

ELECTRICAL NOTES :

PART 1 - GENERAL

- 1.1 GENERAL: THE GENERAL AND SPECIAL CONDITIONS AND REQUIREMENTS OF THE CONTRACT AND SPECIFICATIONS AS WELL AS PLANS AND SPECIFICATIONS OF OTHER DISCIPLINES AND TRADES SHALL APPLY AND BE PART OF THE WORK HEREBY SPECIFIED. THESE SPECIFICATIONS AND THE ACCOMPANYING PLANS ARE INTENDED TO PROVIDE FOR THE COMPLETE FURNISHING AND INSTALLATION OF THE ELECTRICAL SYSTEMS. "WORKMANSHIP" MEANS TURNING AND INSTALLATION.
1.2 COMPLIANCE: WORKMANSHIP, MATERIALS AND INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF NFPA, NEMA, IEC, ASTM, OSHA, IHS, HEALTH AGENCIES, AND OTHER APPLICABLE NATIONAL, STATE, AND LOCAL CODES (FSC 2020 7TH ED. AND NEC 2020) PERTAINING TO REGULATIONS ESTABLISHED BY REGULATORY AGENCIES. CONTRACTOR SHALL ALSO MEET OTHER REGULATIONS AND REQUIREMENTS WHERE SUCH ARE MORE STRINGENT THAN THOSE CITED ABOVE.
1.3 WORKMANSHIP: ALL WORK SHALL BE PERFORMED BY CONTRACTORS LICENSED IN THEIR RESPECTIVE DISCIPLINES. WORK SHALL BE DONE IN A FIRST CLASS MANNER, FULLY OPENING AND TO THE ACCEPTANCE OF THE ARCHITECT/OWNER. CONTRACTOR SHALL PROVIDE FOR ALL NECESSARY LAGS AND WAGERS REQUIRED FOR COMPLETION OF THE WORK INCLUDING BUT NOT LIMITED TO CONNECTIONS TO RELATED WORK SUCH AS CONNECTION TO EXISTING SYSTEMS, DIMENSIONS AND BACKFALLING.
1.4 MATERIALS: CONTRACTOR SHALL PROVIDE ALL NEW MATERIALS OF AMERICAN MANUFACTURE, UNLESS THE ARCHITECT/OWNER'S LABORATORY (OJ) LISTS AN UNLIEABLE MATERIALS SHALL BE ACCEPTABLE AND ABOVE STANDARD QUALITY NORMALLY USED FOR THE PURPOSE AS CALLED FOR ON PLANS. SUPPLEMENTAL MATERIALS, PRODUCTS AND COMPONENTS NECESSARY TO COMPLY WITH THE INTENT OF THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS, BUT NOT NOTED OR SPECIFIED ON THESE SECTIONS, SHALL BE PROVIDED BY CONTRACTOR AS REQUIRED FOR COMPLETION OF THE WORK AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND COORDINATING WITH ALL EXISTING SYSTEMS AND EQUIPMENT DURING SHIPMENT OR INSTALLATION SHALL BE TOUCHED UP AND RETURNED TO FACTORY FINISH, REPLACED WHERE NOT ACCEPTABLE.
1.5 PERMITS & INSURANCE: CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, TAXES, INSPECTIONS, TESTS, FINES AND OTHER ITEMS AS REQUIRED FOR THE INSTALLATION OF COMPLETE ELECTRICAL SYSTEMS. CONTRACTOR SHALL MAINTAIN AND PROVIDE ALL REQUIRED INSURANCE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
1.6 EXISTING CONDITIONS: BEFORE BIDDING CONTRACTOR SHALL VISIT THE JOB SITE AND ASCERTAIN ALL EXISTING CONDITIONS WHICH WILL AFFECT THE WORK FAILURE TO DO SO WILL NOT BE ACCEPTED AS A REASON FOR REQUESTING EXTRA PAY. THE EXISTING CONDITIONS RESULT IN EXTRA MATERIAL OR LABOR ANY EXISTING CONDITION FOUND BY THE CONTRACTOR WHICH WILL ADVERSELY AFFECT THE WORK SHALL IMMEDIATELY BE REPORTED TO THE ARCHITECT/OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENTS OR REPAIRS OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREAS.
