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LEGEND

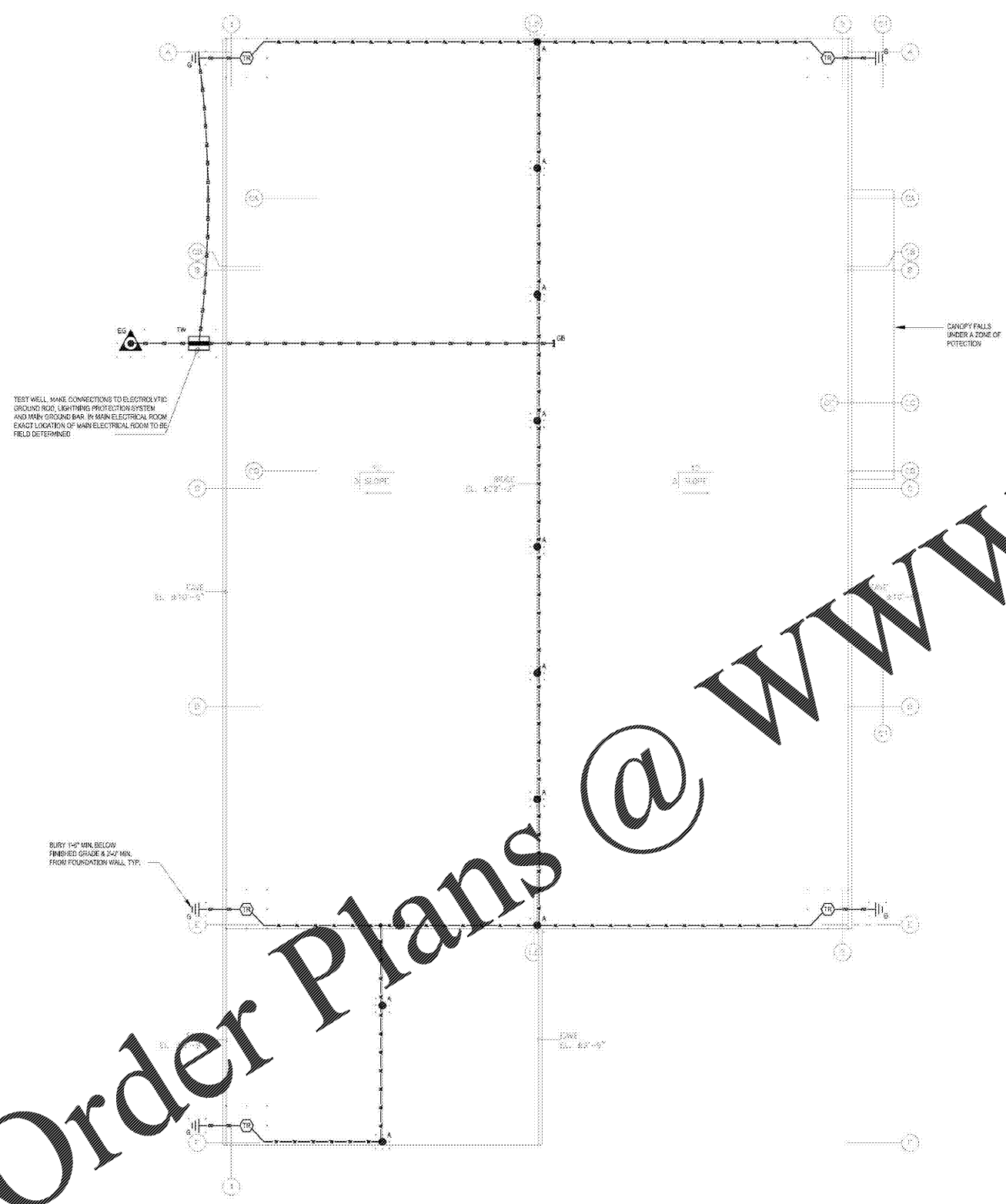
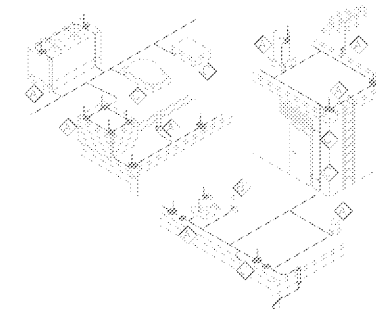
- AIR TERMINAL
- MECHANICAL CONNECTION
- △ MISC. BONDING
- ⊕ THRU-ROOF CONNECTION
- GB GROUND BAR
- CLASS 1 ALUMINUM MAIN CONDUCTOR
- CLASS 1 COPPER MAIN CONDUCTOR
- COPPER CLAD GROUND ROD WITH EXOTHERMIC WELD CONNECTION
- △ EG ELECTROLYTIC GROUND ROD
- TW TEST WELL WITH GROUND BAR

