

ELECTRICAL SPECIFICATIONS/NOTES

NOTE: MANUFACTURERS NAMES ON WHICH THIS SPECIFICATION IS BASED INDICATE THE MINIMUM QUALITY OF PRODUCT REQUIRED. SUBSTITUTION MAY BE MADE TO THOSE SPECIFIED IF DEEMED EQUIVALENT BY THE OWNERS REPRESENTATIVE. ALL WORK AND PRODUCTS SHALL MEET THE REQUIREMENTS OF THE LANDLORD.

1. THE GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS SHALL BE CONSIDERED AS PART OF THIS SPECIFICATION.
2. ALL WORK TO BE IN ACCORDANCE WITH THE RULES AND REGULATION OF THE LOCAL AUTHORITIES HAVING JURISDICTION AND THE MOST RECENT EDITION OF NATIONAL ELECTRIC CODE.
3. CONTRACTOR SHALL FILE PLANS WITH AND OBTAIN APPROVALS FROM MUNICIPAL AGENCIES. ALL PERMITS AND CERTIFICATES OF INSPECTION SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR. PERTINENT CERTIFICATES SHALL BE DELIVERED TO THE OWNERS REPRESENTATIVE, PRIOR TO FINAL BILLING.
4. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING. BIDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS. HE SHALL CAREFULLY EXAMINE THE EXISTING CONDITIONS AND LIMITATIONS THEREOF. HE SHALL ASCERTAIN CONDITIONS UNDER WHICH THE WORK MUST BE PERFORMED, INCLUDING THE HANDLING OF MATERIALS, SECURITY AND LIMITING FIELD DIMENSIONS. FURTHER, THIS CONTRACTOR SHALL PROVIDE FIELD VERIFICATION OF LOCATION OF POINTS OF CONNECTION TO LANDLORDS ELECTRICAL AND TELEPHONE EQUIPMENT AND DISTANCE FROM LEASED SPACE. ANY DISCREPANCIES WITH THE CONSTRUCTION DOCUMENTS DISCOVERED AS A RESULT OF THE AFOREMENTIONED FIELD SURVEY, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE, PRIOR TO COMMENCING ANY WORK. ANY ADDITIONAL COSTS RESULTING FROM CONTRACTORS FAILURE TO DO SO SHALL BE HIS RESPONSIBILITY AND SHALL BE BORNE BY HIM.
5. ELECTRICAL CONTRACTOR SHALL RECORD ALL FIELD CHANGES IN HIS WORK AS THE JOB PROGRESSES. AN ACCURATE RECORD OF ALL WORK AS ACTUALLY INSTALLED, UPON COMPLETION OF THE WORK AND BEFORE FINAL PAYMENT IS AUTHORIZED, SHALL TURN OVER TO THE OWNERS REPRESENTATIVE A RECORD SET OF PRINTS SHOWING THESE CHANGES.
6. SUBMIT MATERIAL LISTS AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE OWNERS REPRESENTATIVE FOR REVIEW. SUBMITTALS SHALL BE IN ACCORDANCE WITH GENERAL CONDITIONS AND SHALL BEAR THE STAMP OF THE ELECTRICAL CONTRACTOR SHOWING THAT HE HAS REVIEWED AND APPROVED THEM. LACK OF SUCH CONTRACTORS APPROVAL WILL BE CAUSE FOR REJECTION WITHOUT REVIEW BY THE OWNER.
7. THIS CONTRACTOR SHALL DO ALL CUTTING, CHASING, OR CHANNELING AND PATCHING REQUIRED FOR ANY WORK HEREIN SPECIFIED. ALL OPENINGS THROUGH STRUCTURALLY SUPPORTED SLABS MUST BE COREBORED, SLEEVED, GROUTED, SEALED AND MADE WATERPROOF. SLEEVES MUST EXTEND AT LEAST 2'-0" AFF. ALL SLEEVES, OPENINGS, ETC. THROUGH FIRE RATED WALLS AND FLOORS SHALL BE SEALED AFTER CONDUIT INSTALLATION TO RETAIN FIRE RATING.
8. ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIR. HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL, SUCH AS CHANNELS, RODS, ETC., NECESSARY FOR THE INSTALLATION OF WORK AND SHALL BE SECURED TO THE BUILDING STRUCTURE, NOT TO PIPING OR DUCTWORK. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. EXPOSED CONDUIT SHALL BE RUN IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO COLUMN LINES AND SEPARATED AT LEAST 1" FROM WATER PIPING. WHENEVER THEY RUN ALONG SIDE OR ACROSS SUCH PIPING, THEY SHALL BE RUN OVER THEM.
9. EVERY PART OF THE INSTALLATION SHALL BE TESTED, MEASURED AND LEFT IN PERFECT WORKING ORDER. TEST ALL WIRES AND CABLES INSTALLED UNDER THIS CONTRACT WITH A 1,000 VOLT MEGOHM METER. ANY READINGS THAT ARE LOWER THAN REQUIRED BY GOOD PRACTICE OR ANY CABLE CODES, PROMPTLY REPLACE THE MATERIALS OR EQUIPMENT INVOLVED. SHOULD TESTING REVEAL ANY OTHER DEFECTS, PROMPTLY CORRECT SUCH DEFECTS AND RUN TESTS UNTIL THE ENTIRE INSTALLATION IS SATISFACTORY TO ALL READINGS.
10. GUARANTEE: CONTRACTOR IS TO GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF ACCEPTANCE OF THE PROJECT BY THE OWNER. IT IS UNDERSTOOD BY HIS ACCEPTANCE OF THE CONTRACT THAT THIS CONTRACTOR WILL MAKE GOOD ANY AND ALL WORK WHICH IN ANY WAY HAS BECOME DEFECTIVE AS TO THE QUALITY OF MATERIALS AND WORKMANSHIP FOR ANY CAUSE OTHER THAN ORDINARY WEAR AND TEAR. FOR THE SAME PERIOD, ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.
11. THE CONTRACTOR, BEFORE FINAL ACCEPTANCE BY THE OWNER WILL BE GRANTED, SHALL CLEAN ALL LIGHTING FIXTURES, DEVICE PLATES, SERVICE FITTINGS AND OTHER ITEMS FURNISHED UNDER THIS CONTRACT. HE SHALL INSURE THAT ALL DIRECTORIES ARE IN PLACE WITH COMPLETED OR REVISED SCHEDULES AND ALL IDENTIFICATIONS AND MARKINGS OF EQUIPMENT, CABLES AND OTHER ITEMS ARE COMPLETED.
12. THIS CONTRACTOR SHALL COORDINATE SEQUENCE OF WORK WITH ALL OTHER TRADES. CONTRACTOR SHALL VERIFY VOLTAGE OF MECHANICAL EQUIPMENT AND FLUORESCENT FIXTURE BALLASTS, PRIOR COMMENCING ANY WORK.
13. THIS CONTRACTOR SHALL MAKE ARRANGEMENTS FOR TEMPORARY POWER AND SHALL PAY THE COST FOR THE UTILITY CONNECTION AND SHALL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF THE TEMPORARY WORK AND FOR THE REMOVAL OF SAME. CONTRACTOR SHALL PAY ALL UTILITY CHARGES IN CONNECTION WITH THE TEMPORARY POWER. CONTRACTOR SHALL PROVIDE GROUND FAULT PROTECTION FOR ALL POWER EQUIPMENT USED ON THE PREMISES DURING CONSTRUCTION.