1.7 UTILITY COMPANIES: BEFORE SUBMITTING BID CONTRACTOR SHALL CHECK WITH WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, CABLE TV AND OTHER UTILITY COMPANIES SUPPLYING SERVICE TO THIS INSTALLATION TO DETERMINE INSTALLATION STANDARDS AND EQUIPMENT REQUIREMENTS TO BE INCLUDED IN THE BID. EXCEPT WHERE UTILITY REQUIREMENTS SHOW OTHERS, PROVIDE TEMPORARY ELECTRICAL SERVICES FOR ALL TRADES AS REQUIRED.
1.8 PLANS: DRAWINGS ARE GENERALLY DIMENSIONAL, INTENDED TO SHOW APPROXIMATE EQUIPMENT LOCATIONS AND ARRANGEMENTS, NOT TO SHOW EVERY MINOR DETAIL. PLANS SHALL NOT BE SCALED TO DETERMINE EXACT LOCATION AND DIMENSIONS.
1.9 INTERFERENCE: CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHER TRADES SO THAT INTERFERENCES WITH EXISTING CONDITIONS, CONDUITS, PIPING, EQUIPMENT, ARCHITECTURAL, STRUCTURAL MEMBERS WILL BE AVOIDED.
1.10 SHOP DRAWINGS: PRIOR TO PLACING AN ORDER AND BEFORE INSTALLATION, SUBMIT FOR REVIEW PROPERLY IDENTIFIED AND DATED SHOP DRAWINGS AND MANUFACTURERS LITERATURE CONFORMING TO SPECIFICATIONS, ALL APPROVALS, MATERIALS FINISHES, ACCESSORIES AND INSTALLATION DIRECTIONS WHERE REQUIRED OF THE EQUIPMENT SPECIFIED. FACTORY CERTIFIED PRINTS SHALL BE PROVIDED FOR ALL MAJOR ITEMS OF EQUIPMENT AND SPECIFIED. SUBMISSION OF EQUIPMENT FOR APPROVAL SHALL BE MADE COMPLETE AND ALL AT THE SAME TIME.
1.11 SUBSTITUTIONS: PRODUCTS AND MATERIALS CALLED OUT BY TRADE NAME AND/OR CATALOG NUMBERS ESTABLISH A STANDARD OF QUALITY, APPEARANCE, PERFORMANCE AND DIMENSION. CONTRACTOR SHALL BASE HIS PROPOSAL ON THESE ITEMS AS THEY SHALL BE CONSIDERED AS A STANDARD BASIS OF BIDDING. REQUESTS FOR SUBSTITUTIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER, DEMONSTRATING THAT PRODUCT IS OF COMPARABLE AND BASIC DESIGN, CONSTRUCTION STANDARDS AND WARRANTIES, DIMENSIONS TO FIT WITHOUT CHANGE, AND DOES NOT CAUSE EXTRA WORK FOR OTHER TRADES. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVING EQUALITY OF SUBSTITUTIONS. ARCHITECT/ENGINEER WILL, UNDER NO CIRCUMSTANCES, BE REQUIRED TO PROVE SUCH ITEM IS OR IS NOT OF EQUAL QUALITY TO THE SPECIFIED ITEM.
1.12 WARRANTIES: AFTER THE SYSTEM IS INSTALLED, THE CONTRACTOR SHALL CONDUCT AN OPERATING TEST FOR APPROVAL AND ACCEPTANCE BY THE ARCHITECT/OWNER ENTIRE ELECTRICAL WORK, INCLUDING PARTS AND LABOR SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL WRITTEN ACCEPTANCE THEREOF AGAINST DEFECTIVE WORKMANSHIP, CONSTRUCTION AND WORKMANSHIP, WHERE APPLICABLE. LOWER WARRANTIES FOR CERTAIN COMPONENTS SHALL APPLY AS REQUIRED AND NOT BE REQUIRED IN ANY WAY. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE TO THE OWNER AND SHALL INCLUDE REPLACEMENTS AND/OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREAS.
1.13 RECORD DRAWINGS: MAINTAIN A COMPLETE SET OF PRINTS FOR INDICATING ALL CHANGES. USE COLORED PENS TO MARK CHANGES AT THE TIME OF EXECUTION AND DELIVER THE SET TO ARCHITECT/ENGINEER UPON COMPLETION. CONTRACTOR SHALL STAMP "AS BUILT" ON PRINTS AND PLANS, DATE AND SIGN IN INK.

