

RCUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
.	..	***	52	1
FED ROAD DIST NO			ILLINOIS FED AID PROJECT	
FAI 55/70			DIST 8 ITS 2006-2	
MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				
D-98-116-05				

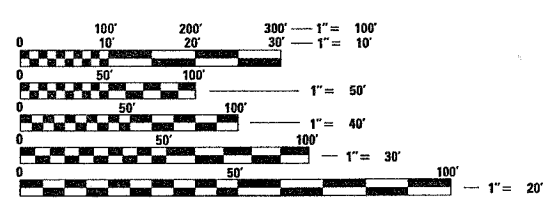
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STANDARDS

000001-04	601001	701001-01
701101-01	701106-01	701400-02
701406-04	701411-03	701501-03
702001-06	720021-01	805001
814001	814006	

MICROFILMED _____
 REEL NUMBER _____
 AWARDED _____
 RESIDENT ENGINEER _____
 AS BUILT CHANGES WERE MADE
 ON THE FOLLOWING SHEETS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123

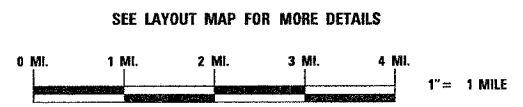
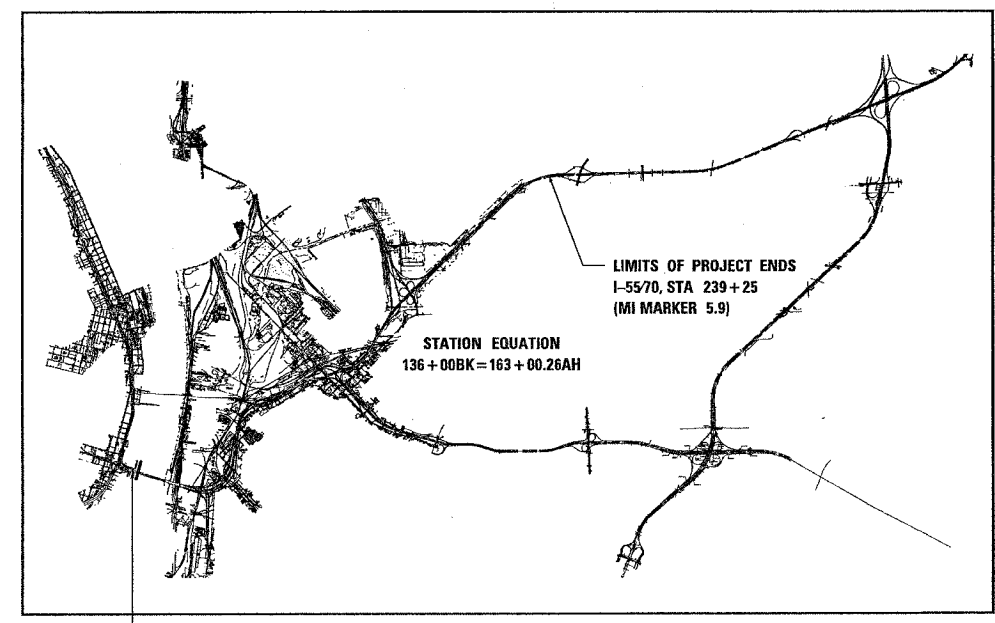
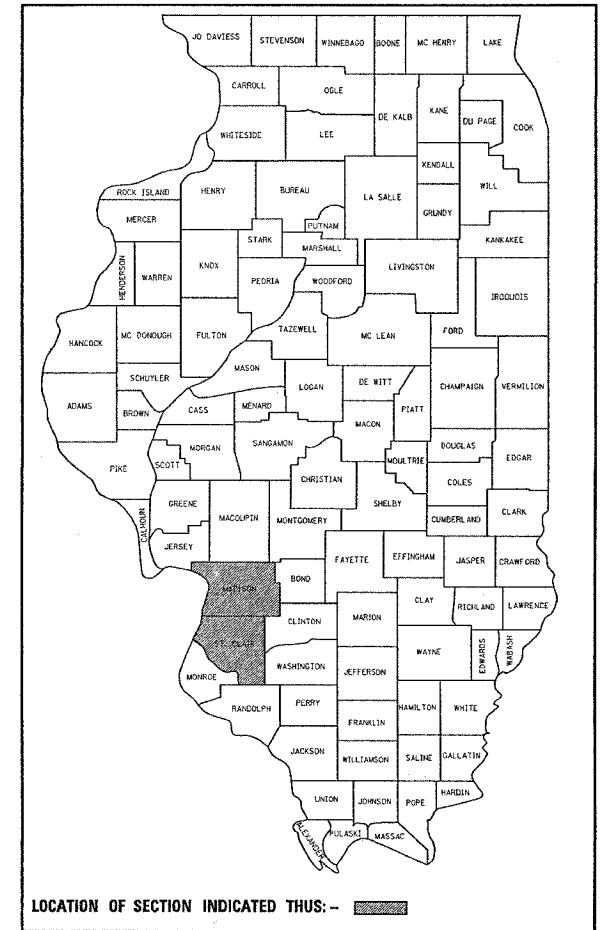
CONTRACT NO. 76973

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

PROPOSED
 HIGHWAY PLANS

FAI 55/70 (I-55/70)
 SECTION DIST 8 ITS 2006-2
 MADISON & ST. CLAIR COUNTIES
 & CITY OF ST. LOUIS, MO
 ITS 1B-PERMANENT COMMUNICATION/DEVICES
 FROM THE POPLAR STREET BRIDGE PIER 1
 IN ST. LOUIS, MO TO 0.5 MI. EAST OF IL RTE 111
 C-75-016-06

PROJ. ITS-0417(104)



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED May 24, 2006
Man C. Rame
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 30, 2006
Mike Stone
 ENGINEER OF DESIGN AND ENVIRONMENT

June 30, 2006
Milton L. Seay, P.E.
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PLOT DATE = 5/23/2006
 FILE NAME = \\edil685\external\l\p\p\16895.dgn
 PLOT SCALE = 1/8"=1'-0"
 REFERENCE = #REF#

LASON ENGINEER: BRIAN A. SNEED (618) 346-3118
 PROJECT ENGINEER: PATTI LEBEAU (618) 346-3179
 SQUAD LEADER: MICHAEL PRESTON (618) 346-3143

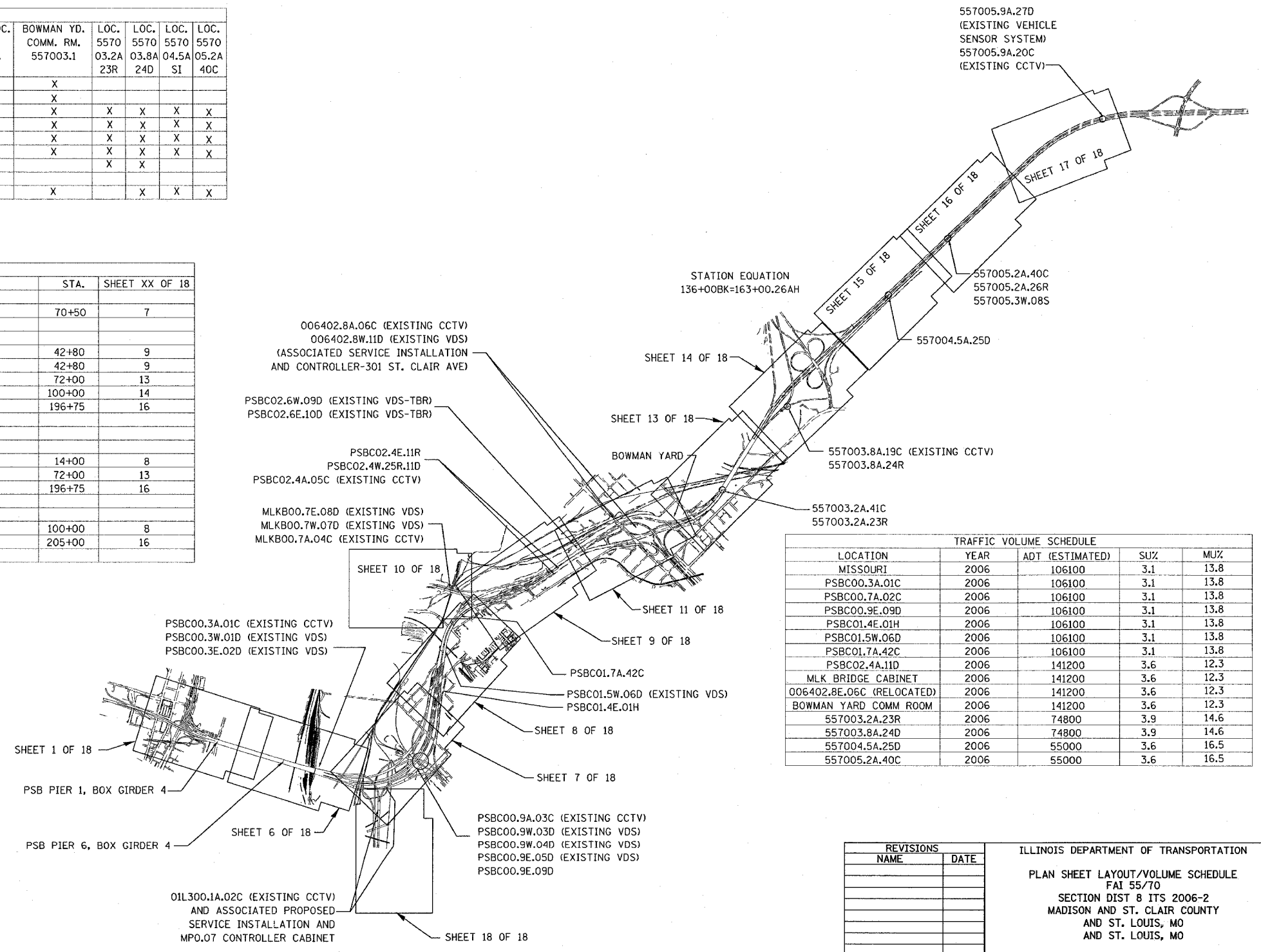
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
..	52	2
STA.		TO STA.		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
FAI 55/70			CONTRACT# 76973	
DIST 8 ITS 2006-2				
MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				

TRAFFIC CONTROL AND PROTECTION STANDARDS	MO	TRAFFIC CONTROL													REL. LOC. 0064 02.8E. 06C	BOWMAN YD. COMM. RM. 557003.1	LOC. 5570 03.2A 23R	LOC. 5570 03.8A 24D	LOC. 5570 04.5A SI	LOC. 5570 05.2A 40C		
		LOC. PSBC 00.3A .01C	LOC. PSBC 00.7A 02C	LOC. PSBC 00.9E 09D	LOC. PSBC 01.4E 01H	LOC. PSBC 01.5W 06D	LOC. PSBC 01.7E 10D	LOC. PSBC 02.4A 11D	LOC. PSBC 02.6E 09D	LOC. MLK BRIDGE CABINET												
701001*	NA	X	X	X	X	X	X	X	X	X	X	X	X		X							
701006-02*	NA	X	X	X	X	X	X	X	X	X	X	X	X		X							
701101-01*	NA						X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
701106-01*	NA						X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
701400-02	1 L SUM								X	X	X	X	X	X	X	X	X	X	X	X	X	X
701406-04	1 L SUM								X	X	X	X	X	X	X	X	X	X	X	X	X	X
701411-03	2 EACH								X	X	X	X	X	X	X	X	X	X	X	X	X	X
701501-03	1 L SUM						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
702001-05*	NA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* NOT MEASURED FOR PAYMENT
SI=SERVICE INSTALLATION

NEW ELEMENTS			
	LOCATION	STA.	SHEET XX OF 18
VIDEO DETECTION			
PSBC00.9E.09D	PARAPET WALL ON RAMP "S" (TUDOR EXIT RAMP FROM WB I-55/70/64) PIER S16	70+50	7
RADAR DETECTION			
PSBC02.4E.11R	EB I-55/70 0.2 MILES EAST OF MARTIN LUTHER KING DRIVE	42+80	9
PSBC02.4W.25R	EB I-55/70 0.2 MILES EAST OF MARTIN LUTHER KING DRIVE	42+80	9
557003.2A.23R	WB I-55/70 0.2 MILES EAST OF EXCHANGE AVE.	72+00	13
557003.8A.24R	0.3 MILES WEST OF IL RTE 203	100+00	14
557005.2A.26R	WB I-55/70 1.5 MILES EAST OF IL RTE 203	196+75	16
CCTV			
PSBC01.7A.42C	EB I-55/70 0.1 MILES EAST OF RIVER PARK DR. (IL 15)	14+00	8
557003.2A.41C	WB I-55/70 0.2 MILES EAST OF EXCHANGE AVE.	72+00	13
557005.2A.40C	WB I-55/70 1.5 MILES EAST OF IL RTE 203	196+75	16
HAR SIGNAGE			
PSBC01.4E.01H	EB I-55/70 INTERSECTION OF 5TH ST. @ CONVERSE AVE.	100+00	8
557005.3W.08S	WB I-55/70 1.6 MILES EAST OF IL RTE 203	205+00	16

FIELD EQUIPMENT NUMBERING SYSTEM	
EXAMPLE : 006402.8W.11D	
0064	DESIGNATES HIGHWAY WHERE FIELD EQUIPMENT IS LOCATED.
006402.8	DESIGNATES MILE MARKER WHERE FIELD EQUIPMENT IS LOCATED.
006402.8W	DESIGNATES DIRECTION VIDEO DETECTOR IS MONITORING TRAFFIC OR DIRECTION TRAFFIC IS TRAVELLING TO RECEIVE DMS MESSAGE.
006402.8W.11	NUMBER ASSIGNED TO THAT FIELD EQUIPMENT
006402.8W.11D	A = ALL DIRECTIONS D = VEHICLE DETECTION C = CAMERA (P/T/Z SURVEILLANCE) H = HAR SIGNAGE WITH BEACON R = RADAR DETECTION