GENERAL INSTALLATION NOTES

- A. LOCATE AIR TERMINALS AS SHOWN. TAKE CARE TO ENSURE THAT ALL POINTS ARE WITHIN 2'-0" (609mm) OF OUTSIDE BUILDING EDGE, OUTSIDE CORNERS, RIDGE ENDS, AND THAT MAX SPACING DOES NOT EXCEED 22'-0" (6.706mm), AND THAT MIN PROJECTION ABOVE OBJECT PROTECTED IS 1'-0" (254mm). POINTS PROTECTING 24" (609mm) MAY BE SPACED @ 25'-0" (7.620mm) MAX.
- B. MAINTAIN HORIZONTAL OR DOWNWARD COURSE OF MAIN CONDUCTOR. ENSURE THAT ALL BENDS HAVE AT LEAST AN 8" (203mm) RADIUS AND DO NOT EXCEED 90 DEGREES.
- C. ATTACH ALL EXPOSED ROOF, DOWN LEAD AND BONDING CABLES AT 3'-0" (914mm) ON CENTER MAX. VERIFY COMPATIBILITY OF ADHESIVE ON MEMBRANE ROOF APPLICATION PRIOR TO INSTALLATION.
- D. GROUND ROD ELECTRODES SHALL BE INSTALLED AS SHOWN, BUT IN NO INSTANCE SHALL THEY BE LESS THAN 1'-0" (304mm) BELOW GRADE AND 2'-0" (609mm) FROM FOUNDATION WALL. DRIVEN RODS SHALL PENETRATE THE EARTH AT LEAST 10'-0" (3.048mm).
- E. BOND TO WATER SERVICE AND OTHER PIPING SYSTEMS AS SHOWN AND AS REQUIRED BY CODE.
- F. MAIN SIZE LIGHTNING CONDUCTOR BOND TO MAIN GROUND BUS. FIELD VERIFY LOCATION 1 1/4" CONDUIT FOR ACCESS. INSTALLED BY OTHERS. INTERCONNECT LIGHTNING PROTECTION GROUND TO TELEPHONE AND OTHER BUILDING GROUND SYSTEMS LOCATION FIELD DETERMINED OR AS REQUIRED BY CODE.
- G. LBS AND SIMILAR CONDUCTOR BODIES MAY NOT BE USED IN THE INSTALLATION OF DOWNLEAD CONDUITS, AS THEY DO NOT ADHERE TO THE REQUIRED 8" (203mm) MINIMUM BEND RADIUS.
- H. SYSTEM SHALL BE INSTALLED AS SHOWN TO ENSURE PROPER CODE COMPLIANCE AND SYSTEM CERTIFICATION. AN APPROXIMATE VARIANCE SHALL BE RESUBMITTED FOR APPROVAL.
- I. ALL MATERIALS TO BE UNDERWRITERS LABORATORIES APPROVED WITH APPROPRIATE UL66 MARKING.
- J. FINAL SYSTEM INSPECTION AND QUALITY CONTROL
 1. THE CONTRACTOR SHALL FURNISH AN LPI-P CERTIFICATE OR FULL CERTIFICATE UPON COMPLETION OF THE INSTALLATION.
 2. LPI CERTIFICATION IF REQUIRED, REQUIRES SIGNATURE BY REPRESENTATIVE OF THE OWNER AT MULTIPLE STAGES OF INSTALLATION & BY THEIR THIRD PARTY FIELD CERTIFICATION IF REQUIRED, REQUIRES INSPECTION BY THEIR THIRD-PARTY FIELD STAFF AFTER COMPLETION OF THE INSTALLATION.
 3. AS-BUILT DRAWINGS SHALL BE COMPLETED AND STAMPED BY AN LPI CERTIFIED MASTER DESIGNER - INSTALLER OF LIGHTNING PROTECTION SYSTEMS.
 4. FINAL INSPECTION REPORT AND FINAL INSPECTION REPORT SHALL BE COMPLETED BASED ON ANS/IEEE 607, NEC, NFPA 70, AND ISEA INDUSTRY STANDARDS AS APPLICABLE. THE SCOPE OF THE INSPECTION AND REPORT SHALL INCLUDE:
 - a. VISUAL AND EVALUATION OF THE GROUNDING SYSTEM. RECORD FINAL SYSTEMS TO GROUND RESISTANCE.
 - b. VISUAL AND TESTING OF THE INTERNAL BONDING AND GROUNDING SYSTEMS.
 - c. EVALUATION AND TESTING OF EQUIPMENT GROUNDING.
 - d. EVALUATION OF FAS SURGE SUPPRESSION INSTALLATION.
 - e. EVALUATION OF TELECOM SURGE SUPPRESSION INSTALLATION.
 - f. COPY OF THE LPI-P OR UL LIGHTNING PROTECTION CERTIFICATION.
 - g. FINAL AS-BUILT REVIEW AND SUBMISSION.
 5. REPORT SHALL INCLUDE DETAILED REPORTING AND TEST RESULTS WITH CORRESPONDING PHOTOS OF EACH EVALUATION CATEGORY.
- K. FIELD VERIFY ACTUAL CONDITIONS PRIOR TO CONSTRUCTION.

