ELECTRICAL SYMBOLS

A-1 — HOMERUN ROUTED CONCEALED IN FINISHED AREAS AND ROUTED EXPOSED IN UNFINISHED AREAS. DESIGNATION INDICATES HOMERUN TO PANEL "A" INDICATING CIRCUIT NUMBER(S) - ALL WIRING SHALL BE #12 WITH GROUND WIRE UON (INCREASE TO #10 FOR CIRCUITS OVER 75 FT.) - ALL HOMERUNS SHALL BE CONNECTED TO A 20 AMPERE, 1 POLE CIRCUIT BREAKER UON - QUANTITY OF CONDUCTORS AS NECESSARY TO ACCOMMODATE CIRCUITS AND CONTROL INDICATED. CONTRACTOR SHALL SIZE CONDUIT TO ACCOMMODATE QUANTITY OF WIRES WITHIN EACH HOMERUN – 3/4" CONDUIT MINIMUM. ANY HOMERUN THAT SERVES AN ISOLATED GROUND RECEPTACLE SHALL BE PROVIDED AN ISOLATED GROUND (SIZED TO MATCH THE EQUIPMENT GROUND) IN ADDITION TO AN EQUIPMENT GROUND. DO NOT ROUTE ISOLATED GROUND CIRCUITS THROUGH SAME CONDUIT AS NORMAL CIRCUITS.

BRANCH CIRCUIT WIRING ON NORMAL POWER ROUTED CONCEALED IN FINISHED AREAS AND ROUTED EXPOSED IN UNFINISHED AREAS. PROVIDE WIRING AND SIZE CONDUIT AS NOTED FOR HOMERUN SYMBOL ABOVE – 3/4" CONDUIT MINIMUM.

CONDUIT INSTALLED BFG OR ROUTED BELOW FINISHED FLOOR UON. PROVIDE WIRING AND SIZE CONDUIT AS NOTED FOR HOMERUN SYMBOL ABOVE – 3/4" CONDUIT MINIMUM.

$ — SWITCH - 20 AMPERE, 120/277 VOLT, SINGLE POLE - MTD AT 46" AFF TO CENTERLINE OF DEVICE (44" TO BOTTOM) UON. SUBSCRIPTS INDICATE THE FOLLOWING 3=3-WAY, 4=4-WAY, K=KEY OPERATED, P=PILOT LIGHT, T=TIMER

$D — LOW VOLTAGE DUAL TECHNOLOGY WALL SWITCH WITH DIMMING. SENSORSWITCH: nWSX-PDT-LV.

$ — DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR. SENSORSWITCH: WSX-PDT (SINGLE POLE), WSX-PDT-2P (2-POLE).

DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT, GROUNDING TYPE - MOUNTED AT 18" AFF TO CENTERLINE OF DEVICE UON.

IG — DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT, ISOLATED GROUND TYPE WITH ORANGE TRIANGLE. COLOR OF DEVICE TO MATCH RECEPTACLES SERVING COMPUTERS OR OTHER ELECTRONIC EQUIPMENT - MOUNTED AT 18" AFF TO CENTERLINE OF DEVICE UON.

TV — DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT, GROUNDING TYPE FOR TV LOCATIONS. E.C. SHALL COORDINATE LOCATIONS AND MOUNTING HEIGHTS WITH TECHNOLOGY AND ARCHITECTURAL/INTERIOR DRAWINGS PRIOR TO ROUGH-IN. LOCATE ADJACENT TO TECHNOLOGY 'TV' OUTLET.

C — DOUBLE DUPLEX RECEPTACLE (QUAD) - TWO (2) 20 AMPERE, 125 VOLT, GROUNDING TYPE RECEPTACLES WITH COMMON BACKBOX AND COMMON FACEPLATE - MOUNTED AT 18" AFF TO CENTERLINE OF DEVICE UON. SUBSCRIPT 'C' INDICATES FEEDS COMPUTER STATION OR DATA LOCATION. REFER TO SPECIFICATIONS FOR REQUIREMENTS FOR ENGRAVED FACEPLATE FEEDING COMPUTERS.

DOUBLE DUPLEX RECEPTACLE (QUAD) - TWO (2) DUPLEX 20 AMPERE, 125 VOLT, GROUNDING TYPE RECEPTACLES WITH COMMON BACKBOX AND COMMON FACEPLATE - MOUNTED AT 18" AFF TO CENTERLINE OF DEVICE UON..

