

#	Rv	ELECTRICAL CRITERIA - GENERAL CONDITIONS	Check Off
EC-01	-	PERMITS & FEES: Secure & pay for all fees, licenses, permits, inspections. <u>Submit Copy</u> Of Each Permit	
EC-02	-	LICENSE(S)-BUSINESS: This Contactor Shall Be Properly Licensed Business Wise, In This Project State, In Accordance With All Applicable State Laws. <u>Submit Copies</u> Of Business License(s).	
EC-03	-	BONDING & INSURANCE(s): This Contactor Shall Be Properly Bonded And Insured In Accordance With The General & Supplements Requirement Of The Project Document. <u>Submit Copies</u> Of All Such Documents.	
EC-04	-	COORDINATION OF OTHER TRADES- This contractor is responsible for coordinating with all other trades for the proper installation of this work, maintaining required clearances, and confirming the electrical characteristics and requirement of electrical power equipment of other trades (prior to ordering equipment). <u>Submit Copies</u> Of All Such Documents.	
EC-05	-	MANUFACTURERS, ALTERNATES & SUBSTITUTIONS- Components & products are to be provided matching the prescribed characteristics, features, performance, types, etc. based on the Manufacturer & Series as given. <u>NO After-Bid</u> Alternates, Changes Or Substitutions Accepted Or Allowed. Prior-To-Bid Request For Acceptance Must Be Submitted To Architect & Engineer NO-LESS Than Two-Business-Weeks Prior To Bid Date. Request-For-Acceptance Must Include Complete & Marked Product Data Indicating Full Matching Compliance. Any Variations Must Be Marked & Noted. Acceptance Will Be At The Description Of The A/E Judgment.	
EC-06	-	SUBMITTALS- Provide complete submittals on all items. Mark & indicate specific items to be used. Submit prior to finalizing orders. Submit three sets min., or per General Conditions.	
EC-07	-	WARRANTY- This contractor shall warrant all materials, labor & installation for one full year from date of Substantial Completion. Any extended product warranties shall be passed onto the owner.	
-	-	End Of Electrical Criteria - General Conditions	

#	Rv	ELECTRICAL CRITERIA - BASICS CRITERIA	Check Off
EB-01	-	GENERAL- Provide a complete electrical system, left in proper working order. Provide herein means installed completely, including labor & materials.	
EB-02	-	LICENSE(S)-ELECTRICAL: This Contactor Shall Be Fully Licensed To Perform Electrical Work, In This Project State, For The Type Of Work To Be Performed In Accordance With All Applicable State Laws. <u>Submit Copies</u> Of Electrical License(s).	
EB-03	-	CODES - Meet & comply with all prevailing Federal, State, County & City Codes Including NEC (NFPA-70), ICC-BC & any Ga Amendments; ICC-IEC & any Ga Amendments.	
EB-04	-	PERMITS & FEES: Secure & pay for all fees, licenses, permits, inspections. <u>Submit Copy</u> Of Each Permit	
EB-05	-	COORDINATION OF POWER UTILITY- Coordinate & verify, in writing, with the utility power company, confirming the electrical power arrangements, characteristics (Voltage, Phase, Transformer Type & KVA, Fault-Current, Etc.), metering arrangement and equipment locations. <u>Copy Ownr</u> Archt/ Engr.	
EB-06	-	COORDINATION OF LV COMMUNICATIONS UTILITY- Coordinate & verify, in writing, with the LV Communications Utility Company, confirming the LV Com Service routing, conduit quantity & sizes, termination locations, and other related requirements.	
EB-07	-	PROVISIONS TO BE INCLUDED- Labor, supplies and materials, tools, equipment, etc.; installation of all electrical equipment & connections; coordination with other trades; material shipping, delivery, receiving, storage, & protection; excavation, backfilling, cutting, patching and cleaning; guarantee for one year, plus any extended manufacturer's warranties; as-built reproducible Mylar record documents.	
EB-08	-	MATERIALS- All materials shall be new, currently manufactured, U.L. labeled, and meet all industry standards. Label all equipment. Provide 3000 PSI class concrete for bases and backfill. Provide 3/4" thick A/D fire retardant grade backboards. Provide all support hardware and systems for electrical work. Fire/smoke seal each penetration of any rated barrier (floor, wall, etc.).	
EB-09	-	MOTORS & CONTROLS- Motors are furnished and installed under other specification sections. Control and interlock wiring is furnished and installed under other specification sections. Individually mounted starters are furnished under other sections, mounted and power wiring connections provided under this section.	
EB-10	-	ELECTRICAL CONNECTIONS- Provide power wiring complete to all items. Coordinate actual equipment characteristics with drawing. Provide backboards for equipment mounting. Label all equipment and over-current protective devices with equipment name, voltage, ratings, and O.C.P. ratings.	
EB-11	-	INSTALLATION STANDARDS: All electrical work shall be installed in accordance with the NEC, NEIS (Nat. Electrical Installation Stds.), related codes and the manufacturer's published requirements.	
-	-	End Of Electrical Criteria - Basic Materials & Methods	

#	Rv	ELECTRICAL CRITERIA - BONDING & GROUNDING	Check Off
EG-01	-	BONDING & GROUNDING GENERAL: Provide components, conductors, fittings and hardware to provide for an electrical system that is completely bonded and grounded with the NEC and these requirements.	
EG-02	-	GENERAL REQUIREMENTS: Provide for the complete Bonding & Grounding of the entire electrical system, including bonding for communication systems.	
EG-03	-	BUILDING BONDING: Provide for the Bonding together of all metallic systems in the facility, including but not limited to, structural steel, slab rebar, water piping, fire-protection piping, gas piping, HVAC system piping.	
EG-04	-	SUBMITTALS- Provide complete submittals on all items. Mark & indicate specific items to be used. Submit prior to finalizing orders. Submit three sets min., or per General Conditions.	
EG-05	-	GROUNDING IN-GRADE CONDUCTORS: Bare, Tin-Plated Copper Of Size & Rating As Scheduled or Required	
EG-06	-	BONDING & GROUNDING CONDUCTORS- #10 and smaller - solid copper THHN/THWN Green Jacket Color; #6 & 8 - stranded copper THHN/THWN black jacket; #4 & larger - stranded copper THHN/THWN identified with Green Tape.	
EG-07	-	CONNECTIONS, IN-GRADE TYPE: UL Labeled for the application, location & use. Heavy-Duty Pure Wrought Copper fitting & devices. Compression type connections. BURNDY HYGROUND Series or Equivalent	
EG-08	-	CONNECTIONS, COPPER- Twist on type for #8 and smaller copper conductors. Set screw/bolted type for #4 and larger copper conductors. Completely insulate each connection, splice, termination.	
EG-09	-	GROUND RODS (ERIECH 683400 Rod) Provide 10 Foot Long, 0.75 In Diameter, Tin-On-Copper 10 Mil. Plated Steel Pointed Ground Rod, driven into earth with top 18 inches below finished grade with inspection/ test well cover, top flush with grade. ANSI/UL 467 & ANSI/ NEMA-GR1. Mechanical Direct-Burial Ground Connector or Exothermic-Weld all ground cables to rods.	
EG-10	-	GROUND ROD INSPECTION WELLS/ ERIECH Wells - Where indicated or required, provide Ground Rod Inspection/ Test Well & Cover, top flush with grade.	
EG-11	-	MASTER GROUND BAR (MGB) (BURNDY BBB or ERICO TGB/TMGB)- Provide bare solid Alloy 110 Cu bus bar, electro-in-plated, with pre-punched holes for two-bolt ground lugs, mounted on stainless steel brackets with insulated flame-resistant stand-offs. 0.25 Inch Thick, 4 Inch High, 20 Inch Long. UL 467 & C22.2 Listed. Anchor to structural wall at height as indicated or noted. Connection to this bar shall be by two-hole bolt lugs, exothermic welded or irreversible crimp connected to the respective cable. Locate at or near the electrical service main disconnect. Label MASTER GROUND BAR	
EG-12	-	ISBT (Inter-System-Bonding-Termination) GROUND BAR (ISBT) (ILSCO PET or Equal)- Provide dual-rated, 8-hole lug with 2-predrilled mounting holes. Attach to each TELCO backboard for bonding of LV systems by others. Label ISBT GRND.	
EG-13	-	INSTALLATION STANDARDS: All bonding & grounding shall be installed in accordance with the NEC, NEIS (Nat. Electrical Installation Stds.), related codes and the manufacturer's published requirements.	
-	-	End Of Electrical Criteria - Bonding & Grounding	

#	Rv	ELECTRICAL CRITERIA - CONDUITS, BOXES & FITTINGS	Chk Off
ER-01	-	GENERAL- All wiring for power and systems shall done in accordance with the applicable codes. All materials shall be U.L. labeled, matched for proper applications and installed in accordance with U.L. & manufacturer's requirements.	
ER-02	-	SUBMITTALS- Provide complete submittals on all items. Mark & indicate specific items to be used. Submit prior to finalizing orders. Submit three sets min., or per General Conditions.	
ER-03	-	GENERAL UNDERGROUND- All underground, in-slab, exterior and exposed or surface mounted wiring shall be in conduits, unless otherwise directed.	
ER-04	-	GENERAL CONCEALED- All wiring shall be concealed where possible (i. e., above ceilings, in walls, in slabs, or underground).	
ER-05	-	GENERAL EXPOSED- Exposed conduits shall be routed as high as possible and parallel or perpendicular to structural elements.	
ER-06	-	GENERAL BOXES- Provide boxes for all connections, devices, system, etc. Coordinate box sizes with structure to which it will be secured. Coordinate the exact final box location with the architectural/interior drawings prior to rough-in of box.	
ER-07	-	CONDUITS, IMC- conduit & fittings shall be utilized for exterior exposed locations and interior exposed locations subject to damage.	
ER-08	-	CONDUITS, EMT- EMT conduit & fittings shall be utilized for in slabs not on grade, concealed dry interior locations, interior exposed locations above 10'0" A. F. F. with set screw fittings indoor concealed dry locations and compression raintight fittings in slabs, and damp locations.	
ER-09	-	CONDUITS, PVC- conduit & fittings shall be utilized in slabs on grade, conduits in earth. PVC fittings, boxes, etc. shall be of same manufacture with solvent bond. Depth per code.	
ER-10	-	CONDUITS, FLEXIBLE- Flexible metallic conduit & fittings shall be utilized where motion or vibrations are encountered. Liquid-tight type flex shall be used in damp or wet locations, (i. e., outdoors, kitchens, areas subject to wash down, shops & industrial areas, etc.). Provide ground wire in all flex.	
ER-11	-	CONDUIT MISC. FITTINGS- Conduit expansion/deflection fittings shall be utilized where crossing expansion joints, floating slabs or isolated slabs. Conduit thru wall seals shall be utilized where crossing between interior/exterior or damp locations. Conduit fire seals shall be utilized where passing thru fire rated construction, U. L. fire and smoke seal to maintain the fire rating of the barrier.	
ER-12	-	CONDUIT BOXES- Utilize interior stamped steel for indoors dry flush mounted devices. Masonry/ile for indoors dry flush mounted devices. Concrete boxes for flush mounting in poured concrete. Cast metal boxes for surface mounted devices, or damp/wet locations. Junction & pull boxes as required or needed. Galvanized steel wire-ways with hinged front cover, only permitted where noted.	
ER-13	-	FLOOR BOXES - Utilize flush-in-floor type, adjustable post-mount, PVC base with brass flip-lid covers. Gang qty to match application & conduit entries. Covers to match device types. Hubbell, Steel City or Wiremold	
ER-14	-	SEISMIC BRACING & SUPPORT- All work shall be anchored, braced & supported in accordance with the Local Seismic Zone rating requirements.	
ER-15	-	INSTALLATION STANDARDS: Each item shall be installed in accordance with the NEIS (Nat. Electrical Installation Stds.), NEC & related codes and the manufacturer's published requirements.	
-	-	End Of Electrical Criteria - Conduits, Boxes & Fittings	

#	Rv	ELECTRICAL CRITERIA - LOW VOLTAGE CONDUCTORS	Chk Off
EC-01	-	CONDUCTORS GENERAL: Provide conductors for all circuiting, wiring and systems.	
EC-02	-	SUBMITTALS- Provide complete submittals on all items. Mark & indicate specific items to be used. Submit prior to finalizing orders. Submit three sets min., or per General Conditions.	
EC-03	-	CONDUCTORS COLOR CODED: Each conductor shall be properly color coded to represent its respective phase, neutral, ground, etc. Wire sizes #12 thru #8 shall have continuous color-coded jacket. Larger wire sizes shall have colored tape at each termination, pull-box, etc.	
EC-04	-	CONDUCTOR LABELING: Each circuit labeled on the conductor and at each box.	
EC-05	-	CONDUCTORS, COPPER- #12 & #10 - solid copper THHN/THWN color coded; #6 & 8 - stranded copper THHN/THWN black jacket; #4 & larger - stranded copper THHN/THWN. No conductors less than #12 Cu allowed, unless specifically noted or control wiring.	
EC-06	-	CONDUCTORS, ALUMINUM- Aluminum (AL) not permitted unless noted. Where noted, conductors shall be compact strand type, THHN/ THWN.	
EC-07	-	CONNECTIONS, COPPER- U.L. Listed, 600V, 90C rated; Twist on type for #8 and smaller copper conductors. Set-Screw, Bolted or Compression type for #4 and larger copper conductors. Completely insulate each connection, splice, termination.	
EC-08	-	CONNECTIONS, ALUMINUM- U.L. Listed, 600V, 90C rated, compression, split-bolt, or set-screw type(s), for Aluminum or Dual-Rated. Completely insulate each connection, splice, termination(s).	
EC-09	-	CONNECTIONS, DAMP & WET LOCATION- U.L. Listed 486D type connector for damp & wet locations, sealant filled type. IDEAL Model 66 or Equal	
EC-10	-	CONNECTIONS, IN-GRADE, UNDER-GROUND, SUBMERSIBLE, WATER-TIGHT- UL Listed 486D, 600V, 90C rated for In-Grade, Direct-Burial, Submersible.	
EC-11	-	GROUNDING CONNECTIONS, IN-GRADE, UNDER-GROUND, SUBMERSIBLE- UL 467 Listed, 90C rated, Compress Or Bolt Type With Inhibiting compound; For Use In Earth or Concrete.	
EC-12	-	METAL-CLAD (MC) CABLE (CONCEALED WIRING)- Contractor may utilize Metal-Clad (Type MC) for interior concealed branch circuit wiring in accordance with the code. All materials, fittings, hardware, etc. shall be U.L. labeled for use with MC cable and properly installed and supported. Type MC cable shall have an integral full length ground conductor, bonded to a ground lug or terminal at each end.	
EC-13	-	INSTALLATION STANDARDS: All wiring & connects shall be installed in accordance with the NEIS (Nat. Electrical Installation Stds.), NEC & related codes and the manufacturer's published requirements.	
-	-	End Of Electrical Criteria - Low Voltage Conductors	

