22 June, 2020

Addendum 5

Renovations to 210 Turner Street Carteret County Administration Office Beaufort, NC

The following addendum shall supersede previous information and does hereby become part of the contract documents.

- Clarification: See attached sheets that were inadvertently left out of the original posting of plans.
 - M-3 HVAC Specifications
 - E-1 Electrical Specifications

End of Addendum 5.

DIVISION 15 B - HEATING, VENTILATING AND AIR CONDITIONING

- 1.1 DESCRIPTION OF THE WORK
- A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:
 - . Heating, ventilation, and air conditioning equipment.
- Ductwork.
 Grilles and diffusers.
- Controls and control wiring.
 Condensate piping.
- B. All work under this contract shall be installed in compliance with the latest edition of the following codes and standards insofar as they apply:
- I. ASHRAE Guide 2. National Electric Code.
- 2018 NC State Building Code: Mech Code.
 The Electrical Specifications for this project.
- 5. SMACNA HVAC Duct Construction Standards. All local codes and ordinances.
- ARI rating.
 2018 NC State Building Code: Energy Conservation Code.
- C. These codes are minimum standards. If codes require a more stringent method of construction than the specifications require, the codes shall govern.
- D. The HVAC Contractor shall be licensed in North Carolina and have all local licenses required for the work.
- 1.2 INTENT
- A. The intent of these specification and the accompanying drawing is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The HVAC Contractor shall take this into consideration and include in his bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.
- 1.3 COORDINATION
- A. Coordinate work with other contractors. Notify Owner of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Owner for a decision before resuming operations.
- verify with owner, the placement of equipment, fixtures, outlets, etc. The drawings do not give exact details as to elevations and locations of various pipes, fittings, ducts, conduit, etc., and do not show all offsets and other installation details which may be required.

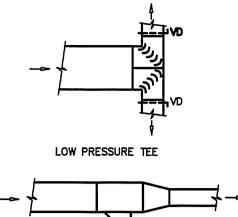
B. Locations shown are approximate. The HVAC Contractor shall

- C. Changes in duct or piping design caused by obstructions shall be submitted to Engineer in sketch form for study and comment prior to execution. Additional cost will not be allowed for this
- 1.4 SHOP DRAWINGS
- A. Shop drawings shall be submitted for all major items of equipment, These may consist of the manufacturer's standard catalog or tear sheets and shall have the exact items being offered clearly identified. Shop drawings shall include but are not limited to the following:
- 1. All equipment and accessories. 2. Grilles and diffusers. 3. Unit sizes and requirements.
- PART 2 -PRODUCTS
- 2.1 EQUIPMENT
- A. All air handling devices must have the manufacturer's recommended filter rack, for 1" thick filters.
- A. Condensate drain piping shall be PVC pipe. Provide tee and plug at changes in direction. Route pipe to proper termination point. All condensate piping shall be insulated with flexible elastomeric insulation. Provide copper piping in plenum areas.
- 2.3 DUCTWORK
- A. Ductwork shall be built in accordance with SMACNA HVAC Duct construction standards. Furnish and install all supply, return, and ventilation ductwork shown, together with splitters, deflectors, dampers, etc. This work shall be constructed of new galvanized prime grade steel sheets. The gauges of metal to be used and the construction and bracing of joints shall be in accordance with the SMACNA recommendations.
- B. Seal all sheet metal joints with fiber impregnated mastic. Support from building structure on strap hangers not over 8 feet apart.
- D. Use manufactured turning vanes in each elbow where required or where indicated on drawings.
- E. Flexible connectors shall be 3 inches wide, of fireproof material and used to isolate noise between equipment and ductwork on supply and return side of all units.
- F. Round runouts, where used, shall be built in accordance with the above standards, and each runout shall also have manufactured side take off, adjustable quadrant damper at all accessible locations and shall be of Owens Corning INL-25 flexible duct with UL label. Flex duct lengths allowed up to 14 feet. Duct must be supported with sufficient hangers in order to prevent sags. Serpentine routing will not be permitted. Quadrant damper to be 22 gauge easily adjustable manually with exterior handle (similar to H&C Kwik-set) and is not to be mounted in side take-off.

