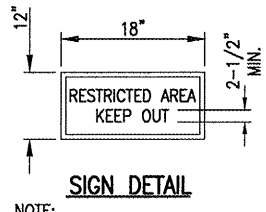
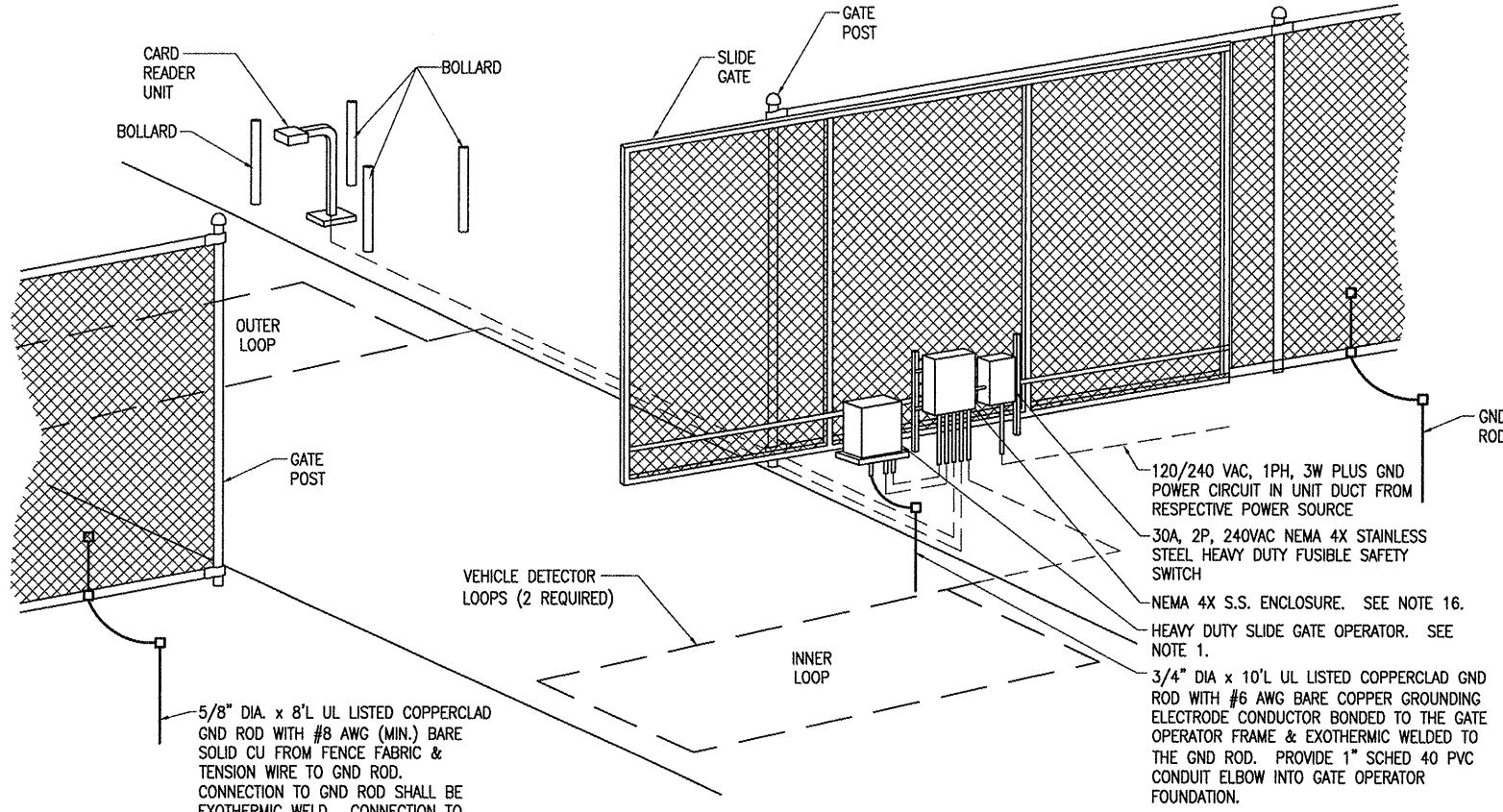