TRAFFIC VOLUME SCHEDULE				
LOCATION	YEAR	ADT (ESTIMATED)	SUZ	MUX
MISSOURI	2006	106100	3.1	13.8
PSBC00.3A.01C	2006	106100	3.1	13.8
PSBC00.7A.02C	2006	106100	3.1	13.8
PSBC00.9E.09D	2006	106100	3.1	13.8
PSBC01.4E.01H	2006	106100	3.1	13.8
PSBC01.5W.06D	2006	106100	3.1	13.8
PSBC01.7A.42C	2006	106100	3.1	13.8
PSBC02.4A.11D	2006	141200	3.6	12.3
MLK BRIDGE CABINET	2006	141200	3.6	12.3
006402.8E.06C (RELOCATED)	2006	141200	3.6	12.3
BOWMAN YARD COMM ROOM	2006	141200	3.6	12.3
557003.2A.23R	2006	74800	3.9	14.6
557003.8A.24D	2006	74800	3.9	14.6
557004.5A.25D	2006	55000	3.6	16.5
557005.2A.40C	2006	55000	3.6	16.5

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		PLAN SHEET LAYOUT/VOLUME SCHEDULE FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO AND ST. LOUIS, MO

DATE 5/23/2006

PLOT DATE = 5/23/2006
FILE NAME = c:\projects\1680\electrical\1680s.dgn
PLOT SCALE = 1/8" = 1'-0"
REFERENCE = #REF#

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

• FAI 55/70
 • DIST 8 ITS 2006-2
 ••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO

CONTRACT# 76973

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

URBAN ST. LOUIS MO.
ST. CLAIR COUNTY
MADISON COUNTY

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION CODE SFTY Y032-1F										BOWMAN YARD COMM ROOM MP03.1	SERV. LOC. 5570 MP04.5	CAB. LOC. 5570 MP03.2	CAB. LOC. 5570 MP03.8	CAB. LOC. 5570 MP05.2	CAB. LOC. 5570 MP05.8	PSB PER 6 TO TMC FO BACKBONE	
				CAB. LOC. PSB PIER 1-8	CAB. LOC. PSBC MP00.3	CAB. LOC. 08.03 MP00.3	CAB. LOC. PSBC MP00.7	CAB. LOC. PSBC MP00.9	CAB. LOC. PSBC MP01.4	FEDERAL - 70% CAB. LOC. PSBC MP01.5	CAB. LOC. PSBC MP01.7	STATE - 22% CAB. LOC. PSBC MP02.4	CAB. LOC. MLKB MP00.7								CAB. LOC. PSBC MP02.8
20101400	NITROGEN FERTILIZER NUTRIENT	POUND	540																		
20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	540																		
20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	540																		
25000115	SEEDING, CLASS 1B	ACRE	2																		
25000210	SEEDING, CLASS 2A	ACRE	2																		
25100105	MULCH METHOD 1	ACRE	4																		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	400																		400
28000600	INLET AND PIPE PROTECTION	EACH	10																		10
68410460	CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED	FOOT	350		50			50							100		100				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	1																		1
67100100	MOBILIZATION	L SUM	1																		1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	2																		
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1								0.2			0.2		0.1		0.1		0.2	0.1
70102820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1																		1
72000305	SIGN PANEL - TYPE 3 (SPECIAL)	SQ. FT	66					66													
72700100	STRUCTURAL STEEL SIGN SUPPORT-BREAKAWAY	POUND	156					156													
73400100	CONCRETE FOUNDATIONS	CU YD	1.4					1.4													
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	6.0					6.0													6.0
80300100	LOCATING UNDERGROUND CABLE	FOOT	2791		1692			740		100					100			50			
80500100	SERVICE INSTALLATION, TYPE A	EACH	6				1			1					1			1			
80801500	WOOD POLE, 25 FT., CLASS 5	EACH	6				1			1					1			1			
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	6					4										2			
81012800	CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	5736					267		27					366		146	127	46		87
81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	599														256				300
81100590	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., ALUMINUM	FOOT	160												160						148
X0325470	CONDUIT ATTACHED TO STRUCTURE, 3" DIA., ALUMINUM	FOOT	415					129		5					5			5			5
81102700	CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., PVC	FOOT	115		115																
81300835	JUNCTION BOX, ALUMINUM, ATTACHED TO STRUCTURE, 18" X 18" X 10"	EACH	37																		37
81400400	CONCRETE HANDHOLE	EACH	56																		56
81400600	CONCRETE DOUBLE HANDHOLE	EACH	8				1			1								1			1
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	35241					370		146					127		46		73		42
83034100	LIGHT POLE, STEEL, 30 FT. M.H., TENON MOUNT	EACH	2														1				1
85800300	FLASHER CONTROLLER, WITHOUT CABINET	EACH	1					1													1
86300305	CONTROLLER CABINET TYPE III SPECIAL	EACH	3				1			1											3
87000105	ELECTRIC CABLE ASSEMBLY IN CONDUIT, 500V (EPR-TYPE TC) 2/C NO. 10 AND NO. 10 GROUND	FOOT	1251.5					855.5		123.5					132.5			84			56
87100110	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, 6F	FOOT	6630												132.5		4534.5		1040		84
87301715	ELECTRIC CABLE IN CONDUIT, COMM., NO. 18 6 PAIR	FOOT	727														378				84
87301735	ELECTRIC CABLE IN CONDUIT, COMM., NO. 18 12 PAIR	FOOT	855.5					855.5											209		56
87301815	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3C	FOOT	1300					34		43					21		50.5		350.5		18
87502680	TRAFFIC SIGNAL POST, ALUMINUM 14 FT.	EACH	1												1						783
87800210	CONCRETE FOUNDATION, TYPE D (SPECIAL)	FOOT	24.5					3.5		3.5					3.5		3.5		3.5		3.5
87900100	DRILL EXISTING FOUNDATION	EACH	10		2					3							1			3	1
87900200	DRILL EXISTING HANDHOLE	EACH	9																	6	
89502215	MODIFY EXISTING CONTROLLER FOUNDATION	EACH	2		1						1										
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	5335					1835									3600				
X0322227	CLOSED CIRCUIT TELEVISION CAMERA SYSTEM	EACH	3																		1
X0322343	LOCATE EXISTING DRAINAGE STRUCTURE	EACH	10																		10
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	32620.5																		32620.5
X0323228	FURNISH AND INSTALL TRUSS DAMPER	EACH	1																		
X0325066	2055 LAYER 2 SWITCH	EACH	7																		1
X0325075	CONDUIT ATTACHED TO STRUCTURE 4" DIA. FIBER GLASS BULLET RESISTANT	FOOT	892																		892
X0325076	WIDE AREA NETWORK	L SUM	1																		1
X0325077	FIBER OPTIC UTILITY MARKER	EACH	400																		400
X7010000	TRAFFIC CONTROL AND PROTECTION STANDARD 701406, SPECIAL	L SUM	1																		1
X8100065	CONDUIT IN TRENCH, 4" DIA., PVC TYPE C	FOOT	29384																		29384
X8102020	CONDUIT PUSHED, 4" DIA., SCHEDULE 80	FOOT	1755																		1755
X8110128	CONDUIT ATTACHED TO STRUCTURE, 4" DIA., PVC TYPE C	FOOT	5124																		5124
X8305420	LIGHT POLE, STEEL, 45 FT. WITH CAMERA LOWERING SYSTEM	EACH	3																		3
X8360100	LIGHT POLE FOUNDATION, 28" DIAMETER	FOOT	90												7.5			7.5		7.5	1
X8710075	FIBER OPTIC CABLE IN CONDUIT, 72 COND. S.M. F.O.	FOOT	38265																		38265
X8730050	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 2 3/C COPPER	FOOT	2963.5																		2963.5
X8801100	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 1-SECTION, POST MOUNTED	EACH	1																		1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1																		1
X0325451	2055 LAYER 2 SWITCH	EACH	4																		4
X0325452	2055 LAYER 2 SWITCH	EACH	4																		4
X0325453	3650-12C LAYER 3 SWITCH	EACH	1																		1
X0325454	3750-12S LAYER 3 SWITCH	EACH	6																		6
X0325455	BOX ORDER CONDUIT INSTALLATION	L SUM	1																		1
X0325456	CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., ALUMINUM	FOOT	788																		788
X0325457	BOX ORDER CONDUIT INSTALLATION	L SUM	1																		1
X0325458	CONFIGURE DIGITAL VIDEO ENCODER AND DIGITAL VIDEO DECODER	EACH	5																		5
X0325459	CONTROLLER CABINET TYPE III SPECIAL (AIR-CONDITIONED)	EACH	5																		5
X0325460	GLC-T SFP MODULE	EACH	1																		1
X0325461	MEDIA CONVERTER	EACH	1																		1
X0325462	MODIFY EXISTING CONTROLLER CABINET TYPE A1	EACH	1																		1
X0325463	MODIFY EXISTING CONTROLLER CABINET TYPE A4	EACH	2																		2
X0325464	MODIFY EXISTING CONTROLLER CABINET TYPE B	EACH	4																		4
X0325465	MODIFY EXISTING CONTROLLER CABINET TYPE C	EACH	6																		6
X0325466	MODIFY EXISTING CONTROLLER CABINET TYPE D	EACH	1																		1
X0325467	MODIFY EXISTING CONTROLLER CABINET TYPE E	EACH	1																		1
X0325468	MODIFY TOWER-COMMUNICATIONS BUILDING	EACH	1																		1
X0325469	OVERHEAD SIGN STRUCTURE BUTTERFLY TYPE LF-A	FOOT	1																		1
X0325470	RADAR VEHICLE DETECTION SYSTEM	EACH	5																		5
X0325471	RADAR VEHICLE DETECTION SYSTEM (NOT INSTALLED)	EACH	1																		1
X0325472	RELOCATE CONTROLLER CABINET	EACH	1																		1
X0325473	RELOCATE EXISTING ITS EQUIPMENT TYPE A	EACH	1																		1
X0325474	RELOCATE EXISTING ITS EQUIPMENT TYPE B	EACH	1																		1
X0325475	RELOCATE EXISTING ITS EQUIPMENT TYPE C	EACH	1																		1
X0325476	REMOVE EXISTING ITS EQUIPMENT	EACH	5																		5
X0325477	SFP-GE-L SFP MODULE	EACH	12																		12
X0325478	SFP-GE-Z SFP MODULE	EACH</																			

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	4
STA.		TO STA.		
FED. ROAD DIST. NO. _		ILLINOIS	FED. AID PROJECT	
FAI 55/70		CONTRACT# 76973		
DIST 8 ITS 2006-2				
MADISON & ST. CLAIR &		CITY OF ST. LOUIS, MO		

LEGEND

ALUM	ALUMINUM
EP	EDGE OF PAVEMENT
TW SH	TWISTED SHIELDED
PWR CBL	POWER CABLE
F.O.	FIBER OPTIC
J.B.	JUNCTION BOX
GSC	GALVANIZED STEEL CONDUIT
PVCC	POLYVINYL CHLORIDE CONDUIT
FGC	FIBER GLASS CONDUIT
□	EXISTING HANDHOLE
▣	EXISTING DOUBLE HANDHOLE
⊠	EXISTING CONTROLLER
⊞	EXISTING SERVICE INSTALLATION
—	EXISTING GALVANIZED STEEL CONDUIT
⊞	EXISTING JUNCTION BOX
⊞	EXISTING SIGN TRUSS
⊞	EXISTING HIGHWAY LIGHTING UNIT
⊞	EXISTING UNDERGROUND LIGHTING CABLES
■	PROPOSED HANDHOLE
▣	PROPOSED DOUBLE HANDHOLE
⊠	PROPOSED CONTROLLER
—	PROPOSED CONDUIT: "T" TRENCH, "P" PUSH "ATS" ATTACHED TO STRUCTURE, SIZE SPECIFIED
⊞	PROPOSED SERVICE INSTALLATION
⊞	PROPOSED CCTV CAMERA
⊞	PROPOSED JUNCTION BOX, SIZE SPECIFIED
●	PROPOSED WOOD POLE, SIZE SPECIFIED
●	PROPOSED DETECTION SYSTEM (MICROLOOPS)
●	PROPOSED LIGHT POLE, SIZE SPECIFIED
—	PROPOSED CHANGEABLE MESSAGE SIGN
⊞	PROPOSED VIDEO DETECTION CAMERA
⊞	PROPOSED HIGHWAY ADVISORY RADIO
⊞	PROPOSED RADAR VEHICLE DETECTOR