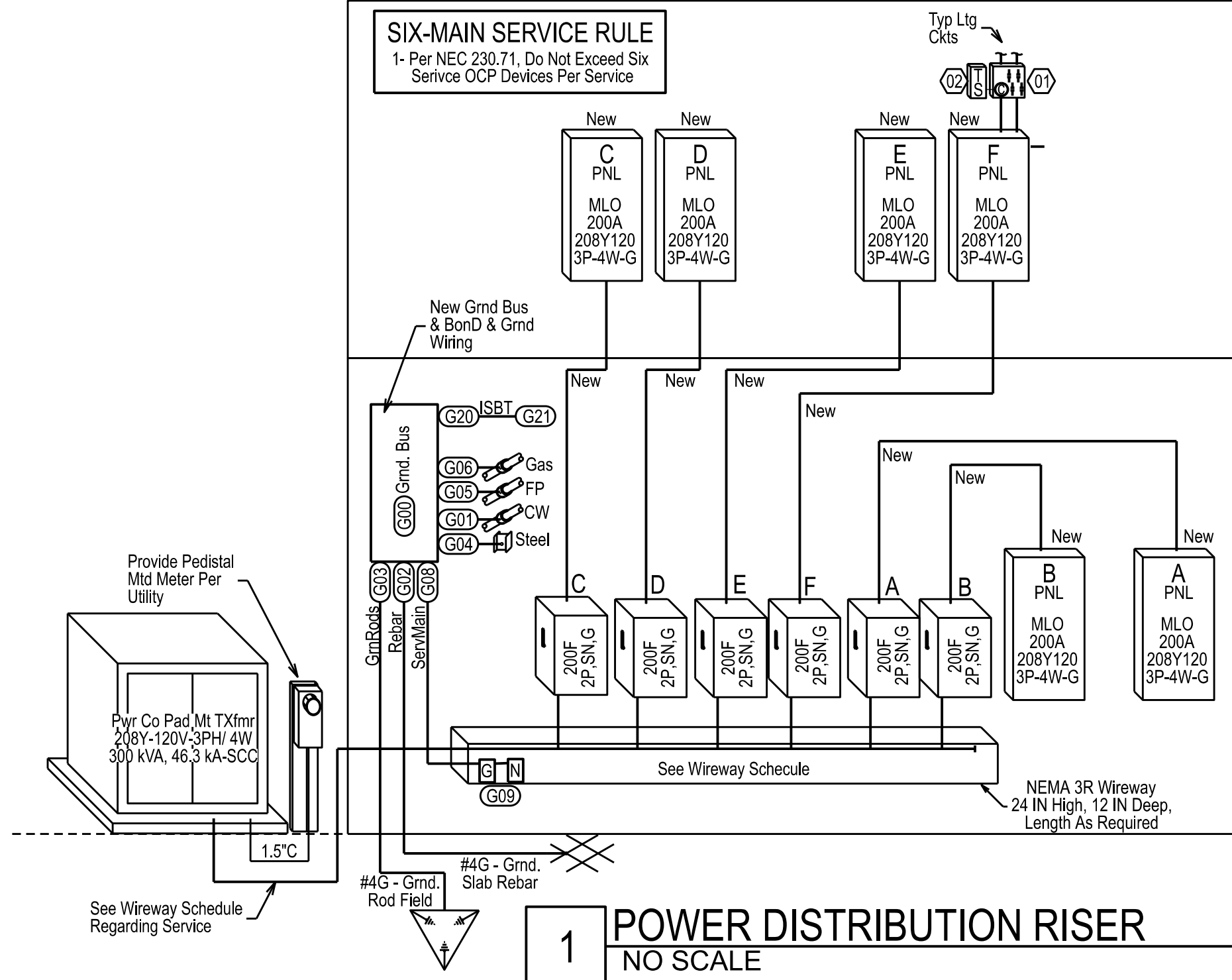
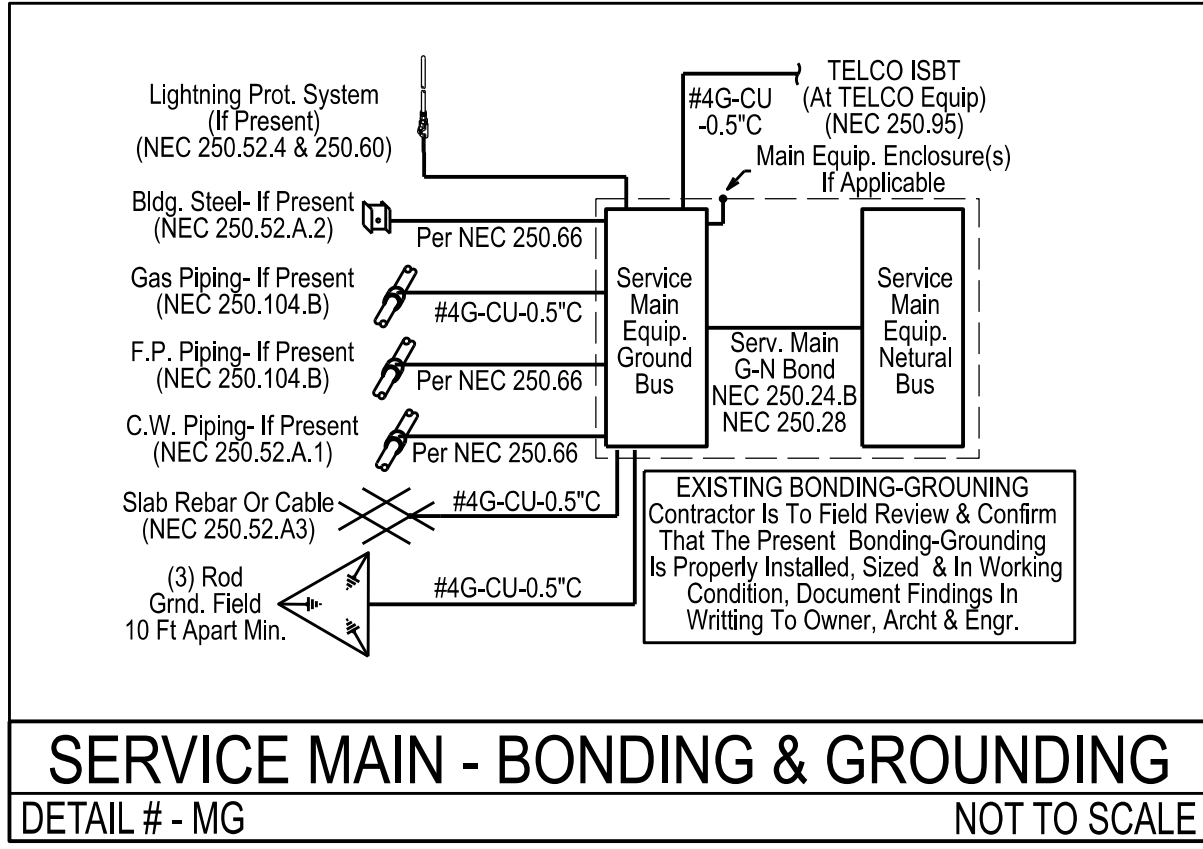
#	Rv	ELECTRICAL CRITERIA - LOW VOLT. ELECT. DISTRIB. GEAR	Chk Off
GENERAL ITEMS			
ED-01	-	GENERAL- Provide Low-Voltage Electrical Distribution Gear as required to provide for a complete system to distribute electrical power.	
ED-02	-	ELECTRICAL RATINGS- Prior to ordering or submitting any electrical distribution equipment, verify all equipment ratings (Voltagess, Phase, Short-Circuit With-Stand & Interrupting Ratings).	
ED-03	-	EQUIPM. DIMENSIONS, CLEARANCES & ACCESS: Prior to ordering or submitting any electrical distribution equipment, verify dimensions, space requirements, clearances, access and interference with work of other trades.	
ED-04	-	SUBMITTALS- Provide complete submittals on all items. Mark & indicate specific items to be used. Submit prior to finalizing orders. Submit three sets min., or per General Conditions.	
LABELING & INSTALLATION			
ED-10	-	EQUIPMENT LABELS: Provide Engraved Melamine Equipment Labels, Adhesive Attached To The Items Face Or Interior Cover. Label To Include Equipment Name, Voltage(s) And OCP Device Ratings If Applicable.	
ED-11	-	SAFETY & WARNING LABELS: Provide Clear & Legible Safety & Warning Labels On Each Item Of Electrical Distribution Gear As Required By The NEC, OSHA & Other Regulations.	
ED-12	-	ARC-FLASH LABELS: Provide Clear & Legible Arc-Flash Labels On Each Item Of Electrical Distribution Gear, Giving The Minimum Ratings, Arc-Flash Energy Level & Required PPE For Each Specific Location.	
ED-13	-	SEISMIC BRACING & SUPPORT- Equipment shall be anchored, braced & supported in accordance with the Local Seismic Zone rating requirements.	
ED-14	-	INSTALLATION STANDARDS: Each item shall be installed in accordance with the NEIS (Nat. Electrical Installation Stds.), NEC & related codes and the manufacturer's published requirements.	
LOW VOLTAGE OVER-CURRENT PROTECTIVE DEVICES			
ED-21	-	OCP GENERAL- Provide over-current-protective (O.C.P.) devices as required by code and/or otherwise prescribed. All lugs and terminals 60/75 deg. C rated.	
ED-22	-	MOLDED CASE (MC) CIRCUIT BREAKERS- Thermal-magnetic, bolt-in, quick-make/quick-break type. Trip free operation with ON, OFF & TRIPPED position. Monolithic tie-handle common trip and common reset multi-pole breakers. Trip rating molded on handle or face. Lugs to match cable type terminations. Single pole 15 and 20 ampere breakers to be "SWITCHING" rated.	
ED-23	-	DISCONNECT REQUIREMENTS - NEMA 1 enclosure indoors, NEMA 3R for damp/wet locations. Voltage, poles, amperage, fusible as required. Equipped with both isolated neutral and ground lugs. Class H, J, R or T fuse with rejection features. Provide switch label.	
ED-24	-	DISCONNECTS 30AMP. - 200AMP (240V Max) - Labeled per UL #98. NEMA KS1 general duty type, load make/break rated. Interrupting rating of 100,000 RMS amps (with R T fuse).	
ED-25	-	DISCONNECTS 400 & 600 AMPERES- Labeled per UL #98. NEMA KS-1 heavy duty type, load make/break rated. Interrupting rating of 200,000 RMS amps (with fuse).	
ED-26	-	DISCONNECT OVER 600 AMPERES- Labeled per UL #97, bolted pressure or high pressure contact type. NEMA heavy duty type, load make/break rated. Accept Class L fuses (as required). Interrupting rating of 200,000 RMS (with fusing). Manual close - manual/electric trip open. Load side phase under voltage detection/trip. Zero sequence GFCl on switches 1000A @ 277 and greater.	
ED-27	-	FUSES- Fuses shall be of same make, manufacturer, type & rating where providing two or three wire O.C.P. at a device. Provide Busman LOW-PEAK KRP-C fuses (U.L. 198 C Class LJ) for protection over 600 ampers. Provide Busman LOW-PEAK LPN-RK (250V) or LPS-RK (600V) (U.L. 198C Class RK1) for protection up to 600 ampers.	
PANELBOARDS			
ED-30	-	PANELBOARDS GENERAL- Provide dead front design with hinged & locking front cover door, NEMA 1 cabinet unless otherwise noted and with devices as scheduled. Voltage, phase, ampacity and devices as scheduled. Service entrance rated as applicable. Series rated and labeled, unless indicated otherwise. Flush or surface mounted NEMA 1 enclosure. All lugs & terminals 60/75 deg. C rated.	
ED-31	-	PANELBOARD STANDARDS- Labeled UL 67 and 50 (Cabinets, Boxes & Trim); NEMA 250 and PB1; NFPA 70-384 and 373; Federal Specs. WP-115C; Circuit Breakers- Type I Class 1 & Fusible Switches- Type II, Class 1.	
ED-32	-	SHORT CIRCUIT RATING & ARC-FLASH LABELS: Match or exceed the Available Short Circuit Current available at the actual panel location; Properly label with Arc-Flash Energy Level & protective requirements (PPE).	
ED-33	-	PANELBOARD INTERIOR- Factory assembled, double row construction. Staggered numbering, sequence phased. Tin-plated copper or aluminum busing. Full ampacity phase & neutral bus, 50% ground bus.	
ED-34	-	OCP DEVICES, COMPONENTS, ETC: Provide all over-current-devices and other components and related as scheduled and / or required. Refer to panel schedule for details. Refer to Over-Current Protective (OCP) devices criteria.	
ED-35	-	PANEL DIRECTORIES - All Panel Directories Shall Be Current, Fully Detailed & Legible Per NEC-110.22 & 408.4(A)	
SWITCHBOARDS			
ED-40	-	SWITCHBOARDS GENERAL- Provide equipment with dead front design and with devices as scheduled. Voltage, phase, ampacity and devices as scheduled. Service entrance rated as applicable. Free-Standing, NEMA 1 enclosure unless otherwise required. All lugs & terminals 60/75 deg. C rated.	
ED-41	-	SWITCHBOARD STANDARDS- The equipment and all installed components shall be UL Listed & Labeled. Labeled UL 891; NEMA 250 and PB2; NFPA 70-384 and 373; Federal Specs. WP-115C; Circuit Breakers- Type I Class 1 & Fusible Switches- Type II, Class 1.	
ED-42	-	SHORT CIRCUIT RATING & ARC-FLASH LABELS: Match or exceed the Available Short Circuit Current available at the actual panel location; Properly label with Arc-Flash Energy Level & protective requirements (PPE).	
ED-43	-	SWITCHBOARD INTERIOR- Factory preassembled, sequence phased. Tin-plated copper or aluminum busing unless otherwise noted. Full ampacity phase & neutral bus, 50% ground bus.	
ED-44	-	OCP DEVICES, COMPONENTS, ETC: Provide all over-current-devices and other components and related as scheduled and / or required. Refer to panel schedule for details. Refer to Over-Current Protective (OCP) devices criteria.	
ED-45	-	CIRCUIT DIRECTORIES - All Circuit Directories Shall Be Current, Fully Detailed & Legible Per NEC-110.22 & 408.4(A)	
TRANSFORMERS			
ED-50	-	TRANSFORMERS GENERAL- Provide dead-front dry-type transformer. Labeled per UL #506, conform with NEMA #250, #5T20 and TR27. General purpose air-cooled dry-type construction. Size, capacity, primary and secondary voltage, as indicated. NEMA 1 enclosure for indoor dry locations, NEMA 3R enclosure for damp/wet locations. Dead-front construction with removable covers. Maximum temperature rise by resistance of 115 degrees C. in a 40 degrees C. ambient. 75 degrees C. maximum terminal compartment with 60/75 degree C. lugs to match the conductor types. Two 2-1/2% above normal and four 2-1/2% below normal full capacity winding taps.	
-	-	End Of Electrical Criteria - Low Voltage Electrical Distribution Gear	