PART 2 - PANELBOARDS

- 2.1 SHOP DRAWINGS: SUBMIT SHOP DRAWINGS OF THE FOLLOWING PRODUCTS:
A. PANELBOARDS, OVERCURRENT PROTECTION DEVICES, CIRCUIT BREAKERS, SWITCHES, FUSES.
B. WIRING, CONDUIT, CONDUITS, ENCASEMENTS, FLOOR AND OUTLET BOXES.
C. WIRING DEVICES, RECEPTACLES, OUTLETS, LIGHT SWITCHES, DIMMERS, PLATES, FLUXCOILS.
D. LIGHTING FIXTURES, LAMPS, POLES AND RELATED HARDWARE.
E. TIMECLOCKS, PHOTOCELLS AND CONDUCTORS.
2.2 PANELBOARDS SHALL BE OF THE CIRCUIT BREAKER TYPE. CIRCUIT BREAKERS SHALL BE MOLDED CASE, BOLT-ON TYPE OF QUICK-BREAK ACTION, THERMAL MAGNETIC TRIP, FULL SIZE DEVICES. LOAD CENTER TYPE PANELBOARDS MAY BE USED WHERE PREVIOUSLY APPROVED BY ENGINEER AND INLINE ACCESSORIES, UNLESS OTHERWISE NOTED ON PLANS. MINIMUM EQUIPMENT RATED SIN PATING SHALL BE 10,000 AT 120/200V, PHASES SHALL BE BALANCED WITHIN 10 PER CENT. MANUFACTURER SHALL BE "0"
2.3 DISCONNECTS: SWITCHES SHALL BE QUICK-BREAK QUICK-ACTION, LOCKABLE TYPE, SERVICE DISCONNECT SHALL BE SERVICE PANEL, PROVIDE DUAL ELEMENT FUSES FOR MOTOR DRIVEN MECHANICAL EQUIPMENT SIZED PER MANUFACTURER'S RECOMMENDATION AND EQUIPMENT NAMEPLATE, FIELD COORDINATED BEFORE ACTUAL INSTALLATION. MANUFACTURER SHALL BE SERVICE.
2.4 RACEWAYS:
A. RIGID AND IMC: NOT-WITTED GALVANIZED INCLUDING THE THREADS, PROVIDE FOR EXTERIOR LOCATIONS, THESE EXPOSED TO PHYSICAL DAMAGE AND FOR ELIMINATING ELLS AND RISERS INTO GROUND AND SLAB. INSTALL ELLS AND RISERS STUBBED UP 6 INCHES FROM CONCEALED SLAB RISERS, 48" ABOVE GROUND WHERE EXPOSED OR WALL, PAINT FINISHED BELOW SLAB OR FINISHED EXTERIOR COLOR WITH TWO (2) COATS OF BRUSHABLE PRIME UP TO A POINT 2" ABOVE SLAB.
B. EMT: MAY BE USED FOR INTERIOR SPACES IN DRY LOCATIONS, WHERE NOT EXPOSED TO PHYSICAL DAMAGE, FITTING SHALL BE THE BEST SET SYSTEM.
C. PVC SCHEDULE 40, MAY BE USED WHERE CONDUIT IS RUN IN CONCRETE SLABS WITH 4" COVER, 12" BELOW SLAB, WHERE BURIED 24" BELOW FINISHED GRADE AND 30" UNDER UNUSUAL TRAFFIC AREAS.
D. FLEXIBLE METALLIC CONDUIT: LIGHTING FIXTURES, MOTORS, TRANSFORMERS AND VIBRATING EQUIPMENT CONNECTIONS IN LENGTHS NOT TO EXCEED 10'.
E. PVC INSULATED FLEXIBLE METAL CONDUIT FOR LOCATIONS OUTSIDE AND/OR EXPOSED TO MOISTURE, GREASE/OIL OR APPROVED EQUAL.
F. RIGID BELOW SLAB SHALL BE PROVIDED WITH A YELLOW REGION TAPPED ALONG THROUGH 6" BELOW GRADE FOR FACTORY IDENTIFICATION.
F. IMC CABLE MAY BE USED WHERE ALLOWED BY CODE.
2.5 CONDUCTORS: SOFT-DRAWN BARE COPPER/ALUMINUM CENTER INSULATED IN CONDUIT, MINIMUM SIZE SHALL BE #14 FOR POWER WIRING AND #16 FOR CONTROL CIRCUIT, #14 FOR 15A CIRCUIT BREAKERS WHERE INDICATED, PROVIDE #10 WIRES FOR 120V POWER CIRCUIT WIRING LONGER THAN 100 FEET, INSULATION SHALL BE RUBY THRU/THERM FOR GENERAL USE, TAN IN SOCS AND REDS AND COLOR CODED THROUGHOUT FOR RED AND TAN TRACK STANDARDS, WIRING IN DUCTS, PLUMBING AND OTHER AIR HANDLING SPACES SHALL COMPLY WITH NEC 300-22, UNLESS PREVIOUSLY APPROVED BY OWNER, ENGINEER AND INSURE AUTHORIZES, NO USE FOR BRANCH CIRCUITS PER NEC 304.
2.6 SPLICES SHALL BE MADE WITH UL LISTED MECHANICAL PRESSURE SOLDERLESS CONNECTIONS, BUNNY SERIES THE OR APPROVED EQUAL. FLEXIBLE SPLICES AND TERMINALS SHALL BE MADE MECHANICALLY USING COMPRESSION TYPE SPLICES OR LUGS AND CONNECTION TO PIPES AND SPLICERS AS MANUFACTURED BY BUNNY OR THOMAS & BETTS.
2.7 WIRING DEVICES SHALL BE RESIDENTIAL SPECIFICATION GRADE, FLUSH MOUNTED, MANUFACTURED BY HUBBELL, SLATER OR LUTHER.
A. SWITCHES: THREE TYPE, 20A 120/277V SINGLE POLE, THREE-WAY WHERE NOTED. SWITCHES IN THE SAME AREA AND FOR FAN/LIGHT CONTROL SHALL BE GANGED TOGETHER IN THE SAME BOX.
B. DIMMERS: LINEAR ON/OFF TYPE, RATED 20A 800W MINIMUM FOR GENERAL AREA, 1000W FOR DINING ROOM AND OTHER AREAS NOTED.
C. RECEPTACLES: 20A 120V GROUNDING TYPE DUPLEX, 15A WHERE FED FROM 15A CIRCUIT BREAKERS, SPECIAL OUTLETS SIZED TO MATCH CIRCUIT BREAKERS AS NOTED ON PLANS. QUAD/PLEX OUTLETS AND SWITCH/OUTLET COMBINATIONS SHALL HAVE THE SAME FACE PLATE. ISOLATED GROUND TYPE SHALL BE PROVIDED WITH SEPARATE ISOLATED GROUND WIRE.
D. TELEPHONE AND DATA OUTLETS: TELEPHONE/DATA JACKS AND WIRING AS SELECTED BY OWNER UNLESS OTHERWISE NOTED & OTHERWISE, PULL WIRE WITH 12" SLACK AT EACH END, RUN IN 3/4" EMPTY CONDUIT.
E. MOUNTING HEIGHTS: WHERE NOT ESTABLISHED ON PLANS OR LEGEND, MOUNTING HEIGHTS SHALL BE AS FOLLOW:
MH = 18" AFF - GENERAL AREA RECEPTACLES AND TELEPHONE OUTLETS.
MH = 42" AFF - COUNTER RECEPTACLES AND TELEPHONE OUTLETS.
MH = 36" AFF - KITCHEN AND OTHER EQUIPMENT OUTLETS.
MH = 48" AFF - SWITCHES AND DIMMERS.
MH = 52" AFF - WALL MOUNTED PHONES.
2.8 LIGHTING FIXTURES SHALL BE COMPLETE WITH ALL NECESSARY LAMPS, BALLASTING, LAMP HOLDERS, REFLECTORS, GLASSWARE, POLES, SHES AND MOUNTING ACCESSORIES AS REQUIRED TO PROVIDE FOR A COMPLETE INSTALLATION. LIGHTING FIXTURES SHALL BE SELECTED BY ARCHITECT/OWNER, PROVIDED BY CONTRACTOR, REFER TO ARCHITECTURAL DRAWINGS FOR COLOR, FINISH AND EXACT MOUNTING DETAILS. ELECTRICAL POWER AND LIGHTING SYSTEMS TO COMPLY WITH THE 2014 NEC SECT. 408.

