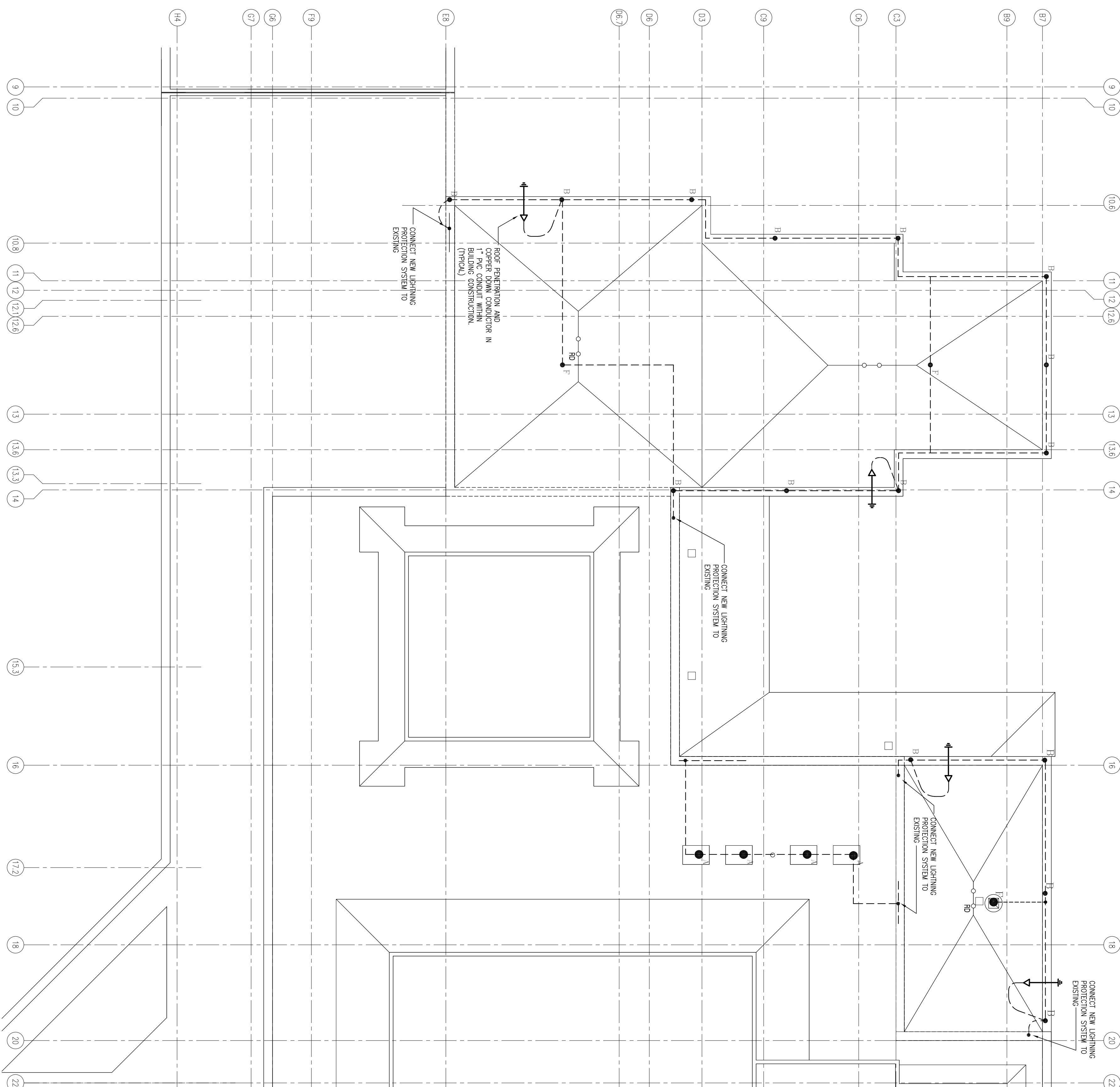
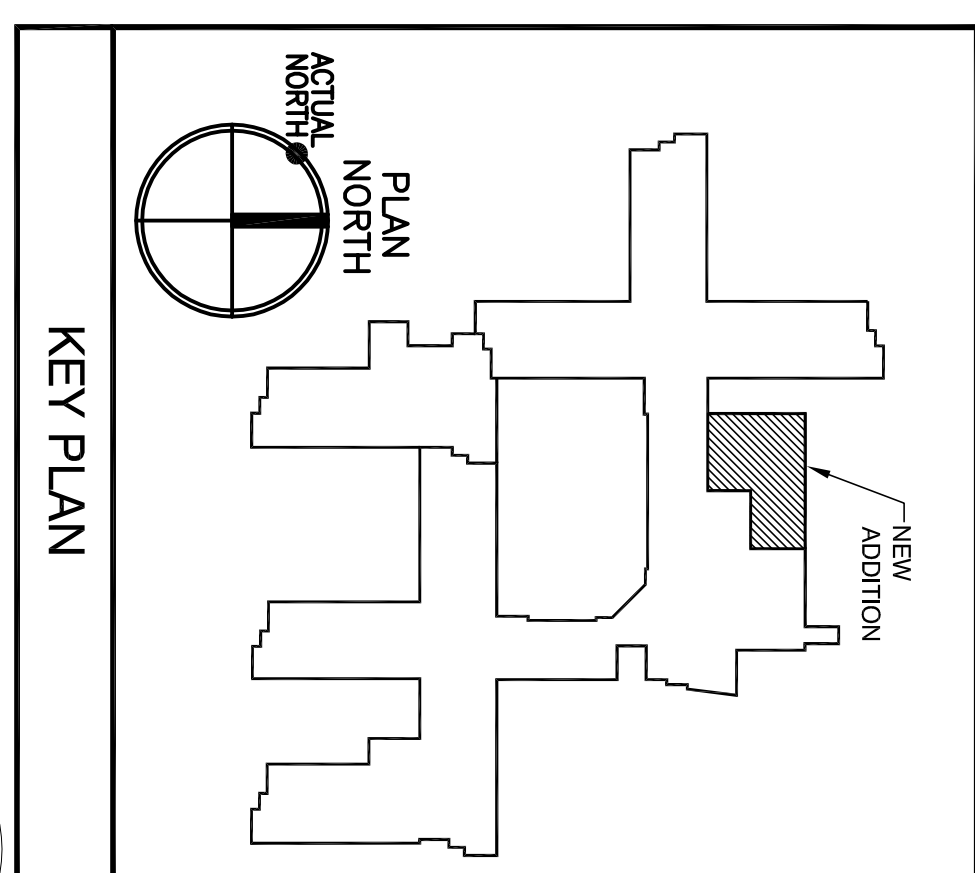


