

SUPPLIERS, OR VENDORS, ANY SHEET NUMBERING SYSTEM USED WHICH IDENTIFIES DISCIPLINES IS SOLELY TO SEPARATE ARCHITECT'S AND ENGINEER'S SCOPE. IT DOES NOT DEFINE A SUBCONTRACTOR'S SCOPE OF WORK. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, CODES OR CONSTRUCTION SEQUENCING SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING. NO CONSIDERATION WILL BE GIVEN TO REQUESTS FOR CHANGE ORDERS FOR FAILURE TO OBTAIN AND REVIEW THE COMPLETE SET OF CONSTRUCTION DOCUMENTS, OR FOR FAILURE TO SEEK INTERPRETATION FROM ARCHITECT FOR DISCREPANCIES.

GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES.
- ALL MATERIAL, EQUIPMENT & APPLIANCES SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS OF THE UNDERWRITER'S LABORATORIES, INC., AND THE NATIONAL MANUFACTURERS ASSOCIATION.
- ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR.
- DRAWINGS ARE DIAGRAMMATIC ONLY AND INDICATE ONLY THE GENERAL ARRANGEMENT. SEE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS (EXCEPT AS NOTED).
- ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A MINIMUM OF ONE YEAR. THE ONE YEAR WARRANTY IS TO CORRESPOND WITH THE GENERAL CONTRACTOR'S ONE YEAR WARRANTY WITH THE OWNER & BUYERS.
- ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL POWER CONNECTIONS TO HVAC, PLUMBING AND OTHER EQUIPMENT AS REQUIRED.
- A COMPLETE GROUNDING SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, AND AS SHOWN ON THE DRAWINGS.
- ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- ALL WIRING REQUIRED BY CODE TO BE IN CONDUIT SHALL BE INSTALLED IN RC, IMC, EMT OR PVC CONDUIT (AS ALLOWED BY CODE).
- CONDUCTORS SHALL BE COPPER RATED AT NOT LESS THAN 600 VOLTS. MINIMUM SIZE SHALL BE #12 AWG UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL WIRE #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID, UNLESS OTHERWISE NOTED.
- BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE THHN OR THWN AS REQUIRED.
- PROVIDE A PULL WIRE IN ALL EMPTY CONDUITS.
- PROVIDE A TYPED DIRECTORY IN ALL PANEL BOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS.
- PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL PANEL BOARDS AND DISCONNECT SWITCHES. WHITE LETTERS ON BLACK BACKGROUND.
- FUSES 0 - 600 AMPS SHALL BE UL CLASS "RK-1" LOW PEAK DUAL ELEMENT TIME DELAY WITH 200,000 AMPERE INTERRUPTING RATING AS MANUFACTURED BY BUSS. UNLESS NOTED OTHERWISE.
- VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START UP. NOTIFY ENGINEER OF ANY CHANGES.
- PROVIDE SCHEDULE 40 PVC CONDUIT UNDERGROUND FROM TELEPHONE EQUIPMENT ROOM TO CONNECTION POINT AS DIRECTED BY LOCAL TELEPHONE COMPANY.
- ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC. SHALL BE IDENTIFIED FOR USE WITH THE MATERIAL (CU/AL) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED. ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC. SHALL BE IDENTIFIED FOR USE WITH 75°C RATED CONDUCTORS.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ELECTRICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPACKLE, ETC.).
- PENETRATIONS OF REQUIRED SMOKE PARTITIONS SHALL BE SEALED USING METHODS APPROVED UNDER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO INSURE THAT THIS SMOKE STOPPING IS ACCOMPLISHED.
- WHERE PENETRATIONS ARE MADE THROUGH A REQUIRED FIRE-RESISTIVE WALL, FLOOR, OR PARTITION FOR THE PURPOSE OF RUNNING RACEWAY CARRYING ELECTRICAL, TELEPHONE, TELEVISION, OR LOCAL COMMUNICATION AND/OR SIGNALING CIRCUITS, THE OPENING AROUND THE RACEWAY SHALL BE FIRE STOPPED PER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO INSURE THAT THIS FIRE STOPPING IS ACCOMPLISHED. USE U.L. APPROVED ASSEMBLIES OF APPROPRIATE TYPE AND RATING ONLY (SEE A2.0 FOR ASSEMBLIES).
- IN REQUIRED FIRE RATED WALLS AND PARTITIONS, OPENINGS FOR INSTALLATION OF BOXES THAT ARE GREATER THAN 16 SQUARE INCHES SHALL BE PROTECTED AS REQUIRED BY U.L. COORDINATE CLOSELY WITH THE GENERAL CONTRACTOR TO INSURE THE INTEGRITY OF THE U.L. RATING IS MAINTAINED.
- WHERE A HOME RUN IS SHOWN THE CIRCUIT SHALL BE INSTALLED IN A DEDICATED CONDUIT, DO NOT COMBINE WITH OTHER CIRCUITS. WHERE A CIRCUIT HOMERUN IS NOT SHOWN THE CONTRACTOR SHALL COMBINE CIRCUITS AS FOLLOWS:
A MAXIMUM OF THREE 20A BRANCH CIRCUITS OF DIFFERENT PHASES MAY BE COMBINED IN A COMMON HOMERUN SHARING A COMMON NEUTRAL OR WITH SEPARATE NEUTRALS. TOTAL OF SIX CURRENT CARRYING CONDUCTORS MAXIMUM.
ALL BRANCH CIRCUITS LARGER THAN 20A SHALL BE SEPARATELY HOMERUN TO THE PANEL. ALL HOME RUNS IN EXCESS OF 100' SHALL BE INCREASED ONE WIRE SIZE FROM THAT SHOWN FOR THE CIRCUIT, #10 AWG MINIMUM.
- ALL EXIT SIGNS SHALL BE CIRCUITED TO AN UNSWITCHED LEG OF THE LOCAL LIGHTING CIRCUIT.
- LOWER CASE LETTER(S) INDICATES SWITCHING DESIGNATION. UPPER CASE LETTER(S) INDICATES FIXTURE TYPE. NUMBER INDICATES CIRCUIT. WHERE DUAL SWITCHING IS DESIGNATED CONTROL ONE LAMP OF TWO LAMP FIXTURES AND THE CENTER LAMP(S) OF THREE AND FOUR LAMP FIXTURES TO ONE SWITCH, AND THE REMAINING LAMPS TO THE SECOND SWITCH. CIRCUIT NUMBERS, FIXTURE DESIGNATION AND SWITCHING ARE DESIGNATED AS FOLLOWS: FIXTURE SWITCHING AND CIRCUITING ARE TYPICAL FOR ALL LIGHT FIXTURES.
- PROVIDE FLASH HAZARD SIGNAGE FOR ALL NON-DWELLING ELECTRICAL PANELS.
- SPACING AND LOCATION OF RECEPTACLES SHALL AT A MINIMUM, BE IN ACCORDANCE WITH IBC AND NEC REQUIREMENTS FOR DWELLING UNITS. FEES ARE FOR GENERAL ARRANGEMENT ONLY.

