



SAMPSON COUNTY 911 & ES FACILITIES

CLINTON,
NORTH CAROLINA

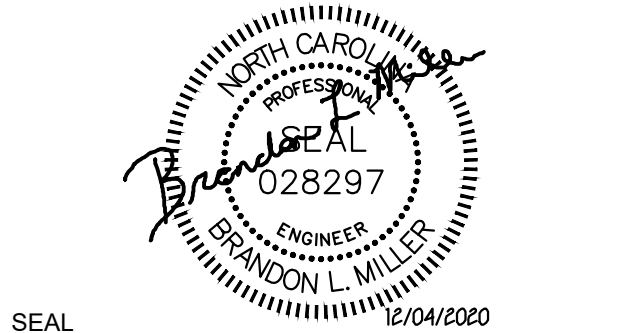
CONSTRUCTION DOCUMENTS

ELECTRICAL NOTES & LEGENDS

DATE 12.04.2020
PROJECT NO 20003

REVISIONS
NUM. DATE DESCRIPTION:
12-17-2020 REVISION #1

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SEAL

E001

SHEET NUMBER

SYMBOL SCHEDULE

FIRE ALARM

FAB S	FIRE ALARM CONTROL PANEL WITH LOCAL SMOKE DETECTOR
FA	FIRE ALARM REMOTE ANNUNCIATOR. PROVIDE BOX AS REQUIRED PER MANUFACTURER RECOMMENDATION. PROVIDE 1" CONDUIT FOR CABLING.
EM	FIRE ALARM MANUAL STATION. PROVIDE PROTECTION DEVICE
S	CEILING MOUNTED SMOKE DETECTOR. FA VENDOR PROVIDED.
SMC	CEILING MOUNTED MULTI-CRITERIA SMOKE DETECTOR. FA VENDOR PROVIDED.
CH	CEILING MOUNTED HEAT DETECTOR.
DD	DUCT MOUNTED SMOKE DETECTOR. FURNISHED AND CONNECTED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR. CUTTING OF DUCT, INSTALLATION OF DETECTOR, AND DETERMINATION OF SAMPLING TUBE LENGTH SHALL BE THE MECHANICAL CONTRACTOR. PROVIDE REMOTE INDICATING LIGHT WITH EACH DETECTOR.
CS	CEILING MOUNTED CARBON MONOXIDE DETECTOR (CENTRAL SYSTEM CONNECTED)
IS	SPRINKLER SYSTEM FLOW SWITCH.
ISB	SPRINKLER SYSTEM TAMPER SWITCH.
SD	SMOKE DAMPER. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, CONNECTED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR.
MD	MAGNETIC DOOR HOLDER. PROVIDED BY ELECTRICAL CONTR. INSTALLED BY ELEC. CONTR. PROVIDE A SMOKE DETECTOR WITHIN 5 FT. OF BOTH SIDES OF DOORS TO LOCALLY ACTIVATE DOOR UPON SMOKE SIGNAL.
FK	ADA COMPLIANT WALL MOUNT FIRE ALARM HORN WITH STROBE LIGHT, 15CD UNLESS OTHERWISE NOTED. WHITE FINISH.**
SK	ADA COMPLIANT WALL MOUNT FIRE ALARM STROBE LIGHT, 15CD UNLESS OTHERWISE NOTED. WHITE FINISH.
CK	ADA COMPLIANT CEILING MOUNTED FIRE ALARM HORN STROBE LIGHT, 15cd, UNLESS OTHERWISE NOTED. WHITE FINISH.**
CS	ADA COMPLIANT CEILING MOUNTED FIRE ALARM STROBE LIGHT, 15cd, UNLESS OTHERWISE NOTED. WHITE FINISH.
D	DUCT DETECTOR REMOTE INDICATING LIGHT.
HK	ADA COMPLIANT FIRE ALARM MINI HORN. WHITE FINISH.**
SSB	CEILING MOUNTED SMOKE DETECTOR WITH LOW FREQUENCY SOUNDER BASE.**
RTS	ROOM TEMPERATURE SPRINKLER SYSTEM SWITCH. NORMALLY OPEN NFPA 13/72 COMPLIANT SWITCH TO CLOSE A 40' OR LESS.
NC	CEILING MOUNTED CARBON MONOXIDE DETECTOR (NOT CENTRAL SYSTEM CONNECTED)
NO2	NITROGEN DIOXIDE DETECTOR (NOT CENTRAL SYSTEM CONNECTED)
** NOTE: AUDIBLE DEVICES WITHIN SLEEPING ROOMS SHALL BE SUBJECT TO LOW FREQUENCY REQUIREMENTS. A SQUARE WAVE 550HZ TONE COMPATIBLE WITH NFPA 72 18.4.5.3. COORDINATE WITH LOCAL CODES AND REQUIREMENTS.	