#	Rv	ELECTRICAL CRITERIA - LIGHTING FIXTURES	Chk Off
EL-01	-	GENERAL- Provide a complete system of lighting, including but not limited to, lighting fixtures, lamps, lighting controls, hardware, support and related wiring. The lighting system shall be installed complete & left in proper operation & function.	
EL-02	-	PRE-SUBMITTAL COORDINATION- Prior to issuing product submittals and / or ordering this contractor shall review & coordinate the specific construction each fixture is to be installed in, any Fire-Ratings, fixture mounting & support, & attachment methods, & ballast voltages. Dimmed fixtures shall be coordinated with their respective dimmer controls for comp ability. Fixtures that are to be fitted to Architectural features (i.e. covers, slots, etc.) shall be coordinated with the respective trades prior to submitting.	
EL-03	-	SUBMITTALS - Prepare & submit project specific product documentation, including but not limited to, fixture cut-sheets with all model numbers, features & option indicated; specific lumen type(s). Custom type fixtures shall include the manufacturers shop fabrication drawings.	
EL-04	-	CODES & REQUIREMENTS- Each fixture shall be U.L. Labeled. Comply with the requirement of the NEC. Installation shall comply with the N.E.I.S. Emergency Lighting & Egress Signage shall comply with NFPA-101.	
EL-05	-	ENERGY EFFECENCY CODES- Each fixture shall conform with energy code requirements.	
EL-06	-	MANUFACTURERS SERIES- The Lighting Fixture Schedule describes the fixture type, features, lamp(s), and other characteristics that is to be provided. The Manufacturer's Model Number are provided as a reference to the grade, quality, features & components required. It is the responsibility of this Contractor to verify with the Manufacturer the actual final correct fixture make & model number required and to be submitted.	
EL-07	-	MANUFACTURER(S) BASIS - The projects base quote shall be based on the prescribed Manufacturer(s) as identified in the Lighting Fixture Schedule.	
EL-08	-	ALTERNATE MANUFACTURER(S)- Liquidate Manufacturer(s) products may be proposed as Add / Deduct Alternate to the Original Base Bid (Post Bid Proposals Not Accepted). The alternate proposal shall be supported with complete fixture and lamp data / cut-sheets with the specific model, features & characteristics indicated. Any variation from the Lighting Fixture Schedule shall be noted / indicated.	
EL-09	-	LAMPS- Lamps shall be a scheduled & Full Light Output, Energy Saving. Lamps shall be by General Electric, Philips, or Osram /Sylvania unless otherwise noted.	
EL-10	-	LAMPS COLOR & CRI- Lamps, unless otherwise noted, shall be a 30k-35k Color and CRI of 80+ for Fluorescents & 90+ for LEDs.	
EL-11	-	LED LAMPS- Shall be UL Labeled (#750 & 1598c), tested & performance rated per ANSI/ IESNA, CIE, FTC, FCC, IES (LM-79, LM-80 & Related), NEMA	
EL-12	-	LINEAR FLUORESCENT BALLAST- Shall be rated & matched to the specific lamp type(s) it serves, High Power Factor, Full Light Output, Energy Saving Electronic Type. Ballast shall be Multi-Volt (120-480) or Universal Voltage (120/277) & 10% THD or less.	
EL-13	-	COMPACT FLUORESCENT LAMP (CFL) BALLAST- Shall be rated & matched to the specific lamp type(s) it serves, High Power Factor, Full Light Output, Energy Saving Electronic Type. Ballast shall be Multi-Volt (120-480) or Universal Voltage (120/277) & 10% THD or less.	
EL-14	-	HIGH INTENSITY DISCHARGE (HID) BALLAST- Shall be rated & matched to the specific lamp type(s) it serves, High Power Factor, Full Light Output, Energy Saving Type. Ballast shall be Multi-Volt (120-480) or Universal Voltage (120/277) & 10% THD or less.	
EL-15	-	DIMMING BALLAST & CONTROLS- Provide fixtures with dimming type ballast as prescribed. The Ballast & Controls shall be fully coordinated & matched for proper system operation.	
EL-16	-	EBIS (EMERGENCY BATTERY/ INVERTERS SYSTEMS) FOR FLUORESCENT LAMPS- Provide Battery/ Inverter units where shown or required for emergency egress lighting in accordance with NFPA-101 & NEC. 90 Minute operation (min) unless otherwise noted. U.L. Listed & Labeled.	
EL-17	-	EBIS FEATURES- EBIS units shall be Self-Diagnostic, Automatic Testing with Audio & Visual alarm notification of trouble conditions. If the above feature is not available, provide Manual Test Switch w/ Indicator Lamp.	
EL-18	-	EBIS TEST FEATURES- units shall be Self-Diagnostic, Automatic Testing with Audio & Visual alarm notification of trouble conditions.	
EL-19	-	EBIS LINEAR LAMP PERFORMANCE - The EBIS shall provide the following minimum Lumen outputs. 48 Inch, 14-32 Watt lamps @ 1100-1400 Lumens. 48 Inch T5 20-55 Watt @ 1800-3000 Lumens	
EL-20	-	EBIS CFL LAMP PERFORMANCE - The EBIS shall provide the following minimum Lumen outputs. CFL 09-13 Watt, 2-Pin @ 350-650 Lumens. CFL 13-26 Watt, 2-Pin @ 500-950 Lumens; CFL 09-42 Watt 4-Pin @ 1100-1400 Lumens.	
EL-21	-	FIXTURE MOUNTING & SUPPORT- Each fixture shall be supported from the ceiling structure (verify ceiling structural capacity) or directly from building structure. Secure fixture to ceiling structure in accordance with code. Pendant supported fixtures shall be supported from building structure.	
EL-22	-	SEISMIC BRACING & SUPPORT- Fixtures shall be braced & supported in accordance with the Local Seismic Zone rating requirements.	
EL-23	-	INSTALLATION STANDARDS: Each item shall be installed in accordance with the NEIS (Nat. Electrical Installation Stds.), NEC & related codes and the manufacturer's published requirements.	
-	-	End Of Electrical Criteria - Lighting Fixtures	

#	Rv	ELECTRICAL CRITERIA - TELCO V/D/B RACEWAYS	Chk Off
ET-01	-	TELCO RACEWAY SCOPE-OF-WORK: Providing raceways, backboards and wall boxes with conduit sub-ups & pull-stringing only for devices, cabling & equipment installation by others (Telco, Voice, Data, Broadband, Etc.)	
ET-02	-	TELCO DEVICES, CABLING & EQUIPMENT: All cabling, jacks, devices, hardware, equipment & software & related installation is the responsibility of the owner or tenant.	
ET-03	-	TELCO UTILITY COORDINATION: Prior to any rough in, coordinate, in writing, with the Telco Service Provider all related requirements- route, conduit qty & sizes, grounding, etc.	
ET-04	-	TELCO SYSTEM PROVIDER COORDINATION: Prior to any rough in, coordinate, in writing, with the Telco Service Provider all related requirements- route, conduit qty & sizes, grounding, etc.	
ET-05	-	TELCO SERVICE CONDUITS: Quantity & size as required or shown, use long radius bends (10X) on all raceway bends & turns. Install Pull-Strings, tagged & tied-off at each end.	
ET-06	-	TELCO V/D BACKBOARDS: 3/4" Thick A/D Grade fire-retardant plywood, painted with two coats of fire-retardant grey paint, bottom 18 In AFF, secured to wall structure. Provide 4-hole ground lug with #6 ground extended to main service ground & bonded.	
ET-07	-	V/D WALL BACKBOXES & STUB-UPS: Provide double gang wall boxes with plaster ring with 1" C. stub-up & turn-out into an accessible plenum. Jacks, devices & covers by owner or tenant's vendor-installer. Install Pull-Strings, tagged & tied-off at each end.	
ET-08	-	V/D WALL FLOOR BOXES & STUB-UPS: Provide flush-in-floor boxes with 1" C. under floor, to a wall & stub-up & turn-out into an accessible plenum. Jacks, devices & covers by owner or tenant's vendor-installer. Install Pull-Strings, tagged & tied-off at each end.	
-	-	End Of Electrical Criteria - TELCO V/D/B Raceways	

#	Rv #	ELECTRICAL CRITERIA - PROJECT CLOSE-OUT	Chk Off
EZ-01		REVIEW REQUEST NOTICE(s)- This Contractor Shall Notify, In Writing, At Least 10 Days In Advance, To Ownr/ Archt/ Engr, Of The Desired Date To Request Having An On-Site Review Performed.	
EZ-02		AHU INSPECTION REPORTS- This Contractor Shall Submit Copy(s) Of Each Inspection Report As Given By The Authority Having Jurisdiction (AHJ) To The Ownr/ Archt/ Engr.	
EZ-03		ROUGH IN REVIEWS - Request Rough-In Review(s) Before Any Material Or Work Is Covered And Unobservable.	
EZ-04		CERTIFICATIONS & TEST REPORTS- Provide Copies Of All Required Certifications And Test Results Prior To Requesting Final Review.	
EZ-05		CONTRACTOR REVIEW- This Contractor Shall Thoroughly Review & Document That The Complete Work Is Properly Functioning & Operating Prior To Requesting A Final Review.	
EZ-06		REVIEW ELECTRICAL BONDING & GROUNDS- Verify Each Service Ground & Bond Is Properly Installed, Connected & Labeled.	
EZ-07		REVIEW ELECTRICAL SERVICE & VOLTAGE- Test & Record The Actual Voltages (L-L, L-N, L-G, N-G) And Amperages Of Each Line, Neutral & Ground At The Service Entrance.	
EZ-08		REVIEW ELECTRICAL DISTRIBUTION- Review & Document Each Part Of The Electrical Distribution System. Verify Proper Size & Ratings Of Each Item, Proper Connections & Torque Values. Verify Proper Bonding & Grounding.	
EZ-09		REVIEW ELECTRICAL PANEL DIRECTORIES - Review & Verify Detail Panel Directories Are Complete, Correct & Installed. Provide Complete "As-Built" Panel Schedule, In PDF Format To Owner For Their Records.	
EZ-10		REVIEW ELECTRICAL EQUIPMENT WIRING- Review Each Equipment Connection, Verify Circuit Protection Complies With The Equipment UL Listings & Ratings. Verify Disconnects Are Properly Labeled. Check For Proper Voltage & Phase Rotation For Equipment.	
EZ-11		REVIEW ELECTRICAL WIRING & DEVICES- Review & Document That All Branch Circuit Wiring Is Properly Installed, Bonded & Operational. Test Each Outlet With For Proper Continuity, Polarity & Grounding. Test Using An IDEAL INDUSTRIES SURE-TEST Model 61-165 Or Equal.	
EZ-12		REVIEW ELECTRICAL LIGHTING & CONTROLS- Review & Document That All LIGHTING Fixtures Are Properly Operating And Clean. Verify Proper Operation Of All Lighting Controls. Program & Set An Control Operations And/ Or Schedules Per Owner.	
EZ-13		REVIEW ELECTRICAL EMERGENCY EGRESS LIGHTING & EXIT SIGNS- Review & Document That Each Emergency Lighting Fixture And / Or System And Each Exit Sign Is Properly Functioning. Turn Off Building / Suite Power For 90 Minutes And Verify Emergency Lighting & Exit Are Operational Per Code.	
EZ-14		REVIEW ELECTRICAL SUB-SYSTEMS- Refer To The Specific Requirments Of Each "Sub-Systems" (i.e.-Fire Alarm, Data-Voice, Etc.).	
EZ-15		KEYS & SPARE PARTS- Label & Turn Over All Keys To Owner's Personnel. Review & Show All Spare Components & Parts To Owner's Personnel & Document With Transmittal.	
EZ-16		"AS_BUILTS" - Provide Copies, In Hard-Copy & PDF Format, Of The Field Recorded Documents With All "As-Built" Field Documentation Reflecting The Final Installed Conditions. Copy To Ownr/ Archt/ Engr.	
EZ-17		WARRANTY- This contractor shall warrant all materials, labor & installation for one full year from date of Certificate of Occupancy. Any extended product warranties shall be passed onto the owner.	
EZ-18		INSTRUCTIONS & TRAINING- Schedule & Provide A Instructional & Training Session With The Owner's Designated Personnel. Review The Project Manual, Perform A "Walk-Thru" Review Of The All Electrical System(s) And Their Proper Operation, Including Resetting Of Breaker & Replacement Of Fuses.	
EZ-19		PROJECT MANUAL(S)- Provide Both A Bound "Hard-Copy" & PDF Version To The Owner & PDF Copy To The Archt/ Engr. The Project Manual Shall Include The Contractors Contact Information, Permits, Copies Of All "As-Built", Product Submittal Data, Copies Of All Inspection Reports, Certifications & Test Results. Include All Maintenance Data, Instructions, & Warranty Information.	
EZ-20		FINAL REVIEWS - Request A Final Reivew Once All Work & Systems Are Completed, Checked And In Proper Operation.	
End Of Electrical Criteria - Project Close-Out			

ELECTRICAL UTILITY & LOAD DATA							
Proj:	Fayette Co Training Center (v3)					18.07.25 Date	
Street	340 Hewell Road					Const Status	
City	Jonesboro, GA 30236					1,600 SF Basis	
ELECTRICAL LOAD DATA & SUMMARY							
Rv #	Connected Load Type	Load ID	Connected KVA	%	NEC Factored Dmnd KVA	AMPS	Item Note #
-	Exist. Demand	X	0.00	0%	0.0	0	--
-	Lighting	L	11.19	6%	14.0	39	--
-	General Rcpts.	R	37.40	18%	23.7	66	--
-	Appliances	A	0.00	0%	0.0	0	--
-	Electronics, PCs, Etc.	E	6.30	3%	7.9	22	--
-	HVAC- Mtrs	H	0.00	0%	0.0	0	--
-	HVAC-Refrig	C	39.93	20%	37.9	105	Heat Pump
-	HVAC- Heating	G	96.00	47%	96.0	266	Fan Coil & Strip Htg
-	Misc- M	M	0.00	0%	0.0	0	--
-	Misc- T	T	12.00	6%	11.6	32	Wtr Htg
-	Spare		0%	0%	0.0	0	--
-	Summary KVA =		203	100%	191	--	--
-	Summary AMPS =		563	--	--	530	--
Preferred Power Co. Service, Transformer & Metering							
Supply: V-LL: 208			V-LN: 120		Phs 3		WIRE: 4
Transformer KVA: 300			Secondary Available Short-Ckt kA: 46.3				
Power Company: GAPCO							
Pwr Co. Primary Service: Existing Under Ground Primary							
Power Co. Transformer: Existing Pad & Transformer							
Power Co. Metering: New Pedestal Mtd Mtr; Pedestal & Conduit By Contractor							
Elect. Secondary Service: Under Ground By Owner / Contractor							
Item Note(s) #							
1-	na						
2-	na						
By: MADDOX GROUP INC.			End Of Load Data			17-159 #	



Project: Fayette Co Training Center (v3)										A		Schd	Jonesboro, GA. 30236				City, St.
Gen Nt 1: Bkr Ties On Multi-Wire Ckts NEC 210.4B										Volt- LL 208			Enclosure-Mtg: NEMA3R		Wall Surf.Mtd.		
Gen Nt 2: Seismic Certified & Seismic Rated Anchors & Supports Req'd.										Volt- LN 120			Cover & Door: Door-In-Door, With Locks				
Gen Nt 3: Lower Level HVAC										Phs. 3 W 4			OCP Types: Main - MCCB 60C/75C		Branch: MCCB, 60C/75C Lugs		
Gen Nt 4: Factory Listed & Rated Series Rated MCCB Allowed										Buss Amps 200			All Busing: CU or AL		100% N & G Busing		
Gen Nt 5: NEW Panel										Main OCP MLO			Arc-Flash: Labeled Per NEC & OSHA				
17-159 MADDOX GROUP INC.										KA-IC/AK SC 65			18,0725 Date:		Const Status		
Rv	Nt	Description	Wiring	ID	W/VA	OCF P	#	P	#	OCF P	W/VA	ID	Wiring	Description	Nt	Rv	
	1	HP-01, 1.5 Ton	# 10	C	1,500	15	-	01	A	02	40	-	2,400	C	HP-02, 4.0 Ton	1	
		208V,1Ph.	WP J-Box & Conn.	C	1,500	-	2	03	B	04	-	2	2,400	C	WP J-Box & Conn.	208V,1Ph,28.5 MCA	
		HP-03, 3.0 Ton	#10+ 10G	C	1,875	35	-	05	C	06	40	-	2,320	C	HP-04, 3.5 Ton	1	
		208V,1Ph,22.1 MCA	WP J-Box & Conn.	C	1,875	-	2	07	A	08	-	2	2,320	C	WP J-Box & Conn.	208V,1Ph,27.6 MCA	
1		HP-05, 4.0 Ton	#10+ 10G	C	2,400	40	-	09	B	10	40	-	2,320	C	HP-06, 3.5 Ton	1	
		208V,1Ph,28.5 MCA	WP J-Box & Conn.	C	2,400	-	2	11	C	12	-	2	2,320	C	WP J-Box & Conn.	208V,1Ph,27.6 MCA	
		HP-07, 3.0 Ton	#10+ 10G	C	1,875	35	-	13	A	14	40	-	2,400	C	HP-08, 4.0 Ton	1	
		208V,1Ph,22.1 MCA	WP J-Box & Conn.	C	1,875	-	2	15	B	16	-	2	2,400	C	WP J-Box & Conn.	208V,1Ph,28.5 MCA	
1		HP-09, 5.0 Ton	#8+ 10G	C	2,875	?	-	17	C	18	20	1	0	-	> Spare <		
		208V,1Ph,34.2 MCA	WP J-Box & Conn.	C	2,875	-	2	19	A	20	20	1	0	-	> Spare <		
		< Space Only >	---		0	Sp	1	21	B	22	Sp	1	0	-	< Space Only >		
		< Space Only >	---		0	Sp	1	23	C	24	Sp	1	0	-	< Space Only >		
		< Space Only >	---		0	Sp	1	25	A	26	Sp	1	0	-	< Space Only >		
		< Space Only >	---		0	Sp	1	27	B	28	Sp	1	0	-	< Space Only >		
		< Space Only >	---		0	Sp	1	29	C	30	Sp	1	0	-	< Space Only >		
N# 01-		HACR Listed & Labeled MCCB			Phs-A =	38.2 %	127	A			15,245 VA			42.4 KVA Facotred End Use	118	A	
N# 02-		Not Used			Phs-B =	32.3 %	107	A			12,895 VA			0.0 KVA Pass Thru Load	0	A	
N# 03-		Not Used			Phs-C =	29.5 %	98	A			11,790 VA			6.4 KVA Spare	18	A	
N# 04-		Not Used			Summary =		111	A			39,930 VA			48.8 KVA Total	135	A	

