



ATTENTION:
SINGLE LINE INFORMATION SHOWN DASHED AND IN GRAYSCALE IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE.

AREA OF WORK PLAN
REFERENCE SHEET C1.2 - AREA OF WORK PLAN FOR DELINEATION OF INDIVIDUAL WORK AREAS WITHIN THE PROJECT.

ATTENTION:
THE HARRIS TEETER PROJECT MANAGER MAY PROVIDE BID NOTES WITH INFORMATION REGARDING THE BIDDING OF THIS PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE HE HAS THIS INFORMATION PRIOR TO SUBMITTING BID.

DEMO - DISPOSAL OF MATERIALS COMPLIANCE
THE ELECTRICAL CONTRACTOR SHALL DISPOSE OF ALL ELECTRICAL DEMOLITION WASTE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS AND GUIDELINES. THIS INCLUDES BUT IS NOT LIMITED TO LAMPS, BALLASTS, FIXTURES, TRANSFORMERS, PANELS, BREAKERS, CONDUIT, WIRING, BATTERIES AND OTHER ELECTRICAL EQUIPMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A LETTER INDICATING ANY SUCH MATERIALS HAVE BEEN DISPOSED OF IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS.

APPLICABLE CODES

BUILDING SIZE (SQ. FT.): EXISTING SQ FT	
OCCUPANCY TYPE:	MERCANTILE
GOVERNING CODES & REFERENCES:	2017 NC NEC
	2018 NC ECC
	2018 NORTH CAROLINA BUILDING CODE
LOCATION:	RALEIGH, NORTH CAROLINA

ELECTRICAL DRAWING INDEX

DRAWING NUMBER	TITLE
1	E1.1 SINGLE LINE DIAGRAM, NOTES AND LOAD ANALYSIS
2	E1.2 ELECTRICAL NOTES, LEGEND AND SCHEDULE
3	E2.0 LIGHTING DEMOLITION PLAN
4	E2.1 LIGHTING RENOVATION PLAN
5	E3.0 POWER DEMOLITION PLAN
6	E3.1 POWER RENOVATION PLAN
7	E3.2 ROOF POWER RENOVATION PLAN
8	E4.1 PANEL SCHEDULES
9	E4.2 PANEL SCHEDULES
10	F1.1 FIRE ALARM RENOVATION PLAN