SPECIAL SYSTEMS

S	FLUSH-MOUNTED CEILING SPEAKER.
HS	WALL-MOUNTED SPEAKER.3/4" CONDUIT TO LOCAL CABLE TRAY
WSP	EXTERIOR WEATHERPROOF SPEAKER.3/4" CONDUIT TO LOCAL CABLE TRAY PROVIDE WEATHERPROOF J-BOX
VI	VOLUME CONTROL: SINGLE GANG BOX AND 3/4" CONDUIT TO ABOVE CEILING WITH PULL STRING. SEE APPLICABLE DETAIL AND/OR SPECIFICATIONS FOR ADDITIONAL CONDUIT AND CABLING REQUIREMENTS.
HTV	SEE TV DETAILS ON SHEET E605 FOR TYPE AND REQUIREMENTS.
GA	GENERATOR ANNUNCIATOR PANEL: 3/4" CONDUIT TO ATS. PROVIDE BOX AS REQUIRED PER MANUFACTURER RECOMMENDATION PROVIDE CABLING PER MANUFACTURER RECOMMENDATIONS
LUA	UPS ANNUNCIATOR ANNUNCIATOR PANEL: 3/4" CONDUIT TO UPS. PROVIDE BOX AS REQUIRED PER MANUFACTURER RECOMMENDATION PROVIDE CABLING PER MANUFACTURER RECOMMENDATIONS
HD	ACCESSIBLE DOOR OPENER PUSH BUTTON. PROVIDE MINIMUM (2) GANG BOX WITH SINGLE GANG OPENING. 3/4" TO DOOR OPERATOR. COORDINATE WITH EQUIPMENT PROVIDED. SEE DETAIL.

SECURITY

SC	SECURITY CAMERA. PROVIDE 3/4" CONDUIT TO LOCAL ACCESSIBLE CEILING. PROVIDE DOUBLE GANG JUNCTION BOX WITH SINGLE GANG OPENING PLATE. PROVIDE PULL STRING.
CR	CARD READER, MINIMUM 1/2" CONDUIT. PROVIDE SINGLE GANG JUNCTION BOX AND PULL STRING. SEE CARD READER DETAIL FOR ADDITIONAL REQUIREMENTS OF PATHWAYS AND CABLING.
DS	DOOR STRIKE, MINIMUM 1/2" CONDUIT. PROVIDE SINGLE GANG JUNCTION BOX AND PULL STRING. SEE CARD READER DETAIL FOR ADDITIONAL REQUIREMENTS OF PATHWAYS AND CABLING.
DC	DOOR CONTACT, MINIMUM 1/2" CONDUIT. PROVIDE SINGLE GANG JUNCTION BOX AND PULL STRING. SEE CARD READER DETAIL FOR ADDITIONAL REQUIREMENTS OF PATHWAYS AND CABLING.

TELECOMMUNICATIONS

TO	TELE/ DATA OUTLET ABOVE COUNTER OR HEIGHT SPECIFIED. 1" EC TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
TD	TELE/ DATA OUTLET. 1" EC TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
WAO	ABOVE CEILING, STRUCTURE MOUNTED JUNCTION BOX FOR WIRELESS ACCESS LOW VOLTAGE CABLING. 4" SQUARE BOX WITH A TWO-GANG OPENING. STUB 1" EC FROM BOX TO J-HOOKS OR CABLETRAY ABOVE ACCESSIBLE CEILING. PROVIDE CABLING, TERMINATIONS, AND FACEPLATE PER SPECIFICATIONS.
CABLE TRAY	LADDER STYLE CABLE TRAY 12" WIDE X 4" DEEP (8" RUNG SPACING) SUSPENDED FROM CEILING STRUCTURE UNLESS OTHERWISE NOTED. CABLE TRAY SHALL BE COORDINATED WITH MECHANICAL DUCTWORK IN FIELD PRIOR TO INSTALLATION; CONTRACTOR SHALL PRODUCE COORDINATION DRAWINGS AND FIELD ADJUST AS REQUIRED TO MEET INTENT OF DRAWINGS

LIGHTING (SEE FIXTURE SCH.)