LIGHTNING PROTECTION MATERIALS LIST	
COFFER LIGNING PROTECTION WAVE CONDUCTOR	08BHE-29-12
ALUMINUM LIGNING PROTECTION CONDUCTOR	08ABE-24-14
COFFER LIGNING PROTECTION SECONDARY CABLE	08BHE-35
COFFER LIGNING PROTECTION SECONDARY CABLE	08BHE-35
CABLE FASTENERS (ASTEN CABLE NEW JAY. MAX.)	08BHE-72, 66, 64
0 1/2 x 1/2 COFFER AIR TERMINAL AND ADHESIVE BOE	08BHE-30, 08BHE-23
0 1/2 x 1/2 COFFER AIR TERMINAL AND ADHESIVE BOE (20 PMS)	08BHE-30, 08BHE-23
0 1/2 x 1/2 COFFER AIR TERMINAL AND ADHESIVE BOE (40 PMS)	08BHE-30, 08BHE-23
0 1/2 x 1/2 COFFER AIR TERMINAL AND ADHESIVE BOE (80 PMS)	08BHE-30, 08BHE-23
SPRING ADHESIVE (ADAPT TO AIR TERMINALS LOCATED NEAR W/L EQUIPMENT)	08BHE-19
SECONDARY BONDING:	
WELDING CONNECTOR	08ABE-44
WELDING CONNECTOR	08ABE-42
WELDING CONNECTOR	08ABE-42A
CLAMPING BONDING PLATE (AIR TUB. RIG. & RAS)	08BHE-35
PIPE CLAMP (ADHESIVE, RAINBOW, ETC.)	08BHE-10X
PIPE CLAMP (ADHESIVE, RAINBOW, ETC.)	08BHE-44
STRAIGHT SPACER	08BHE-26
CROSSOVER CABLE CONNECTOR	08ABE-57XVA
WATERPROOF CONNECTOR (FINE WHITE & COARSE WHITE)	08ABE-97
0 1/2 x 10-07 COFFERBOARD GROUND ROD AND CONNECTOR	08BHE-1000R, 111



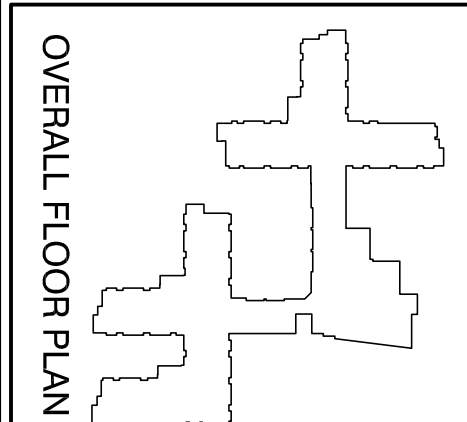
PARTIAL ROOF PLAN

SCALE: 1/8" = 1'-0"