ELECTRICAL SYMBOL SCHEDULE

	ELECTRICAL CONNECTION TO APPLIANCE OR EQUIPMENT.
	ELECTRICAL CONDUIT HOMERUN TO BRANCH PANELBOARD.
	ELECTRICAL CONDUIT RUN IN OR BELOW FLOOR SLAB.
	JUNCTION BOX CEILING OR FLOOR MOUNTED
	JUNCTION BOX WALL MOUNTED AT HEIGHT INDICATED ON DRAWINGS.
	THERMOSTAT WALL MOUNTED AT 48" AFF.
	SINGLE POLE SWITCH, 20A, 120/277 VOLT, +48" A.F.F. TO CENTER.
	3-WAY SWITCH, 20A, 120/277 VOLT, +48" A.F.F. TO CENTER.
	4-WAY SWITCH, 20A, 120/277 VOLT, +48" A.F.F. TO CENTER.
	PADDLE FAN SPEED CONTROL SWITCH, 120V, 1HP RATED.
	125V, 20A SINGLE PHASE MANUAL MOTOR STARTER WITH OVERLOADS
	WALL SWITCH OCCUPANCY SENSOR, +48" AFF.
	DUAL TECHNOLOGY OCCUPANCY SENSOR, +48" AFF.
	DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, +18" A.F.F. TO CENTER. "G" INDICATES GROUND FAULT CIRCUIT INTERRUPTING. "WP" INDICATES WEATHERPROOF. "C" INDICATES MOUNTED 6" ABOVE COUNTERTOP BACKSLASH.
	DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, FLUSH FLOOR MOUNTED WITH CHROME COVERPLATE.
	208V-1A, 30A DRYER OUTLET OR 208V-1A, 50A RANGE/OVEN OUTLET.
	DUPLEX GFI RECEPTACLE MOUNTED ABOVE COUNTER BACKSLASH OR AT HEIGHT INDICATED.
	CONDUIT TURNED UP, AS VIEWED FROM LOAD.
	CONDUIT TURNED DOWN, AS VIEWED FROM LOAD.
	INDICATES EQUIPMENT CONNECTION. SEE EQUIPMENT CONNECTION SCHEDULE SHEET FOR ELECTRICAL CONNECTION INFORMATION. TEXT INDICATES EQUIPMENT BEING SERVED BY CONNECTION AS IDENTIFIED ON KITCHEN DRAWINGS AND SPECIFICATIONS.
	CABLE TELEVISION OUTLET, COORDINATE HEIGHT WITH OWNER. PROVIDE RG-58 CABLE TO CATV CABINET. PROVIDE DUPLEX RECEPTACLE ADJACENT TO TELEVISION. COORDINATE HEIGHT WITH OWNER.
	DUPLEX RECEPTACLE CONTROLLED BY SWITCH INDICATED. UPPER HALF OF RECEPTACLE IS SWITCHED. LOWER HALF OF RECEPTACLE IS UNSWITCHED.
	TELEPHONE/DATA OUTLET, +18" AFF TO CENTER "W" INDICATES WALL MOUNTED AT 4"-8"
	HEAVY DUTY FUSIBLE/NON-FUSIBLE DISCONNECT SWITCH, NUMBERS INDICATE AMP RATING. PROVIDE NEMA 1 ENCLOSURE INSIDE. PROVIDE NEMA 3 ENCLOSURE FOR ALL SWITCHES LOCATED OUTSIDE. FPN = FUSE PER NAMEPLATE, NF = NON FUSED.
	MOTOR STARTER.
	PANELBOARD, SURFACE OR RECESS MOUNTED, SEE SCHEDULE FOR DETAILS.
	MOTOR OUTLET. SEE PLANS FOR SIZE.
	MOTORIZED DAMPER.

* NOT ALL SYMBOLS ARE USED IN THESE DRAWINGS

ELECTRICAL ABBREVIATIONS

18"	DIMENSION INDICATES HEIGHT ABOVE FINISHED FLOOR AT WHICH CENTER OF DEVICE IS TO BE MOUNTED.
AFB	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
EC	ELECTRICAL CONTRACTOR
FPN	FUSE PER EQUIPMENT NAMEPLATE REQUIREMENTS.
GC	GENERAL CONTRACTOR
GFI	INDICATES RECEPTACLE TO HAVE GROUND FAULT PROTECTION.
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
WP	INDICATES DEVICE TO HAVE WEATHERPROOF COVER.
U.N.O.	UNLESS NOTED OTHERWISE
FACP	FIRE ALARM CONTROL PANEL
FAAN	FIRE ALARM ANNUNCIATOR PANEL
CH	COUNTER HEIGHT
NL	NIGHT LIGHT

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE: 2018 NCECC

LIGHTING SCHEDULE (each fixture type)

SEE FIXTURE SCHEDULE LAMP TYPE REQUIRED IN FIXTURE
SEE FIXTURE SCHEDULE NUMBER OF LAMPS IN FIXTURE
SEE FIXTURE SCHEDULE BALLAST TYPE USED IN THE FIXTURE
SEE FIXTURE SCHEDULE NUMBER OF BALLAST IN FIXTURE
SEE FIXTURE SCHEDULE TOTAL WATTAGE FOR FIXTURES
SEE FIXTURE SCHEDULE TOTAL INTERIOR WATTAGE VS. ALLOWED
838.95 VS. 90 W/SF
348 VS. 30 W/SF