CL1	CEILING FAN. HUNTER DEMPSEY – 52" FOUR BLADE, WHITE FAN OR APPROVED EQUAL. PROVIDE WITH 3 SPEED FAN CONTROL WALL SWITCH. NO LIGHT KIT.
CL2	CEILING FAN. CANARM – 36" THREE BLADE, WHITE FAN OR APPROVED EQUAL. PROVIDE WITH 3 SPEED FAN CONTROL WALL SWITCH. NO LIGHT KIT.
L	LED LIGHTING FIXTURE. SEE FIXTURE SCHEDULE. SUSPEND FOUR CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
LS	LED STRIP FIXTURE.
LD	LED LIGHTING DOWNLIGHT.
W	WALL MOUNTED LED LIGHTING FIXTURE.
LE	LED FIXTURE WITH EMERGENCY BATTERY BALLAST OR DRIVER. PROVIDE 1100 LUMEN INVERTER RATED 120/277 MINUTE OPERATION. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE. EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE.
LDL	LED DOWNLIGHT WITH AN EMERGENCY BATTERY BALLAST OR DRIVER. BASED ON 1100 LUMEN INVERTER (SEE SCHEDULE FOR FIXTURE LUMEN MAXIMUM). EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE.
EL	EXIT LIGHT WITH ARROWS AND NUMBERS OF FACES AS INDICATED ON PLANS. 90 MIN BATTERY BACKUP. SEE LIGHTING FIXTURE SCHEDULE.
EB	EMERGENCY BATTERY PACK FIXTURE. 90 MINUTE EMERGENCY INTEGRAL BATTERY. SEE LIGHTING FIXTURE SCHEDULE
EBE	EMERGENCY BATTERY PACK/EXIT COMBO FIXTURE WITH 90 MINUTE BATTERY BACKUP. SEE FIXTURE SCHEDULE.
ELI	EXTERIOR EMERGENCY FIXTURE WITH EMERGENCY BALLAST OR DRIVER. PROVIDE 1100 LUMEN INVERTER RATED FOR 90 MINUTE OPERATION. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE. EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE.
ELI	SINGLE HEAD POLE FIXTURE. SEE FIXTURE SCHEDULE.
ELI	DOUBLE HEAD POLE FIXTURE. SEE FIXTURE SCHEDULE.
L	LIGHT BOLLARD OR POLE TOP FIXTURE. SEE FIXTURE SCHEDULE.
F	FLOODLIGHT. SEE FIXTURE SCHEDULE.
S	SINGLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER AH 1221, OR EQUAL BY HUBBELL, LEVITON, AND PASS & SEYMOUR.
S	DOUBLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER 1222, OR EQUAL.
S	THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, OR EQUAL BY HUBBELL, LEVITON, AND PASS & SEYMOUR.
S	FOUR WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1224, OR EQUAL.
S	KEY OPERATED SWITCH
S	DIMMER SWITCH. LUTRON SERIES, OR EQUAL. VERIFY LOAD ON CIRCUIT AND MATCH DIMMER SIZE TO LOAD AND DEVICE QUANTITY. PROVIDE DOUBLE GANG J-BOX WITH SINGLE GANG TRIM PLATE. PROVIDE DIMMING SWITCH AS RECOMMENDED BY LIGHTING MANUFACTURER. MATCH SWITCH TYPE TO SOURCE (LED, FLUORESCENT, OR INCANDESCENT). WATTAGE, AND QUANTITY.
SS	INDICATES TWO LEVEL SWITCHING. SWITCH OUTER TWO LAMPS OF FIXTURES TOGETHER AND THE INNER LAMP(S) TOGETHER.
Svs	WALL MOUNTED VACUANCY SENSOR AND SWITCH (MANUAL ON/AUTOMATIC OFF). INFRARED TECHNOLOGY. 120/277V RATED. SENSOR SWITCH WSX, WATT STOPPER PW-301, LEVITON, COOPER OR EQUAL.
S	WALL MOUNTED OCCUPANCY SENSOR AND SWITCH. INFRARED TECHNOLOGY WITH NEUTRAL, 120/277V RATED. WATT STOPPER #WS-250, OR EQUAL BY SENSOR SWITCH, AND LEVITON.
S	WALL MOUNTED OCCUPANCY SENSOR AND SWITCH. INFRARED TECHNOLOGY, WATT STOPPER, SENSOR SWITCH, COOPER CONTROLS OR EQUAL. FOR DIMMING SWITCHING. SWITCH SHALL BE INSTALLED IN SINGLE GANG BOX. 120/277V RATED.
S	THREE SPEED FAN CONTROL SWITCH. PROVIDED WITH CEILING FAN KIT.
DT(HB)	CEILING MOUNTED EXTENDED RANGE OCCUPANCY SENSOR. WATT STOPPER #DT(HB) #HB300B-LX, EQUALS: COOPER, HUBBELL.
DT	CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH CM PDT 10, WATT STOPPER #DT-300, COOPER OAC-DT OR EQUAL.
DT	CEILING MOUNTED OCCUPANCY SENSOR. INFRARED TECHNOLOGY. WATT STOPPER #DT-300-1 OR EQUAL.
L	CEILING MOUNTED OCCUPANCY SENSOR, ULTRASONIC WATT STOPPER #WT-2255 OR EQUAL.
HW	WALL MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH WV-PDT, WATT STOPPER #DT-200, LEVITON, GREENGATE OR EQUAL. CONICAL PATTERN, MOUNT AS CLOSE TO CORNER OF ROOM AS POSSIBLE. MOUNT 10' AFF OR 4" BELOW CEILING (IF LOWER THAN 10').
VC	CEILING MOUNTED VACANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH, WATT STOPPER, COOPER OR EQUAL.
VC	CEILING MOUNTED OCCUPANCY SENSOR, POWER PACK, SENSOR SWITCH PP-20, WATT STOPPER #PP-100, COOPER SP-20, OR EQUAL.
PP	CEILING MOUNTED OCCUPANCY SENSOR, DIMMING POWER PACK. SENSOR SWITCH, WATT STOPPER, COOPER, OR EQUAL.
LS	LIGHT LEVEL SENSOR WATT STOPPER LS-101 OR APPROVED EQUAL
EXT	PHOTO CONTROL, EXTERIOR, MOUNT FACING NORTH.
EXT	EXTERIOR MOUNTED LINE VOLTAGE MOTION SENSOR WATT STOPPER #EN-100 (90 DEGREE) OR EQUAL.