14. SCOPE OF WORK CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, SUPPLIES, EQUIPMENT AND FEES REQUIRED TO COMPLETELY INSTALL, TEST AND PLACE THE HEREIN SPECIFIED EQUIPMENT, COMPONENTS, CONTROLS, AND SYSTEMS IN SERVICE. COMPLETE POWER AND LIGHTING DISTRIBUTION SYSTEMS INCLUDING ALL PANELS AND COMPLETE BRANCH CIRCUIT WIRING SYSTEM. COMPLETE UTILITY MOTOR WIRING SYSTEM (EXCEPT AS NOTED). COMPLETE LIGHTING FIXTURE INSTALLATION. COMPLETE TELEPHONE CONDUIT SYSTEM. CONDUIT FROM POINT OF CONNECTION TO LANDLORD'S SYSTEM AND ALL TERMINAL DEVICES, BOXES, CONDUIT, PLATES, ETC. TEMPORARY ELECTRICAL SERVICE AS REQUIRED FOR CONSTRUCTION. WIRING AND FINAL CONNECTION TO ALL SIGNS AND GRAPHICS, FURNISHED BY THE OWNER. PROVISIONS FOR FIRE ALARMS/SMOKE EVACUATION SYSTEM AND EXTENSION TO LANDLORD'S SYSTEM. COMPLETE CONDUIT SYSTEM ALONG PULL STRING FOR THE POINT OF SALE (P.O.S.) SYSTEM. THE POS SYSTEM SHALL BE PROVIDED AND INSTALLED BY THE POS VENDOR. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE QUANTITY AND LOCATION OF ALL DATA AND / OR TELEPHONE JUNCTION BOXES WITH THE VENDOR PRIOR TO INSTALLATION OF CONDUITS, BOXES AND BLANK PLATES. TESTING OF ALL CABLES AND CIRCUIT WIRING AFTER INSTALLATION. TESTING OF ALL ELECTRICAL EQUIPMENT. WARRANTY OF ALL WORK FOR A PERIOD OF ONE YEAR FROM DATE OF PROJECT CLOSE-OUT.
15. ELECTRICAL SERVICE PROVIDE ELECTRICAL AS INDICATED ON THE DRAWING. ALL WORK NOT SPECIFICALLY NOTED AS BEING BY THE LANDLORD OR THE POWER COMPANY SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. CLOSELY COORDINATE ENTIRE INSTALLATION WITH THE POWER COMPANY. CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE LOCAL UTILITY FOR INSTALLATION OF METERING.
16. CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE LOCAL TELEPHONE UTILITY FOR TELEPHONE SERVICE TO THE SPACE, CONDUIT SYSTEM FOR TELEPHONE DISTRIBUTION TO THE LEASED PREMISES SHALL BE PROVIDED WHERE REQUIRED FOR UTILITY COMPANY WIRES. COORDINATE INSTALLATION OF TELEPHONE WORK AND INSTALL CONDUIT FOR TELEPHONE SYSTEM. OUTLET BOXES SHALL BE 4" SQUARE METAL WITH SINGLE DEVICE COVER AND TELEPHONE PLATE. PROVIDE INTERIOR TYPE 4-D PLYWOOD 24" X 24" TO SERVICE TELEPHONE TERMINAL BOARD.
- 17.1. THE CONTRACTOR SHALL FURNISH LABOR, MATERIALS, EQUIPMENT AND TOOLS TO PERFORM ELECTRICAL WORK SHOWN, NOTED OR SCHEDULED FOR A COMPLETE AND FINISHED INSTALLATION.
- 17.2. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEARS ON THE UNDERWRITERS LABORATORY LIST OF APPROVED ITEMS AND SHALL MEET THE REQUIREMENTS OF RECOGNIZED STANDARDS.
- 17.3. EQUIPMENT SHALL BE SIZED IN CONFORMITY WITH REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES.
18. CONDUIT SHALL BE STANDARD STEEL, RIGID, IMC OR EMT (THIN WALL) ACCORDING TO CODE REQUIREMENTS. CONDUIT SHALL BE CONCEALED IN FINISHED AREAS, EXCEPT AS OTHERWISE APPROVED BY OWNERS REPRESENTATIVE.
19. SURFACE RACEWAYS SHALL BE METAL TYPE OF THE SIZE AND CHANNEL REQUIRED FOR SERVICE, CONSTRUCTED OF GALVANIZED STEEL WITH SNAP-ON COVERS, WITH 1/8" MOUNTING SCREW KNOCKOUTS IN BASE APPROXIMATELY 8" O.C. PROVIDE FITTINGS INDICATED WHICH MATCH AND MATE WITH RACEWAY. FINISH WITH MANUFACTURERS STANDARD PRIME COATING SUITABLE FOR PAINTING.
20. ALL CONDUCTORS SHALL BE SOFT DRAWN, ANNEALED COPPER, WITH 600V INSULATION:
- 20.1. #10 AND SMALLER - SOLID WITH SINGLE BRAID. # 8 AND LARGER - STRANDED WITH AT LEAST DOUBLE BRAID. MINIMUM WIRE SIZE SHALL BE #12, EXCEPT #14 MAY BE USED FOR CONTROL APPLICATIONS.
- 20.2. ALL WIRE AND CABLE SHALL BE NEW AND SHALL BE BROUGHT TO THE SITE IN UNBROKEN PACKAGES.
- 20.3. GENERAL WIRING SHALL HAVE THW, THHN OR THWN INSULATION.
- 20.4. ALUMINUM CONDUCTORS ARE NOT PERMITTED FOR BRANCH CIRCUIT WIRING.
- 20.5. WIRES SHALL BE COLOR CODED IN KEEPING WITH NEC STANDARDS
21. THE NEC ALLOWS THE USE OF MC CABLE IN PLACES OF ASSEMBLY, BUT MUST BE INSTALLED IN AREAS NOT SUBJECT TO PHYSICAL DAMAGE PER NEC ARTICLE 330. INSTALLATION AND USE OF A SEPARATE INSULATED COPPER, CODE SIZED GROUND WIRE IN ALL CONDUITS IS REQUIRED, INCLUDING MC CABLE. IT IS ALSO REQUIRE THAT THE MC CABLE SHEATH QUALIFIES AS A GROUNDING CONDUCTOR. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVAL FROM THE LOCAL JURISDICTION HAVING AUTHORITY FOR THE USE OF MC CABLE ON THIS PROJECT.
22. OUTLET BOXES AND COVERS SHALL BE ONE PIECE, GALVANIZED OR SHERARDIZED STEEL. KNOCK-OUT TYPE W/ FUTURE STUDS AS REQ. JUNCTION BOXES, PULL BOXES AND COVERS SHALL BE GALVANIZED STEEL, CODE GAUGE AND SIZE.

