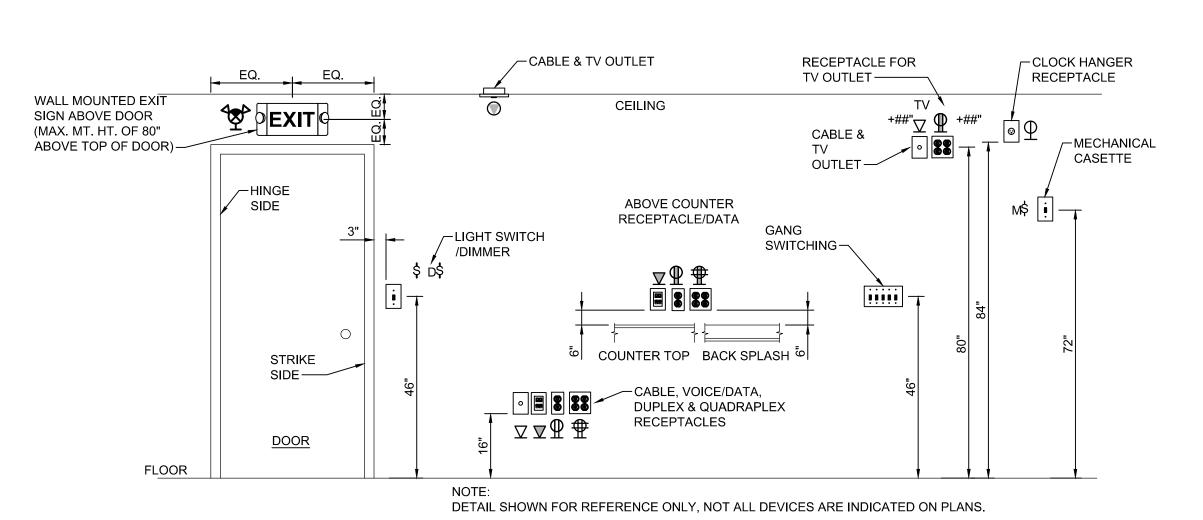
ELECTRIC	CAL LEGEND				
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	2x4 LIGHT FIXTURE, RECESSED MOUNTED LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)  2x2 LIGHT FIXTURE, SURFACE MOUNTED	₽ ₽ <del>₽</del>	RECEPTACLE, DUPLEX, 120VAC, 20A, MOUNTED 16" AFF, UNLESS OTHERWISE NOTED. (SEE ELECTRICAL MOUNTING HEIGHT DETAIL)  RECEPTACLE, DUPLEX, 120VAC, 20A, MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH.  RECEPTACLE, QUADPLEX, 120VAC, 20A MOUNTED 16"AFF UNLESS OTHERWISE NOTED (SEE	WP WAP WALL X CLNG X SM	WIRELESS ACCESS POINT, 2 DATA IN A DUAL GANG BOX WITH A SINGLE GANG PLASTER RING, OWNER SHALL PROVIDE SURGE PROTECTOR AND WAP DEVICE, THE ELECTRICAL CONTRACTOR SHALL INSTALL. WP - LISTED WEATHER-RESISTANT TYPE DEVICE  COMBINATION DATA/TELEPHONE OUTLET, MOUNTED 18" AFF UNLESS OTHERWISE NOTED. PROVIDE 11/4" CONDUIT TO ABOVE GRID CEILING W/PULL STRING. OUTLETS LOCATED BELOW
	LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)	#	ELECTRICAL MOUNTING HEIGHT DETAIL)  RECEPTACLE, QUADPLEX, 120VAC, 20A, MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH.	<u>v</u>	HARD(GYPBOARD) CEILINGS, ROUTE 11/4" CONDUIT BACK TO TELEPHONE/DATA ROOM. S - INDICATES SECURE DATA DEVICE M - INDICATES NON-SECURE MUTOA SM - INDICATES SECURE MUTOA
0	LOW BAY FIXTURE, SUSPENSION MOUNTED LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE) RECESSED LIGHT FIXTURE	<b>□</b>	RECEPTACLE, DUPLEX, GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A, MOUNTED 16" AFF, UNLESS OTHERWISE NOTED. (SEE ELECTRICAL MOUNTING HEIGHT DETAIL)  RECEPTACLE, DUPLEX, GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A.	DP	DATA SERVICE POLE, 4" X4" MINIMUM EXTRUDED ALUMINUM SERVICE POLE, SINGLE CHANNEL WITH CEILING TRIM. ANODIZED ALUMINUM, POLE WITH KNOCKOUTS ON 2 SIDES OF THE POLE WITH KNOCKOUTS THE ENTIRE LENGTH. UL LISTED EACH DATA
□ ¤	LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)  WALL MOUNTED LIGHT FIXTURE LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)	#	MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH.  RECEPTACLE, QUADPLEX, GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A MOUNTED 16"AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL)	PP	POLE SHOWN ON PLAN SHALL HAVE PROVISIONS FOR (4) DATA DROPS .  POWER SERVICE POLE, 4" X4" MINIMUM EXTRUDED ALUMINUM SERVICE POLE, SINGLE CHANNEL WITH CEILING TRIM, ANODIZED ALUMINUM. UL LISTED POLE WITH KNOCKOUTS
	POWER & SWITCH LEG  UNSWITCHED LEG	#	RECEPTACLE, QUADPLEX, GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A, MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH.		TO ACCOMMODATE THE QUANTITY OF RECEPTACLES INDICATED ON THE PLAN DRAWING.
	CONDUIT, HOME RUN TO PANEL BOARD  EXIT SIGN, SINGLE FACE, CEILING, ARROW INDICATES DIRECTION.	Φ	RECEPTACLE, 208VAC, 2 POLE, 3 WIRE, WALL MOUNTED, SIZE AS INDICATED ON DRAWING RECEPTACLE, DUPLEX, 120VAC, 20A CEILING MOUNTED (LAY-IN / GYPBOARD / SUSPENDED)	모	JUNCTION BOX - WALL MOUNTED +##" - INDICATES MOUNTING HEIGHT OF DEVICE IN INCHES AFF (if given)
	LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)  EXIT SIGN, SINGLE FACE, WALL/END MOUNTED, ARROW INDICATES DIRECTION.	© ₽	RECEPTACLE, DUPLEX, 120VAC, 20A RECESSED FLOOR MOUNTED.  UPS FED RECEPTACLE, DUPLEX, 120VAC, 20A, MOUNTED 16" AFF, UNLESS OTHERWISE NOTED. (SEE ELECTRICAL MOUNTING HEIGHT DETAIL)	①	JUNCTION BOX - CEILING MOUNTED  WALL MOUNTED DOUBLE GANG BOX FOR TELEVISION MOUNTED AT 72" AFF UNLESS NOTED OTHERWISE. BOX SHALL HAVE DUPLEX RECEPTACLE AND DATA CONNECTIONS FOR
₹	LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)  EXIT SIGN W/EMERGENCY LIGHTING UNIT, WALL/END MOUNTED, ARROW INDICATES DIRECTION. INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)	#	UPS FED RECEPTACLE, QUADPLEX, 120VAC, 20A, MOUNTED 16" AFF, UNLESS OTHERWISE NOTED. (SEE ELECTRICAL MOUNTING HEIGHT DETAIL)		TELEVISION AS DIRECTED BY OWNER/CLIENT/TENANT. BOX SHALL BE PASS & SEYMOUR TV2MW OR APPROVED EQUIVALENT.
4_	EMERGENCY LIGHTING UNIT, 2-HEAD WITH BATTERY BACK-UP, WALL MOUNTED, "NOT SWITCHED" LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)				FLOOR MOUNTED LOCKABLE DATA RACK
9	PHOTOCELL, REMOTE MOUNTED, 120V, 10 SECOND TIME DELAY, UL WET LOCATION, RATED FOR 1500 W @ 120 VAC AND 4000 W @ 277 VAC (FOR USE WITH LAMP SOURCE(S) SHOWN		**FOR ALL RECEPTACLE TYPES ABOVE: +XX"- INDICATES MOUNTING HEIGHT OF DEVICE IN INCHES AFF (IF GIVEN) (SEE ELECTRICAL MOUNTING HEIGHT DETAIL) WP - LISTED WEATHER-RESISTANT TYPE DEVICE WITH WEATHERPROOF IN USE COVER TR - TAMPER RESISTANT		1 HOUR RATED FIRE WALL 2 HOUR RATED FIRE WALL
\$	SWITCH, SINGLE POLE, 120/277VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL). LOWER CASE LETTER INDICATES FIXTURE SWITCHING (WHEN INDICATED)	30A/3/3R, W/ 30AF □Ľ	DISCONNECT SWITCH, FUSED, HEAVY (GENERAL) DUTY, SIZE AS INDICATED ON DRAWINGS (SIZE AS INDICATED IN THE EQUIPMENT CONNECTION SCHEDULE)	UGP	3 HOUR RATED FIRE WALL  UNDERGROUND PRIMARY DUCTBANK
\$3 \$4	3-WAY SWITCH, 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED 4-WAY SWITCH 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED	□св	##A = DISCONNECT SIZE / # = NUMBER OF POLES / # = NEMA RATING, /##AF = FUSE SIZE  ENCLOSED BREAKER, HEAVY DUTY, SIZE AS INDICATED ON DRAWINGS ##A = BREAKER SIZE / # = NUMBER OF POLES / # = NEMA RATING.	c	UNDERGROUND TELECOMMUNICATIONS DUCTBANK
\$ <sub>WP</sub>	WEATHERPROOF SWITCH, SINGLE POLE 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED  HEAVY DUTY DIMMER,1500W @ 120 VAC AND 4000W @ 277 VAC, 0-10V(IF REQUIRED)	<b>⋈\$##</b>	MANUAL MOTOR STARTER, ELECTRICAL CONTRACTOR SHALL COORDINATE POLES AND SIZE WITH EQUIPMENT		KEY NOTE SYMBOL
D\$	SINGLE POLE, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL). LOWER CASE LETTER INDICATES FIXTURE SWITCHING (WHEN INDICATED)		## = AMPERAGE RATING WHEN INDICATED ON DRAWING		REVISION DELTA
AFC\$	ADJUSTABLE FAN CONTROL, 120/277VAC, SINGLE POLE, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL). LOWER CASE LETTER INDICATES FIXTURE SWITCHING (WHEN INDICATED)	208/120V	PANELBOARD, SURFACE OR RECESSED MOUNTED AS SHOWN. SIZE, RATINGS, AND MOUNTING AS INDICATED ON PANEL SCHEDULE. CONTRACTOR IS RESPONSIBLE FOR		
⊙ ⊙-	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR, 360° COVERAGE  2 = SECOND CONTACT TO BE PROVIDED FOR CONNECTION TO BUILDING MANAGEMENT  CEILING MOUNTED OCCUPANCY SENSOR, LONG RANGE COVERAGE		REQUIRED CLEARANCE IN FRONT OF ELECTRICAL PANEL. SEE NEC TABLE 110.26 WORKING SPACES FOR ADDITIONAL CLEARANCE CONDITIONS.		
<b>9</b>	2 = SECOND CONTACT TO BE PROVIDED FOR CONNECTION TO BUILDING MANAGEMENT  WALL MOUNTED OCCUPANCY SENSOR, 180° COVERAGE  2 = SECOND CONTACT TO BE PROVIDED FOR CONNECTION TO BUILDING MANAGEMENT		TRANSFORMER, SIZE AS INDICATED ON DRAWING		
<b>.</b>	WALL MOUNTED OCCUPANCY SENSOR, PIR TECHNOLOGY OCCUPANCY SENSOR, LOW VOLTAGE (24VDC) 19mA DRAW, WATTSTOPPER CX100-1, LONG RANGE SENSOR. INSTALL WHERE FREE OF OBSTRUCTIONS.		METER  SERVICE POLE, HUBBEL, LEGRAND, OR EQUAL, EXTRUDED ALUMINUM SERVICE POLE, 2-CHANNELS WITH CEILING TRIM, ANODIZED ALUMINUM, MULTI-SERVICE, TWO-CHANNEL		
<b>-</b> -⊚-	WALL MOUNTED OCCUPANCY SENSOR, PIR TECHNOLOGY OCCUPANCY SENSOR, LOW VOLTAGE (24VDC) 19mA DRAW, WATTSTOPPER CX100-3, TWO SIDED AISLEWAY. INSTALL WHERE FREE OF OBSTRUCTIONS.	PP	POLE WITH (2) KNOCKOUTS, (2) 20AMP RECEPTACLES. ADJUSTABLE T-BAR ASSEMBLY FOR MOUNTING POLES IN MIDDLE OF CEILING. UL LISTED. EACH POWER POLE SHOWN ON PLAN SHALL HAVE PROVISIONS FOR (2) DATA DROPS AND (1) VOICE DROP.		
o\$	WALL MOUNTED OCCUPANCY SENSOR, SINGLE BUTTON ON/OFF CONTROL, 180° COVERAGE, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED.  WALL MOUNTED OCCUPANCY SENSOR, DUAL BUTTON ON/OFF CONTROL, 180°	M = =	ELECTRICAL MOTOR  GROUND BUS, "E" INDICATES ELECTRICAL GROUND BAR, "TG" INDICATES TELECOMMUNICATIONS GROUND BAR		
0\$2 0\$D	COVERAGE, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED.  WALL MOUNTED DUAL TECH OCCUPANCY SENSOR, DUAL BUTTON ON/OFF CONTROL WITH 0-10V DIMMING, 180° COVERAGE, MOUNTED AT 46" AFF UNLESS		CABLE TRAY, LADDER TYPE, 9"W x 5"D TRAY USAGE DESIGNATED ON DRAWING		
\$т	OTHERWISE NOTED. WATTSTOPPER DW-311 OR EQUAL.  WALL MOUNTED DIGITAL TIMED SWITCH (5 MIN'S TO 12 HR'S), SINGLE BUTTON ON/OFF CONTROL, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED.	GB	CABLE TRAY, BASKET TYPE, 8"W x 4"D TRAY USAGE DESIGNATED ON DRAWING SOLID COPPER GROUND BAR, 36" x 4" x 1/4"		
O\$F	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR, DUAL BUTTON ON/OFF CONTROL, 180° COVERAGE, ADDITIONAL POWER SUPPLY FOR FAN OPERATION, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED.				