ELECTRICAL SHEET INDEX

PLAN NUMBER	PLAN NAME
E001	ELECTRICAL NOTES & LEGENDS
E002	ELECTRICAL SPECIFICATIONS
E010	SITE PLAN – ELECTRICAL
E011	FLOOR PLAN – SITE GROUNDING
E012	FLOOR PLAN – SUPPLEMENTAL GROUNDING
E013	ROOF PLAN – GROUNDING
E014	GROUNDING DETAILS
E101	AREA 1 LIGHTING PLANS
E102	AREA 2 LIGHTING PLANS
E103	AREA 3 LIGHTING PLANS
E201	AREA 1 POWER PLANS
E202	AREA 2 POWER PLANS
E203	AREA 3 POWER PLANS
E301	AREA 1 EQUIPMENT CONNECTIONS PLANS
E302	AREA 2 EQUIPMENT CONNECTIONS PLANS
E303	AREA 3 EQUIPMENT CONNECTIONS PLANS
E304	AREA 1 AND AREA 2 EQUIPMENT CONNECTIONS ROOF PLANS
E305	AREA 3 EQUIPMENT CONNECTIONS ROOF PLANS
E401	AREA 1 SYSTEMS PLANS
E402	AREA 2 SYSTEMS PLANS
E403	AREA 3 SYSTEMS PLANS
E501	ENLARGED PLANS – ELECTRICAL
E601	ELECTRICAL DETAILS
E602	ELECTRICAL DETAILS
E603	ELECTRICAL DETAILS
E604	ELECTRICAL DETAILS
E605	ELECTRICAL DETAILS
E701	POWER RISER DIAGRAM
E801	LIGHT FIXTURE SCHEDULE
E802	EQUIPMENT SCHEDULES
E803	PANEL SCHEDULES
E804	PANEL SCHEDULES
E805	PANEL SCHEDULES

