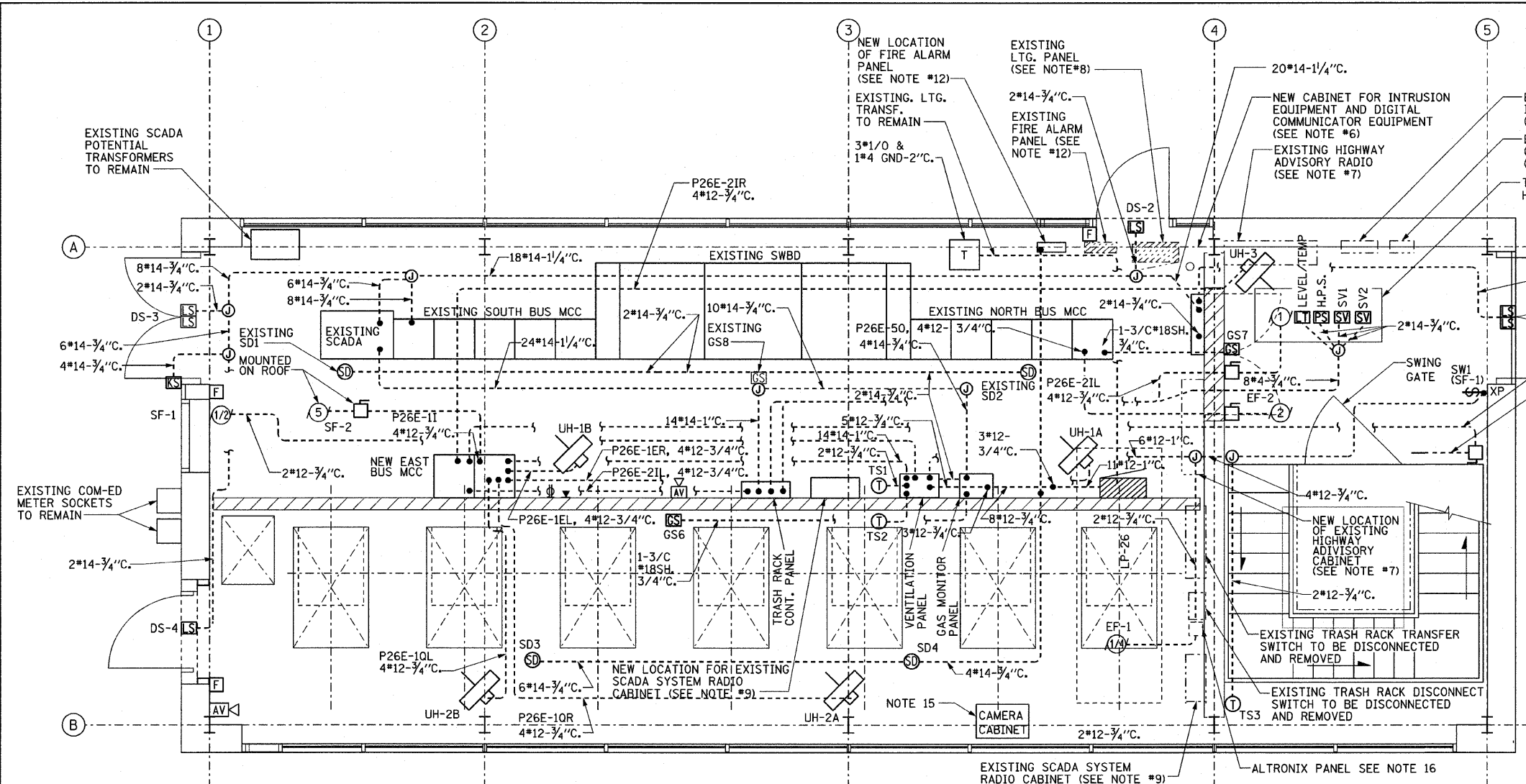