PART 3 - RECEIPTABLES

- 3.1 TESTS: PROVIDE ALL NECESSARY INSTRUMENTS AND SPECIAL APPARATUS TO CONDUCT ANY TESTS THAT MAY BE REQUIRED TO INSURE SYSTEM IS FREE OF ALL IMPROPER GROUNDING AND SHORT CIRCUITS AND THAT ALL FEEDERS ARE PROPERLY BALANCED. SYSTEM SHALL BE CHECKED AND COMPLETION TO CONFORM WITH THE FULL REQUIREMENTS AND INTENT OF THE DRAWINGS AND SPECIFICATIONS.
3.2 CONDUIT RUS, RACEWAYS AND PIPING SHALL BE CONCEALED IN WALLS, CEILING, SLAB AND PARTITIONS & NO RACEWAY SHALL BE EXPOSED WITHIN INTERIOR SPACES. ALL OUTLETS AND WIRING DEVICES SHALL BE FLUSH MOUNTED.
3.3 GROUNDING AND BONDING SHALL COMPLY WITH NEC 250. ALL METALLIC RACEWAYS SHALL BE GROUNDING AND BONDING PER NEC 250. NON-METALLIC RACEWAYS SHALL BE PROVIDED WITH A GROUNDING CONDUCTOR SIZED PER NEC 250-122.
3.4 ELECTRICAL EQUIPMENT SPACE AND INSTALLATION SHALL BE IN ACCORDANCE WITH NEC 110-15A AND 304-2. WIRING IN DUCTS, PLUMBING AND OTHER AIR HANDLING SPACES SHALL COMPLY WITH NEC 300-22.
3.5 PANELBOARDS, SWITCHES, CONTROLLERS, CONTROL PANELS, TIMECLOCKS AND OTHER ELECTRICAL COMPONENTS SHALL BE CLEARLY AND PERMANENTLY IDENTIFIED. INDICATE PANELBOARDS CIRCLES ON UNLIEATED TYPED DISCREETORY CHSD HOLLERS WITH CLASS COVER AND METAL FRAME INSTALLED ON INSIDE OF PANELBOARD DOOR MARK CONDUCTORS WITH PREPRINTED ADHESIVE MARKERS AS MANUFACTURED BY W.L. BRADY CO. OR THOMAS & BETTS.
3.6 CONTRACTOR SHALL MAKE ALL NECESSARY DIMENSIONS, CUTTING AND REWORKING AS REQUIRED FOR THE PROPER EXECUTION OF THIS WORK.
3.7 CONTRACTOR SHALL FIELD SPOT LOCATION OF WORKING DEVICES TO VERIFY AND GET APPROVAL FROM ARCHITECT/OWNER BEFORE INSTALLATION.
3.8 ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND PROVIDED BY THIS CONTRACTOR. EQUIPMENT TO BE REMOVED NOT CLAIMED BY THE OWNER SHALL BE REMOVED FROM THE JOB SITE AS DIRECTED, FIELD VERIFY WITH OWNER BEFORE REMOVAL.
3.9 AIR CONDITIONING: BEFORE COMMENCING WORK CONTRACTOR SHALL FIELD COORDINATE NAMEPLATE INSTALLATION REQUIREMENTS AND, IF NECESSARY, UPDATE ELECTRICAL PROFESSIONAL WIRING AND CONDUIT AS REQUIRED TO MEET NEC AND MANUFACTURER'S RECOMMENDATIONS.
3.10 WITH IN THE LIMITS ALL THE CIRCUITS WILL BE CONCEAL, WHERE ELECTRICAL IS ON AN CONCRETE SLAB, CONDUITS AND JUNCTION BOXES WILL BE EMBEDDED AND FACE OF JUNCTION BOXES WILL BE FLUSH WITH EXPOSED WALL/FLOOR.
3.11 IN ALL AREAS SPECIFIED IN 210.52, ALL 125 VOLT, 15 AND 20 AMP. RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT AS PER NEC CODE SECTION 408.11.
3.12 COMPLY AS REQUIRED AS STATED IN NEC ART. 210.8.
3.13 ALL ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC ART. 110.26.
3.14 COMPLY AS REQUIRED AS STATED IN NEC ART. 308.12.