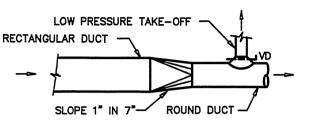
- 2.4 DUCT INSULATION (LOW PRESSURE)
- A. All insulation, linings, coverings and adhesives shall have a flame spread classification of 25 or less and a smoke
- developed rating of not more than 50, exposed exterior piping. All duct insulation shall comply with Section 604, of the N. C. Building Code: Mechanical Code
- C. All supply and return ductwork shall be completely insulated, either internally or externally.
- D. Rectangular ductwork shall be lined with two—inch thick,1.5 lb. per cubic foot density, duct liner, Armstrong, CSG
- E. As an alternative to duct liner rectangular duct may be wrapped with Class I 2", 3/4 lb. density (R-6.5) thick reinforced foil back fiberglass insulation, Owens—corning Series ED or equal. Tape shall be Kraft reinforced foil tape or equal.

Ultraliner, Johns Manville or approved equal.

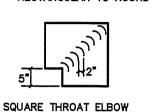
- F. Exhaust air duct shall be insulated on exterior of duct
- with insulation as in "E" above. G. Insulation shall be held inplace with adhesive and welding
- pins 16" on center. H. Duct dimensions shown on the drawings are Net Inside Dimensions
- 2.5 THERMOSTATS
- A. Provide programmable electronic thermostats. B. Submit proposed thermostats for approval.
- 2.6 ROOF PENETRATIONS
- A. Provide pre-manufactured roof flashings compatible with equipment served. B. Coordinate roof work with roof system used. Provide proper flashing as required. C. Provide 1 year warranty on all roof work performed.
- 2.7 DUCT SMOKE DETECTORS
- A. Duct detectors are not required since units air flows are 2000 cfm or less per NCSBC: Mechanical Code, Section 606.2.
- PART 3 EXECUTION
- 3.1 PIPING
- A. The HVAC Contractor shall coordinate such routing with others, to line his work true to adjacent spaces and in a workmanlike manner and to use only short radius 90 degree elbows. Where required, piping to be sturdily supported and separated in a manner satisfactory to the Engineer.
- B. The HVAC Contractor shall paint all exterior refrigerant piping. with UV resistant paint as recommended by the closed cell insulation
- C. Insulate all condensate lines for their entire length with 1/2" closed cell insulation. Install insulation per the manufacturers recommendations.
- 3.2 ELECTRICAL WORK
- A. The electrical contractor shall provide all switches, starters, wire conduit for the air conditioning, heating and ventilation equipment. Control wiring shall be by the heating and air conditioning contractor.
- B. HVAC Contractor is responsible for verifying that power terminals have been properly grounded prior to operating equipment and must find connections to all equipment including control wiring.
- C. All materials and workmanship shall be in accordance with the electrical specifications for the project. All wiring shall be color coded, and as-built wiring diagram prepared showing all connections and colors of wiring and delivered to the Owner.
- Furnish certification for acceptance of control wiring from local electrical inspector prior to acceptance.
- 3.3 CLEAN UP
- A. During construction, keep the site clean of debris. Upon completion, and before final inspection, clean up the premises to remove all evidence of work. In addition upon completion of construction leave equipment clean.
- B. Furnish one box of clean filters, for each size required, at the time of final inspection to the owner.
- 3.4 OPERATOR'S MANUAL AND DIAGRAM
- A. The HVAC Contractor shall prepare in one copy a manual describing the proper maintenance and operation of the systems. This manual shall not consist of standard factory instructions (although these may be included) but shall be prepared to describe this particular job.
- B. The manual shall be bound, indexed, dated and signed by the HVAC Contractor.
- C. Qualified representative of the HVAC contractor shall meet with the designated representatives of the Owner and the Owner's representative shall be instructed in the proper operation and maintenance of the control system and other systems.
- 3.5 GUARANTEE
- A. Guarantee all materials and labor included in the HVAC work for a period of one year from date of final acceptance by the owner. In addition, motor compressors shall be a nonprorated five year warranty. Any part or parts of the work or equipment which prove to be defective during the guarantee period shall be replaced at no additional cost to the
- B. All air flows must be measured and balanced to within 10% of design airflows. All equipment used must have a current certification. Provide two copies of the balance report to the owner at closeaut. The HVAC contractor shall return and re-balance to occupant comfort after 90 days from close-out
 Provide all balance dampers needed for satisfactory operation regardless if shown on the drawings or not, and shift location of thermostats themostats if required for occupancy confort.