REVISIONS

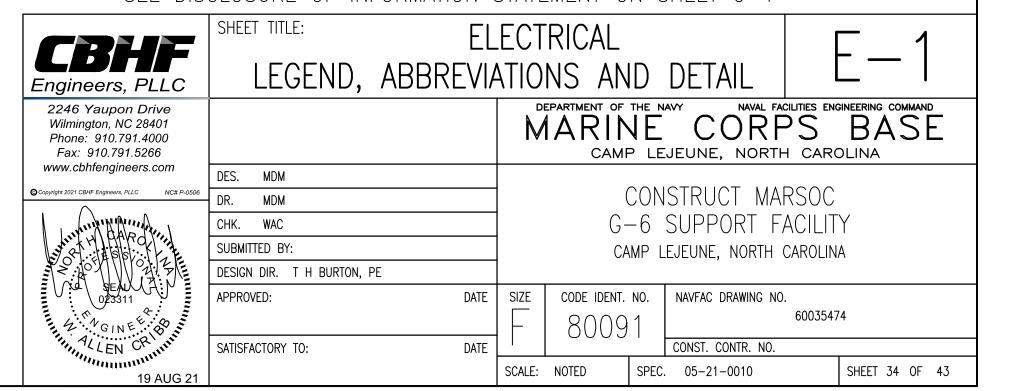
SYM. DATE APPROVED

	. ABBREVIATIONS:		
A, AMP	AMPERE	LP	LIGHTING PANEL, LIGHT POLE
AFF	ABOVE FINISHED FLOOR	LTG	LIGHTING
AFG	ABOVE FINISHED GRADE	MCB	MAIN CIRCUIT BREAKER
AHU	AIR HANDLING UNIT	MCC	MOTOR CONTROL CENTER
AIC	AMPERE INTERRUPTING CAPACITY	MCP	MOTOR CIRCUIT PROTECTOR
ATS	AUTOMATIC TRANSFER SWITCH	MDP	
			MAIN DISTRIBUTION PANEL
AWG	AMERICAN WIRE GAUGE	MFR	MANUFACTURER
BOF	BOTTOM OF FIXTURE	MH	MANHOLE
BRKR	BREAKER	MLO	MAIN LUGS ONLY
C, CND	CONDUIT	MTD	MOUNTED
CAB	CABINET	MTG	MOUNTING
CAT	CATALOG	MTS	MANUAL TRANSFER SWITCH
CL	CHLORINE	MV	MEDIUM VOLTAGE
CB	CIRCUIT BREAKER	N, NEUT	NEUTRAL
CCTV	CLOSED CIRCUIT TELEVISION	NA NA	
			NOT APPLICABLE
CKT	CIRCUIT	NC	NORMALLY CLOSED
CLG	CEILING	NEC	NATIONAL ELECTRIC CODE
CP	CONTROL PANEL	NIC	NOT IN CONTRACT
CR	CONTROL RELAY, CORROSION RESISTANT	NL	NIGHT LIGHT
CS	CONTROL SWITCH	NO	NORMALLY OPEN
CV	CONTROL VALVE	NTS	NOT TO SCALE
CT	CURRENT TRANSFORMER	P	POLE
CU	COPPER	PA	
			PUBLIC ADDRESS
EF	EXHAUST FAN	PB	PULL BOX, PUSH-BUTTON
EMER	EMERGENCY	PF	POWER FACTOR
EMT	ELECTRICAL METALLIC TUBING	РН, ф	PHASE
ENCL	ENCLOSURE	PLC	PROGRAMMABLE LOGIC CONTROLLER
EQUIP	EQUIPMENT	PNL	PANEL
EWC	ELECTRIC WATER COOLER	PP	POWER PANEL, POWER POLE
EWH	ELECTRIC WATER HEATER	PT	POTENTIAL TRANSFORMER
EPRF		PWR	
	EXPLOSION PROOF	RECPT, RCP	POWER
FA	FIRE ALARM	*	RECEPTACLE
FAAP	FIRE ALARM ANNUNCIATOR PANEL	REQ'D	REQUIRED
FACP	FIRE ALARM CONTROL PANEL	RGS	RIGID GALVANIZED STEEL CONDUIT
FBO	FURNISHED BY OTHERS	RM	ROOM
FLA	FULL LOAD AMPS	RTU	REMOTE TELEMETRY UNIT
FLUOR	FLUORESCENT	SCR	DC MOTOR DRIVE
FLR	FLOOR	SH	SHEET
FWE	FURNISHED WITH EQUIPMENT	SM	
		SPEC	SURFACE MOUNTED
GB	SOLID COPPER GROUND BAR		SPECIFICATION
GEN	GENERATOR	SS	SELECTOR SWITCH
G, GND	GROUND	SST	STAINLESS STEEL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SW	SWITCH
HH	HANDHOLE	SWBD	SWITCHBOARD
HID	HIGH INTENSITY DISCHARGE	SWGR	SWITCH GEAR
HOA	HAND-OFF-AUTO	TEL	TELEPHONE
HP		TPS	
	HORSE POWER		TWISTED PAIR SHIELDED
HPF	HIGH POWER FACTOR	TVSS	TRANSIENT VOLTAGE SURGE SUPPRES
HPS	HIGH PRESSURE SODIUM	TYP	TYPICAL
HTR	HEATER	UGND	UNDERGROUND
HV	HIGH VOLTAGE	UH	UNIT HEATER
Hz	HERTZ	UON	UNLESS OTHERWISE NOTED
IMC	INTERMEDIATE METALLIC CONDUIT	UTIL	UTILITY
INCAND		V	
	INCANDESCENT	V VFD	VOLTS
JB	JUNCTION BOX		VARIABLE FREQUENCY DRIVE
K	THOUSAND	W	WIRE, WATT
KCMIL	THOUSAND CIRCULAR MILLS	WH	WATT-HOUR
KVA	KILOVOLT AMPERE	WP	WEATHERPROOF
KW	KILOWATTS	XFMR	TRANSFORMER
KWH	KILOWATTS KILOWATT-HOURS	(X)	
	NILOWATI-HOUKS	1 117	EXISTING



