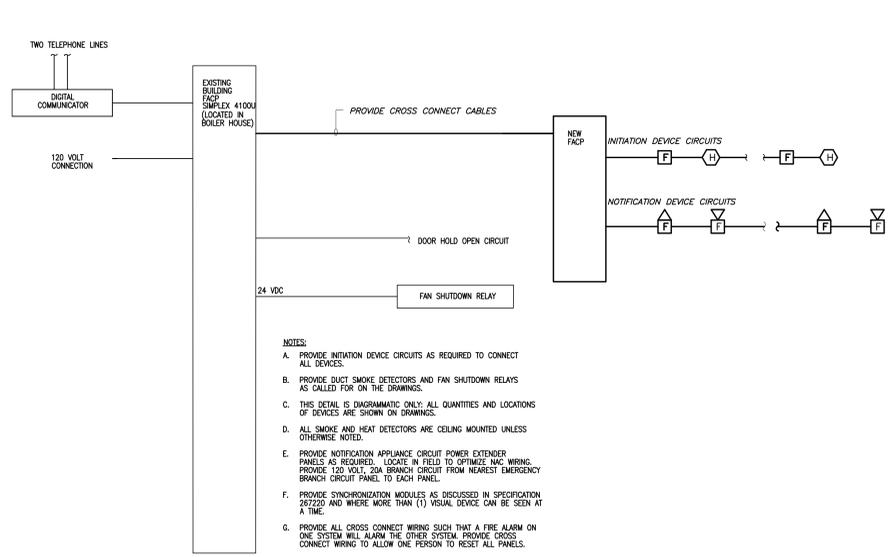
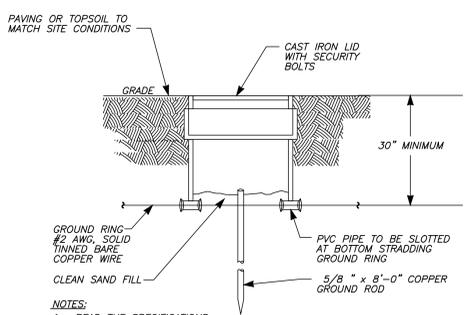


A three inches = one foot  
 B one and one-half inch = one foot  
 C one inch = one foot  
 D three-quarters inch = one foot  
 E one-half inch = one foot  
 F three-eighths inch = one foot  
 G one-quarter inch = one foot  
 H one-eighth inch = one foot



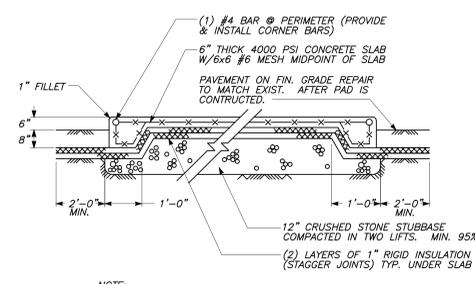
**NOTES:**  
 A. PROVIDE INITIATION DEVICE CIRCUITS AS REQUIRED TO CONNECT ALL DEVICES.  
 B. PROVIDE DUCT SMOKE DETECTORS AND FAN SHUTDOWN RELAYS AS CALLED FOR ON THE DRAWINGS.  
 C. THIS DETAIL IS DIAGRAMMATIC ONLY; ALL QUANTITIES AND LOCATIONS OF DEVICES ARE SHOWN ON DRAWINGS.  
 D. ALL SMOKE AND HEAT DETECTORS ARE CEILING MOUNTED UNLESS OTHERWISE NOTED.  
 E. PROVIDE NOTIFICATION APPLIANCE CIRCUIT POWER EXTENDER PANELS AS REQUIRED. LOCATE IN FIELD TO OPTIMIZE WIRING. PROVIDE 120 VOLT, 20A BRANCH CIRCUIT FROM NEAREST EMERGENCY BRANCH CIRCUIT PANEL TO EACH PANEL.  
 F. PROVIDE SYNCHRONIZATION MODULES AS DISCUSSED IN SPECIFICATION 267220 AND WHERE MORE THAN (1) VISUAL DEVICE CAN BE SEEN AT A TIME.  
 G. PROVIDE ALL CROSS CONNECT WIRING SUCH THAT A FIRE ALARM ON ONE SYSTEM WILL ALARM THE OTHER SYSTEM. PROVIDE CROSS CONNECT WIRING TO ALLOW ONE PERSON TO RESET ALL PANELS.