VEHICLE DETECTOR LOOPS		
GATE SIZE	LOOP SIZE	NO. OF TURNS
8' TO 12'	4' X 6'	3 TURNS
12' TO 16'	4' X 10'	2 TURNS
16' TO 20'	4' X 14'	2 TURNS
20' TO 24'	4' X 18'	2 TURNS
24' TO 30'	6' X 22'	2 TURNS
30' TO 34'	6' X 26'	2 TURNS

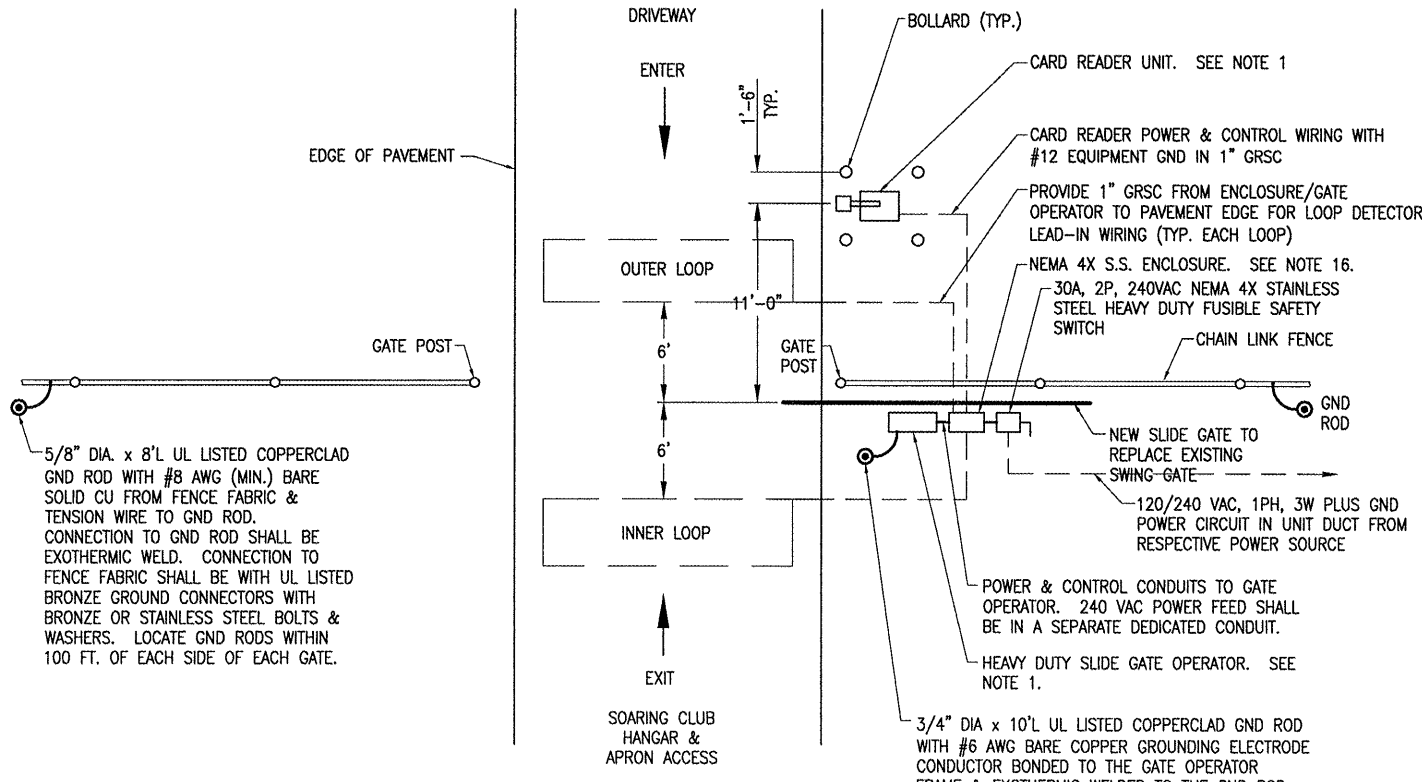


SIGN DETAIL
 NOTE:
 0.08 GA. ALUMINUM ALLOY SHEET
 LETTERING COLOR SHALL BE RED.
 EACH GATE SHALL REQUIRE ONE
 SIGN. EVERY 100' OF FENCE
 SHALL REQUIRE ONE SIGN.