22. WIRING DEVICES: WALL SWITCHES, SINGLE POLE, DOUBLE POLE, AND THREE WAY SHALL BE GENERAL DUTY, FLUSH, TOGGLE SWITCHES. SPECIFICATION GRADE, 20A, 120/277V WITH SCREW TERMINALS. MANUFACTURERS SHALL BE HUBBELL, BRYANT, PASS AND SEYMORE, OR LEVITON. GENERAL DUTY DUPLEX RECEPTACLES SHALL BE 2-POLE, 3-WIRE GROUNDING TYPE, SPECIFICATION GRADE, 20A, 125V, NEMA 5-20R UNLESS OTHERWISE INDICATED. MANUFACTURERS SHALL BE HUBBELL, BRYANT, PASS AND SEYMORE, OR LEVITON. GROUND FAULT INTERRUPTER RECEPTACLE SHALL BE GENERAL DUTY, DUPLEX RECEPTACLES, GROUND FAULT CIRCUIT INTERRUPTER, FEED THROUGH TYPE, CAPABLE OF PROTECTING CONNECTED DOWNSTREAM RECEPTACLES ON A SINGLE CIRCUIT, GROUNDING TYPE UL-RATED CLASS A, GROUP 1, 20A, 20V, 60 HZ, WITH SOLID-STATE GROUND FAULT SENSING AND SIGNALING; WITH MILLIAMPERES GROUND-FAULT TRIP LEVEL; IN NEMA 5-15R CONFIGURATION. MANUFACTURERS SHALL BE HUBBELL, BRYANT, PASS AND SEYMORE, OR LEVITON. DUPLEX ISOLATED GROUND TYPE RECEPTACLE SHALL BE 2-POLE, 4-WIRE, 15A STRAIGHT BLADE DEVICE WITH SEPARATE ISOLATED GROUND AND BONDING GROUND CONNECTIONS, IN NEMA 5-15R CONFIGURATION. MANUFACTURED BY HUBBELL IG-5362. TELEPHONE OUTLET COVER SHALL BE ALUMINUM #P-12. WIRING DEVICE ACCESSORIES INCLUDING ALL WALL PLATES SHALL BE PROVIDED AT EACH DEVICE. ALL PLATES SHALL BE SAME COLOR AS DEVICE AND MANUFACTURED IN ACCORDANCE WITH THE DEVICE MOUNTING HEIGHTS OF DEVICES SHALL BE TO THE FOLLOWING DIMENSIONS:
 