GFI — DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT - GROUND FAULT CIRCUIT INTERRUPTER TYPE - MOUNTED AT 18" AFF TO CENTERLINE OF DEVICE UON.MOUNT DEVICE IN ACCESSIBLE LOCATION PER NEC.

GFI — DOUBLE DUPLEX RECEPTACLE (QUAD) - TWO (2) DUPLEX 20 AMPERE, 125 VOLT, GROUND FAULT CIRCUIT INTERRUPTER TYPE - MOUNTED AT 18" AFF TO CENTERLINE OF DEVICE UON. MOUNT DEVICE IN ACCESSIBLE LOCATION PER NEC.

SINGLE GANG DEDICATED RECEPTACLE, 20 AMPERE, 125 VOLT, GROUND TYPE, MOUNTED AT 18" AFF TO CENTER LINE OF DEVICE UON.

SPECIAL RECEPTACLE. SEE DRAWINGS FOR DETAILS.

WP GFI — DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT - GROUND FAULT CIRCUIT INTERRUPTER TYPE WITH WEATHERPROOF WHILE-IN-USE LOCKABLE HINGED COVER - MOUNTED AT 24" AFF TO CENTERLINE OF DEVICE UON. MOUNT DEVICE IN ACCESSIBLE LOCATION PER NEC.

TELE/DATA DEVICE LOCATION. E.C. SHALL PROVIDE A RECESSED 2-GANG (4-1/2" SQ.) BACKBOX WITH A SINGLE GANG PLASTER RING MOUNTED AT 18" TO CENTERLINE OF DEVICE AND 1" EMPTY CONDUIT WITH PULLSTRING ROUTED FROM BACKBOX AND STUBBED UP ABOVE ACCESSIBLE CEILING. PROVIDE PLASTIC GROMMET ON CONDUIT ENDS. ALL COMMUNICATION AND TECHNOLOGY WIRING, DEVICE(S) AND FACEPLATE SHALL BE FURNISHED AND INSTALLED BY OTHERS.

POKE-THRU OR PEDESTAL MOUNTED DEVICE. REFER TO DRAWINGS FOR DETAILS. SUBSCRIPTS INDICATE THE FOLLOWING: P=POWER, T=TELEPHONE**, D=DATA**. **REFER TO TECHNOLOGY DRAWINGS FOR TELEPHONE OR DATA REQUIREMENTS.

FB1 — SIX-GANG FLUSH ON-GRADE FLOOR BOX WITH ALUMINUM COVER, FINISH BY ARCHITECT (3) 1-GANG 20A, 120V GROUND TYPE RECEPTACLE, (1) 1-GANG 6 PORT SCREW AND (2) 4 GANG OPENING FOR AV CONNECTIONS.

LEGRAND EVOLUTION SERIES EF86S-OG OR APPROVED EQUAL. E.C. SHALL COORDINATE WITH TECHNOLOGY CONSULTANT AND OWNER PRIOR TO ORDERING.

FB2 — FOUR-GANG CAST IRON FLUSH FLOOR BOX WITH NONMETALLIC COVER, FINISH BY ARCHITECT (2) 1-GANG 20A, 120V GROUND TYPE RECEPTACLE, (1) 1-GANG 6 PORT SCREW AND (1) 4 GANG OPENING FOR AV CONNECTIONS.

STEEL CITY 665-CI OR APPROVED EQUAL. E.C. SHALL COORDINATE WITH TECHNOLOGY CONSULTANT AND OWNER PRIOR TO ORDERING.

VFD — VARIABLE FREQUENCY DRIVE. REFER TO DIVISION 23 FOR MORE INFORMATION. INSTALLED COMPLETE BY ELECTRICAL CONTRACTOR.

NON-FUSED DISCONNECT SWITCH

FUSED DISCONNECT SWITCH

TB — TELEPHONE TERMINAL BOARD. 4'W X 8'H X 3/4" THICK PLYWOOD, PAINTED WITH TWO (2) COATS OF FIRE RESISTANT PAINT.

E.C. SHALL PROVIDE A 120V SINGLE POLE MOTOR RATED SWITCH NEAR UNIT FOR DISCONNECTING MEANS.

JUNCTION BOX - MOUNTING HEIGHT AND SIZE AS REQUIRED BY CODE OR AS NOTED ON DRAWINGS.

M # — MECHANICAL TAG. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE FOR DETAILS OF EQUIPMENT AND ELECTRICAL REQUIREMENTS.
XXX-XX — CIRCUIT NUMBER IF REQUIRED

X x — LIGHT FIXTURE TAG
SWITCH DESIGNATION.