GENERAL NOTES

- CCTV ARE LOCATION SENSITIVE. PROPOSED EQUIPMENT LOCATIONS ARE APPROXIMATE TO ENSURE THE OPTIMUM FIELD OF VIEW. ACTUAL LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR, PER THE MANUFACTURER REPRESENTATIVES' RECOMMENDATIONS AND THE ENGINEER'S APPROVAL. MR. BRIAN SNEED OF BUREAU OF OPERATIONS SHALL BE CONTACTED FOR ACTUAL CAMERA LOCATION VERIFICATION.
 - ALL MATERIALS SUPPLIED SHALL CONFORM TO SECTION 106 OF THE STANDARD SPECIFICATIONS FOR CONTROL OF MATERIALS.
 - THE CONTROLLER CABINETS AND JUNCTION BOXES SHALL BE UNPAINTED ALUMINUM SHEET METAL UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 - UNDERGROUND CABLE MARKING TAPE SHALL BE INSTALLED WITH ALL TRENCH AND BACKFILL FOR ELECTRICAL WORK IN ACCORDANCE WITH ARTICLES 815.03 AND 1066.05 OF THE STANDARD SPECIFICATIONS.
 - A 1/4 " DIA. NYLON ROPE SHALL BE INSTALLED IN ALL CONDUIT RUNS. THE COST OF PULL ROPE SHALL BE INCLUDED IN THE PROPOSED ELECTRIC CABLE INSTALLATION AND OR FIBER OPTIC IN THAT CONDUIT.
 - THE CONTRACTOR SHALL NOT DRILL ANY HOLES IN THE BEAMS, DECK, OR SUBSTRUCTURE OF THE BRIDGE. UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 - ALL GROUND RODS SUPPLIED FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH ARTICLE 1087.01 EXCEPT THAT THEY SHALL BE 3/4 " DIAMETER X 12'-0" LONG. ALL CONNECTIONS TO GROUND RODS SHALL BE MADE VIA EXOTHERMIC WELD, COMPRESSION CLAMPS WILL NOT BE ALLOWED.
 - COORDINATION WITH THE DEPARTMENT'S BUREAU OF OPERATIONS IS REQUIRED BEFORE ANY TRENCHING SHALL BE DONE TO LOCATE HIGHWAY LIGHTING/PUMP STATION FACILITIES AND TO COORDINATE OTHER FIELD ACTIVITIES.
 - BENDING RADIUS OF FIBER OPTIC CABLE SHALL NOT EXCEED SIX (6) INCHES. A MINIMUM OF 20' SLACK CABLE SHALL BE INSTALLED AT EACH CONTROLLER CABINET PRIOR TO TERMINATION OF FIBER.
 - NO OVERNIGHT PERMANENT LANE CLOSURES SHALL BE PERMITTED ON THIS PROJECT.
 - ANY GROUND AREA THAT THE CONTRACTOR COMPACTS OR DISTURBS SHOULD BE SEEDED AT THE END OF EACH WEEK WITH CLASS 7 TEMPORARY EROSION CONTROL SEEDING W/MULCH FOR PERMANENT SEEDING US CLASS 1B LAWN MIXTURE IN EAST SAINT LOUIS CITY LIMITS OR CLASS 2A ROADSIDE MIXTURE ALONG THE INTERSTATE.
 - ALL HANDHOLES SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE (PER ARTICLE 1088.10 THE LEGEND ON THE COVER SHALL BE "ITS". SLOPE HANDHOLE TO MATCH FINAL GRADE ELEVATION. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONENT OF THE VARIOUS CCTV CAMERA SYSTEMS AND VIDEO VEHICLE DETECTION SYSTEMS AND INSTALLATIONS.
 - ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
 - AMEREN IP (GAS AND ELECTRIC)
 - AMEREN UE (ELECTRIC)
 - CENTER POINT ENERGY (PIPELINE)
 - CHARTER COMMUNICATIONS, INC. (CABLE TV)
 - CITY OF EAST SAINT LOUIS (SANITARY SEWER)
 - EXPLORER PIPELINE COMPANY (WATER)
 - LACLEDE PIPELINE CORP. (PIPELINE)
 - LIGHT CORE (COMMUNICATIONS)
 - MCI NETWORK SERVICES (COMMUNICATIONS)
 - MCLEOD USA TELECOMMUNICATIONS, INC. (COMMUNICATIONS)
 - MEDIACOM (CABLE TV)
 - METRO (COMMUNICATIONS)
 - LEDCOR TECHNICAL SERVICES, INC. (COMMUNICATIONS)
 - QWEST COMMUNICATIONS (COMMUNICATIONS)
 - SBC (COMMUNICATIONS)
- (MEMBER OF J.U.L.I.E. (800-892-0123) ARE INDICATED BY "*". NON J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.)
- MISSOURI LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING BY CALLING MISSOURI ONE CALL (800) 334-7483, AND NOTIFYING NON MISSOURI ONE CALL MEMBERS INDIVIDUALLY.

- A 9-1-1 ADDRESS MUST BE OBTAINED FROM THE ST. CLAIR COUNTY 9-1-1 COORDINATOR PRIOR TO OBTAINING ELECTRIC/ TELEPHONE SERVICE AT THE PROJECT LOCATIONS. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER/TECHNICIAN A MINIMUM OF SIX WEEKS IN ADVANCE OF THE ANTICIPATED DATE THAT ELECTRIC/TELEPHONE SERVICE WILL BE REQUIRED IN ORDER THAT THE NECESSARY ADDRESS CAN BE OBTAINED. IF THERE ARE ANY QUESTIONS REGARDING THE ABOVE, CONTACT THE 9-1-1 COORDINATOR AT 618-692-6200, EXT. 5911 FOR MADISON COUNTY AND 618-277-7316 EXT. 104 FOR ST. CLAIR COUNTY
- THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO SECTION 107. LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC OF THE STANDARD SPECIFICATIONS. IN PARTICULAR 107.01 LAWS TO BE OBSERVED AND 107.04 PERMITS AN LICENSES.
- ALL FIBER BACKBONE CONDUIT SHALL BE PLACED A MINIMUM OF 5' FROM EDGE OF PAVEMENT OR AS INDICATED ON THE PLAN SHEETS OR PER FIELD ENGINEER'S RECOMMENDATION.
- THE CONTRACTOR SHALL BE AWARE THAT DURING EARTH WORK NECESSARY TO PERFORM INSTALLATION, SIZABLE CONCRETE DEBRIS MAY BE ENCOUNTERED AND WILL NEED TO BE BROKEN IN PLACE AND SPREAD. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF THE INSTALLATION OF THAT PARTICULAR EQUIPMENT.
- FIELD MEASUREMENTS ARE REQUIRED TO VERIFIED DIMENSIONS OF EXISTING STRUCTURES PRIOR TO ORDERING MOUNTING HARDWARE.

SPECIFICATIONS

FOUNDATIONS: THE CONTRACT UNIT PRICE FOR "CONCRETE FOUNDATIONS" OR "DRILLED SHAFT CONCRETE FOUNDATIONS" SHALL INCLUDE: ALL NECESSARY EXCAVATION OR DRILLING (EXCEPT IN ROCK); BACKFILLING WITH EXCAVATED MATERIAL; DISPOSAL OF SURPLUS MATERIAL; FORMWORK; AND FURNISHING AND PLACING CLASS SI CONCRETE, REINFORCEMENT BARS, CONDUIT, ANCHOR BOLTS, NUTS, WASHERS, AND GROUND RODS COMPLETE IN PLACE.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION GENERAL NOTES, LEGEND, & SPECIFICATIONS FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO DATE 5/23/2006
NAME	DATE	

PLOT DATE = 5/23/2006
FILE NAME = c:\projects\2006\52\11800\electrical\mapinfo\11800.dgn
PLOT SCALE = 100/1510 / IN.
REFERENCE = #REF#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	**	***	52	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
• FAI 55/70		CONTRACT# 76973		
** DIST 8 ITS 2006-2				
*** MADISON & ST. CLAIR & C		CITY OF ST. LOUIS, MO		

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESCRIBED ON THE PLANS AND DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.
 - (a.) WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
 - (b.) EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS.
 - (c.) AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
 - I. PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.
 - II. TEMPORARILY SEED ERODABLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODABLE SURFACE AREA WITHIN THE CONTRACT LIMITS.
 - III. CONSTRUCT ROADSIDE DITCHES AND PROVIDE TEMPORARY EROSION CONTROL SYSTEMS.
 - IV. TEMPORARILY DIVERT WATER AROUND PROPOSED CULVERT LOCATIONS.
 - V. BUILD NECESSARY EMBANKMENT AT CULVERT LOCATIONS AND THEN EXCAVATE AND PLACE CULVERT.
 - VI. CONTINUE BUILDING UP THE EMBANKMENT TO THE PROPOSED GRADE WHILE AT THE SAME TIME, PLACING PERMANENT CONTROL SUCH AS RIPRAP DITCH LINING AND CONDUCTING FINAL SHAPING TO THE SLOPES.
 - (d.) EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR 7 DAYS.
 - (e.) CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
 - (f.) THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY AND AFTER RAINS OF 1/2 INCH OR GREATER OR EQUIVALENT SNOWFALL AND DURING THE WINTER SHUTDOWN PERIOD. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BI-WEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.
 - (g.) SEDIMENT COLLECTED DURING CONSTRUCTION OF THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR EARTH EXCAVATION.
 - (h.) THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR TEMPORARY EROSION CONTROL SYSTEM.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING:

1. TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED.
2. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RESEEDED.






MAINTENANCE AFTER CONSTRUCTION:

1. CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE BY I.D.O.T. FINAL INSPECTION. MAINTENANCE UP TO THIS DATE WILL BE BY THE CONTRACTOR.

MISCELLANEOUS:

1. TEMPORARY DITCH CHECK, STRAW BALES SHALL BE LOCATED AT EVER 1.5 FT. FALL/RISE IN DITCH GRADE.
2. TEMPORARY DITCH CHECKS, AGGREGATE USES GRADING NO. 3- REMOVE AT END OF CONSTRUCTION.
3. TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS/ACRES.
4. MULCH METHOD 1 AS APPLIED TO TEMPORARY SEEDING SHALL CONFORM TO SECTION 251 OF THE STANDARD SPECIFICATIONS. MULCH WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE PRICE FOR TEMPORARY SEEDING.
5. CONSTRUCT PERIMETER EROSION CONTROL AT BEGINNING OF CONSTRUCTION. REMOVE AT END OF CONSTRUCTION.
6. ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

LEGEND

-  TEMPORARY DITCH CHECK- STONES, STRAW BALES
-  TEMPORARY DITCH CHECK- AGGREGATE
-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER- SILT FILTER FENCE OR OTHER AS APPROVED BY THE ENGINEER
-  INLET AND PIPE PROTECTION- STRAW BALES, FILTER FABRIC, AGGREGATES

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

Mary C. Linn
 DEPUTY DIRECTOR OF HIGHWAYS
 REGION FIVE ENGINEER

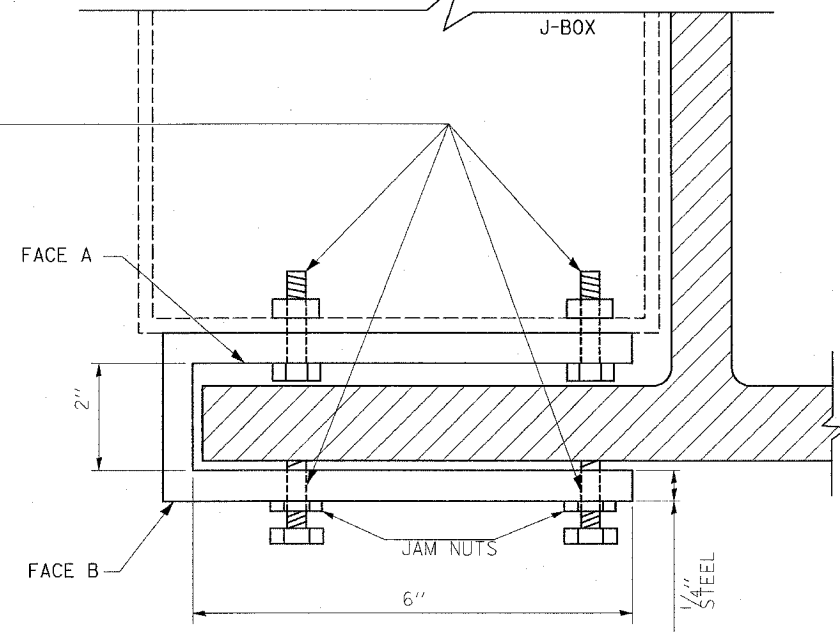
5-24-06
 DATE

NOTE: ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD 280001 AND AS DIRECTED BY THE ENGINEER. MAINTENANCE AND CLEANING OF THE EROSION CONTROL ITEMS SHALL BE INCLUDED IN THE RESPECTIVE EROSION CONTROL PAY ITEM.

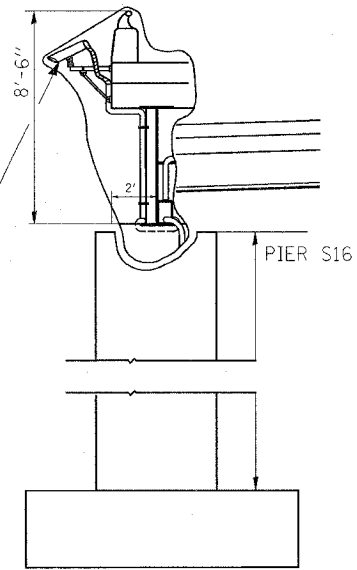
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION STORM WATER POLLUTION PREVENTION PLAN
NAME	DATE	
		FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO DATE 5/24/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
..	52	6
STA.		TO STA.		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
..		CONTRACT# 76973		
.. FAI 55/70				
.. DIST 8 ITS 2006-2				
.. MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				

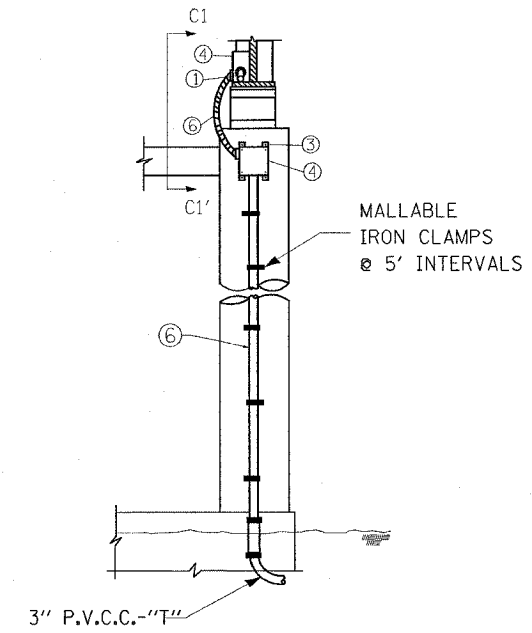
3/8" STAINLESS STEEL-HEX HEAD BOLTS (LENGTH AS REQUIRED)



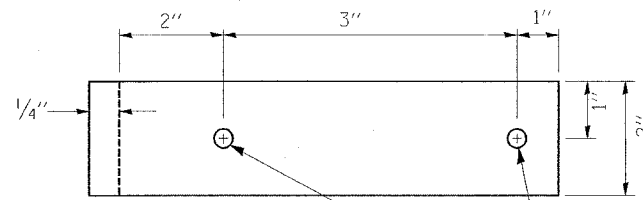
NEW VIDEO DETECTION SYSTEM PARAPET MOUNTED



PARAPET MOUNT DETAIL

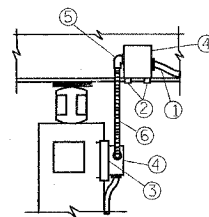


SECTION C-C'



13/32" Ø HOLES FOR FACE A.
FACE B-HOLES SHALL BE TAPPED FOR 3/8" SET SCREW DIA. AS REQUIRED

VIEW OF FACE A & B CHANNEL CLAMP DETAIL D



SECTION C1-C1'

