO HAVE A COMPLETE UNDERSTANDING OF CEILING CONFIGURATIONS, WIRING SPACES, FIRE RATED SURFACES, STRUCTURAL FEATURES, AIR CONDITIONING WORK, TEMPORARY POWER REQUIREMENTS, PIPING, PLUMBING AND ALL OTHER FEATURES WHICH BEAR ON THE ELECTRICAL WORK. UNDER NO CONDITION IS THIS PROJECT TO BE BID WITHOUT A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS.
- J. SCALES. DO NOT SCALE OR TAKE DIMENSIONS FROM ELECTRICAL DRAWINGS.
- K. MAIN DISCONNECTS. MAIN DISCONNECTS MAY BE HEAVY DUTY FUSED SWITCHES OR CIRCUIT BREAKERS PROPERLY COORDINATED. FUSES ARE TO BE BUSSMAN TYPE LPN-R, LPS-R, OR KRP-C. CIRCUIT BREAKERS ARE TO BE RATED FOR THE AC SHORT CIRCUITS INDICATED.
- L. UNDERGROUND WORK. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT ROUTES OF ALL UNDERGROUND WORK. ROUTES SHOWN ARE APPROXIMATE. POWER, TELEPHONE, CABLE COMPANIES, AND ALL OTHER UTILITY COMPANIES SHALL BE CONSULTED, AND LINES SHALL BE STAKED. DIGGING BY HAND IS REQUIRED AROUND EXISTING UTILITIES.
- M. TVSS. THE POWER SERVICE IS TO BE PROTECTED FROM LIGHTNING WITH SURGE SUPPRESSORS THROUGH A 30A/3P BREAKER (42,000A).
- N. LED LIGHT FIXTURES. LED LIGHTS ARE TO BE CAPABLE OF DIMMING 0-100 WITH DRIVERS AND DIMMERS PROVIDED BY SAME MANUFACTURER. THE CONTRACTOR IS TO INSTALL MULTIPLE CONDUCTORS REQUIRED BY DRIVERS, AND IS TO FIELD MEASURE ALL LOCATIONS AND DIMENSIONS. ALL LENSES, ADJUSTABLE MOUNTING HARDWARE, POWER SUPPLIES, METALLIC HOUSINGS TO BE INCLUDED.
- O. LIGHT FIXTURE VOLTAGES. OBTAIN LIGHT FIXTURE VOLTAGES FROM CIRCUITS ON PLANS. DO NOT OBTAIN FROM MODEL NUMBERS ON LIGHT FIXTURE SCHEDULE.
- P. RECEPTACLE HEIGHTS. COORDINATE WITH BUILDING DEPARTMENT THE MINIMUM HEIGHT FOR RECEPTACLES. AMERICAN DISABILITY ACT REQUIRES 36" ABOVE FINISHED FLOOR.
- Q. EQUIPMENT DISCONNECTS. DISCONNECTS SHOWN CAN BE DELETED IF DISCONNECTING MEANS BUILT IN AND PERMITTED BY THE BUILDING DEPARTMENT.
- R. COMPLETION REQUIREMENTS. WITHIN 30 DAYS AFTER SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION SHALL BE PROVIDED BY THE CONTRACTOR TO BUILDING DEPARTMENT WITH A SINGLE LINE DIAGRAM OF THE DISTRIBUTION SYSTEM PLUS FLOOR PLANS SHOWING LOCATIONS AND AREAS SERVED.
- S. OPERATING AND MAINTENANCE MANUALS. OPERATING AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT SHALL BE TURNED OVER BY THE CONTRACTOR TO OWNER WITH SUBMITTAL DATA AND REQUIRED MAINTENANCE PROCEDURES. THE NAME AND ADDRESS OF A QUALIFIED SERVICE AGENCY SHALL BE PROVIDED.
- T. SHARED NEUTRALS. WHENEVER THE CONTRACTOR USES SHARED NEUTRALS, BREAKERS ARE TO HAVE A COMMON HANDLE (I.E. 2 POLE OR 3 POLE).
- U. GFCI. OUTLETS INSTALLED OUTDOORS, WITHIN 6' OF A SINK, AND OTHERWISE REQUIRED BY CODE ARE TO BE ON GFCI TYPE CIRCUIT BREAKERS.
- V. WHERE DISCREPANCY EXISTS BETWEEN DRAWINGS, SPECIFICATION, CODES, STANDARDS, QUANTITIES AND THE LIKE THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED.

ELECTRICAL SPECIFICATIONS

GENERAL PROVISIONS. PROVIDE ALL LABOR, MATERIALS, TOOLS, SUPPLIES, EQUIPMENT AND TEMPORARY POWER FACILITIES TO COMPLETE THE DRAWINGS AND SPECIFICATIONS. ALL SYSTEMS ARE TO BE INSTALLED IN ACCORDANCE WITH THE OPERATIONAL. ALL ELECTRICAL WORK SHALL COMPLY WITH THE DRAWINGS AND SPECIFICATIONS, THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL CODES, WHICHEVER IS MOST STRINGENT.

OPERATING CLEARANCES. INSTALL. ALL WORK NEARLY SO AS TO BE PROPERLY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR.

JOB SITE VISIT. VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID. VERIFY ALL DIMENSIONS AND DETERMINE THE CHARACTERISTICS OF EXISTING FACILITIES WHICH WILL AFFECT THE PERFORMANCE OF THE WORK, INCLUDING THOSE NOT SHOWN ON DRAWINGS OR SPECIFICATIONS.

SUBSTITUTIONS. ALL EQUIPMENT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO BIDDING.

TEMPORARY LIGHT AND POWER. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING ALL MATERIAL AND EQUIPMENT REQUIRED TO PROVIDE LIGHT AND POWER TO PERFORM ALL WORK OF ALL TRADES DURING CONSTRUCTION, AND UNTIL WORK IS COMPLETE. COST OF ALL POWER CONSUMED DURING CONSTRUCTION SHALL BE PAID BY THE PARTY DESIGNATED BY THE PRIME CONTRACTOR.

MATERIAL SUBMITTALS. SUBMIT ELECTRONIC PDF SHOP DRAWINGS AND EQUIPMENT DESCRIPTIONS FOR ALL ELECTRICAL WORK PRIOR TO ORDERING. ELECTRICAL MATERIALS FOUND ON THE PROJECT WHICH DO NOT HAVE THE ENGINEER'S APPROVAL MUST BE REMOVED AND REPLACED AT THE ELECTRICAL CONTRACTOR'S EXPENSE.

TRENCHING, BORING AND BACKFILLING. EXCAVATION OR BORING, BACKFILLING AND REPAIRING OF PAVING AND GRASSING IS TO BE IN THE BID OF THE ELECTRICAL CONTRACTOR. THE ACTUAL WORK NEED NOT BE PERFORMED BY THE ELECTRICAL TRADES. HOWEVER, THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, BORING, DEWATERING, BACKFILLING, TAMING AND REPAIR OF PAVEMENTS AND GRASSING REQUIRED IN SUPPORT OF ELECTRICAL WORK. LOCATE AND PROTECT EXISTING UTILITIES AND OTHER UNDERGROUND WORK IN A MANNER WHICH WILL ENSURE THAT NO DAMAGE OR SERVICE INTERRUPTION WILL RESULT FROM EXCAVATING OR BACKFILLING. THE ELECTRICAL CONTRACTOR IS COMPLETELY RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR PROPERTY. PROTECT PROPERTY FROM DAMAGE WHICH MIGHT RESULT FROM EXCAVATING, BORING OR BACKFILLING. PROTECT PERSONS FROM INJURY AT EXCAVATIONS BY BARRICADES WITH WARNINGS AND ILLUMINATION. IN THE EVENT, IT IS SUSPECTED THAT ACTIVE ELECTRICAL LINES ARE SUBJACENT TO THE AREA OF WORK, POWER IS TO BE DISCONNECTED. AN UNDERGROUND LOCATOR SERVICE SHALL BE EMPLOYED.

TESTS. CONDUCT OPERATING TESTS FOR APPROVAL. THE SYSTEMS SHALL BE DEMONSTRATED TO OPERATE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE SPECIFICATIONS AND MANUFACTURERS INSTRUCTIONS. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER OR AN AUTHORIZED REPRESENTATIVE. FURNISH ALL ITEMS REQUIRED TO PERFORM TESTS.

DIVISION OF WORK. ALL POWER WIRING IS TO BE BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF DISCONNECTS, STARTERS, THERMOSTATS, FIRESTATS, CONTROL TRANSFORMERS, SWITCHES, ETC. WITH THE OTHER CONTRACTORS TO MAKE CERTAIN NO ITEMS ARE LEFT OUT OF THE BIDS. THE PRIME CONTRACTOR SHALL MAKE ANY SPECIAL DECISIONS REGARDING THE DIVISION OF WORK BETWEEN CONTRACTORS. IN NO EVENT SHALL SUCH WORK REQUIRE ADDITIONAL EXPENSE TO THE OWNER.

LOCATIONS. THE ENGINEER MAY MOVE ANY ELECTRICAL DEVICES BY AS MUCH AS TEN (10) FEET PRIOR TO ROUGH-IN AT NO ADDITIONAL COST.

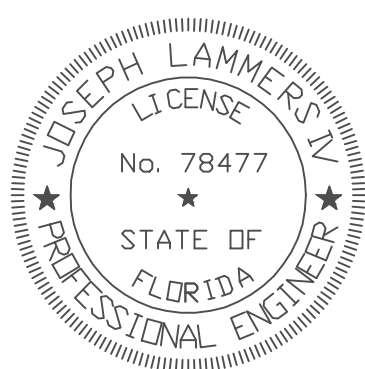
CIRCUITS. ALL OUTLETS, LIGHT FIXTURES AND OTHER ITEMS OF EQUIPMENT SHOWN ON DRAWINGS ARE TO BE CIRCUITED.

BIDDING FROM A FULL SET OF DRAWINGS. THE ELECTRICAL CONTRACTOR IS TO OBTAIN A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING, AND IS TO BECOME THOROUGHLY FAMILIAR WITH THE ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL AND LANDSCAPING FEATURES OF THE PROJECT.

PRIOR TO BIDDING, THE ELECTRICAL CONTRACTOR IS TO HAVE A COMPLETE UNDERSTANDING OF CEILING CONFIGURATIONS, WIRING SPACES, FIRE RATED SURFACES, FOUNDATIONS, AIR CONDITIONING WORK, SPRINKLER PIPING, PLUMBING AND ALL OTHER FEATURES WHICH BEAR ON THE ELECTRICAL WORK. UNDER NO CONDITIONS IS THIS PROJECT TO BE BID WITHOUT A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS.

FIRE RATED SURFACES. FIRE WALL, CEILING AND FLOOR PENETRATIONS ARE TO BE MADE WITH METALLIC RACEWAYS IN A U.L. APPROVED MANNER. DO NOT KNOCK HOLES INTO VOID SPACES OR OTHERWISE DEGRADE FIRE WALLS. ALL PASSAGES INTO OR THROUGH FIRE WALLS ARE TO BE PERFORMED IN A MANNER ACCEPTABLE TO THE BUILDING DEPARTMENT. (NO PENETRATIONS ARE PERMITTED THROUGH 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 25, 30, 36, 48, 60, 72, 96, 108, 144, 180, 216, 288, 360, 432, 576, 720, 864, 1080, 1296, 1512, 1814, 2160, 2592, 3024, 3628, 4356, 5184, 6048, 7200, 8640, 10080, 11712, 13824, 16512, 19584, 23136, 27648, 33177, 39811, 47784, 57379, 68995, 83194, 100437, 121365, 146928, 178248, 216480, 261888, 315936, 382128, 462464, 559296, 674880, 812160, 984192, 1194240, 1456320, 1776960, 2167680, 2655360, 3248640, 3968640, 4838400, 5892480, 7161600, 8784000, 10732800, 13177600, 16281600, 19990400, 24483200, 29952000, 36582400, 44582400, 54240000, 65952000, 80256000, 98624000, 121728000, 150240000, 184896000, 227232000, 278208000, 338784000, 419904000, 514240000, 624896000, 764864000, 935936000, 1145280000, 1403840000, 1722400000, 2112000000, 2583040000, 3148160000, 3821280000, 4624640000, 5592960000, 6748800000, 8121600000, 9841920000, 11942400000, 14563200000, 17769600000, 21676800000, 26553600000, 32486400000, 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LIGHTING FIXTURE SCHEDULE											
TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLT	LAMP COLOR	LUMENS	LAMP TYPE	DIM TYPE	WATTS	MOUNTING	NOTES
BUILDING C - BAY FLEET GARAGE											
A3	2X4 LED TROFFER	METALUX	24CZ2-40-UNV-L840-CD1-U	UNV	4000	4000	LED	0-10V	31.6W	RECESSED	
A3E	2X4 LED TROFFER W/EMERGENCY BATTERY PACK	METALUX	24CZ2-40-UNV-EL7W-L840-CD1-U	UNV	4000	4000	LED	0-10V	31.6W	RECESSED	
D3	4" DOWNLIGHTS	HALO COMMERCIAL	HC415D010-HM405226-40-41MDW	UNV	4000	1500	LED	0-10V	14W	RECESSED	
D3E	4" DOWNLIGHTS W/EMERGENCY BATTERY PACK	HALO COMMERCIAL	HC415D010-EM7-HM40525840-41MDW	UNV	4000	1500	LED	0-10V	14W	RECESSED	
F3	4" LINEAR LED	METALUX	4SNLED-LD5-50SL-LW-UNV-L840-CD1-U	UNV	4000	5000	LED	0-10V	46W	SURFACE	
F3E	4" LINEAR LED W/EMERGENCY BATTERY PACK	METALUX	4SNLED-LD5-50SL-LW-UNV-EL7W-L840-CD1-U	UNV	4000	5000	LED	0-10V	46W	SURFACE	
P3	2" LINEAR LED	METALUX	2SNLED-LD5-30HL-LW-UNV-L840-CD1-U	UNV	4000	3000	LED	0-10V	26W	SURFACE	
LB3	LED HIGH BAY	METALUX	CHB-36SE-MFL-UNV-L740-CD-U	UNV	4000	36000	LED	0-10V	226W	SURFACE	
LB3E	LED HIGH BAY W/EMERGENCY BATTERY PACK	METALUX	CHB-36SE-MFL-UNV-L740-EL20W-CD-U	UNV	4000	36000	LED	0-10V	226W	SURFACE	
W3	NOT USED LED WALLPACK	MC GRAW EDISON	GWC-SA1C-740-U-T3	UNV	4000	7556	LED	0-10V	59W	WALL	
W3E	LED WALLPACK W/EMERGENCY BATTERY PACK	MC GRAW EDISON	GWC-SA1C-740-U-T3-CBP	UNV	4000	7556	LED	0-10V	59W	WALL	
X2	EXIT SIGN	SURELITE	CSX7G	UNV	N/A	N/A	LED	N/A	1.12W	SURFACE	



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THESE DRAWINGS ARE NOT VALID FOR ANY PURPOSE WHICH REQUIRES THE ORIGINAL SIGNATURE AND SEAL OF THE ENGINEER UNLESS THE ORIGINAL SIGNATURE AND SEAL ARE ATTACHED. DRAWINGS NOT SIGNED AND SEALED BY THE ENGINEER SHALL NOT BE SUBMITTED TO ANY AUTHORITY OR USED FOR ANY PURPOSE WHERE SIGNATURE AND SEALED DOCUMENTS ARE REQUIRED.

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine applicability of the layout to existing or future field conditions. This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation electrical voltage, tolerance in layout and other variable field conditions.

NOTES

1	CONTROLS LAYOUT	07/19/22
No.	Revision/Issue	Date

LIGHTING DYNAMICS, INC.
7835 West Commercial Blvd
Tamarac, FL 33351
(954) 944-0286
www.lightingdynamics.com

Expert Name and Address

FPL Service in Columbia County
Building E
Controls Diagram

FILE	P:\PROJECTS\2022\APR
CLIENT	Cardinal Engineering Associates, Inc

Project FPL Service in Columbia County Building A	Sheet LC1
Date 07/19/2022	
Scale NTS	DRAWN BY EC

Project FPL Service in Columbia County Building A	Sheet LC1
Date 07/19/2022	
Scale NTS	DRAWN BY EC

PROJECT NO.

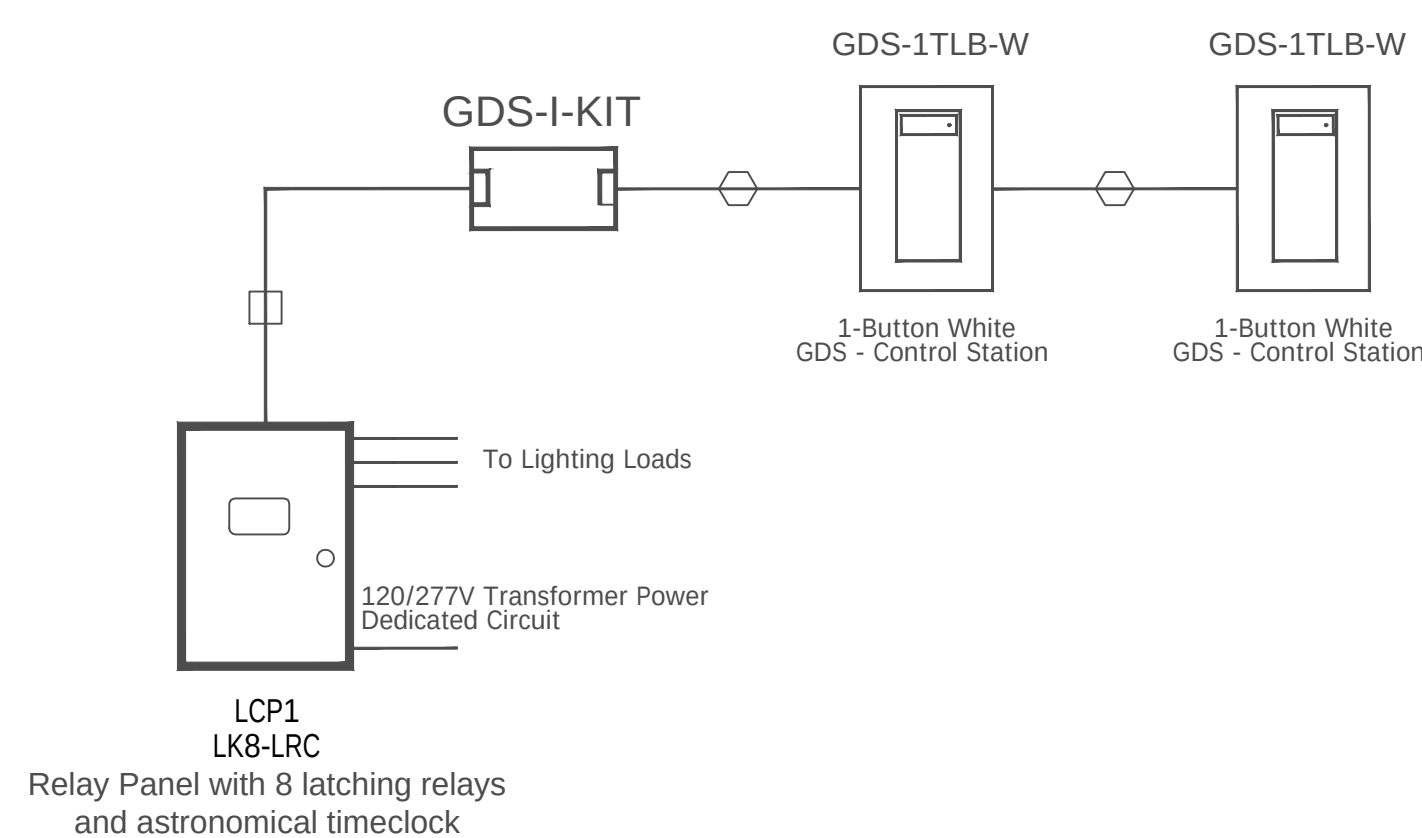
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SHEET TITLE

**LIGHTING
CONTROLS**

SHEET NUMBER

C-E003



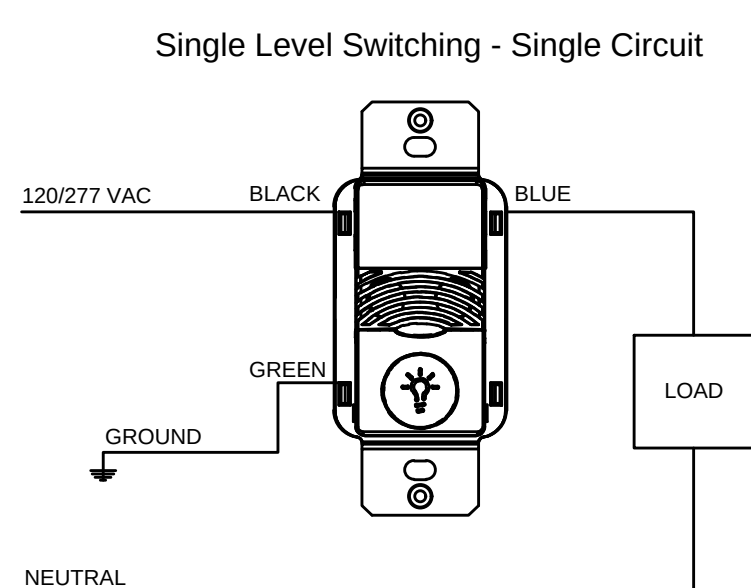
Notes

1	This one-line drawing is for concept only. Every wire is not shown. Wire according to the product installation/wiring instructions.
2	Refer to plans for locations, size, and quantity.
3	Refer to all manufacturers installation instructions for correct wiring information

Cables

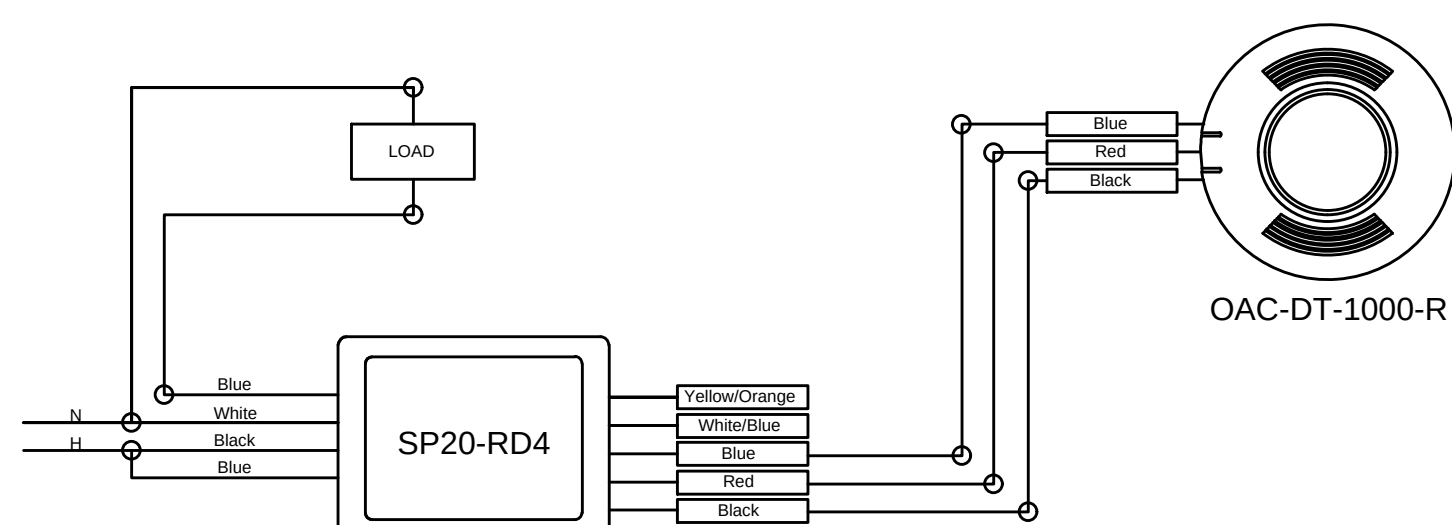
☐	CAN	Use Belden# 1502R non-plenum cable or 1502P plenum cable.
☐	RS232	RS-232 Cable (6 feet), provided with product