LOW PRESSURE BRANCH TAKE-OFF



RECTANGULAR TO ROUND TRANSITION



FULL RADIUS ELBOW

LOW PRESSURE DUCT ELBOWS

THESE DRAWING AND SPECIFICATIONS REPRESENT AN INSTRUMENT OF SERVICE AND AS SUCH SHALL REMAIN IN OWNERSHIP WITH THE ARCHITECT, USE OR REPRODUCTION BY ANY MEANS, IN WHOLE OR IN PART, WITHOUT THE ARCHITECT'S WRITTEN CONSENT, IS PROHIBITED.

DUCT CONSTRUCTION DETAILS M-3 SCALE: NOT TO SCALE

Coasta

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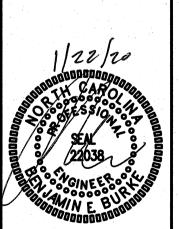
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SPECIFICATIONS & DETAILS

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ENGINEER

BURICE DESIGN GROUP
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SHEET NO.

DIVISION 16 - ELECTRICAL

PART 1 - GENERAL

- 1.1 DESCRIPTION OF THE WORK
- A. Work under this section includes, but is not necessarily limited to, furnishing and installing the following:
- 1. Electrical service and service equipment.
- 2. Lighting and power distribution system. 3. Provide lighting fixtures selected by owner
- with lamps to match. 4. Wiring devices, boxes, cover plates, etc.
- 5. Source of power for all items of equipment. Grounding.
- 7. Other requirements and/or systems where shown. B. All work shall be complete and items, equipment, etc.,
- shall be electrically connected for proper and correct C. All work under this contract shall be installed in accordance
- with the latest edition of the following codes and standards insofar as they apply:
- 1. The 2017 National Electrical Code.
- 2. The National Electrical Safety Code. 3. Underwriter's Laboratories, Inc., Standards and
- approved listings.
- 4. Electrical Testing Labatories standards. North Carolina Building Code, Latest Edition and Revisions.
- 6. All local codes and ordinances.
- D. The Electrical Contractor shall be licensed in the State of North Carolina and have all local licenses required for the work.
- E. Obtain all permits, licenses, inspections, etc., required for the work and pay for the same. Furnish final certificate of inspection and approval from the electrical
- inspector having jurisdiction prior to acceptance of the work. F. All work shall be done by skilled mechanics and shall

present a neat, trim, workmanlike condition when complete. 1.2 INTENT

A. The intent of these specifications and the accompanying drawings is to convey as reasonably as possible the requirements for a complete job ready for the building to operate. The Electrical Contractor shall take this into consideration and include in his base bid allowance for contingencies as will allow him to provide minor pieces of equipment and labor not specifically indicated but required for the job to operate properly, at no additional cost to the Owner.

1.3 COORDINATION

- A. Coordinate work with other contractors. Notify Architect of apparent conflicts early to expedite construction. If structural damage appears imminent, stop work and notify Architect for a decision before resuming operations.
- B. Locations shown are approximate. The drawings do not give exact details as to elevations and locations of various pipes, fittings, ducts, conduit, etc., and do not show all offsets and other installation details which may be required. Coordinate all locations with architect before any rough-in.