T/C — TIMECLOCK

208/120 VOLT, 3 PHASE, 4 WIRE PANELBOARD

GENERAL NOTE:

NOT ALL SYMBOLS USED.

ELECTRICAL GENERAL NOTES

REQUIREMENTS FOR THE USE OF ALUMINUM BUILDING WIRE

THIS PROJECT IS DESIGNED FOR THE USE OF COPPER WIRING. IF THE CONTRACTOR CHOOSES TO USE ALUMINUM WIRING, FOR SEVICE ENTRANCE AND PANEL FEEDERS ONLY, THEN HE SHALL AT HIS EXPENSE:

1. CONTRACTOR SHALL SIZE THE ALUMINUM CONDUCTORS TO THE SAME OR LARGER AMPACITY AS THE COPPER CONDUCTORS SHOWN.
2. CONTRACTOR SHALL SIZE THE CONDUITS FOR THE LARGER ALUMINUM FILL REQUIRED, PER THE NEC.
3. ALUMINUM CONDUCTOR GRADE SHALL BE MINIMUM AA-8000 OR THE NEWEST ALUMINUM CONDUCTOR SPECIFICATION BEING USED BY THE INDUSTRY.
4. THE CONTRACTOR SHALL ABIDE BY ALL ARTICLES RELATED TO ALUMINUM CONDUCTORS IN THE LATEST ISSUE OF THE NEC.
5. CONTRACTOR SHALL VERIFY TERMINATIONS ON EACH DEVICE OR EQUIPMENT BEFORE START OF WORK FOR RATED ALUMINUM CONNECTORS. IF DEVICE REQUIRES COPPER CONNECTIONS (MECHANICAL, PLUMBING, ETC.) THEN THIS CONTRACTOR SHALL PROVIDE COPPER CONDUCTORS.CONTRACTOR SHALL ORDER / PROCURE DEVICE WITH CONNECTORS RATED FOR ALUMINUM CONDUCTORS AND TERMINATIONS. NO EXTRAS.
6. THE CONTRACTOR SHALL ABIDE BY ALL ALUMINUM WIRING INSTALLATION STANDARDS AS REQUIRED BY THE NEIS (NATIONAL ELECTRICAL INSTALLATION STANDARDS) PUBLISHED BY THE NECA (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION). THE CONTRACTOR SHALL ABIDE BY ALL STANDARDS IN THE NECA / AA - 2006, WHICH DEFINES MINIMUM STANDARDS OF QUALITY AND WORKMANSHIP. A SUMMARY OF SOME OF THE REQUIREMENTS FOLLOW:

   a. TERMINATE WITH COMPRESSION CONNECTORS, NO RING CUTS OF THE INSULATION, CRIMP ONLY WITH A CRIMP TOOL AND THE CORRECT DIE AS REQUIRED BY THE MANUFACTURER.
   b. PROVIDE OXIDE INHIBITOR IF REQUIRED BY THE CONNECTOR MANUFACTURER.
   c. TERMINATING WITH A SET SCREW CONNECTOR, THE SCREW SHALL BE TIGHTENED USING ONLY A TORQUE WRENCH.
   d. NECA / AA RECOMMENDS BELLVILLE WASHERS WHEN CONNECTING ALUMINUM CONDUCTORS TO COPPER BUS BARS. ABIDE BY ALL NECA / AA RECOMMENDATIONS.
   e. DO NOT USE PIN CONNECTORS (WIRE ADAPTERS) UNLESS ABSOLUTELY NECESSARY. USE ALL / ANY OTHER OPTIONS, AND IF REQUIRED, PROVE TO ENGINEER BEFORE INSTALLING. IF USED, FOLLOW U.L. GUIDE FOR WIRE CONNECTORS (ZMOW), AND PROVIDE THE SPECIAL TOOLS REQUIRED BY THE MANUFACTURER. DIE-LESS CRIMPERS WILL NOT BE ACCEPTED.
7. ALUMINUM WIRING SHALL ONLY BE USED FOR SERVICE ENTRANCE FEEDERS AND PANEL FEEDERS.