ONW-D-1001-MV-W



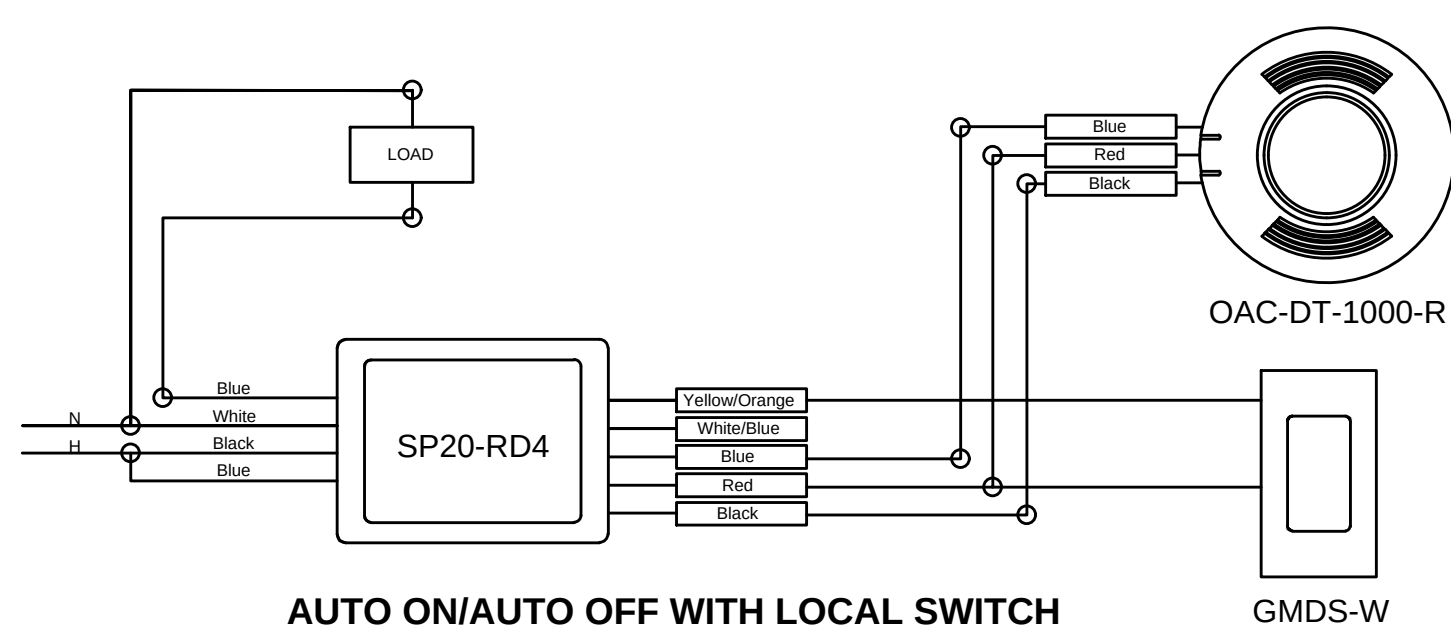
ONW-D-1001-MV-W
WALL SENSOR DIAGRAM

AUTO ON/AUTO OFF



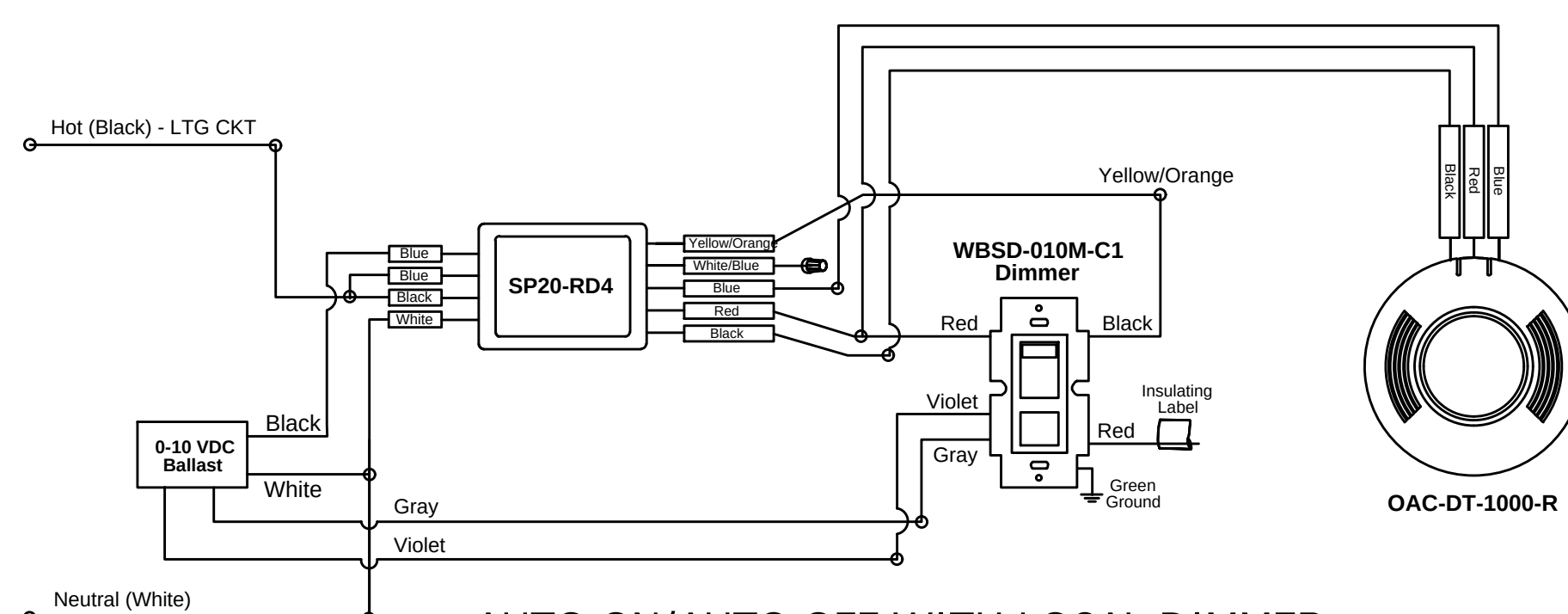
AUTO ON/AUTO OFF WITH LOCAL SWITCH

AUTO ON/AUTO OFF W/ LOCAL SWITCH

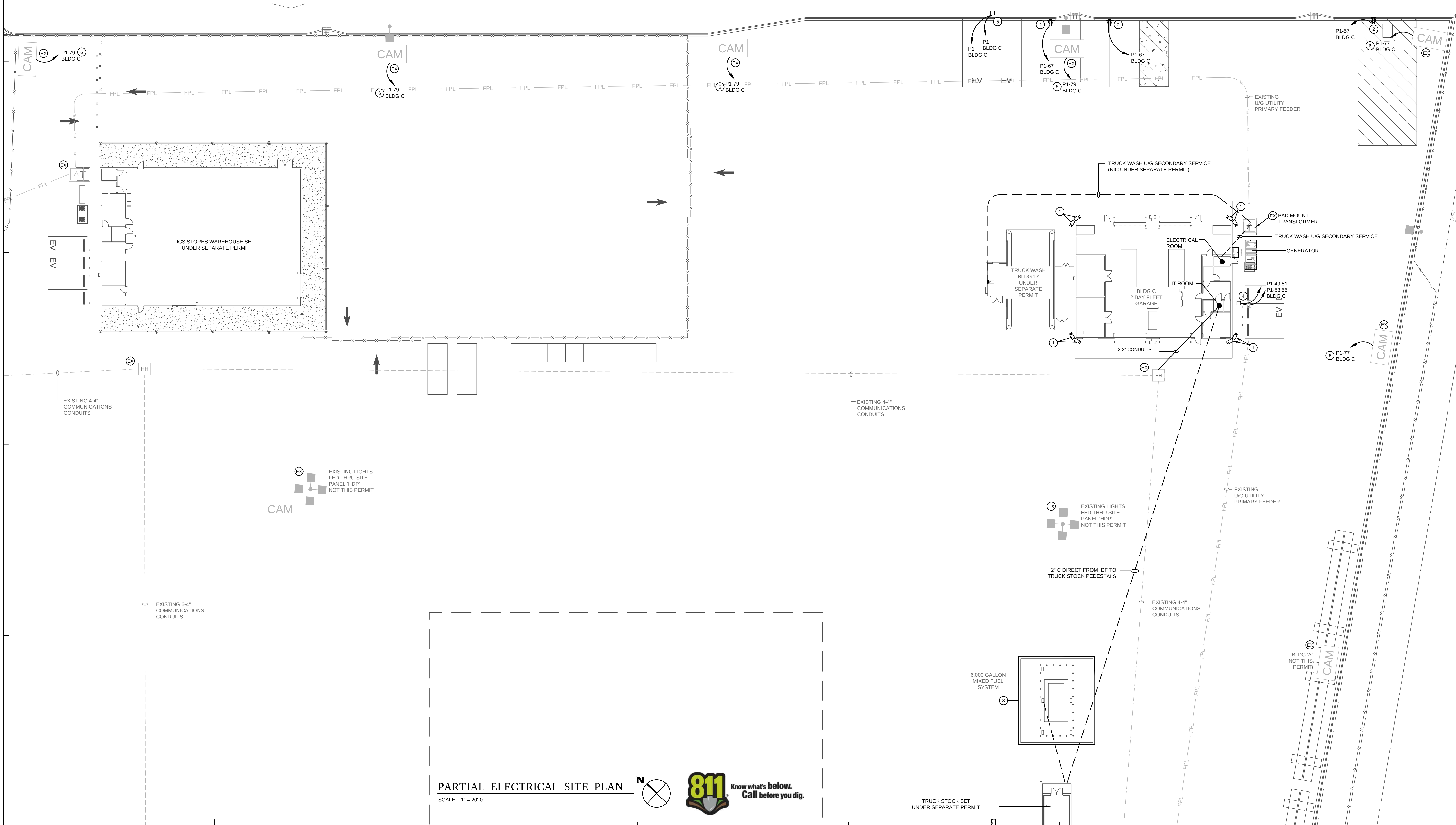


AUTO ON/AUTO OFF WITH LOCAL SWITCH

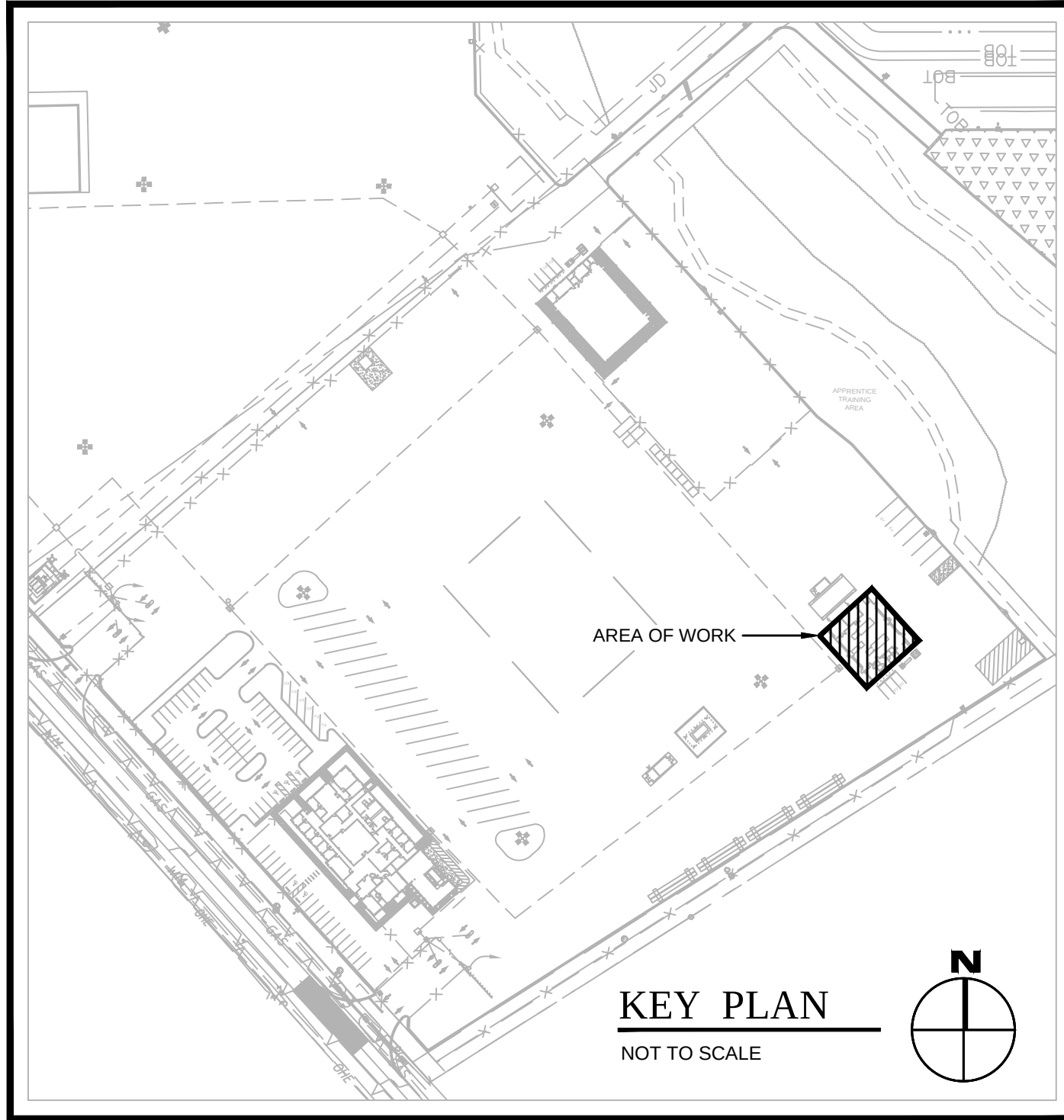
AUTO ON/AUTO OFF W/ LOCAL DIMMER



AUTO ON/AUTO OFF WITH LOCAL DIMMER



PARTIAL ELECTRICAL SITE PLAN
SCALE : 1" = 20'-0"



GENERAL NOTES THIS DRAWING

- COORDINATE ALL UNDERGROUND WORK WITH ALL OTHER TRADES AND ACTUAL FIELD CONDITIONS FOR PROPER CLEARANCES
- REFER TO FPL STANDARDS FOR ALL PRIMARY DUCT BANK INSTALLATION REQUIREMENTS.
- PROVIDE PULL LINES IN ALL CONDUITS.
- ALL UTILITY PRIMARY CONDUIT RUNS SHOWN ON THIS SHEET SHALL BE (2) 6" CONDUITS.
- CONDUIT ROUTING SHOWN IS DIAGRAMMATICAL AND NOT NECESSARILY REPRESENTATIVE OF MOST EFFICIENT ROUTE. CONTRACTOR SHALL FIELD ADJUST ALL SITE CONDUIT ROUTING TO ALLOW FOR SHORTEST POSSIBLE RUNS.
- EXTERIOR LIGHT FIXTURES SHALL BE CONTROLLED BY A PHOTOCELL CONNECTED TO THE LOW VOLTAGE LIGHTING CONTROL PANEL. MOUNT PHOTOCELL ON EXTERIOR WALL 8' AFG WITH UNOBSTRUCTED VIEW FACING NORTH.
- UNLESS OTHERWISE NOTED ALL UNDERGROUND CONDUITS SHOWN ARE FOR OWNER PROVIDED AND INSTALLED FIBER AND DATE CABLING FOR SITE SECURITY/IT EQUIPMENT. CONTRACTOR SHALL PROVIDE PULL LINES IN ALL SITE CONDUITS. TOP OF CONDUITS SHALL BE MINIMUM 36" BELOW FINISHED GRADE FOR DIRECT BURIED CONDUIT.
- ALL SITE LIGHTING FIXTURES SHALL BE MOUNTED AT 30' AFG UNLESS NOTED OTHERWISE.

KEYED NOTES (X)

- PROVIDE WIRING ACCESS FOR SECURITY CAMERA'S IN ACCORDANCE WITH APPROVED SHOP DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND COORDINATING DEVICE PLACEMENT WITH APPROVED AUDIO VISUAL SHOP DRAWINGS AND SUBJECT TO OWNER'S APPROVAL FOR ADDITIONAL INFORMATION.
- STEEL BOLLARD WITH QUAD OUTLET. REFER TO DETAIL 8, C-505 FOR ADDITIONAL INFORMATION.
- BOXED AREA SHALL BE CONSIDERED A CLASS 1 DIVISION 1 LOCATION. ALL ELECTRICAL EQUIPMENT INSTALLED WITHIN THIS REGION SHALL BE EXPLOSION PROOF. ALL CONDUIT STUB UPS SHALL BE IN RIGID CONDUIT WITH THREADED FITTINGS. PROVIDE SEAL OFFS AT ALL CONDUITS AT BOTH ENDS.
- PROVIDE TWO BLINK MQ-200 MODEL IQW2-80U-WL-NL-N-25 ELECTRICAL VEHICLE CHARGING STATIONS AND BLINK TRIANGLE, DUAL PEDESTAL #01-0212 AT THIS LOCATION. REFER TO MANUFACTURERS INSTRUCTIONS FOR STUB UP AND ROUGH IN REQUIREMENTS. IN ADDITION TO POWER CIRCUIT HOMERUNS SHOWN PROVIDE A 1" DATA HOMERUN FROM EACH EV CHARGER TO THE IDF IN THE IT ROOM OF THE BUILDING SERVED.
- PROVIDE 11"x18" QUAZITE TYPE PG, TIER 22 RATED, UNDERGROUND HANDHOLE FOR DISTRIBUTION TO FUTURE CHARGING STATION. COORDINATE EXACT LOCATION WITH SITE CONDITIONS AND PROPOSED CHARGING STATION LOCATION. EXTEND 1" EMPTY CONDUIT HOMERUN TO BLDG C, PANEL P1 AND 1" EMPTY CONDUIT HOMERUN TO BUILDING C IDF.
- EXISTING CAMERA TO BE POWERED BY BUILDING 'C' PANEL 'P1'.

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DIVERSIFIED ARCHITECTURAL CONSULTING

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No. 78477
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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ISSUE FOR

100% CONSTRUCTION DOCUMENTS

ISSUE DATE

02/15/2026

ISSUE NO.

NO.

REASON

DATE

PROJECT TEAM

PRINCIPAL IN CHARGE

DAVID LITHGOW

PROJECT MANAGER

DAVID LITHGOW

DESIGN TEAM

CEA

PROJECT NAME

COLUMBIA STORM PROCESSING & SERVICE CENTER - BUILDING C - 2 BAY FLEET GARAGE
FLORIDA POWER & LIGHT

PROJECT NO.

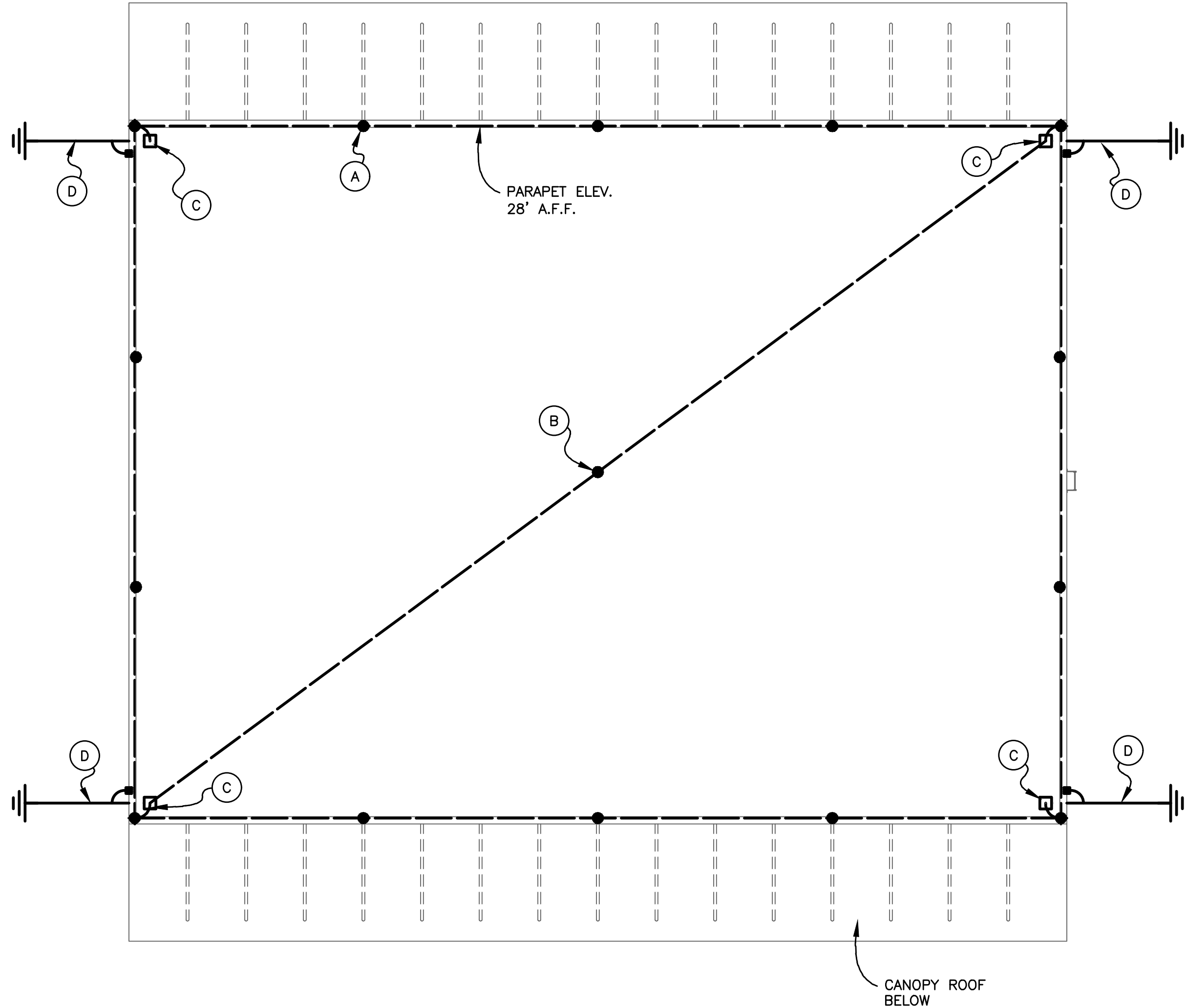
814C632800

SHEET TITLE

ELECTRICAL SITE PLAN

SHEET NUMBER

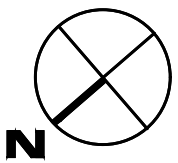
C-ES101



SEE e-E501 FOR GROUNDING & LIGHTNING PROTECTION DETAILS

LIGHTNING PROTECTION PLAN

SCALE : 1/8" = 1'-0"



LEGEND			
	AIR TERMINAL LOCATION		
	THRU-ROOF LOCATION		
	REBAR BOND PROVIDED BY BONDED LIGHTNING PROTECTION AND INSTALLED BY THE ELECTRICAL CONTRACTOR.		
	GROUND ROD LOCATION		
	NO. C29 COPPER CABLE, U.L. LABELED, 29 STR. 17 GA. 192 LBS./1,000 FT., 59,450 CM. (#2 AWG).		
	NO. C29 COPPER CABLE, U.L. LABELED, SAME SPECS AS ABOVE. COURSE CABLE CONCEALED FROM VIEW SHOWN.		
	ROOF HATCH		
	A.F.F. ABOVE FIRST FLOOR		
GENERAL INSTALLATION NOTES			
1	CURRENT U.L. LISTED TVSS/SPD ARE REQUIRED ON ALL SERVICE ENTRANCES AND SHALL BE FURNISHED AND INSTALLED BY OTHERS.		
2	TELEPHONE AND/OR ELECTRICAL SERVICE ENTRANCE GROUNDS SHALL BE INTERCONNECTED TO ONE LIGHTNING PROTECTION GROUND OR WATER PIPE.		
3	METAL BODIES OF INDUCTANCE LOCATED ABOUT THE ROOF SUCH AS; METAL FLASHING, GRAVEL STOPS, ROOF DRAINS, SOIL PIPE VENTS, INSULATION VENTS, LOUVERS AND DOOR FRAMES SITUATED WITHIN 6'-0" OF A LIGHTNING CONDUCTOR OR BONDED METAL BODY SHALL BE INTERCONNECTED TO THE LIGHTNING CONDUCTOR SYSTEM.		
4	NO BEND OF A CONDUCTOR SHALL FORM A FINAL INCLUDED ANGLE OF LESS THAN 90° NOR SHALL HAVE A RADIUS OF BEND OF LESS THAN 8".		
5	CONDUCTORS SHALL INTERCONNECT ALL AIR TERMINALS AND SHALL FORM A TWO-WAY PATH FROM EACH AIR TERMINAL HORIZONTALLY OR DOWNWARD TO CONNECTIONS WITH GROUND TERMINALS.		
6	ALL LIGHTNING PROTECTION CONDUCTORS SHALL BE FASTENED NOT MORE THAN 3'-0" MAXIMUM SPACING.		
7	GROUND RODS SHALL BE DRIVEN TO A MINIMUM DEPTH OF 10'-0" BELOW GRADE AND 2'-0" AWAY FROM FOUNDATION WALL.		
8	CONNECTIONS TO GROUND LOOP CONDUCTOR SHALL BE MADE AT A POINT NOT LESS THAN 18" BELOW GRADE AND 2'-0" AWAY FROM FOUNDATION WALL.		
9	AIR TERMINALS SHALL BE PLACED AT ALL UNPROTECTED OUTSIDE CORNERS AND LOCATED INTERMEDIATELY ON 20'-0" MAXIMUM SPACING AROUND THE ROOF PERIMETER OR RIDGE AND WITHIN 2'-0" OF OUTSIDE EDGE.		
10	FOR SAKE OF CLARITY, WE HAVE NOT LABELED EACH INDIVIDUAL ITEM OF LIGHTNING PROTECTION MATERIALS ON THE ROOF PLAN. WE HAVE SHOWN INSTALLATION DETAILS AND HAVE CALLED OUT EACH OF THESE DETAILS ON THE ROOF PLAN ONLY AT RANDOM LOCATIONS.		
11	BOND ALL METALLIC PIPES INCLUDING WATER, FIRE, GAS, SEWER, STORM, ETC. WHICH ENTER THE STRUCTURE TO THE NEAREST DOWNLEAD, GROUND ROD OR GROUND LOOP.		
12	BARE COPPER LIGHTNING PROTECTION MATERIALS SHALL NOT BE INSTALLED ON ALUMINUM ROOF OR SIDING OR OTHER ALUMINUM SURFACES AND VICE VERSA. ALUMINUM LIGHTNING PROTECTION MATERIALS SHALL NOT BE INSTALLED ON COPPER ROOFING OR COPPER SIDING OR OTHER COPPER SURFACES.		
13	THE LIGHTNING PROTECTION SYSTEM SHALL BE INSTALLED IN A NEAT AND INCONSPICUOUS MANNER SO THAT ALL COMPONENTS WILL BLEND IN WITH THE APPEARANCE OF THE BUILDING.		
14	ACTUAL JOB-SITE CONDITIONS MAY NECESSITATE SLIGHT ALTERATIONS IN AIR TERMINAL AND GROUND ROD LOCATIONS.		
15	MIDROOF AIR TERMINALS SHALL BE PLACED ON 50'-0" MAXIMUM SPACING.		
16	IF REQUIRED, ANY SACRIFICIAL ROOFING PADS, SHALL BE FURNISHED AND INSTALLED BY THE ROOFING CONTRACTOR.		
17	ALL ADHESIVE TYPE FITTINGS SHALL BE SET IN PLACE WITH AN APPLICATION OF CHEM LINK M-1 STRUCTURAL SEALANT ON NON-BALUSTED ROOFS.		
18	SEAL ENDS OF CONDUIT MOISTURE TIGHT WITH DUCT SEAL OR LEAD WEDGE.		
19	ALL CONDUIT, CONDUIT FASTENERS AND MISCELLANEOUS ACCESSORIES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.		
20	ALL REINFORCING, STRUCTURAL, FRAMING AND MISCELLANEOUS STEEL SHALL BE MADE ELECTRICALLY CONTINUOUS THROUGHOUT CONSTRUCTION BY WELDING, CLIPPING, BOLTING OR OTHER APPROVED METHODS.		
21	THE DESIGN LAYOUT AND INSTALLATION DETAILS SHOWN HEREON SHALL MEET THE REQUIREMENTS OF UNDERWRITERS' LABORATORIES STANDARD 96A FOR MASTER LABELED OR LETTER OF FINDINGS LIGHTNING PROTECTION SYSTEMS WHEN REQUIRED BY SPECIFICATION.		
22	THE DESIGN LAYOUT AND INSTALLATION DETAILS SHOWN HEREON SHALL MEET THE REQUIREMENTS OF NATIONAL FIRE PROTECTION ASSOCIATION STANDARD #780, CURRENT EDITION WHEN REQUIRED BY SPECIFICATION.		
23	THE LIGHTNING PROTECTION INSTALLATION SHALL COMPLY IN ALL RESPECTS TO LIGHTNING PROTECTION INSTITUTE STANDARD 175. THE INSTALLATION SHALL BE MADE BY OR UNDER THE SUPERVISION OF AN L.P.I. CERTIFIED MASTER INSTALLER, WHEN REQUIRED BY SPECIFICATION.		
NOTE: THE DESIGN LAYOUT AND INSTALLATION PROCEDURES SHOWN FOR THE BUILDING LIGHTNING PROTECTION SYSTEM AND THE COMPONENT PARTS SHOWN HEREON ARE ILLUSTRATED AS A STANDARD OF QUALITY BY BONDED LIGHTNING PROTECTION 2080 W. INDIANTOWN ROAD, JUPITER, FLORIDA 33458. PHONE: 561-746-4336 FAX: 561-747-8233			
EVALUATION:			
PROJECT: 2 BAY FLEET GARAGE BUILDING E			
FLORIDA INSTALLER & DESIGNER: BONDED LIGHTNING PROTECTION LIGHTNING PROTECTION SYSTEMS, INC., INSTALLING MEMBER OF THE LIGHTNING PROTECTION INSTITUTE PHONE: 561-746-4336 FAX: 561-747-8233 2080 W. INDIANTOWN ROAD SUITE 100 JUPITER, FLORIDA 33458 333 N. FALKENBURG ROAD UNIT D-401 TAMPA, FLORIDA 33619 1505 CAPITAL CIRCLE NW UNIT B TALLAHASSEE, FLORIDA 32303			
JOB NO. MANUFACTURER BLD22032  EAST COAST LIGHTNING EQUIPMENT L.P.I. MEMBER - U.L.P.A. PHONE: 1-800-680-9482 E-MAIL: info@ecle.biz 24 LANSON DRIVE WINSTED, CT. 06098			
DWN. BY RES			
CHK. BY PCD			
DATE: 6-20-22			
SCALE AS SHOWN			
SHEET NO. 1 -OF- 1			
NO.	DATE:	DESCRIPTION	BY
REVISIONS			

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ISSUE FOR:
100% CONSTRUCTION
DOCUMENTS

ISSUE DATE:
02/15/2026

REV. NO.
NO. REASON DATE

DESIGN TEAM:
PRINCIPAL IN CHARGE
DAVID LITHGOW
PROJECT MANAGER
DAVID LITHGOW
DESIGN TEAM
CEA

PROJECT NO.
814C632800
SHEET TITLE
LIGHTNING
PROTECTION &
GROUNDING PLAN
SHEET NUMBER
C-EG101

Photometrics Calculation Software Generated Luminaire Schedule								
Scene: EM MODE								
Symbol	Qty	Label	Arrangement	Lum. Lumens	Arr. Lum. Lumens	LLF	Lum. Watts	Arr. Watts
	12	W3E	Single	7556	7556	0.900	59	59

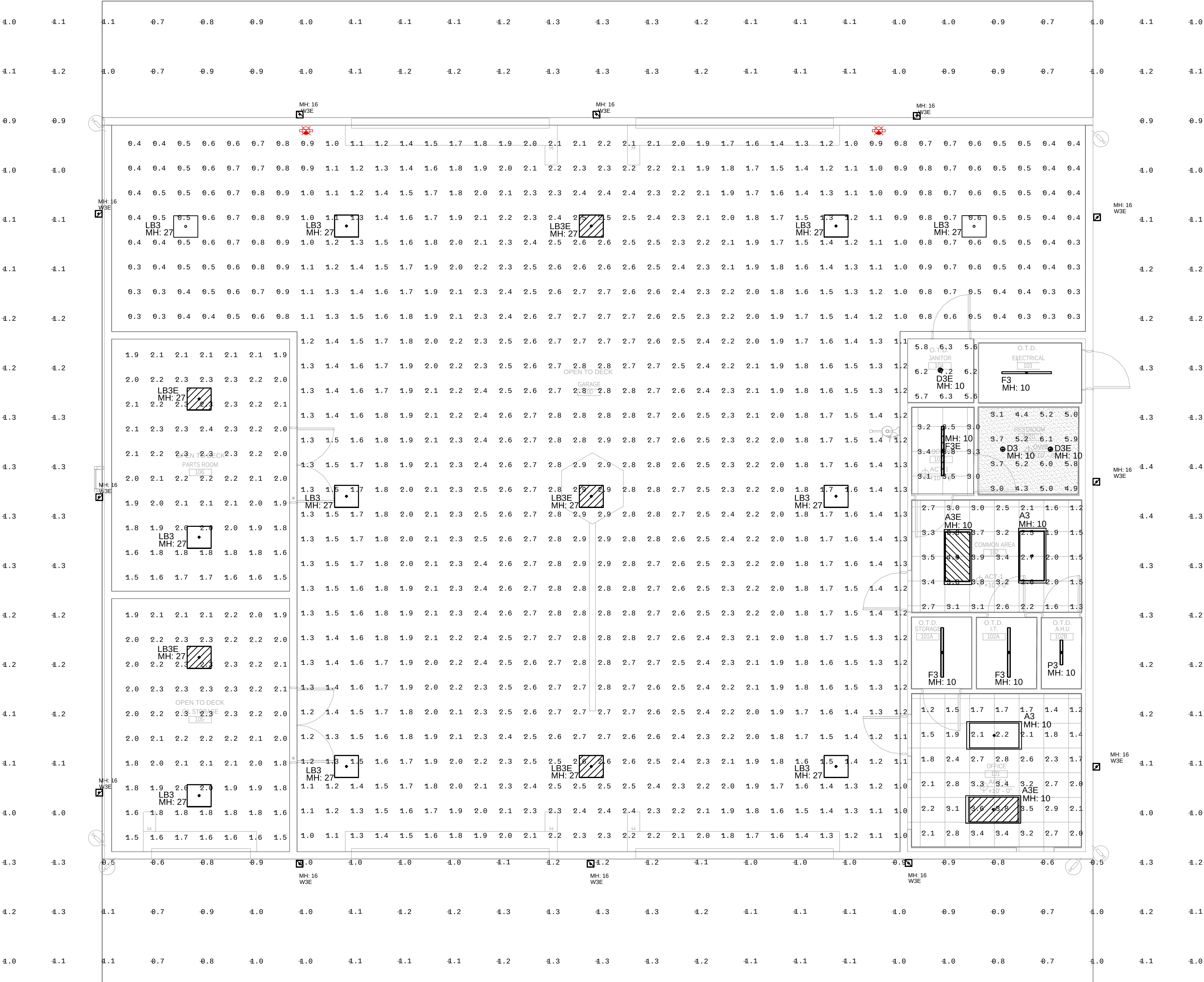
Calculation Summary								
Scene: EM MODE								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
OUTDOOR GALLERY	Illuminance	Fc	1.09	1.4	0.5	2.18	2.80	

Scene/Channel Summary			
Scene: EM MODE			
Channel	Switched	Dimming	# Lums
W3E	On	0.17	12

Scene/Channel Summary			
Scene: EM MODE			
Channel	Switched	Dimming	# Lums
A3	Off	1.00	2
A3E	On	0.22	2
D3	Off	1.00	1
D3E	On	0.50	2
F3	Off	1.00	3
F3E	On	0.15	1
LB3	Off	1.00	8
LB3E	On	0.09	5
P3	Off	1.00	1

Photometrics Calculation Software Generated Luminaire Schedule								
Scene: EM MODE								
Symbol	Qty	Label	Arrangement	Lum. Lumens	Arr. Lum. Lumens	LLF	Lum. Watts	Arr. Watts
	2	A3	Single	4169	4169	0.900	31.6	31.6
	2	A3E	Single	4169	4169	0.900	31.6	31.6
	1	D3	Single	1481	1481	0.900	14	14
	2	D3E	Single	1481	1481	0.900	14	14
	3	F3	Single	5420	5420	0.900	47.1	47.1
	1	F3E	Single	5420	5420	0.900	47.1	47.1
	5	LB3E	Single	37493	37493	0.900	226.2	226.2
	8	LB3	Single	37493	37493	0.900	226.2	226.2
	1	P3	Single	2995	2995	0.900	25.9	25.9

Calculation Summary								
Scene: EM MODE								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
100 - GARAGE_Floor	Illuminance	Fc	1.79	2.9	0.3	5.97	9.67	
101 - OFFICE_Floor	Illuminance	Fc	2.38	3.8	1.2	1.98	3.17	
102 - COMMON AREA_Floor	Illuminance	Fc	2.68	4.0	1.2	2.23	3.33	
102C - LOCKERS_Floor	Illuminance	Fc	3.31	3.8	3.0	1.10	1.27	
102D - RESTROOM_Floor	Illuminance	Fc	4.78	6.1	3.0	1.59	2.03	
104 - JANITOR_Floor	Illuminance	Fc	6.10	7.2	5.6	1.09	1.29	
105 - OIL STORAGE_Floor	Illuminance	Fc	2.01	2.3	1.5	1.34	1.53	
106 - PARTS ROOM_Floor	Illuminance	Fc	2.03	2.4	1.5	1.35	1.60	

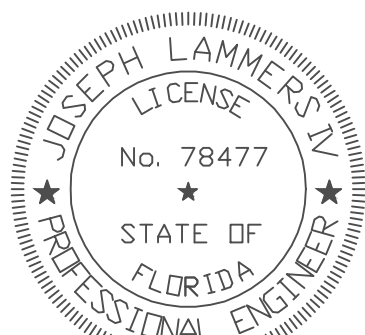


PHOTOMETRIC PLAN

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



SEE E-002 FOR LIGHT FIXTURE SCHEDULE



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Based on the information provided, all dimensions and luminaires locations shown represent approximate positions. The engineer and/or architect must determine the location of the fixture in relation to the building footprint.