5/8" DIA. x 8'L UL LISTED COPPERCLAD
 GND ROD WITH #8 AWG (MIN.) BARE
 SOLID CU FROM FENCE FABRIC &
 TENSION WIRE TO GND ROD.
 CONNECTION TO GND ROD SHALL BE
 EXOTHERMIC WELD. CONNECTION TO
 FENCE FABRIC SHALL BE WITH UL LISTED
 BRONZE GROUND CONNECTORS WITH
 BRONZE OR STAINLESS STEEL BOLTS &
 WASHERS. LOCATE GND RODS WITHIN
 100 FT. OF EACH SIDE OF EACH GATE.

ELECTRIC GATE DETAIL
 "NOT TO SCALE"



5/8" DIA. x 8'L UL LISTED COPPERCLAD
 GND ROD WITH #8 AWG (MIN.) BARE
 SOLID CU FROM FENCE FABRIC &
 TENSION WIRE TO GND ROD.
 CONNECTION TO GND ROD SHALL BE
 EXOTHERMIC WELD. CONNECTION TO
 FENCE FABRIC SHALL BE WITH UL LISTED
 BRONZE GROUND CONNECTORS WITH
 BRONZE OR STAINLESS STEEL BOLTS &
 WASHERS. LOCATE GND RODS WITHIN
 100 FT. OF EACH SIDE OF EACH GATE.

ELECTRIC GATE PLAN
 "NOT TO SCALE"

NOTES:

- SEE SPECIAL PROVISION SPECS FOR REQUIREMENTS ON RESPECTIVE GATE & GATE OPERATOR SYSTEM.
- ALL DIMENSIONS AND LAYOUT INFORMATION SHOWN SHOULD BE ADJUSTED AS RECOMMENDED BY THE MANUFACTURER. SEE RESPECTIVE SITE PLAN FOR EACH GATE.
- CONCRETE FOUNDATIONS SHALL BE PROVIDED FOR THE SLIDE GATE OPERATOR AND THE CARD READER CONTROL UNIT. FOUNDATION FOR THE GATE OPERATOR SHALL BE 48" (MIN.) IN DEPTH AND OF THE SIZE RECOMMENDED BY THE MANUFACTURER PLUS MOUNTING SPACE FOR SAFETY SWITCH & J-BOX. FOUNDATION FOR THE CARD READER ACCESS CONTROL UNIT SHALL BE 48" (MIN.) IN DEPTH, AS DETAILED HEREIN.
- 1" GR5 CONDUIT WILL BE REQUIRED BETWEEN THE SLIDE GATE OPERATOR AND THE CARD READER ACCESS CONTROL UNIT AND BETWEEN THE SLIDE GATE OPERATOR AND THE DETECTOR LOOPS. THE MINIMUM BURYING DEPTH IS 24". ALL METAL CONDUITS ENTERING THE GATE OPERATOR SHALL BE BONDED TO THE GATE OPERATOR FRAME WITH A #8 AWG (MIN.) COPPER BONDING JUMPER. CONFIRM CONTROL WIRING REQUIREMENTS WITH THE RESPECTIVE GATE OPERATOR SALES AND SERVICE REPRESENTATIVE.
- THE GUARD/BOLLARD POSTS SHALL BE 4" DIA. STEEL (HEAVY WALL) PIPE, CONCRETE FILLED, AND SHALL EXTEND FROM THE TOP OF THE CARD CONTROL UNIT TO A DEPTH OF 48" BELOW THE GROUND LINE. THE CONCRETE FOOTER DIMENSION SHALL BE AS DETAILED HEREIN. GUARD/BOLLARD POSTS SHALL BE PAINTED WITH YELLOW COLORED ENAMEL FINISH.
- THE SLIDING GATE SHALL BE CANTILEVER TYPE OF THE SIZE CALLED FOR ON THE PLANS, SHALL HAVE AN ENCLOSED ROLLER ASSEMBLY WHICH IS PROTECTED FROM FREEZING RAIN AND SNOW, AND SHALL BE AS MANUFACTURED BY TYMETAL CORPORATION OR APPROVED EQUAL.
- AS PART OF THIS ITEM 75 CARDS AND 25 REMOTE TRANSMITTERS FOR EACH GATE SHALL BE PROVIDED BY THE CONTRACTOR. COORDINATE PROGRAMMING OF CARDS & TRANSMITTER FREQUENCIES WITH THE AIRPORT MANAGER.
- CONTRACTOR SHALL COORDINATE ANY POWER OUTAGES TO EXISTING EQUIPMENT WITH THE RESPECTIVE OWNER'S REPRESENTATIVE AND THE AIRPORT MANAGER.
- INCLUDE UL LISTED SECONDARY SURGE ARRESTER FOR THE GATE OPERATOR SUITABLE FOR USE ON 240 VAC, 1 PHASE, 2 WIRE PLUS GROUND SYSTEM, WITH SURGE CURRENT RATING OF 100 KA PER MODE, LIFETIME PRODUCT REPLACEMENT WARRANTY, DITEK MODEL DTK-120/240 CM PLUS OR EQUAL.
- CONCRETE USED FOR INSTALLING THE GATE OPERATOR, CARD READER, & FENCE SHALL MEET THE REQUIREMENTS OF STRUCTURAL PORTLAND CEMENT CONCRETE ITEM 610.
- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE UL LISTING, ETL LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
- PROVIDE A WEATHERPROOF ENGRAVED PHENOLIC OR PLASTIC LEGEND PLATE FOR THE SAFETY SWITCH AT THE RESPECTIVE GATE OPERATOR NOTING THE GATE SERVED, VOLTAGE, AND RESPECTIVE POWER SOURCE CIRCUIT AND LOCATION.
- PAYMENT FOR EACH SLIDE GATE, CARD READER, GATE OPERATOR, AND ALL ASSOCIATED CONTROL & SAFETY DEVICES SHALL BE ON A LUMP SUM BASIS AND SHALL BE FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT, CABLE IN CONDUIT, DUCT, OR UNIT DUCT, GROUNDING, LABOR, TOOLS, COORDINATION, TESTING, AND INCIDENTALS REQUIRED TO INSTALL THE GATE COMPLETE AND IN OPERATING CONDITION.
- CONTROL CIRCUIT WIRING SHALL NOT BE ROUTED THROUGH THE SAFETY SWITCH/DISCONNECT.
- LOCATE RECEIVER ANTENNA TO PROVIDE PROPER OPERATION FROM REMOTE TRANSMITTERS FROM A DISTANCE UP TO 150 FEET. INCLUDE CONDUITS & SUPPORT HARDWARE.
- ALL CONTROL POWER TRANSFORMERS, POWER SUPPLIES, RECEPTACLES, LOOP DETECTOR AMPLIFIERS, SECONDARY SAFETY DEVICE EQUIPMENT, AND ANY OTHER ASSOCIATED CONTROLS SHALL BE INSTALLED EITHER INSIDE THE GATE OPERATOR CONTROL PANEL OR INSIDE A SEPARATE NEMA 4 STAINLESS STEEL CONTROL PANEL ENCLOSURE. WHERE THE CONTROL EQUIPMENT IS TO BE INSTALLED INSIDE THE GATE OPERATOR CONTROL PANEL THE CONTRACTOR SHALL COORDINATE THIS WITH THE GATE OPERATOR MANUFACTURER AND THE RESPECTIVE GATE OPERATOR EQUIPMENT SUPPLIER. LOCATING THESE CONTROLS OUTSIDE OF GATE OPERATOR CONTROL PANEL BUT WITHIN THE GATE OPERATOR HOUSING WILL NOT MEET THIS REQUIREMENT.

BY	REVISION	DATE

**MID-AMERICAN AIR CENTER
 LAWRENCEVILLE-VINCENNES AIRPORT
 LAWRENCEVILLE, ILLINOIS**

IL. PROJ.: LW-3869 A.I.P. PROJ.: 3-17-0061-B15

Hanson Project No. 08A018SD_0800	FILENAME: E-501.DWG	SCALE: NOT TO SCALE	DATE: 01/20/09
LAYOUT	KNL	01/06/09	
DRAWN	MV	01/07/09	
REVIEWED	JSL	01/09/09	



**FRONTAL AREA
 FENCE INSTALLATION**

**PROPOSED ELECTRIC
 SLIDE GATE DETAILS -
 SOARING CLUB**