ELECTRICAL SYMBOL LEGEND

BOXES & FITTINGS: CEILING MOUNTED JUNCTION BOX, WALL MOUNTED JUNCTION BOX, 18" AFF. OR AS OTHERWISE NOTED. FIRE ALARM WIRE LEGEND: MEDIUM - SCHEDULE FAN - EQUAL TO #7 675 PLP, #10 1.52, #16 1.52, #18 1.52. LIGHTING: CONDUIT OR NORMAL CIRCUIT, SURFACE OR PERMANENT MOUNTED FLUORESCENT FIXTURE, SURFACE OR PERMANENT MOUNTED FLUORESCENT FIXTURE WITH 90 WEL EMERGENCY BATTERY BACK-UP, SURFACE MOUNTED SINGLE FACE EXIT LIGHT, WALL MOUNTED EXIT LIGHT FIXTURE WITH ARROWS AS INDICATED, WITH 90 WEL EMERGENCY BATTERY BACK-UP, WALL MOUNTED EXIT LIGHT FIXTURE WITH ARROWS AS INDICATED, WITH 90 WEL EMERGENCY BATTERY BACK-UP, SURFACE MOUNTED DOUBLE FACE EXIT LIGHT, WALL MOUNTED DOUBLE FACE EXIT LIGHT, COMBINATION SINGLE FACE EXIT LIGHT AND BATTERY BACK-UP, PERMANENT MOUNTED FLUORESCENT FIXTURE, PERMANENT MOUNTED FLUORESCENT FIXTURE WITH 90 WEL EMERGENCY BATTERY BACK-UP. MISCELLANEOUS: TRANSFORMER WALL OR FLOOR MOUNTED, SIZE AND WIRING AS INDICATED ON DRGS, GROUND BOX (BROOKS BUS), BATTERY BACK-UP LIGHT CONNECTED AHEAD OF LOCAL LIGHT SWITCH, GENERATOR ANNUNCIATOR PANEL AS PER NFPA 101, TELEPHONE CABLE, 18" AFF, ROUTE 3/4" DUPLEX CONDUIT UP TO CEILING, COMBINATION TELEPHONE/DATA OUTLET, CONDUIT EXPANSION JOINT, LIGHTING PROTECTION AIR TERMINAL, ADA PUSH-BUTTON WEATHER PROOF, METERED DAMPER, FIRE SMOKE DAMPER, VARIABLE AIR VOLUME BOX. RECEPTACLES: 120V, 1 PHASE, 60 HZ, 20 AMP, DUPLEX RECEPTACLE WITH 18" AFF, SAME AS ABOVE EXCEPT WITH 48" ABOVE COUNTER, 120V, 1 PHASE, 60 HZ, 20 AMP, DUPLEX RECEPTACLE WITH 18" AFF, SPECIAL PURPOSE RECEPTACLE, CEILING MOUNTED RECEPTACLE, CEILING MOUNTED RECEPTACLE, 20 AMP GROUNDING TYPE W/1/8" THICK COUPLER, E.C. TO PROMOTE OWNER WITH (20) THIS LOCK & 20 AMP, 250V "50" CODE CEILING TO FLOOR LEGS (1) WIRE OUTLET AT THE END & (1) FEMALE ON OTHER FOR SWANT USAGE, CEILING MOUNTED RECEPTACLE, 20-20 AMP GROUNDING TYPE W/1/8" THICK COUPLER, E.C. TO PROMOTE OWNER WITH (6) THIS LOCK & 20 AMP, 250V "50" CODE CEILING TO FLOOR LEGS (1) WIRE OUTLET AT THE END & (1) FEMALE ON OTHER FOR SWANT USAGE, RECESSED FLOOR MOUNTED TELEPHONE/DATA OUTLET, RECESSED FLOOR MOUNTED DUPLEX RECEPTACLE.

CHAMPLAIN TOWERS SOUTH CONDOMINIUM 8777 COLLINS AVENUE SURFSIDE, FLORIDA 33154

PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION

OFFICE COPY

APPROVED TOWN OF SURFSIDE Address 8777 Collins Ave Permit No. 21-466 Planning & Zoning Board Building Official Date Chief Electrical Inspector Date Chief Plumbing Inspector Date Chief Mechanical Inspector Date Structural Engineer Date