1 ELECTRICAL DEVICES - MOUNTING HEIGHT DETAIL

NOT TO SCALE



REVISIONS				
SYM.		DATE	APPROVED	

## **ELECTRICAL GENERAL NOTES:**

- ALL ELECTRICAL WORK SHALL BE IN FULL COMPLIANCE WITH NFPA 70 STATE BUILDING CODE. ALL LOCAL CODES AND ORDINANCES AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- ALL EQUIPMENT PROVIDED BY THE CONTRACTOR SHALL BE LISTED AND LABELED BY A NATIONALLY-RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, FOR THE CONDITIONS OF INSTALLATION. ALL MATERIAL, EQUIPMENT AND DEVICES SHALL BE NEW CURRENT PRODUCTS OF MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH PRODUCTS. EQUIPMENT SHALL BE SUITABLE FOR ITS APPLICATION (E.G. WHEN INSTALLED OUTDOORS, IT SHALL BE WEATHERPROOF, ETC.)
- THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR WORK REQUIREMENTS, THE AMOUNT OF SPACE AVAILABLE FOR ELECTRICAL EQUIPMENT, AND LAYOUT HIS WORK IN A COMPATIBLE AND COMPLEMENTARY MANNER.
- THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THOROUGHLY FAMILIARIZING HIMSELF WITH ANY CONTRACTUAL REQUIREMENTS AS MAY BE SET FORTH IN THE OTHER DIVISIONS OF THE PROJECT SPECIFICATIONS.
- UNLESS SPECIFICALLY NOTED OTHERWISE, SYSTEMS PROVIDED OR INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE COMPLETE AND FULLY-FUNCTIONING AFTER INSTALLATION. INCIDENTAL COMPONENTS MAY NOT BE SHOWN, AND ALL WORK WHICH MAY BE REASONABLY IMPLIED AS BEING INCIDENTAL TO THIS WORK, BUT REQUIRED FOR THE PROPER OPERATION OF THE EQUIPMENT OR SYSTEM, SHALL BE PROVIDED BY THE CONTRACTOR AND INCLUDED IN THE BID. ADDITIONAL CIRCUITS SHALL BE INSTALLED WHEREVER NEEDED TO CONFORM TO THE SPECIFIC REQUIREMENTS OF EQUIPMENT.
- TEMPORARY POWER CONNECTIONS AS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR AND INCLUDED IN THE BID. ALL TEMPORARY EQUIPMENT WIRING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. THE CONTRACTOR SHALL PROVIDE DETAILS, METHODS, MATERIALS, ETC. FOR REVIEW PRIOR TO MAKING TEMPORARY CONNECTIONS. FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS INCLUDING CONTROL EQUIPMENT. MOTOR STARTERS. BRANCH AND FEEDER CIRCUIT BREAKERS, PANELBOARDS, TRANSFORMERS, ETC. FOR TEMPORARY POWER. COORDINATE WITH THE ELECTRICAL UTILITY COMPANY AS REQUIRED.
- THE WORK SHALL INCLUDE COMPLETE TESTING OF ALL EQUIPMENT AND WIRING AT THE COMPLETION OF WORK AND ANY MINOR CORRECTIONS, CHANGES OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM AND EQUIPMENT.

ALL ELECTRICAL EQUIPMENT SHALL, AT ALL TIMES DURING CONSTRUCTION, BE ADEQUATELY

- . ALL EQUIPMENT SHOWN DOTTED OR DASHED IS BY OTHERS OR IS EXISTING, AS NOTED.
- PROTECTED AGAINST MECHANICAL INJURY, OR DAMAGE BY WATER AND/OR THE ELEMENTS. ELECTRICAL EQUIPMENT SHALL NOT BE STORED OUT OF DOORS, BUT SHALL BE STORED IN DRY PERMANENT SHELTERS. IF AN APPARATUS HAS BEEN DAMAGED, OR HAS BEEN SUBJECT TO POSSIBLE INJURY BY WATER OR THE ELEMENTS, SUCH DAMAGE SHALL BE REPLACED AT NO ADDITIONAL COST.
- ). DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR
- CIRCUIT LAYOUTS ARE NOT INTENDED TO SHOW THE NUMBER OF FITTINGS. OR OTHER INSTALLATION DETAILS. UNLESS NOTED OTHERWISE, THE EXACT ROUTING OF FEEDER AND BRANCH CIRCUIT RACEWAYS AND CABLES IS THE RESPONSIBILITY OF THE CONTRACTOR. RISER AND GENERAL CIRCUIT ARRANGEMENTS ARE SHOWN SCHEMATICALLY/DIAGRAMMATICALLY ONLY. THE CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE
- . UNLESS DIMENSIONED, DEVICE LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADJUST EXACT LOCATIONS AS REQUIRED TO SERVE THE INTENDED PURPOSE AND TO AVOID CONFLICTS AND INTERFERENCES WITH OTHER TRADES. EXACT DEVICE LOCATIONS SHALL BE AS INDICATED ON THE ARCHITECTURAL DRAWINGS OR AS DIMENSIONED. IF NOT SHOWN ON THE ARCHITECTURAL DRAWINGS OR DIMENSIONED ON THE ELECTRICAL DRAWINGS, VERIFY EXACT LOCATION WITH THE ARCHITECT/ENGINEER PRIOR TO ROUGH-IN.
- 3. CONDUIT TERMINATING IN PRESSED STEEL BOXES SHALL HAVE DOUBLE LOCKNUTS AND INSULATED BUSHINGS. CONDUITS TERMINATING IN GASKETED ENCLOSURES SHALL BE TERMINATED WITH GROUNDING TYPE CONDUIT HUBS.
- 4. DEVICE BOXES SHOWN BACK-TO-BACK SHALL BE OFFSET A MINIMUM OF TWELVE (12) INCHES TO REDUCE SOUND TRANSMISSION BETWEEN ROOMS.

. BRANCH CIRCUIT HOMERUNS SHOWN ON DRAWINGS INDICATE PHASE CONDUCTORS, NEUTRAL,

- EQUIPMENT GROUND ISOLATED GROUND CONDUCTORS AS REQUIRED. ADDITIONAL CONDUCTORS REQUIRED FOR CONTROL SHALL BE INCLUDED EVEN IF NOT EXPLICITLY SHOWN. 16. SEAL ALL CONDUIT OPENINGS THROUGH EXTERIOR BUILDING WALLS WATERTIGHT.
- . IN WET LOCATIONS AND EXTERIOR, ALL WIRING DEVICES SHALL BE WEATHER-RESISTANT LISTED
- 8. RACEWAYS ENETRATING FLOORS, CEILINGS OR WALLS SHALL BE PROPERLY SEALED

WITH WEATHERPROOF WHILE IN USE COVER. LIGHTING FIXTURES SHALL BE APPROPRIATELY

RATED AND LISTED FOR THE ENVIRONMENT INCLUDING 0 DEGREE BALLASTS FOR FLUORESCENT.

- 19. LIGHTING FIXTURES, SPEAKER ASSEMBLIES, ETC. MOUNTED IN FIRE-RATED CEILINGS SHALL BE PROVIDED WITH UL-LISTED, PRE-FABRICATED OR FIELD FABRICATED SHROUDS/ACCESSORIES NECESSARY TO MAINTAIN THE CEILING FIRE RATING.
- 20. ALL RACEWAYS SHALL BE CONCEALED WHERE POSSIBLE. IF APPLICABLE, MATCH EXISTING RACEWAY INSTALLATION METHODS AND ROUTINGS AT OR NEAR EXISTING FACILITIES.
- . INSTALL EXPOSED RACEWAYS PARALLEL TO OR AT RIGHT ANGLES TO NEARBY SURFACES OR STRUCTURAL MEMBERS, AND FOLLOW THE SURFACE CONTOURS AS MUCH AS POSSIBLE. NO DIAGONAL RUNS WILL BE ALLOWED. ALL CONDUITS SHALL BE RUN STRAIGHT AND TRUE. RUN PARALLEL OR BANKED RACEWAYS TOGETHER ON COMMON SUPPORTS WHERE PRACTICAL. MAKE BENDS IN PARALLEL OR BANKED RUNS FROM SAME CENTERLINE TO MAKE BENDS PARALLEL.