REQUIREMENTS FOR THE USE OF MC CABLE

1. MC CABLE SHALL CONTAIN AN INSULATED COPPER, CODE SIZED GROUND WIRE. THE MC CABLE SHEATH SHALL ALSO QUALIFY AS A GROUND CONDUCTOR.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVAL FROM THE LOCAL JURISDICTION HAVING AUTHORITY FOR THE USE OF MC CABLE ON THIS PROJECT.
2. MC CABLE SHALL BE CONCEALED. MC CABLE SHALL NOT BE USED FOR HOMERUNS.
2. THE CONTRACTOR SHALL RECEIVE PERMISSION FROM THE ARCHITECT AND THE OWNER IN WRITING BEFORE INSTALLING MC CABLE.

GENERAL CONSTRUCTION NOTES:

1. ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR SHAFTS SHALL BE SEALED IN ACCORDANCE WITH SPECIFICATIONS.
2. ROUTING OF ALL SURFACE MOUNTED/EXPOSED CONDUIT IN UNFINISHED AREAS (OR WHERE NOTED ON THE DRAWINGS) SHALL BE COORDINATED WITH, AND SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. ALL EXPOSED CONDUIT SHALL BE RIGID TYPE EMT OR GRC.
3. FIELD VERIFY EXACT LOCATION OF EQUIPMENT WITH ASSOCIATED EQUIPMENT INSTALLER PRIOR TO ROUGH-IN. EXACT ELECTRICAL REQUIREMENTS SHALL BE VERIFIED IN THE FIELD WITH THE EQUIPMENTS NAMEPLATE DATA. E.C. SHALL MAKE APPROPRIATE ADJUSTMENTS TO ASSOCIATED BREAKERS/DISCONNECT SWITCHES, BRANCH CIRCUIT WIRING, AND SIZE FUSES PER MANUFACTURER'S RECOMMENDATIONS.
4. THE PHRASE "PROVIDED BY" USED WITHIN THESE DOCUMENTS SHALL EXPLICITLY REPRESENT "FURNISHED AND INSTALLED BY".
5. PROVIDE A LAYOUT OF EACH ELECTRICAL ROOM WITH THE ACTUAL DIMENSIONS OF ALL EQUIPMENT TO BE ORDERED SHOWN. SUBMIT LAYOUT WITH THE ELECTRICAL DISTRIBUTION EQUIPMENT SHOP DRAWINGS FOR REVIEW AND APPROVAL. ALL LAYOUTS SHALL SHOW HOW THE EQUIPMENT WILL FIT INTO THE ROOM AND MUST INCORPORATE THE WORKING CLEARANCES TO BE MAINTAINED PER NEC.
6. PROVIDE A LAYOUT OF THE OUTDOOR EQUIPMENT ENCLOSURE WITH THE ACTUAL DIMENSIONS OF ALL EQUIPMENT TO BE ORDERED SHOWN (CONTACT UTILITY COMPANY FOR DIMENSIONS TO BE USED FOR THE PADMOUNTED TRANSFORMER). SUBMIT LAYOUT WITH THE GENERATOR EQUIPMENT SHOP DRAWINGS FOR REVIEW AND APPROVAL. ALL LAYOUTS SHALL SHOW HOW THE EQUIPMENT WILL FIT DRAWINGS FOR REVIEW AND APPROVAL. ALL LAYOUTS SHALL SHOW HOW THE EQUIPMENT WILL FIT INTO THE AREA AND MUST INCORPORATE THE WORKING CLEARANCES TO BE MAINTAINED PER NEC AND NFPA. E.C. SHALL VERIFY WITH THE GENERATOR MANUFACTURER FOR THE EQUIPMENT BEING FURNISHED TO ENSURE THAT THE UNIT HAS AN INTERNAL SCOOP THAT DIRECTS THE AIRFLOW FOR VENTILATION REQUIRED FOR PROPER COOLING. IF THE UNIT DOES NOT HAVE THIS INTERNAL FEATURE, COORDINATE WITH G.C. THE ADDITION OF SURFACE RECESSED WITHIN THE OUTDOOR ENCLOSURE FOR PROPER AIR CIRCULATION.
7. ALL INDOOR MOUNTED ELECTRICAL EQUIPMENT SHALL BE INSTALLED ON A 4" CONCRETE HOUSEKEEPING PAD [illegible] BY THE E.C.
8. PROVIDE VIBRATION INSULATORS BENEATH EACH TRANSFORMER TO ELIMINATE NOISE OR THE TRANSFERANCE OF VIBRATION TO ADJACENT ITEMS/AREAS.
9. WIRING SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE A MINIMUM OF 3/4".