Project: Fayette Co Training Center (v3)					B					Schd					Jonesboro, GA. 30236 City,St				
Gen Nt 1: Bkr Ties On Multi-Wire Ckts NEC 210.4B					Volt- LL 208					Enclosure-Mtg: NEMA 1					Wall Surf Mt.				
Gen Nt 2: Seismic Certified & Seismic Rated Anchors & Supports Req'd.					Volt- LN 120					Cover & Door: Door-In-Door, With Locks									
Gen Nt 3: Lower Level Ltg & Rcpts					Phs. 3 # W 4					OCP Types: Main - MCCB-60C/75C					Branch: MCCB, 60C/75C Lugs				
Gen Nt 4: Factory Listed & Rated Series Rated MCCB Allowed					Buss Amps 200					All Busing: CU or AL					100% N & G Busing				
Gen Nt 5: NEW Panel					Main OCP MLO					Arc-Flash: Labeled Per NEC & OSHA									
17-159 MADDOX GROUP INC.					Spare % = 15%					KA-IC/ SCA 65					18.07.25 Date:				
Rv	Nt	Description	Wiring	ID	W/VA	OCF P	#	P	#	OCF P	W/VA	ID	Wiring	Description	Nt	Rv			
		Ltg- Bsmt, "M"	As Shown	L	850	20	01	A	02	20	1	800	R	As Shown	Rcpt- Bsmt				
		Ltg- Bsmt, "M"	As Shown	L	1,020	20	03	B	04	20	1	800	R	As Shown	Rcpt- Bsmt				
		Ltg- Bsmt, "M"	As Shown	L	1,020	20	05	C	06	20	1	1,000	R	As Shown	Rcpt- Bsmt				
		> Spare <	---		0	20	07	A	08	20	1	900	E	As Shown	Rcpt- Bsmt TELCO				
		> Spare <	---		0	20	09	B	10	20	1	900	E	#10	Rcpt- Bsmt TELCO				
		> Spare <	---		0	20	11	C	12	20	1	900	E	#10	Rcpt- Bsmt TELCO				
		> Spare <	---		0	20	13	A	14	20	1	900	E	#10	Rcpt- Bsmt TELCO				
		> Spare <	---		0	20	15	B	16	20	1	900	E	#10	Rcpt- Bsmt TELCO				
		> Spare <	---		0	20	17	C	18	20	1	900	E	#10	Rcpt- Bsmt TELCO				
		< Space Only >	---		0	Sp	1	19	A	20	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	21	B	22	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	23	C	24	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	25	A	26	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	27	B	28	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	29	C	30	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	31	A	32	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	33	B	34	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	35	C	36	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	37	A	38	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	39	B	40	Sp	1	0	---	< Space Only >				
		< Space Only >	---		0	Sp	1	41	C	42	Sp	1	0	---	< Space Only >				
N# 01- HACR Listed & Labeled MCCB					Phs-A = 31.7 %					29	A	3,450 VA		13.0 KVA Facotred End Use			36	A	
N# 02- Not Used					Phs-B = 33.2 %					30	A	3,620 VA		0.0 KVA Pass Thru Load			0	A	
N# 03- Not Used					Phs-C = 35.1 %					32	A	3,820 VA		1.9 KVA Spare			5	A	
N# 04- Not Used					Summary =					30	A	10,890 VA		14.9 KVA Total			41	A	

Proj Fayette Co Training Center (v3)										WW-MD (6- Main Rule)				18.07.25 Date													
Place Jonesboro, GA 30236										WIREWAY SCHEDULE				Const Status													
WireWay Type: NEMA -1/ 3R, Code Gauge Galvneized Steel, Hinged & Latch/ Screw Cover										Note(s) #:		01, 02, 03, 04		Volts-LL 208													
Cabling-Bussing: Full-Length, Full-Capacity Cabling										SCC - kA:		46.3 kA		Volts-LN 120													
Cabling Taps: Fully Insulated, Ilisco NIMBUS Multi-Tap or Ilisco Lay-In Tap-Block or Equal										Neut Bus %		100%		Phase 3													
Misc. Notes: Seismic Rated & Installed, Provide Arc-Flash, Fault-Current & Device Labels										Gmd Bus %		Per Code		Wires 4													
Feeder-Service >										Conduit & Wire:		(3Cu) #4 500- 3.00°C or (3Al) #460 - 4.00°C (Minimum)		Amp Capacity:		1,000 Amps											
Ckt #										Nt #		Load Served Description		Meter Amps		Frame Amps											
OCF Amp										# P-N-G		OCF Type		Ends Type		Wiring		LT									
Ph-A										Ph-B		Ph-C		Ph-D		TOTAL kVA		Revs #									
A										01, 02		A- Pnl		na		200		200									
B										01, 02		B- Pnl		na		200		200									
C										01, 02		C- Pnl		na		200		200									
D										01, 02		D- Pnl		na		200		200									
E										01, 02		E- Pnl		na		200		200									
F										01, 02		F- Pnl		na		200		200									
- - -										- - -		- - -		- - -		- - -		- - -									
Item Notes (Nt #):										- - - - -										Load Totals & Calculations:							
01- Existing Wireway May Be Reused, EC To Verify, Clean, Repaint & Label.										Connected Watts / VA Phs:										74,395		65,815		62,610		203 kVA	
02- Existing Disconnect(s) May Be Reused, EC To Verify, Clean & Label.										Connected Amps Per Phs:										619		548		521		563 Amps	
03- Existing Service May Be Reused, However, EC To Verify Amp Capacity.										Factored Load kVA:										- -		245		kVA		570 Amps	
04- If Exist. Service Is Inadequate Or Poor Condition Give Replacement & Add.										Additional Spare Capacity:										15%		30.8		kVA		85 Amps	
05- - - - -										TOTAL FINAL LOAD:										- -		236		kVA		655 Amps	
By: MADDOX GROUP INC.										End Of WireWay Schedule										17-159							

Project: Fayette Co Training Center (v3)						C		Schd	Jonesboro, GA. 30236										City, St	
Gen Nt 1: Bkr Ties On Multi-Wire Ckts NEC 210.4B						Volt- LL		208	Enclosure-Mtg: NEMA 3R						Wall Surf Mtd.					
Gen Nt 2: Seismic Certified & Seismic Rated Anchors & Supports Req'd.						Volt- LN		120	Cover & Door: Door-In-Door, With Locks											
Gen Nt 3: Main Level HVAC						Phs		3	W	4	OCP Types: Main - MCCB-60C/75C						Branch- MCCB, 60C/75C Lugs			
Gen Nt 4: Factory Listed & Rated Series Rated MCCB Allowed						Buss Amps		200	All Busing: CU or AL						100% N & G Busing					
Gen Nt 5: NEW Panel						Main OCP		MLO	Arc-Flash: Labeled Per NEC & OSHA											
17-159 MADDUX GROUP INC.						Spare % = 15%		KA-A/C		SCA	65	18.07.25 Date:						Const		Status
Rv	Nt	Description	Wiring	ID	W/VA	OCP	P	#	P	#	OCP	P	W/VA	ID	Wiring	Description	Nt	Rv		
	1	FCU-02, 11.3 kW Htg	#4+ 8G	G	6,500	80	-	01	A	02	60	-	4,500	G	#6+ 10G	FCU-03, 7.5 kW Htg	1			
		208V,1Ph, 76.3 MCA	WP J-Box & Conn.	G	6,500	-	2	03	B	04	-	2	4,500	G	WP J-Box & Conn.	208V,1Ph,53.8 MCA				
	1	FCU-04, 11.3 kW Htg	#4+ 8G	G	6,500	80	-	05	C	06	40	-	4,000	T	#8+ 10G	Water Heater	1			
		208V,1Ph, 76.3 MCA	WP J-Box & Conn.	G	6,500	-	2	07	A	08	-	-	4,000	T	DS- 60A,3P,G,N1	80G- 12.0 kW				
	1	FCU-05, 11.3 kW Htg	#4+ 8G	G	6,500	80	-	09	B	10	-	3	4,000	T	---	208V, 3Phs, 33.3 FLA	1			
		208V,1Ph, 76.3 MCA	WP J-Box & Conn.	G	6,500	-	2	11	C	12	Sp	1	0		---	< Space Only >				
		< Space Only >	---		0	Sp	1	13	A	14	Sp	1	0		---	< Space Only >	1			
		< Space Only >	---		0	Sp	1	15	B	16	Sp	1	0		---	< Space Only >				
		< Space Only >	---		0	Sp	1	17	C	18	Sp	1	0		---	< Space Only >				
Nt# 01- HACR Listed & Labeled MCCB						Phs-A = 35.8 %						179	A	21,500	VA	59.6 KVA Facotred End Use		165	A	
Nt# 02- NotUsed						Phs-B = 35.8 %						179	A	21,500	VA	0.0 KVA Pass Thru Load		0	A	
Nt# 03- NotUsed						Phs-C = 28.3 %						142	A	17,000	VA	8.9 KVA Spare		25	A	
Nt# 04- NotUsed						Summary =						167	A	60,000	VA	68.5 KVA Total		190	A	

Project: Fayette Co Training Center (v3)						E		Schd	Jonesboro, GA. 30236										City, St
Gen Nt 1: Bkr Ties On Multi-Wire Ckts NEC 210.4B						Volt- LL 208			Enclosure-Mtg: NEMA 1						Wall Surf Mtd.				
Gen Nt 2: Seismic Certified & Seismic Rated Anchors & Supports Req'd.						Volt- LN 120			Cover & Door: Door-In-Door, With Locks										
Gen Nt 3: Main Level Rcpts						Phs. 3 W. 4			OCP Types: Main - MCCB-60C/75C						Branch- MCCB, 60C/75C Lugs				
Gen Nt 4: Factory Listed & Rated Series Rated MCCB Allowed						Buss Amps 200			All Busing: CU or AL						100% N & G Busing				
Gen Nt 5: NEW Panel						Main OCP MLO			Arc-Flash: Labeled Per NEC & OSHA										
17-159 MADDUX GROUP INC.						Spare % = 15%			18.07.25 Date:						Const Status				
Rv	Nt	Description	Wiring	ID	W/VA	OCP	P	#	P	#	OCP	P	W/VA	ID	Wiring	Description	Nt	Rv	
		Rcpt-Ded Copier	#12	R	1,500	20	1	01	A	02	20	1	800	R	#10	Rcpt- GF Extr			
		Rcpt-Ded Copier	#12	R	1,500	20	1	03	B	04	20	1	600	R	#10	Rcpt- GF Extr			
		Rcpt-Ded Copier	#12+ 12G	R	1,500	20	1	05	C	06	20	1	800	R	#10+ 10G	Rcpt- GF Extr			
		Rcpt-Ded Copier	#12+ 12G	R	1,500	20	1	07	A	08	20	1	600	R	#10+ 10G	Rcpt- Train Rm			
		Rcpt-Ded GF Wtr Cool	#12+ 12G	R	1,500	20	1	09	B	10	20	1	600	R	#10+ 10G	Rcpt- Train Rm			
		Rcpt-Ded GF Appl	#12+ 12G	R	900	20	1	11	C	12	20	1	1,200	R	#10+ 10G	Rcpt- Train Rm			
		Rcpt-Ded GF Appl	#12+ 12G	R	900	20	1	13	A	14	20	1	1,200	R	#10+ 10G	Rcpt- Train Rm			
		Rcpt-Ded GF Appl	#12+ 12G	R	900	20	1	15	B	16	20	1	600	R	#12+ 12G	Rcpt- Train Rm			
		Rcpt-Ded GF Appl	#12+ 12G	R	900	20	1	17	C	18	20	1	600	R	#12+ 12G	Rcpt- Train Rm			
		Rcpt-Ded GF Appl	#12+ 12G	R	900	20	1	19	A	20	20	1	1,200	R	#12+ 12G	Rcpt- Train Rm			
		Rcpt-Ded GF Appl	#12+ 12G	R	900	20	1	21	B	22	20	1	1,200	R	#12+ 12G	Rcpt- Train Rm			
		Rcpt-Ded GF Appl	#12+ 12G	R	900	20	1	23	C	24	20	1	600	R	#12+ 12G	Rcpt- Train Rm			
		Rcpt-Ded GF Appl	#12+ 12G	R	900	20	1	25	A	26	20	1	1,000	R	#12+ 12G	Rcpt- Dine			
		Rcp- RR & Misc	#12+ 12G	R	900	20	1	27	B	28	20	1	1,000	R	#12+ 12G	Rcpt- Dine			
		Rcpt- Offices	#12+ 12G	R	1,400	20	1	29	C	30	20	1	1,200	R	#10+ 10G	Rcpt- Lobby			
		Rcpt- Offices	#12+ 12G	R	1,400	20	1	31	A	32	20	1	800	R	#12+ 12G	Rcpt- Dine Flr Bx			
		Rcpt- Offices	#12+ 12G	R	1,400	20	1	33	B	34	20	1	0		---	< Space Only >			
		Rcpt- Misc	#12+ 12G	R	1,000	20	1	35	C	36	20	1	0		---	< Space Only >			
		< Space Only >	---		0	20	1	37	A	38	20	1	0		---	< Space Only >			
		< Space Only >	---		0	20	1	39	B	40	20	1	0		---	< Space Only >			
		< Space Only >	---		0	20	1	41	C	42	20	1	0		---	< Space Only >			
Nt# 01-	HACR Listed & Labeled MCCB					Phs-A =		36.5 %	106	A	12,700 VA		22.4 KVA Facotred End Use				62	A	
Nt# 02-	Not Used					Phs-B =		31.9 %	92	A	11,100 VA		0.0 KVA Pass Thru Load				0	A	
Nt# 03-	Not Used					Phs-C =		31.6 %	92	A	11,000 VA		3.4 KVA Spare				9	A	