BONDING NOTES

- ◇ TYPICAL BODIES OF CONDUCTANCE AS NOTED BELOW. USE FULL SIZE CONDUCTOR AND APPROPRIATE FITTING SHOWN FOR CONNECTION.
- ◇ (PLUMBING STACK) REQUIRES BONDING WITH MAIN SIZE CABLE ONLY IF WITHIN 6'-0" (1.829mm) OF LIGHTNING PROTECTION SYSTEM.
- ◇ TYPICAL BODIES OF INDUCTANCE AS NOTED BELOW. USE SECONDARY SIZE (SMALLER) CONDUCTOR AND APPROPRIATE FITTING SHOWN FOR CONNECTION.
- ◇ BONDING CONNECTIONS AND FITTINGS SHOWN ARE TYPICAL EXAMPLES. MAKE ALL CONNECTIONS REQUIRED TO MEET CODES AS NOTED BELOW. ADJUST FITTING TYPE AS REQUIRED TO SUIT FIELD CONDITIONS.



JACKSON COUNTY
ANIMAL RESCUE CENTER AND GREEN ENERGY PARK
 DILLSBORO, NORTH CAROLINA

SHEET	ISSUE NO.	DATE	DESCRIPTION	BY
1	09/2/2020		ISSUE FOR 804-PERMIT	RMF

PRINCIPAL IN CHARGE: ALM
 PROJECT ENGINEER: CDC
 DRAWN BY: TMW

SHEET TITLE:
ELECTRICAL LIGHTNING PLAN

SHEET NO. PROJ. NO.
 019216.00

E-003