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NOTES:		
1	PHOTOMETRIC STUDY	07/14/2022
No.	Revision/Issue	Date

LIGHTING DYNAMICS, INC.
7835 West Commercial Blvd.
Tamarac, FL 33351
(954) 944-0286
www.lightingdynamics.com

Project Name and Address
FPL SERVICE CENTER
BUILDING E - EXTERIORS
EM MODE
Columbia County, FL
PROJECT NO. P/PROJECTS/2022/APRIL
CLIENT OCI Engineering

Project Name and Address
FPL Service Center
Columbia County
Date: 07/14/2022
Scale: 3/16" = 1'-0"
Drawn by: MR

Project Name and Address
FPL SERVICE CENTER
BUILDING E - INTERIORS
EM MODE
Columbia County, FL
PROJECT NO. P/PROJECTS/2022/APRIL
CLIENT OCI Engineering

Project Name and Address
FPL Service Center
Columbia County
Date: 07/14/2022
Scale: 1/4" = 1'-0"
Drawn by: MR

PROJECT TEAM
PRINCIPAL IN CHARGE
DAVID LITHGOW
PROJECT MANAGER
DAVID LITHGOW
DESIGN TEAM
CEA

PROJECT NO.
814C632800
SHEET TITLE
PHOTOMETRIC PLAN

SHEET NUMBER
C-EL101

SYMBOL	MODEL/DESCRIPTION
	OAC-DT-1000-R 360 DEGREE 1000FT ² DT CEILING SENSOR
	OAC-DT-2000-R 360 DEGREE 2000FT ² DT CEILING SENSOR
	SP20-RD4 120/277VAC SINGLE RELAY SWITCHPACK FOR LIGHTING LOADS
	ONW-D-1001-MV-W 120/277VAC SINGLE RELAY DT WALL SWITCH SENSOR
	WBSD-010M-C1 0-10V SLIDE DIMMER WALLSTATION & MASTER OVERRIDE
	GMDS-W MOMENTARY SWITCH FOR OVERRIDING SENSOR
	GDS-1TLB-W GDS GREENGATE DIGITAL SWITCH

COLOR KEY

GREENGATE RELAY	_____
ROOM CONTROLLER RELAY	_____
DAYLIGHT ZONE	_____

Scene/Channel Summary			
Scene: EM MODE			
	Switched	Dimming	# Lums
A3E	Off	1.00	2
A3E	On	0.22	2
D3	Off	1.00	1
D3E	On	0.50	2
F3	Off	1.00	3
F3E	On	0.15	1
LB3	Off	1.00	8
LB3E	On	0.09	5
P3	Off	1.00	1



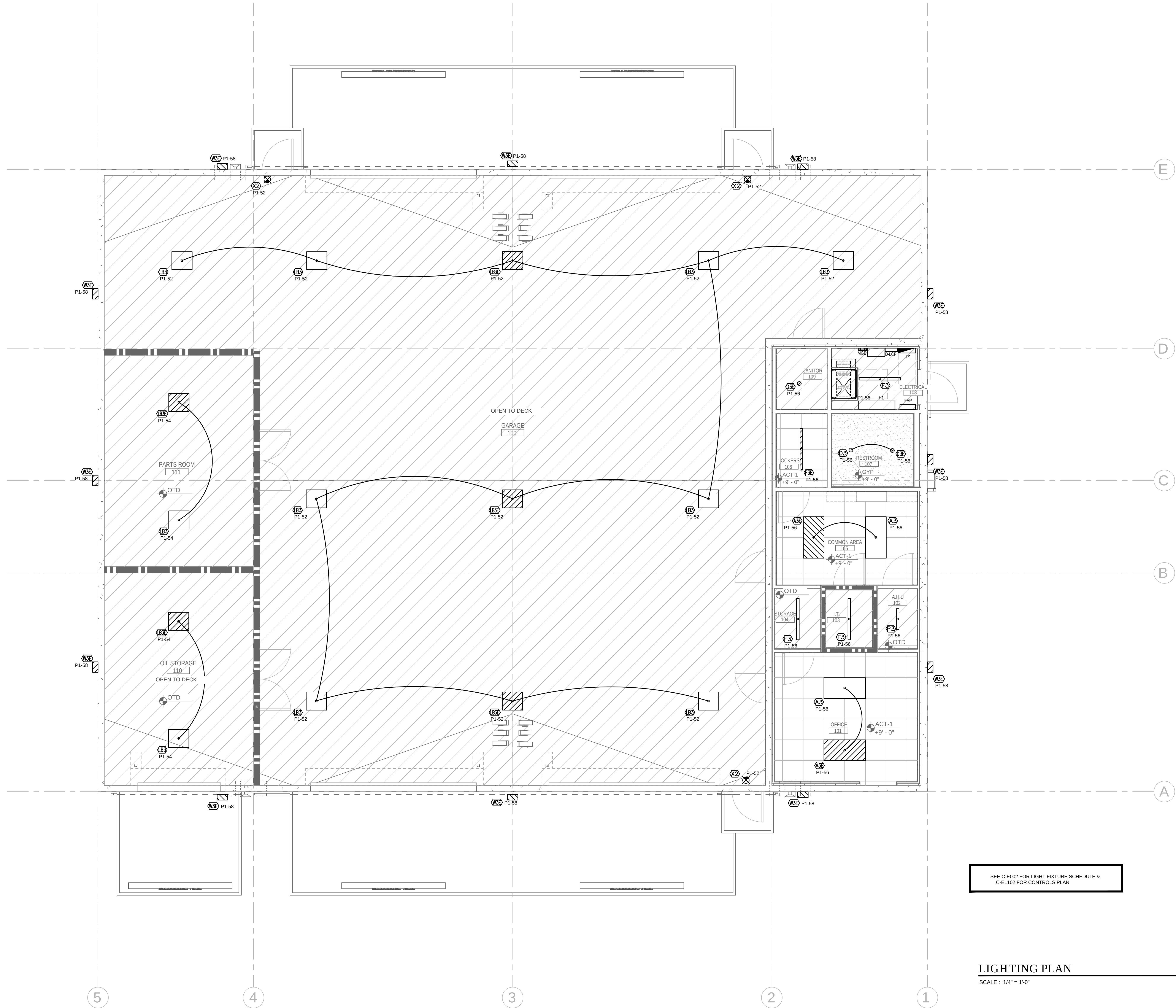
Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine applicability of the layout to existing or future field conditions. This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps and other variable field conditions.

1	CONTROLS LAYOUT	07/19/22
No.	Revision/Issue	Date

Project Name and Address	
FPL Service in Columbia Country Building E	
Controls Layout - Site	
FILE	P:\PROJECTS\2022\APR
CURRENT	Cardinal Engineering Associates, Inc

Project FPL Service in Columbia County Building A	Sheet LC
Date 07/19/2022	
Scale 3/16" = 1'	CREATED BY EC

CARDINAL ENGINEERING ASSOCIATES INC.-21-03-34-00 FPL COLUMBIA: Frl, 13 Feb 2026 - 12:05pm



GENERAL NOTES THIS DRAWING

1. LIGHT FIXTURES SHALL BE FED FROM PANEL 'P1' UNLESS OTHERWISE NOTED.
2. EXIT LIGHTS SHALL BE WIRED TO A CIRCUIT IN THE SAME SPACE AHEAD OF ANY SWITCHES AND OCCUPANCY SENSORS.
3. EXTERIOR BUILDING MOUNTED LIGHT FIXTURES ON THIS DRAWING SHALL BE CONTROLLED BY A TIMECLOCK IN CONJUNCTION WITH PHOTOCELL AND LIGHTING CONTACTOR 'E-LCC'.

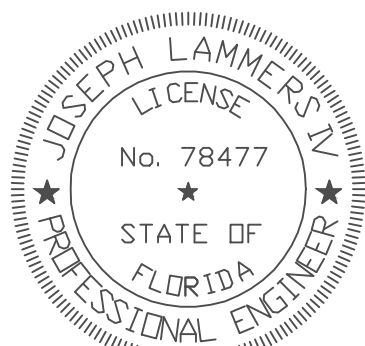
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02/15/2026

NO. REASON DATE

DAVID LITHGOW
DAVID LITHGOW
CEA

COLUMBIA STORM
PROCESSING & SERVICE
CENTER - BUILDING C -
2 BAY FLEET GARAGE
FLORIDA POWER & LIGHT

814C632800

LIGHTING
PLAN

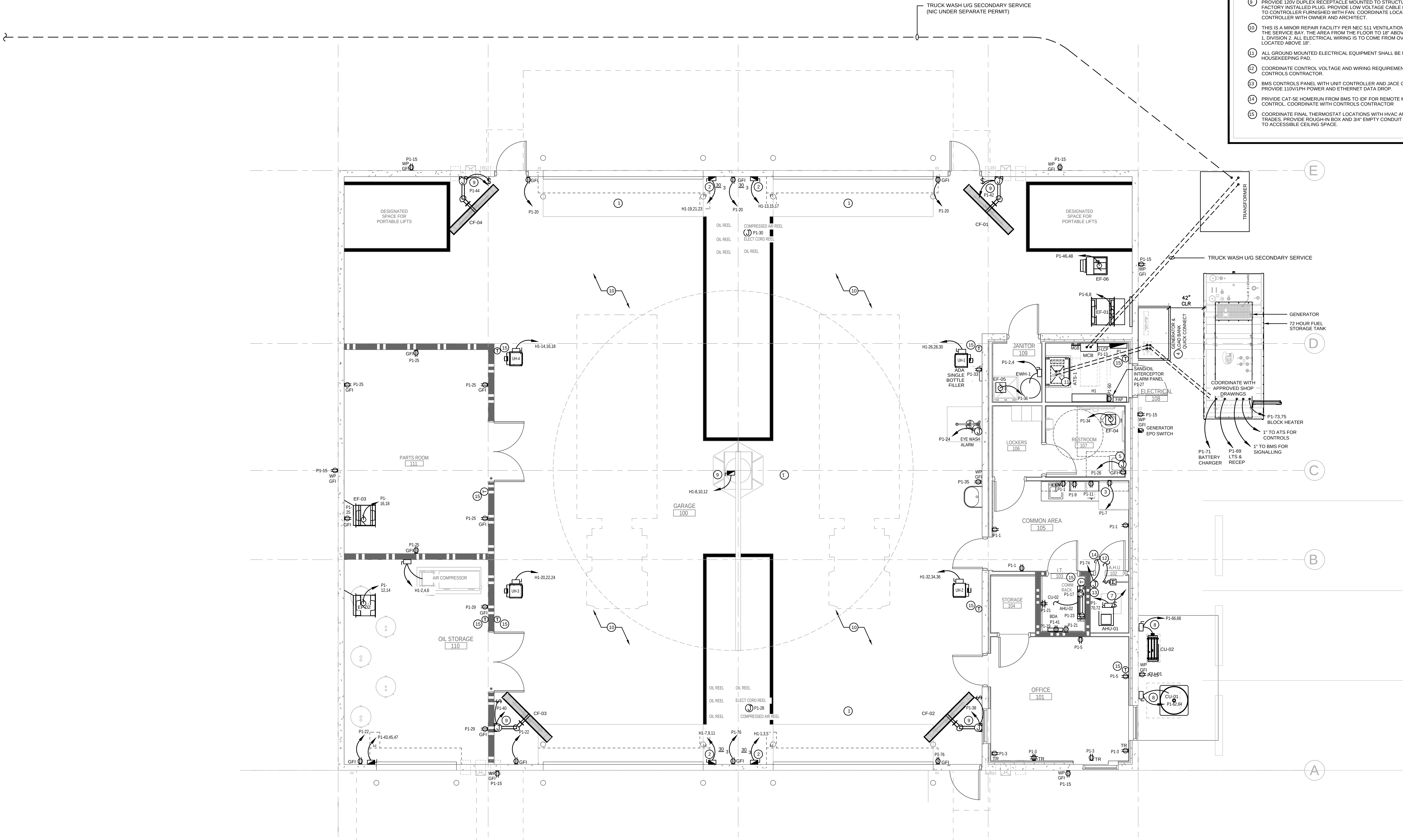
C-EL103

LIGHTING PLAN

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



CARDINAL ENGINEERING ASSOCIATES INC. 21-03-34-00 FPL COLUMBIA: FPL 13 Feb 2026 - 12:05pm



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

POWER NOTES:

- CONTROL WIRING FOR MECHANICAL EQUIPMENT AND SYSTEMS PLANS (E-T101) WILL BE PROVIDED BY THE DIVISION 23 CONTRACTOR UNLESS OTHERWISE NOTED.
- REFER TO SYSTEMS PLANS (E-T10) FOR COMMUNICATIONS DEVICES, WHERE 120V RECEPTACLE ARE IN CLOSE PROXIMITY TO COMMUNICATIONS DEVICES. SUCH DEVICES SHALL BE INSTALLED AT THE SAME HEIGHT AS RECEPTACLES WITH NO MORE THAN 2" OF SEPARATION BETWEEN THEM.
- THE AREA UP TO 18" A.F.F. WITHIN GARAGE BAY SPACE IS CLASSIFIED AS CLASS 1, DIVISION 2 LOCATION. ALL ELECTRICAL DEVICES, EQUIPMENT, WIRING AND CONDUITS IN THE GARAGE BAY SPACE SHALL BE INSTALLED ABOVE 18" A.F.F. TO CLEAR THE HAZARDOUS LOCATION.
- REFER TO C-E506 FOR GENERATOR EXHAUST DETAILS.

KEYED NOTES (X)

- ELECTRICAL DEVICES AND CONDUITS LOCATED ON THE TILT WALLS SHALL BE SURFACE MOUNTED, UON.
- PROVIDE A 30A/3P HEAVY DUTY FUSED DISCONNECT SWITCH FOR OVERHEAD ROLL-UP DOOR. FUSE SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATION. PROVIDE ADDITIONAL CONDUIT, WIRING AND CONNECTIONS FOR DOOR CONTROLS AS DIRECTED BY DOOR MANUFACTURER AND INSTALLER.
- PROVIDE GFCI TYPE BRANCH CIRCUIT BREAKER AT SOURCE PANELBOARD FOR RECEPTACLES INDICATED.
- ALL GROUND MOUNTED ELECTRICAL EQUIPMENT SHALL BE MOUNTED ON A 4" HOUSEKEEPING PAD.
- PROVIDE A 120V, 1 PHASE ELECTRICAL CONNECTION FOR AUTOMATIC MOTION SENSOR TRANSFORMER. COORDINATE ROUGH-IN REQUIREMENTS AND EXACT TRANSFORMER LOCATION WITH THE PLUMBING CONTRACTOR.
- FULLY CONNECT JIB CRANE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS INCLUDING CONTROLS.
- CONNECT UV-C EMITTER DEVICE IN AIR HANDLER. PROVIDE DOOR INTERLOCK SWITCH SO THAT SYSTEM AUTOMATICALLY TURNS OFF WHEN UNIT SERVICE DOOR IS OPEN.
- INSTALL DISCONNECT SWITCH FURNISHED BY THE DIVISION 23 CONTRACTOR WITH LOAD SIDE CONNECTIONS AND HOME RUN AS INDICATED. COORDINATE ALL WIRING AND INSTALLATION REQUIREMENTS WITH THE EQUIPMENT MANUFACTURER.
- PROVIDE 120V DUPLEX RECEPTACLE MOUNTED TO STRUCTURE FOR FAN FACTORY INSTALLED PLUG. PROVIDE LOW VOLTAGE CABLE IN 3/4" CONDUIT TO CONTROLLER FURNISHED WITH FAN. COORDINATE LOCATION OF CONTROLLER WITH OWNER AND ARCHITECT.
- THIS IS A MINOR REPAIR FACILITY PER NEC §11 VENTILATION IS PROVIDED BY THE SERVICE BAY. THE AREA FROM THE FLOOR TO 18" ABOVE FLOOR IS CLASS 1, DIVISION 2. ALL ELECTRICAL WIRING IS TO COME FROM OVERHEAD AND BE LOCATED ABOVE JIB.
- ALL GROUND MOUNTED ELECTRICAL EQUIPMENT SHALL BE MOUNTED ON A 4" HOUSEKEEPING PAD.
- COORDINATE CONTROL VOLTAGE AND WIRING REQUIREMENTS WITH CONTROLS CONTRACTOR.
- BMS CONTROLS PANEL WITH UNIT CONTROLLER AND JACE GATEWAY. PROVIDE 110V/1PH POWER AND ETHERNET DATA DROP.
- PROVIDE CAT-5E HOMERUN FROM BMS TO IDF FOR REMOTE MONITORING AND CONTROL. COORDINATE WITH CONTROLS CONTRACTOR.
- COORDINATE FINAL THERMOSTAT LOCATIONS WITH HVAC AND CONTROLS TRADES. PROVIDE ROUGH-IN BOX AND 3/4" EMPTY CONDUIT WITH PULL STRING TO ACCESSIBLE CEILING SPACE.

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ISSUE FOR

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ISSUE DATE

02/15/2026

REVISIONS

NO.	REASON	DATE
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DESIGNED BY

DAVID LITHGOW

PROJECT MANAGER

DAVID LITHGOW

DESIGN TEAM

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PROJECT NO.