WALL SWITCHES	4'-0"
RECEPTACLES	1'-6"
WALL TELEPHONE OUTLETS	4'-0"
DISCONNECT SWITCHES	5'-6"
PANELBOARDS	5'-0"

THIS CONTRACTOR SHALL PROVIDE, INSTALL AND CONNECT A COMPLETE SYSTEM OF GROUNDING FOR ALL EQUIPMENT AND STRUCTURES. A GOOD MECHANICAL AND ELECTRICAL CONNECTION SHALL BE MADE WITH APPROVED GROUNDING CONNECTORS. ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS SHALL COMPLY WITH ALL LOCAL, STATE AND NEC CODES AND REGULATIONS. PANELS, CONDUIT SYSTEMS, MOTOR FRAMES, LIGHTING FIXTURES AND OTHER EQUIPMENT THAT ARE A PART OF THIS INSTALLATION SHALL BE SECURELY GROUNDED BOTH MECHANICALLY AND ELECTRICALLY IN ACCORDANCE WITH ALL CODES. MAIN GROUNDING SYSTEM SHALL BE SIZED TO CONFORM WITH SECTION 250, TABLE 250-94 OF THE NATIONAL ELECTRICAL CODE. PROVIDE CONDUIT TO PROTECT GROUND WIRE FROM DAMAGE TO AN AREA 6 FT. ABOVE FLOOR. MAKE ALL JOINTS AND CONNECTIONS OF THE CONDUIT SYSTEM TIGHT TO MAINTAIN CONTINUITY OF MECHANICAL AND ELECTRICAL GROUND THROUGHOUT ENTIRE SYSTEM. GROUND ALL 3 WIRE RECEPTACLES TO THE OUTLET BOXES. GROUND NEUTRAL FROM THE TRANSFORMER CONNECTED TO WATER LINE. GROUND CONDUCTOR SHALL BE SUPPLIED IN ALL NON-METALLIC CONDUIT.