DEVICES AND PATHWAYS

W	WIRING SYSTEM CONCEALED IN WALL OR CEILING. WHEN SHOWN, CROSS LINES INDICATE NUMBER OF WIRES. (GROUND WIRES ARE NOT SHOWN)
U	WIRING SYSTEM CONCEALED IN OR UNDER SLAB OR UNDERGROUND.
W	WIRING SYSTEM EXPOSED
U	CONDUIT TURNED UP TO FLOOR ABOVE.
U	CONDUIT TURNED DOWN TO FLOOR BELOW.
CH	BRANCH CIRCUIT HOMERUN TO PANEL.
JD	JUNCTION BOX WITH CONNECTION TO EQUIPMENT SERVED. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
JD	JUNCTION BOX FOR HAND DRYER CONNECTION; SEE MOUNTING HEIGHTS DETAIL FOR EXACT HEIGHT; SEE ARCH. SHEETS FOR COORDINATION. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. PROVIDE WITH MANUAL TOGGLE SWITCH DISCONNECT (S) MOUNTED ABOVE CEILING. IF MOUNTED IN HAND CEILING SPACE AN ACCESS DOOR SHALL BE PROVIDED AT TOGGLE SWITCH LOCATION.
DR	DUPLEX RECEPTACLE, 20 AMP, 120 VOLT. HUBBELL 5352, OR EQUAL.
DR	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER BACKSPLASH, OR AT HEIGHT NOTED.
Q	QUAD RECEPTACLE. TWO NEMA 5-20R DUPLEX RECEPTABLES.
EW	STANDARD TWO NEMA 5-20R DUPLEX RECEPTACLE FOR ELECTRIC WATER COOLER. COORDINATE LOCATION WITH PLUMBING CONTRACTOR.
GR	GROUND FAULT RECEPTACLE. NEMA 5-20R DUPLEX. ALL RECEPTABLES INSTALLED OUTSIDE, WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI.
GR	ISOLATED GROUND RECEPTACLE. NEMA 5-20R DUPLEX.
WR	WEATHERPROOF RECEPTACLE. NEMA 5-20R GR1 DUPLEX. COVER SHALL BE INTERMATIC #WP1020 (CLEAR) OR SPECIFICATION EQUAL.
DR	DUPLEX RECEPTACLE, 20 AMP, 120 VOLT (USE 20 AMP FOR SINGLE RECEPTACLE ON A CIRCUIT). COOPER 5352, OR EQUAL. T.V. RECEPTACLE MOUNTED AT 88" AFF.
DR	DUPLEX SWITCHED TAMPER RESISTANT RECEPTACLE, 20 AMP, 120 VOLT.
SPD	SURGE PROTECTION DEVICE (SPD); SEE DETAIL.
W	WIREFMOLD 2400 PLYUMOLD. NEMA 5-15R RECEPTABLES ON 12" CENTERS. ALTERNATE CIRCUITS.
W	SPECIAL OUTLET. SEE PLANS.
M	MOTOR OPERATED DAMPER, INTERLOCK WITH FAN AS INDICATED. (DAMPER BY M.C.) CONNECT TO LOCAL MECHANICAL CONTROLS CIRCUIT AS REQUIRED.
HC	GROUNDING BAR PER DIAGRAM.
Q	REFERENCE SHORE POWER DROPS DETAIL #2/E605.
FB2	TWO GANG FLUSH MOUNTED FLOOR BOX WITH ACCESSIBLE COVER FOR POWER. PROVIDE TWO NEMA 5-20R DUPLEX RECEPTABLES. EQUAL TO WIREFMOLD RFB2-OG-FPBT.C. ARCHITECT TO SELECT FINISH.
FB4	FOUR GANG FLUSH MOUNTED FLOOR BOX WITH ACCESSIBLE COVER FOR POWER AND COMMUNICATIONS. PROVIDE TWO NEMA 5-20R DUPLEX RECEPTABLES. ONE COMMUNICATION PLATE FOR SIX RJ45 CAT6 JACKS ON EACH PLATE, AND ONE AV PLATE. EQUAL TO WIREFMOLD RFB4-OG-FPBT. ARCHITECT TO SELECT FINISH. STUB FROM BOX ONE CONCEALED 1¼" ROUTED TO WHICHEVER IS NEAREST, BB, J-HOOKS, OR CABLE TRAY.
FB4	FOUR GANG FLUSH MOUNTED FLOOR BOX WITH ACCESSIBLE COVER FOR POWER AND COMMUNICATIONS. PROVIDE TWO NEMA 5-20R DUPLEX RECEPTABLES AND TWO COMMUNICATION PLATES FOR SIX RJ45 CAT6 JACKS ON EACH PLATE. EQUAL TO WIREFMOLD RFB4-OG-FPBT. ARCHITECT TO SELECT FINISH. STUB FROM BOX ONE CONCEALED 1¼" ROUTED TO WHICHEVER IS NEAREST, BB, J-HOOKS, OR CABLE TRAY.
FB6	SIX GANG FLUSH MOUNTED FLOOR BOX WITH ACCESSIBLE COVER FOR POWER AND COMMUNICATIONS. PROVIDE FOUR NEMA 5-20R DUPLEX RECEPTABLES AND TWO COMM. PLATE WITH PROVISION FOR SIX RJ45 CAT6 JACKS. EQUAL TO WIREFMOLD RFB6-OG-FPBT. ARCHITECT TO SELECT FINISH. STUB FROM BOX ONE CONCEALED 1¼" ROUTED TO WHICHEVER IS NEAREST, BB, J-HOOKS, OR CABLE TRAY.