**1 FIRE ALARM RISER DIAGRAM**  
 E502 SCALE: NONE



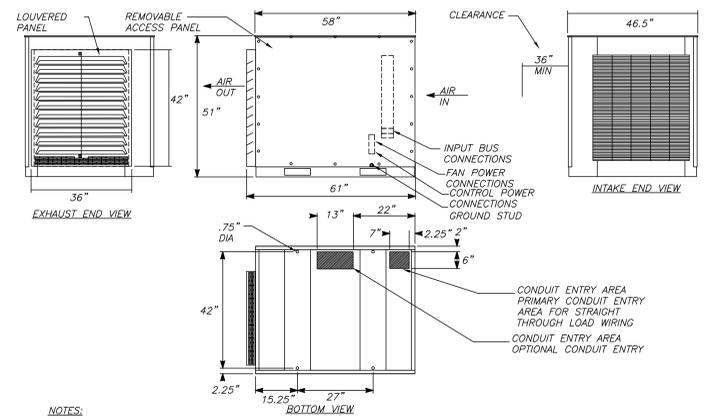
**NOTES:**  
 1. READ THE SPECIFICATIONS  
 2. REPAIR ALL SETTLEMENT  
 3. MINIMUM TOP SOIL - 6"

**2 INSPECTION WELL DETAIL**  
 E502 SCALE: NONE



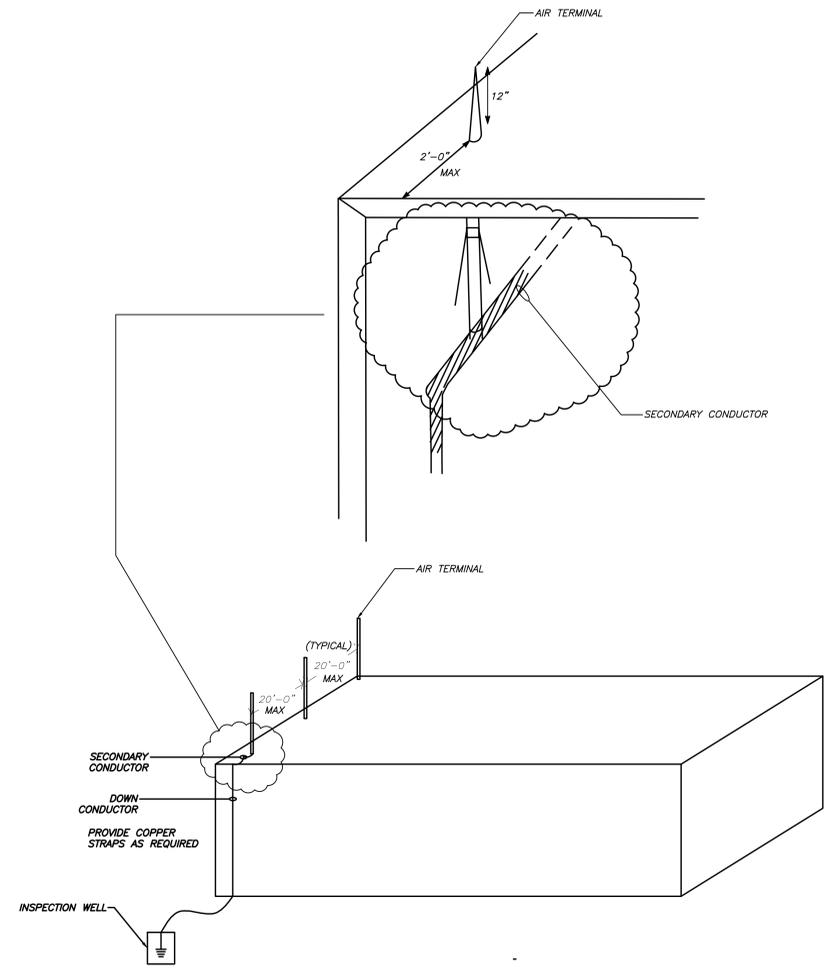
**NOTE:**  
 1. PITCH SLAB @ 1/4" FT. AWAY FROM BUILDING. OVERALL PAD DIMENSIONS SHALL BE 58"W x 69"L.