- ## LIGHTNING PROTECTION NOTES
1. ALL MATERIALS PROVIDED SHALL BE APPROVED BY THE LIGHTNING PROTECTION CO., INC. OR APPROVED EQUIVALENT (AS PROVIDED BY THE LIGHTNING PROTECTION COMPANY). THE LIGHTNING PROTECTION SYSTEM SHALL BE EXTENDED TO THE EXISTING MASTER ELECTRICAL PANEL FOR THE ENTIRE BUILDING.
  2. THE LIGHTNING PROTECTION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 STANDARD FOR THE PROTECTION OF BUILDINGS FROM LIGHTNING.
  3. CONDUCTORS SHALL MAINTAIN A MINIMUM CLEARANCE OF 18" (1.5 FEET) FROM "V" OR "W" (DOWN AND UP) POCKETS.
  4. NO BRIDLE OF CONDUCTOR SHALL FORM AN ANGLE OF LESS THAN 90° NON SHARP TURN. A BRIDLE OF BRIDLE LESS THAN 90° SHALL BE REWORKED TO A 90° TURN.
  5. AIR TERMINALS SHALL BE PLACED 20'-0" FROM EACH OTHER AND FROM THE PERIMETER OF ALONG ROOF RIDGES AND WITHIN 2'-0" OF OUTSIDE CORNERS & ROOF EDGES.
  6. MID-ROOF AIR TERMINALS SHALL BE PLACED 50'-0" MAXIMUM SPACING.
  7. ACTUAL JOIST CONDITIONS MAY REQUIRE DOWN CONDUCTORS AND GROUND ROD LOCATIONS.
  8. BARE COPPER MATERIALS SHALL NOT BE ALUMINUM MATERIALS SHALL NOT BE INSTALLED ON COPPER SURFACES.
  9. ALL LIGHTNING PROTECTION CONDUCTORS SHALL BE MECHANICALLY FASTENED TO THE STRUCTURE AT SPACINGS OF MORE THAN 3'-0" O.C. MAXIMUM SPACING.
  10. METALLIC BONES OF INSURANCE SHALL BE INSTALLED WITHIN 6'-0" OF A LIGHTNING CONDUCTOR OR ANOTHER BOWED METAL SURFACE. ALL BOWED METAL SURFACES THE LIGHTNING CONDUCTOR SYSTEM, UNLESS INHERENTLY GROUNDING.
  11. BOND TO ALL METAL BONES OF THE MAIN LIGHTNING CONDUCTOR SUCH AS EXHAUST FANS, ROOF VENTS, HOT COOLING PIPES, ANTENNAS, SATELLITES, METAL BONES, AND ALL OTHERS EXPOSED METAL BONES. ALL BONDING SHALL BE MADE BY THE AIR TERMINAL IN USE, UNLESS OTHERWISE SPECIFIED.
  12. CONNECTIONS TO GROUND ROD SHALL BE BELOW FINISHED GRADE AND 2'-0" AWAY FROM FOUNDATION WALL.
  13. BOND TO WIREBONES (DOMESTIC & FIRE).
  14. LIGHTNING PROTECTION CONDUCTORS OR ANTENNA DISCHARGE UNIT SHALL BE INSTALLED ON EACH ELECTRICAL AND TELEVISION ANTENNA LEAD-IN BY THE ELECTRICAL CONTRACTOR, PER NFPA-70.
  15. THE LIGHTNING PROTECTION CONDUCTORS SHALL NOT BE RUN HORIZONTALLY, THE CONDUCTORS IN PVC CONDUIT AND MAKE ALL REQUIRED CONNECTIONS.
  16. CONCRETE INTERIOR CONDUCTORS WITHIN BUILDING SHALL BE INSTALLED IN PVC CONDUIT WHERE PRACTICAL.
  17. CONNECT CONDUCTORS USING EXPONENT WELDING PROCESS, PROTECT EXPOSED CONDUCTORS FROM DAMAGE BY ELECTRICAL ELEMENTS AND FINISHES.
  18. BOND EXTERIOR METAL BONES ON BUILDING TO PROVIDE INTERMEDIATE LEVEL PROTECTION. CONDUCTORS GO TO EEL ON CENTER.

Revisions	
Date	



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Drawing Title  
**ELECTRICAL:  
PARTIAL ROOF PLAN**  
Approved: Chief, Facilities Engineering Service  
Approved: Chief Executive Officer


SECTION  
Drawn  
SMR  
Checked  
JA

Project Name	CLC SUPPORT SPACES VAMC - LYONS	
Building Number	135	Contract Number 561-CS1-130
Location	LYONS, NJ	

Date	2/05/13
Project No.	1009
Dwg.	OF
<b>E-10</b>	

VETERANS ADMINISTRATION		