EXISTING SINGLE LINE DIAGRAM
SCALE: NONE

ELECTRICAL SPECIFICATION

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2017 NORTH CAROLINA STATE BUILDING CODE AND ALL LOCAL ORDINANCES AND REGULATIONS THEREIN.
- PROVIDE AND INSTALL A COMPLETE ELECTRICAL SYSTEM AS SPECIFIED ON THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL REVIEW THE ARCHITECTURAL, MECHANICAL, REFRIGERATION, EMS AND PLUMBING DOCUMENTS AND FINISH AND INSTALL ALL ELECTRICAL WORK REQUIRED IN THESE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO FULLY ACCOUNT THEMSELVES WITH ALL SITE CONDITIONS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION WHICH COULD AFFECT LABOR PRODUCTIVITY, MATERIAL HANDLING, STORAGE AND OTHER CONDITIONS THAT MAY AFFECT COST. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTIES OF PERFORMING THE WORK.
- ALL MATERIALS AND EQUIPMENT INSTALLED SHALL BE NEW. PROPER CARE SHALL BE EXERCISED IN HANDLING ALL EQUIPMENT AND MATERIALS. DAMAGED EQUIPMENT SHALL BE REPLACED AT NO COST TO THE OWNER.
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH NECA-1
- ALL ELECTRICAL EQUIPMENT FURNISHED UNDER THIS SECTION SHALL BE APPROVED BY UL AND SHALL BE SO LABELED OR LISTED WHERE SUCH IS REQUIRED BY CODE. OTHER LISTING AGENCIES ARE ACCEPTABLE PROVIDED THEY ARE APPROVED BY THE LOCAL AUTHORITY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DEMONSTRATE LOCAL APPROVAL IF NECESSARY. WHERE CUSTOM BUILT EQUIPMENT IS SPECIFIED AND THE UL LABEL OR LISTING IS NOT APPLICABLE TO THE COMPLETED PRODUCT, ALL COMPONENTS USED IN THE CONSTRUCTION OF SUCH EQUIPMENT SHALL BE LABELED OR LISTED BY UL WHERE APPLICABLE.
- THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, LICENSES, CERTIFICATES AND INSPECTIONS REQUIRED BY LOCAL AUTHORITIES AS NECESSARY TO CONSTRUCT AND PLACE IN OPERATION ALL WORK PERFORMED UNDER THIS SECTION, AT NO ADDITIONAL EXPENSE TO THE OWNER.
- THE INSTALLATION SHALL BE AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH EQUIPMENT MANUFACTURERS' RECOMMENDATIONS AND INSTRUCTIONS. THE INSTALLATION SHALL BE ACCOMPLISHED BY WORKMEN SKILLED IN THIS TYPE OF WORK AND PROPERLY LICENSED IN ACCORDANCE WITH LOCAL JURISDICTION REQUIREMENTS.
- WIRE SHALL BE THIN/TWEN COPPER IN CONDUIT. MC CABLE MAY BE USED WERE CONCEALED IN WALLS OR ABOVE CEILINGS.
- INSTALL BLANK PLATES OR REPAIR OPENINGS WHERE DEVICES ARE TO BE REMOVED, I.E. LEAVE NO ABANDONED DEVICES, AND WHERE DEVICES ARE REMOVED, REWORK CONDUIT, WIRE AND BOXES SO AS TO KEEP CIRCUIT ACTIVE.
- COORDINATE ALL WORK WITH OTHER TRADES.
- PROVIDE EQUIPMENT GROUNDING FOR ALL ELECTRICAL EQUIPMENT, INCLUDING RACEWAY SYSTEMS AND WIRING DEVICES IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE NEC.
- PROVIDE TESTING OF ALL NEW LIGHTING CONTROLS PER SEC. 505.2.6 ON THE NORTH CAROLINA ENERGY CODE.