PANELBOARDS SHALL BE 3-PHASE, 4-WIRE DISTRIBUTED PHASE TYPE WITH SOLID NEUTRAL GROUND LUG, GROUND BUS AND NUMBER OF CIRCUIT BREAKERS AS SHOWN ON THE PANEL SCHEDULE. BUSWAYS SHALL BE HARD DRAWN COPPER. CABINET SHALL BE CONSTRUCTED OF CODE GAUGE STEEL WITH HINGED DOOR HAVING DIRECTORY CARD, NEATLY AND PROPERLY INSCRIBED AND SET IN FRAME WITH TRANSPARENT COVER. ALL BREAKERS SHALL BE BOLTED TYPE, THERMAL MAGNETIC WITH ALL TWO OR THREE POLE BREAKERS HAVING COMMON TRIP. CIRCUIT BREAKERS SHALL BE RATED FOR MINIMUM 22,000 AMP SYMMETRICAL SHORT CIRCUIT CURRENT. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY AND CALCULATE SHORT CIRCUIT FAULT CURRENT AND ARC FLASH AND PROVIDE LABELS ON ELECTRICAL EQUIPMENT PER N.E.C. AND LOCAL JURISDICTION. CONTRACTOR SHALL PROVIDE EQUIPMENT RATED FOR FAULT CURRENT CIRCUIT BREAKERS SERVING LIGHTING CIRCUITS SHALL BE RATED FOR SWITCH SERVICE. PANELBOARDS AND BREAKERS SHALL BE AS MANUFACTURED BY SQUARE-D OR EQUAL. PANEL SHALL BE CIRCUITED SO THAT THE LOAD IS DISTRIBUTED EVENLY ACROSS ALL THREE PHASES.

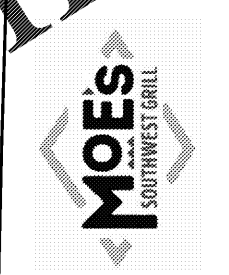
PROVIDE SAFETY AND DISCONNECT SWITCHES, FUSED OR NON-FUSED, AS CALLED FOR ON DRAWING AND AS REQUIRED BY CODE. SWITCHES SHALL BE HEAVY DUTY, LOAD AND HORSEPOWER RATED AS MANUFACTURED BY SQUARE-D, GENERAL ELECTRIC, OR EQUAL. SWITCH ENCLOSURE TO BE SUITABLE FOR APPLICATION. FURNISH AND INSTALL DUAL ELEMENT CURRENT LIMITING FUSES OF TYPE AND AMPACITY DESIGNED TO PROTECT SYSTEM AGAINST AVAILABLE SHORT CIRCUIT FAULT CURRENT.

PROVIDE SURGE PROTECTIVE DEVICE (SPD) SYSTEM FOR MAIN PANEL MDP.

LIGHTING FIXTURES: THE CONTRACTOR SHALL PROVIDE A NEW LIGHTING FIXTURE OF THE TYPE SPECIFIED FOR EACH LIGHTING OUTLET SHOWN WITH COMPLETE LAMPS OR TUBES. ALL FIXTURES SHALL BE HUNG AND MOUNTED IN PLACE, PROPERLY WIRED, TESTED AND LEFT READY FOR OPERATION.

PAINTING OF ELECTRICAL CONDUITS, ETC., IF REQUIRED, WILL BE BY GENERAL CONTRACTOR.

FINALLY: IT IS THE INTENT THAT THE FOREGOING WORK SHALL BE COMPLETE IN EVERY RESPECT AND THAT ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK SHALL BE FURNISHED. THE LOCATION OF RECEPTACLES AND FIXTURES SHOWN ON THE DRAWING IS APPROXIMATE AND THE OWNER SHALL HAVE THE RIGHT TO RELOCATE ANY RECEPTACLES OR FIXTURES BEFORE THEY ARE INSTALLED WITHOUT ADDITIONAL COST.



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

DRAFT

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

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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Order Plans

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