1.4 SHOP DRAWINGS

A. Shop drawings shall be submitted for panels and service equipment, lighting, wiring devices, and cover plates. These may consist of the manufacturer's standard catalog or tear sheets and shall have the exact items being offered clearly identified.

PART 2 - PRODUCTS AND MATERIALS

2.1 GENERAL

- A. All material shall be new and shall bear the manufacturer's name, trade name, and UL label where such standard has been established for the particular material. Materials shall be the standard products of manufacturer's regularly engaged in the manufacture of the required type of equipment and the manufacturer's latest approved design.
- 1. Boxes installed in concealed locations shall be set flush with
- the finished surfaces. 2. Provide rated boxes in all fire barriers & walls installed per code.

2.2 NOT USED 2.3 CONDUCTORS

- A. Conductors shall be color coded, sizes #8 and larger may be color
- taped on the job. Color coding shall be: Standard Practice. B. Conductors shall be manufactured by Dodge, Southwire or approved equal. Conductors shall meet the latest requirements of NEMA and
- IPCEA and shall be UL approved.
- C. Metallic sheathed "MC" cable may be used where allowed by N.E.C. D. Conductors shall be spliced and taped as follows:
- 1. Size #10 and #12, use Ideal "Wing Nuts" or T&B "Piggy" connectors. Connectors shall be rated for
- 150 degrees C for use in recessed lighting fixtures. 2. Size #8 and larger shall be solderless screw and screw-clamping type, smoothly covered and shaped with rubber gum type with final cover vinyl plastic electrical type. In lieu of rubber gum and vinyl plastic type, factory fabricated approved preformed
- be UL approved. 3. No split-bolt type connectors may be used.
- E. All branch wire and connections shall be copper and sized per

insulating covers may be used. All connectors shall

- National Electric Code. F. All conductors shall be continuous without splice between junction, outlet, device boxes, etc. No splicing will be permitted in
- panelboard cabinets, safety switches, etc. G. All wiring in mechanical spaces shall be plenum rated.
- H. Provide GFI protection within 6'-0" of any sink.
- I. All multi-wire branch circuits shall comply with 2017 NEC, 210.4(B). J. All wiring at medical facilities shall comply with 2017 NEC, 517.1.

2.4 PANELBOARDS, SAFETY SWITCHES

- A. Panelboards shall comply with NEMA Standard PB 1 Latest Edition and as manufactured by Square D or ITE—Siemens.
- B. The contractor shall be responsible for correctly phasing the circuits in the panelboards.
- C. Safety switches shall be general duty type, size and rating as required for lead service. Safety switches shall be fused or unfused as shown and/or as required. Safety switches serving motor loads shall be horsepower rated for load served.

2.5 NOT USED

2.6 WRING DEVICES

- A. Wiring devices shall be commercial grade by Bryant, Leviton, or
- approved equal. With matching cover. Color by Architect. B. Wiring devices installed under a Kitchen Hood shall have
- C. Wiring devices installed over counters shall comply with ANSI A117.1.

2.7 NOT USED

2.8 CONDUIT

- A. PVC conduit will be allowed where N.E.C. approved.
- B. All service conduit shall be rigid where exposed below 8'-0" AFF or exposed to the elements or hazardous conditions.