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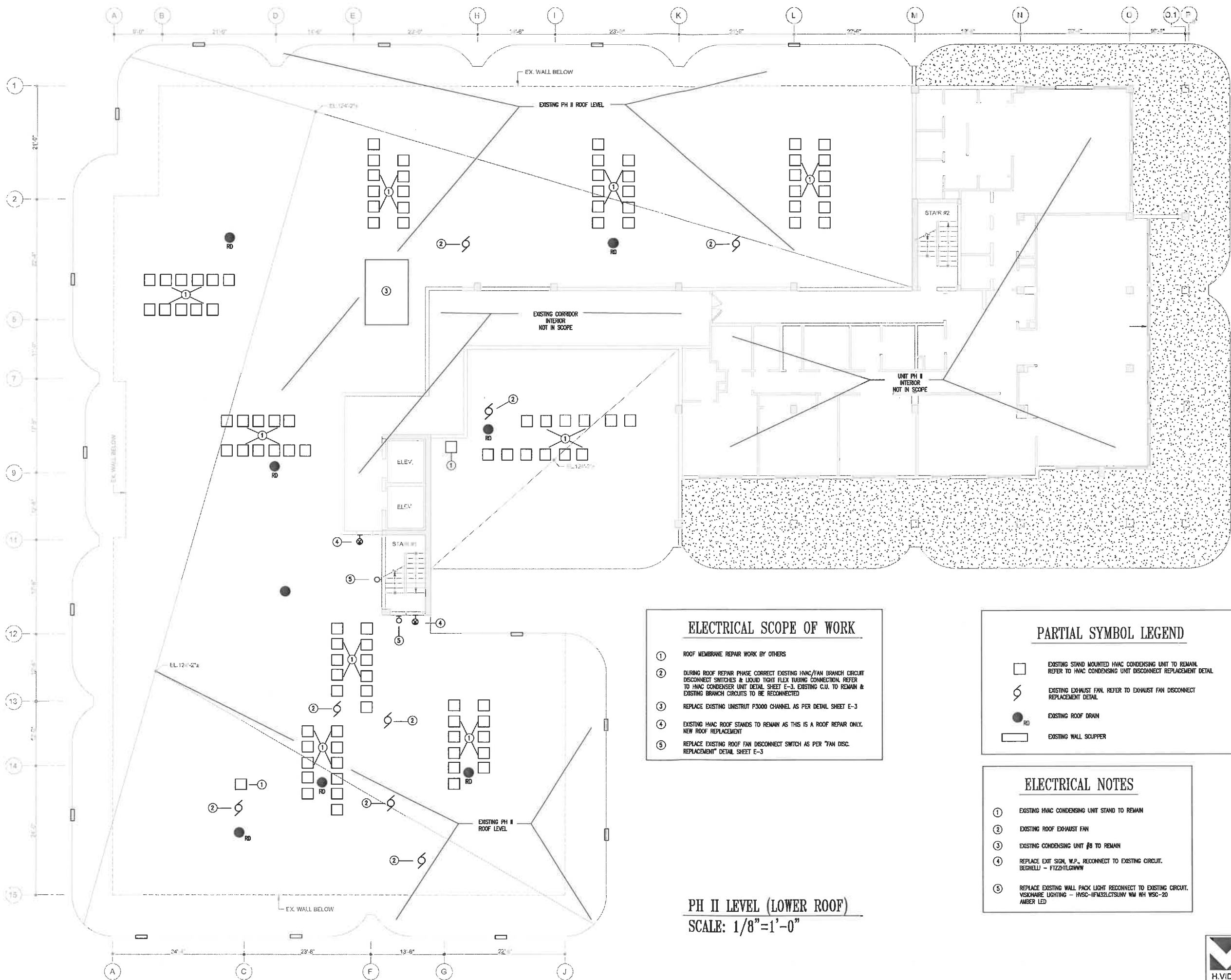
Table with 3 columns: No, Date, Revisions

DESIGNED: Designer Author DRAWN: Author CHECKED: Checker APPROVED: Approver

Project No.: 18217 Date: 12/15/2020 Scale: AS SHOWN Sheet Title: ELECTRICAL SYMBOL LEGEND AND NOTES

Sheet No.: E-0

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### ELECTRICAL SCOPE OF WORK

- 1 ROOF MEMBRANE REPAIR WORK BY OTHERS
- 2 DURING ROOF REPAIR PHASE CORRECT EXISTING HVAC/FAN BRANCH CIRCUIT DISCONNECT SWITCHES & LIQUID TIGHT FLEX TUBING CONNECTION. REFER TO HVAC CONDENSER UNIT DETAIL SHEET E-3, EXISTING C.U. TO REMAIN & EXISTING BRANCH CIRCUITS TO BE RECONNECTED
- 3 REPLACE EXISTING UNISTRUT P3000 CHANNEL AS PER DETAIL SHEET E-3
- 4 EXISTING HVAC ROOF STANDS TO REMAIN AS THIS IS A ROOF REPAIR ONLY. NEW ROOF REPLACEMENT
- 5 REPLACE EXISTING ROOF FAN DISCONNECT SWITCH AS PER "FAN DISC. REPLACEMENT" DETAIL SHEET E-3

### PARTIAL SYMBOL LEGEND

- EXISTING STAND MOUNTED HVAC CONDENSING UNIT TO REMAIN. REFER TO HVAC CONDENSING UNIT DISCONNECT REPLACEMENT DETAIL
- EXISTING EXHAUST FAN. REFER TO EXHAUST FAN DISCONNECT REPLACEMENT DETAIL
- EXISTING ROOF DRAIN
- EXISTING WALL SCOUPPER

### ELECTRICAL NOTES

- 1 EXISTING HVAC CONDENSING UNIT STAND TO REMAIN
- 2 EXISTING ROOF EXHAUST FAN
- 3 EXISTING CONDENSING UNIT #8 TO REMAIN
- 4 REPLACE EXIT SIGN, W.P., RECONNECT TO EXISTING CIRCUIT. BEGHELLI - FTZZHLLGWW
- 5 REPLACE EXISTING WALL PACK LIGHT RECONNECT TO EXISTING CIRCUIT. VISIONAIRE LIGHTING - HVSC-1FM43ZLCTSYUNY WM WH WSC-20 AMBER LED

**PH II LEVEL (LOWER ROOF)**  
**SCALE: 1/8"=1'-0"**

**CHAMPLAIN TOWERS  
 SOUTH CONDOMINIUM**  
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**PHASE IIC: OVERALL BUILDING  
 REPAIR AND RESTORATION**