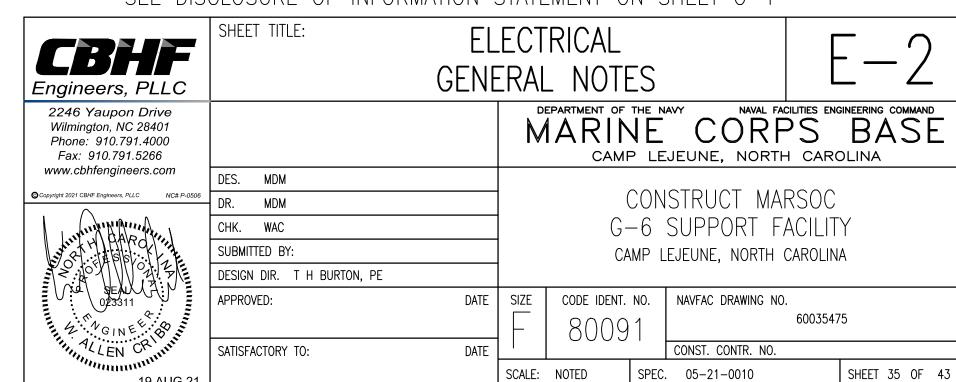
- 2. PROVIDE AND PLACE ALL SLEEVES FOR CONDUITS PENETRATING WALLS, FLOORS, PARTITIONS, ETC. LOCATE ALL NECESSARY SLOTS FOR ELECTRICAL WORK AND FORM BEFORE CONCRETE IS
- 23. PATCHING OF WATERPROOFED SURFACES SHALL RENDER THE AREA OF THE PATCHING
- 24. ALL MOTORS AND OTHER VIBRATING EQUIPMENT SHALL BE CONNECTED TO THE CONDUIT SYSTEM BY MEANS OF A SHORT SECTION (18 INCH MINIMUM) OF FLEXIBLE CONDUIT UNLESS OTHERWISE INDICATED. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED INSIDE THE FLEXIBLE CONDUIT AND TERMINATE AT THE LOAD END WITH AN APPROVED GROUNDING CLAMP OR LUG.
- 5. SURFACE MOUNTED PANELBOARDS, JUNCTION, OUTLET AND PULL BOXES, RACEWAYS, ETC., INSTALLED ON EXTERIOR SURFACES OR INSIDE ON EXTERIOR WALLS SHALL BE SUPPORTED BY SPACERS TO PROVIDE A 1/4" MINIMUM CLEARANCE BETWEEN THE WALL AND EQUIPMENT.
- 26. CEILING MOUNTED DEVICES INSTALLED IN ACOUSTICAL TILE CEILING AREAS SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE WITH RODS OF SUFFICIENT SIZE TO PREVENT VERTICAL MOVEMENT OF THE OUTLET BOX. BRIDGES ALONE ARE NOT ADEQUATE UNLESS SPECIFICALLY APPROVED. CEILING MOUNTED EXIT LIGHT FIXTURES SHALL BE INSTALLED LEVEL DO NOT SUPPORT DEVICES FROM ACCOUSTICAL CEILING TILE.
- 7. EXCAVATION AND TRENCHING REQUIRED FOR THE INSTALLATION OF ELECTRICAL POWER AND TELECOMMUNICATIONS RACEWAYS SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF DIVISION 26 27 & 33 OF THE PROJECT SPECIFICATIONS.
- 28. PRIOR TO TRENCHING IN ANY AREA, THE CONTRACTOR SHALL CONTACT ELECTRICAL, COMMUNICATIONS/DATA/FIBER, CABLE TELEVISION, GAS AND WATER UTILITY PROVIDERS AND HAVE ALL UTILITIES IN THE AREA IDENTIFIED. DAMAGE TO ANY UNDERGROUND UTILITIES OR STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.
- 9. ALL UNDERGROUND RACEWAYS SHALL BE IDENTIFIED BY UNDERGROUND LINE MARKING TAPE LOCATED DIRECTLY ABOVE THE RACEWAY AT 6 TO 8 INCHES BELOW FINISHED GRADE. SEE SPECIFICATIONS SECTION 260553.
- 30. WHERE UNDERGROUND RACEWAYS ARE REQUIRED TO TURN UP INTO CABINETS, EQUIPMENT, ETC., AND ON TO POLES, THE ELBOW REQUIRED AND THE STUB-UP OUT OF THE SLAB OR EARTH SHALL BE OF PLASTIC-COATED RIGID STEEL.
- . PROVIDE ADHESIVE BACKED RECEPTACLE DEVICE PLATE LABELS IDENTIFYING THE CIRCUIT FEEDING THE DEVICE. LABELS SHALL INDICATE PANEL AND CIRCUIT NUMBER. ALSO PROVIDE IDENTIFICATION FOR MULTIWIRE BRANCH CIRCUIT PHASE CONDUCTORS IN PANELBOARD. SEE SPECIFICATIONS SECTION 260553 FOR REQUIREMENTS.
- 2. FINAL TYPED PANELBOARD DIRECTORIES INSTALLED IN THE PANELBOARD DOOR POCKET SHALL INCLUDE FINAL ACTUAL ROOM NAMES AND NUMBERS IN ADDITION TO THE GENERAL DESCRIPTION SHOWN ON THE PANEL SCHEDULES ON THE DRAWINGS.
- 3. CONDUCTOR SIZING IS BASED ON 75 DEGREE C. COPPER NEC RATINGS, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL VERIFY, PRIOR TO INSTALLATION OF CONDUCTORS OR CONDUIT FEEDING ANY EQUIPMENT, THE ELECTRICAL EQUIPMENT IS RATED FOR USE WITH 75 DEGREE C. WIRING. IF ANY EQUIPMENT IS RATED FOR USE WITH LESS THAN 75 DEGREE C. CONDUCTORS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY FOR EVALUATION/CORRECTION.
- 4. DO NOT PULL CONDUCTORS UNTIL THE CONDUIT SYSTEM IS COMPLETE IN EVERY DETAIL. IN THE CASE OF CONCEALED WORK, "COMPLETE" MEANS UNTIL ALL ROUGH PLASTERING OR MASONRY HAS BEEN COMPLETED.
- 5. WHERE SIZE IS NOT SHOWN ON THE DRAWINGS, BRANCH CIRCUITS SHALL CONSIST OF #12 OR #10 AWG MINIMUM PHASE, NEUTRAL AND EQUIPMENT GROUND CONDUCTORS IN 3/4" MINIMUM
- 36. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS WITH A TOTAL INSTALLED LENGTH GREATER THAN 75 FEET AND/OR BRANCH CIRCUIT HOMERUNS LONGER THAN 50 FEET, I.E.; #12 AWG INCREASED TO #10 AWG FOR RECEPTACLE BRANCH CIRCUITS OVER 75 FEET TOTAL LENGTH (INCLUDING THE HOMERUN SEGMENT) AND HOMERUNS OVER 50 FEET.
- 37. PROVIDE SEPARATE, INDIVIDUAL NEUTRAL CONDUCTORS FOR ALL CIRCUITS.
- 8. KEEP CONDUCTOR SPLICES TO A MINIMUM. INSTALL SPLICES AND TAPES THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATINGS THAN CONDUCTORS BEING SPLICED. USE SPLICE AND TAP CONNECTORS COMPATIBLE WITH CONDUCTOR MATERIAL. INSTALL CONDUCTORS AT EACH OUTLET WITH AT LEAST 12 INCHES OF SLACK. CONNECT OUTLETS AND COMPONENTS TO WIRING AND TO GROUND AS INDICATED AND INSTRUCTED BY THE MANUFACTURER.
- 39. DO NOT SPLICE BRANCH CIRCUIT HOMERUNS WITHOUT THE PERMISSION OF THE ARCHITECT/ENGINEER. HOMERUNS SHALL BE CONTINUOUS FROM THE LAST OUTLET BOX TO THE SERVING PANELBOARD.
- 40. DO NOT COMBINE BRANCH CIRCUIT HOMERUNS UNLESS SPECIFICALLY INDICATED ON THE
- 41. DO NOT CHANGE CIRCUITING SHOWN WITHOUT PERMISSION OF THE ARCHITECT/ENGINEER.
- 3. INSTALL WIRING DEVICES AT HEIGHTS AS SHOWN ON THE DRAWINGS. ALSO COORDINATE MOUNTING HEIGHTS WITH THE ARCHITECTURAL DRAWINGS AND CASEWORK DETAILS. IF CONFLICTING, ARCHITECTURAL DRAWINGS AND DETAILS SHALL GOVERN.

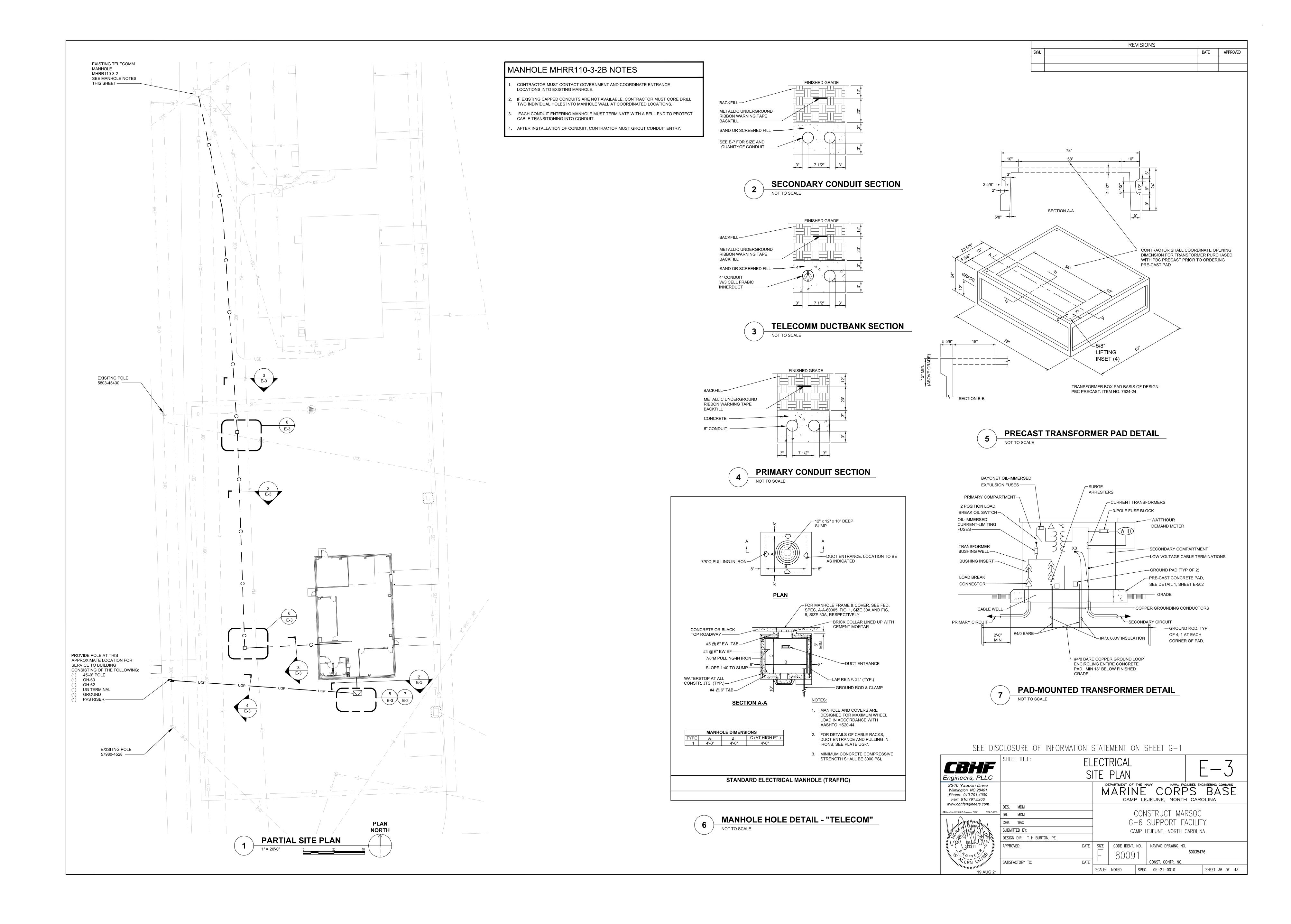
42. TROUGH TAPS SHALL BE AT SWITCH AMPACITY, UNLESS NOTED OTHERWISE.