10. CIRCUITS SHALL BE ARRANGED AS REQUIRED TO MAINTAIN THE MOST BALANCED LOADS ON EACH PHASE WITHIN EACH PANEL. E.C. SHALL PROVIDE A TYPED PANELBOARD SCHEDULE AND INSTALL IT ON INSIDE COVER OF EACH PANEL.
11. ALL DEVICES THAT ARE TO BE INSTALLED BACK-TO-BACK IN A COMMON WALL SHALL BE SEPARATED BY 8" MINIMUM TO MINIMIZE SOUND TRANSFER.
12. DRAWINGS ARE DIAGRAMATIC AND INDICATE GENERAL ARRANGEMENT ONLY. COORDINATE INSTALLATION WITH OTHER TRADES TO VERIFY THE ACTUAL SPACE CONDITIONS, HEADROOM, ETC. THAT IS TO BE MAINTAINED. NO ADDITIONAL PAYMENT WILL BE APPROVED FOR FAILURE TO COMPLY.
13. BRANCH CIRCUITS SERVING ISOLATED GROUND RECEPTACLES SHALL INCLUDE AN ADDITIONAL ISOLATED GROUNDING CONDUCTOR FROM THE RECEPTACLE AND WILL TERMINATE ON THE ISOLATED/INSULATED GROUND BAR IN PANEL SERVING THEM.
14. COORDINATE ALL LOCATIONS OF FLOOR BOXES, RECEPTACLES, AND OTHER DEVICE BACKBOXES WITH CASEWORK AND FURNITURE LAYOUTS. REFER TO THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND FIELD VERIFY EXACT LOCATIONS AND CONDUIT ROUTING METHODS WITH ARCHITECT PRIOR TO ROUGH-IN.
15. WIRE SIZE OF BRANCH CIRCUITS SHALL BE ADJUSTED TO COMPENSATE FOR VOLTAGE DROP BASED UPON ACTUAL CONDUIT ROUTING. E.C. SHALL MAINTAIN VOLTAGE DROP AS RECOMMENDED BY NEC (NOT TO EXCEED 3%).
16. E.C. SHALL PROVIDE 3/4" MINIMUM EMPTY CONDUIT WITH PULLWIRE FOR CONTROL WIRING BETWEEN HVAC EQUIPMENT AND REMOTE LOCATED CONTROL PANELS. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR.
17. ALL BRANCH CIRCUITS SHALL BE PROVIDED WITH A SEPARATE NEUTRAL CONDUCTOR. NEUTRALS SHALL NOT BE SHARED PER 2017 NEC 210.4 (B).
18. ALL AREAS THAT HAVE TOGGLE-TYPE LIGHT SWITCHES AND RECEPTACLES MOUNTED BESIDE DOOR OPENINGS AT 46" TO CENTERLINE MAY BE FURNISHED WITH A COMMON BACKBOX WITH BARRIERS BETWEEN THE DEVICES AND A COMMON FACEPLATE PER NEC 404.8(B).
19. E.C. SHALL COORDINATE WITH THE FOLLOWING PRIOR TO ROUGH-IN: FOODSERVICE VENDOR AND FOODSERVICE DRAWINGS, TECHNOLOGY VENDOR AND TECHNOLOGY DRAWINGS, MECHANICAL/PLUMBING CONTRACTOR AND MECHANICAL/PLUMBING DRAWINGS. E.C. SHALL PROVIDE ALL EQUIPMENT, DEVICES, WIRING AND CONDUITS AS SHOWN OR IMPLIED ON THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
20. E.C. SHALL CONNECT CORD AND PLUG COMPONENTS SHIPPED LOOSE WITH ANY EQUIPMENT FURNISHED BY OTHER TRADES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
21. REFER TO SHEET M-701 AND ALL 700 SERIES DRAWINGS FOR ELECTRICAL SCOPE REQUIRED TO COMPLETE BUILDING AUTOMATION SYSTEM. INCLUDE BAS INTERFACE WITH ELECTRICAL EQUIPMENT AS INDICATED.

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MOE'S SOUTHWEST GRILL

REV NO.	DATE	DESCRIPTION
	07/27/18	ISSUED FOR PERMIT

DRAFT

MOE'S SOUTHWEST GRILL
3732 US HWY 280
PHENIX CITY, AL 36867

ELECTRICAL SYMBOL LEGEND

	DATE:
BRAND REVIEW	07/27/2018
PERMIT	07/27/2018
BID	--/--/----
CONSTRUCTION	--/--/----
RECORDED	--/--/----

PROJECT MANAGER	DESIGNER
JB	JW

JOB NO. 2018375.13

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