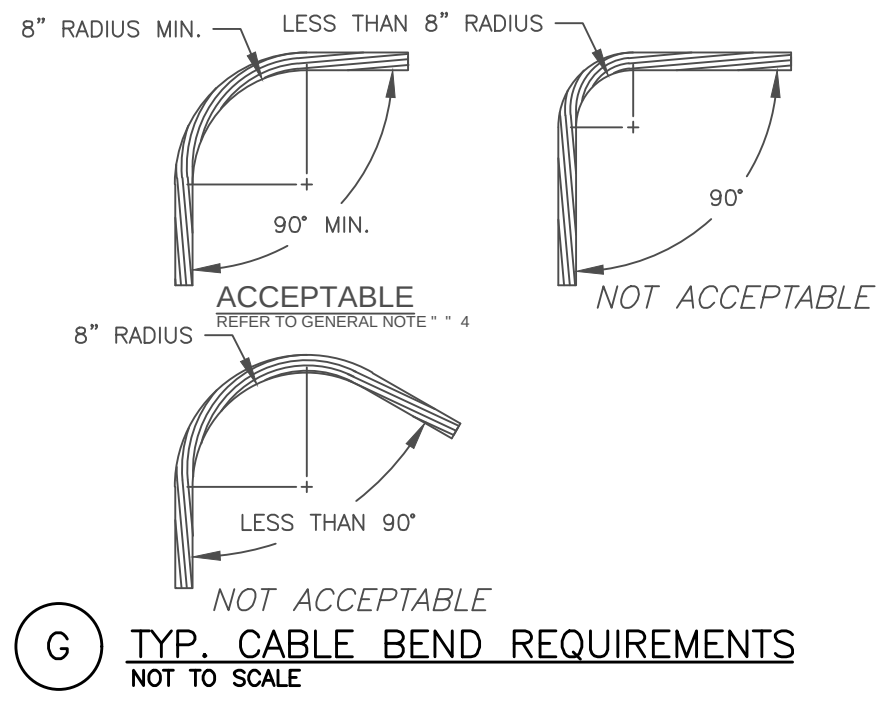
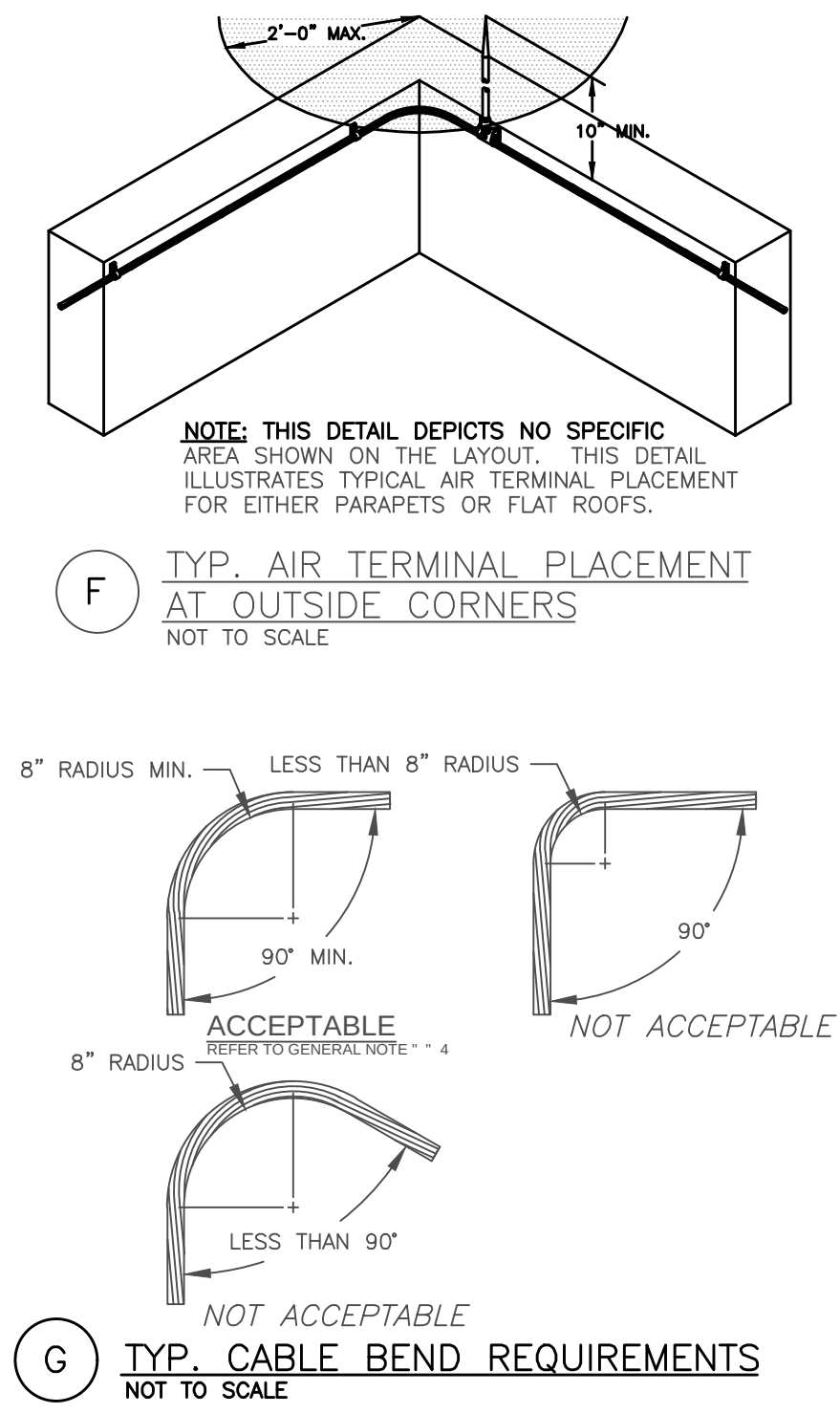
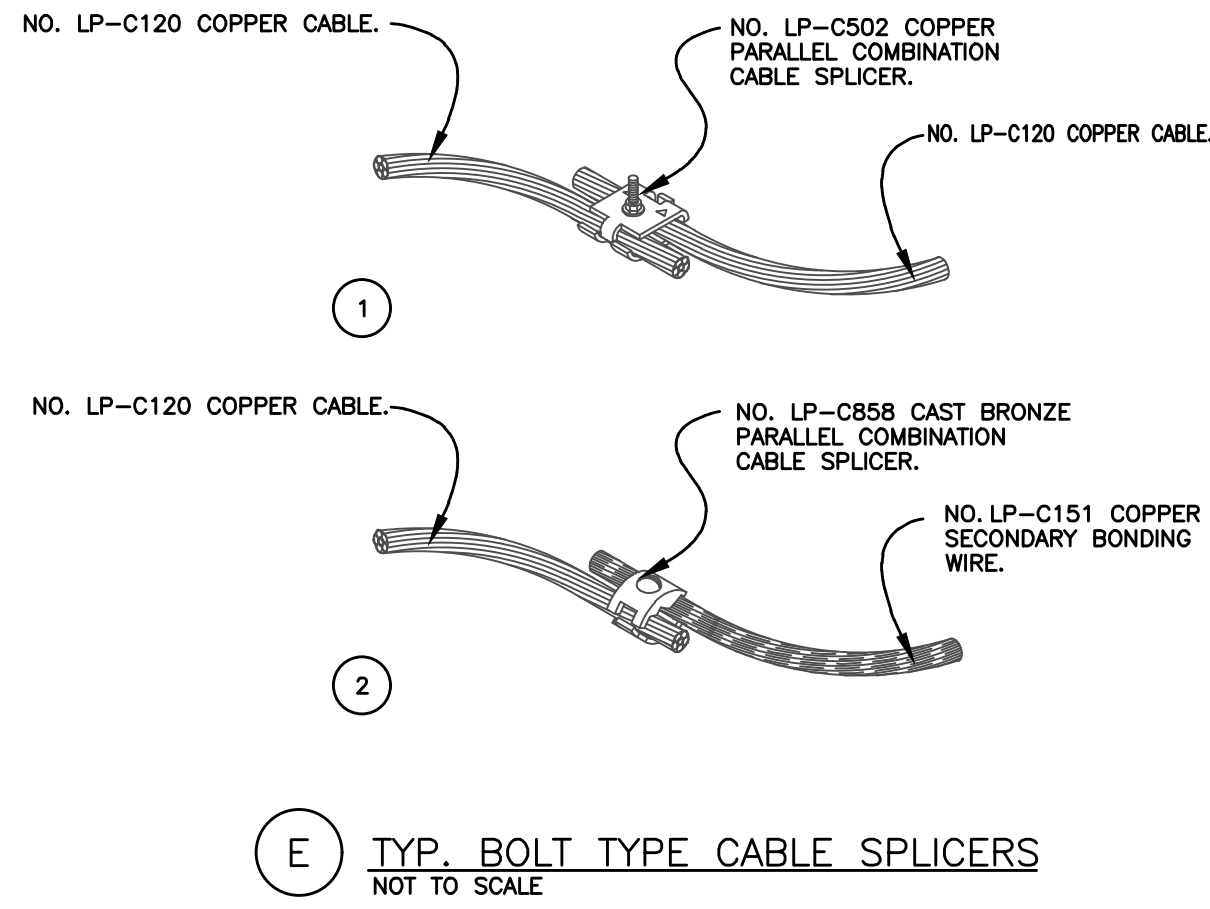
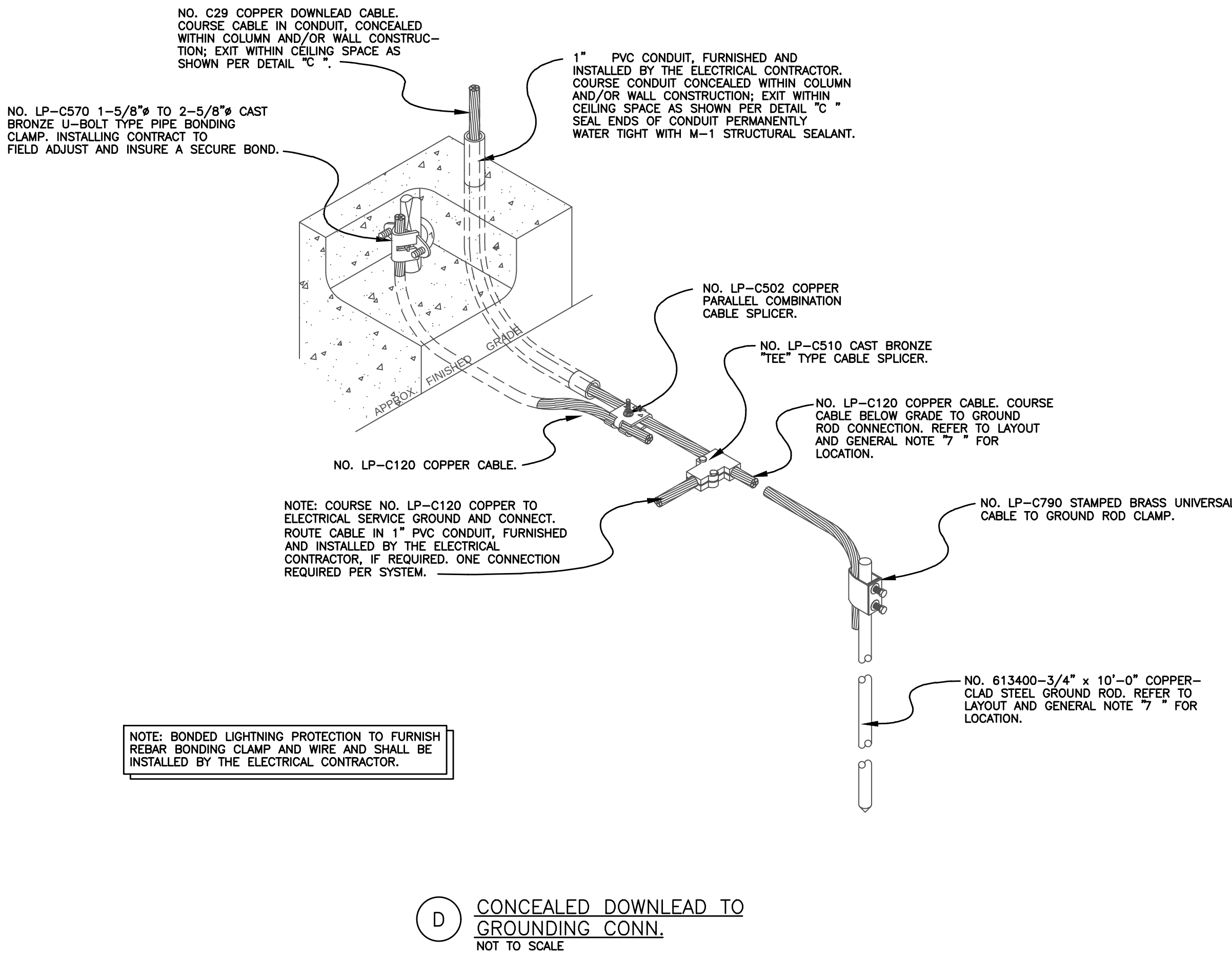
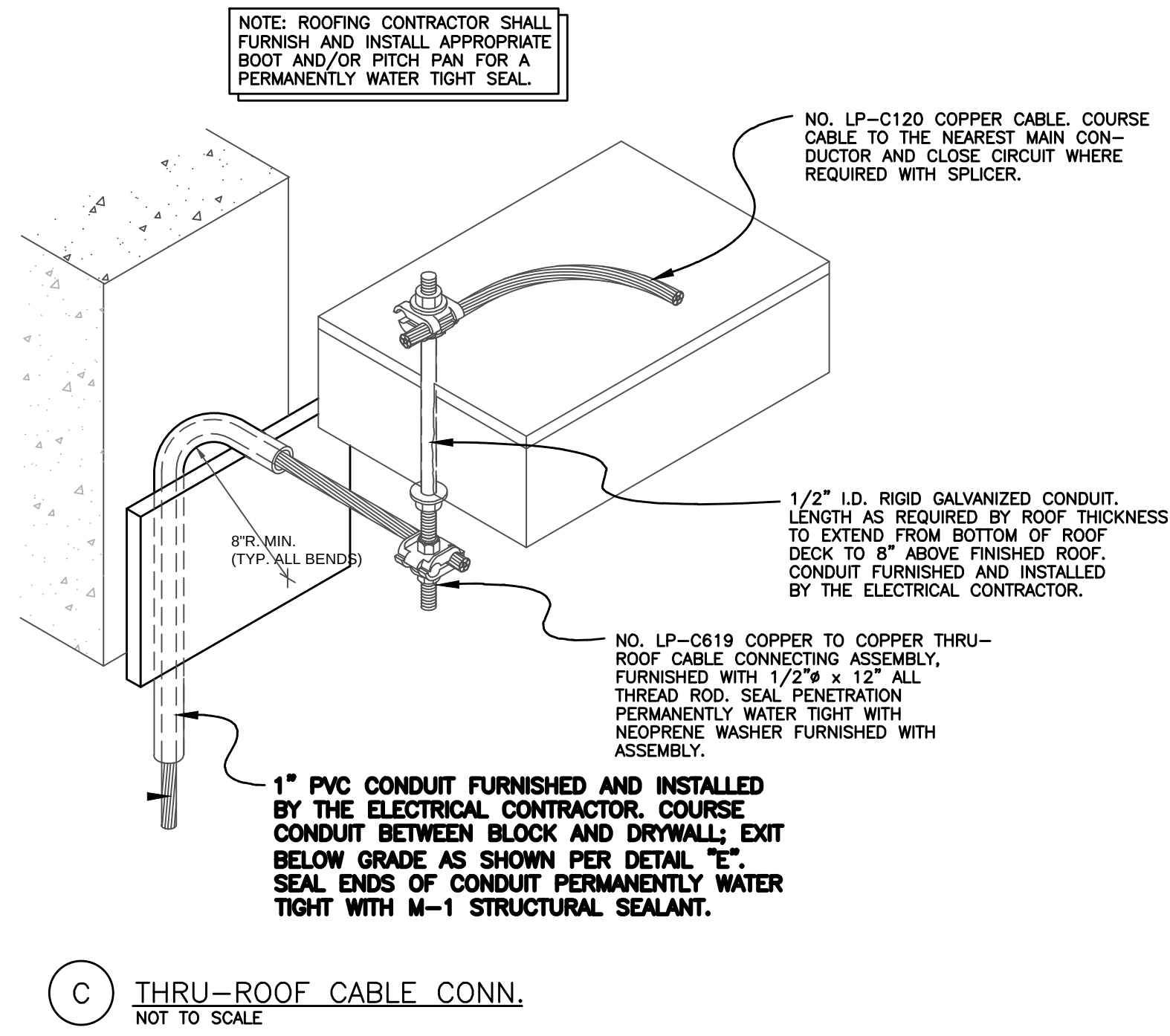
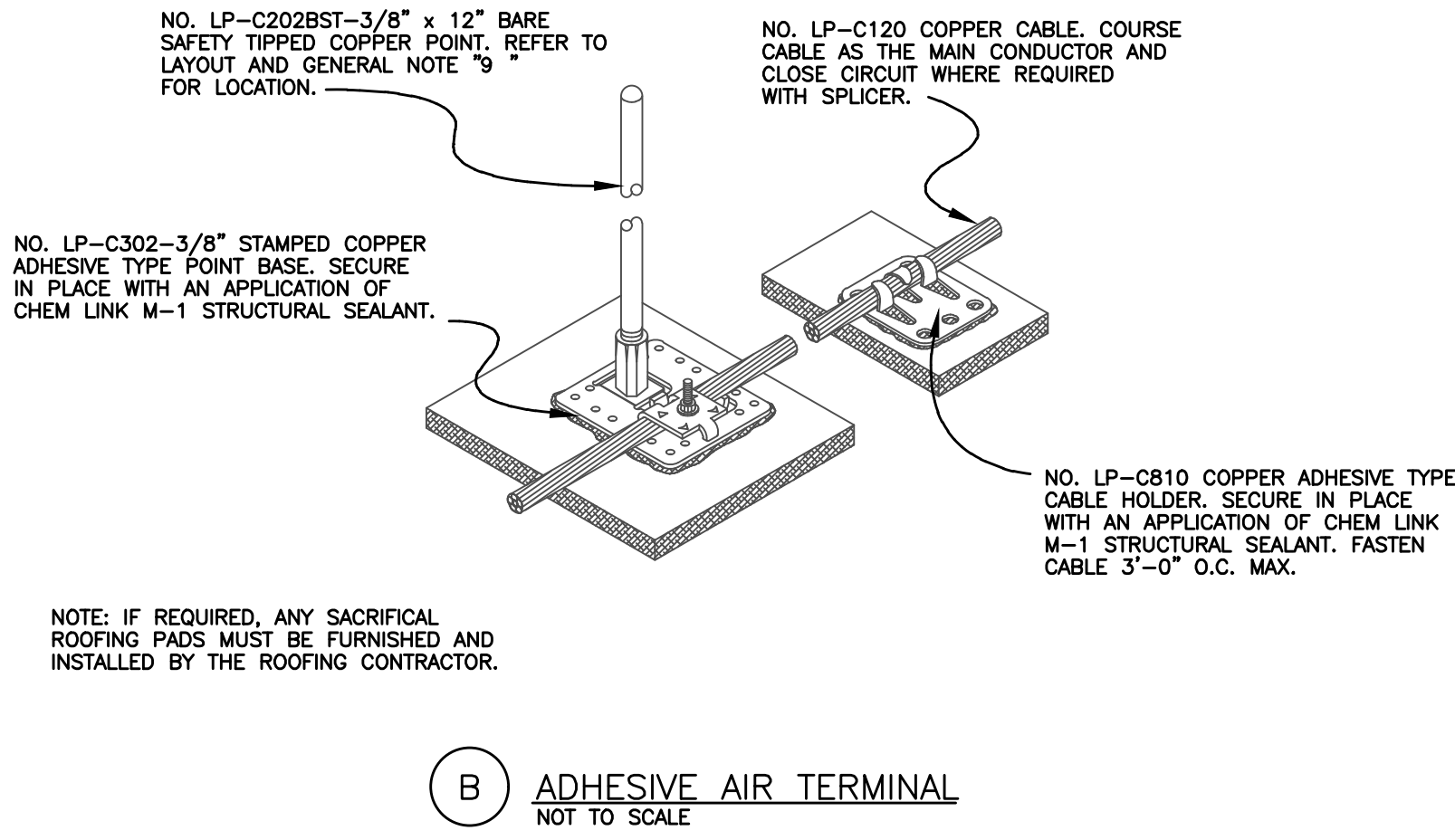
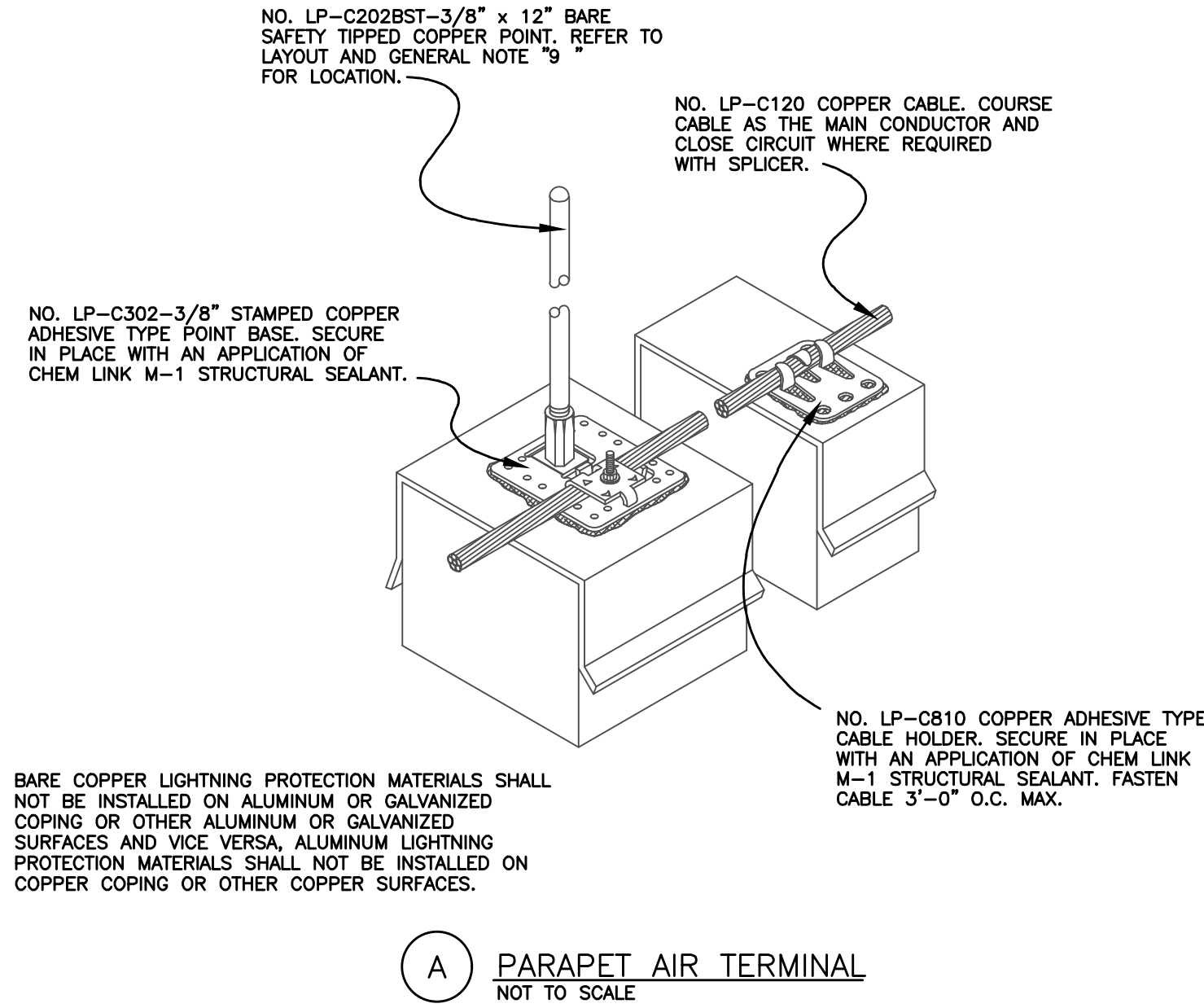
814C632800

SHEET TITLE

POWER PLAN

SHEET NUMBER

C-EP101



LEGEND			
●	AIR TERMINAL LOCATION		
○	THRU-ROOF LOCATION		
⌋	REBAR BOND PROVIDED BY BONDED LIGHTNING PROTECTION AND INSTALLED BY THE ELECTRICAL CONTRACTOR.		
⌋	GROUND ROD LOCATION		
---	NO. C29 COPPER CABLE, U.L. LABELED, 29.5T, 17 GA., 192 LBS./1,000 FT., 59,450 CM. (#2 AWG).		
---	NO. C29 COPPER CABLE, U.L. LABELED, SAME SPECS AS ABOVE, COURSE CABLE CONCEALED FROM VIEW SHOWN.		
△	ROOF HATCH		
A.F.F.	ABOVE FIRST FLOOR		
GENERAL INSTALLATION NOTES			
1	CURRENT U.L. LISTED TVSS/SPD ARE REQUIRED ON ALL SERVICE ENTRANCES AND SHALL BE FURNISHED AND INSTALLED BY OTHERS.		
2	TELEPHONE AND/OR ELECTRICAL SERVICE ENTRANCE GROUNDS SHALL BE INTERCONNECTED TO ONE LIGHTNING PROTECTION GROUND OR WATER PIPE.		
3	METAL BODIES OF INDUCTANCE LOCATED ABOUT THE ROOF SUCH AS: METAL FLASHING, GRAVEL STOPS, ROOF DRAINS, SOIL PIPE VENTS, INSULATION VENTS, LOUVERS AND DOOR FRAMES SITUATED WITHIN 6'-0" OF A LIGHTNING CONDUCTOR OR BONDED METAL BODY SHALL BE INTERCONNECTED TO THE LIGHTNING CONDUCTOR SYSTEM.		
4	NO BEND OF A CONDUCTOR SHALL FORM A FINAL INCLUDED ANGLE OF LESS THAN 90° NOR SHALL HAVE A RADIUS OF BEND OF LESS THAN 8".		
5	CONDUCTORS SHALL INTERCONNECT ALL AIR TERMINALS AND SHALL FORM A TWO-WAY PATH FROM EACH AIR TERMINAL HORIZONTALLY OR DOWNWARD TO CONNECTIONS WITH GROUND TERMINALS.		
6	ALL LIGHTNING PROTECTION CONDUCTORS SHALL BE FASTENED NOT MORE THAN 3'-0" MAXIMUM SPACING.		
7	GROUND RODS SHALL BE DRIVEN TO A MINIMUM DEPTH OF 10'-0" BELOW GRADE AND 2'-0" AWAY FROM FOUNDATION WALL.		
8	CONNECTIONS TO GROUND LOOP CONDUCTOR SHALL BE MADE AT A POINT NOT LESS THAN 18" BELOW GRADE AND 2'-0" AWAY FROM FOUNDATION WALL.		
9	AIR TERMINALS SHALL BE PLACED AT ALL UNPROTECTED OUTSIDE CORNERS AND LOCATED INTERMEDIATELY ON 20'-0" MAXIMUM SPACING AROUND THE ROOF PERIMETER OR RIDGE AND WITHIN 2'-0" OF OUTSIDE EDGE.		
10	FOR SAKE OF CLARITY, WE HAVE NOT LABELED EACH INDIVIDUAL ITEM OF LIGHTNING PROTECTION MATERIALS ON THE ROOF PLAN. WE HAVE SHOWN INSTALLATION DETAILS AND HAVE CALLED OUT EACH OF THESE DETAILS ON THE ROOF PLAN ONLY AT RANDOM LOCATIONS.		
11	BOND ALL METALLIC PIPES INCLUDING WATER, FIRE, GAS, SEWER, STORM, ETC. WHICH ENTER THE STRUCTURE TO THE NEAREST DOWNLEAD, GROUND ROD OR GROUND LOOP.		
12	BARE COPPER LIGHTNING PROTECTION MATERIALS SHALL NOT BE INSTALLED ON ALUMINUM ROOF OR SIDING OR OTHER ALUMINUM SURFACES AND VICE VERSA, ALUMINUM LIGHTNING PROTECTION MATERIALS SHALL NOT BE INSTALLED ON COPPER ROOFING OR COPPER SIDING OR OTHER COPPER SURFACES.		
13	THE LIGHTNING PROTECTION SYSTEM SHALL BE INSTALLED IN A NEAT AND INCONSPICUOUS MANNER SO THAT ALL COMPONENTS WILL BLEND IN WITH THE APPEARANCE OF THE BUILDING.		
14	ACTUAL JOB-SITE CONDITIONS MAY NECESSITATE SLIGHT ALTERATIONS IN AIR TERMINAL AND GROUND ROD LOCATIONS.		
15	MIDROOF AIR TERMINALS SHALL BE PLACED ON 50'-0" MAXIMUM SPACING.		
16	IF REQUIRED, ANY SACRIFICIAL ROOFING PADS, SHALL BE FURNISHED AND INSTALLED BY THE ROOFING CONTRACTOR.		
17	ALL ADHESIVE TYPE FITTINGS SHALL BE SET IN PLACE WITH AN APPLICATION OF CHEM LINK M-1 STRUCTURAL SEALANT ON NON-BALUSTED ROOFS.		
18	SEAL ENDS OF CONDUIT MOISTURE TIGHT WITH DUCT SEAL OR LEAD WEDGE.		
19	ALL CONDUIT, CONDUIT FASTENERS AND MISCELLANEOUS ACCESSORIES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.		
20	ALL REINFORCING, STRUCTURAL, FRAMING AND MISCELLANEOUS STEEL SHALL BE MADE ELECTRICALLY CONTINUOUS THROUGHOUT CONSTRUCTION BY WELDING, CLIPPING, BOLTING OR OTHER APPROVED METHODS.		
21	THE DESIGN LAYOUT AND INSTALLATION DETAILS SHOWN HEREON SHALL MEET THE REQUIREMENTS OF UNDERWRITERS' LABORATORIES STANDARD 96A FOR MASTER LABELED OR LETTER OF FINDINGS LIGHTNING PROTECTION SYSTEMS WHEN REQUIRED BY SPECIFICATION.		
22	THE DESIGN LAYOUT AND INSTALLATION DETAILS SHOWN HEREON SHALL MEET THE REQUIREMENTS OF NATIONAL FIRE PROTECTION ASSOCIATION STANDARD #780, CURRENT EDITION WHEN REQUIRED BY SPECIFICATION.		
23	THE LIGHTNING PROTECTION INSTALLATION SHALL COMPLY IN ALL RESPECTS TO LIGHTNING PROTECTION INSTITUTE STANDARD 175. THE INSTALLATION SHALL BE MADE BY OR UNDER THE SUPERVISION OF AN L.P.I. CERTIFIED MASTER INSTALLER, WHEN REQUIRED BY SPECIFICATION.		
NOTE: THE DESIGN LAYOUT AND INSTALLATION PROCEDURES SHOWN FOR THE BUILDING LIGHTNING PROTECTION SYSTEM AND THE COMPONENT PARTS SHOWN HEREON ARE ILLUSTRATED AS A STANDARD OF QUALITY BY BONDED LIGHTNING PROTECTION 2080 W. INDIANTOWN ROAD, JUPITER, FLORIDA 33458. PHONE:561-746-4336 FAX:561-747-8233			
EVALUATION:			
PROJECT: 2 BAY FLEET GARAGE BUILDING E			
FLORIDA			
INSTALLER & DESIGNER: BONDED LIGHTNING PROTECTION SYSTEMS, INC.			
LIGHTNING PROTECTION			
INSTALLING MEMBER OF THE LIGHTNING PROTECTION INSTITUTE			
PHONE: 561-746-4336 FAX: 561-747-8233			
2080 W. INDIANTOWN ROAD, SUITE 100 JUPITER, FLORIDA 33458 333 N. FALKENBURG ROAD UNIT D-401 TAMPA, FLORIDA 33619 1505 CAPITAL CIRCLE NW, UNIT B TALLAHASSEE, FLORIDA 32303			
JOB NO. MANUFACTURER EAST COAST LIGHTNING EQUIPMENT L.P.I. MEMBER - U.L.P.A. PHONE: 1-800-680-3462 E-MAIL: info@ecle.biz 24 LANSON DRIVE WINSTED, CT. 06098			
BLD22032			
DWN. BY RES			
CHK. BY PCD			
DATE: 6-20-22			
SCALE AS SHOWN			
SHEET NO. 1			
-OF- 1			
NO.	DATE:	DESCRIPTION	BY
REVISIONS			

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PROJECT TEAM

PRINCIPAL IN CHARGE
DAVID LITHGOW

PROJECT MANAGER
DAVID LITHGOW

DESIGN TEAM
CEA

PROJECT NO.

814C632800

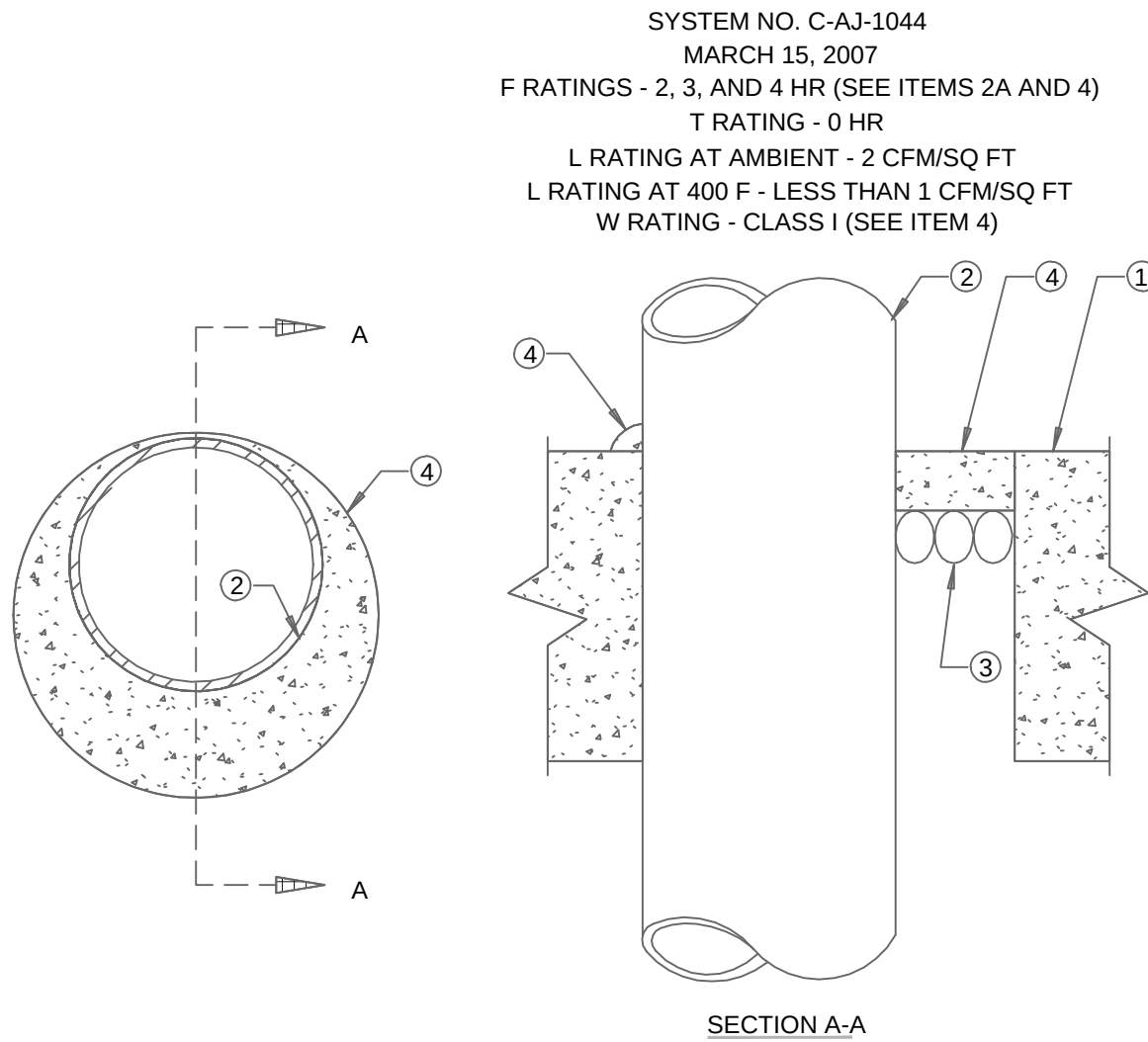
SHEET TITLE

LIGHTNING PROTECTION DETAILS

SHEET NUMBER

C-E501





1. FLOOR OR WALL ASSEMBLY - LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M3) CONCRETE. EXCEPT AS NOTED IN TABLE UNDER ITEM 4, MIN THICKNESS OF SOLID CONCRETE FLOOR OR WALL ASSEMBLY IS 4-1/2 IN. (114 MM). FLOOR MAY ALSO BE CONSTRUCTED OF ANY MIN 6 IN. (152 MM) THICK UL CLASSIFIED HOLLOW CORE PRECAST CONCRETE UNITS*. WHEN FLOOR IS CONSTRUCTED OF HOLLOW CORE PRECAST CONCRETE UNITS, PACKING MATERIAL (ITEM 3) AND CAULK FILL MATERIAL (ITEM 4) TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF FLOOR, FLUSH WITH FLOOR SURFACE. WALL ASSEMBLY MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING IS IN SOLID LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE, FLOOR IS 32 IN. (813 MM), MAX DIAM OF OPENING IN FLOOR CONSTRUCTED OF HOLLOW-CORE PRECAST CONCRETE UNITS IS 7 IN. (178 MM).

SEE CONCRETE BLOCKS (CAZT) AND PRECAST CONCRETE UNITS (CFTV) CATEGORIES IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

1A. STEEL SLEEVE (OPTIONAL, NOT SHOWN) - NOM 16 IN. (406 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY. SLEEVE MAY EXTEND A MAX OF 2 IN. (51 MM) ABOVE TOP OF FLOOR OR BEYOND EITHER SURFACE OF WALL. AS AN ALTERNATE NOM 16 IN. (406 MM) DIAM (OR SMALLER) MIN 0.028 (0.71 MM) THICK GALVANIZED SHEET STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY FLUSH WITH FLOOR OR WALL SURFACES.

2. THROUGH PENETRANTS - ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. MAX ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND EDGE OF THROUGH OPENING OR SLEEVE IS DEPENDENT ON THE PARAMETERS SHOWN IN ITEM 4. MIN ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING IS 0 IN. (0 MM) (POINT CONTACT). MAX ANNULAR SPACE TO BE AS SHOWN IN THE TABLE IN ITEM 4. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

- A. STEEL PIPE - NOM 30 IN. (762 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. IRON PIPE - NOM 30 IN. (762 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
C. CONDUIT - NOM 6 IN. (152 MM) DIAM (OR SMALLER) RIGID STEEL CONDUIT.
D. CONDUIT - NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.
E. COPPER TUBING - NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBE.
F. COPPER PIPE - NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

3. PACKING MATERIAL - POLYETHYLENE BACKER ROD OR NOM 1 IN. (25 MM) THICKNESS OF TIGHTLY-PACKED MINERAL WOOL BATT OR GLASS FIBER INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4).

3A. FORMING MATERIAL - AS AN ALTERNATE TO THE PACKING MATERIAL IN ITEM 3, NOM 4 IN. (102 MM) WIDE STRIPS OF MIN 1/2 IN (13 MM) THICK COMPRESSIBLE MAT TO BE STACKED TO A THICKNESS GREATER THAN THE WIDTH OF THE ANNULAR SPACE AND COMPRESSION-FITTED, EDGE-FIRST, TO FILL THE ANNULAR SPACE TO A MIN 4 IN. (102 MM) DEPTH. AS AN OPTION, THE STRIPS OF MIN 1/2 IN. (13MM) THICK COMPRESSIBLE MAT MAY BE FOLDED IN HALF, LENGTHWISE, AND STACKED TO A THICKNESS GREATER THAN THE WIDTH OF THE ANNULAR SPACE AND COMPRESSION-FITTED, EDGE-FIRST, TO FILL THE ANNULAR SPACE TO A MIN 2 IN. (51 MM) DEPTH. TOP OF FORMING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS NECESSARY TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL.

4. FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT - APPLIED TO FILL THE ANNULAR SPACE FLUSH WITH TOP SURFACE OF FLOOR. IN WALL ASSEMBLIES, REQUIRED CAULK THICKNESS TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL, FLUSH WITH WALL SURFACE. AT POINT CONTACT LOCATION BETWEEN PENETRANT AND SLEEVE OR BETWEEN PENETRANT AND CONCRETE, A MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK SHALL BE APPLIED AT TOP SURFACE OF FLOOR AND AT BOTH SURFACES OF WALL. THE HOURLY F RATINGS AND THE MIN REQUIRED CAULK THICKNESSES ARE DEPENDENT UPON A NUMBER OF PARAMETERS, AS SHOWN IN THE FOLLOWING TABLE.