GENERAL PROJECT NOTES

- THE E.C. SHALL VERIFY FIELD CONDITIONS PRIOR TO SUBMITTING BID.
- EXISTING CONDITIONS ON THESE DOCUMENTS ARE BASED ON EXISTING DRAWINGS AND FIELD OBSERVATIONS. THE E.C. SHALL FIELD VERIFY EXISTING CONDITIONS, CIRCUIT NUMBERS AND DIMENSIONS PRIOR TO BEGINNING ANY WORK. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER FOR DISPOSITION, ELECTRICAL EQUIPMENT AND WIRING IN AREAS UNAFFECTED BY THE RENOVATION MAY NOT BE SHOWN.
- THE E.C. SHALL REMOVE ANY UNUSED CONDUIT AND WIRING, INCLUDING LOW VOLTAGE COMMUNICATION AND EMS WIRING RESULTING FROM THE RENOVATION OR ENCOUNTERED DURING THE RENOVATION OF THE STORE.
- THE E.C. SHALL FULLY COORDINATE WORK WITH ALL OTHER APPLICABLE TRADES.
- THE E.C. SHALL PRESERVE DEMOLISHED FIXTURES AND EQUIPMENT FOR REUSE WITHIN OTHER AREAS OF THE RENOVATION. DISPOSE OF UNUSED FIXTURES, EQUIPMENT AND TRASH AS DIRECTED BY THE OWNER.
- THE E.C. SHALL MAINTAIN ALL EMERGENCY LIGHTING, FIRE ALARM SYSTEMS AND POWER TO ALLOW FOR UNINTERRUPTED TRADING OF GOODS DURING THE COURSE OF THE RENOVATION. PROVIDE TEMPORARY POWER AND WIRING AS REQUIRED DURING THE RENOVATION.
- COORDINATE CUTTING AND PATCHING OF THE FLOORS WERE REQUIRED WITH THE GC, AND OTHER APPLICABLE TRADES.
- WHERE WALL FINISHES ARE BEING RENOVATED OR REPLACED, THE E.C. SHALL REMOVE COVERPLATES, PROVIDE BOX EXTENSIONS, REMOVE AND REPLACE ELECTRICAL DEVICES, DISCONNECTS AND OTHER ELECTRICAL EQUIPMENT AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS.
- AS PART OF THIS RENOVATION THE E.C. SHALL VERIFY THE CIRCUIT IDENTIFICATION OF ALL BREAKERS IN ALL AFFECTED BRANCH PANELBOARDS AND SWITCHBOARDS AND PROVIDE NEW TYPE WRITTEN PANELBOARD SCHEDULES IN EACH PANEL. CIRCUIT DESCRIPTIONS FOR MECHANICAL EQUIPMENT (I.E. RTU'S, HP'S, REFRIG. EQUIPMENT, WATER HEATERS, ETC.) SHALL BE CONSISTENT WITH THE MECHANICAL PLANS AND LABELS ON THE EQUIPMENT.
- THE E.C. MAY REUSE EXISTING CONDUIT AND WIRING IN PLACE, RESULTING FROM THE DEMOLITION FOR NEW CIRCUITS PROVIDED IT IS IN GOOD CONDITION AND MEETS THE REQUIREMENTS FOR THE NEW CIRCUIT AS INDICATED ON THE PANEL SCHEDULE.
- THE E.C. SHALL THOROUGHLY REVIEW THE ARCH, MECHANICAL, PLUMBING, REFRIGERATION, EMS, AND ANY OTHER PLAN WITHIN THE CONTRACT DOCUMENTS TO COORDINATE AND DETERMINE ANY AFFECT THESE PLANS MAY HAVE ON WORK. DO NOT BID FROM A PARTIAL SET. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR FAILURE TO REVIEW AND COORDINATE WITH ALL PLANS.
- ALL WORK SHALL BE SCHEDULED AS DIRECTED BY THE HTPM AND SHALL MINIMIZE THE DISRUPTION TO THE OPERATION OF THE STORE.
- THE E.C. SHALL PROVIDE TEMPORARY POWER AS REQUIRED FOR THE RENOVATION AND RELOCATION OF EQUIPMENT, CASES DEVICES, ETC. UNTIL PERMANENT WIRING CAN BE INSTALLED.

LOAD ANALYSIS - FOR SERVICE #1 OF 1 208Y/120V, 3 PHASE, 4 WIRE

LOAD	KVA	NEC DEMAND FACTOR	NEC KVA	AMPS @ 208 VAC	REFERENCE NEC 2017
LIGHTING - Continuous	77.187	1.25	96	269	NEC Article 215, Section 215.3
HVAC EQUIPMENT	172.58	1.25	173	479	NEC Article 440, Part IV Section 440.33, 440.35, 424.30 & 220.80
PRODUCT REFRIGERATION	315.74	1.00	316	876	NEC Article 440, Part IV Section 440.35
KITCHEN EQUIPMENT	51.89	0.65	34	94	NEC Article 220, Part III Section 220.56
WATER HEATERS	0.4	1.00	0	1	NEC Article 422, Section 422.13
RECEPTACLES - 18T 10 KVA	10	1.00	10	28	NEC Article 220, Part III Section 220.44
RECEPTACLES - REWIRING	22.47	0.30	11	31	NEC Article 220, Part III Section 220.44
OTHER - Continuous	8.02	1.25	10	28	NEC Article 215, Section 215.3
OTHER - Non-Continuous	83.45	1.00	63	178	NEC Article 215, Section 215.3
TOTAL LOAD			714	1980	
SERVICE EQUIP. RATING - AMPS				2000A	



NOTE: THIS DOCUMENT MAY HAVE BEEN ELECTRONICALLY TRANSMITTED. IF UNSIGNED, IT CANNOT BE FILED FOR PUBLIC RECORD. PUBLIC RECORD FILINGS REQUIRE SIGNED AND SEALED DOCUMENTS.

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Revisions:	No.	Date	By	Date	By

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The **SINGLE LINE DIAGRAM, NOTES AND LOAD ANALYSIS**