PART 3 - EXECUTION

3.1 CIRCUIT GROUNDING

- A. All circuits shall contain an insulated, green, copper grounding conductor, sized in accordance with Table 250-95 of the NEC. Grounding conductors shall be connected to equipment grounding bus in panelboard and securely attached and grounded to the device or enclosure at the other end.
- 3.2 GROUNDING TYPE CONVENIENCE OUTLETS AND SWITCHES
- A. Outlets and switches shall be solidly grounded to equipment grounding system with a green colored insulated conductor. Electrical connections shall be continuous from equipment ground bus in panelboard to the hex nut on the convenience outlet or switch.
- 3.3 MOTORS A. All motors shall be connected to conduit system with short length (minimum length 24" and maximum length 36") of flexible liquidtight

3.4 NOT USED

3.5 EQUIPMENT LABELING

- A. Provide permanent name plates for all panelboards, safety switches, wiring troughs, etc., for identification of equipment controlled, services, etc. Nameplates shall be securely and permanently attached to equipment with stainless steel screws. Nameplates shall include the name of the equipment and where it is fed from.
- B. All switch plates, receptacle plates and outlet covers shall be labeled with machine printed vinyl labels identifying the circuit(s) within.
 - C. All empty conduit runs shall be identified and indicated
 - where they terminate. D. Provide typewritten directory in each panelboard to
- clearly identify each circuit, service, etc.
- 3.6 NOT USED
- 3.7 NOT USED
- 3.8 JUNCTION AND/OR PULL BOXES
- A. Boxes shall be installed where necessary to avoid excessive runs and/or too many bends between outlets.
- 3.9 PULL WIRE
- A. Leave pull wire in each empty conduit run.

3.10 NOT USED

- 3.11 GROUNDING A. All grounding shall be in accordance with Article 250 of the NEC.
- In addition, the following requirements shall be met: 1. Grounding conductors shall be installed as to permit the shortest and most direct path from equipment to ground. All connections to grounding conductors shall be accessible.
- 2. Equipment ground continuity shall be maintained through flexible metal conduit.
- 3. All wiring devices equipped with grounding connection shall be
- solidly grounded to ground system with grounding conductors. 4. The frame of all lighting fixtures shall be securely grounded
- to the equipment ground system with grounding conductors. 5. All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be
- effectively and adequately bonded to ground. 6. All equipment enclosures, and non-current-carrying metallic parts of electrical equipment, raceway systems, etc., shall be

effectively and adequately bonded to ground. 3.12 ELECTRICAL WORK IN CONNECTION WITH OTHER WORK

- A. PLUMBING WORK: The Electrical Contractor shall furnish and install switches and devices as shown and electrically connect electric water heaters, etc. All other electrical work required will be performed by the PLUMBING CONTRACTOR.
- B. HEATING AND AIR CONDITIONING WORK: The Electrical Contractor shall provide all disconnect switches, starters, and associated hardware for the equipment furnished including all line and load side wiring and conduit. Final connections to the equipment will be by the HVAC contractor. All control wiring will be accomplished by the HVAC contractor. Coordinate all work associated with the HVAC contractor.

3.13 CLEAN UP

A. During construction, keep the site clean of debris. Upon completion, and before final inspection, clean up the premises to remove all evidence of work. In addition upon completion of construction leave equipment clean.

3.14 GUARANTEE

A. Guarantee all materials and labor included in the electrical work for a period of one year from date of final acceptance by the Owner. Any part or parts of the work or equipment which prove to be defective during the guarantee period shall be replaced at no additional cost to the Owner.