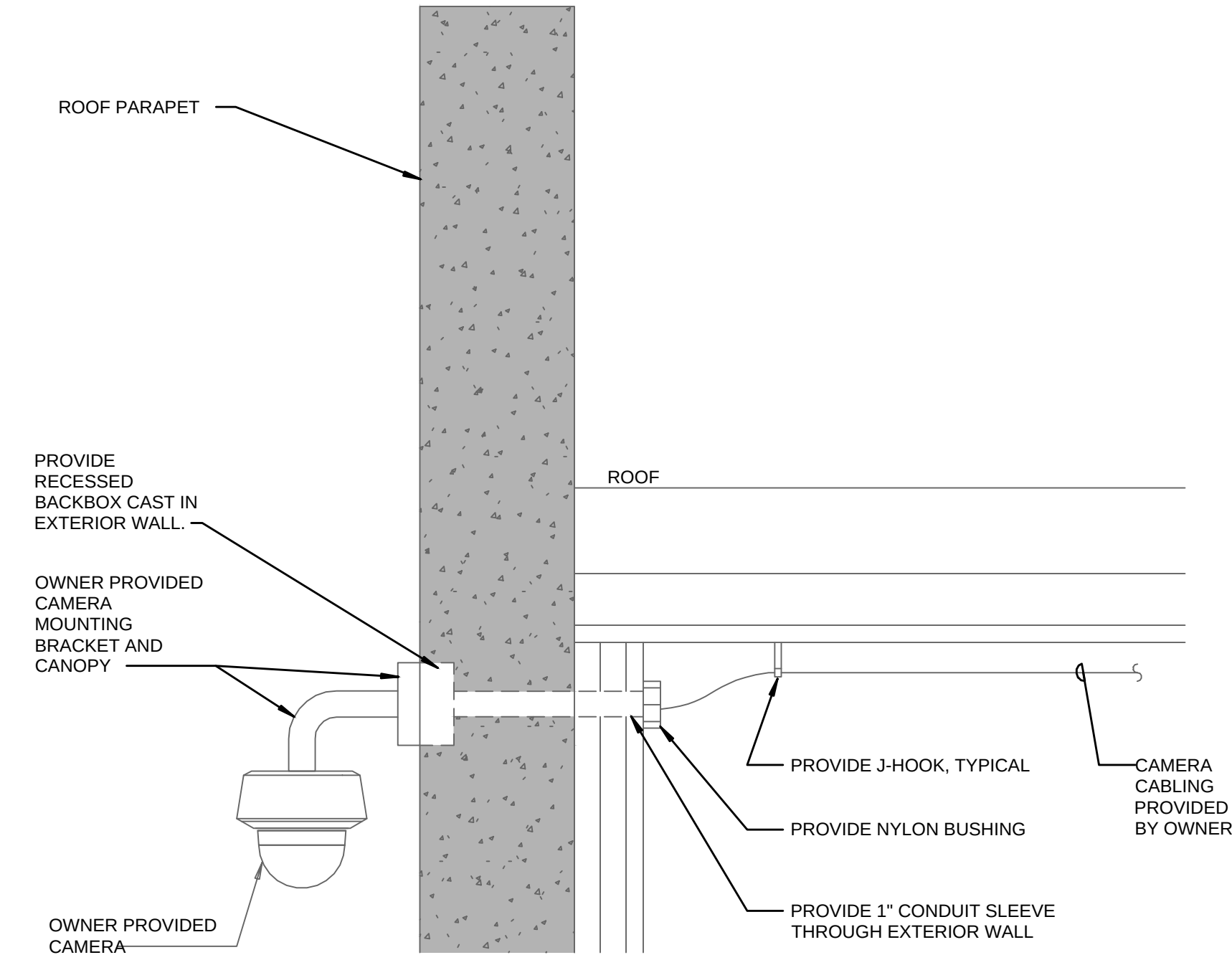
MIN FLOOR OR WALL THKNS IN. (MM)	NOM PIPE TUBE OR CONDUIT DIAM IN. (MM)	MAX ANNULAR SPACE IN. (MM)	MIN CAULK THKNS IN. (MM)	F RATING HR
2-1/2 (64)	1/2-12 (13-305)	1-3/8 (35)	1/2 (13)	2
2-1/2 (64)	1/2-12 (13-305)	3-1/4 (83)	1 (25)	2
4-1/2 (114)	1/2-6 (13-152)	1-3/8 (35)	1/4 (6) (a)	2
4-1/2 (114)	1/2-12 (13-305)	1-1/4 (32)	1/2 (13)	3
4-1/2 (114)	1/2-20 (13-508)	2 (51)	1 (25)	3
4-1/2 (114)	1/2-20 (13-508)	2 (51)	1 (25)	3
4-1/2 (114)	1/2-12 (13-305)	3-1/4 (83)	1 (25)	3
4-1/2 (114)	22-30 (558-762)	2 (51)	2 (51)	3
5-1/2 (140)	1/2-6 (13-152)	1-3/8 (35)	1 (25) (b)	4

(A) MIN 2 IN. (51 MM) THICKNESS OF MINERAL WOOL BATT INSULATION REQUIRED IN ANNULAR SPACE.
(B) MIN 1 IN. (25 MM) THICKNESS OF MINERAL WOOL BATT INSULATION REQUIRED IN ANNULAR SPACE ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. MIN 1 IN. (25 MM) THICKNESS OF CAULK TO BE INSTALLED FLUSH WITH EACH SURFACE OF FLOOR OR WALL ASSEMBLY.

3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT.
(NOTE: W RATING APPLIES ONLY WHEN FB-3000 WT SEALANT IS USED.)

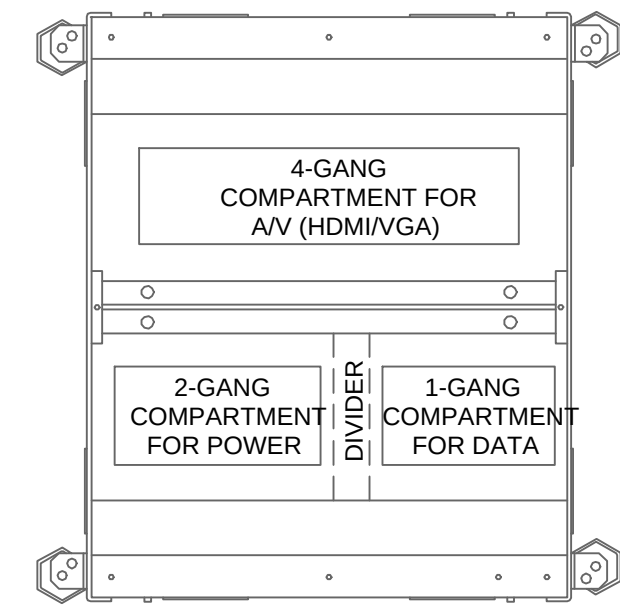
4 UL C-AJ-1044 FIRESTOP WALL PENETRATION DETAIL

C-E503 NTS

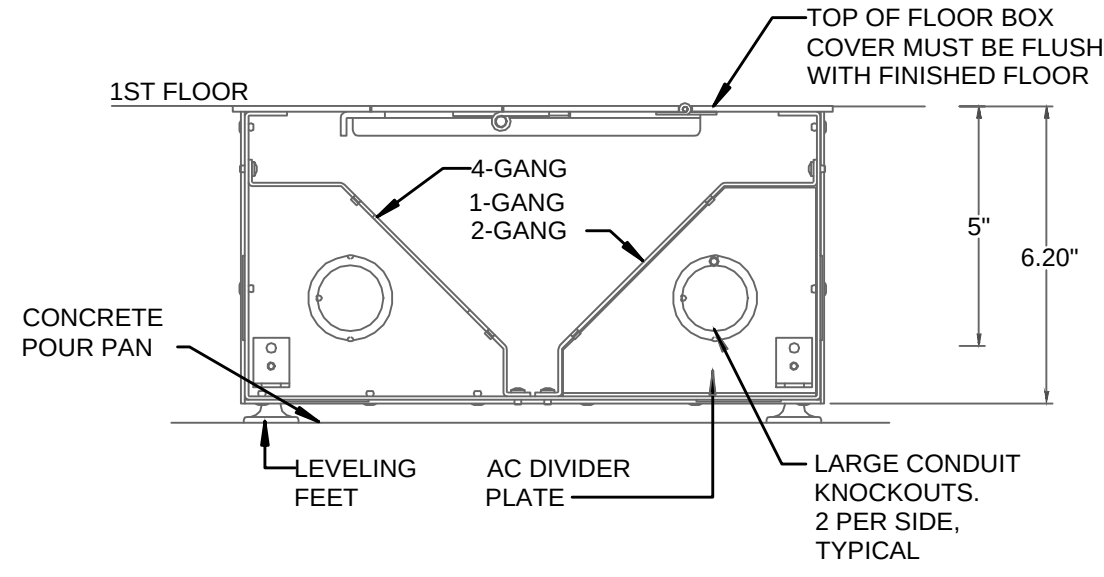


1 EXTERIOR CAMERA MOUNTING DETAIL

C-E503 NTS



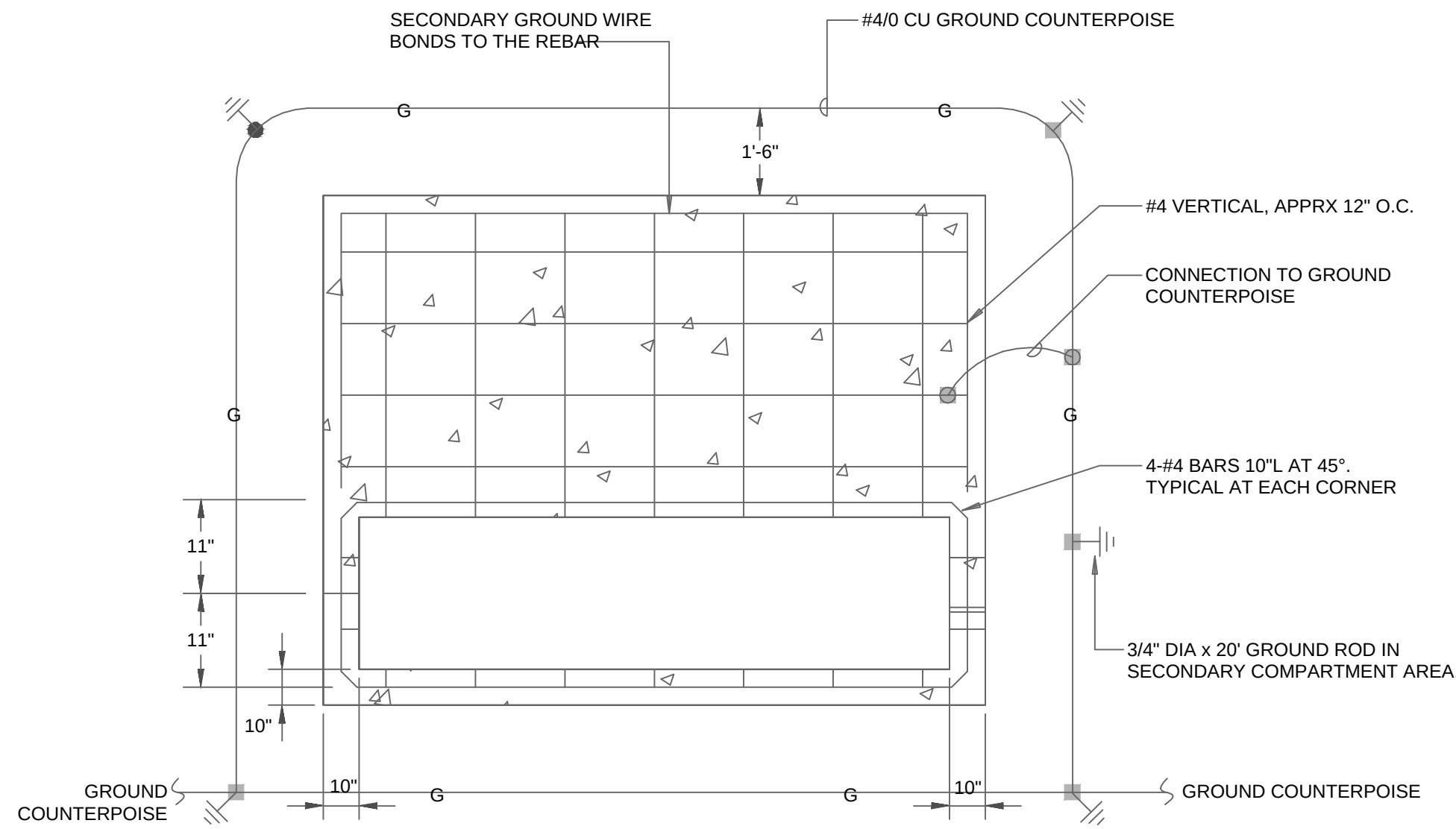
TOP VIEW



FRONT VIEW

2 FOUR COMPARTMENT FLOOR BOX DETAIL

C-E503 NTS



3 TYPICAL TRANSFORMER PAD DETAIL

C-E503 NTS

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REV ISONS

NO.	REASON	DATE

PROJECT TEAM

PRINCIPAL IN CHARGE

DAVID LITHGOW

PROJECT MANAGER

DAVID LITHGOW

DESIGN TEAM

CEA

PROJECT NAME

COLUMBIA STORM PROCESSING & SERVICE CENTER - BUILDING C - 2 BAY FLEET GARAGE
FLORIDA POWER & LIGHT

PROJECT NO.

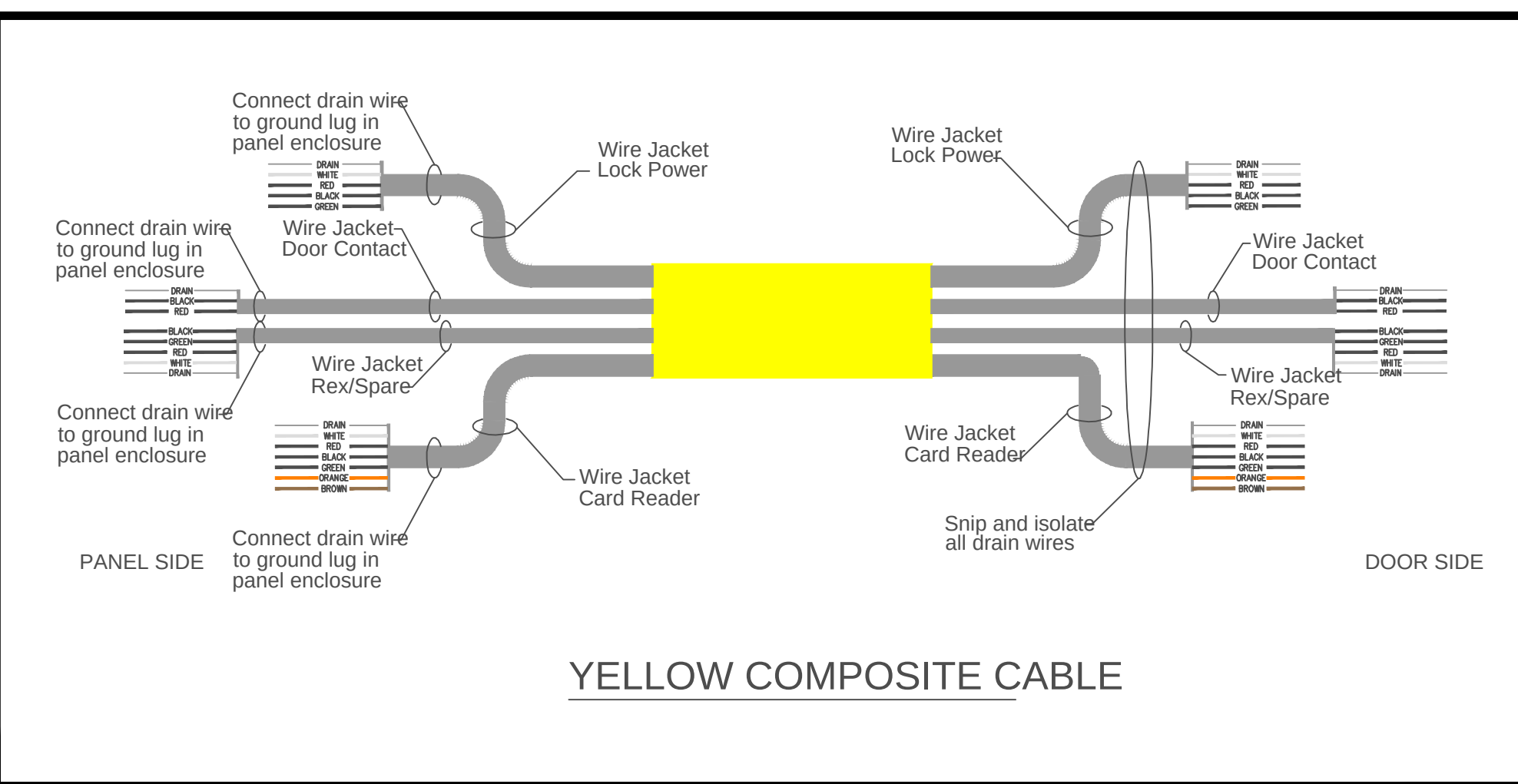
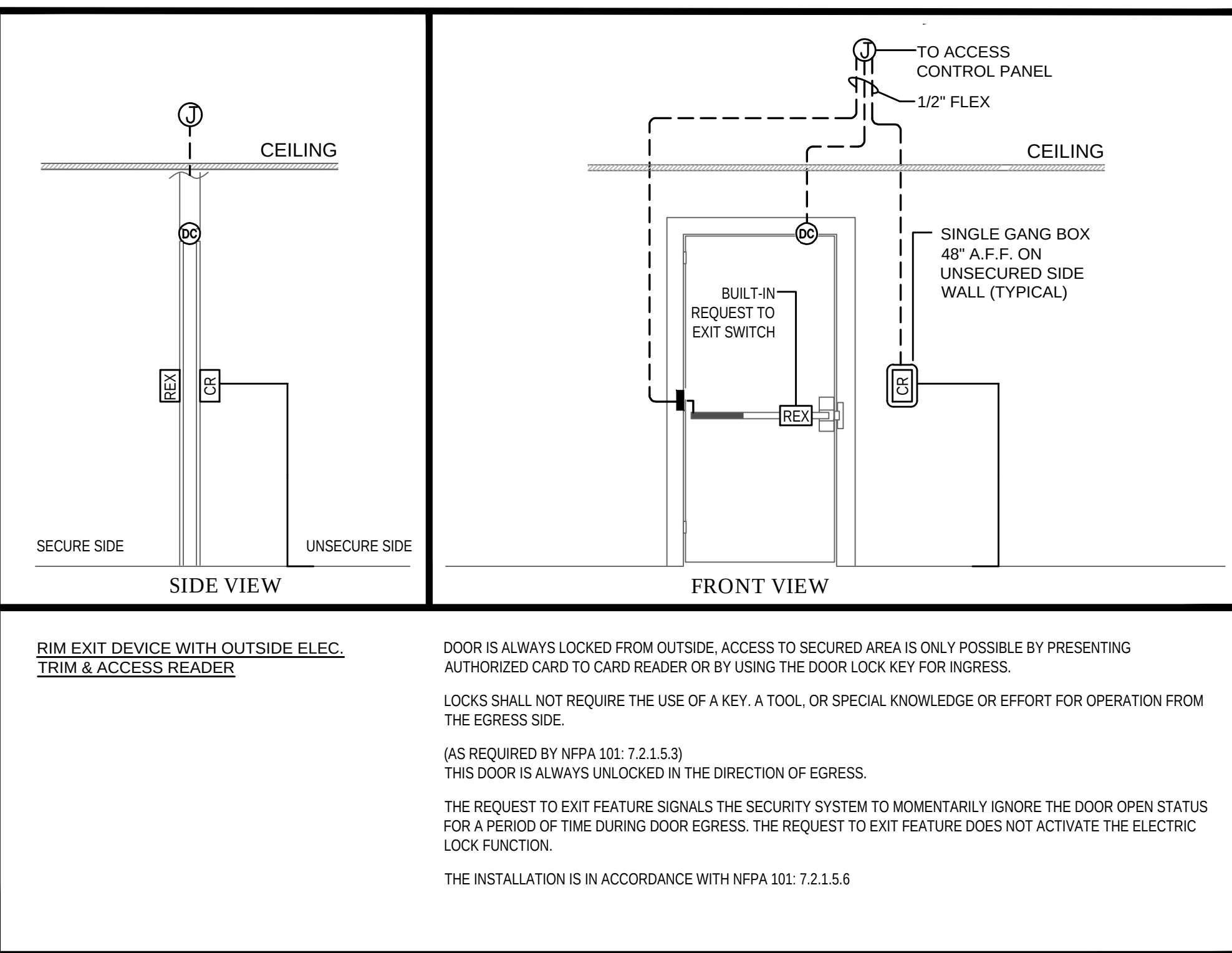
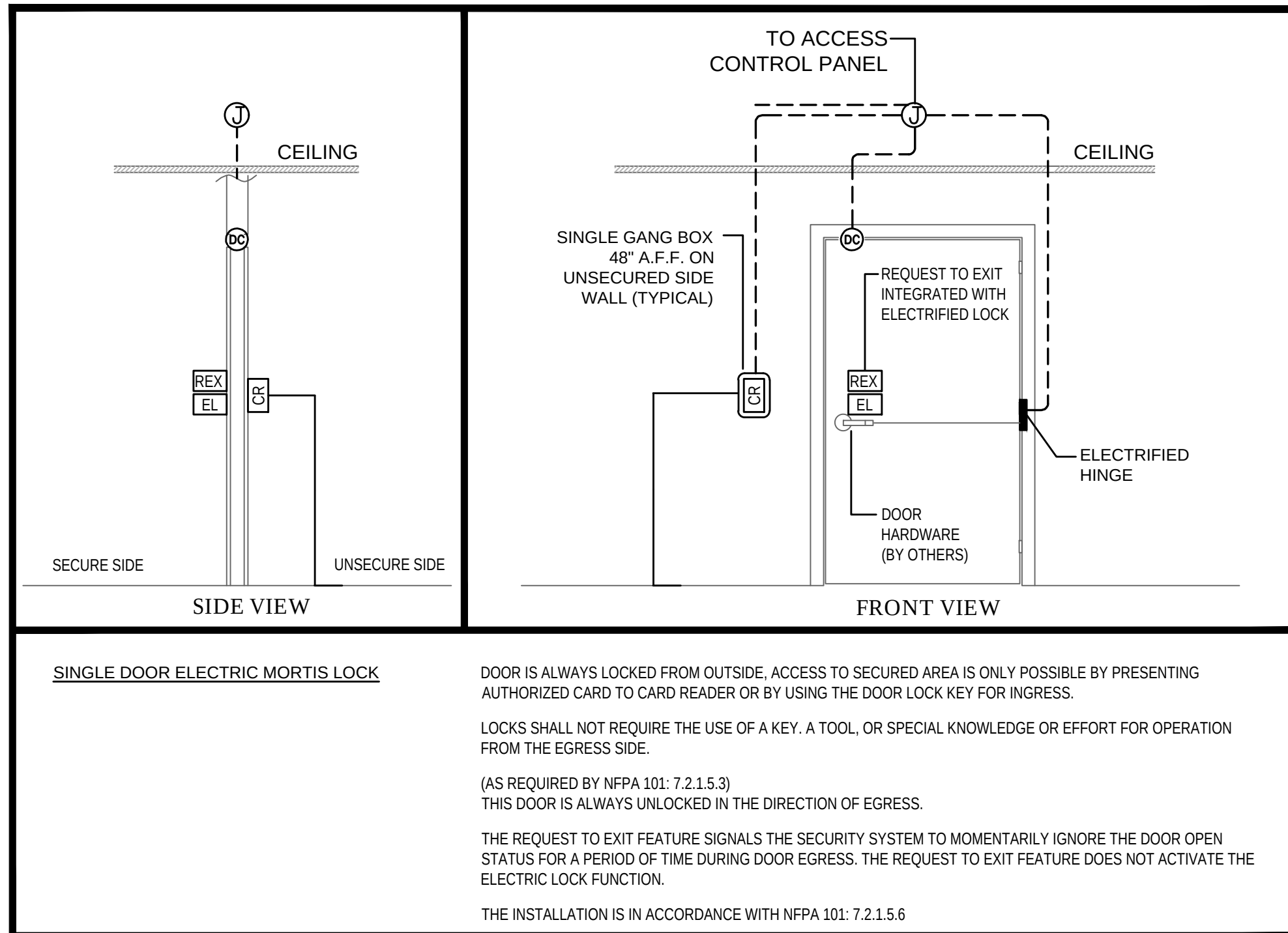
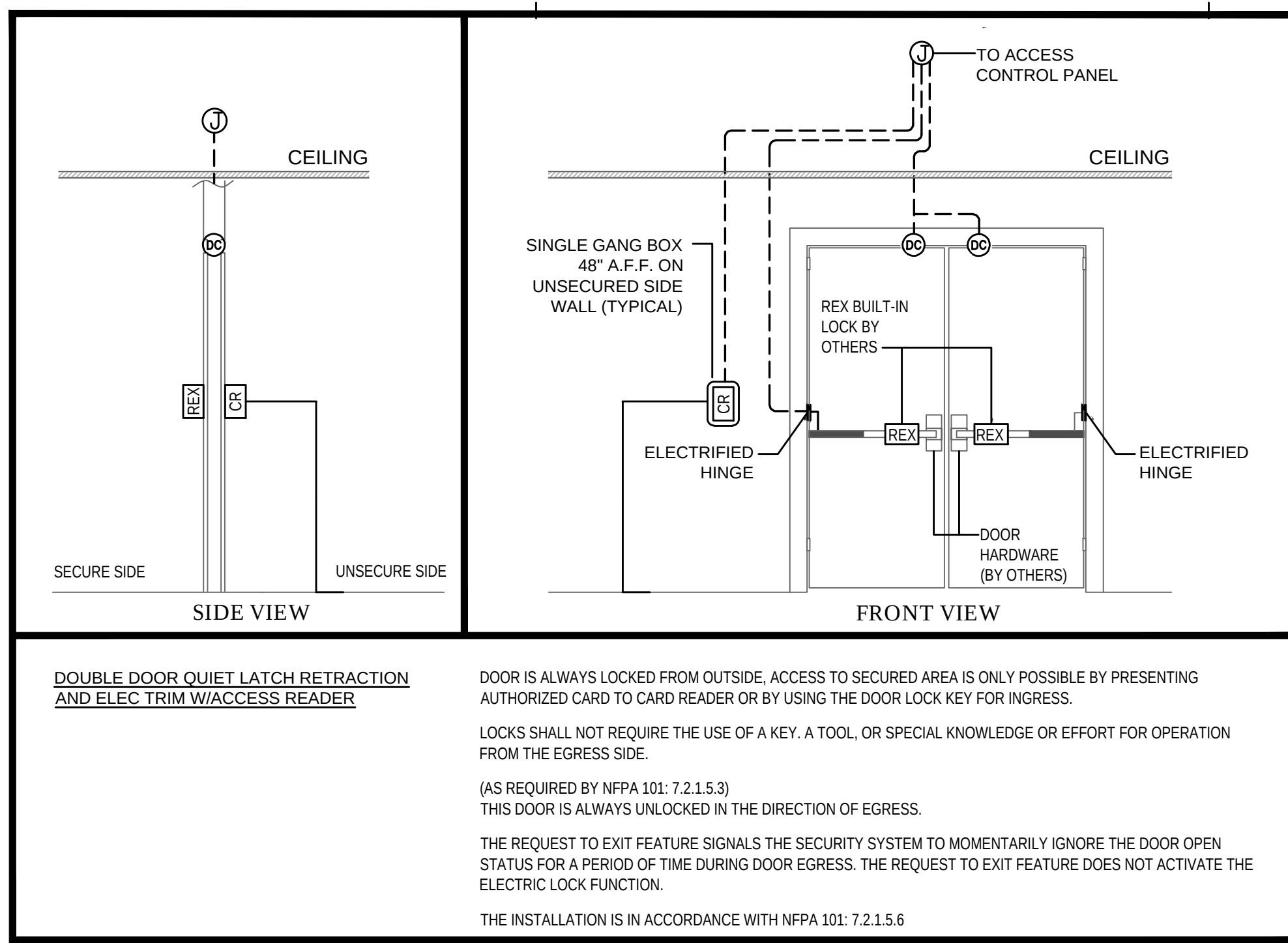
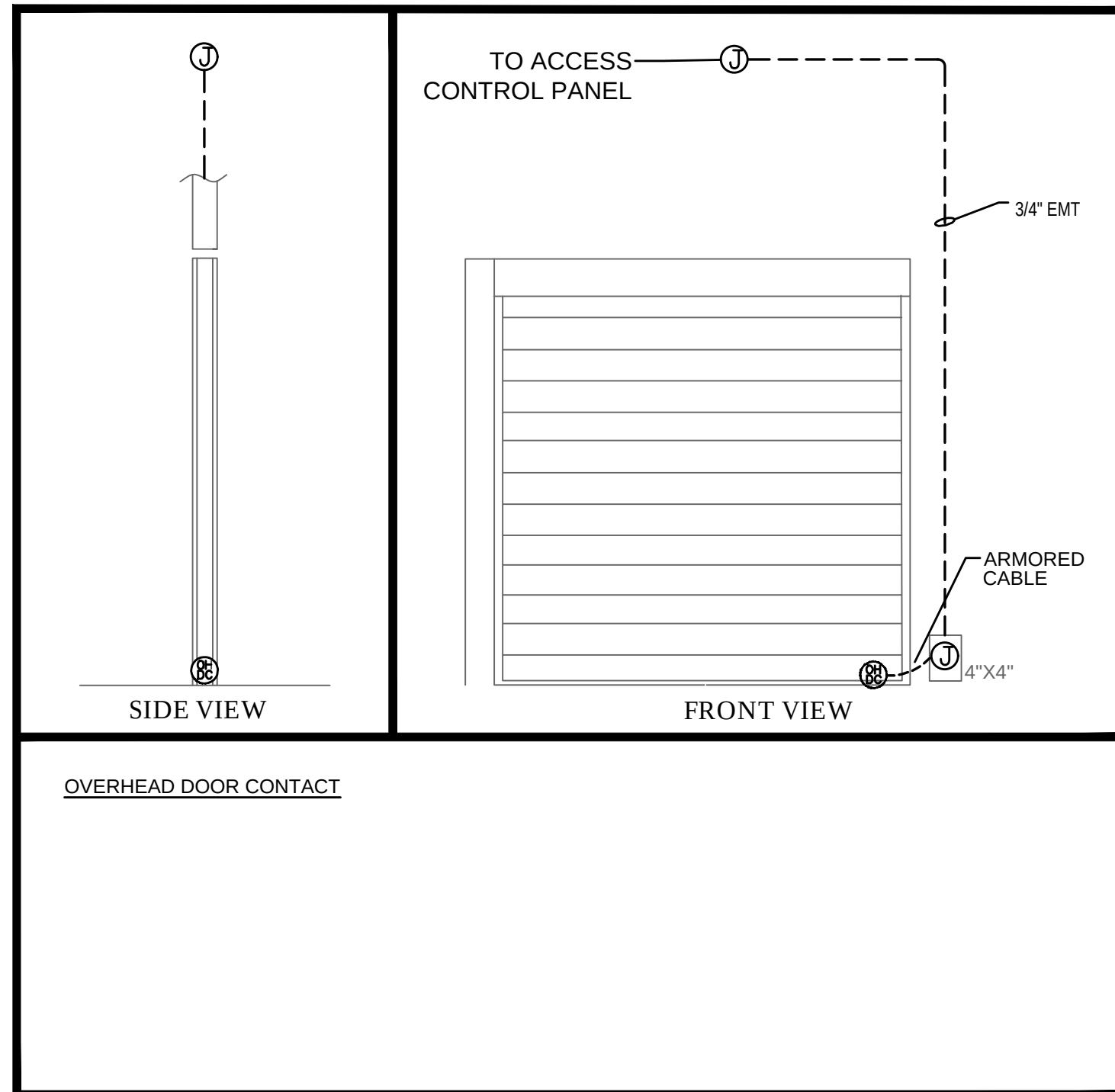
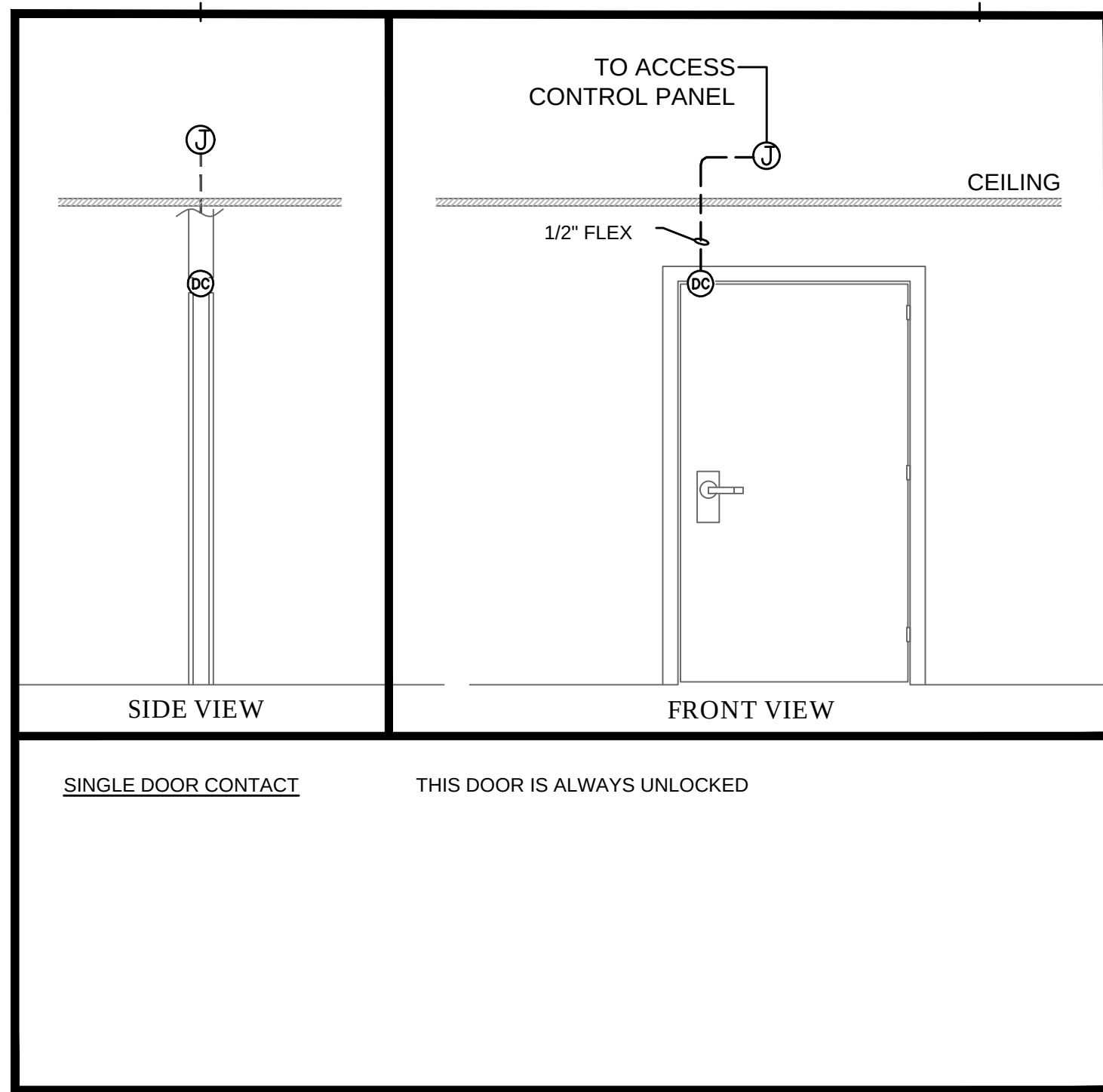
814C632800