**3 LOAD BANK PAD DETAIL**  
 E502 SCALE: NONE



**NOTES:**  
 AS A GENERAL GUIDE, THE MINIMUM CLEARANCE REQUIRED FROM ANY OBSTRUCTION IS:  
 6'-0" ON INLET  
 3'-0" ON OUTLET  
 8'-0" ON EXHAUST  
 REVIEW MANUAL FOR DETAILED INSTALLATION AND SITE CONDITIONS  
 ALL DIMENSIONS ARE APPROX. INCHES  
 WEIGHT: 1100LBS

**4 350KW LOAD BANK**  
 E502 SCALE: NONE



**GENERAL NOTES:**  
 A. ALL COMPONENTS SHALL MEET U.L. REQUIREMENTS FOR A CLASS 1 SYSTEM.  
 B. ALL SECONDARY CONDUCTOR CABLES, CLAMPS, ETC ARE TO BE CONCEALED.  
 C. IT IS ACCEPTABLE FOR DOWN CONDUCTORS TO BE RUN ON BUILDING EXTERIOR. COORDINATE LOCATIONS WITH COR AND G.C. PRIOR TO INSTALLATION.

**ROOF PENETRATION NOTE:**  
 A. ROOF PENETRATIONS REQUIRED FOR DOWN CONDUCTORS OR FOR CONNECTIONS TO STRUCTURAL STEEL FRAMEWORK SHALL BE MADE USING THRU-ROOF ASSEMBLIES WITH SOLID BARS AND APPROPRIATE ROOF FLASHINGS. CONDUCTORS SHALL NOT PASS DIRECTLY THROUGH THE ROOF. ROOF FLASHINGS COMPATIBLE WITH THE ROOFING SYSTEM SHALL BE FURNISHED AND INSTALLED BY THE E.C. CONTRACTOR PER ROOFING MANUFACTURER'S SPECIFICATIONS.