LEGEND

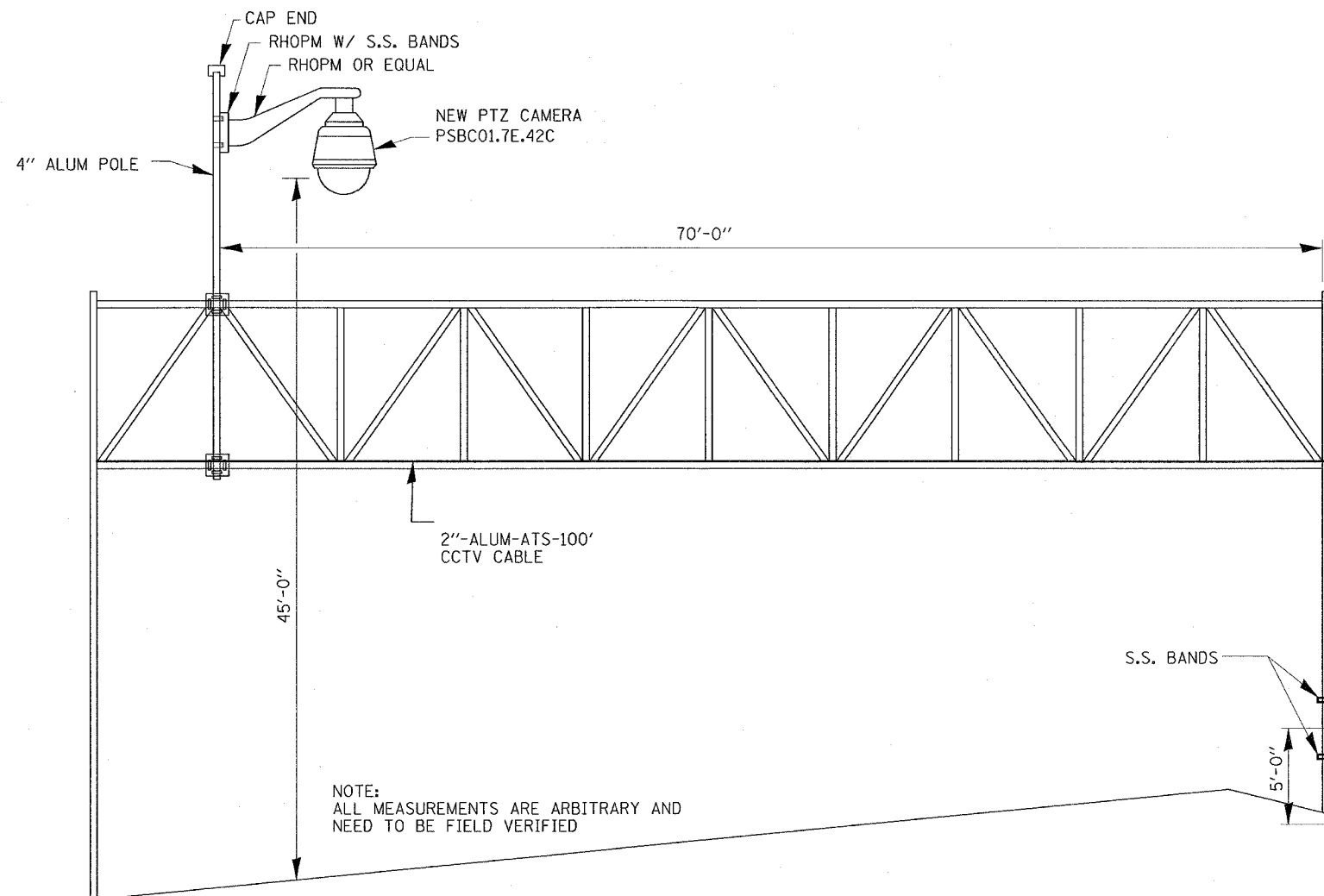
1. 3" PVCC-'ATS'
2. CHANNEL CLAMPS-2 REQUIRED (SEE DETAIL)
3. 1 1/2" X 1 1/2" 12 GAUGE GALV. STEEL CHANNEL
4. 18" X 18" X 10" STAINLESS STEEL JUNCTION
5. CONDULET
6. LIQUID TIGHT FLEXIBLE CONDUIT

PLOT DATE = 5/23/2006
PLOT SCALE = 1/8" = 1'-0"
REFERENCE = #REF#

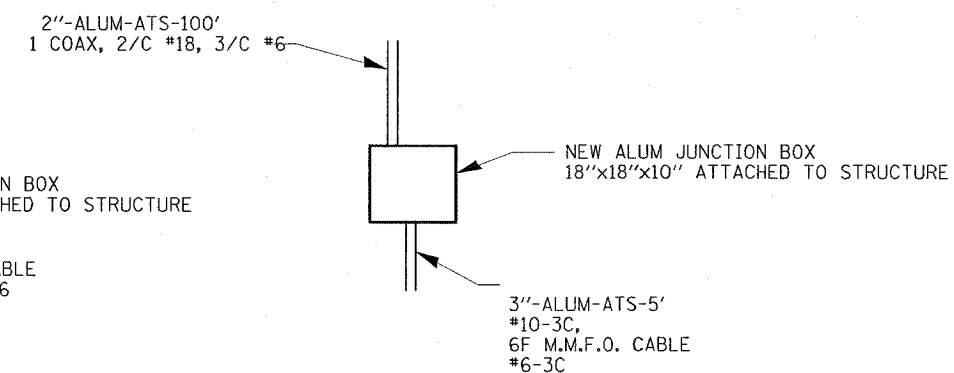
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PARAPET MOUNT VIDEO DETECTION DETAILS
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO
DATE 5/23/2006

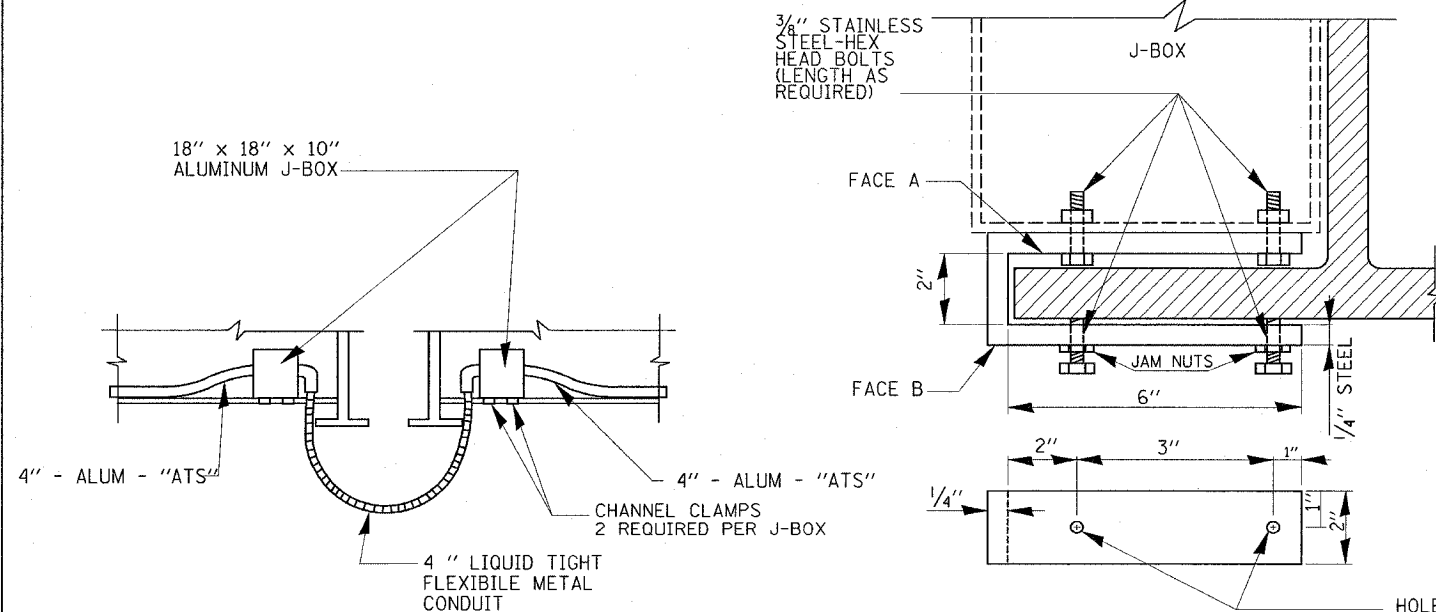
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	**	***	52	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
•	FAI 55/70	CONTRACT# 76973		
**	DIST 8 ITS 2006-2			
***	MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO			



NOTE:
ALL MEASUREMENTS ARE ARBITRARY AND
NEED TO BE FIELD VERIFIED



SECTION A-A'



TYPICAL CONDUIT EXPANSION JOINT

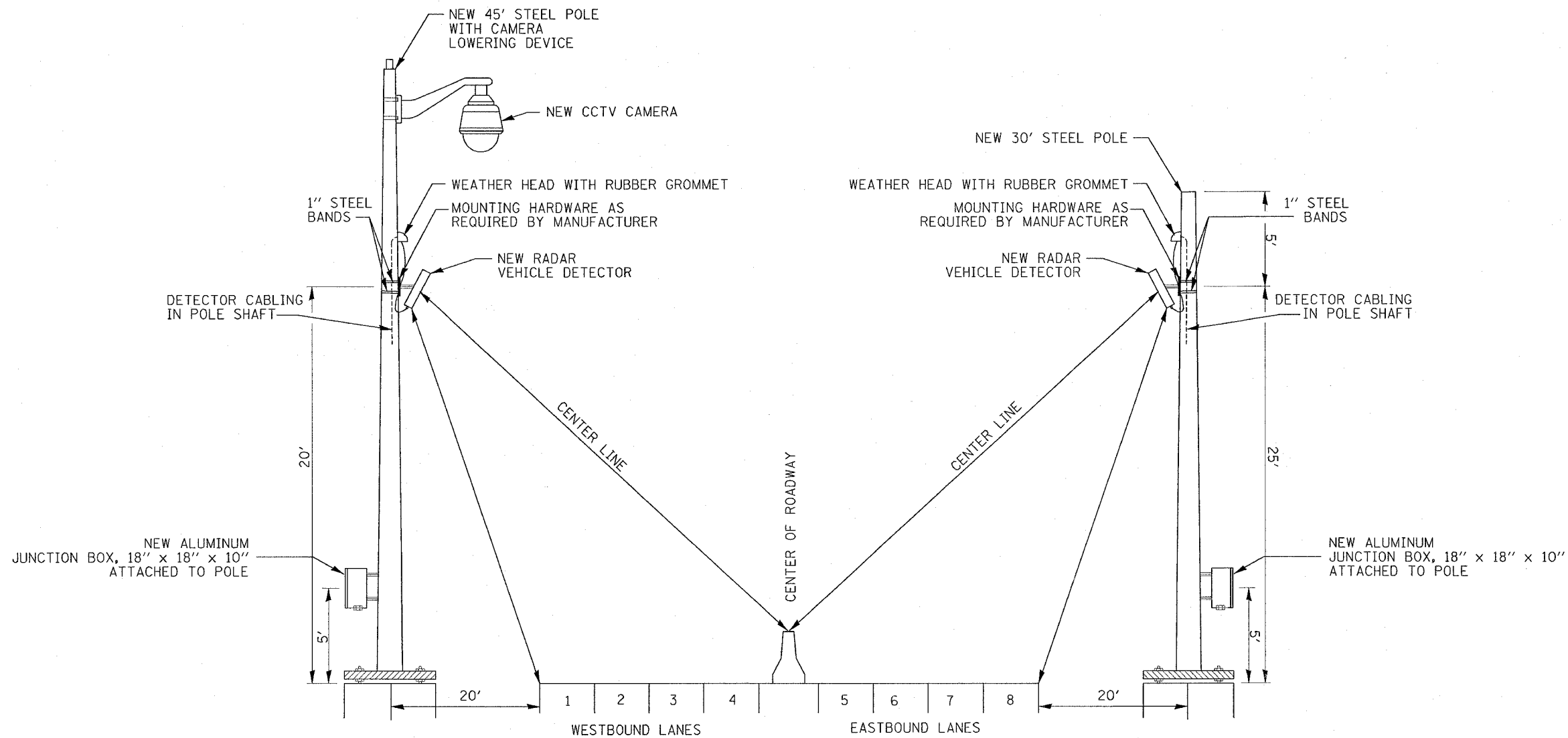
VIEW OF FACE A & B
CHANNEL CLAMP DETAIL D

HOLES (9/16 " Ø FOR FACE A
FOR FACE B HOLES SHALL
BE TAPPED FOR 3/8 " SET SCREW
DIA. AS REQUIRED)

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TRUSS MOUNT CCTV DETAILS FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO DATE 5/23/2006

PLOT DATE = 5/23/2006
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 REFERENCE = NONE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
FAI 55/70		CONTRACT# 76973		
DIST 8 ITS 2006-2				
MADISON & ST. CLAIR &				
CITY OF ST. LOUIS, MO				



**DETAIL
RADAR VEHICLE DETECTOR**

NOT TO SCALE

LOCATIONS:

- 1A. PSBC02.4A.05C (RELOCATED W/ LOWERING DEVICE)
PSBC02.4E.11R-45' POLE ON THE
EXISTING CONCRETE FOUNDATION
- 1B. PSBC02.4W.25R-30' POLE W/O LOWERING DEVICE
- 2. 557003.2A.23R
557003.2A.41C-45' POLE
- 3. 57003.8A.24R-30' POLE W/O LOWERING DEVICE
- 4. 557005.2A40C
557005.2A26R-45' POLE

NOTE:

- 1. LANE NUMBERS ARE ARBITRARY
- 2. LOCATION 557003.2A.23R HAS 4 LANES PER DIRECTION
AND LOCATION 557005.2A.26R HAS 3 LANES PER DIRECTION
- 3. LANE 8 IS A POTENTIAL NEW LANE FOR LOCATION 557005.2A.26R
AS PART OF FUTURE I-70 REALIGNMENT

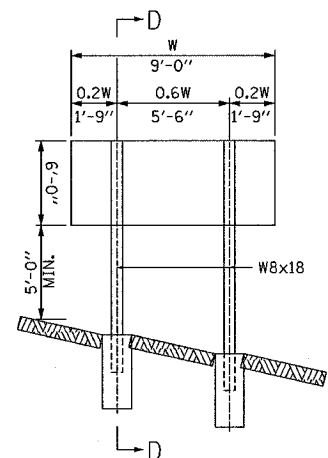
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 REFERENCE = #REF#

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 RADAR VEHICLE
 DETECTION DETAIL
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO

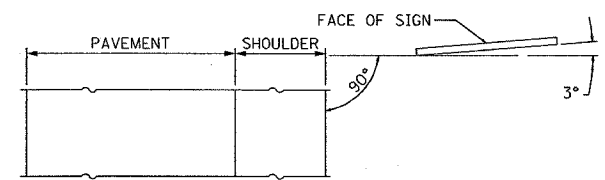
DATE 5/23/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
FAI 55/70	CONTRACT# 76973			
DIST 8 ITS 2006-2				
MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				

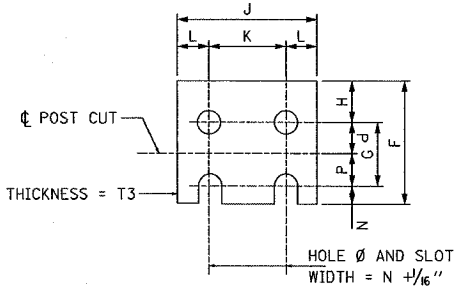


ELEVATION

SOME EQUIPMENT OMITTED FROM VIEW FOR CLARITY.