Project: Fayette Co Training Center (v3)						D		Schd	Jonesboro, GA. 30236						City,St			
Gen Nt 1: Bkr Ties On Multi-Wire Ckts NEC 210.4B						Volt- LL 208			Enclosure-Mtg: NEMA 3R						Wall Surf Mtd.			
Gen Nt 2: Seismic Certified & Seismic Rated Anchors & Supports Req'd.						Volt- LN 120			Cover & Door: Door-In-Door, With Locks									
Gen Nt 3: Main Level HVAC						Phs 3 W. 4			OCP Types: Main - MCCB-60C/75C						Branch- MCCB, 60C/75C Lugs			
Gen Nt 4: Factory Listed & Rated Series Rated MCCB Allowed						Buss Amps 200			All Busing: CU or AL						100% N & G Busing			
Gen Nt 5: NEW Panel						Main OCP MLO			Arc-Flash: Labeled Per NEC & OSHA									
17-159 MADDUX GROUP INC.				Spare % = 15%		KA-A/C SA 65			18.07.25 Date:				Const Status					
Rv	Nt	Description	Wiring	ID	W/VA	OCP	P	#	#	OCP	P	W/VA	ID	Wiring	Description	Nt	Rv	
	1	FCU-06, 11.3 kW/Htg	#4+ #8G	G	6,500	80	-	01	A	02	Sp	1	0	---	< Space Only >			
		208V,1Ph, 76.3 MCA	WP J-Box & Conn.	G	6,500	-	2	03	B	04	Sp	1	0	---	< Space Only >			
	1	FCU-08, 11.3 kW/Htg	#4+ #8G	G	6,500	80	-	05	C	06	60	-	4,500	G	#6+ #10G	FCU-07, 7.5 kW/Htg	1	
		208V,1Ph, 76.3 MCA	WP J-Box & Conn.	G	6,500	-	2	07	A	08	-	2	4,500	G	WP J-Box & Conn.	208V,1Ph,53.8 MCA		
	1	FCU-09, 11.3 kW/Htg	#4+ #8G	G	6,500	80	-	09	B	10	Sp	1	0	---	< Space Only >			
		208V,1Ph, 76.3 MCA	WP J-Box & Conn.	G	6,500	-	2	11	C	12	Sp	1	0	---	< Space Only >			
		< Space Only >	---		0	Sp	1	13	A	14	Sp	1	0	---	< Space Only >			
		< Space Only >	---		0	Sp	1	15	B	16	Sp	1	0	---	< Space Only >			
		< Space Only >	---		0	Sp	1	17	C	18	Sp	1	0	---	< Space Only >			
Nt# 01- HACR Listed & Labeled MCCB						Phs-A = 36.5 %		146	A		17,500	VA	48.0 KVA Facotred End Use				133	A
Nt# 02- Not Used						Phs-B = 27.1 %		108	A		13,000	VA	0.0 KVA Pass Thru Load				0	A
Nt# 03- Not Used						Phs-C = 36.5 %		146	A		17,500	VA	7.2 KVA Spare				20	A
Nt# 04- Not Used						Summary =		133	A		48,000	VA	55.2 KVA Total				153	A

Project: Fayette Co Training Center (v3)						F		Schd	Jonesboro, GA. 30236										City, St.
Gen Nt 1: Bkr Ties On Multi-Wire Ckts NEC 210.4B						Volt- LL 208			Enclosure-Mtg: NEMA 1						Wall Surf Mtd.				
Gen Nt 2: Seismic Certified & Seismic Rated Anchors & Supports Req'd.						Volt- LV 120			Cover & Door: Door-In-Door, With Locks										
Gen Nt 3: Main Level Ltg						Phs 3 W 4			OCP Types: Main - MCCB-60C/75C						Branch- MCCB, 60C/75C Lugs				
Gen Nt 4: Factory Listed & Rated Series Rated MCCB Allowed						Buss Amps 200			All Busing: CU or AL						100% N & G Busing				
Gen Nt 5: NEW Panel						Main OCP MLO			Arc-Flash: Labeled Per NEC & OSHA										
17-159				MADDOX GROUP INC.		Spare % = 15%		KA-AIC SCA 65		18.07.25		Date:		Const		Status			
Rv	Nt	Description	Wiring	ID	W/VA	OCP	P	#	P	#	OCP	P	W/VA	ID	Wiring	Description	Nt	Rv	
		Ltg- Offices	#12 +12G	L	900	20	1	01	A	02	20	1	500	L	#12+ 12G	Ltg - Train Rm			
		Ltg- Hall	#12 +12G	L	800	20	1	03	B	04	20	1	500	L	#12+ 12G	Ltg - Train Rm			
		Ltg- Core, Rest Rms	#12 +12G	L	700	20	1	05	C	06	20	1	500	L	#12+ 12G	Ltg - Train Rm			
		Ltg- Lobby	#12 +12G	L	500	20	1	07	A	08	20	1	500	L	#12+ 12G	Ltg - Train Rm			
		Ltg- Foyer	#12 +12G	L	600	20	1	09	B	10	20	1	1,100	L	#12+ 12G	Ltg - Dine-Train Rm			
	2	Ltg-Extr Lwr Lvl	#10+ 10G	L	100	20	1	11	C	12	20	1	200	L	#10+ 10G	Ltg- Extr Paddle Fans			
	2	Ltg-Extr Uprr Lvl	#10+ 10G	L	700	20	1	13	A	14	20	1	900	E	#10+ 10G	EDP- Fire Alarm			
	2	Ltg-Extr Uprr Lvl	#10+ 10G	L	700	20	1	15	B	16	20	1	0		---	> Spare <			
		> Spare <	---		0	20	1	17	C	18	20	1	0		---	> Spare <			
		< Space Only >	---		0	Sp	1	19	A	20	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	21	B	22	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	23	C	24	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	25	A	26	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	27	B	28	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	29	C	30	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	31	A	32	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	33	B	34	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	35	C	36	Sp	1	0		---	< Space Only >			
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		< Space Only >	---		0	Sp	1	39	B	40	Sp	1	0		---	< Space Only >			
		< Space Only >	---		0	Sp	1	41	C	42	Sp	1	0		---	< Space Only >			
N#01-		HACR Listed & Labeled MCCB					Phs-A = 43.5 %		33	A		4,000 VA		11.5 KVA		Facored End Use		32	A
N#02-		Ckt Thrst Astro-Sched Relay Pnl					Phs-B = 40.2 %		31	A		3,700 VA		0.0 KVA		Pass Thrud Lru		0	A
N#03-		Not Used					Phs-C = 16.3 %		12	A		1,500 VA		1.7 KVA		Spare		5	A
N#04-		Not Used					Summary =		26	A		9,200 VA		13.2 KVA		Total		37	A

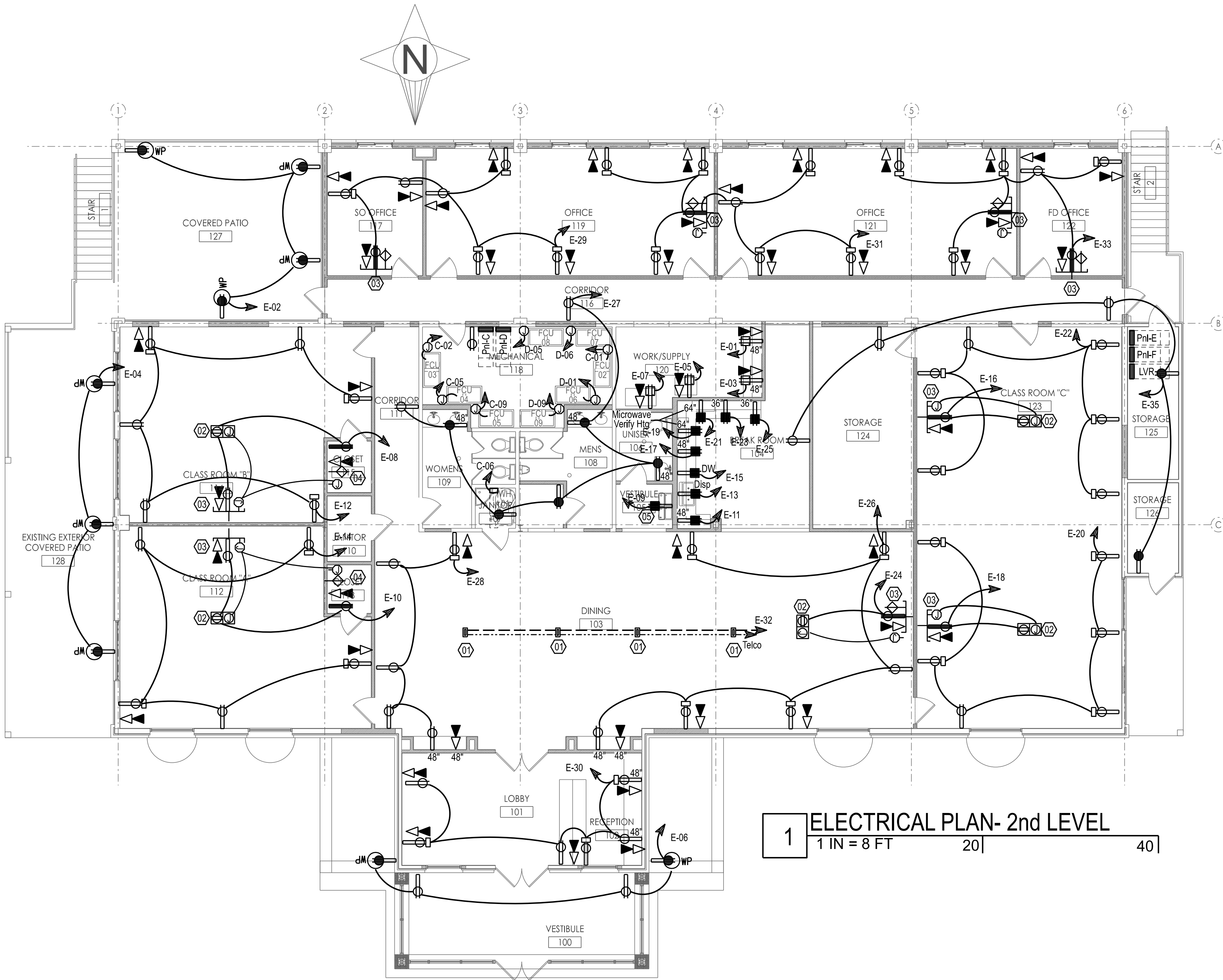
WIRING & EQUIPMENT

SYMBOLS	DESCRIPTIONS
	J-Box Ctg / Wall Mtd. @ 24" AFF UNO
	Flexible Conduit, LT Damp-Wet Areas
	Solid Curved- Concealed Wiring
	Solid Straight- Exposed Wiring
	Dashed- In-Slab Or U.G. Wiring
	Arrowhead- Home Run As Shwon
	Surf. Mtd Multi-Channel Raceway
	Grounding Symbol / Gnd Rod
	Plywood Bktd. Size As Noted
	Motor, F- Fract. HP, # HP
	Manual Motor Rated Switch, 30A, 3P, 600V, NEMA-3R Ends
	Magnetic Motor Combo Starter / Switch, Ratings As Noted Or Scheduled
	Electric Heat Unit
	Disc. Switch, Ratings As Noted
	Panel / Distb. Panel & Clearances
	Distrib. Equip. & Clearances
	Transformer & Clearances

- NOTES & COMMENTS**
- Single Branch Circuit Homeruns (#12) To The Same Panel May Be Combined Into Multi-Circuit Homeruns Of No More Than (2) 3-Ckt/ 4-Wire Homeruns. Note Multi-Pole OCP Required At Panel.
 - Every Ckt., Regardless Of Conduit Type, Shall Be Provided With A Green Ground Wire (#12 Min), Size Per Code U.N.O.
 - Where IG CKTs. Are Required, Each IG Ckt. Shall Have A Separate (Non-Shared) Neutral & A Shared Insulated Ground (IG) Conductor.
 - Grouping Of Controls / Switching May Be Indicated By Lower Case Letters (i.e.- a,b,c,---).

LEGEND NOTES

#	Rv	CO
18.07.25		
01	-	CO
02	-	CO
03	-	CO
04	-	CO
05	-	CO
17-159		



1 ELECTRICAL PLAN- 2nd LEVEL
1 IN = 8 FT

RECEPTACLE DEVICES

15A	20A	MTG/UNO	DESCRIPTIONS
		18" AFF	RCPT- SINGLE
		18" AFF	RCPT- DUPLEX
		18" AFF	RCPT- QUAD (TWO DUPLEX)
		18" AFF	RCPT- DUPLEX GFCI
		18" AFF	RCPT- DUPLEX WR-GFCI & WP IN-USE COVER
		18" AFF	RCPT- DUPLEX ISO.GRN. (SEE WIRING NOTES)
		18" AFF	RCPT- TWO DUPLEX ISO. GRN. (SEE WIRING NTS)
		18" AFF	RCPT- DUPLEX -TOP SWITCHED
		18" AFF	RCPT- TAMPER RESISTANT DUPLEX
		18" AFF	RCPT- TAMPER RESISTANT DUPLEX GFCI

- COMMENTS & NOTES**
- Devices To Be UL20, UL498 Listed & Labeled Where Applicable.
 - Devices To Be FSUL-WS896, FSUL-WC596 Compliant Where Applicable.
 - Devices To Be NF7A (Buy American) Where Available.
 - Devices To Be Legrand / P&S, Plug/Ill. Specification Grade Devices, UNO.
 - Device Face To Decor Style Unless Not Available In Decor Style.
 - Provide Smooth Finish Matching P&S Trade-Master Grade Cover Plates.
 - Products Of Other Manufacturers, Equivalent In Appearance, Features, Performance, Rating & Size, Are Acceptable.
 - Color As Selected By Owner / Tenant Or Architect.
 - Field Verify Final Exact Location Prior To Rough-In With Archt., Owner / User.
 - Multiple Adjacent Devices Shall Be Mtd In Multi-Gang Box With Multi-Gang Cover.

LOW-VOLTAGE DEVICE - ROUGH-INS

SYMBOLS	MTG/UNO	DESCRIPTIONS
	FLR MTD	VOICE-DATA EQUIPMENT RACK/ CABINET, FREE STANDING (BY OTHERS)
	TOP 60" AFF	VOICE-DATA EQUIPMENT PANEL, WALL MOUNTED (BY OTHERS)
	BTM 18" AFF	VOICE-DATA EQUIP., PROVIDE WALL MTD. BACKBOARD, 0.75" THICK AID GRADE PLY-WOOD, SIZE A PRESCRIBED
	18" AFF	VOICE JACK WALL MTD QTY. JACKS AS SHOWN
	18" AFF	DATA JACK WALL MTD QTY. OF JACKS AS SHOWN
	18" AFF	COMBO VOICE-DATA JACKS QTY. JACK DEVICES AS SHOWN
	18" AFF	TV/ BROADBAND JACK(S) DUPLEX PLATE WALL MTD

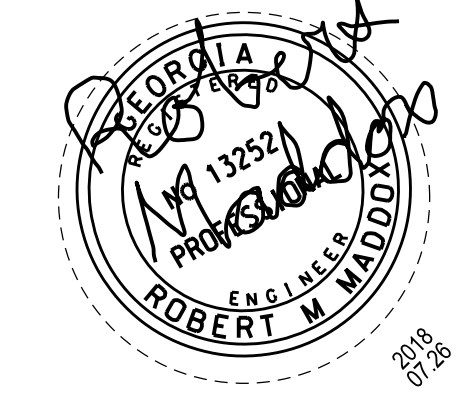
- NOTES**
- This Contractor Is To Provide For Wiring Pathways For Each Low-Voltage Device Shown Consisting Of A "Ring & String" And / Or Wall-Box & Conduit Stub-Ups. The Low-Voltage Cabling & System(s) Is "By-Others".
 - Ring & String- 2-Gang Wall Plaster Ring & String To Accessible Plenum.
 - Wall Box & Stub Up- 2-Gang (4" Square) Box With 1-Gang Plaster-Ring, With 1.25" Conduit Stub-Up To Accessible Ceiling Plenum With A Pull-String From Box To Conduit End & Tied-Off.
 - Floor Box Mounted Devices- Provide A Floor Box Of Type As Prescribed With Low-Voltage Device Mounting Plates and 1.25" E.C. Under-Floor & Extended To The Tenants Accessible Plenum With Pull-String.
 - Products, Set-Ups, Programming, & Related.
 - All Conduit / Raceway Bends Shall Be Long-Radius Bends (10X Diameter).
 - The Owner / Tenant Provides All The Remaining Materials, Installation, Products, Set-Ups, Programming, & Related.

architecture
interiors
town planning

KAOD

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DATE	COMMENTS
18.07.26	For Pricing, Permitting & Construction