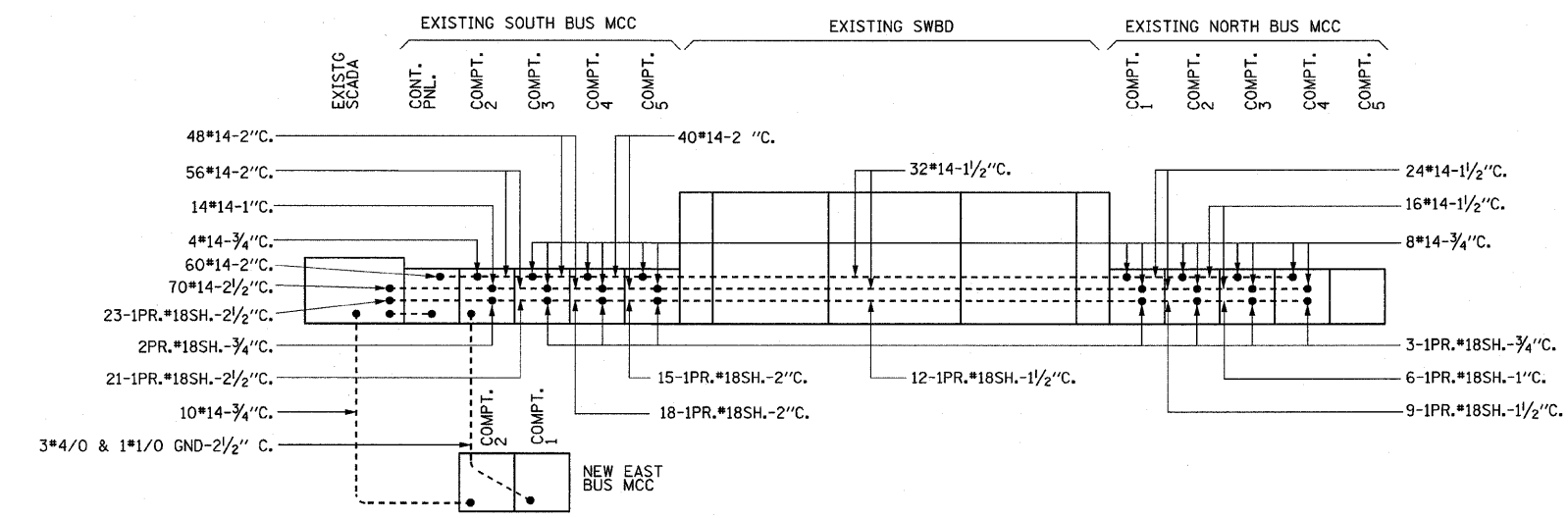