LOCATION SKETCH

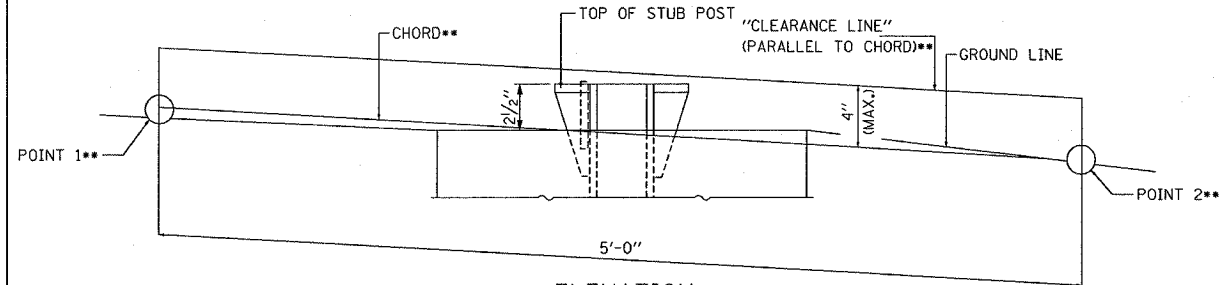


FUSE PLATE DETAIL
(INSTALL WITH NOTCHES DOWN)

FUSE PLATE DATA										
POST	N-BOLT DIAMETER	LENGTH	G	H	P	F	J	K	L	T3
W8x18	5/8"	2"	2 1/4"	1 1/4"	1 1/8"	4 9/16"	5 1/4"	2 3/4"	1 1/4"	3/8"

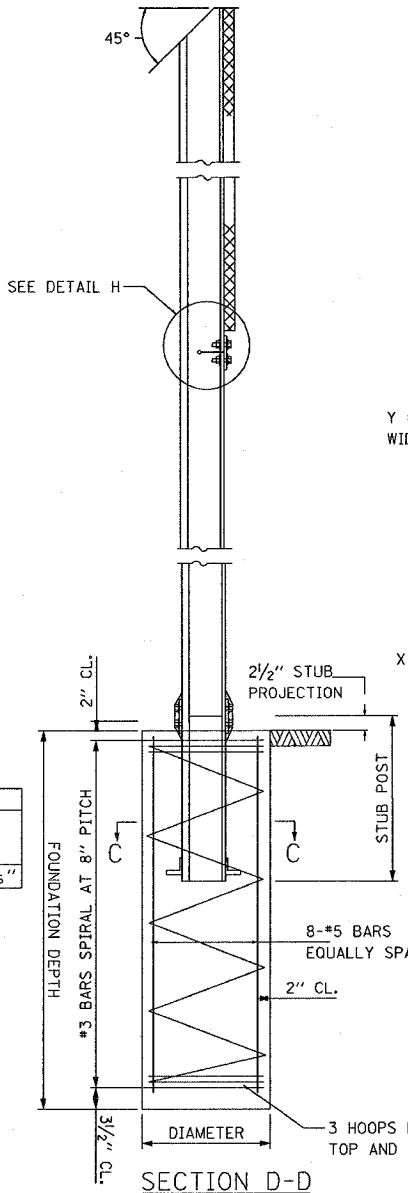
POST	CONCRETE FOUNDATION TABLE				POST TO STUB CONNECTION DATA										
	DIAMETER	MINIMUM DEPTH	CONCRETE (CU. YDS.)	VERTICAL REINFORCEMENT	STUB POST	BOLT SIZE	A	B	C	D	E	T1	T2	R	W
W8x18	2'-0"	6'-0"	0.70	5'-9"	2'-6"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1 1/2"	1 1/2"	5/16"

- DIMENSIONAL CHANGES REQUIRED FOR VARYING SITE CONDITIONS SHALL BE APPROVED BY THE ENGINEER.
- ① QUANTITY INCLUDES ALL CONCRETE NECESSARY FOR ONE FOUNDATION.
- ② INCLUDES REINFORCEMENT BARS AND SPIRAL HOOPING FOR ONE FOUNDATION.

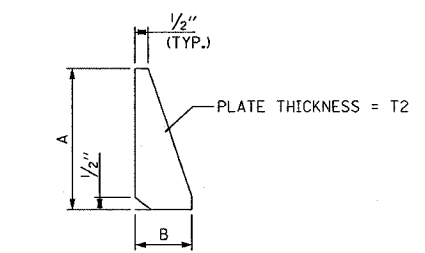


ELEVATION
GROUND LINE & STUB POST

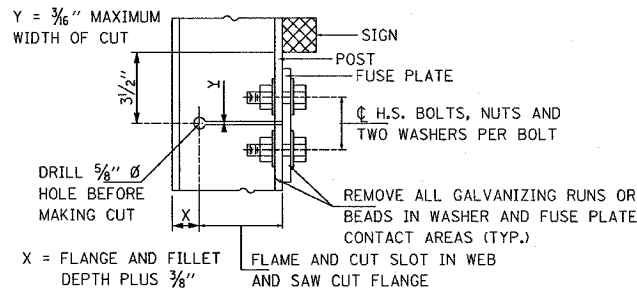
•• FOR ALL "POINT1" AND "POINT2" LOCATIONS. "CLEARANCE LINE" MUST BE AT OR ABOVE TOP OF STUB POST.



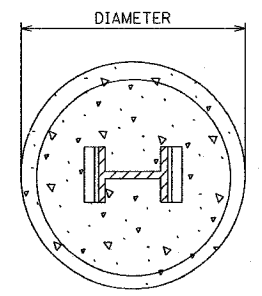
SECTION D-D



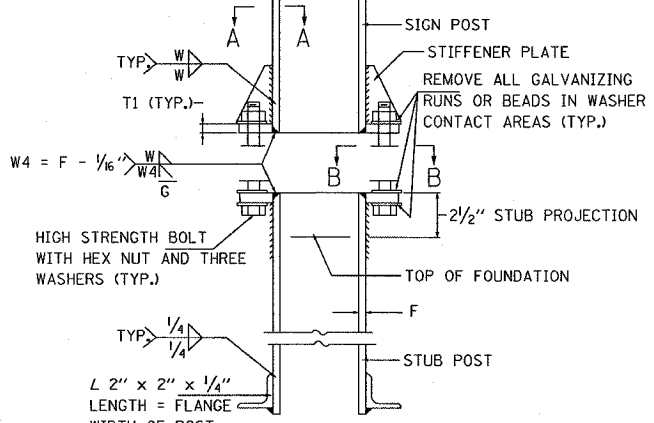
STIFFENER PLATE DETAIL
(SEE TABLE FOR DIMENSIONS)



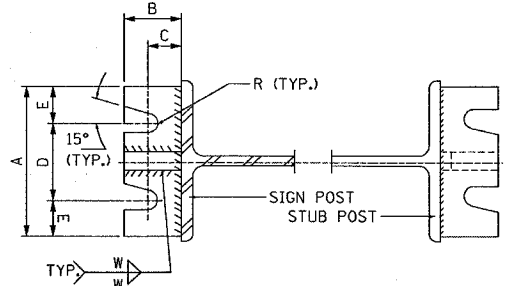
DETAIL H



SECTION C-C



ELEVATION
SIGN POST & STUB POST



SECTION A-A SECTION B-B

SHIM DETAIL
FURNISH TWO 0.01" THICK AND TWO 0.03" THICK STAINLESS STEEL OR BRASS (ASTM B36) SHIMS PER POST.

GENERAL NOTES

POSTS SHALL BE PLUMBED USING SHIMS WITH POST-TO-STUB POST CONNECTIONS BOLTS SNUG TIGHT ONLY. FINAL TIGHTENING OF ALL HIGH STRENGTH BOLTS SHALL BE IN ACCORDANCE WITH ARTICLE 505.04(F)(3), AND THREADS AT THE JUNCTION OF THE BOLT AND NUT SHALL BE BURRED OR CENTER PUNCHED TO PREVENT THE NUT FROM LOOSENING.

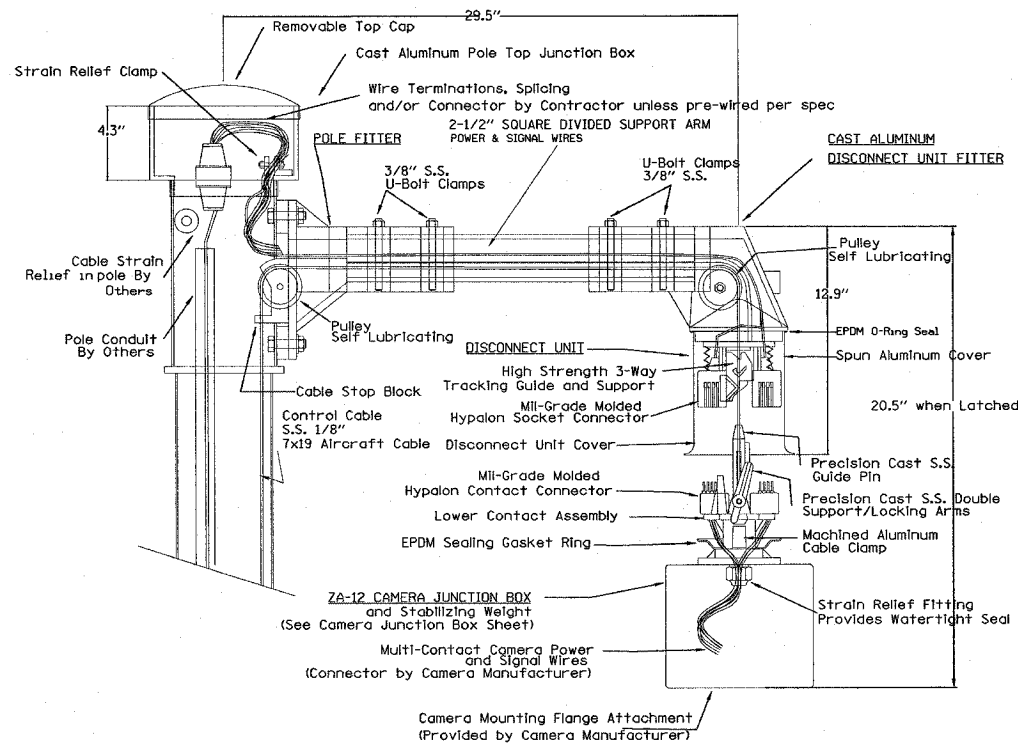
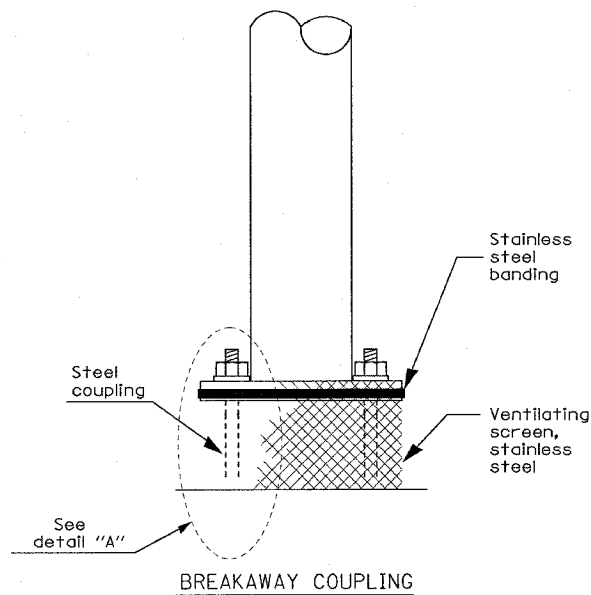
LOADING: 80 MPH WIND WITH 30% GUST FACTOR, NORMAL TO SIGN.
 STRUCTURAL STEEL - 20,000 P.S.I.
 REINFORCING STEEL - 20,000 P.S.I.
 CONCRETE - 1,400 P.S.I.
 FOOTING SOIL PRESSURE - 2,000 P.S.F.

AFTER FABRICATION, THE POST, FUSE PLATE AND UPPER 6" (MINIMUM) OF THE STUB POST SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M111. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M232.