- 44. PROVIDE GROUND FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL IN ACCORDANCE WITH THE NEC INCLUDING ALL ELECTRIC WATER COOLERS, EXTERIOR RECEPTACLES AND RECEPTACLES IN AREAS SUBJECT TO POSSIBLE WET CONDITIONS. ALL RECEPTACLES INSTALLED WITHIN 6 FEET OF A SINK SHALL BE GFI PROTECTED. ALL RECEPTACLES IN NON-RESIDENTIAL KITCHENS SHALL BE GFI PROTECTED.
- 45. IN AREAS IN WHICH DUAL LEVEL SWITCHING IS INDICATED (TYPICALLY BY 2 OR MORE ADJACENT, GANGED SWITCHES), PROVIDE THE APPROPRIATE NUMBER OF CONDUCTORS TO FACILITATE THIS FUNCTION (AS TYPICALLY SHOWN).
- 46. CONNECT BATTERY PACK TYPE EMERGENCY AND EXIT LIGHTING TO THE UNSWITCHED LIGHTING CIRCUIT SERVING THE SPACE LIGHTED BY THE EMERGENCY AND EXIT FIXTURES. THESE CONNECTIONS ARE INTENTIONALLY NOT SHOWN TO MAINTAIN DRAWING FOR CLARITY.
- 47. COORDINATE LIGHTING FIXTURE LOCATIONS WITH THE ARCHITECTURAL REFLECTED CEILING PLAN. IF CONFLICTS ARE NOTED, REQUEST CLARIFICATION FROM THE ARCHITECT/ENGINEER BEFORE PROCEDING.
- 48. ADJACENT SWITCHES SHALL BE GANGED. INSTALL BARRIERS BETWEEN UNLIKE VOLTAGE
- 49. SEPARATE NEUTRALS ARE REQUIRED FOR ALL DIMMED LIGHTING CIRCUITS.

SECTIONS.

- 50. WHERE THE DRAWINGS INDICATE A LIGHTING FIXTURE IS TO BE PROVIDED WITH SPECIAL FEATURES/SWITCHING (DIMMING, EMERGENCY BATTERY BALLAST, MULTI-LEVEL, ETC), THE CONTRACTOR SHALL PROVIDE THESE FIXTURES WITH THE APPROPRIATE BALLASTING TO ACCOMMODATE THE SPECIAL FEATURE. THE CONTRACTOR SHALL PROVIDE THE FIXTURES AS INDICATED IN THE LIGHTING FIXTURE SCHEDULE WITH MODIFICATIONS AS REQUIRED BY DRAWING
- 51. COORDINATE LOCATIONS OF PLUMBING, MECHANICAL, DATA AND TELEPHONE AND AUDIO/VISUAL EQUIPMENT AND OF GOVERNMENT PROVIDED EQUIPMENT WITH THE RESPECTIVE CONTRACTORS AND VENDORS AND THE GOVERNMENT BEFORE ROUGH-IN. ADJUST LIGHTING FIXTURES. RECEPTACLES AND ELECTRICAL EQUIPMENT TO ACCOMMODATE THIS EQUIPMENT. ADVISE THE GOVERNMENT OF CONFLICTS BEFORE ROUGH-IN
- 52. BEFORE COMMENCING WORK OR ORDERING MATERIALS, THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND VERIFY THE NAMEPLATE RATINGS OF ALL EQUIPMENT (MOTORS. HEATERS, COMPRESSORS, ETC.) AND ADJUST THE RATINGS OF THE ELECTRICAL EQUIPMENT (SWITCHES, FUSES, CIRCUIT BREAKERS, FEEDERS, ETC.) AS APPROPRIATE TO SERVE THIS EQUIPMENT.
- 53. ENERGIZE EQUIPMENT ONLY AFTER OBTAINING PERMISSION FROM THE CONTRACTOR PROVIDING THE EQUIPMENT.
- 54. UNLESS SPECIFICALLY NOTED OTHERWISE, THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL UTILIZATION EQUIPMENT SHOWN ON THE DRAWINGS. VERIFY THE TYPE OF FINAL CONNECTION AND PROVIDE APPROPRIATE WIRING METHOD. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL, PLUMBING AND GENERAL CONTRACTORS, PRIOR TO ORDERING OR INSTALLATION OF ANY EQUIPMENT, TO VERIFY MECHANICAL AND PLUMBING EQUIPMENT REQUIREMENTS ARE PROVIDED IN THE ELECTRICAL DESIGN. THE CONTRACTOR WILL NOT BE COMPENSATED FOR COSTS ASSOCIATED WITH CHANGING THE ELECTRICAL SYSTEMS TO MATCH UTILIZATION EQUIPMENT, EVEN IF THE ELECTRICAL WORK IS INSTALLED PER THE ELECTRICAL DRAWINGS.
- 55. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL EQUIPMENT TERMINATIONS, PLUGS AND CORDSETS WITH VENDOR EQUIPMENT AND VERIFY ALL DEVICE LOCATIONS FOR SPECIALITY EQUIPMENT WITH CASEWORK PRIOR TO ROUGH-IN.
- 56. THE LAYOUT AND PLACEMENT OF ELECTRICAL DISTRIBUTION EQUIPMENT IS BASED ON PUBLISHED EQUIPMENT SIZES AND SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE. DEVIATIONS FROM CONFIGURATIONS SHOWN IS THE RESPONSIBILITY OF THE CONTRACTOR. PROVIDE NATIONAL ELECTRIC CODE REQUIRED CLEARANCES FOR ALL ELECTRICAL EQUIPMENT, PANELBOARDS, TRANSFORMERS, SAFETY SWITCHES, SWITCHBOARDS, ETC. COORDINATE RESOLUTION OF CONFLICTS WITH OTHER TRADES. ADVISE THE ARCHITECT/ENGINEER OF CONFLICTS BEFORE ROUGH-IN.
- 57. TELECOMMUNICATIONS AND DATA CABLES WILL BE PROVIDED AND INSTALLED BY CONTRACTOR. LEAVE PULL WIRES AND ROPES OF ADEQUATE TENSIL STRENGTH IN ALL EMPTY CONDUITS.
- A. COMPLY WITH OSHA AND NEC ARC FLASH PROTECTION REQUIREMENTS.
- 59. ALL SWITCHES, RECEPTACLE AND LIGHTS SHALL COMPLY WITH ANSI 117.2 FOR ADA REQUIREMENTS.