SHEET TITLE

DETAILS

SHEET NUMBER

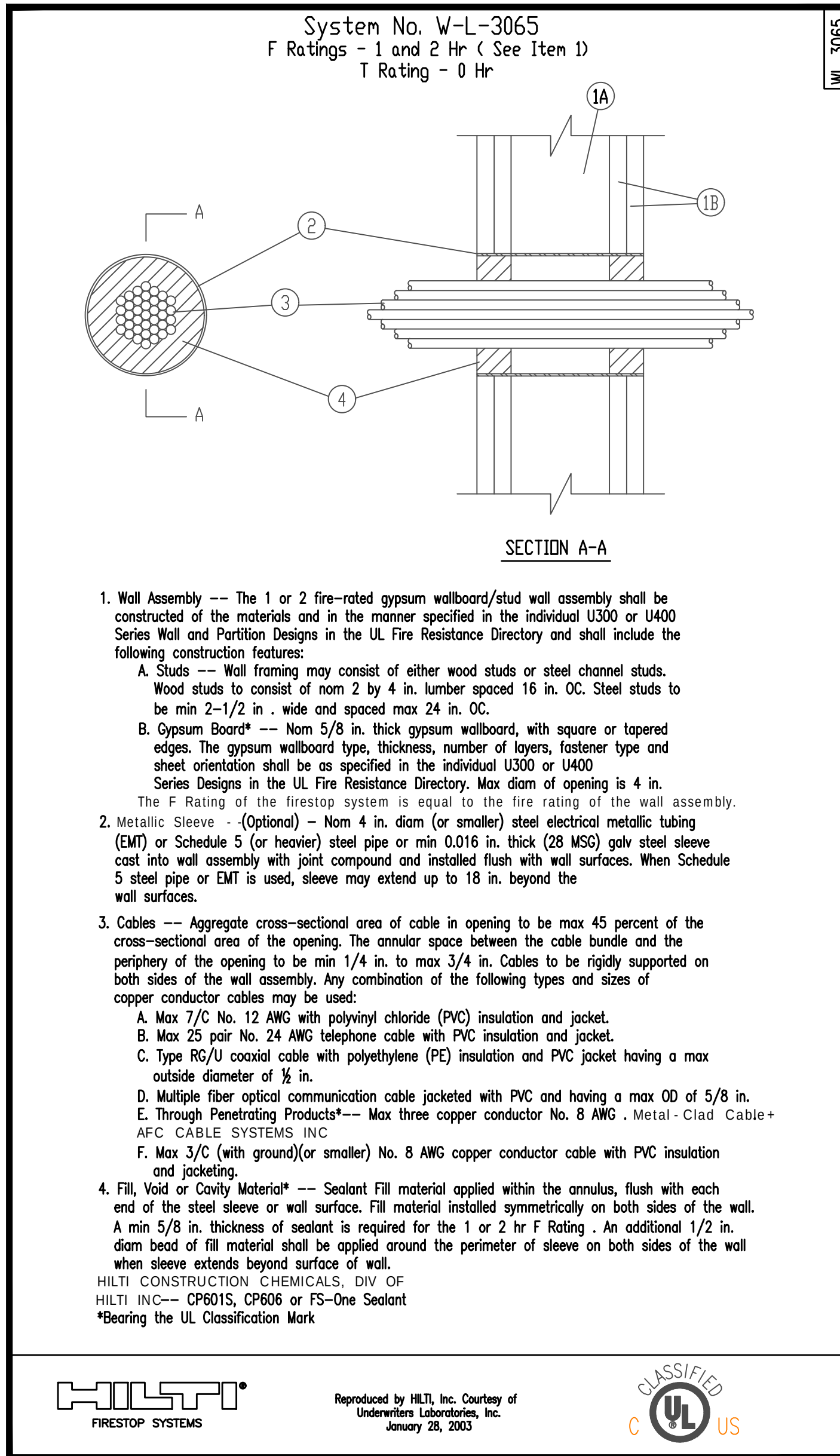
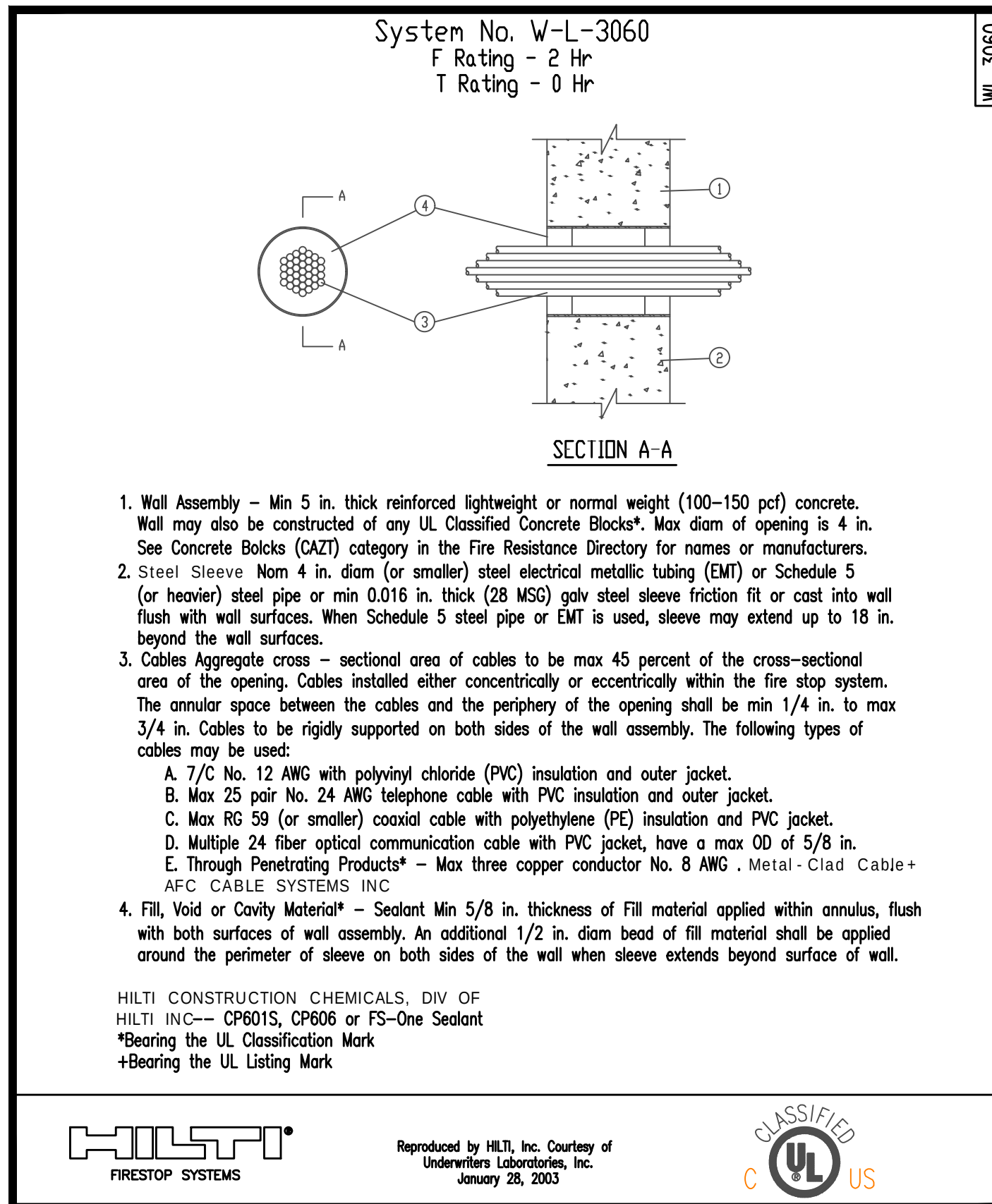
C-E503



SYSTEMS TO BE INSTALLED WILL COMPLY WITH
NFPA 101 2018 SECTION 7.2.1.5.6 (1-6)

7.2.1.5.6 DOOR HARDWARE RELEASE OF ELECTRICALLY LOCKED EGRESS DOOR ASSEMBLIES. DOOR ASSEMBLIES IN THE MEANS OF EGRESS SHALL BE PERMITTED TO BE EQUIPPED WITH APPROVED ELECTRICAL LOCKING SYSTEMS RELEASED BY THE OPERATION OF DOOR HARDWARE PROVIDED THAT ALL THE FOLLOWING CONDITIONS ARE MET:

- (1) THE HARDWARE FOR EGRESS-SIDE OCCUPANT RELEASE OF THE ELECTRICAL LOCK IS AFFIXED TO THE DOOR LEAF.
- (2) THE HARDWARE HAS AN OBVIOUS METHOD OF OPERATION THAT IS READILY OPERATED IN THE DIRECTION OF EGRESS UNDER ALL LIGHTING CONDITIONS.
- (3) THE HARDWARE IS CAPABLE OF BEING OPERATED WITH ONE HAND IN THE DIRECTION EGRESS.
- (4) OPERATION OF THE HARDWARE DIRECTLY INTERRUPTS THE POWER SUPPLY TO THE ELECTRIC LOCK AND UNLOCKS THE DOOR ASSEMBLY IN THE DIRECTION OF EGRESS.
- (5) LOSS OF POWER TO THE LISTED RELEASING HARDWARE AUTOMATICALLY ELECTRICALLY UNLOCKS THE DOOR ASSEMBLY IN THE DIRECTION OF EGRESS.
- (6) HARDWARE FOR NEW INSTALLATIONS IS LISTED IN ACCORDANCE WITH ANSI/UL 294, STANDARD FOR ACCESS CONTROL SYSTEM UNITS.



ACCESS CONTROL DEVICES LEGEND

- D**  ACCESS CONTROL PANEL & LOCK POWER SUPPLY

 - (1) LNL-X2220
 - (2) LNL-1320-S3
 - (1) FPO150-B100C4D8NL4R824M1

E  ACCESS CONTROL PANEL & LOCK POWER SUPPLY

 - (1) LNL-X2220
 - (8) LNL-1320-S3
 - (2) FPO150-B100C4D8NL4R824M1
 - (1) FPO150-B100C4D8NL4R82E2M

F  ACCESS CONTROL PANEL & LOCK POWER SUPPLY

 - (1) LNL-X2220
 - (1) LNL-1320-S3
 - (1) FPO75-B100C4D8NL4R82E2M

CR CARD READER
HID 920NNPNEK2009Y

IT INTERCOM
AXIS I8016-LVE

DC DOOR CONTACT
GRI 4400-A

OH OVERHEAD DOOR CONTACT (OHDC)
GRI 4700-A

QEL QUIET LATCH RETRACTION (RX-QEL-9847-E0
& RX-QEL+9847-NL-OP-110M0) BY OTHERS

EL ELEC. MORTISE LOCK W/ BUILT IN REX
(BEST 45HW-7-DEU-14H-C-RQE) BY OTHERS

PB RIM EXIT DEVICE WITH BUILT IN REX
& ELEC. OUTSIDE TRIM (E996L) BY OTHERS

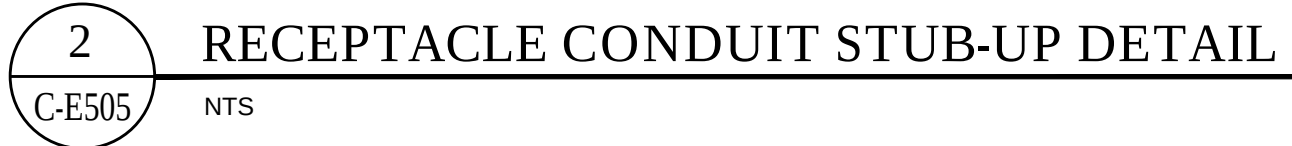
PTH POWER TRANSFER HINGE (BY OTHERS)

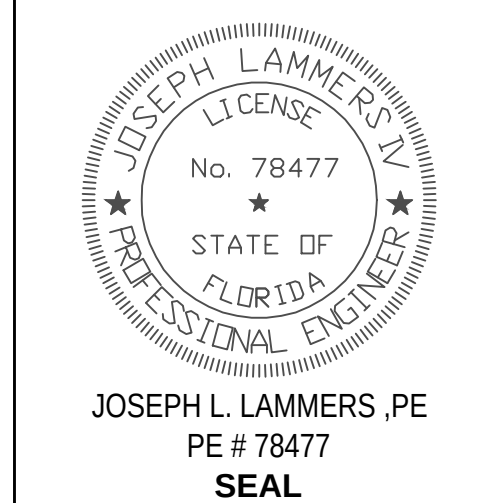
CCTV DEVICES LEGEND

-  NETWORK CAMERA (P3375-V)
-  NETWORK CAMERA (P3375-V)

GENERAL NOTES THIS DRAWING

1. DETAILS ON THIS DRAWING ARE SCHEMATIC AND DIAGRAMMATIC IN NATURE; THE ACTUAL LAYOUT OF THE EQUIPMENT, DEVICES, AND ROUTING OF CONDUIT(S) SHALL BE PROVIDED BY FP&L'S SECURITY SYSTEM VENDOR.





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NO.	REASON	DATE

PROJECT TEAM
PRINCIPAL IN CHARGE DAVID LITHGOW
PROJECT MANAGER DAVID LITHGOW
DESIGN TEAM CEA

COLUMBIA STORM
PROCESSING & SERVICE
CENTER - BUILDING C -
2 BAY FLEET GARAGE
FLORIDA POWER & LIGHT

PROJECT NO.
814C632800

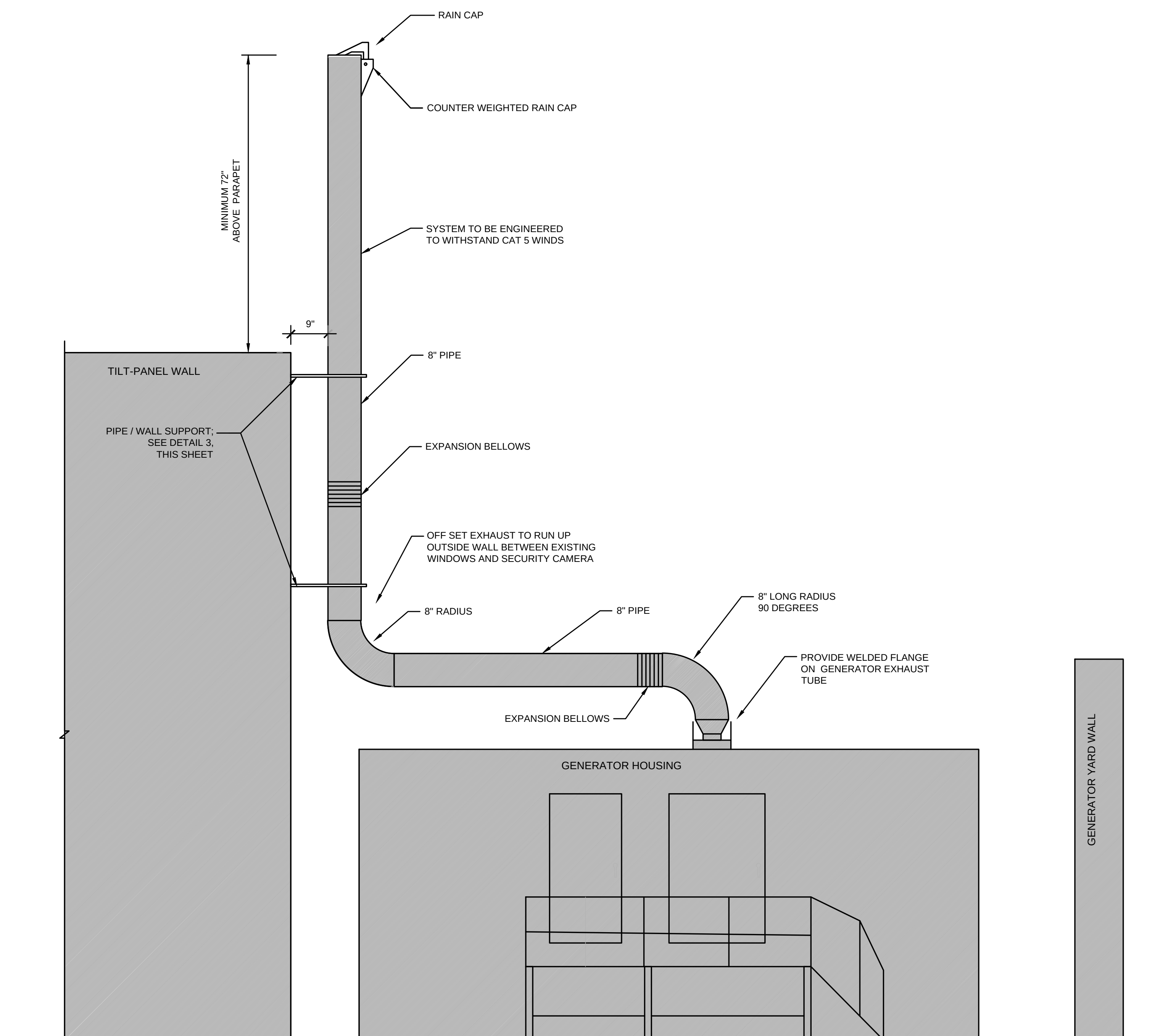
DETAILS

SHEET NUMBER

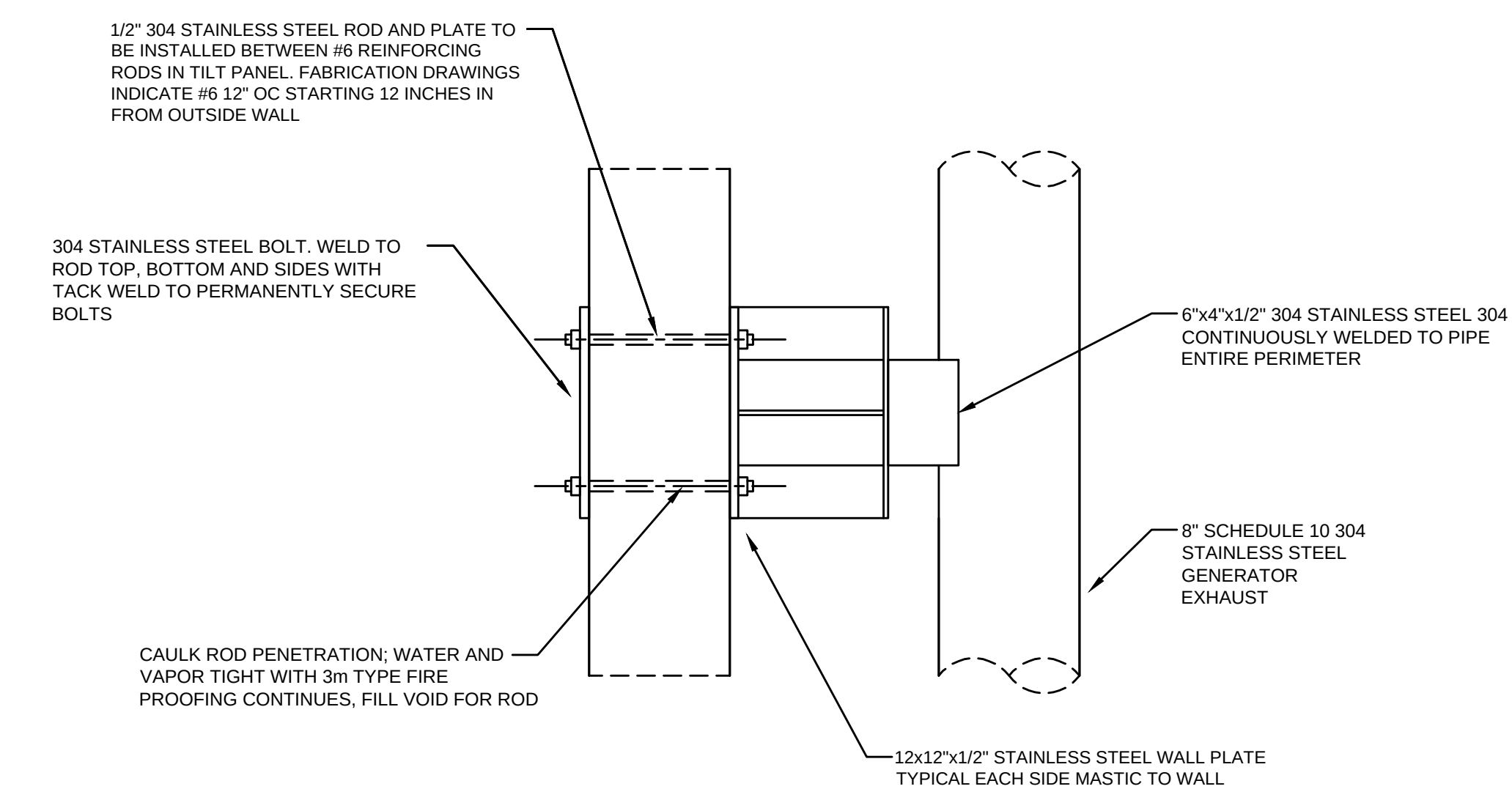
C-E506

LEGEND NOTES

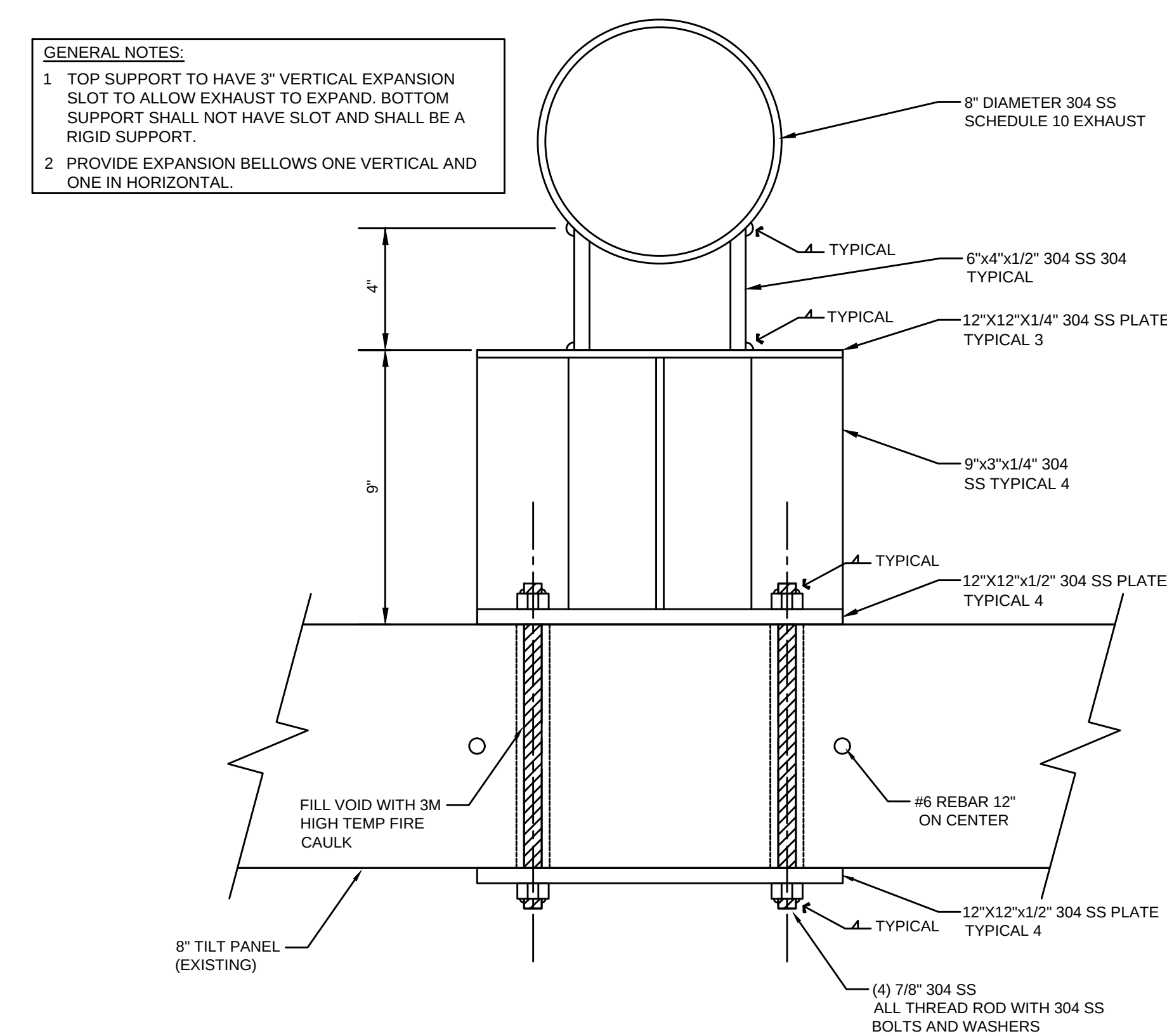
1. SUPPORTS AND GENERATOR EXHAUST DESIGNED TO WITHSTAND 226 MPH WIND FROM CATEGORY 5 HURRICANE.