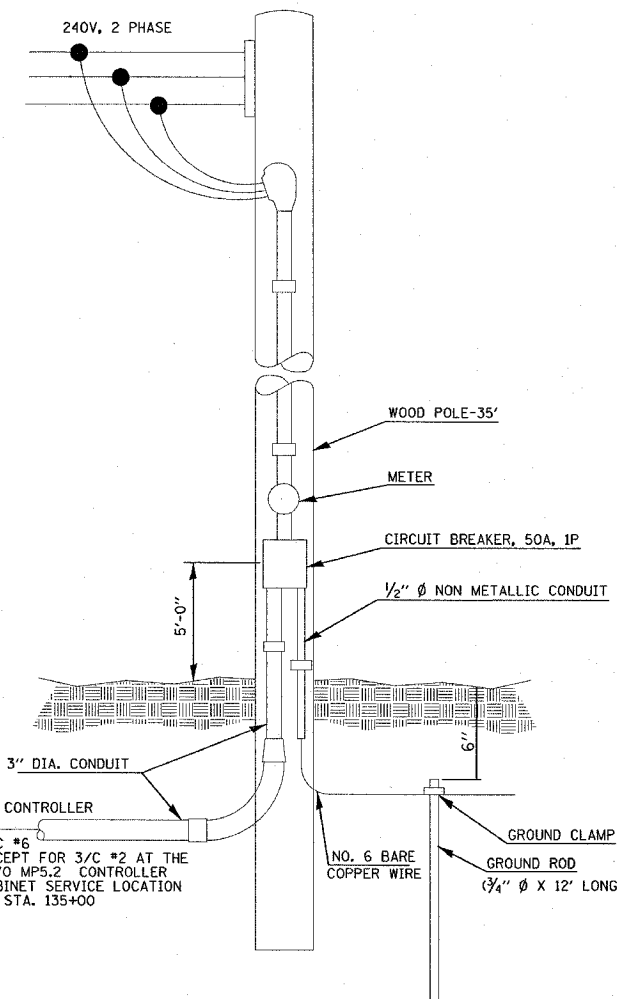
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		HAR SIGN DETAILS (2 OF 2) FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO DATE 5/23/2006

PLOT DATE = 5/23/2006
 FILE NAME = c:\p1686\electrical\sign\1686s.dgn
 PLOT SCALE = 1/8" = 1'-0"
 REFERENCE = #REF#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• FAI 55/70		CONTRACT# 76973		
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



Camera Lowering Device for Pole Mounting Multi-Function Surveillance Cameras CLDMG2-HYP-045-ST-D



SERVICE INSTALLATION TYPE A
NOT TO SCALE

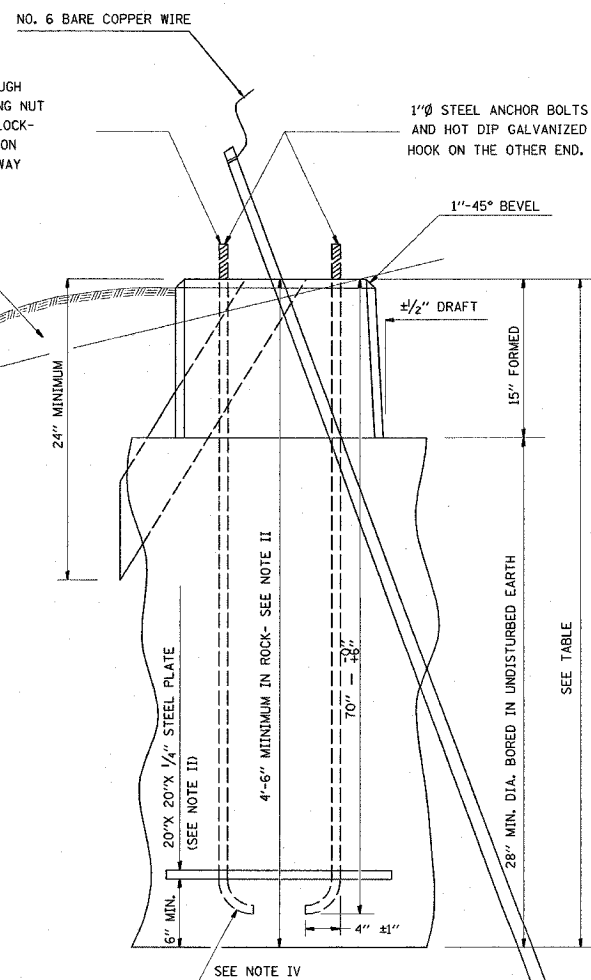
ANCHOR BOLT SHALL EXTEND THROUGH NUT 3/8" TO 1". USE SELF-LOCKING NUT AND FLAT WASHER. DO NOT USE LOCK-WASHER. LENGTH ABOVE FOUNDATION SHALL BE ADJUSTED WHEN BREAKAWAY DEVICES ARE USED.

NOTE:

USE DIRT REMOVED FROM FOUNDATION TO FILL AROUND FOUNDATION TOP. MAKE TOP OF DIRT LEVEL WITH TOP OF CONCRETE. ANY EXCESS DIRT WILL BE DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE.

LOW MOUNT DESIGN TABLE

MOUNTING FOUNDATION HEIGHT	DEPTH	BOLT CIRCLE
30' OR LESS	5'-0"	11 1/2"
31'-35'	6'-0"	11 1/2"
36'-40'	7'-0"	15"
41'-45'	7'-6"	15"
46'-50'	8'-0"	15"



FOUNDATION DETAIL
LOCATION 557004.8A.09C

NOTE:

AFTER POURING CONCRETE, THE FORM SHALL REMAIN UNDISTURBED OVERNIGHT.

THE TOP 15" ONLY SHALL BE FORMED. CONCRETE BOUNDED BY UNDISTURBED EARTH ONLY SHALL FILL THE REMAINDER OF THE HOLE.

NOTE I:

MINIMUM CLEARANCE FROM THE OUTSIDE EDGE OF FOUNDATION TO ANY PART OF THE POLE BASEPLATE SHALL BE 2".

NOTE II:

THE DEPTH OF THE FOUNDATION MAY BE REDUCED 6" FOR EVERY FOOT OF ROCK ENCOUNTERED WITH A MINIMUM DEPTH OF 4'-6". WHEN THE DEPTH OF THE FOUNDATION IS DECREASED TO LESS THAN 6'-0", THE ANCHOR BOLTS SHALL BE CUT, THREADED, AND A STEEL PLATE 20" X 20" X 1/4" SHALL BE INSTALLED ON THE ANCHOR BOLTS 6" ABOVE THE BOTTOM OF THE EXCAVATION. THE COST SHALL BE INCIDENTAL TO THE FOUNDATION.

NOTE III:

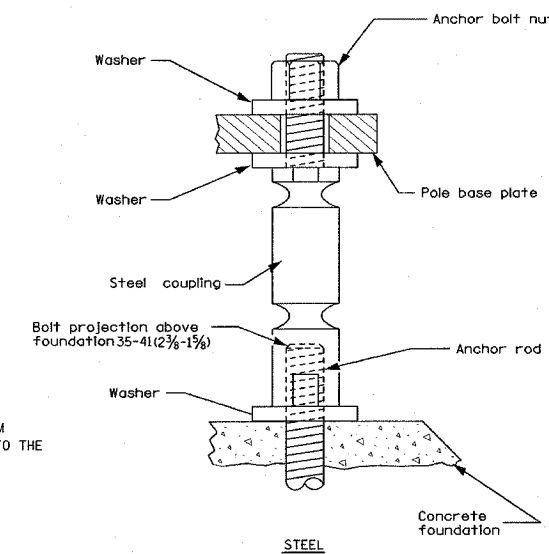
ON PARAPET WALLS USE 1/4" Ø ANCHOR BOLTS. USE SELF-LOCKING NUT AND FLAT WASHER. DO NOT USE LOCKWASHER. (FOR DETAILS SEE STANDARD III/2.35 OF BRIDGE DESIGN MANUAL.

NOTE IV:

BEND RADIUS SHALL BE FOUR TIMES BOLT DIAMETER.

NOTE V:

CONNECT GROUND WIRES TO POLE BASE GROUND LUG, NOT ANCHOR BOLTS OR TRANSFORMER BASE.



Installation Instructions:

Screw couplings onto anchor bolts to end of threads. Very important to level couplings to avoid over stressing and either cracking or stripping of the threads within the coupling.

DETAIL A

TYPICAL COUPLING FOR CONCRETE FOUNDATION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SERVICE INSTALLATION AND
POLE MOUNTED CCTV DETAIL WITH
CAMERA LOWERING DEVICE (SHEET 1 OF 3)
DETAILS
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

DATE 6/15/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
..	52	12
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FAI 55/70 CONTRACT# 76973
 DIST 8 ITS 2006-2
 MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO

NOTES:

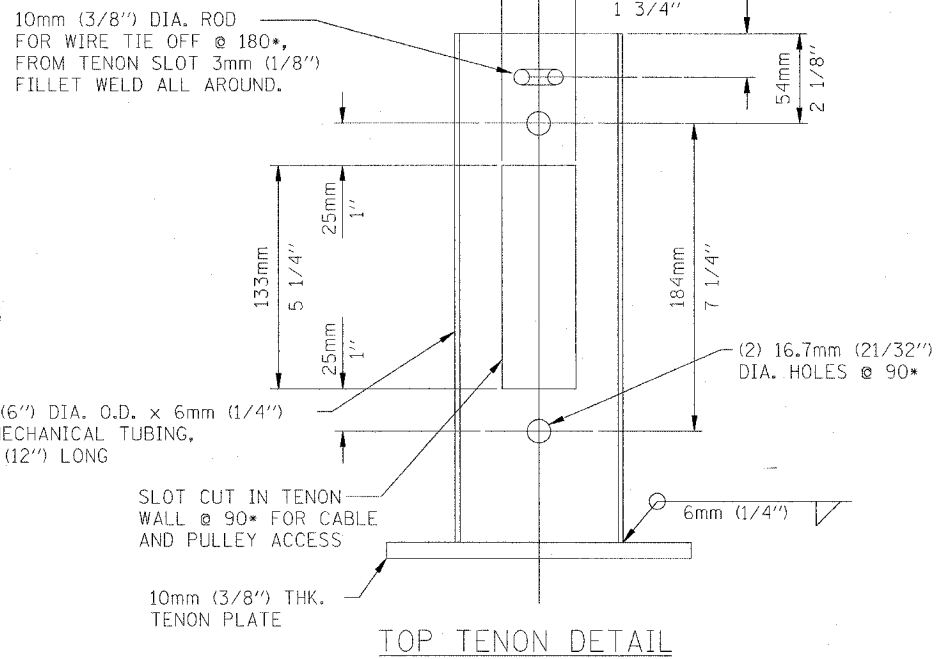
- 1) POLE TUBE ASTM A572, GR. 50 MIN.
- 2) BASE PLATE ASTM A572, GR. 50.
- 3) HANDHOLE FRAME ASTM A500, GR B TUBING.
- 4) HANDHOLE COVER ASTM A36 MIN.
- 5) ANCHOR BOLTS ASTM F1554, GR. 55, TOP H.D. GALVANIZED TO ASTM A153.
- 6) ANCHOR NUTS ASTM A563, GR. DH or A194, GR. 2H, H.D. GALVANIZED TO ASTM A153.
- 7) ANCHOR WASHERS ASTM F436, TYPE 1, H.D. GALVANIZED TO ASTM A153.
- 8) TOP PLATE ASTM A572, GR. 50.
- 9) TENON ASTM A53, GR. B PIPE.
- 10) TENON SLEEVE ASTM A512 OR A513.
- 11) WELDING AWS D1.1.
- 12) FINISH H.D. GALVANIZED TO ASTM A123.
- 13) POLE CAP CAST ALUMINUM OR GALVANIZED STEEL.
- 14) VALUE STRUCTURES, INC., IS CERTIFIED BY A.I.S.C. FOR CONVENTIONAL STEEL BUILDING STRUCTURES, SIMPLE STEEL CONVENTIONAL STEEL BUILDING STRUCTURES, SIMPLE STEEL BRIDGES, WITH FRACTURE CRITICAL ENDORSEMENT.

DESIGN NOTE:

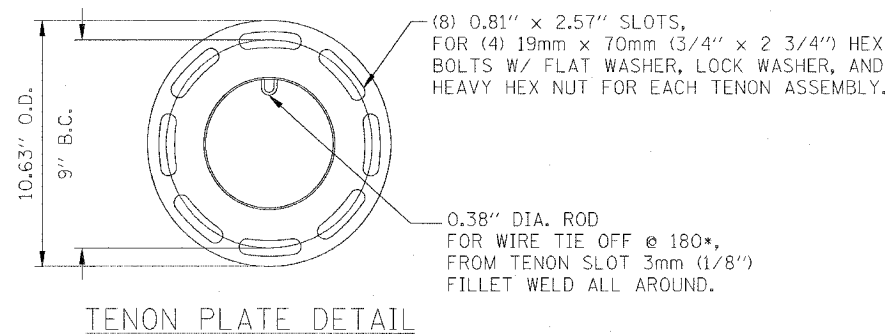
CCTV POLES AND ANCHORAGE ARE ALL DESIGNED TO ACCEPT MAXIMUM LOADING FROM CAMERAS, STATIONARY ARMS AND LOWERING DEVICES. THE COMBINATION OF CAMERA AND LOWERING DEVICE ASSEMBLY OF 3.0 SQ. FT. EPA AND 130 LBS DEADLOAD RESULTING IN THE LARGEST AREA AND WEIGHT FOR POLE DESIGN TO THE FOLLOWING LOADING CASES; ALL PER AASHTO 2001 STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 4TH EDITION.
 LOAD CASE 1
 80 MPH AASHTO
 LOAD CASE 2
 30 MPH SUSTAINED WIND FOR MAXIMUM HORIZONTAL DEFLECTION @ POLE TOP NOT TO EXCEED 1".