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DESIGNED Designer	DRAWN Author
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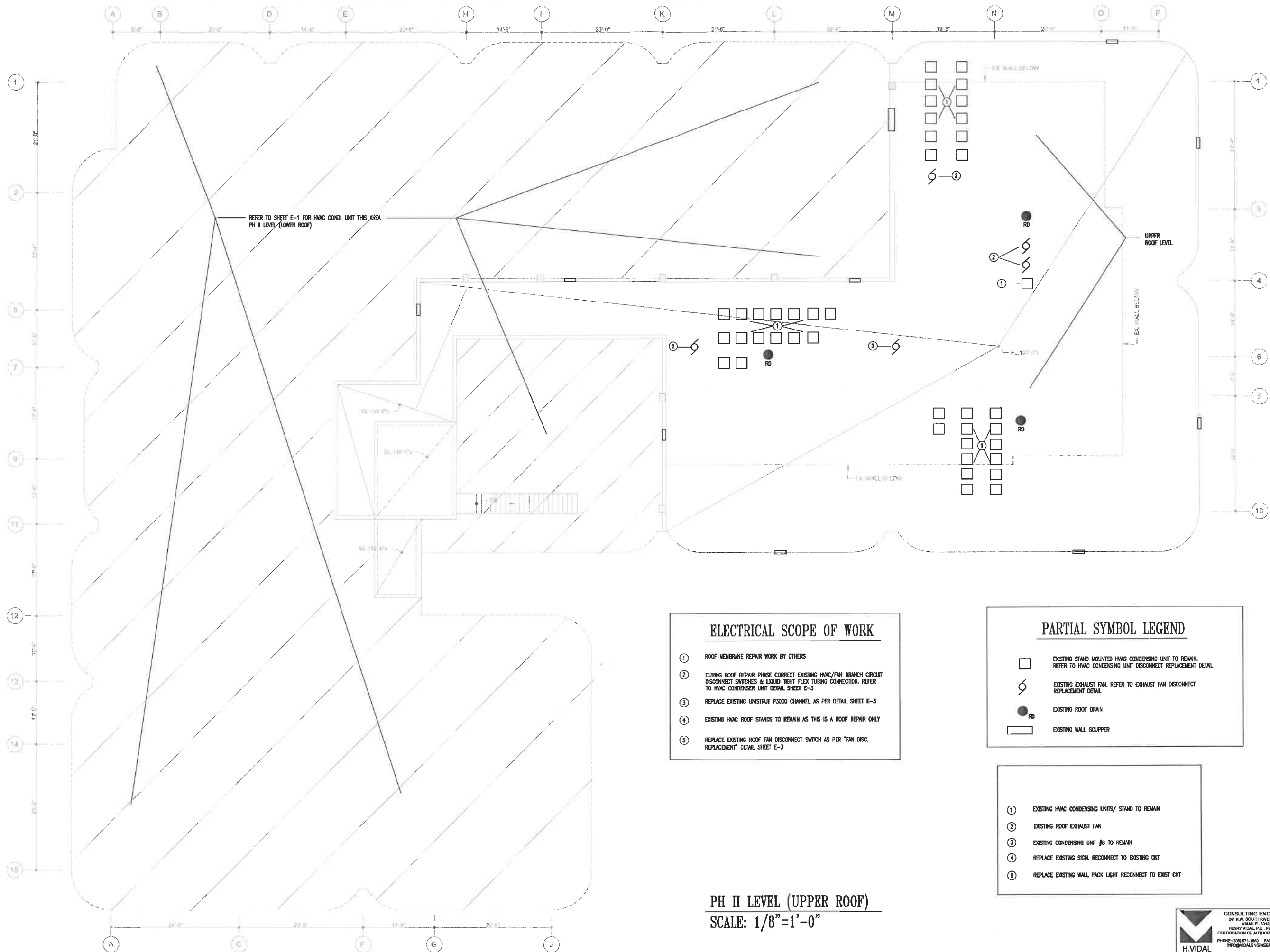
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LOW ROOF &  
 PENTHOUSE FLOOR  
 PLAN  
 Sheet No.: E-1



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5/18/21



REFER TO SHEET E-1 FOR HVAC COND. UNIT THIS AREA PH II LEVEL (LOWER ROOF)

- ### ELECTRICAL SCOPE OF WORK
- ① ROOF MEMBRANE REPAIR WORK BY OTHERS
  - ② CURING ROOF REPAIR PHASE CORRECT EXISTING HVAC/FAN BRANCH CIRCUIT DISCONNECT SWITCHES & LIQUID TIGHT FLEX TUBING CONNECTION. REFER TO HVAC CONDENSER UNIT DETAIL SHEET E-3
  - ③ REPLACE EXISTING UNISTRUT P3000 CHANNEL AS PER DETAIL SHEET E-3
  - ④ EXISTING HVAC ROOF STANDS TO REMAIN AS THIS IS A ROOF REPAIR ONLY
  - ⑤ REPLACE EXISTING ROOF FAN DISCONNECT SWITCH AS PER "FAN DISC. REPLACEMENT" DETAIL SHEET E-3

- ### PARTIAL SYMBOL LEGEND
- EXISTING STAND MOUNTED HVAC CONDENSING UNIT TO REMAIN. REFER TO HVAC CONDENSING UNIT DISCONNECT REPLACEMENT DETAIL.
  - EXISTING EXHAUST FAN. REFER TO EXHAUST FAN DISCONNECT REPLACEMENT DETAIL.
  - EXISTING ROOF DRAIN
  - EXISTING WALL SCUPPER

- ① EXISTING HVAC CONDENSING UNITS/ STAND TO REMAIN
- ② EXISTING ROOF EXHAUST FAN
- ③ EXISTING CONDENSING UNIT #8 TO REMAIN
- ④ REPLACE EXISTING SIGN. RECONNECT TO EXISTING CKT
- ⑤ REPLACE EXISTING WALL PACK LIGHT RECONNECT TO EXIST CKT

PH II LEVEL (UPPER ROOF)  
SCALE: 1/8"=1'-0"

**CHAMPLAIN TOWERS SOUTH CONDOMINIUM**  
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**PHASE IIC: OVERALL BUILDING REPAIR AND RESTORATION**