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	1999-161-1	COOK	75	47
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
D-91-411-99				



- NOTES:**
- ALL ELECTRICAL INSTALLATIONS EXPOSED TO THE WET ATMOSPHERE, INCLUDING THE STAIRWELLS, SHALL MEET THE REQUIREMENTS OF THE LATEST NEC HAZARDOUS LOCATION FOR CLASS 1, DIVISION 1, GROUP D. THE ELECTRICAL CONTROL ROOM SHALL BE NON-HAZARDOUS.
 - ALL CONTROL CABLES SHALL BE AWG. NO. 14, STRANDED.
 - ALL CONDUIT BOTH EXISTING AND NEW PENETRATIONS THROUGH WALL AND/OR FLOOR SLAB BETWEEN HAZARDOUS AND NON-HAZARDOUS AREAS SHALL BE GROUTED GAS TIGHT.
 - ALL FLOOR AND WALL PENETRATIONS SHALL BE CORE DRILLED AND SEALED WITH NON SHRINK GROUT.
 - "3/C#18SH" REPRESENTS "3 CONDUCTOR #18 SHIELDED CABLE".
 - RELOCATE AND REWIRE EXISTING AEGIS EQUIPMENT AND DIGITAL COMMUNICATOR INTO NEW CABINET ON NORTH WALL OF ELECTRICAL ROOM. CONTRACTOR SHALL ENSURE THAT THE EXISTING AEGIS ALARM SYSTEM IS CONTINUALLY MAINTAINED THROUGHOUT THE PROJECT CONSTRUCTION AND THAT THE SYSTEM IS FUNCTIONING AND COORDINATED WITH THE RELOCATION AT THE END OF THE PROJECT.
 - RELOCATE AND REWIRE THE EXISTING HIGHWAY ADVISORY RADIO CABINET. 1/2" FOAM DIELECTRIC, POLYETHYLENE JACKETED, FLEXIBLE COAXIAL CABLE SHALL BE UTILIZED FOR DIRECT BURIAL OF ANTENNA FEED LINE AND ANTENNA CONNECTION. SUITABLE CONNECTORS SHALL BE SUPPLIED AND INSTALLED FOR A SECURE CONNECTIONS. (I.E. ANDREW LDF4-50A) RG-8U OR EQUIVALENT FOAM FILLED, COPPER JACKETED, FLEXIBLE CABLE WITH APPROPRIATE CONNECTORS FOR ANTENNA TUNING AND ABOVE SOIL CONNECTIONS. COAXIAL CABLE SHALL BE GROUNDED WITH A #8 WIRE (NOT TO EXCEED 20 FT.) AT THE BUILDING PREMISES AS CLOSE AS POSSIBLE TO THE POINT OF ENTRY.
 - KEEP EXISTING LIGHTING PANEL IN SERVICE UNTIL THE NEW LIGHTING PANEL IS WIRED.
 - RELOCATE AND REWIRE THE EXISTING SCADA SYSTEM RADIO CABINET.
 - REWIRE EXISTING FLOAT SWITCHES TO EXISTING CONTROL PANEL, RUN NEW CONDUITS AND INSTALL A NEW FLOAT TERMINAL BOX TO MEET THE REQUIREMENTS FOR CLASS 1, DIVISION 1, GROUP D LOCATION. FLOAT TERMINAL BOX SHALL BE 12"x12"x6" EXPLOSION PROOF WITH 2-20 POINT TERMINAL BLOCKS. PROVIDE CABLE CONNECTORS FOR EACH EXISTING FLOAT CABLE AND 1 NEW (FOR STANDBY PUMP) ON THE BOTTOM OF THE BOX.
 - ALL SMOKE DETECTORS ARE CEILING MOUNTED. ALL GAS DETECTORS ARE WALL MOUNTED AT 5'-6" ABOVE FLOOR.
 - CONTRACTOR SHALL RELOCATE AND REWIRE THE EXISTING FIRE ALARM CONTROL PANEL.
 - ALL CONDUIT AND FITTINGS INSTALLED BELOW GRADE SHALL BE PVC COATED.
 - ALL CONDUIT AND FITTINGS INSTALLED IN HAZARDOUS AREAS SHALL BE INTRINSICALLY SAFE.
 - CAMERA RACK WILL BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION.
 - THE EXISTING GAS SYSTEM ALTRONIX PANEL IS NOT RATED FOR HAZARDOUS LOCATIONS. ACCORDINGLY, RELOCATE ALTRONIX PANEL TO UNCLASSIFIED WALL SPACE IN MCC ROOM NEXT TO PROPOSED GAS MONITOR PANEL, AND PROVIDE 120VAC POWER TO THE ALTRONIX WALL TRANSFORMER FROM THE GAS MONITOR PANEL'S 120VAC CIRCUIT. EXTEND THE WIRING FROM THE EXISTING ULTIMA X3 TRANSMITTER BACK TO THE NEW LOCATION OF THE ALTRONIX PANEL. ALTERNATIVELY TO THE ABOVE, THE GAS SYSTEM VENDOR AND SUBCONTRACTOR MAY AT HIS OPTION DEMO THE ALTRONIX PANEL AND EXISTING ULTIMA X3 ENTIRELY, AND PROVIDE A NEW TRANSMITTER AND INTEGRAL POWER SUPPLY FOR EXISTING GAS SENSORS GS1 AND GS8. IN EITHER CASE, CONTRACTOR SHALL ALSO DEMO THE 120VAC RECEPTACLE AND CONDUIT LABELED "CKT 27" BACK TO THE LIGHTING PANEL.

PLAN A-A AT EL.+15'-3"



DETAIL WIRING AMONG MCC'S, CONTROL PANEL & SCADA



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

ELECTRICAL CONDUIT PLAN - SHEET 1

SCALE: VERT. 3/8"=1'-0"
 HORIZ. 3/8"=1'-0"
 DATE: 3/23/2010

DRAWN BY: B.K.
 CHECKED BY: M.Z.

PLOT DATE = 3/22/2010
 FILE NAME = D:\60828-161-E-05.dgn
 PLOT SCALE = 1/2"=6'6"
 USER NAME = MUSEBY