FAYETTE COUNTY TRAINING FACILITY RENOVATION

340 Hewell Road
Jonesboro, Georgia
30236

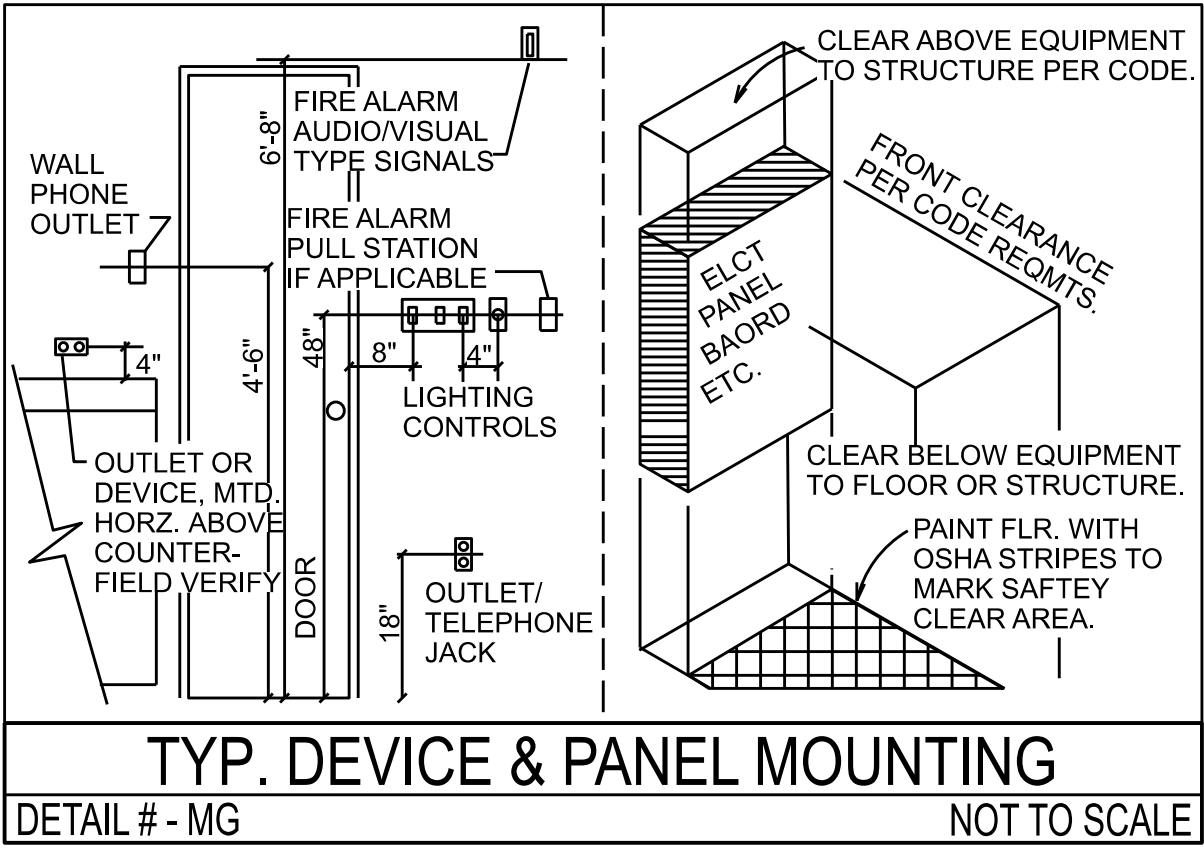
Prepared for
FAYETTE COUNTY

COMMISSION / JOB NO:
1465.17

SHEET TITLE:
ELECTRICAL PLAN 2nd LEVEL

SHEET NO:
E-1.2

RELEASED FOR
PERMIT OR CONSTRUCTION



TYP. DEVICE & PANEL MOUNTING
DETAIL # - MG NOT TO SCALE

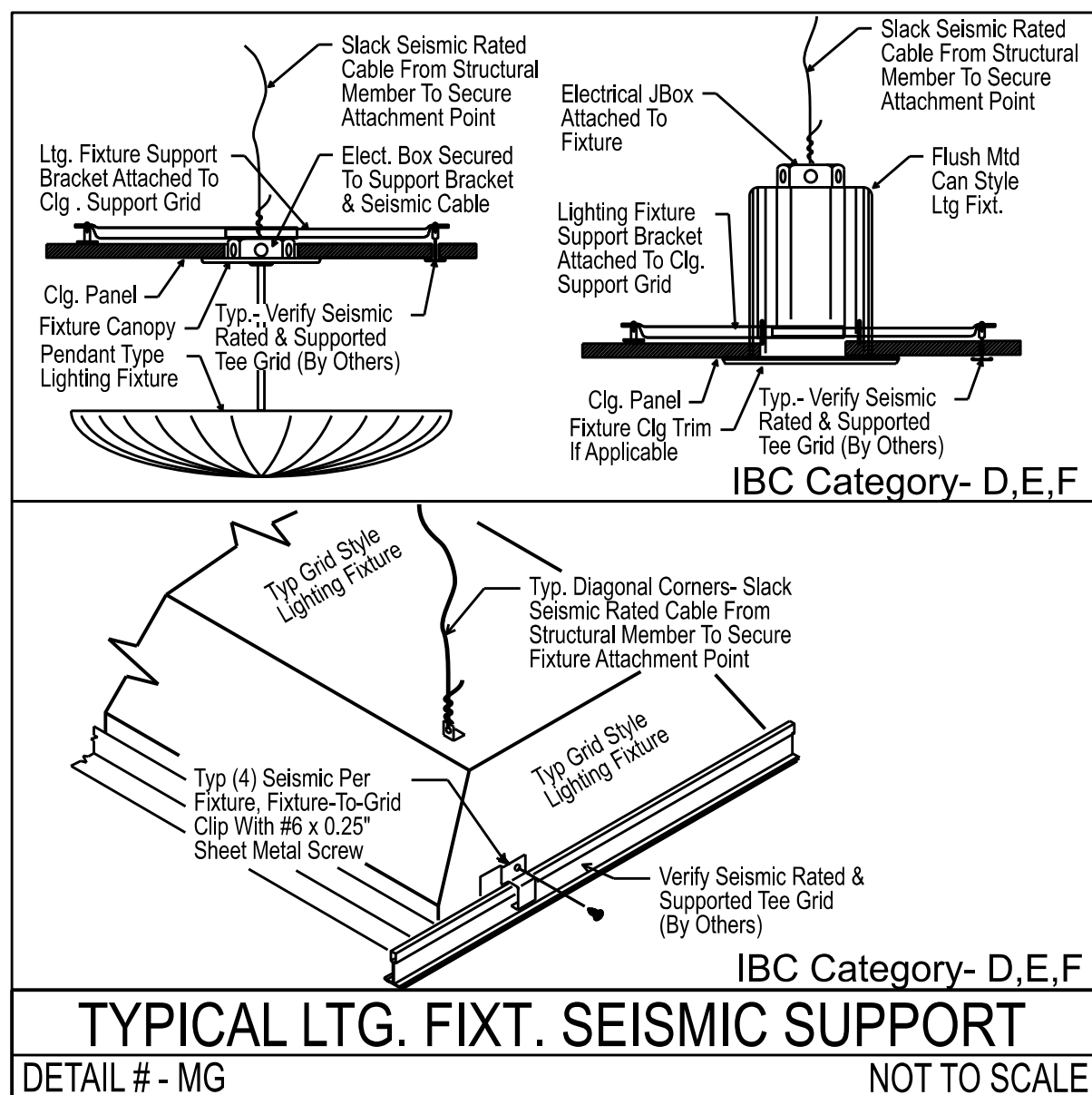
Fayette Co Training Center (v3)		LIGHTING FIXTURE SCHEDULE										18.07.25 Date	
Jonesboro, GA 30236		KAOD										Const Status	
Fixt ID	General Lighting Fixture Descriptions	Ttl Mean Lumens	Lamp Qty & Type	Ballast/Driver Type	Power V VA	Mount.	Item Notes	Manufacturer Series / Model	Revs #				
A	Center Lens Fixt, 2x4- LED Lamp, Curved White Acrylic Lenses, 5-Yr Warranty, Non-Dimming	4,912 (ML)	LED, 83-CRI, 35k-CCT	Fixed, 10%-THD, 0.95PF	UNV 120-277	40	FIC	Columbia: LCAT-24-80CRI-35k-ML- G-NoAr-E-Unv	-				
B	Center Lens Fixt, 2x4- LED Lamp, Curved White Acrylic Lenses, 5-Yr Warranty, 1%-Dimming	4,912 (ML)	LED, 83-CRI, 35k-CCT	0-10V 1%-Dimm, 10%-THD, 0.95PF	UNV 120-277	40	FIC	Columbia: LCAT-24-80CRI-35k-ML- G-NoAr-ED1-Unv	-				
C	Center Lens Fixt, 2x2- LED Lamp, Curved Prismatic Acrylic Lenses, 5-Yr Warranty, 1%-Dimming	3,420 (ML)	LED, 83-CRI, 35k-CCT	0-10V 1%-Dimm, 10%-THD, 0.95PF	UNV 120-277	29(ML)	FIC	Columbia: LCAT-22-80CRI-35k-ML- G-Curve-NoAr-ED1-Unv	-				
D	04 Ft Linear 04Wx05H X-Seed, LED Asymmetric-Wall-Wash, Flush-Mtd, Matte-White Trim, 1%-Dimming	750 Lu/ Ft	LED, 85-CRI, 35k-CCT	0-10V 1%-Dimm, 10%-THD, 0.95PF	UNV 120-277	6 W/Ft	FIC	LumenVex VIA-4R Series: VIA-4R+ WR02+ 750 Lu LED+ 35 KCCT+ 04 Ft+ UNV+ D1+ 1CK+ Mtg+ White+ LSC	-				
E	Center Lens Fixt, 2x2- LED Lamp, Curved Prismatic Acrylic Lenses, 5-Yr Warranty, Non-Dimming	3,420 (ML)	LED, 83-CRI, 35k-CCT	Fixed, 10%-THD, 0.95PF	UNV 120-277	29(ML)	FIC	Columbia: LCAT-22-80CRI-35k-ML- G-Curve-NoAr-E-Unv	-				
F	06 In LED Dmt, 45D Cut-Off Diff Lens, Satin-Haze Alzak Reflector & Trim Ring, Damp/Wet Location, 5-Yr Warranty, Med Distb; Non-Dimm	2,000	LED, 90-CRI, 35k-CCT	Fixed, 10%-THD, 0.95-PF	MV 120V 277V	27	FIC	Elite-MaxLume HH6-LED-2000Lumens-AVxM-MD-35k-85+CRI-6501-CL-WH	-				
G	07 Inch Rod, 1.25 In Deep LED Surface Unit (Flush JBox Mtd) White Trim Ring, Damp-Wet Location, 5-Yr Warranty, Non-Dimm	1032 Lu (7")	LED, 90-CRI, 35k-CCT	Fixed, 10%-THD, 0.95-PF	120V 17(7")		SM On Flush J-Box	Prescotte LiteBox: LBS-7"-LED-A-10LED-35K-80CRI-WH-LBS Mtg Kit	-				
H	28", 2.75" W, 2.5" D, LED, Vanity Wall, Sconce Fixture, ADA Compliant, White Acrylic Diffuse & Satin Nickel Hardware, Non-Dimming	1,725	LED, 90-CRI, 35k-CCT	HPF LED Driver, Output=Fixed	120 or 277V	27	Horz / Vert Wall Hg Per Archt	Oxygen Apollo Series: 3x-524-24	-				
I	32", 2.75" W, 2.5" D, LED, Vanity Wall, Sconce Fixture, ADA Compliant, White Acrylic Diffuse & Satin Nickel Hardware, Non-Dimmable	1,751 Lu	LED, 90-CRI, 35k-CCT	Fixed, 10%-THD, 0.95-PF	120	20	Horz / Vert Wall Hg Per Archt	Oxygen Apollo Series: 3-525-24	-				
J	Under-Cabinet, LED, Steel Housing & UV-Poly Carb. Lens, Non-Dimm, 33-Long, 3-Wire Cord-Set (CS)	~450 Lu/Ft	LED, 83-CRI, 35k-CCT	Fixed, 10%-THD, 0.95PF	120V	~5 W/ Ft	Under Cabinet Face Wall	Elite-Orade E-LED Series: EU-LED-33"-120V-35k-WH-CS	-				
K	08-Ft Linear LED Arm-Mtd Direct-Asymmetric + Indirect Asymmetric Distribution, Rect-Cross-Set, Modular Units For Continuous Runs, Tandem-Wired, Pre-Order Verify Final Length(s), Mtg, Ctg Type(s) With Architect-Owner & GC (See Approx Fl Length)	750 Lu-FL Up/Lt, 750 Lu-FL Dn-Lt	LED, 85-CRI, 35k-CCT	0-10V Dimm To 01%, 10%-THD, 0.95PF	UNV 120-277	6 W/Ft + 6.0 W/Ft	Wall Mtd At Hg Per Archt & Dts	LumenVex VIA-4-LED Series: VIA-4+WDI+AR02+ARO+LE D-80CRI+7750DLuF+777 50mLuFL+35KCCT+##F+Un v-D1, 2CK+DMB+WLSC+Options	-				
L	08-Ft Linear LED Cable-Mtd Robable Accent Asymmetric Distribution, Soft-Curve Cross-Set, Modular Units For Continuous Runs, Tandem-Wired, Custom Finish, 1%-Dimmable, Pre-Order Verify Final Length(s), Mtg, Ctg Type(s) With Architect-Owner & GC	950 Lu/ Ft	LED, 85-CRI, 35k-CCT	0-10V 1%-Dimm, 10%-THD, 0.95PF	UNV 120-277	8 W/Ft	Ctg Mtd, Aim For Uniform Ltg	LumenVex AXLE-LED Series: AXL-WH+ARO-LED +90CRI +950 LuFl+35KCCT +8Ft+ Unv-D1- 1CK+DMB +Custom+LSC	-				
M	8-Ft Indust. LED Reflector, Apert-Top, Adjustable V-Hangers, Optco+ Wide-Distb + Frosted Acrylic Lens; Sensor+ Occupancy	~17,000	60k Hr (L80) LEDs, 83-CRI, 35k-CCT	Fixed, 10%-THD, 0.95PF	UNV 120-277	83	PH Per Dts	Columbia Series MPL-8 Ft-83CRI+ 35KCCT+ ML Lu+ WH-SFA Distb+ E-UNV+ VHang+ OS360-30	-				
Fixt ID	Wet-Location Outdoor Lighting Fixture Descriptions	Ttl Mean Lumens	Lamp Qty & Type	Ballast/Driver Type	Power V VA	Mount.	Item Notes	Manufacturer Series / Model	Revs #				
WA	30Hx06Wx04D, UL-Wet-Location, LED, Wall Mt Columnar Fixture, ADA Compliant, Stainless-Steel Base With Satin-White Diffuser & Satin Nickel Trim	2,830	LED, 85-CRI, 35k-CCT	Fixed, 10%-THD, 0.95PF, TVSS	UNV 120-277	24	VM Vert @ Hg Per Archt-Own	ASL BCJ-SN Series: BCJ-SN+ 24 W+ 2830 Lu+ 35K+ 30 H+ MV-DV+ FSN+ SRP	-				
WB	UL-Wet-Location,LED Wall Pack, Med. Size (11Wx06Hx07D), Full-Cut-Off, Die-Cast Al Housing Bronze (Verify+ Archt-Owner)	4,270	LED, 85-CRI, 4.0 KCCT, Distb. Type- FwdThrow	Fixed, 10%-THD, 0.95PF, TVSS	UV 120-277	43	VM, High As Possible, Per Archt	Hubbell LNC2 Series: LNC2+16-LED+ 4KCCT+ 700 DC+FT Distb+ Unv+Std Mtg+ Brz- Finish	-				
WC	UL-Wet-Location,LED Wall Pack, Small (09Wx06Hx05D), Full-Cut-Off, Die-Cast Al Housing, Bronze Finish (Verify Per Archt-Owner)	2,059	LED, 85-CRI, 4.0 KCCT, Distb. Type- xx	Fixed, 10%-THD, 0.95PF, TVSS	UV 120-277	22	VM As High Possible, Per Archt	Hubbell LNC Series: LNC+09 Lu+ 4KCCT+ 4-Distb+ Brz- Finish	-				
WD	UL Damp Rated Ctg Mtd LED 16 In Dia Opal White Acrylic Dome With Satin Nickel Trim On Steel Base, 5-Yr Warranty	1,720	LED, 85-CRI, 35k-CCT	Fixed, 10%-THD, 0.95PF, TVSS	UNV 120-277	16	Ctg Mtg	ASL HRO Series: 16 W+35k+ 1720 Lu+ 16 Dia+ MV-DVDim+ FSN+ LCU+ SRP	-				
WE	Not Used	-	-	-	-	-	-	-	-				
WF	Outdoor Damp-Rated Orbging Caged Fan Unit (No Light), 3-Blade, With Matching Ctg Wall Mount, Speed Control, Mtg, Height & Finish Per Architect-Owner (Black, Bronze, Pewter, Nickel)	847 CFM Air Flow	No Light	Fan Mtd, 3-Speed Non-Reversing + Remote Wall Ctl	120	85	Stem Mtd, Verify Length	Fannatm Extraordinaire Unit Equal By Casablanca or Modern Fan Co	-				
Fixt ID	Exit Signs & Emergency Ltg. Units Fixture Descriptions	R1 FC Avg	Unit Heads Qty & Type	Unit Battery	Power V VA	Mount.	Notes	Manufacturer Series / Model	Revs #				
X1	White Thermoplastic Emerg Ltg Unit, 2-LED MR16 Heads, UL924-NFPA101 Self-Diagnostic-Testing, 3-Yr Full & 5-Yr Pro-Rate Warranty	na	(2) 3.6V-3.6W LED-MR16, 50k Hr Life	3.6-V Nickel-Metal-Hydride	UNV-120, 277	7.5	Ctg / VM High	LightAlarms: LCA-2LED	-				
X2	White Thermoplastic Emerg Ltg Unit, LED NiCad Battery, UL924-NFPA101 Self-Diagnostic-Testing, Vandal-Resistant, 3-Yr Warranty	80x06 @15H	(2) 6.0 W-LED MR16 Heads	12 VDC Sealed Lead-Calcium	UNV-120, 277	7.5	Ctg / VM High	LightAlarms Grande Series: 2Hd-GR12N4-(2) LD10-WB-ID-T2-LO-CMFM	-				
XOF	Dual-Function LED Extr & Batt.Egress Wall-Light, Die-Cast Alum. Vandal-Resistant, Wet Location, Self-Contained Norm-AC / Emerg. Batt. Unit, Photo-Cell, Heater & Self-Test-Monitor-Alarm, Color Per Archt-Owner: Black, Dk-Bronze, Off-White, Platinum-Gray	640	Forward Throw, Hi-Lumen Output LED	Nickle-Metal Hydride With Self-Diagnostics	UNV 15(Ht)		VM Abv Door	LightAlarms Canmay LED: CAM-ACSD-Color--CS-FT-HL-PC	-				
XOW	Same As Type-XOF, Except With "Wide-Throw" Distribution	640	Wide / Forward Throw, Hi-Lumen Output-LED	Nickle-Metal Hydride With Self-Diagnostics	UNV 15(Ht)		VM Abv Door	LightAlarms Canmay LED: CAM-ACSD-Color--CS-FT-HL-PC	-				
XU	Combo LED Exit Sign, 1/2 Face, 2-Adjust LED Heads, Univ Mtg, Bat-Back-Up, Red Ltg. Arrows As Needed, Self-Test-Alarm, 3-Yr. Warranty, White, (17W 13H 04D)	~89 CO, 07 MH	(2) 6.0 W-LED MR16 Heads, 80Cx15Hx06W	12 VDC Lead-Calcium With Self-Diagnostics	UNV 5	UM	1	LightAlarms GRANDE Series: GR-1224M-R-U-W-2HD-LD10-ID	-				
SPECIFIC ITEM NOTES													
1- Connected Emerg Battery To Unswitched Source		2- Refer To Interior Lighting Plans & Schedules For Details											
3-		4-											
Misc Abbreviations		Lamp / Ballast / Driver Terms		Mounting Terms									
FBO: Furnished By Owner Complete U.N.O.		CRI Color Rendering Index (Of Lamp)		BFC- Below Finished Ceiling									
FMC: Fixt. Material Cost With Lamps & Hardware Complete		xx K Kelvin (Lamp Color)		CB- Concrete Base- See Details									
IBC - Installed Complete By Contractor, U.N.O.		Lum Lumens (Lamp Light Output)		FIC- Flush In Ceiling									
		mA Milli-Amp (LED Driver Rating)		FIG- Flush In Grade									
		PS Programmed Start											
PBC: Provided By Contractor		STA Self-Test & Alarm		PH- Pend Hung Htg As Ntd, Per Archt									
SBO- Selected By Owner		RS Rapid Start		SM- Surface Mtd On Ceiling Or Structure									
		THD Total Harmonic Distortion Max.											
ALTERNATES / PRIOR APPROVAL REQUEST													
AA Project Base Quote Shall Be Based On The Lighting As Scheduled & Specified.													
AB Lighting Products Of Other Manufacturers May Be Submitted As Add Or Deduct Alternates, Complete With Labeled Fixtures & Lampe Data, Cut-Sheets & Any Variations From The Specified Fixtures Must Be Denoted.													
SUBMITTALS REQUIRED													
SA A Complete Submittal Is Required, Including Cover-Page, Bill-Of-Materials, & Individual Product Data. The Submittal Shall Bear The "Compliance Statement" & Revised Stamp" Of The Supplier, Sub-Contractor & General Contractor. Failure To Do So Is Grounds For Automatic Rejection Of Submittals.													
SB Each Items Cut-Sheet Shall be Labeled With Specific Choices Marked, Including Lamp Data, Indicating Full Compliance With The Criteria-Specification Requirements.													
MADDOX GROUP INC.		End Of Lighting Fixture Schedule - See Lighting Criteria											