GENERAL NOTES

- 1 ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES HAVING JURISDICTION.
- 2 ALL BRANCH CIRCUIT CONDUCTORS TO BE COPPER (SERVICE CONDUCTORS MAY BE ALUMINUM WITH SAME AMPACITY AS COPPER CONDUCTORS. RE-SIZE CONDUCTERS AND CONDUIT PER NEC.)
- 3 ALL CIRCUITS TO BE 2 #12, 1 #12 GND IN 1/2" EMT CONDUIT AS A MINIMUM. PROVIDE WRING FOR LARGER CIRCUITS AS REQUIRED BY NEC. RIGID
- CONDUIT IS REQUIRED WHERE EXPOSED BELOW 8'-0" A.F.F.
- 4 ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FEET SHALL BE PROVIDED WITH A PULL WIRE OR FISH TAPE/CORD.
- 5 CONTRACTOR SHALL VERIFY THAT ALL DOOR SWINGS ARE CORRECT BEFORE INSTALLING LIGHT SWITCH OUTLETS.
- 6 ALL BRANCH CIRCUIT CONDUCTORS FROM THE PANEL TO THE FIRST OUTLET SHALL BE INCREASED TO THE NEXT LARGER SIZE WHERE THE LENGTH OF THE HOME RUN EXCEEDS 120 FEET ON 120V AND 208V CIRCUITS.
- 7 THE CORRECT NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS. ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON DRAWINGS OR NOT.
- 8 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANELBOARDS.
- 9 THE ELECTRICAL CONTRACTOR SHALL VERIFY THE TYPE OF CEILING SYSTEM WITH THE GENERAL CONTRACTOR TO INSURE THAT ALL LIGHTING FIXTURES ARE COMPATIBLE WITH THE CEILING SYSTEM BEING INSTALLED. LIGHTING FIXTURES SHOULD NOT BE ORDERED UNTIL TYPE OF CEILING HAS BEEN VERIFIED.
- 10 ELECTRICAL REQUIREMENTS INDICATED ON DRAWINGS MAY DIFFER FROM ACTUAL EQUIPMENT FURNISHED. IF FURNISHED EQUIPMENT DIFFERS FROM RATINGS ON DRAWINGS CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER FOR APPROPRIATE ACTION TO BE TAKEN.
- 11 IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE EXACT BREAKER REQUIREMENTS FOR ALL EQUIPMENT PRIOR TO ORDERING PANEL. ADJUST BREAKER AND WIRE SIZES AS REQUIRED.
- 12 PROVIDE BOXES, JACKS, WIRING AND CONDUIT FROM LOCATIONS SHOWN TO MTP LOCATION. VERIFY EXACT REQUIREMENTS WITH OWNER.
- 13 ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECTS FOR MECHANICAL & PLUMBING EQUIPMENT. DISCONNECTS SHALL BE PER MANUFACTURES RECOMMENDATIONS AND FUSED PER NAME PLATE. PROVIDE NEMA 3R ENCLOSURES ON EXTERIOR. COORDINATE FUSE SIZES.
- 14 THE EC SHALL MEET WITH THE ARCHITECT AND TENANT PRIOR TO INSTALLING OUTLET BOXES TO VERIFY LOCATIONS AND MOUNTING HEIGHTS OF RECEPTACLES AND TELEPHONE

ELECTRICAL LEGEND

LIGHT FIXTURE: LETTER DENOTES FIXTURE TYPE (REFER TO LIGHTING PLAN AND FIXTURE SCHEDULE). NL = NIGHT LIGHT (NOT SWITCHED/ALWAYS ON)

> DUPLEX RECEPTACLE - 120V; MOUNT 18" TO CENTER AFF UNLESS NOTED OTHERWISE; 'WP' INDICATES WEATHER PROOF, 'GFI' INDICATES GROUND FAULT CURRENT INTERRUPT PROTECTED. 'U' INDICATES RECEPTACLE WITH (2) USB PORTS.



FLOOR OR CEILING OUTLET (AS NOTED) - 120V

SPECIAL PURPOSE RECEPTACLE - REFER TO POWER PLAN AND PANEL SCHEDULE

SWITCH WITH INTEGRAL PIR/US MOTION SENSOR FOR AUTOMATIC SHUT-OFF WITH UP TO 2 HOUR ADJUSTABLE DELAY.