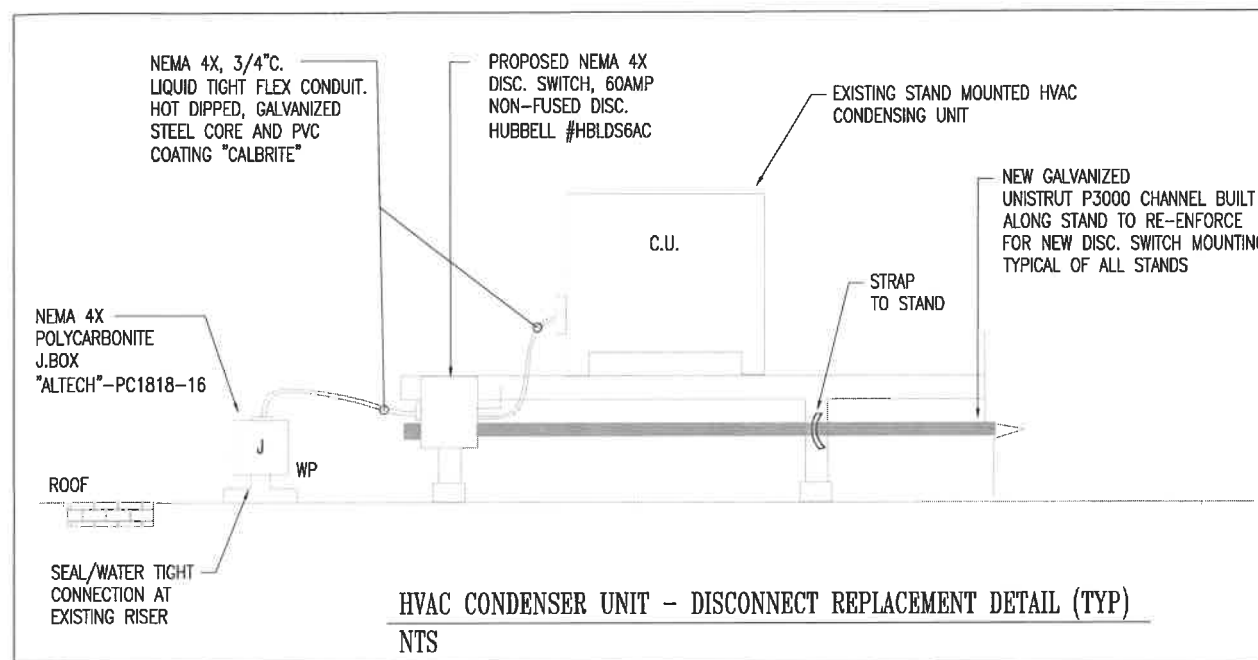
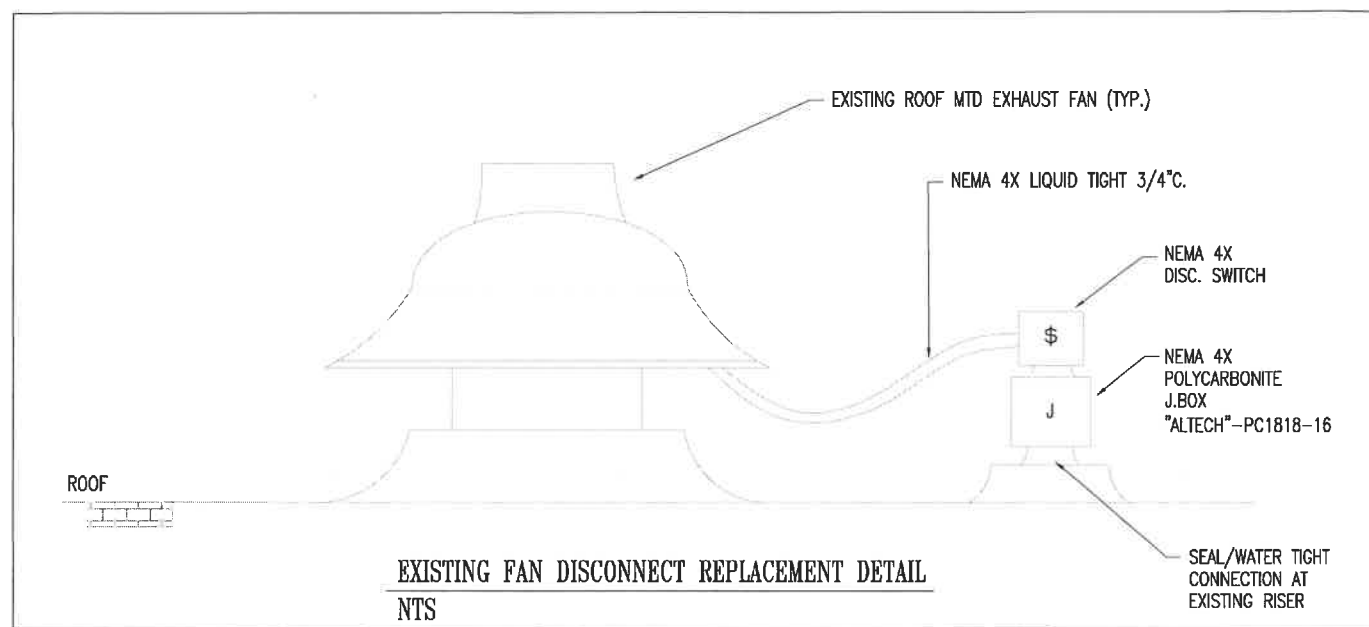
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E-2	

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Sheet No.: *On 5/13/21*  
E-3