SEE TOP TENON AND PLATE DETAILS

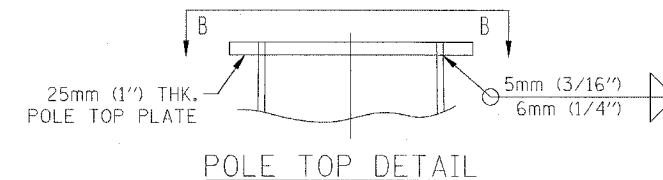
(45'-0") OVERALL POLE HEIGHT
 SECTION A



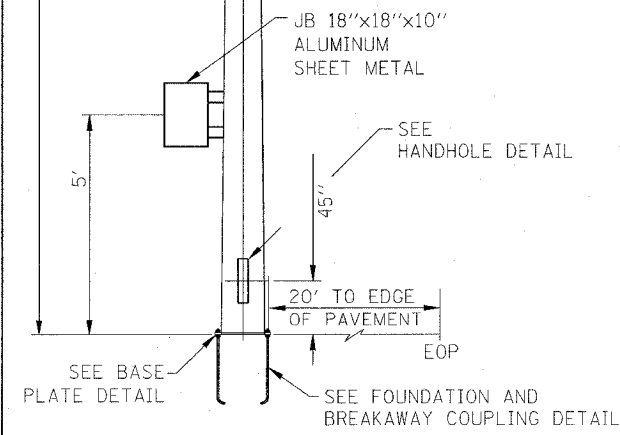
TOP TENON DETAIL



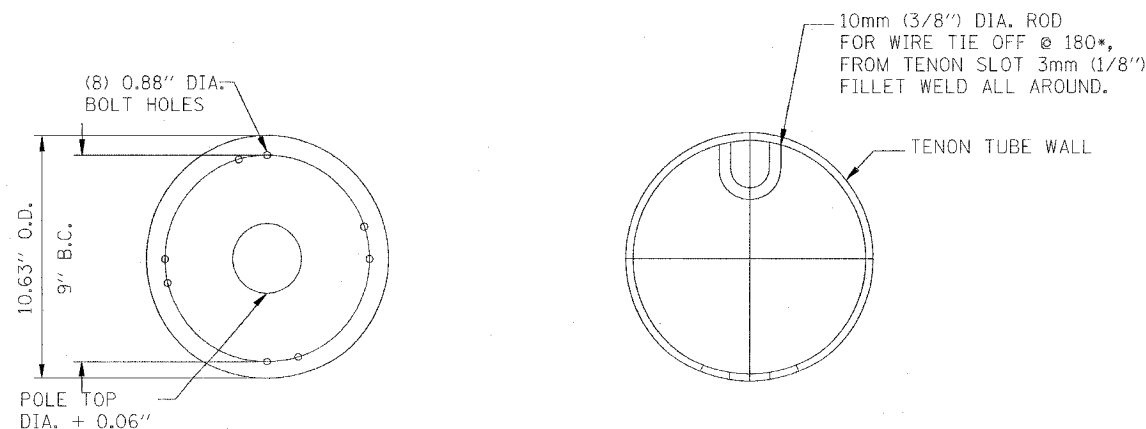
TENON PLATE DETAIL



POLE TOP DETAIL



SECTION B-B
 TOP PLATE DETAIL



SECTION A-A
 WIRE TIE OFF ORIENTATION DETAIL

WIND VELOCITY: 30 MPH W/NO GUST
 1" MAXIMUM POLE TOP DEFLECTION

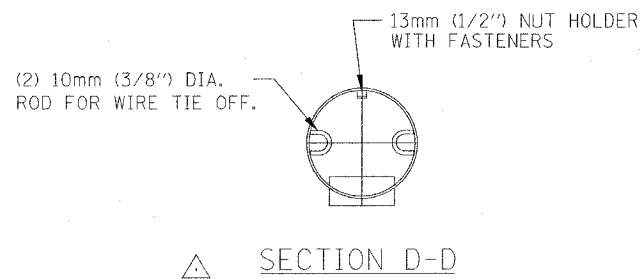
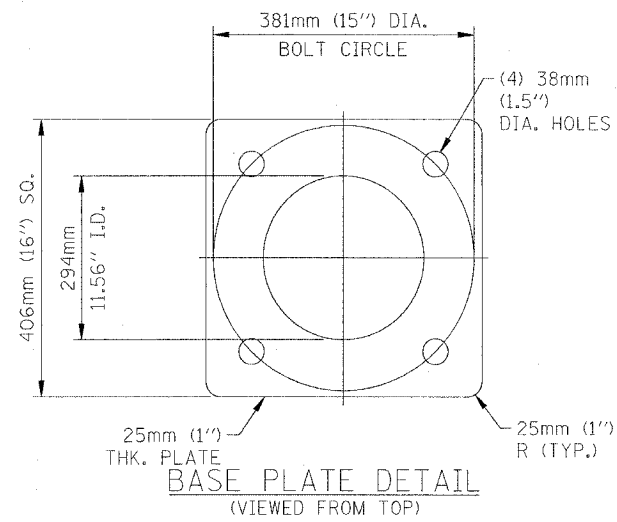
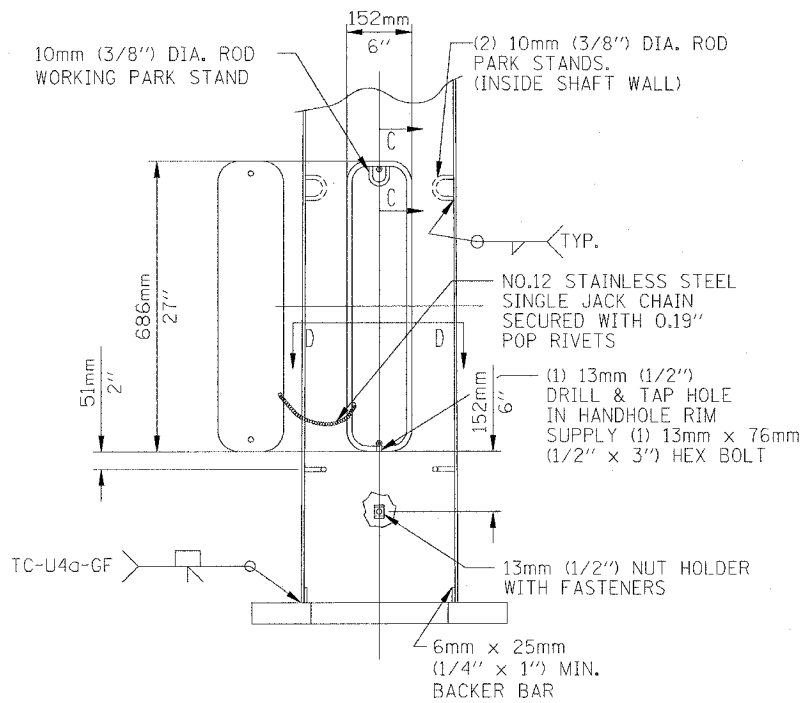
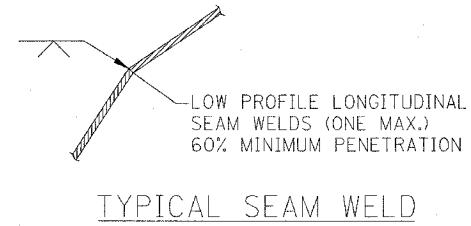
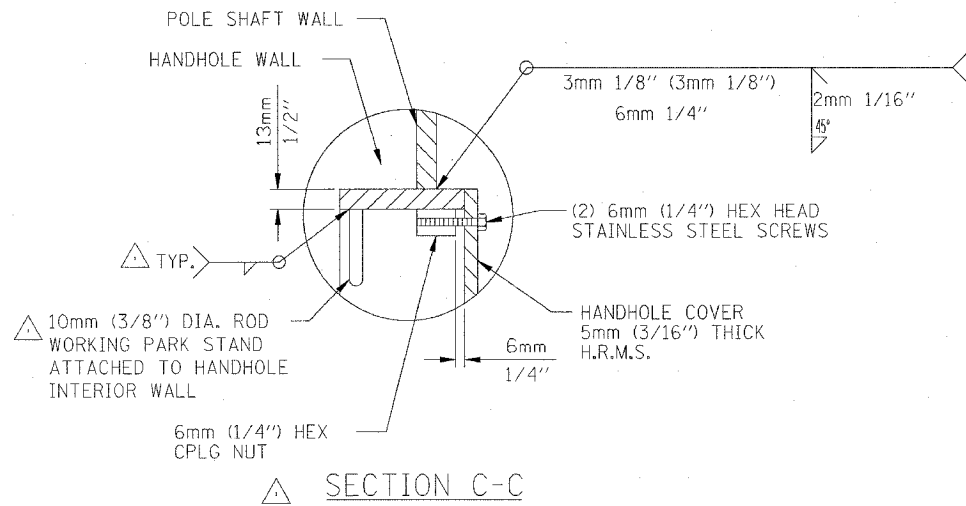
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 POLE MOUNTED CCTV DETAIL WITH
 CAMERA LOWERING DEVICE (SHEET 2 OF 3)
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO

DATE 5/23/2006

PLOT DATE = 5/23/2006
 FILE NAME = c:\projects\ad1686\electrical\isp\in1686.dgn
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 REFERENCE = #REF#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	13
STA.	TO STA.			
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
• FAI 55/70			CONTRACT# 76973	
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



PLOT DATE = 5/23/2006
 PLOT SCALE = 100%
 PLOT REFERENCE = REF#

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 POLE MOUNTED CCTV DETAIL WITH
 CAMERA LOWERING DEVICE (SHEET 3 OF 3)

FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO

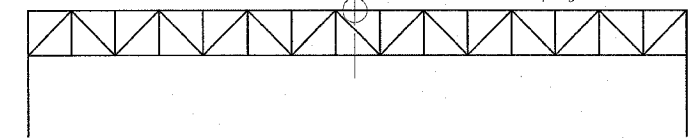
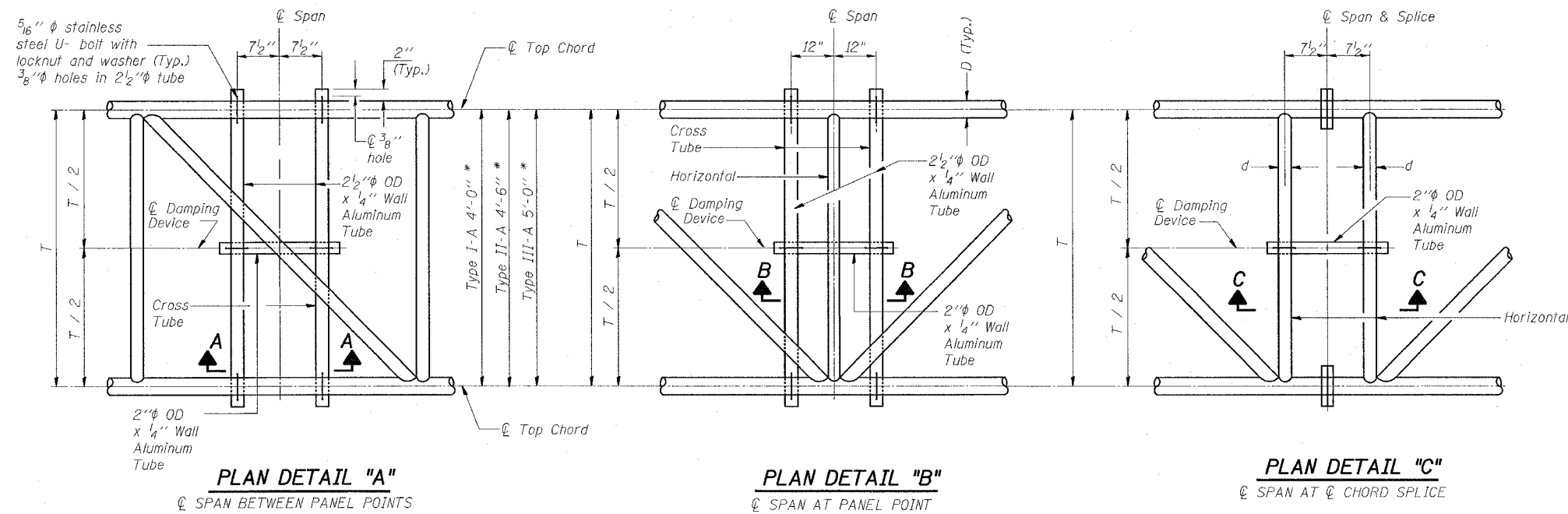
DATE 5/23/2006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
..	52	14

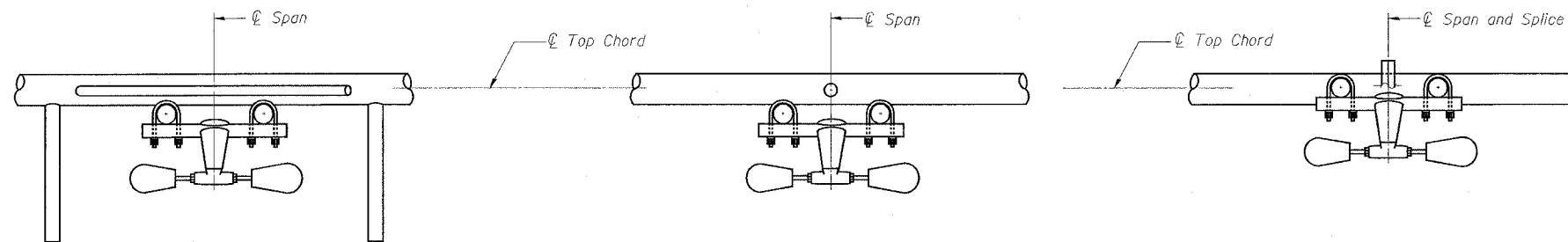
STA.	TO STA.
FED. ROAD DIST. NO. ILLINOIS	FED. AID PROJECT
FAI 55/70	CONTRACT# 76973
DIST 8 ITS 2006-2	
MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO	



ELEVATION
Aluminum Overhead Sign Truss

NOTES

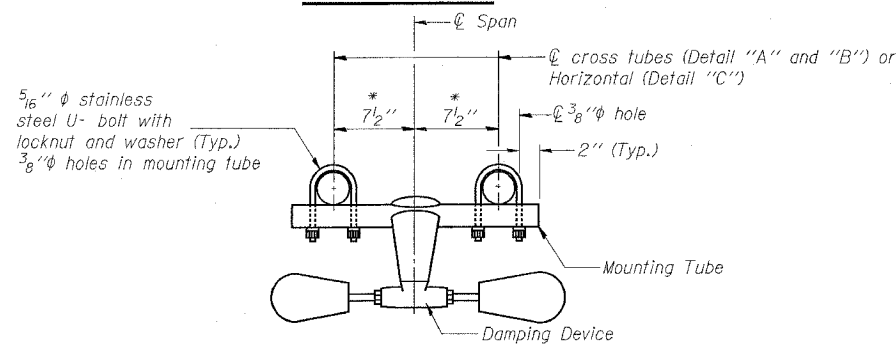
Damper: One damper per truss. (31 lbs. Stockbridge-Type, Alum.)
Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in "Overhead Sign Structure..."