DIMMABLE LIGHT SWITCH

MOTOR RATED SWITCH

JUNCTION BOX

TELE/DATA OUTLET - PROVIDE JUNCTION BOX WITH CONDUIT BACK TO MTP. PROVIDE (1) TELEPHONE JACK AND (1) CAT 5 DATA JACK

SINGLE-POLE HOMERUN TO PANELBOARD

TWO-POLE OR 3-POLE HOMERUN TO PANELBOARD

PHOTOCELL (LED COMPLIANT)

DISCONNECTING MEANS AS REQUIRED BY CODE

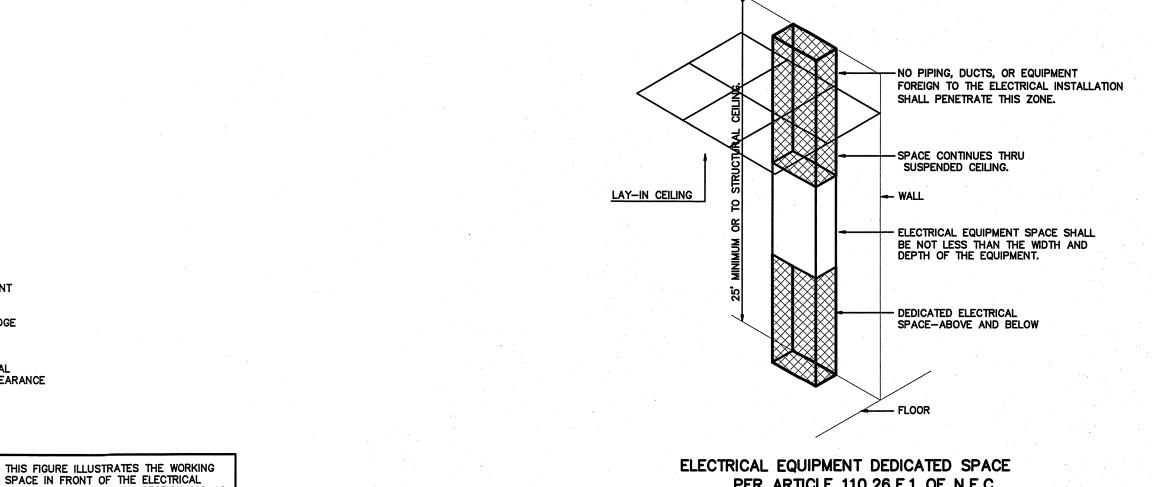
EXIT EXIT LIGHT

EMERGENCY EGRESS FIXTURE

---- BRANCH CIRCUIT WRING

---- SWITCH LEG GROUND CONNECTION

DISTRIBUTION PANELBOARD PANEL A



TELECTRICAL CLEARANCES E-I SCALE: NTS

- STRUCTURAL CEILING

SUSPENDED CEILING

- ELECTRICAL EQUIPMENT

- EVEN WITH FRONT EDGE

DEDICATED ELECTRICAL

EQUIP. WORKING CLEARANCE

EQUIPMENT REQUIRED BY SECTION 110-16 OF THE N.E.C.

EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE

OR GROUNDED PARTS ON THE OTHER SIDE OF THE

WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR

INSULATED BUSBARS OPERATING AT NOT OVER 300V

EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED

3 EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK

SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1

WHERE THE CONDITIONS ARE AS FOLLOWS:

SHALL NOT BE CONSIDERED LIVE PARTS.

PARTS ON THE OTHER SIDE.

WITH THE OPERATOR BETWEEN.

OF EQUIPMENT

30" MINIMUM OF WIDTH OF EQUIP

ELECTRICAL EQUIPMENT WORKING CLEARANCE

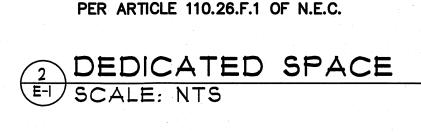
PER ARTICLE 110-26 OF N.E.C.

WORKING CLEARANCES

NDITION: 1

MIN. CLEAR DISTANCE IN FEET

3-1/2





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ELECTRICAL **SPECIFICATIONS**

> DWG BY: RM CKD BY: BEB **REVISIONS**

> > SHEET NO.

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VOLTAGE TO

GROUND NOMINAL