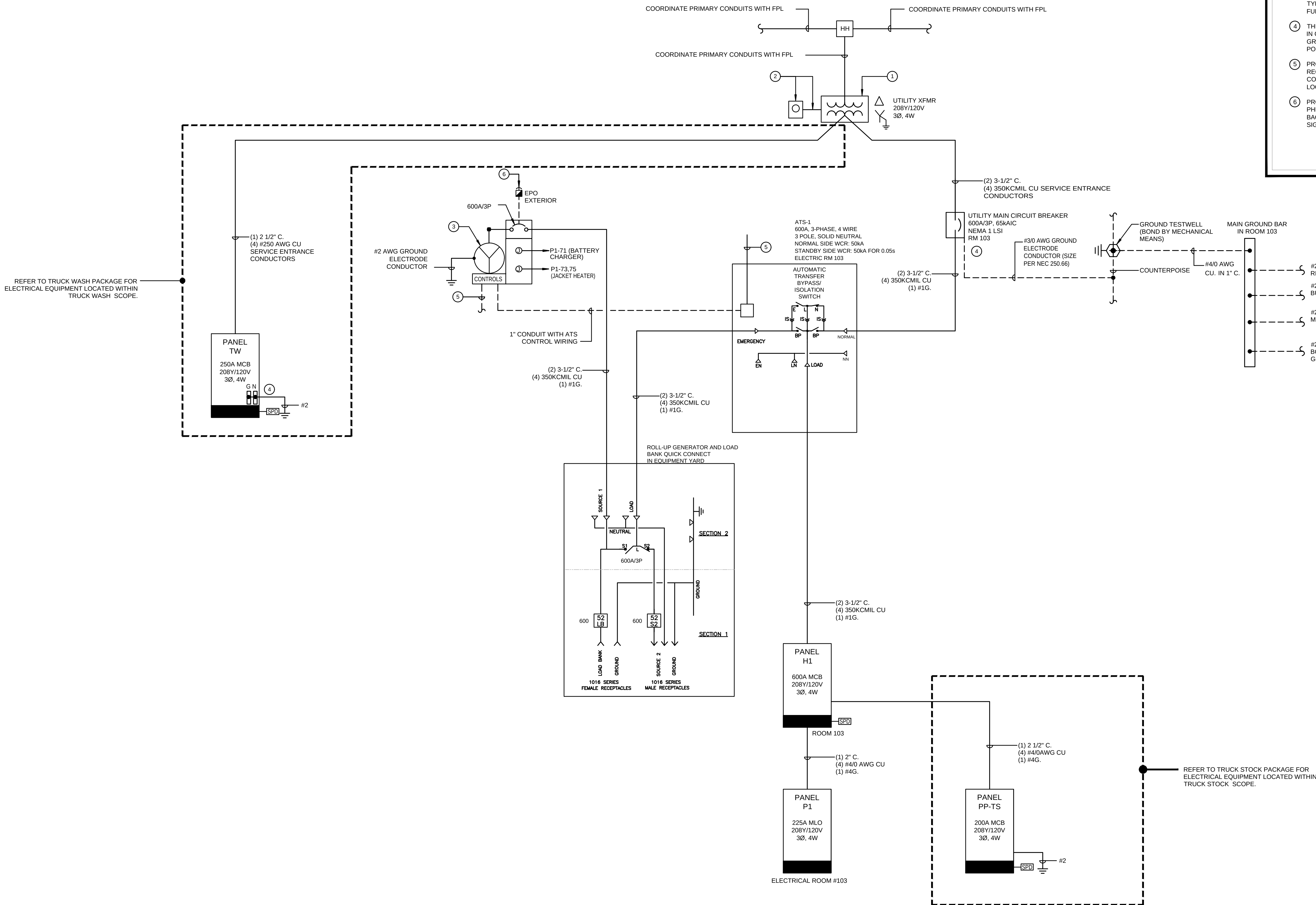
1 MECHANICAL EQUIPMENT ELEVATION
C-E506 NTS



2 PIPE/WALL SUPPORT (3)
C-E506 SCALE: 1 1/2"=1'-0"



3 EXHAUST PIPE SUPPORT DETAIL (TYP 2)



ELECTRICAL ONE-LINE DIAGRAM

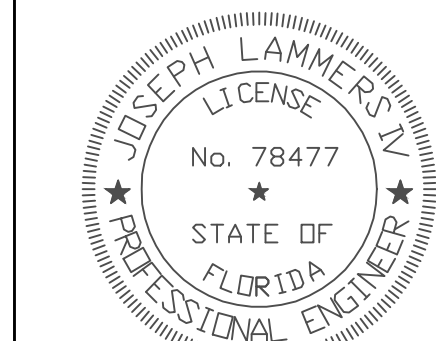
NTS

GENERAL NOTES THIS DRAWING

1. PROVIDE LABELS ON MAIN SERVICE PANEL INDICATING (AT MINIMUM) MAXIMUM FAULT CURRENT, "SERVICE ENTRANCE", AND OTHER LABELS AS REQUIRED BY SPECIFICATIONS, APPLICABLE CODES, AND AHJ. LABEL ALL PANELS AS REQUIRED PER NEC AND AHJ REQUIREMENTS. INCLUDE ARC-FLASH HAZARD LABELS.
2. PROVIDE TERMINAL LUGS ON EQUIPMENT SUITABLE TO ACCOMMODATE CONDUCTOR QUANTITIES AND SIZES INDICATED.

KEYED NOTES (X)

- ① NEW UTILITY TRANSFORMER PROVIDED BY FPKL. CONTRACTOR SHALL INSTALL CONCRETE PAD PER FPKL STANDARDS.
- ② PROVIDE 1-1/2" CONDUIT WITH PULL STRING FOR CT CABBING PROVIDED BY FPKL. PROVIDE UTILITY METAL ENCLOSURE AND METER SOCKET PER FPKL STANDARDS.
- ③ INSTALL 150KW/187.5 KVA, 208V/120V, 3-PHASE, 4-WIRE, EMERGENCY STAND-BY DIESEL GENERATOR SET WITH A WEATHERPROOF ENGINE CAPABLE OF EXCEEDING CATEGORY 3 HURRICANE WINDS, CRITICAL GEAR SILENCER, AND LEVEL 2 SOUND ATTENUATED HOURS. GENERATOR SHALL BE CLASSIFIED AS NFPA 110 LEVEL 2, 150 KW/187.5 KVA, 208V/120V, 3-PHASE, 4-WIRE, EMERGENCY FUEL TANK. INSTALL AS A NON-SEPARATELY SERVED SYSTEM.
- ④ THE NEUTRAL CONDUCTOR IS BONDED TO GROUND AT THIS LOCATION IN COMPLIANCE WITH NEC 250.4(A). DO NOT BOND NEUTRAL TO GROUND BUSBARS INSIDE ELECTRICAL EQUIPMENT BEYOND THIS POINT.
- ⑤ PROVIDE 1" CONDUIT WITH CONTROL/COMMUNICATIONS WIRING AS REQUIRED TO THE BUILDING MANAGEMENT SYSTEMS MAIN CONTROLLER. COORDINATE WITH MECHANICAL CONTRACTOR FOR LOCATION OF CONTROLLER.
- ⑥ PROVIDE WEATHERPROOF GENERATOR OPAL. INSTALL ENGRAVED PHENOLIC SIGN WITH 1.5" HIGH WHITE LETTERS ON A RED BACKGROUND LABELED: "GENERATOR EMERGENCY STOP". MOUNT ON 1.5" RADIUS OF CURVE.



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PROJECT TEAM
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PROJECT MANAGER DAVID LITHGOW
DESIGN TEAM CEA
PROJECT NAME

COLUMBIA STORM
PROCESSING & SERVICE
CENTER - BUILDING C -
2 BAY FLEET GARAGE
FLORIDA POWER & LIGHT

PROJECT NO.

814C63280C

ELECTRICAL ONE-LINE DIAGRAM

SHEET NUMBER

C-E601

[illegible]

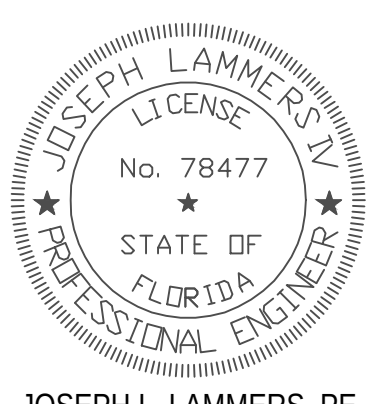
PANELBOARD SCHEDULE 'P1'															
CONNECTED VOLTAGE			LOAD DESCRIPTION	WIRES A/B/C	POLES	AMPS A B C	BUS A B C	A =	AMPS A B C	POLES	LOAD DESCRIPTION	WIRES A/B/C	CONNECTED VOLTAGE		
AØ	BØ	CØ											AØ	BØ	CØ
720			RECEPS-COMMON AREA 102	12	1	20	1	2	30	2	EWH-1 JANITOR 104 (4.5KW)	12	2250		
	900		RECEPS-OFFICE 101	12	1	20	12	2	30	2	EF-01 1/2HP	12		2250	
		360	RECEPS-OFFICE 101	12	1	20	5	8	20	2	EF-01 1/2HP	12			1435
1000			REF-COMMON AREA 102	12	1	20	7	8	20	2		12	1435		
	1500		MICRO-COMMON AREA 102	12	1	20	5	8	20	2		12		1435	
		500	COFFEE COMMON AREA 102	12	1	20	11	12	15	2	EF-02 1/2HP	12			562
180			RECEPS-ELECT 105	12	1	20	13	14	20	2		12	562		
	1080		RECEPS-EXTIOR	12	1	20	15	16	15	2	EF-03 1/2HP	12		562	
		1200	1TWIST LOCK-T 100A	12	1	30	11	18	30	1		12			562
180			BDA-I 1.00A	12	1	20	10	20	20	1	RECEPS-GARAGE 100	12	540		
	540		RECEPS-I 1.00A	12	1	20	21	22	20	1	RECEPS-GARAGE 100	12		360	
		360	SECURITY RECEP	12	1	20	23	24	20	1	JBOX EYE WASH ALARM	12			500
1080			RECEPS-INETS RM 106	12	1	20	22	23	20	1	AUTO MOTION SEN. RS 102D	12	360		
	85		SANDVOIL INTERCEPTOR ALARM PNL	12	1	15	21	28	20	1	HOSE REEL GARAGE 100	12		500	
		360	RECEPS-OIL STORAGE	12	1	20	20	32	20	1	HOSE REEL GARAGE 100	12			500
			SPACE				31	32	20	1	SPACE	12			
			SPACE				32	34	15	1	EF-04 BATHROOM	12		24	
			600 BOTTLE FILLER	12	1	20	35	36	15	1	EF-05 JAN CLO	12			24
							37	38	20	1	CF-02	12	1164		
							38	40	20	1	CF-03	12		1164	
							39	40	20	1	CF-03	12			1164
440			500 BDA	12	1	20	43	44	20	1	CF-04	12	1164		
			OVERHEAD ROLLUP DOOR	12	3	15	43	44	20	1	CF-04	12			1435
							45	46	25	2	EF-06	10			1435
							46	48	20	1		12			
2900			440 EV (BLINK)	8	2	40	49	50	20	1	FACP	12	500		
	2900		EV (BLINK)	8	2	40	50	51	20	1	LIGHTING	12		2486	
		2900	EV (BLINK)	8	2	40	52	54	20	1	LIGHTING	12			904
							54	56	20	1	LIGHTING	12	364		
		360	TEST SHED RECEP	12	1	20	57	58	20	1	LIGHTING	12		709	
			SPARE				58								

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REVISORS		
NO.	REASON	DATE

PROJECT TEAM
PRINCIPAL IN CHARGE DAVID LITHGOW
PROJECT MANAGER DAVID LITHGOW
DESIGN TEAM CEA
PROJECT NAME

COLUMBIA STORM
PROCESSING & SERVICE
CENTER - BUILDING C -
2 BAY FLEET GARAGE
FLORIDA POWER & LIGHT

PROJECT NO.
814C632800

SHEET TITLE

PANELBOARD
SCHEDULES

SHEET NUMBER

C-E701

SYSTEMS LEGEND

- UNDERGROUND COMMUNICATIONS**
- 2-PORT DATA OUTLET BY OWNER. PROVIDE 4" SQUARE BOX WITH SINGLE GANG MUD RING AND 3/4" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING.
 - 4-PORT DATA OUTLET BY OWNER. PROVIDE 4" SQUARE BOX WITH SINGLE GANG MUD RING AND 1" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING.
 - DATA OUTLET FOR RADIO COMMUNICATION BY OWNER. PROVIDE 4" SQUARE BOX WITH SINGLE GANG MUD RING AND 1" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING.
 - DATA OUTLET FOR BUILDING AUTOMATION SYSTEM BY OWNER. PROVIDE 4" SQUARE BOX WITH SINGLE GANG MUD RING AND 3/4" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING.
 - TELEPHONE OUTLET. PROVIDE 4" SQUARE BOX WITH SINGLE GANG MUD RING AND 3/4" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING.
 - (2) TELEPHONE VOICE JACKS IN (1) 4" SQUARE BOX WITH SINGLE GANG COVER. PROVIDE SEPARATE DEDICATED OUTSIDE PHONE LINES FOR EACH JACK. PROVIDE 3/4" CONDUIT.
 - POINT OF CONNECTION FOR DATA SYSTEM RACEWAY TO FURNITURE. PROVIDE 4" SQUARE BOX WITH SINGLE GANG MUD RING AND 1" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING.

- AUDIOVISUAL ROUGH-IN OUTLET BOX FOR INSTALLATION OF AV OUTLETS BY OWNER. PROVIDE 4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED ON PLANS.
- MODULAR FIRE RATED PATHWAY. BASIS OF DESIGN HILTI CP 653 4 OR APPROVED EQUAL.
- 12" LADDER TYPE CABLETRAY. MOUNT CABLETRAY AT 8'-3" A.F.F. TO CENTER OF TRAY. UNLESS NOTED OTHERWISE.
- COMM RACK WITH VERTICAL WIRE MANAGERS PROVIDED BY OWNER.
- 4"x6"x1/4" FIRE RETARDANT PLYWOOD BACKBOARD.
- WIRELESS ACCESS POINT PROVIDED BY OWNER.
- TV. PROVIDE 4" SQUARE BOX WITH SINGLE GANG MUD RING FOR CABLE TELEVISION OUTLET BY OWNER. PROVIDE 3/4" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING.
- DATA OUTLET, VGA AND HDMI (BY OWNER). PROVIDE 4" SQUARE BOX WITH DOUBLE GANG MUD RING. PROVIDE (1) 3/4" CONDUIT WITH PULL STRING FOR DATA AND (1) 1 1/2" CONDUIT WITH STRING FOR VGA/HDMI CABLES.
- DATA OUTLETS, VGA AND HDMI (BY OWNER) INSTALLED IN FOUR COMPARTMENT FLOOR BOX. FURNISHED BY DIVISION 26 CONTRACTOR. PROVIDE 3/4" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING. REFER TO 8-E504 FOR ADDITIONAL DETAIL.

- DATA OUTLETS, VGA AND HDMI (BY OWNER) INSTALLED IN POKE-THRU TYPE FLOOR BOX. FURNISHED BY DIVISION 26 CONTRACTOR. PROVIDE 3/4" CONDUIT WITH PULL STRING FROM BOX TO ACCESSIBLE LOCATION ABOVE CEILING. REFER TO 8-E504 FOR ADDITIONAL DETAIL.
- DUAL SERVICE MODULAR FURNITURE POKE-THRU. FURNISHED BY DIVISION 26 CONTRACTOR. ALIGN POKE-THRU FEED HOLES WITH CENTER OF MODULAR FURNITURE. REFER TO 8-E504 FOR ADDITIONAL INFORMATION.
- 2-GANG JUNCTION BOX. COORDINATE WITH AV INSTALLER AND APPROVED SHOP DRAWINGS.
- SCREEN LOW VOLTAGE INTERFACE WITH MOTOR AND INTERFACE MOUNTS ABOVE FINISHED CEILING. COORDINATE WITH AV INSTALLER AND APPROVED SHOP DRAWINGS FOR EXACT LOCATION.
- CEILING MOUNTED SPEAKER. COORDINATE WITH AV INSTALLER AND APPROVED SHOP DRAWINGS FOR EXACT LOCATION.
- PROVIDE WIRING ACCESS AND NETWORK CONNECTIVITY FOR SECURITY CAMERA'S IN ACCORDANCE WITH APPROVED SHOP DRAWINGS.
- VOICE/VIDEO PORT AT FLOOR. VERIFY AND COORDINATE WITH AV INSTALLER AND APPROVED SHOP DRAWINGS FOR EXACT LOCATION.

CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND COORDINATING DEVICE PLACEMENT WITH APPROVED AUDIO VISUAL DRAWINGS AND SUBJECT TO OWNER'S APPROVAL.

ELECTRONIC DOOR SYMBOL LEGEND

- CARD READER
- DOOR CONTACT
- ELECTRIC LOCK
- MAGNETIC HOLDER
- OBSTRUCTION SENSOR
- OVERHEAD DOOR CONTACT
- PANIC BAR
- POWER OPERATOR
- PUSH PAD OPERATOR
- POWER TRANSFER HINGE REQUEST-TO-EXIT

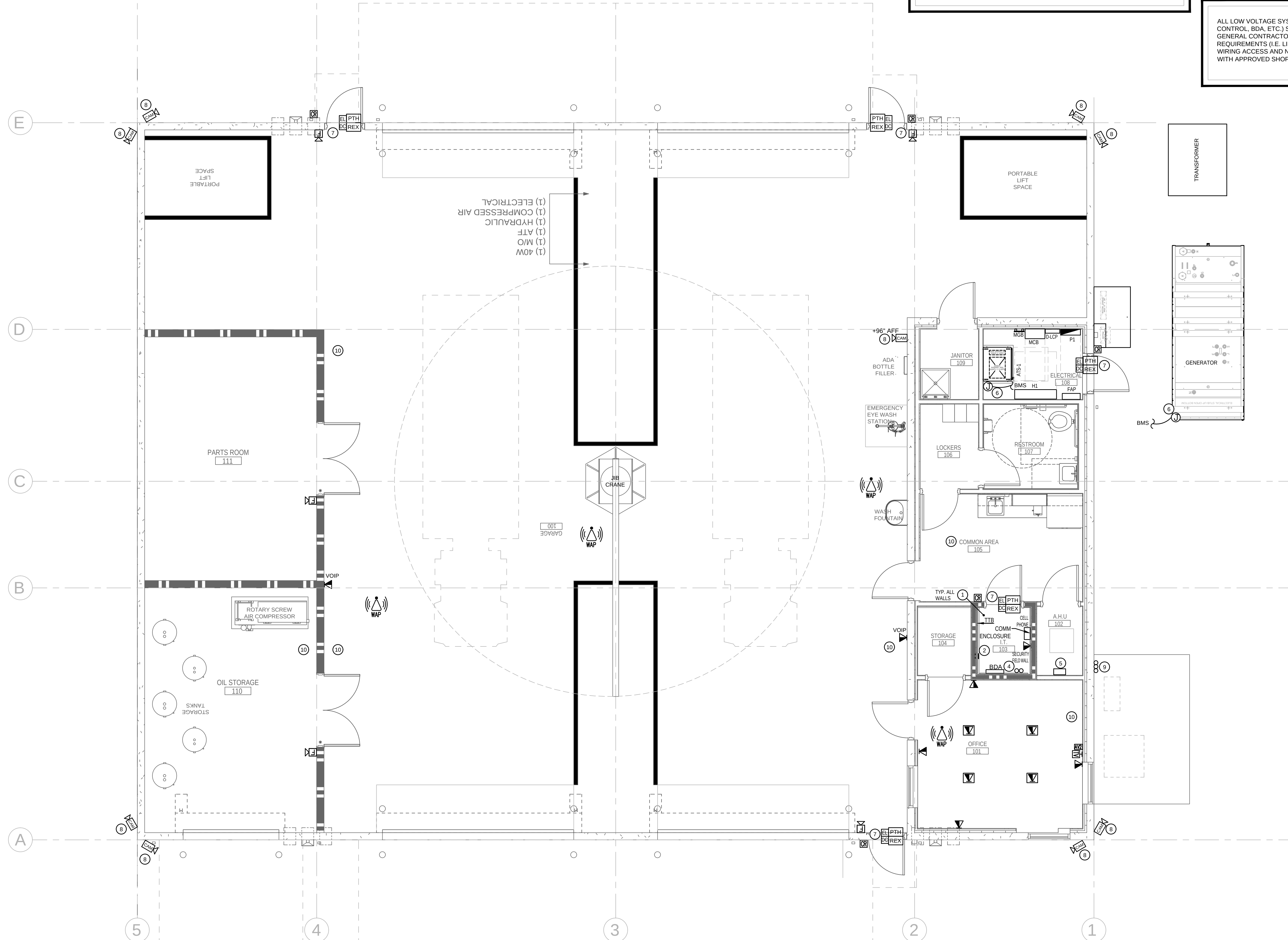
GENERAL NOTES THIS DRAWING

- REFER TO POWER PLANS FOR RECEPTACLE LOCATIONS. WHERE 120V RECEPTACLES ARE IN CLOSE PROXIMITY TO COMMUNICATIONS DEVICES, SUCH DEVICES SHALL BE INSTALLED AT SAME HEIGHT AS RECEPTACLES WITH NO MORE THAN 2" OF SEPARATION BETWEEN THEM.
- CONDUITS FOR DATA SHALL BE INCREASED BY ONE STANDARD TRADE SIZE FOR ALL RUNS WHICH REQUIRE MORE THAN (1) 90 DEGREE BEND.
- PROVIDE CONDUIT SLEEVES FOR DATA CABLE PENETRATIONS THROUGH FULL HEIGHT WALL. COORDINATE SIZES AND LOCATIONS WITH DATA CABLE INSTALLER. PROVIDE FIRE STOPPING WHERE NECESSARY TO MAINTAIN FIRE RATING OF WALLS.

KEYED NOTES (X)

- PROVIDE 4"x6"x3/4" THICK PLYWOOD BACKBOARD. PAINTED WITH WHITE FIRE RETARDANT PAINT. STUB UP SITE COMM CONDUITS IN THIS ROOM.
- PROVIDE COPPER GROUND BAR IN DATA ROOM. REFER TO DETAIL ON DRAWING E-E502.
- ALL VOICE/VIDEO AND SECURITY CABLING SHALL BE IN CONDUIT IN EXPOSED AREAS.
- ALLOCATE 5'-0" OF WALL SPACE FROM FLOOR TO CEILING FOR BDA (BI-DIRECTIONAL AMPLIFIER). PROVIDE 3" CONDUIT WITH NYLON PULLSTRING FROM LOCATION OF BDA TO THE DONOR ANTENNA LOCATION ON THE EXTERIOR WALL.
- PROVIDE EMPTY 2" CONDUIT WITH NYLON PULLSTRING FROM DDC (BMS) PANEL TO FIRE ALARM PANEL LOCATED IN ELECT RM 108.
- CONNECT GENERATOR AND ATS TO BUILDING MANAGEMENT SYSTEM FOR OFF SITE ALARM AND MONITORING CONNECTIONS.
- REFER TO C-E503 FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH OWNERS SECURITY SYSTEM INSTALLER AND APPROVED SHOP DRAWINGS.
- PROVIDE WIRING ACCESS FOR SECURITY CAMERA'S IN ACCORDANCE WITH APPROVED SHOP DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND COORDINATING DEVICE PLACEMENT WITH APPROVED AUDIO VISUAL DRAWINGS AND SUBJECT TO OWNER'S APPROVAL.
- CONDUIT WALL PENETRATIONS: 1 FOR BDA, 1-2" CONDUIT FOR CELL PHONE REPEATER AND 1-2" CONDUIT FOR SPARE.
- COORDINATE FINAL THERMOSTAT LOCATIONS WITH HVAC AND CONTROLS TRADES. PROVIDE ROUGH-IN BOX AND 3/4" EMPTY CONDUIT WITH PULL STRING TO ACCESSIBLE CEILING SPACE.

ALL LOW VOLTAGE SYSTEMS (WIFI, AUDIO/VISUAL, SECURITY, TELECOM, ACCESS CONTROL, BDA, ETC.) SHALL BE PROVIDED BY THE OWNER'S SUBCONTRACTOR. GENERAL CONTRACTOR TO COORDINATE LOCATIONS AND INFRASTRUCTURE REQUIREMENTS (I.E. LINE VOLTAGE, CONDUIT, ETC.) COORDINATE AND PROVIDE WIRING ACCESS AND NETWORK CONNECTIVITY AS REQUIRED IN ACCORDANCE WITH APPROVED SHOP DRAWINGS.



SYSTEMS PLAN

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

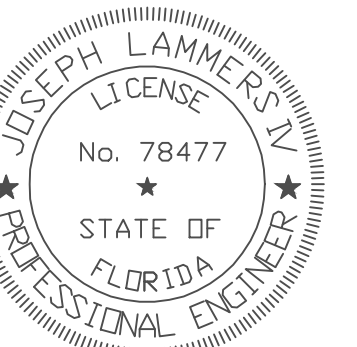
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REVISIONS

NO.	REASON	DATE

PREPARED BY
PRINCIPAL IN CHARGE
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PROJECT MANAGER
DAVID LITHGOW
DESIGN TEAM
CEA

PROJECT NAME
COLUMBIA STORM
PROCESSING & SERVICE
CENTER - BUILDING C -
2 BAY FLEET GARAGE
FLORIDA POWER & LIGHT

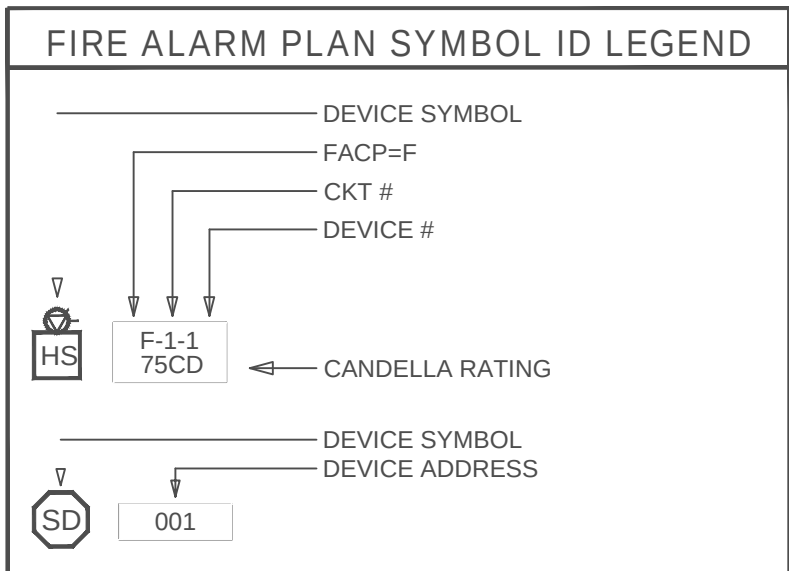
PROJECT NO.
814C632800

SHEET TITLE
SYSTEMS
PLAN

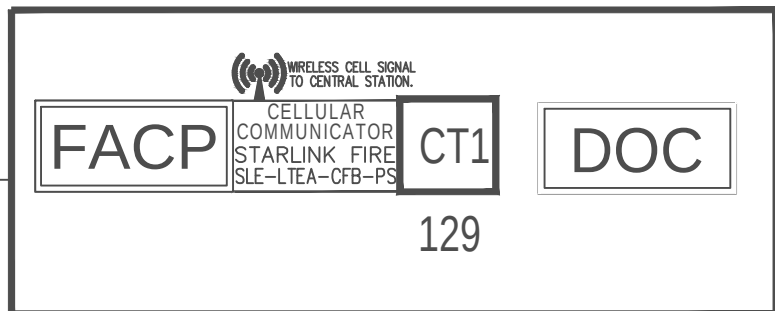
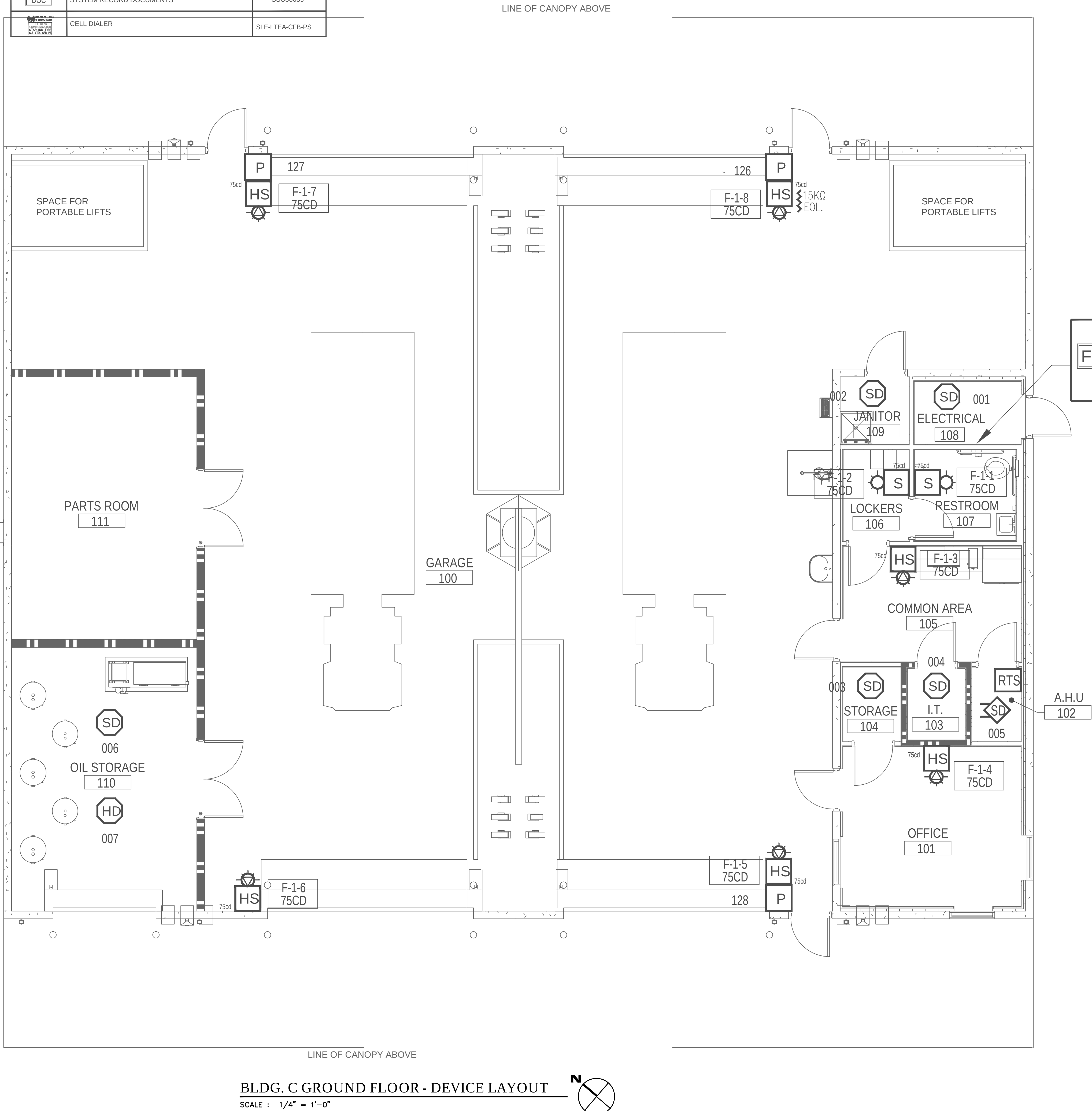
SHEET NUMBER
C-T101