PANELS, DISCONNECTS

MC	CONNECTION TO MOTOR. STARTER PROVIDED BY OTHERS UNLESS OTHERWISE NOTED.
SH	FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER, WITH OVERLOAD PROTECTION
CH	NON-FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
CH	FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING/FUSE SIZE. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
CH	CIRCUIT BREAKER. NUMERALS INDICATE RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
CH	COMBINATION STARTER/FUSED DISCONNECT. NUMERALS INDICATE SWITCH RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
W	PLYWOOD TELEPHONE BACKBOARD. SIZE AS INDICATED ON RISER.
W	PANELBOARD. SEE SCHEDULE FOR MOUNTING. TOP OF PANEL AT 6'-6" AFF.
W	DOOR MOTOR CONTROL MOUNT +48" AFF. CONTROLS SHALL BE UP, DOWN, AND STOP MOUNTED ON 4" SQUARE BOX (FLUSH BOX)

2018 NORTH CAROLINA ENERGY CONSERVATION CODE

COMMERCIAL ENERGY EFFICIENCY – ELECTRICAL SUMMARY

C401 METHOD OF COMPLIANCE	NC SPECIFIC COMCHECK PROVIDED
2018 NCECC CHAPTER 4	ASHRAE 90.1-2013
N/A BASED ON PROJECT SCOPE	
C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS	
C406.1.1 EFFICIENT MECH EQUIPMENT	C406.1.4 ON-SITE RENEWABLE ENERGY
C406.1.2 REDUCED LTG DENSITY	C406.1.5 DEDICATED OA SYSTEM
C406.1.3 ENHANCED DIGITAL LTG CNTLS	C406.1.6 HI-EFF SERVICE WTR HTG
NOT APPLICABLE BASED ON PROJECT SCOPE	

C408 – SYSTEM COMMISSIONING:	
BUILDING IS LESS THAN 10,000 SQUARE FEET AND IS EXEMPT FROM THE SYSTEM COMMISSIONING REQUIREMENTS OF SECTION C408.	
BUILDING IS GREATER THAN 10,000 SQUARE FEET AND REQUIRES SYSTEM COMMISSIONING PER SECTION C408.	

C405.2 – LIGHTING CONTROLS (MANDATORY REQUIREMENTS):	
LIGHTING SYSTEMS ARE PROVIDED WITH CONTROLS AS REQUIRED PER SECTION C405.2, EXCEPT WHERE EXEMPT.	
NOT APPLICABLE	

C405.3 – EXIT SIGNS (MANDATORY REQUIREMENTS):	
INTERNALLY ILLUMINATED EXIT SIGNS DO NOT EXCEED 5 WATTS PER SIDE.	
NOT APPLICABLE	

C405.4 – INTERIOR LIGHTING POWER REQUIREMENTS (PRESCRIPTIVE) (NON-EXEMPT):	
NOT APPLICABLE PER 2018 NCECC C503.1, EXCEPTION 2.G.	
C405.4.1 – TOTAL CONNECTED INTERIOR LIGHTING POWER:	
17,707 WATTS SPECIFIED	
3% REDUCTION OF SPECIFIED VS. ALLOWED (APPLICABLE IF C406.1.2 IS SELECTED)	

C405.4.2 – TOTAL ALLOWABLE INTERIOR LIGHTING POWER:	
METHOD OF COMPLIANCE:	
BUILDING AREA METHOD	SPACE-BY-SPACE METHOD
25,874 WATTS ALLOWED	

C405.5.1 – EXTERIOR BUILDING LIGHTING POWER (NON-EXEMPT):	
NOT APPLICABLE	
TOTAL CONNECTED EXTERIOR LIGHTING POWER:	
4,120 WATTS SPECIFIED	

TOTAL ALLOWABLE EXTERIOR LIGHTING POWER:	
11,233 WATTS ALLOWED	

C405.6 – ELECTRICAL ENERGY CONSUMPTION (DWELLING UNITS):	
SEPARATE ELECTRICAL METERING HAS BEEN PROVIDED FOR EACH DWELLING UNIT IN GROUP P-2 BUILDINGS.	
NOT APPLICABLE	

C405.7 – ELECTRICAL TRANSFORMERS (MANDATORY REQUIREMENTS):	
ELECTRICAL TRANSFORMERS HAVE BEEN SPECIFIED TO MEET MINIMUM EFFICIENCY REQUIREMENTS PER C405.7, EXCEPT WHERE EXEMPT.	
NOT APPLICABLE	