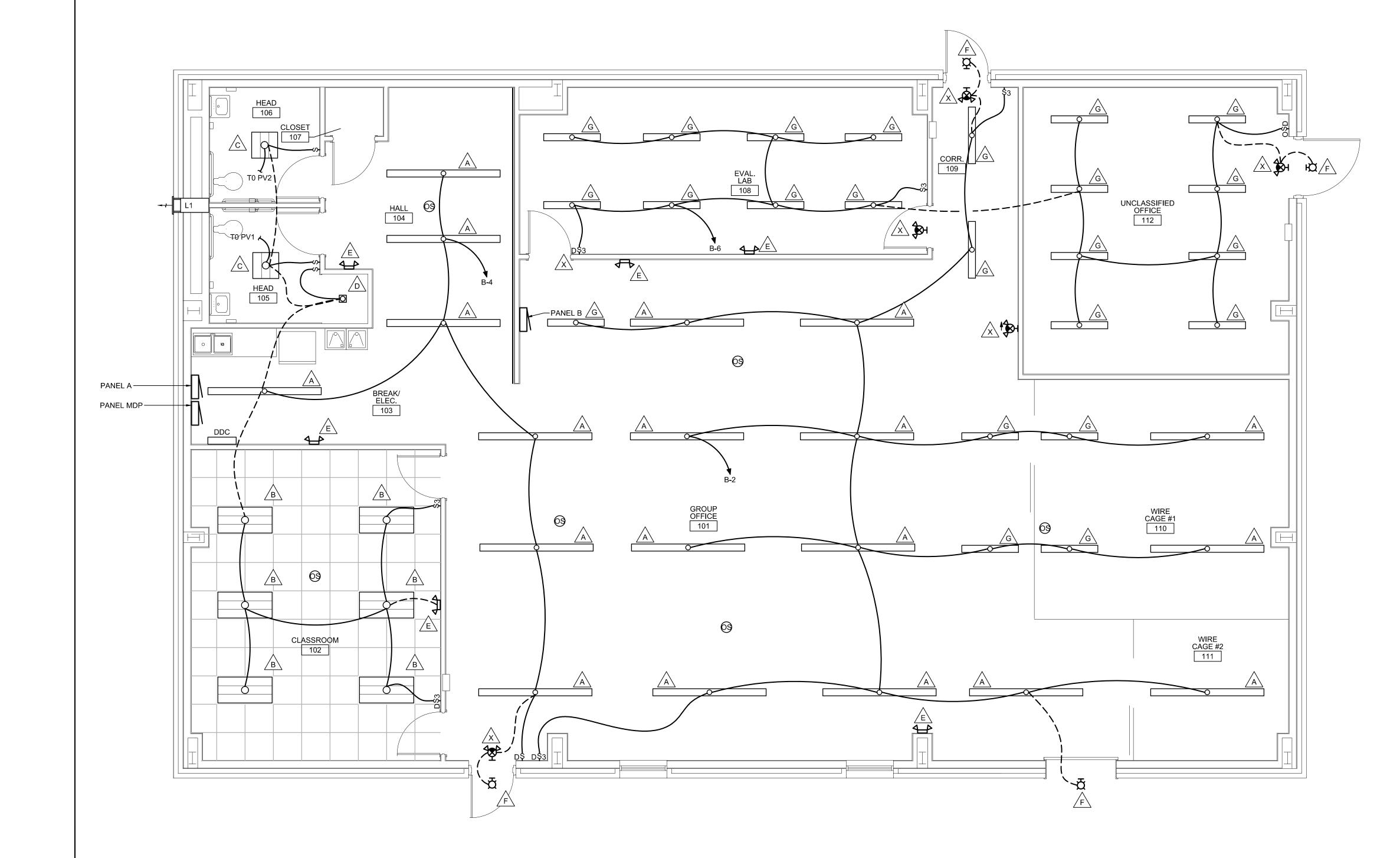




REVISIONS					
SYM.		DATE	APPROVED		

## **INSTALLATION NOTES**

- CONTRACTOR TO SUSPEND ALL FIXTURES FROM STRUCTURAL ROOF MEMBERS. DO NOT ADD STRUT FRAME AND ATTACHED LIGHTS DIRECTLY LOW FRAME WITHOUT PERMISSION OF THE GOVERNMENT.
- ALL POWER MUST BE ROUTED AT ROOF INTERIOR AND DROP TO EACH INDIVIDUAL FIXTURE.



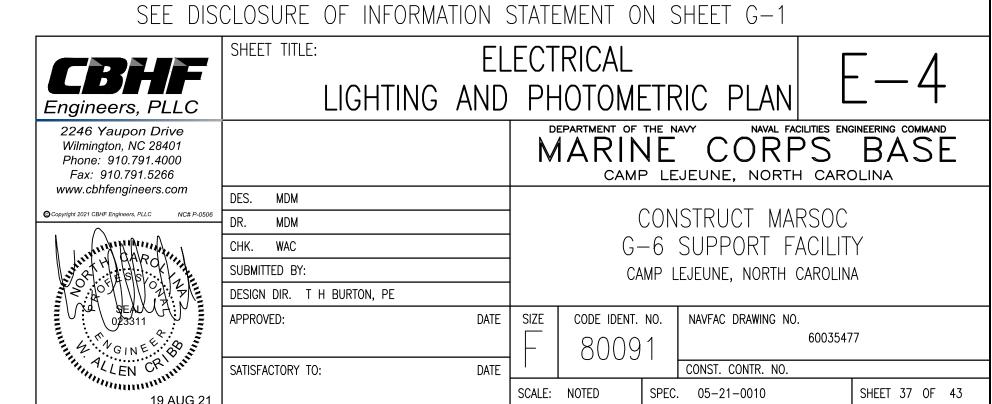
<sup>+</sup>32.8 <sup>+</sup>34.7 <sup>+</sup>36.1 <sup>+</sup>37.1 <sup>+</sup>36.9 <sup>+</sup>36.7 <sup>+</sup>37.1 <sup>+</sup>35.9 <sup>+</sup>34.5 <sup>+</sup>32.0 <sup>+</sup>26.4 <sup>+</sup>17.5 <sup>+</sup>20.7 <sup>+</sup>19.4 + <sup>+</sup>28.0 <sup>+</sup>34.7 <sup>+</sup>35.3 <sup>+</sup>31.1 <sup>+</sup>29.2 <sup>+</sup>32.4 <sup>+</sup>35.9 <sup>+</sup>33. <sup>+</sup>30.3 <sup>+</sup>31.9 <sup>+</sup>29.0 <sup>+</sup>23.4 **8**.3 <sup>+</sup>23.1 <sup>+</sup>33.9 <sup>+</sup>42.4 <sup>+</sup>45.1 <sup>+</sup>46.8 <sup>+</sup>48.6 <sup>+</sup>47.6 <sup>+</sup>47.7 <sup>+</sup>48.7 <sup>+</sup>47.0 <sup>+</sup>45.0 <sup>+</sup>41.8 <sup>+</sup>33.1 <sup>+</sup>22 **1**.9 <sup>+</sup>27.2 <sup>+</sup>24.8 **1** <sup>+</sup>32.1 <sup>+</sup>40.6 <sup>+</sup>41.5 <sup>+</sup>35.9 <sup>+</sup>33.3 <sup>+</sup>37.3 <sup>+</sup>41.9 <sup>+</sup>38.5 <sup>†</sup>22.3 <sup>†</sup>27.5 <sup>†</sup>25.**2** <sup>†</sup>34.2 <sup>†</sup>43.1 <sup>†</sup>44.0 <sup>†</sup>38.4 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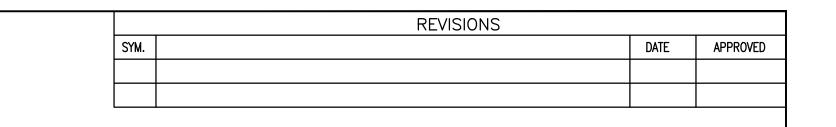
<sup>†</sup>32.4 <sup>†</sup>42.7 <sup>†</sup>46.9 <sup>†</sup>43.3 <sup>†</sup>41.0 <sup>†</sup>44.6 <sup>†</sup>46.5 <sup>†</sup><del>39.7 <sup>†</sup>2</del>