FIRE ALARM SYSTEM GENERAL NOTES	
1. ALL WALL-MOUNTED VISUAL SIGNALING APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80 IN. (2030mm) AND NOT GREATER THAN 96 IN. ABOVE THE FINISHED FLOOR (A.F.F.) PER NFPA 72 2016 CH. 18.5.5 2. ALL WALL-MOUNTED AUDIBLE DEVICES SHALL BE A MINIMUM OF 8' A.F.F. TO THE TOP OF DEVICE PER NFPA 72 2016 (SECTION 18.4.1). AREAS HAVING MORE THAN 2 STROBES IN THE FIELD OF VIEW SHALL BE SYNCHRONIZED PER NFPA 72 SECTION 18.5.1.4.2. 3. SMOKE DETECTORS AND HEAT DETECTOR LOCATIONS ARE BASED ON SMOOTH CEILING WITH MAXIMUM HEIGHT OF 10 FEET UNLESS OTHERWISE NOTED. 4. STROBE LOCATION IS BASED ON 10 FOOT CEILING HEIGHT AND ARE INSTALLED ACCORDING TO NFPA 72 REQUIREMENTS UNLESS OTHERWISE NOTED. ANY DEVICES ON CEILINGS OVER 10 FT. WILL BE DERATED PER NFPA 72. 5. MANUAL PULL STATIONS SHALL BE MOUNTED AT 42-48" TO PULL LEVER ABOVE FINISHED FLOOR LEVEL. 6. ALL EQUIPMENT SHALL BE LISTED. 7. ALL WIRING SHALL BE IN ACCORDANCE WITH N.E.C. AND AUTHORITIES HAVING JURISDICTION. 8. ALL JUNCTION BOXES SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. 9. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE SERVICING, TROUBLE SHOOTING, ETC. 10. DETECTORS SHALL NOT BE LOCATED IN A DIRECT AIR-FLOW, NOR CLOSER THAN 3 FEET (900mm) FROM AN AIR SUPPLY DIFFUSER. 11. ALL DUCT SMOKE DETECTORS SHALL BE MOUNTED BY THE MECHANICAL CONTRACTOR. DUCT DETECTORS EXPOSED TO THE WEATHER SHALL BE WEATHER PROTECTED BY THE MECHANICAL CONTRACTOR. ALL AIR VELOCITY TESTING SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR. 12. ALL 120 VAC POWER REQUIREMENTS FOR THE FIRE ALARM SYSTEM SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR AND SHALL MEET ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION. 13. ALL FIRE ALARM DEVICE BACK BOXES, FIRE ALARM TERMINAL CABINETS, GUTTERS, JUNCTION BOXES AND ASSOCIATED SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. REFER TO FIRE ALARM SYMBOL LIST AND/OR MOUNTING DETAILS FOR ADDITIONAL INFORMATION. SYSTEM SUPPLIER PROVIDED BACK BOXES SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. 14. SMOKE DETECTOR TESTING SHALL BE ACCOMPLISHED WITH SMOKE OR LISTED AEROSOL APPROVED BY THE MANUFACTURER PER NFPA 72 AS ACCEPTABLE BY THE A.H.U. 15. ALL WIRING SHALL BE CUT FOR IN AND OUT. WIRING SHALL NOT BE LOOPED THROUGH DEVICES. 16. POINT AND COMMON ANNUNCIATION AND T-TAPPING ARE PROHIBITED. (T-TAPPING IS ALLOWABLE ON ADDRESSABLE STYLE 4 SLC LOOPS). 17. THE ALARM SYSTEM SHALL HAVE AN AUDIBILITY OF NOT LESS THAN 15dB ABOVE AMBIENT NOISE LEVELS, BUT NOT LESS THAN 75dB THROUGHOUT AREA OF ALARM. TESTING SHALL BE ACCOMPLISHED WITH A dB METER, WHERE APPLICABLE. AUDIBLE TONE WILL BE TEMPORAL PATTERN. 18. FIRE ALARM SIGNAL SHALL MEET ANSI S3.41. AUDIBILITY EMERGENCY EVACUATION SIGNAL (TEMPORAL PATTERN) 19. ALL CONDUITS ARE 3/4" UNLESS OTHERWISE NOTED. 20. ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED PER MANUFACTURERS SPECIFICATIONS. 21. SYSTEM SHALL BE FURNISHED AND INSTALLED BY AN AUTHORIZED DISTRIBUTOR. 22. TAMPER PROOF SCREWS OR OTHER APPROVED MECHANICAL MEANS SHALL BE USED ON ALL COVERS OF EXTERIOR ELECTRICAL JUNCTION BOXES IN LIEU OF ELECTRICAL SUPERVISION OF THE COVERS. PER THE 2016 NFPA 72 23.8.5.11.1. 23. ELECTRICAL POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT(S) AND CONNECTIONS SHALL BE MECHANICALLY PROTECTED. CIRCUIT BREAKERS SHALL BE LOCKED IN THE ON POSITION WITH AN APPROVED MECHANICAL CLIP. CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING. SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT". THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT. 24. UPON COMPLETION OF ALL INSTALLATION AND TESTING, THE CONTRACTOR SHALL PROVIDE TO THE AUTHORITY HAVING JURISDICTION AND THE BUILDING OWNER A COMPLETED AND SIGNED NFPA 72 CERTIFICATE OF COMPLETION. SECTION 17.7.1.1.3 OF THE 2016 EDITION OF NFPA 72 STATES THAT "WHERE DETECTION IS NOT REQUIRED DURING CONSTRUCTION, DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER ALL OTHER CONSTRUCTION TRADES HAVE COMPLETED CLEANUP." 25. IN-BUILDING PUBLIC SAFETY RADIO SYSTEM ENHANCEMENT, IF REQUIRED, SHALL BE MONITORED BY FIRE ALARM SYSTEM. 26. FIRE ALARM BASIS OF DESIGN IS AN EDWARDS EST-4. 27. PROVIDE SIGN INDICATING THE FACP LOCATION ON THE DOOR TO ELECTRICAL ROOM 108. 28. PROVIDE SIGN INDICATING FIRE DEPARTMENT CONNECTION (FDC). 29. CELLULAR COMMUNICATOR TO BE PROVIDED FOR CENTRAL STATION MONITORING.	
APPLICABLE CODES / STANDARDS	
PARTIAL LIST OF APPLICABLE NFPA STANDARDS	
NFPA 72-National Fire Alarm Codes (2016 Edition) NFPA 101-Life Safety Code (2018 Edition) 2020 Florida Fire Prevention Code 7th Edition	
BUILDING INFORMATION	
BUILDING CONSTRUCTION TYPE: II-B BUILDING OCCUPANCY: S-1 OCCUPANT LOAD: 15 SPRINKLERED: NO	
AREA OF BUILDING: 4,598 sq NO. OF STORIES: 1 OWNER: John McGowan	

FIRE ALARM SYMBOL LEGEND		
SYMBOL	DESCRIPTION	MODEL #
	FIRE ALARM CONTROL PANEL	EST-IO1000
	SMOKE DETECTOR W/BASE	SIGA-OSD/ SIGA-SB4
	HEAT DETECTOR W/BASE	SIGA-HRD/ SIGA-SB4
	DUCT DETECTOR	SIGA-SD
	REMOTE TEST STATION	SD-TRK
	PULL STATION	SIGA-278
	SINGLE INPUT MODULE	SIGA-CT1
	HORN STROBE	G4AVRF
	STROBE	G4VRF
	VOLTAGE SURGE PROTECTOR - 120 VAC	DITEK DTK-120HW
	VOLTAGE SURGE PROTECTOR - TELEPHONE LINES	DITEK DTK-MR31XSCPWP
	SYSTEM RECORD DOCUMENTS	SSU00689
	CELL DIALER	SLE-LTEA-CFB-PS



FIRE ALARM WIRE LEGEND	
WIRE TAG	WIRE USE
A	(NAC) 14-2 FPL OR EQUIVALENT
B	(SLC DATA LOOP) 18-2 FPL OR EQUIVALENT
C	(REMOTE TEST STATION) 22-4 FPL OR EQUIVALENT
ALL CONDUITS 3/4" EMT. MINIMUM UNLESS OTHER WISE NOTED. 40% FILLED MAX.	



SCALE	1/4" = 1'-0"
PROJECT NO.	21-03-34-00
DATE	10/26/2022
DRAWN	JAC
CHECKED	OH



1st Fire & Security INC.
Life Safety Powered By Service
610 1st Street, Vero Beach, FL 32962
Phone: (772) 233-1111
License # EF01187

PROJECT NAME
FPL COLUMBIA BLDG. C - FLEET GARAGE
COUNTY ROAD 25A
LAKE CITY, FL 32096

SHEET NAME
COVER SHEET, NOTES & GROUND FLOOR - DEVICE LAYOUT

Sheet Number
FA-01
1 OF 2

LITTLE
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These drawings are NOT valid for any purpose which requires the original signature and seal of the engineer. Drawings not signed and sealed by the engineer shall not be submitted to any authority or used for any purpose where signed and sealed documents are required.

100% CONSTRUCTION DOCUMENTS

02/15/2026

NO.	REASON	DATE
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PRINCIPAL IN CHARGE
DAVID LITHGOW

PROJECT MANAGER
DAVID LITHGOW

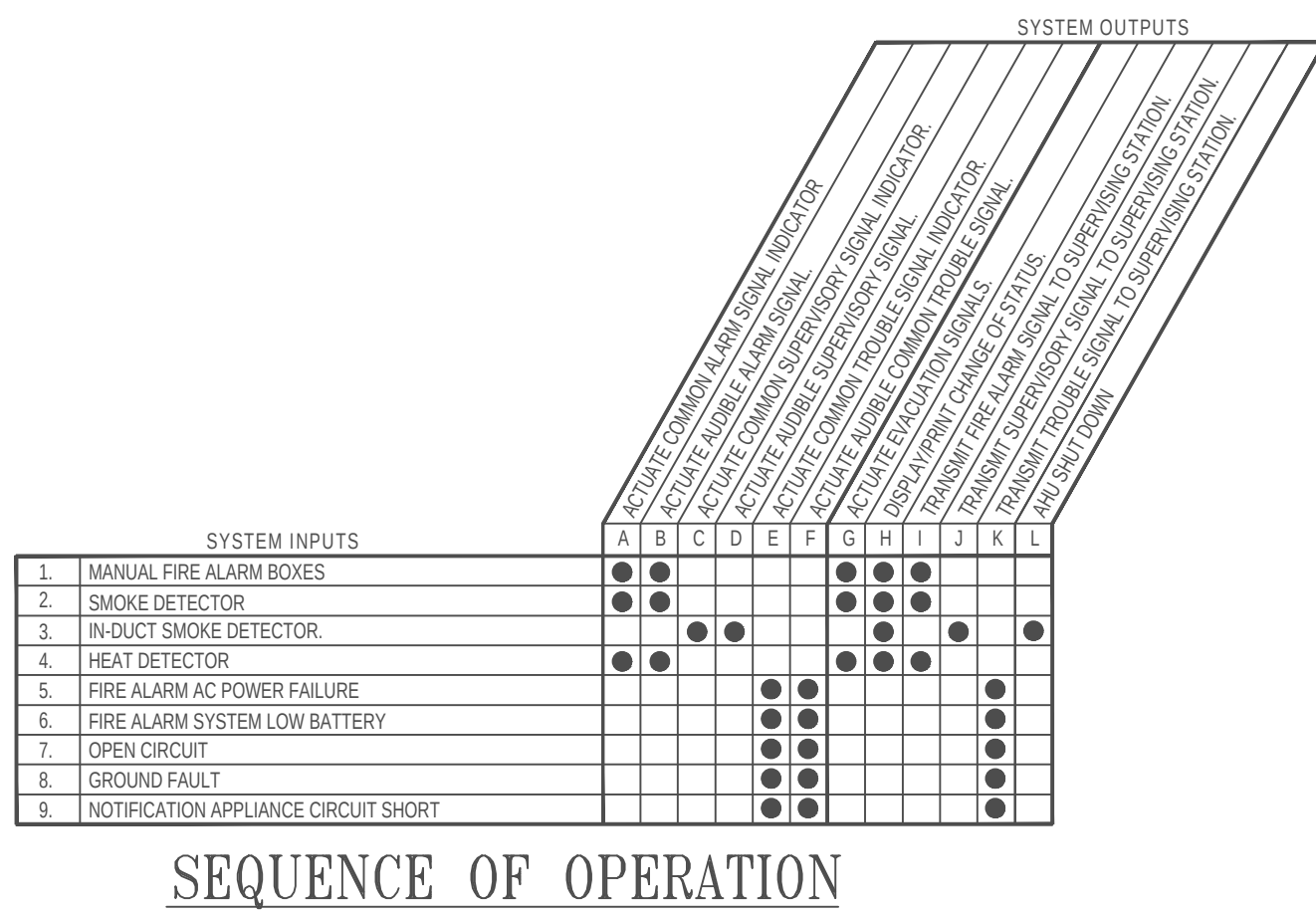
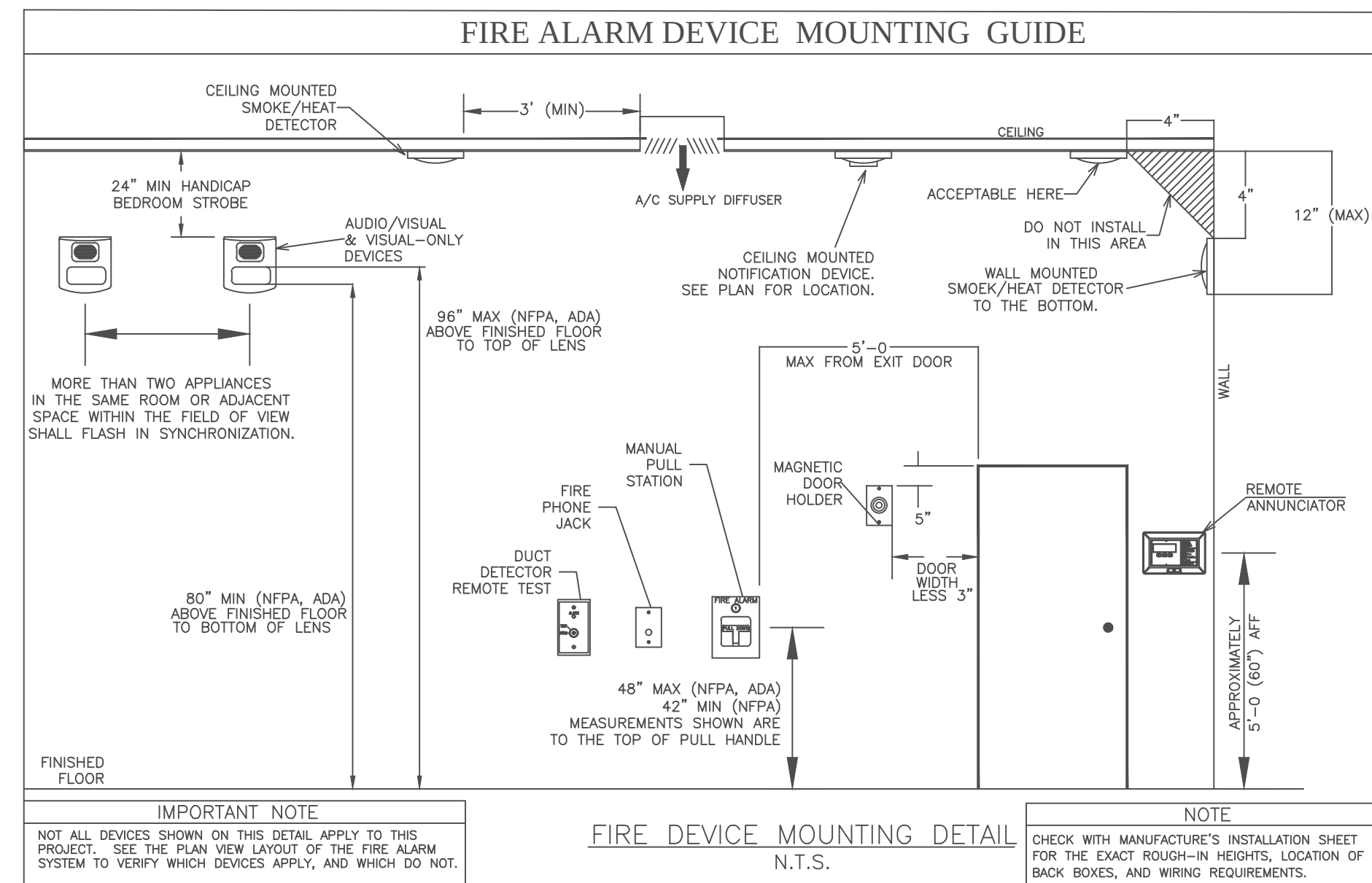
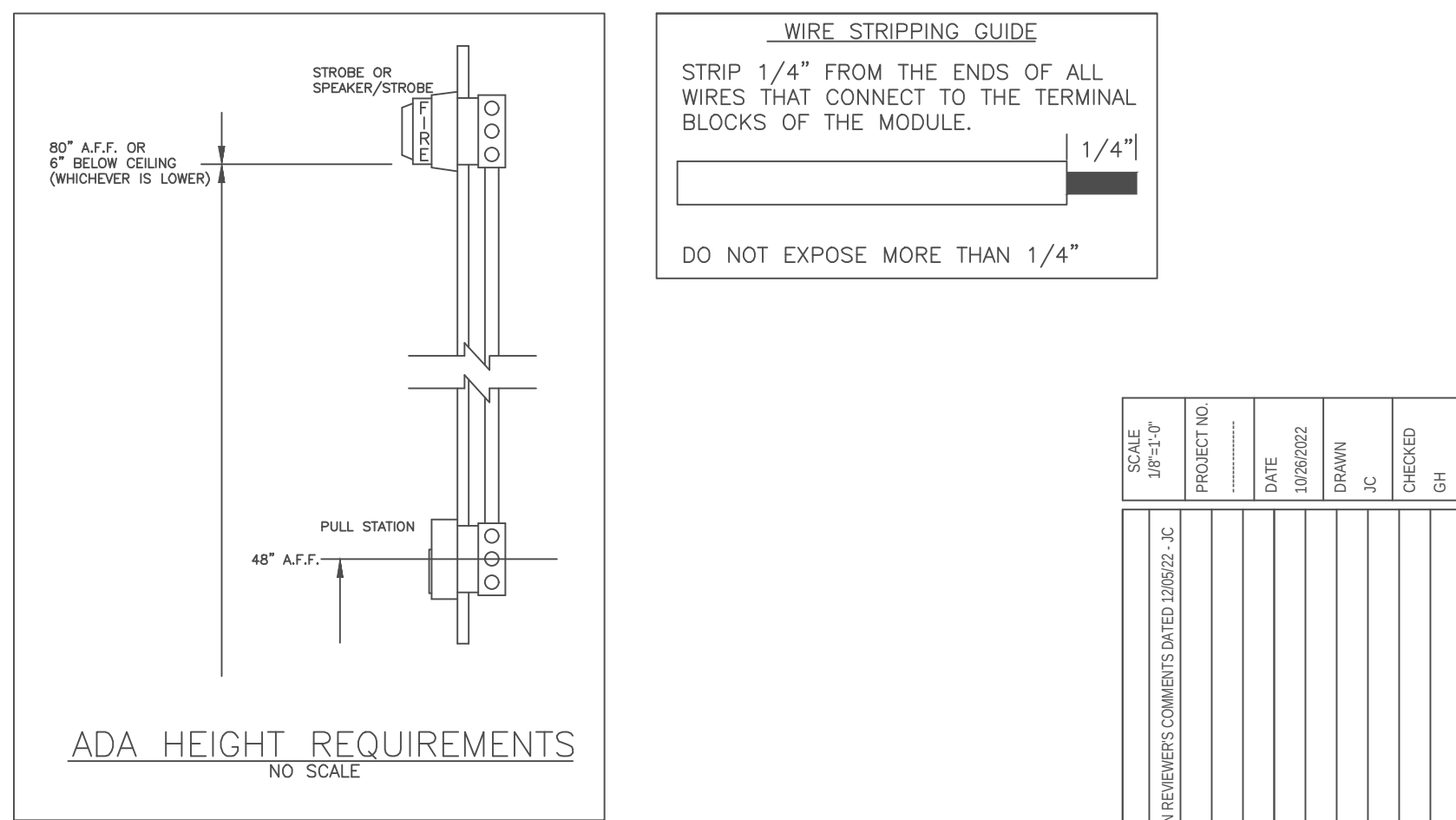
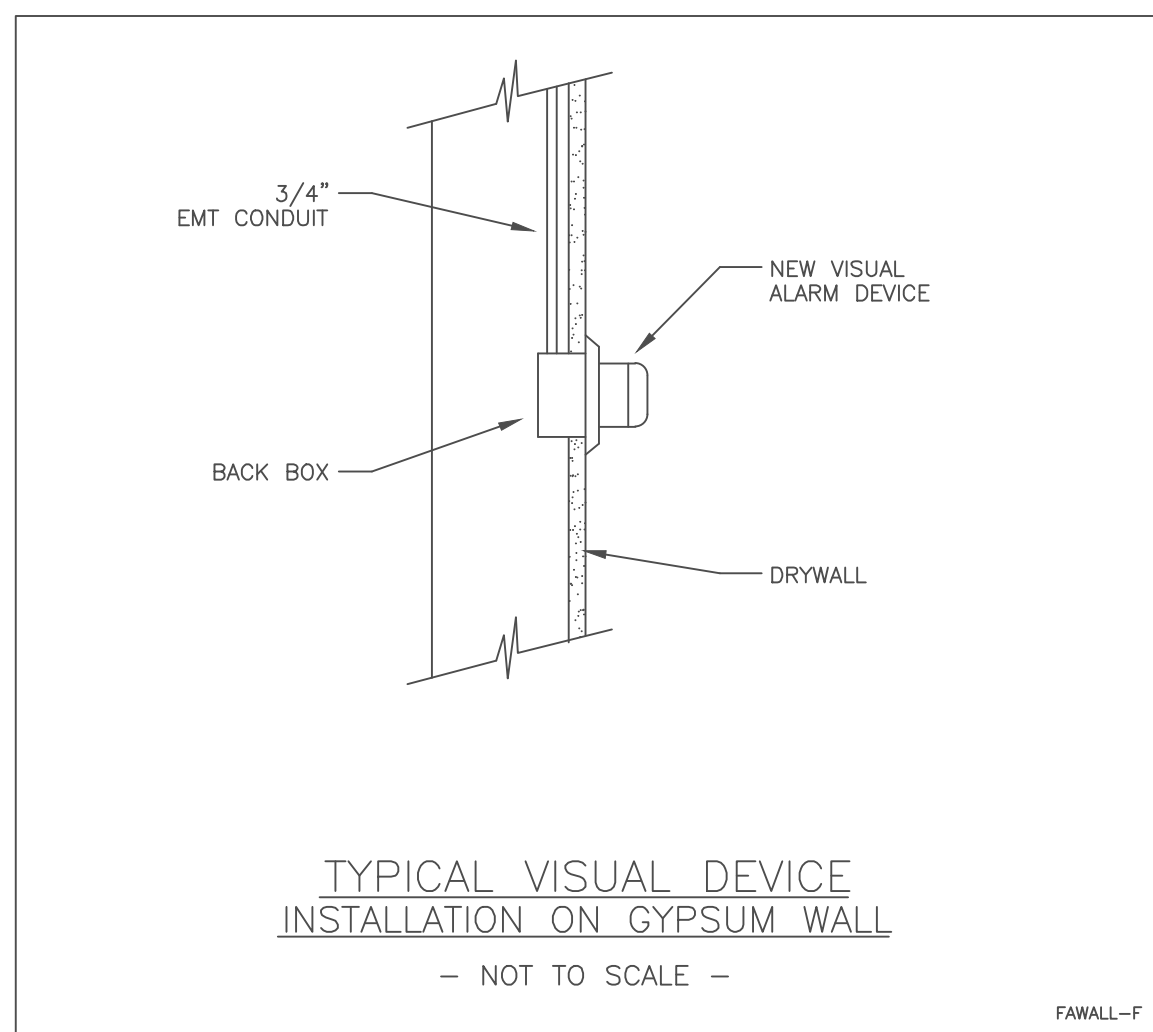
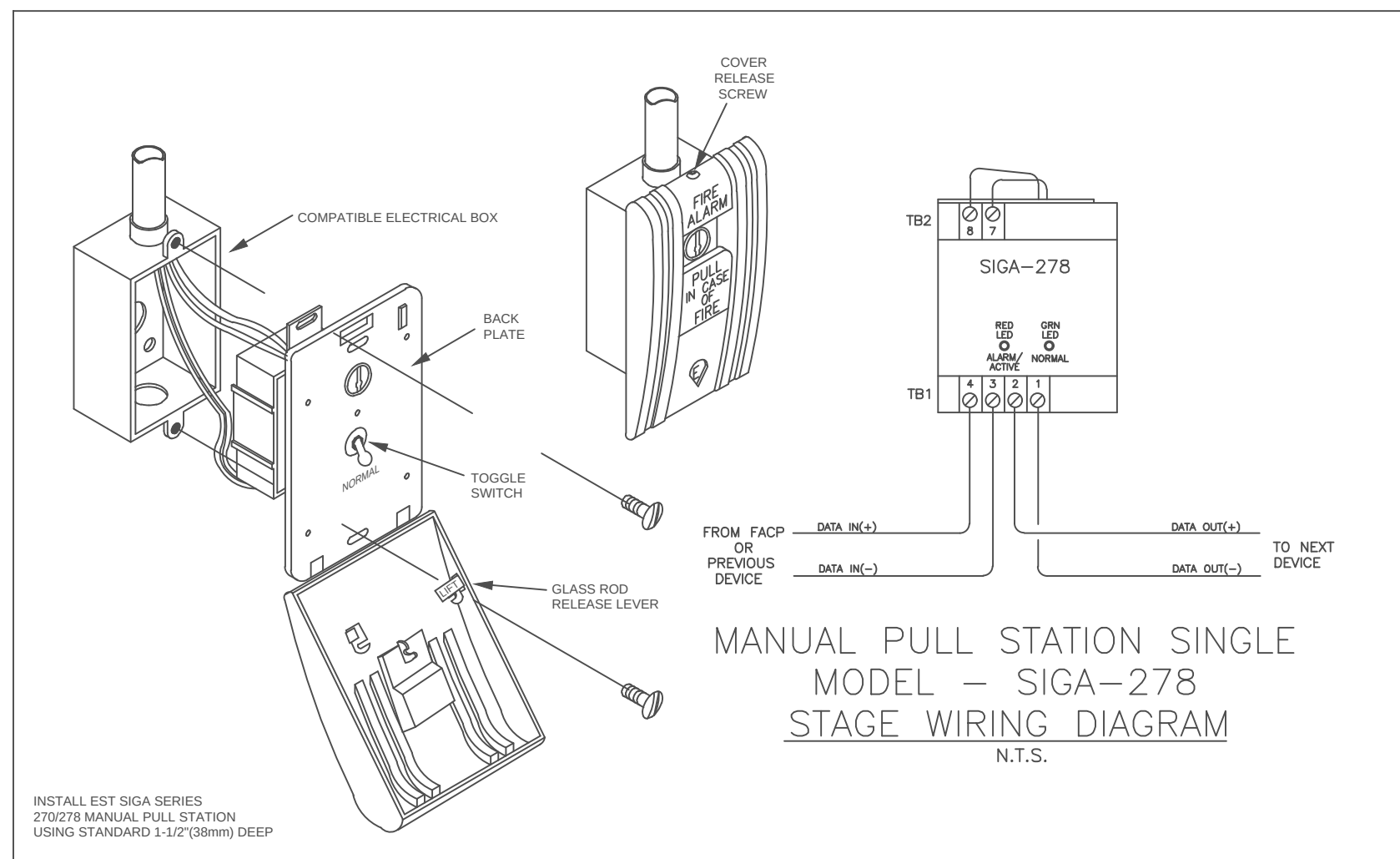
DESIGN TEAM
CEA

COLUMBIA STORM
PROCESSING & SERVICE
CENTER - BUILDING C -
2 BAY FLEET GARAGE
FLORIDA POWER & LIGHT

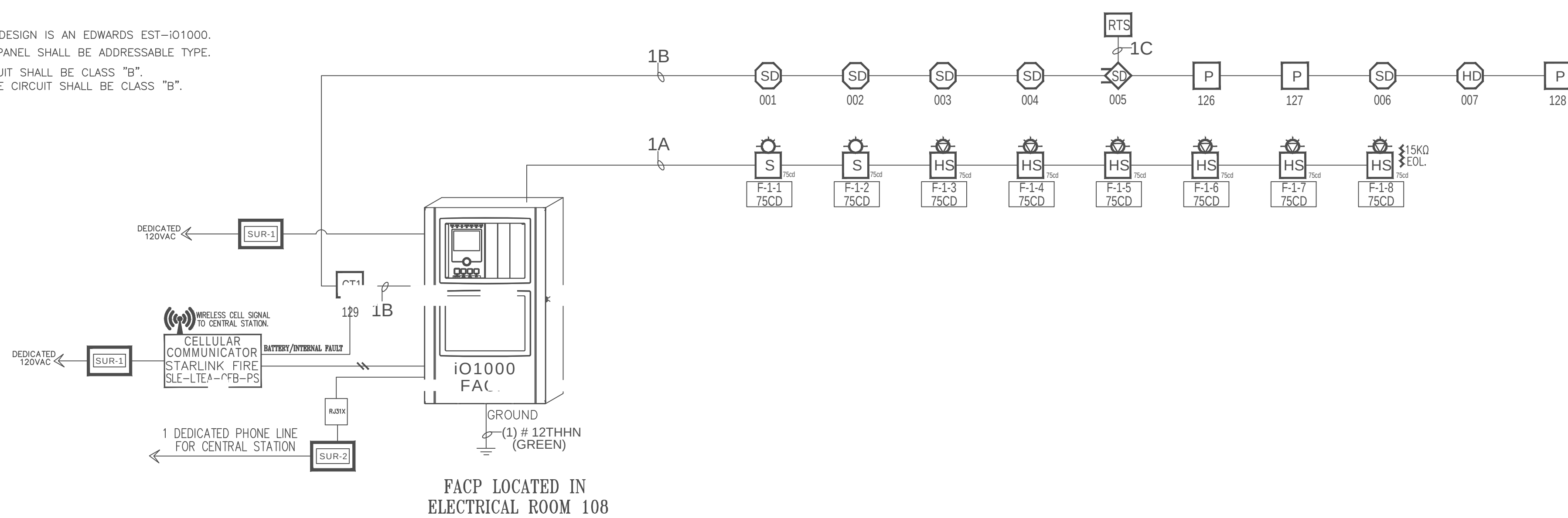
PROJECT NO.
814C632800

SHEET TITLE
FIRE ALARM
NOTES & GROUND
FLOOR DEVICE
LAYOUT

SHEET NUMBER
C-FA101



- NOTES:**
1. FIRE ALARM BASIS OF DESIGN IS AN EDWARDS EST-i01000.
 2. FIRE ALARM CONTROL PANEL SHALL BE ADDRESSABLE TYPE.
 3. INITIATING DEVICE CIRCUIT SHALL BE CLASS "B".
 4. NOTIFICATION APPLIANCE CIRCUIT SHALL BE CLASS "B".



TYPICAL RISER DIAGRAM