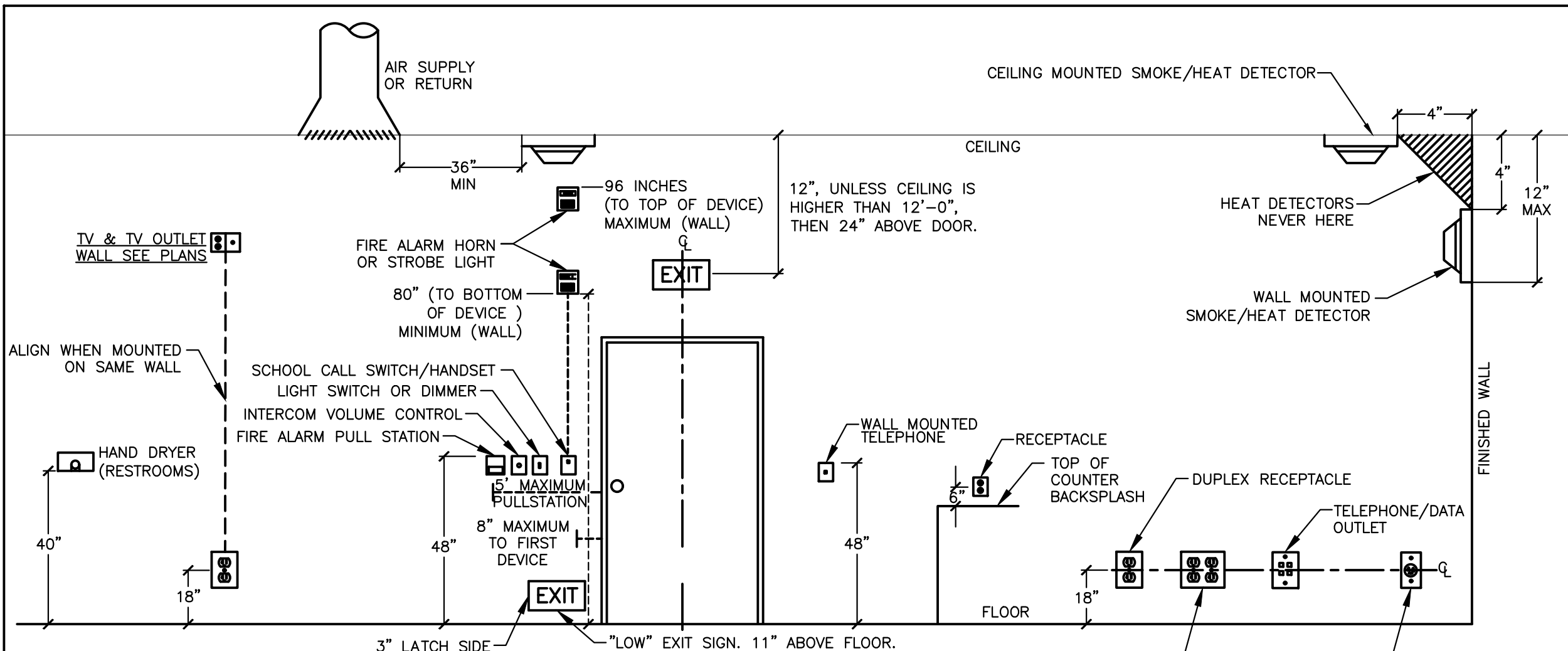
C405.8 – ELECTRICAL MOTORS (MANDATORY REQUIREMENTS):	
ELECTRICAL MOTORS HAVE BEEN SPECIFIED TO MEET MINIMUM EFFICIENCY REQUIREMENTS PER C405.8, EXCEPT WHERE EXEMPT.	
NOT APPLICABLE	

ABBREVIATIONS

+42"	DIMENSION INDICATES HEIGHT ABOVE FINISHED FLOOR AT WHICH CENTER OF DEVICE IS TO MOUNTED. SEE PLANS.
3R	NEMA 3R
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLER UNIT
C.B.	CIRCUIT BREAKER
EC	EMPTY CONDUIT WITH PULL CORD
E.C.	ELECTRICAL CONTRACTOR
EW	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
FACP	FIRE ALARM CONTROL PANEL
FPN	FUSE PER NAMEPLATE
LC	LIGHTING CONTACTOR
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
U.G.	UNDERGROUND
WP	WEATHERPROOF
S.E.	SERVICE ENTRANCE
EM	EMERGENCY FIXTURE WITH BATTERY OR GEN. BACK-UP
ISC	RMS SYMMETRICAL SHORT CIRCUIT CURRENT
AIC	AMPERE INTERRUPTING CAPACITY (EQUIPMENT RATING)

SCHEDULE NOTES:

- SEE DETAIL FOR STANDARD MOUNTING HEIGHTS OF ALL DEVICES, UNLESS OTHERWISE NOTED.
- ALL DEVICES (SWITCHES AND RECEPTABLES) SHALL BE CHOSEN BY ARCHITECT, WITH EXCEPTION OF THOSE ON UPS POWER OR FED FROM CRITICAL PANEL, WHICH SHALL BE CRANES. ALL COVER PLATE FINISHES SHALL BE SELECTED BY ARCHITECT. ALL COVER PLATES IN MASONRY WALLS SHALL BE 302 STAINLESS STEEL JUMBO PLATES.
- DEVICE BOXES SHALL NOT BE MOUNTED BACK TO BACK IN COMMON WALLS UNLESS OTHERWISE NOTED.
- ALL FIRE ALARM SHALL BE IN CONDUIT UNLESS OTHERWISE NOTED.
- ALL LOW VOLTAGE CABLING SHALL BE PLENUM RATED.
- MC CABLE SHALL NOT BE PERMITTED.
- ALL PLAN DRAWINGS SHALL SUPERCEDE SPECIFICATIONS WHEN PLANS AND SPECIFICATIONS ARE IN CONFLICT.
- ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, CONDUIT, WIRE, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC. SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- SHARED NEUTRAL, OR "SUPER NEUTRAL" CONDUCTORS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS.
- SERIES RATED PANELS ARE NOT ACCEPTABLE.
- STACKED TRANSFORMERS SHALL BE COORDINATED AND INSTALLED PRIOR TO DOOR OPENING OF ELECTRICAL ROOMS.
- ALL WALL MOUNTED OCCUPANCY/VACANCY SENSOR SWITCH OUTLETS SHALL BE PROVIDED WITH A GROUNDED CONDUCTOR AS PART OF THE WIRING SYSTEM.
- ALL PANELBOARDS SHALL BE PROVIDED WITH A TYPED CIRCUIT DIRECTORY PER NEC 408.4. SPARE CIRCUIT BREAKERS SHALL BE PLACED IN THE "OFF" POSITION.



- NOTES:
- LOCATIONS WHERE TV MOUNT IS BACK TO BACK ON SAME WALL, AN OFFSET OF 8-12\"/>
 - DEVICES ABOVE COUNTER TOPS SHALL BE A MAXIMUM OF 48\"/>
 - LOW EXIT SIGN AS INDICATED ON PLANS, PER IBC 1011.2
 - DEVICES NEXT TO DOOR EXIT SHALL BE WITHIN 8\"/>

2 MOUNTING HEIGHTS OF DEVICES - ELEVATION

NO SCALE

ALTERNATES:

ALTERNATE #2: ADD AIR SCRUBBERS IN VEHICLE BAYS

PROVIDE TWELVE FULL AIR SCRUBBER SYSTEMS IN APPARATUS ROOMS A AND B (ROOMS 201 AND 209) AS INDICATED IN THE ARCHITECTURAL REFLECTED CEILING PLANS AND ELECTRICAL PLANS. INCLUDE A COMPLETE SYSTEM OF FANS AS SCHEDULED, POWER AND CONTROL WIRING, DEVICES, AND RACEWAYS.

ALTERNATE #3: ADD LSHV FANS IN APPARATUS BAYS

PROVIDE TWO FULL LOW SPEED HIGH VOLUME CEILING FAN SYSTEMS IN APPARATUS ROOMS A AND B (ROOMS 201 AND 209) AS INDICATED IN THE ARCHITECTURAL REFLECTED CEILING PLANS AND ELECTRICAL PLANS. INCLUDE A COMPLETE SYSTEM OF FANS AS SCHEDULED, POWER AND CONTROL WIRING, DEVICES, AND RACEWAYS.

ALTERNATE #4: ADD PATIO CANOPY STRUCTURE

PROVIDE A PREFINISHED METAL CANOPY SYSTEM AT PATIO 133. INCLUDE ALL FOOTINGS, POSTS, BEAMS, ROOF DECKS, DRAINAGE, AND FLASHINGS. INCLUDE ALL FASTENERS AND SEALANTS. PROVIDE LIGHTING AS INDICATED IN THE ELECTRICAL DOCUMENTS.

COMMISSIONING NOTE - 2018 NCECC C408

THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SYSTEM COMMISSIONING PER 2018 NCECC SECTION C408. MC SHALL HIRE A REGISTERED DESIGN PROFESSIONAL (ENGINEER SEALED IN NC OR CERTIFIED COMMISSIONING PROFESSIONAL) TO PERFORM THE COMMISSIONING DUTIES DESCRIBED IN SECTION C408, AND PROVIDE THE OWNER AND CODE OFFICIAL WITH A SEALED STATEMENT OF COMPLETION (APPENDIX C1). THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH COMMISSIONING AGENT AND PROVIDE ALL NECESSARY TIME, MATERIALS, AND PROCEDURES REQUIRED FOR A FULLY COMMISSIONED PROJECT.