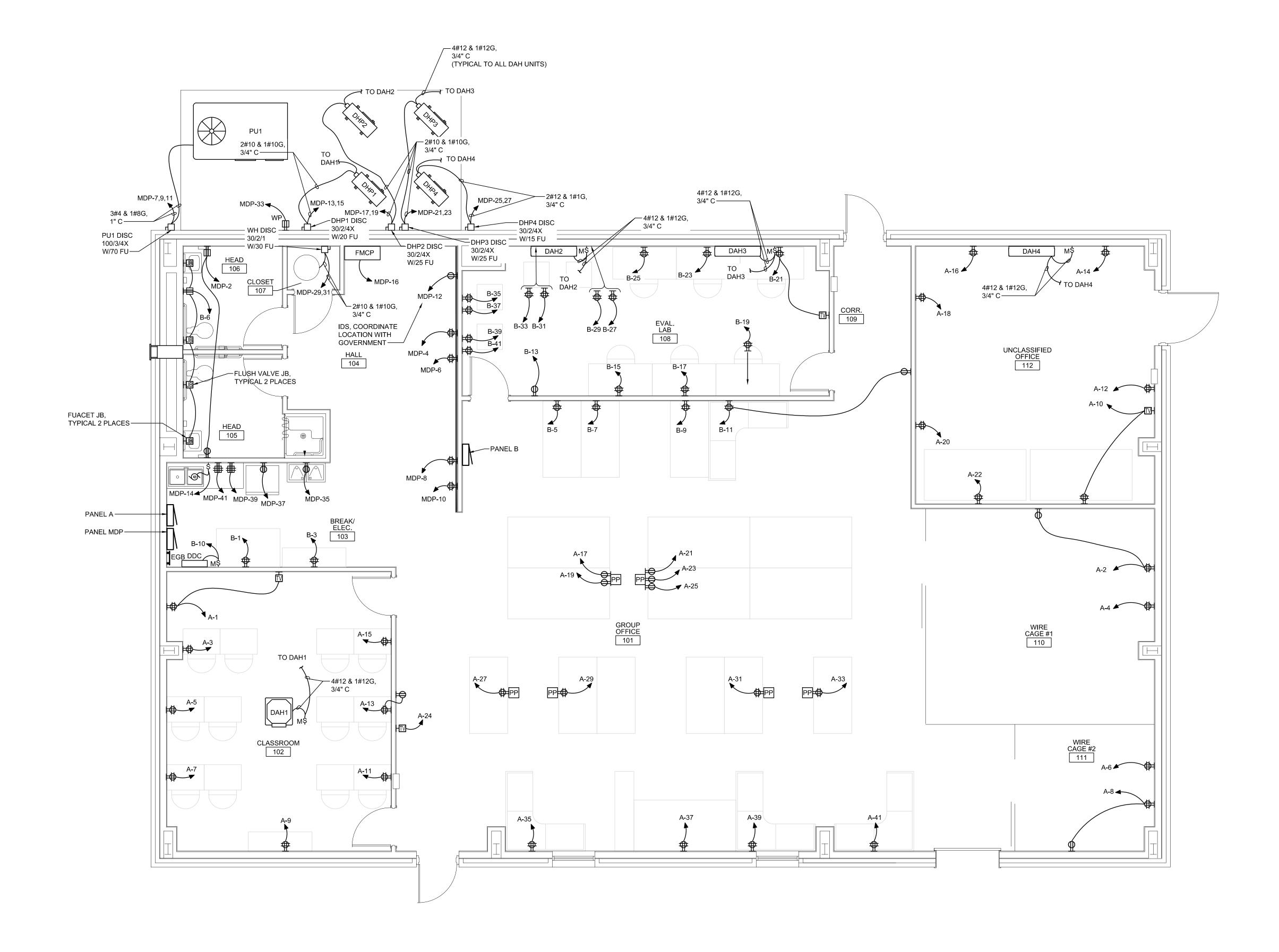
<sup>+</sup>23.8<sup>+</sup>32.6<sup>+</sup>37.7<sup>+</sup>37.3<sup>+</sup>31.9<sup>+</sup>25.6<sup>+</sup>22.6<sup>+</sup>22.6<sup>+</sup>22.6<sup>+</sup>25.9<sup>+</sup>31.7<sup>+</sup>39.1<sup>+</sup>48.3<sup>+</sup>49.8<sup>+</sup>48.1<sup>+</sup>45.9<sup>+</sup>47.1<sup>+</sup>51.8<sup>+</sup>54.8<sup>+</sup>52.9<sup>+</sup>46.8<sup>+</sup>42.2<sup>+</sup>43.8<sup>+</sup>49.3<sup>+</sup>53.0<sup>+</sup>51.3<sup>+</sup>46.3<sup>+</sup>41.4<sup>+</sup>41.2<sup>+</sup>42.0<sup>+</sup>4<sup>†</sup>1.2<sup>+</sup>39.7<sup>+</sup>37.8<sup>+</sup>34.0<sup>+</sup>33.6<sup>+</sup>37.7<sup>+</sup>41.7<sup>+</sup>41.7<sup>+</sup>36.8 31.1 <sup>+</sup>42.7 <sup>+</sup>52.4 <sup>+</sup>56.0 <sup>+</sup>53.5 <sup>+</sup>49.2 <sup>+</sup>49.4 <sup>+</sup>54.8 <sup>+</sup>58.4 <sup>+</sup>56.2 <sup>+</sup>49.4 <sup>+</sup>43.9 <sup>+</sup>46.2 <sup>+</sup>53.2 <sup>+</sup>57.6 <sup>+</sup>55.8 <sup>+</sup>49.8 <sup>+</sup>44.8 <sup>+</sup>45.5 <sup>+</sup>47.5 <sup>+</sup>47.1 <sup>+</sup>45.8 <sup>+</sup>43.2 <sup>+</sup>38.9 <sup>+</sup>38.3 <sup>+</sup>43.7 <sup>+</sup>48.9 <sup>+</sup>48.9 <sup>+</sup>42.8 <sup>+</sup> <sup>†</sup>36.9<sup>†</sup>50.4<sup>†</sup>55.9<sup>†</sup>50.6<sup>†</sup>47.3<sup>†</sup>52.5<sup>†</sup>55.6<sup>†</sup>46.6<sup>†</sup>3 3 <sup>3</sup><sup>2</sup>28.4<sup>+</sup>38.4<sup>+</sup>47.1<sup>+</sup>50.8<sup>+</sup>49.5<sup>+</sup>46.5<sup>+</sup>46.8<sup>+</sup>51.0<sup>+</sup>53.7<sup>+</sup>51.6<sup>+</sup>46.6<sup>+</sup>42.1<sup>+</sup>43.5<sup>+</sup>49.1<sup>+</sup>52.3<sup>+</sup>51.3<sup>+</sup>46.8<sup>+</sup>43.1<sup>+</sup>43.8<sup>+</sup>45.3<sup>+</sup>4<sup>‡</sup>5.1<sup>+</sup>44.3<sup>+</sup>42.0<sup>+</sup>38.3<sup>+</sup>37.7<sup>+</sup>41.9<sup>+</sup>45.9<sup>+</sup>45.7<sup>+</sup>40.3<sup>+</sup> \$\frac{1}{41.8}^{59.7}^{66.8}^{60.8}^{59.0}^{54.3}^{66.8}^{66.5}^{54.5}^{66.5}^{54.5}^ ±+40.4<sup>+</sup>55.0<sup>+</sup>61.1<sup>+</sup>56.3<sup>+</sup>53.1<sup>+</sup>58.1<sup>+</sup>60.5<sup>+</sup>50.7<sup>+</sup>3**1**8<sup>+</sup>27.6<sup>+</sup>38.7<sup>+</sup>48.2<sup>+</sup>52.1<sup>+</sup>50.5<sup>+</sup>46.8<sup>+</sup>47.2<sup>+</sup>51.6<sup>+</sup>54.5<sup>+</sup>52.8<sup>+</sup>47.0<sup>+</sup>42.3<sup>+</sup>44.0<sup>+</sup>49.6<sup>+</sup>53.3<sup>+</sup>52.5<sup>+</sup>47.9<sup>+</sup>44.2<sup>+</sup>44.9<sup>+</sup>46.8<sup>+</sup>46.6<sup>+</sup>46.1<sup>+</sup>43.9<sup>+</sup>39.7<sup>+</sup>38.9<sup>+</sup>43.2<sup>+</sup>47.7<sup>+</sup>47.7<sup>+</sup>42.3<sup>+</sup>±8.1<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup>+</sup>55.0<sup></sup> <sup>+</sup>43.0<sup>+</sup>60.3<sup>+</sup>67.4<sup>+</sup>60.7<sup>+</sup>56.5<sup>+</sup>63.1<sup>+</sup>66.9<sup>+</sup>55.2<sup>+</sup>3 7<sup>+</sup>24.9<sup>+</sup>33.8<sup>+</sup>41.7<sup>+</sup>45.0<sup>+</sup>44.0<sup>+</sup>41.2<sup>+</sup>41.3<sup>+</sup>44.9<sup>+</sup>47.1<sup>+</sup>45.7<sup>+</sup>41.7<sup>+</sup>38.1<sup>+</sup>39.4<sup>+</sup>44.1<sup>+</sup>47.3<sup>+</sup>46.7<sup>+</sup>43.0<sup>+</sup>40.1<sup>+</sup>40.9<sup>+</sup>42.5<sup>+</sup>42.1<sup>+</sup>41.6<sup>+</sup>39.4<sup>+</sup>36.2<sup>+</sup>35.5<sup>+</sup>39.0<sup>+</sup>42.4<sup>+</sup>42.2<sup>+</sup>37.5<sup>+</sup>  $^{+}42.8^{+}60.4^{+}67.6^{+}60.4^{+}56.1^{+}63.0^{+}67.1^{+}55.2^{+}3$ <sup>†</sup>38.0<sup>†</sup>50.0<sup>†</sup>55.3<sup>†</sup>52.1<sup>†</sup>49.8<sup>†</sup>53.3<sup>†</sup>54.6<sup>†</sup>46.4<sup>†</sup>3 0<sup>†</sup>22.1<sup>†</sup>28.7<sup>†</sup>34.3<sup>†</sup>36.8<sup>†</sup>36.1<sup>†</sup>33.9<sup>†</sup>33.3<sup>†</sup>35.5<sup>†</sup>38.2<sup>†</sup>38.9<sup>†</sup>37.0<sup>†</sup>34.2<sup>†</sup>33.5<sup>†</sup>35.5<sup>†</sup>38.3<sup>†</sup>39.4<sup>†</sup>38.1<sup>†</sup>36.2<sup>†</sup>36.2<sup>†</sup>36.2<sup>†</sup>38.2<sup>†</sup>39.5<sup>†</sup>37.4<sup>†</sup>33.3<sup>†</sup>30.4<sup>†</sup>30.7<sup>†</sup>33.4<sup>†</sup>35.4<sup>†</sup>34.6<sup>†</sup>30.6<sup>†</sup> <sup>+</sup>36.4 <sup>+</sup>47.2 <sup>+</sup>52.0 <sup>+</sup>49.5 <sup>+</sup>47.6 <sup>+</sup>50.5 <sup>+</sup>51.3 <sup>+</sup>43.9 <sup>+</sup>3 <sup>+</sup>7 <sup>+</sup>23.8 <sup>+</sup>33.2 <sup>+</sup>40.8 <sup>+</sup>43.8 <sup>+</sup>41.7 <sup>+</sup>36.9 <sup>+</sup>35.6 <sup>+</sup>39.6 <sup>+</sup>45.0 <sup>+</sup>46.8 <sup>+</sup>43.5 <sup>+</sup>38.2 <sup>+</sup>36.0 <sup>+</sup>39.4 <sup>+</sup>44.8 <sup>+</sup>46.9 <sup>+</sup>44.7 <sup>+</sup>41.4 <sup>+</sup>41.3 <sup>+</sup>46.0 <sup>+</sup>49.0 <sup>+</sup>45.4 <sup>+</sup>37.5 <sup>+</sup>32.3 <sup>+</sup>33.5 <sup>+</sup>38.9 <sup>+</sup>42.8 <sup>+</sup>42.0 <sup>+</sup>36.0 <sup>+</sup> <sup>+</sup>39.6<sup>+</sup>55.1<sup>+</sup>61.4<sup>+</sup>55.2<sup>+</sup>51.4<sup>+</sup>57.4<sup>+</sup>60.9<sup>+</sup>50.5<sup>+</sup>348<sup>+</sup>24.4<sup>+</sup>35.1<sup>+</sup>44.4<sup>+</sup>47.7<sup>+</sup>44.7<sup>+</sup>38.3<sup>+</sup>35.7<sup>+</sup>40.6<sup>+</sup>47.0<sup>+</sup>49.4<sup>+</sup>45.9<sup>+</sup>39.7<sup>+</sup>36.8<sup>+</sup>41.3<sup>+</sup>48.0<sup>+</sup>50.7<sup>+</sup>48.1<sup>+</sup>43.3<sup>+</sup>43.0<sup>+</sup>49.3<sup>+</sup>53.8<sup>+</sup>49.2<sup>+</sup>39.3<sup>+</sup>32.8<sup>+</sup>34.5<sup>+</sup>41.3<sup>+</sup>46.3<sup>+</sup>45.6<sup>+</sup>38.5<sup>+</sup> \_\_<sup>+</sup>39.4 <sup>+</sup>56.2 <sup>+</sup>62.7 <sup>+</sup>55.1 <sup>+</sup>50.6 <sup>+</sup>57.8 <sup>+</sup>62.5 <sup>+</sup>51.2 <sup>+</sup>3 4 <sup>+</sup>21.4 <sup>+</sup>29.4 <sup>+</sup>36.1 <sup>+</sup>38.6 <sup>+</sup>36.8 <sup>+</sup>32.6 <sup>+</sup>31.0 <sup>+</sup>34.4 <sup>+</sup>39.3 <sup>+</sup>41.1 <sup>+</sup>38.5 <sup>+</sup>33.8 <sup>+</sup>32.1 <sup>+</sup>35.0 <sup>+</sup>39.7 <sup>+</sup>41.8 <sup>+</sup>40.1 <sup>+</sup>36.9 <sup>+</sup>36.9 <sup>+</sup>41.2 <sup>+</sup>44.2 <sup>+</sup>40.9 <sup>+</sup>33.7 <sup>+</sup>28.9 <sup>+</sup>29.9 <sup>+</sup>34.5 <sup>+</sup>38.2 <sup>+</sup>37.2 <sup>+</sup>32.2 <sup>+</sup>32