LIGHTING FIXTURE SYMBOLS		
SYMBOLS	MTG/UNO	DESCRIPTIONS
	SEE SCHD.	LIGHTING FIXTURES, GENERALLY CEILING MOUNTED SHAPE GENERALLY INDICATES SHAPE OF FIXTURE
	SEE SCHD.	FLUORESCENT STRIP TYPE FIXTURE
	SEE SCHD.	WALL OR BRACKET MOUNTED TYPE FIXTURE
	SEE SCHD.	LIGHTING TRACK & FIXTURES
	SEE SCHD.	EXIT SIGNAGE FIXTURE
	SEE SCHD.	EXIT SIGNAGE WITH DIRECTIONAL ARROWS
	SEE SCHD.	EXIT SIGNAGE WITH EMERGENCY FLOOD LIGHTS
	SEE SCHD.	BATTERY TYPE EGRESS FIXTURES
	SEE SCHD.	LIGHTING FIXTURE TYPE ID / TAG-SEE LTG FIXTURE SCHEDULE
LIGHTING GENERAL NOTES		
NOTES & COMMENTS		
FIXTURE TYPES ARE INDICATED BY UPPER CASE CHARACTERS		
SWITCHING GROUPS SHOWN BY LOWER CASE LTRS. WHERE APPLICABLE.		
CIRCUIT GROUPING SHOWN BY NUMBERS, WHERE APPLICABLE.		
REFER TO REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS.		
WP INDICATES WEATHER PROOF SWITCH COVER.		

LIGHTING CONTROLS - MANUAL, LINE-VOLTAGE, HARD-WIRED				
SYMBOLS	MTG UNO	GENERIC DESCRIPTIONS	RATINGS	MANUF. & SERIES LEGRAND/P3S: UNO
MANUAL DEVICES - LINE VOLTAGE TYPE				
	48" AFF	(Toggle Switch, 1= SPST; 2= 2PST; 3= 3-Way; 4= 4-Way	20A; Gnd 120V & 277V	PT-262-XX
	48" AFF	(Key Operated Switch, 1= SPST; 2= 2PST; 3= 3-Way; 4= 4-Way	20A; Gnd 120V & 277V	PT-20AC-XX
	48" AFF	(Illuminated When On Switch (UNO), 1= SPST; 2= 2PST; 3= 3-Way; 4= 4-Way	20A; Gnd 120V & 277V	PT-262-XX
	48" AFF	(Momentary Contact Switch, 1-Pole 3-Position (a) Subscript Indicates Switching Group, Etc.	20A; Gnd 120V & 277V	TM811-DTMO-XX
	48" AFF	(Dimmer Line Volt, (1/3) Way, Full-Off, Incand, CFL & LED; NEMA-SSL7, Forward Phs Dim.	120V, G 150W-CFL, 600W-I	Lutron Maestro C-L Dimmers
	48" AFF	(On-Off Switch, Level Slider, Pwr-Fail Memory	0-10V Analog Control Wires	Lutron Diva Series
	48" AFF	(Weather(P) Toggle Switch, 1-Pole & WP Cover	20A, 120V, 277V G	PT-262-XX & CA1GL
	48" AFF	Switch Motor Rated, NEMA 3R Enclosure	3 Pole, 30A, 600V	7803 Switch & 7833 Ends
COMMENTS & NOTES				
1- Devices To Be UL20, Listed & Labeled Where Applicable.				
2- Devices To Be NEMA WD-1 & WD-6 Compliant Where Applicable.				
3- Devices To Be NF7A (Buy American) Where Available.				
4- Devices To Be Legrand / P&S, Plug Tail, Spec. Grade Devices, UNO.				
5- Device Face To Decor Style Unless Not Available In Decor Style.				
6- Provide Smooth Finish Matching P&S Trade-Master Grade Cover Plates.				
7- Color As Selected By Owner / Tenant Or Architect.				
8- Products Of Other Manufacturers, Equivalent In Appearance, Features, Performance, Rating & Size, Are Acceptable.				
09- Field Verify Exact Final Location Prior To Rough-Ins Per Archt., Owner/ User.				
10- Control / Grouping Indicated By Lower Case Letters (L-a-z, 0-9)				
11- Multiple Adjacent Devices Shall Be Mounted In Multi-Gang Box With Multi-Gang Cover				

LIGHTING CONTROLS - SENSOR, LINE-VOLTAGE, HARD-WIRED				
SYMBOLS	MTG UNO	GENERIC DESCRIPTIONS	RATINGS	MANUF. & SERIES HUBBELL - UNO
	Wall Mt, 48" AFF	(Vacancy Sensor, (1/2) Ckt, PIR, Wall Mtd. Auto or Man On, Adjustable Time Off	800W-FI @ 120V 1200W-F @ 277V	(V1-1P) LHRS1-xx-M (V2-2P) LHRS2G-xx-M
	Wall Mt, 48" AFF	(Ultra-Sonic PIR Dual Sensor, (1/2) Ckt, Self-Adaptive, Off Warning, Mani Auto Select 20x15 Minor & 35x30 Major Motion Range	800W-F @ 120V 800W-F @ 120V 1200W-F @ 277V	(U1-1P) LHMTS1G-xx (U2-2P) LHMTS2G-xx
	Ctg Mtd Per Manuf	(PIR Occupancy Sensor, (1/2x) Range, Power Pack, RFI & EMI Resistant, Adjust. Delay & Sensitivity P1- 500 Sq Ft, P2- 1200 Sq Ft Coverage Range	24 VDC Sensor 20A, 120/ 277V Power Pack	(P1=500S) OMNI-HR (P2=1200S) OMNI-HRL
	Ctg Mtd Per Manuf	(Ultra-Sonic Sensor, (1/2x) Range, Power Pack, RFI & EMI Resistant, Adjust. Delay & Sensitivity U1- 500 SF, U2-1100 SF, U3- 2200 SF Range	24 VDC Sensor 20A, 120/ 277V Power Pack	(U1=500S) OMNI-US500 (U2=1100S) OMNI-US1000 (U3=2200S) OMNI-US2000
	Ctg Mtd Per Manuf	(Day/Light Switching (Non-Dim) Sensor, Closed-Circuit Light Sensing Matching Power Pack, RFI & EMI Resistant, Adjust. Delay & Sensitivity	24 VDC Sensor 20A, 120/ 277V Power Pack	NX-DS Sensor & NX-CSR/IRUV Power-Pack
	Ctg Mtd Per Manuf	(Combo Dual-Tech, USPIR Sensor, Power Pack, RFI & EMI Resistant, Adjust. Delay & Sensitivity 360-Degree Sensor, 1000 & 2000 SF Range	24 VDC Sensor 20A, 120/ 277V Power Pack	(C1=1000S) OMNI-DT1000 (C2=2000S) OMNI-DT2000
COMMENTS & NOTES				
01- Devices To Be UL20, Listed & Labeled Where Applicable. 02- Devices To Be NEMA WD-1 & D-16 Compliant Where Applicable. 03- Devices To Be NEMA 3R (Guy American) Where Applicable. 04- Devices To Be Hubbell, Spec. Grade Devices, UNO. 05- Color, if Option, Selected By Owner / Tenant Or Architect. 06- Products Of Manufacturers, Equivalent In Appearance, Features, Performance, Rating & Size, Are Acceptable.			07- Field Verify Exact Final Location Prior To Rough-In Per Archt., Owner User. 08- Control Grouping Indicated On Power Case Letters (A-B-C). 09- Multiple Adjacent Devices Can Be Mounted On Multi-Range Box With On-Off Cover	

LEGEND NOTES		
#	Rv	CO
01	-	Emergency Egress / Exit Light, Connect To Unswitched Lighting Power Ckt. To Ensure Continuous Power To Battery Charger.
02	-	RF Wireless Ltg Control Dimming Module, 120/277V, 05A, 0-10V Dimming, J-Box Mtd. One Per Switch-Leg Required. (Must Be Matching To Other Lutron RF Wireless Controls Within 30 FT Radius), Ensure Matching 0-10V Dimming Ballast / Drivers In Ltg Fixtures. Lutron RMJ-ST-DV-B.
03	-	RF Wireless Day-Light Sensor, 10-Yr Batt. Life. Must Be Matching To Other Lutron RF Wireless Controls Within 30 FT Radius. Ctg. Ort Wall (High As Possible) Mtd. Lutron LRF2-DCRB-White Series. Placemnt Per Manuf.
04	-	RF Wireless 180D Ltg Occupancy-Vacancy Sensor, 10-Yr Batt. Life. Must Be Matching To Other Lutron RF Wireless Controls Within 30 FT Radius. Ctg. Ort Wall (High As Possible) Mtd. Lutron LRF2-180-O Series ()
05	-	RF Wireless 090D Ltg Occupancy-Vacancy Sensor, 10-Yr Batt. Life. Must Be Matching To Other Lutron RF Wireless Controls Within 30 FT Radius. Ctg. Ort Wall (High As Possible) Mtd. Lutron LRF2-090-O Series.
06	-	RF Wireless Hall Ltg Occupancy-Vacancy Sensor, 10-Yr Batt. Life. Must Be Matching To Other Lutron RF Wireless Controls Within 30 FT Radius. Ctg. Ort Wall (High As Possible) Mtd. Lutron LRF2-Hall-O Series.
07	-	RF Wireless Ltg Wall Control Station, 10-Yr Batt. Life. Must Be Matching To Other Lutron RF Wireless Controls Within 30 FT Radius. Lutron PICO Series, Verify Final Color, 3-Button With Raise-Lower Dimming, 3BRL.
08	-	RF Wireless Ltg Wall Control Station, 10-Yr Batt. Life. Must Be Matching To Other Lutron RF Wireless Controls Within 30 FT Radius. Lutron PICO Series, Verify Final Color, 3-Switch Button Station-3B.
09	-	Future Note Space
10	-	Extend Ckt Thru LV Switching Relay In LV Relay Pnl LVRP, Provide Unswitched Leg For Any Battery Packs.
11	-	Future Note Space
12	-	Future Note Space
13	-	1.0" EC Stubbed Down & Out, 5 Feet From Building, Staked & Marked For Future Use. Stub Empty Conduit Up To Above Accessible Ceiling, Cap & Label "For Future Use".
14	-	RF Wireless Ltg Control Switching Relay, 120/277V, 16A Rated, J-Box Mtd. One Per Switch-Leg Required. (Must Be Matching To Other Lutron RF Wireless Controls Within 30 FT Radius). Lutron RMJ-16R-DV-B.
17-159	-	End Of Legend Notes