**5 LIGHTNING PROTECTION DIAGRAM**  
 E502 SCALE: NONE

- DRAWING NOTES:**
- THE DESIGN LAYOUT AND INSTALLATION DETAILS SHOWN HEREON SHALL MEET THE REQUIREMENTS OF NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) #780 CURRENT EDITION.
  - CONNECTION TO GROUND ROD OR GROUND LOOP CONDUCTOR SHALL BE MADE AT A POINT NOT LESS THAN 18" BELOW GRADE. GROUND RODS SHALL NOT BE LESS THAN 8' LONG AND EXTEND AT LEAST 10' INTO THE EARTH.
  - AIR TERMINALS SHALL BE PLACED AT ALL UNPROTECTED OUTSIDE CORNERS AND LOCATED INTERMEDIATELY ON 20'-0" MAXIMUM SPACING AROUND THE ROOF PERIMETER OR RIDGE AND WITHIN 2'-0" OF OUTSIDE EDGE.
  - MIDROOF AREAS ARE TO BE PROVIDED WITH AIR TERMINALS SPACED EITHER AT 50' CENTER OR, OF SUFFICIENT QUANTITY AND HEIGHT, TO ENSURE THE ENTIRE ROOF AREA IS COVERED BY A "ZONE-OF-PROTECTION" AS AFFORDED BY A 150' RADIUS SPHERE, PER NFPA #780.
  - GROUNDING METAL BODIES LOCATED ABOUT THE STRUCTURE SUCH AS: SOIL PIPE VENTS, ROOF DRAINS, EXHAUST FANS, AIR HANDLING UNITS, ANY MISCELLANEOUS EQUIPMENT WITH ELECTRICAL SERVICES, ETC. SHALL BE INTERCONNECTED TO THE LIGHTNING CONDUCTOR SYSTEM, IF WITHIN THE "BONDING DISTANCE" ESTABLISHED BY NFPA #780.
  - BOND ALL METALLIC PIPES INCLUDING WATER, FIRE, GAS, SEWER, STORM, ETC. WHICH ENTER THE STRUCTURE, WITHIN 12' OF GRADE, TO THE NEAREST DOWNLEAD, GROUND ROD, OR GROUND LOOP.
  - ALL REINFORCING, STRUCTURAL, FRAMING, AND MISCELLANEOUS STEEL SHALL BE MADE ELECTRICALLY CONTINUOUS THROUGHOUT CONSTRUCTION BY WELDING, CLIPPING, BOLTING, OR OTHER APPROVED METHODS.
  - TELEPHONE AND/OR ELECTRIC SERVICE ENTRANCE GROUNDS SHALL BE INTERCONNECTED TO ONE LIGHTNING PROTECTION GROUND OR WATER PIPE.
  - ALL AREAS WHICH HAVE NOT BEEN PROVIDED WITH LIGHTNING PROTECTION COMPONENTS ARE PROTECTED FROM HIGHER ROOFS OR STRUCTURES. THESE AREAS FALL WITHIN A "ZONE-OF-PROTECTION" AS ESTABLISHED BY THE CURRENT EDITION OF THE NFPA #780 DOCUMENT FOR PROTECTION AGAINST LIGHTNING.
  - THE LIGHTNING PROTECTION SYSTEM SHALL BE INSTALLED IN A NEAT AND INCONSPICUOUS MANNER SO THAT ALL COMPONENTS WILL BLEND WITH THE APPEARANCE OF THE BUILDING.
  - NO BEND OF A CONDUCTOR SHALL FORM A FINAL INCLUDED ANGLE OF LESS THAN 90 DEGREES NOR SHALL HAVE A RADIUS OF BEND OF LESS THAN 8'.
  - CONDUCTORS SHALL INTERCONNECT ALL AIR TERMINALS AND SHALL FORM A TWO-WAY PATH FROM EACH AIR TERMINAL HORIZONTALLY OR DOWNWARD TO CONNECTIONS WITH GROUND TERMINALS, WITH THE EXCEPTION OF VERTICAL ROOF MEMBERS, UPPER ROOF TO LOWER ROOF TRANSITIONS, OR LOWER ROOF "DEAD ENDS."
  - ALL LIGHTNING PROTECTION CONDUCTORS SHALL BE FASTENED NOT MORE THAN 3'-0" MAXIMUM SPACING.
  - ALL ADHESIVE TYPE FITTINGS SHALL BE SET IN PLACE WITH AN APPLICATION OF COMPATIBLE ADHESIVE COMPOUND BEFORE ROOF GRAVEL IS APPLIED.
  - ACTUAL JOBSITE CONDITIONS MAY NECESSITATE SLIGHT ALTERATIONS IN AIR TERMINAL AND GROUND ROD LOCATIONS.
  - BARE COPPER LIGHTNING PROTECTION MATERIALS SHALL NOT BE INSTALLED ON ALUMINUM ROOF OR SIDING OR OTHER ALUMINUM SURFACES AND VICE VERSA, ALUMINUM LIGHTNING PROTECTION MATERIALS SHALL NOT BE INSTALLED ON COPPER ROOFING OR COPPER SIDING OR OTHER COPPER SURFACES.
  - SURGE SUPPRESSOR SHALL BE PROVIDED ON ELECTRIC AND TELEPHONE SERVICE ENTRANCES AND ON RADIO AND TELEVISION ANTENNA LEAD-INS.
  - SEAL ENDS OF CONDUIT MOISTURE TIGHT WITH DUCT SEAL OR LEAD WEDGE. ALL CONDUIT, CONDUIT FASTENERS, AND MISCELLANEOUS ACCESSORIES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
  - THE DESIGN LAYOUT AND INSTALLATION DETAILS SHOWN HEREON SHALL MEET THE REQUIREMENTS OF UNDERWRITER'S LABORATORIES UL STANDARD 96A FOR MASTER LABELED LIGHTNING PROTECTION SYSTEMS. WHEN DESIRED, THE ACTUAL MASTER LABEL WILL BE DELIVERED UPON COMPLETION OF INSTALLATION.
  - THE LIGHTNING PROTECTION INSTALLATION SHALL COMPLY IN ALL RESPECTS TO LIGHTNING PROTECTION INSTITUTE STANDARD 175. THE INSTALLATION SHALL BE MADE BY OR UNDER THE SUPERVISION OF AN L.P.I. CERTIFIED MASTER INSTALLER.
  - METAL BODIES OF INDUCTANCE LOCATED ABOUT THE ROOF SUCH AS METAL FLASHINGS, GRAVEL STOPS, ROOF DRAINS, SOIL PIPE VENTS, INSULATION VENTS, LOUVERS, AND DOOR FRAMES SITUATED WITHIN 6'-0" OF A LIGHTNING CONDUCTOR OR BONDED METAL BODY SHALL BE INTERCONNECTED TO THE LIGHTNING CONDUCTOR SYSTEMS.

VA WESTERN NEW YORK HEALTHCARE SYSTEM  
 222 RICHMOND AVENUE  
 BATAVIA, NEW YORK 14020



CARDIOLOGY MANAGER	DATE	ENGINEERING MANAGER	DATE
INFECTIOUS CONTROL	DATE	CARELINE MANAGER	DATE
SAFETY OFFICER	DATE	CHIEF OF STAFF	DATE

Drawing Title		Project Title	
ELECTRICAL DETAILS		VA BATAVIA EMERGENCY POWER UPGRADES	
MEDICAL CENTER DIRECTOR		Building Number	Checked
ASSOCIATE MEDICAL CENTER DIRECTOR		1	EJS
		Drawn	RS

Date	June 6, 2014
Station No.	528-13-201
Location	V.A.M.C. BATAVIA, NEW YORK

13-201-E502