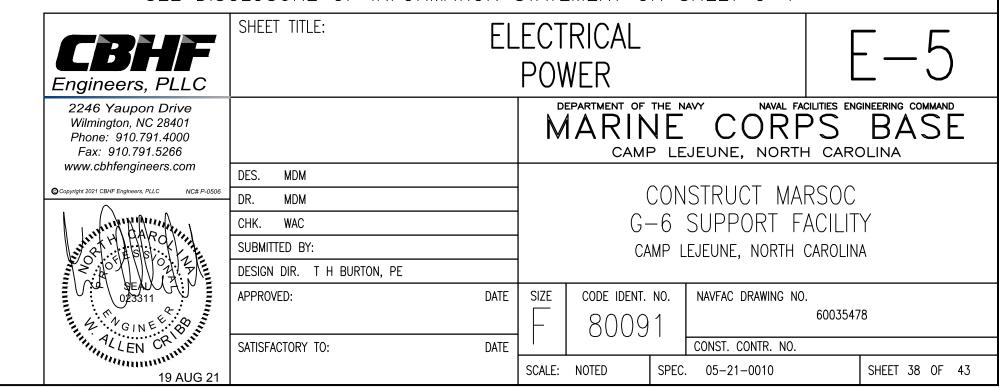


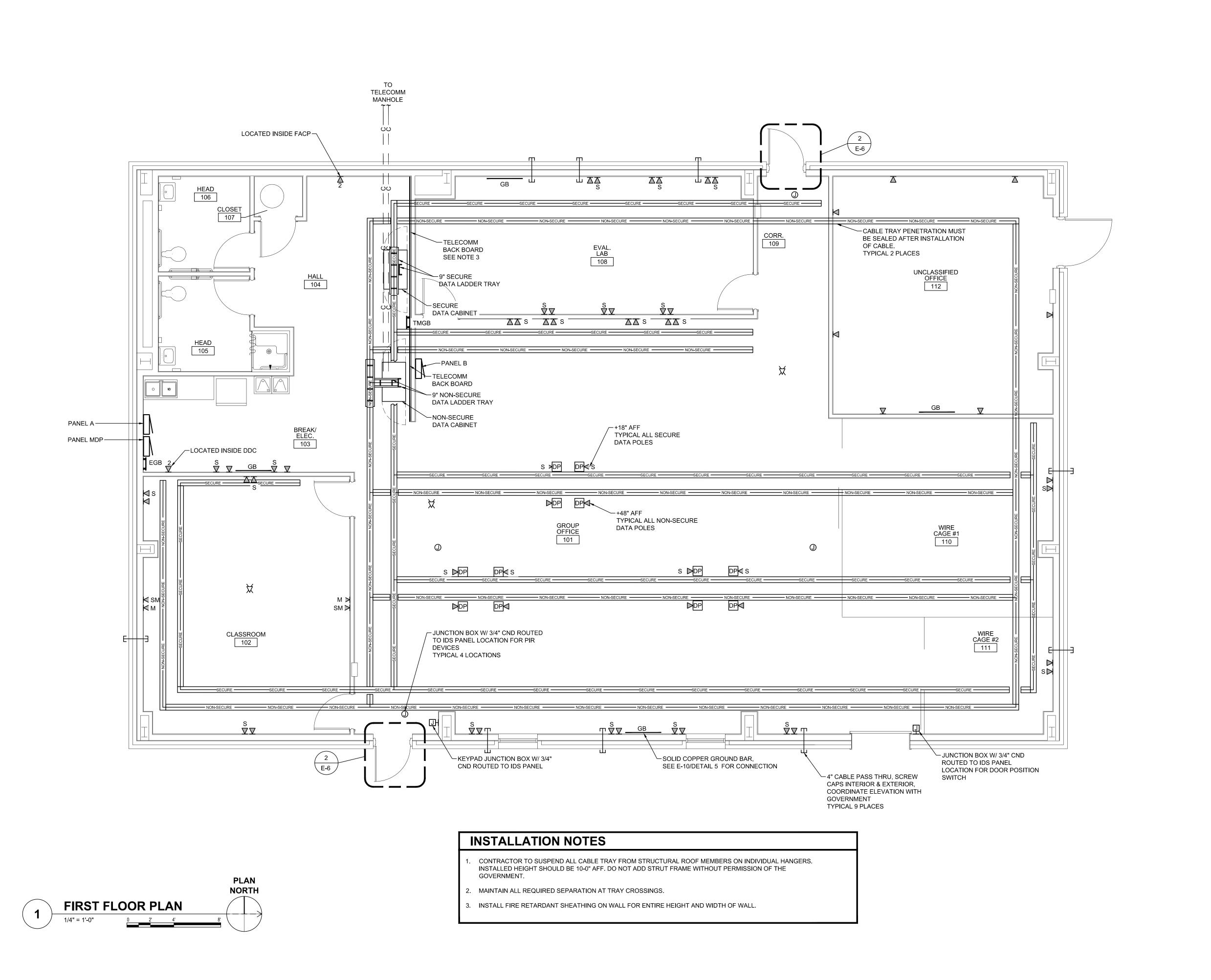










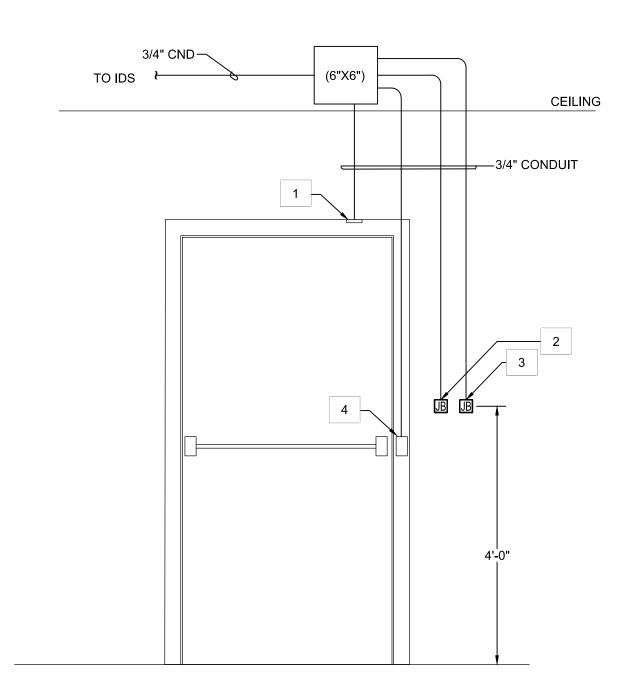


REVISIONS

DATE APPROVED

## **DETAIL 2 KEYED NOTES**

- 1 MAGNETIC SWITCH TO BE RECESSED INTO DOOR FRAME. DOOR FRAME CUTOUT MUST MEET SPECIFICATIONS FOR SENTROL 2757D DEVICE.
- 2 2" x 4" JUNCTION BOX, FLUSH MOUNTED ON THE SECURE SIDE FOR AACS.
- 3 2" x 4" JUNCTION BOX, FLUSH MOUNTED ON THE NON-SECURE SIDE FOR FOR SECURITY KEY PAD.
- ELECTRIC STRIKE TO BE RECESSED INTO DOOR FRAME FOR NON-PANIC HARDWARE DOORS. DOOR FRAME CUTOUT MUST MEET SPECIFICATIONS FOR HES 7000 LBM HARDWARE. PANIC HARDWARE DOORS MUST BE PREPPED TO RECEIVE HES 9600 LBM ELECTRIC STRIKE DEVICE. SEE ARCHITECTURAL FOR DOOR HARDWARE SPECIFICS.



## NOTES:

- 1. COORDINATE THE EXACT LOCATION OF SECURITY DEVICES, CONDUIT, AND JUNCTION
- BOXES WITH THE GOCVERNMENT.
  2. PROVIDE CONDUIT AS INDICATED.
- 3. PROVIDE JUNCTION BOX, AS SHOWN, FLUSH OR SURFACE MOUNTED ABOVE DOOR, OR ABOVE CEILING WHERE APPLICABLE ON SECURE SIDE.
- 4. STUB CONDUIT INTO JUNCTION BOX OF DOOR FRAME FOR CONCEALED MAGNETIC DOOR POSITION SWITCH AND ELECTRIC HINGE.



SECURITY DOOR DETAIL