LIGHTING CONTROLS - WIRELESS TYPE			
SYMBOLS	MTG UNO	GENERIC DESCRIPTIONS	RATINGS MANUF. & SERIES LUTRON - UNO
WIRELESS DEVICES			
(WB)	Wall Mtd 48" AFF UNO	(Wireless Push-Button Remote (# Qty Buttons), RF-Based, Wireless Comm, EMI Resistant, UL, FCC Approved, Color (WH,BL,VL,VA,WG) Per Archt-Owner.	Wireless 10 Year Batt Life PICO P-2 Series (01-03 Button - UNO)
(WC)	Ctg Or Wall Mtd High As Possible	(Wireless Corner Occupancy Sensor, RF-Based, Wireless Comm, EMI Resistant, UL, FCC Approved, Ft. Range= 30 Ft Minor / 50 Ft Major Motion.	Wireless 10 Year Batt Life LRF-2-O, 90 Deg Corner Mtd. Coverage
(WH)	Ctg Or Wall Mtd High As Possible	(Wireless Hall-Way Occupancy Sensor, RF-Based, Wireless Comm, EMI Resistant, UL, FCC Approved, Ft. Range= 6Wx50L; 8Wx100L; 10Wx150L.	Wireless 10 Year Batt Life LRF-2-O, Hall-Way Long Coverage
(WO)	Ctg Or Wall Mtd High As Possible	(Wireless Open Area Occupancy Sensor, RF-Based, Wireless Comm, EMI Resistant, UL, FCC Approved, Ft. Range= 30Wx50L Minor; 50Wx60L Major.	Wireless 10 Year Batt Life LRF-2-O, 180 Deg Coverage
(WD)	Ctg Mtd Place & Aim Per Manuf	(Wireless Daylight Compensating Sensor, RF-Based, Wireless Comm, EMI Resistant, UL, FCC Approved, 0-100% Range.	Wireless 10 Year Batt Life LRF2-DCRB-WH (White)
(VR)	Plenum Mtd On JBox	(Wireless Receiver-Power Pack-Dimming Relay, Zero-Crossing Switching, RF-Based Wireless Comm, EMI Resistant, Plenum-Rated, UL, FCC Approved.	120/277 V-50/60 Hz, 1.0 W 1P-16 Amp Rated RMJ-16R-DV-B (Where Noted- LV 24V-1.0A) Dry-Contact Load Control
(WS)	Plenum Mtd On JBox	(Wireless Receiver-Power Pack-Dimming Module, Zero-Crossing Switching, RF-Based Wireless Comm, EMI Resistant, Plenum-Rated, UL, FCC Approved, 0-10V Compatible Dimming Ballast-Drivers Read.	120/277 V-50/60 Hz, 1.0 W; NEC Class I or II Ballast Ctl. Wiring RMJ-ST-DV-B
(WV)	Plenum Mtd On JBox	(Wireless Receiver-Power Pack-Dimming Module, Zero-Crossing Switching, RF-Based Wireless Comm, EMI Resistant, Plenum-Rated, UL, FCC Approved, EcoSystem Dimming Digital Ballast-Drivers Read.	120/277 V-50/60 Hz, 1.0 W; NEC Class I or II Ballast Ctl. Wiring RMJ-ECO32-DV-B (URM-ECO32-DV-B)
COMMENTS & NOTES			
1- All Wireless Devices & Component To Be Of Same Manufacturer. 2- This Design & Products Are Based On Lutron "Radio-Power-Save" System. 3- Color As Selected By Owner / Tenant Or Architect. 4- Products Of Other Manufacturers, Equivalent In Appearance, Features, Performance, Ratings & Size May Be Submitted As Add / Deduct Alternates For Consideration (With Complete Supporting Documentation). 05- Locate & Install All Product In Accordance With Manufacturer's Documented Instructions. 06- Field Verify Exact Final Location Prior To Rough-Ins Per Archt., Owner / User. 07- Control / Grouping Indicated By Lower Case Letters (i.e.-a,b,c).			

LIGHTING FIXTURE SYMBOLS	
SYMBOLS	DESCRIPTIONS
(SEE SCHD.)	LIGHTING FIXTURES, GENERALLY CEILING MOUNTED SHAPE GENERALLY INDICATES SHAPE OF FIXTURE
(SEE SCHD.)	FLUORESCENT STRIP TYPE FIXTURE
(SEE SCHD.)	WALL OR BRACKET MOUNTED TYPE FIXTURE
(SEE SCHD.)	LIGHTING TRACK & FIXTURES
(SEE SCHD.)	EXIT SIGNAGE FIXTURE
(SEE SCHD.)	EXIT SIGNAGE WITH DIRECTIONAL ARROWS
(SEE SCHD.)	EXIT SIGNAGE WITH EMERGENCY FLOOD LIGHTS
(SEE SCHD.)	BATTERY TYPE EGRESS FIXTURES
(SEE SCHD.)	LIGHTING FIXTURE TYPE ID / TAG- SEE LTG FIXTURE SCHEDULE
LIGHTING GENERAL NOTES	
NOTES & COMMENTS	
FIXTURE TYPES ARE INDICATED BY UPPER CASE CHARACTERS SWITCHING GROUPS SHOWN BY LOWER CASE LTRs, WHERE APPLICABLE. CIRCUIT GROUPING SHOWN BY NUMBERS, WHERE APPLICABLE. REFER TO REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. WP INDICATES WEATHER PROOF SWITCH COVER.	

LIGHTING CONTROLS - MANUAL, LINE-VOLTAGE, HARD-WIRED			
SYMBOLS	MTG UNO	GENERIC DESCRIPTIONS	RATINGS MANUF. & SERIES LUTRON/PAS- UNO
MANUAL DEVICES - LINE VOLTAGE TYPE			
(Tx)	48" AFF	(Toggle Switch, 1= SPST; 2= 2PST; 3= 3-Way; 4= 4-Way	20A, Gnd 120V & 277V PT-262-XX
(Kx)	48" AFF	(Key Operated Switch, 1= SPST; 2= 2PST; 3= 3-Way; 4= 4-Way	20A, Gnd 120V & 277V PT-20AC-XX
(Lx)	48" AFF	(Illuminated When On Switch (UNO), 1= SPST; 2= 2PST; 3= 3-Way; 4= 4-Way	20A, Gnd 120V & 277V PT-262-XX
(Ma)	48" AFF	(Momentary Contact Switch, 1-Pole 3-Position (a) Subscript Indicates Switching Group, Etc.	20A, Gnd 120V & 277V TM811-DTMO-XX
(DL)	48" AFF	(Dimmer Line Volt, (1/3) Way, Full-Off, Incand., CFL & LED; NEMA-SSL7, Forward Phs Dim.	120V, G 150W-CFL, 600W-4
(DO)	48" AFF	(Dimmer, 0-10V Analog Control; 1%-100%; On-Off Switch, Level Slider, Pwr-Fail Memory	0-10V Analog Control Wires
(Wx)	48" AFF	(Weather-Proof Toggle Switch, 1-Pole & WP Cover	20A, 120V/277V G PT-262-XX & CA1GL
(SM)	48" AFF	Switch Motor Rated, NEMA 3R Enclosure	3 Pole, 30A, 600V 7803 Switch & 7833 Ends
COMMENTS & NOTES			
1- Devices To Be UL20, Listed & Labeled Where Applicable. 2- Devices To Be NEMA WD-1 & WD-6 Compliant Where Applicable. 3- Devices To Be NFPA (Buy American) Where Available. 4- Devices To Be Legrand / PAS, Plug Tail, Spec. Grade Devices, UNO. 5- Device Face To Decor Style Unless Not Available In Decor Style. 6- Provide Smooth Finish Matching PAS Trade-Master Grade Cover Plates. 7- Color As Selected By Owner / Tenant Or Architect. 8- Products Of Other Manufacturers, Equivalent In Appearance, Features, Performance, Rating & Size, Are Acceptable. 09- Field Verify Exact Final Location Prior To Rough-Ins Per Archt., Owner / User. 10- Control / Grouping Indicated By Lower Case Letters (i.e.-a,b,c). 11- Multiple Adjacent Devices Shall Be Mounted In Multi-Gang Box With Multi-Gang Cover			

LIGHTING CONTROLS - SENSOR, LINE-VOLTAGE, HARD-WIRED			
SYMBOLS	MTG UNO	GENERIC DESCRIPTIONS	RATINGS MANUF. & SERIES HUBBELL - UNO
(V1)	Wall Mtd 48" AFF	(Vacancy Sensor, (1/2) Ckt PIR, Wall Mtd. Auto or Man On, Adjustable Time Off	800W-F1 @ 120V 1200W-F @ 277V (V1-1P) LHRS1-xx-M (V2-2P) LHRS2G-xx-M
(V2)	Wall Mtd 48" AFF	(Ultra-Sonic PIR Dual Sensor, (1/2) Ckt, Self-Adaptive, Off Warning, Man Auto Select 20x15 Minor & 35x30 Major Motion Range	800W-4 @ 120V 800W-4 @ 120V 1200W-F @ 277V (U1-1P) LHMTS1G-xx (U2-2P) LHMTS2G-xx
(P1)	Ctg Mtd Per Manuf	(PIR Occupancy Sensor, (1/2x) Range, Power Pack, RFI & EMI Resistant, Adjust. Delay & Sensitivity P1-500 Sq Ft, P2-1200 Sq Ft Coverage Range	24 VDC Sensor 20A, 120/277V Power Pack (P1>500SF) OMNI-HRL (P2>1200SF) OMNI-HRL
(U1)	Ctg Mtd Per Manuf	(Ultra-Sonic Sensor, (1/2x) Range, Power Pack, RFI & EMI Resistant, Adjust. Delay & Sensitivity U1-500 SF, U2-1100 SF, U3-2200 SF Range	24 VDC Sensor 20A, 120/277V Power Pack (U1>500SF) OMNI-US500 (U2>1100SF) OMNI-US1000 (U3>2200SF) OMNI-US2000
(U2)	Ctg Mtd Per Manuf	(Day/Light Switching (Non-Dim) Sensor, Closed-Loop Light Sensing, Matching Power Pack, RFI & EMI Resistant, Adjust. Delay & Sensitivity	24 VDC Sensor 20A, 120/277V Power Pack NX-JOS Sensor & NX-RC1RUV Power-Pack
(DL)	Ctg Mtd Per Manuf	(Combo (Dual-Tech, USPIR Sensor, Power Pack, RFI & EMI Resistant, Adjust. Delay & Sensitivity 360D-Sensing, 1000 & 2000 SF Range	24 VDC Sensor 20A, 120/277V Power Pack (C1>1000SF) OMNI-DT1000 (C2>2000SF) OMNI-DT2000
COMMENTS & NOTES			
01- Devices To Be UL20, Listed & Labeled Where Applicable. 02- Devices To Be NEMA WD-1 & WD-6 Compliant Where Applicable. 03- Devices To Be NFPA (Buy American) Where Available. 04- Devices To Be Hubbell, Spec. Grade Devices, UNO. 05- Color, If Option, Selected By Owner / Tenant Or Architect. 06- Products Of Other Manufacturers, Equivalent In Appearance, Features, Performance, Rating & Size, Are Acceptable. 07- Field Verify Exact Final Location Prior To Rough-Ins Per Archt., Owner / User. 08- Control / Grouping Indicated By Lower Case Letters (i.e.-a,b,c). 09- Multiple Adjacent Devices Shall Be Mounted In Multi-Gang Box With Multi-Gang Cover			

architecture
interiors
town planning

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DATE 18.07.26 COMMENTS For Pricing, Permitting & Construction

FAYETTE COUNTY TRAINING FACILITY RENOVATION

340 Hewell Road
Jonesboro, Georgia 30236

Prepared for
FAYETTE COUNTY

COMMISSION / JOB NO:
1465.17

SHEET TITLE:
LIGHTING PLAN 2nd LEVEL

SHEET NO:
E-2.2

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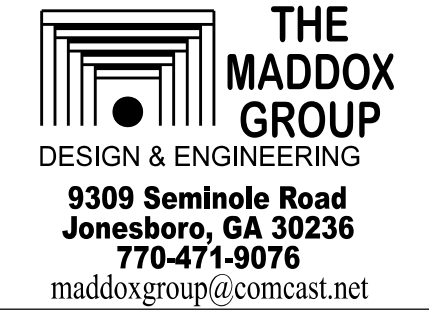
NOTES

- 1- Install Per NFPA, NEC & Local Codes & Requirments.
- 2- All Components U.L. Listed & Labeled & Installed Per U.L.
- 3- All Componets Shall Be Matched & U.L. Listed For Use With Other Devices
- 4- All Cabling Shall Be Per Code & Installed In Protected Manner.

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FAYETTE
COUNTY

E-3.2

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FIRE ALARM (FA) SYSTEM DEVICES			
CLG MTD	WALL MTD	MTG/UNO	DESCRIPTIONS
		8" BFC	FA Detector- Smoke (Type Per Criteria)
		8" BFC	FA Detector- Smoke (Ionization Type)
		8" BFC	FA Detector- Smoke (Photoelectric Type)
		Air Duct	FA Detector- Duct Mtd Type
		8" BFC	FA Detector- Smoke- Beam Transmitter
		8" BFC	FA Detector- Smoke- Beam Receiver
		8" BFC	FA Detector- Heat (Type Per Criteria)
		8" BFC	FA Detector- Heat Combo (Fixed & Rise)
		8" BFC	FA Detector- Heat Fixed Temp
		8" BFC	FA Detector- Heat Rate-Of-Rise
		8" BFC	FA Detector- Flame (Type Per Criteria)
		Per Code	FA Signal: AV Combo Horn-Strobe
		Per Code	FA Signal: Audio Horn Strobe
		Per Code	FA Signal: Visual Strobe Only
		Per Code	FA Signal: AV Combo Speaker-Strobe
		Per Code	FA Signal: Audio Speaker Only
		High As Possible	FA Signal: Trumpet 1-Way Spkr & Strobe
		High As Possible	FA Signal: Trumpet 2-Way Spkr & Strobe
		High As Possible	FA Signal: Trumpet 4-Way Spkr & Strobe
		48" AFF	FA Manual Pull Station
		On Piping	FA FP Sprinkler: Combo Flow & Tamper
		On Piping	FA FP Sprinkler: Water Flow Switch
		On Piping	FA FP Sprinkler: Tamper Switch
		On Piping	FA Ctrl Device: Gas Shut-Off Solenoid
		On Equip	FA Ctrl Device: Relay- Misc
		At Door	FA Ctrl Device: Door Hold-Release
		48" AFF	FA Fire-Fighter Comm: Phone
		24" AFF	FA Fire-Fighter Comm: Phone Accessible
		48" AFF	FA Fire-Fighter Comm: Phone Jack
		Top 60" AFF	FA Control Panel
		Top 60" AFF	FA Voice Panel
		Top 60" AFF	FA Panel System Annunciator
		Top 60" AFF	FA Transponder / Transmitter
		Top 60" AFF	FA Communicator
		Top 60" AFF	FA Elevator Status / Recall
		Top 60" AFF	FA Remote Power & Terminal Unit

NOTES:

- 1- Install Per NFPA, NEC & Local Codes & Requirements.
- 2- All Components U.L. Listed & Labeled & Installed Per U.L.
- 3- All Components Shall be Matched & U.L. Listed For Use With Other Devices
- 4- All Cabling Shall Be Per Code & Installed In Protected Manner.

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