ADDITIONAL EFFICIENCY PACKAGE OPTIONS

- C406.2 MORE EFFICIENT MECHANICAL EQUIPMENT
- C406.3 REDUCED LIGHTING POWER DENSITY
- C406.4 ADVANCED DIGITAL LIGHTING CONTROLS
- C406.5 ON-SITE RENEWABLE ENERGY
- C406.6 DEDICATED OUTDOOR AIR SYSTEM
- C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING

DESIGNER STATEMENT:
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE ENERGY CODE.

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	MODEL	DESCRIPTION	LAMP	BALLAST	MOUNTING	NOTE 1	NOTE 2	VOLTS	INPUT WATTS
		MILLENNIUM LIGHTING R SERIES LED GOOSENECK WITH RLM SHADE	GALVANIZED LED GOOSE NECK LUMINAIRE OVER SIGNAGE	MINIMUM 2,000 LUMEN	LED DRIVER	WALL SCONCE	COORDINATE LOCATION AND HEIGHT W/ OWNER			
		LITHONIA WDG2 LED PS 40K 80CRI VW MVOLT DNAXD	WALL PACK, CUTOFF, NATURAL ALUMINUM FINISH, 40K LED	(1) 48W 4000K LED	LED DRIVER	WALL	MOUNT AT 12" AFG TO BOTTOM OF FIXTURE		120	48
D		EELP VLF6-B-24-50L-QT-40K	2X4 LED FLAT PANEL	(1) 50W 4000K LED	LED DRIVER	CEILING			120	50
EM		LITHONIA EU2C	EMERGENCY EGRESS LUMINAIRE. INTEGRAL EMERGENCY BATTERY PACK.	(2) 1W LED	LED DRIVER	SURFACE	CONNECT UNSWITCHED TO LOCAL LIGHTING CIRCUIT INDICATED.		120	0.56
EXT		LITHONIA AFN BN EXT	EXTERIOR EMERGENCY EGRESS, BRUSHED NICKEL FINISH	(2) 5.4W LED (INCL)	LED DRIVER	SURFACE	CONNECT UNSWITCHED TO THE LIGHTING CIRCUIT INDICATED		120	21
F4		LITHONIA ZL1N L48 5000LM FST 120 40K 80CRI WH	4' LED STRIP LIGHT	(1) 34W 4000K LED	LED DRIVER	PENDANT/SURFACE			120	34
F8		LITHONIA TZL1N L96 10000LM FST 120 40K 80CRI WH	8' LED STRIP LIGHT	(1) 68W 4000K LED	LED DRIVER	PENDANT/SURFACE			120	68
G		LITHONIA XVML L48 5000LM MVOLT 40K 80CRI	LED LINEAR LUMINAIRE, VAPORTIGHT	(1) 33W 4000K LED	LED DRIVER	SURFACE	COORDINATE LOCATION W/ OWNER		120	33
H		LITHONIA LDC6 35/25 L06AR LSS MVOLT EZIO	LED SOFFIT 6" CANNISTER LIGHT IN SOFFIT			DOWNLIGHT			120	34
J		CONTECH LIGHTING CY3T295KMDV2UDXMS	LED UP/DOWN EXTERIOR WALL SCONCE			WALL	COORDINATE LOCATION AND HEIGHT W/ OWNER		120	

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6/5/2020

STRICKLAND BROTHERS
10 MINUTE OIL CHANGE
810 SOUTH MAIN STREET
GRAHAM, NC



ELECTRICAL COVER SHEET

ISSUE DATE: 6/5/20
REVISION 1: _____
REVISION 2: _____
REVISION 3: _____
REVISION 4: _____
PROJECT #: 20-127
CONTENT: _____
PROJECT ARCHITECT: ECE
DRAWN BY: VW
CADD FILE NAME: 20-127



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