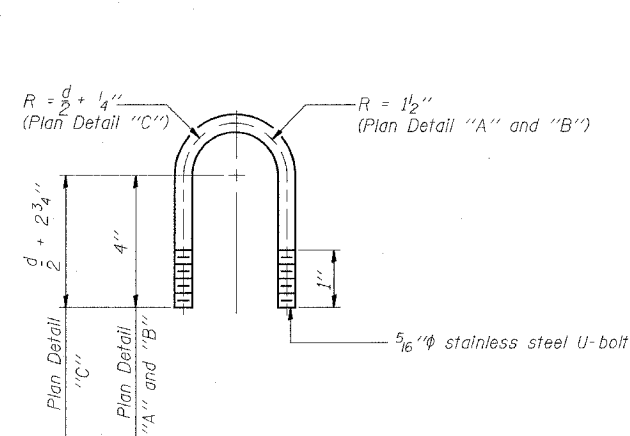
SECTION A-A

SECTION B-B

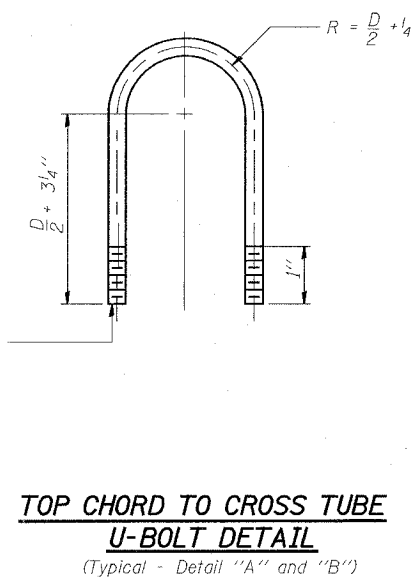
SECTION C-C



TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail "A" and "B")

DESIGNED	
CHECKED	
DRAWN	J.K.M.
CHECKED	

EXAMINED	19
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

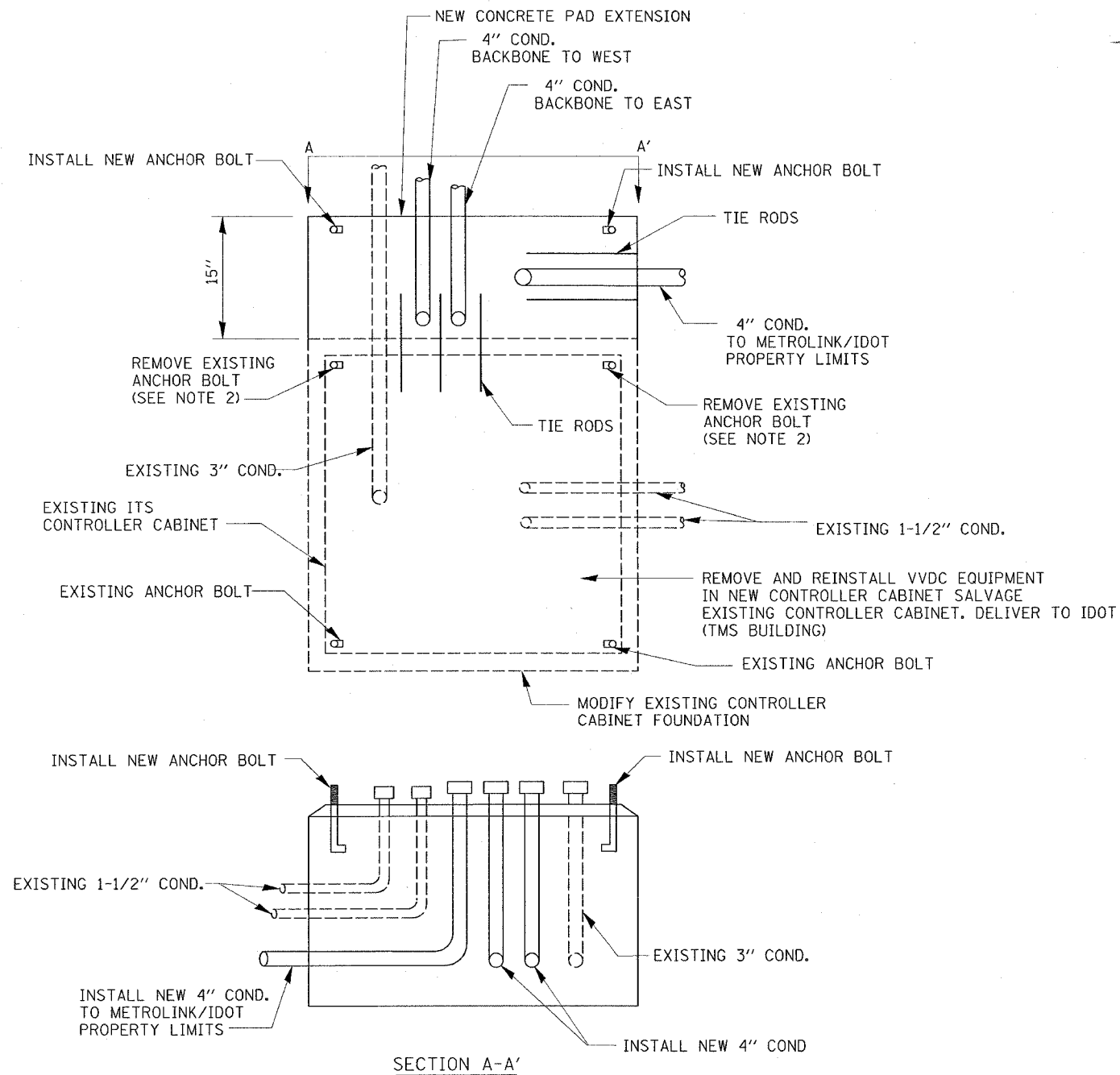
OS-A-D

7/1/2001

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
OVERHEAD SIGN STRUCTURE DAMPING DEVICE
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO
DATE 5/23/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	15
STA.		TO STA.		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
• FAI 55/70			CONTRACT# 76973	
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



- NOTES:**
1. SPLICING NEW CONDUIT TO EXISTING CONDUITS ARE INCIDENTAL TO "MODIFY EXISTING CONTROLLER FOUNDATION".
 2. EXISTING ANCHOR BOLTS SHALL BE CUT FLUSH WITH TOP OF FOUNDATION.

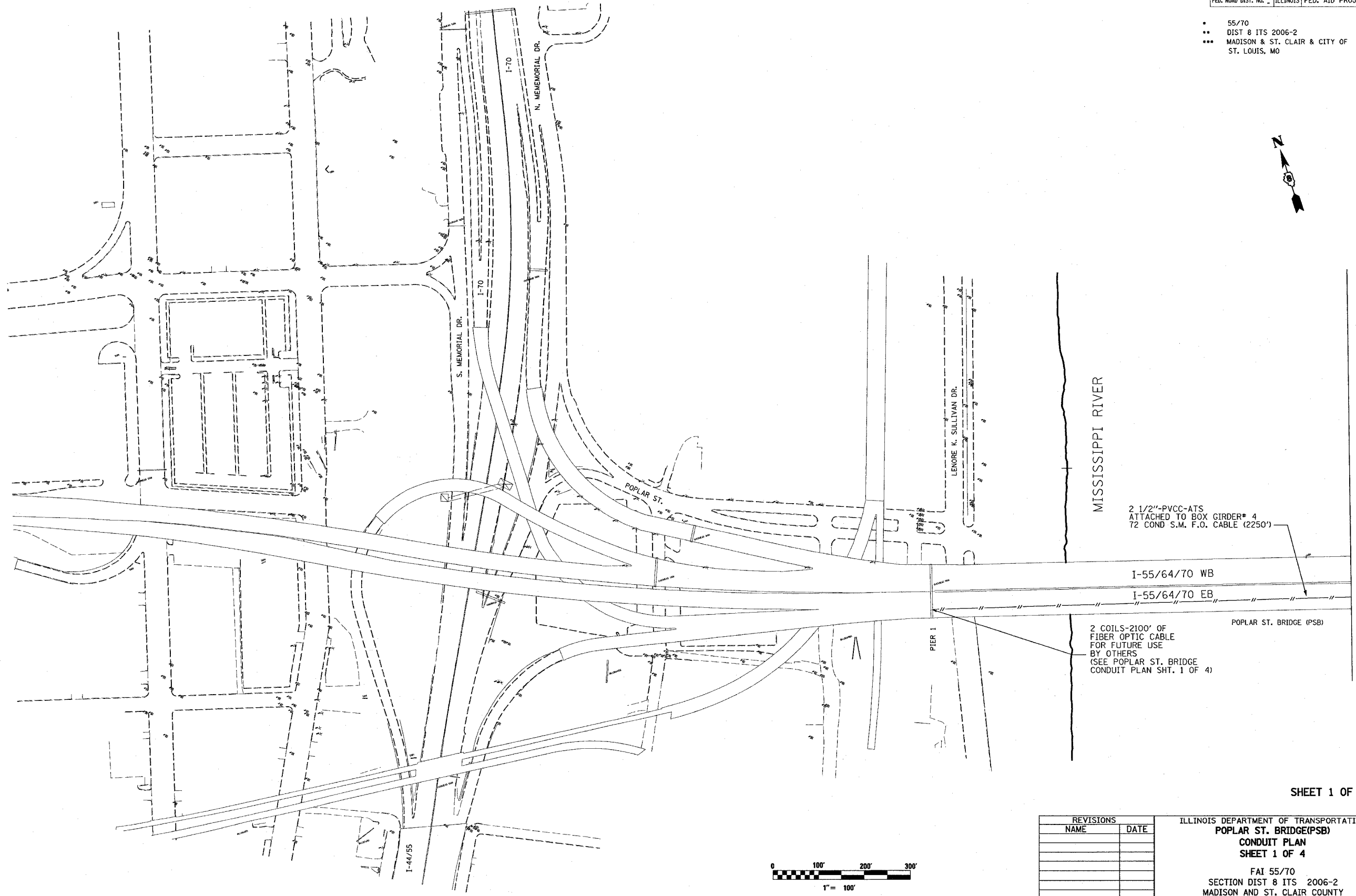
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		MODIFY EXISTING CONTROLLER CABINET FOUNDATION DETAIL FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO

DATE 5/23/2006

PLOT DATE = 5/23/2006
 FILE NAME = c:\projects\1686\electrical\isp\1686.dgn
 PLOT SCALE = 1/8" = 1'-0"
 REFERENCE = #REF#

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	16
STA.		TO STA.		
FED. ROAD DIST. NO. _		ILLINOIS FED. AID PROJECT		

- * 55/70
- ** DIST 8 ITS 2006-2
- *** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO



2 1/2" PVCC-ATS
ATTACHED TO BOX GIRDER# 4
72 COND S.M. F.O. CABLE (2250')

I-55/64/70 WB
I-55/64/70 EB

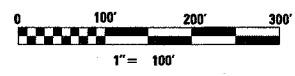
POPLAR ST. BRIDGE (PSB)

2 COILS-2100' OF
FIBER OPTIC CABLE
FOR FUTURE USE
BY OTHERS
(SEE POPLAR ST. BRIDGE
CONDUIT PLAN SHT. 1 OF 4)

FOR CONTINUATION SEE SHEET 5

SHEET 1 OF 18

PLOT DATE = 5/23/2006
 FILE NAME = c:\projects\76973\electrical\stpln11685.dgn
 PLOT SCALE = 1" = 100'
 REFERENCE = SHEET 1

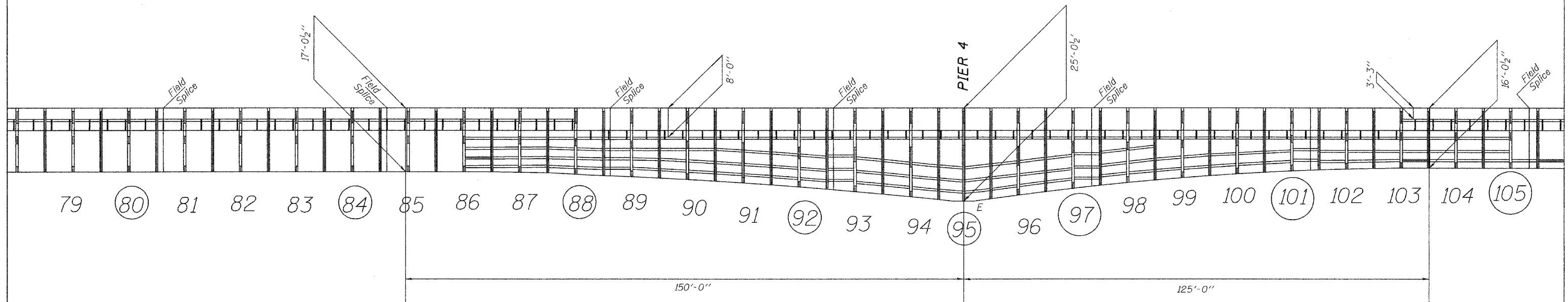
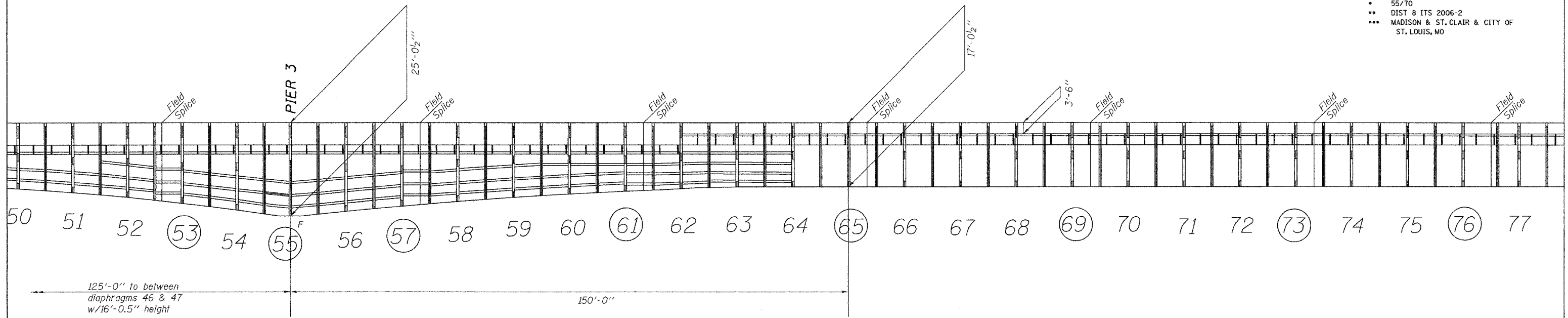


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
POPLAR ST. BRIDGE (PSB)
CONDUIT PLAN
SHEET 1 OF 4
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 DATE 5/23/2006

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***		/8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

- * 55/70
- ** DIST 8 ITS 2006-2
- *** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO



BRIDGE LENGTHS

PIER 1 TO PIER 2	300'
PIER 2 TO PIER 3	500'
PIER 3 TO PIER 4	600'
PIER 4 TO PIER 5	500'
PIER 5 TO PIER 6	265'

DIAPHRAGM # TO DIAPHRAGM #	HEIGHT TO HEIGHT
1 TO 46	16'-0 1/2" TO 16'-0 1/2"
46 TO 55	16'-0 1/2" TO 25'-0 1/2"
55 TO 65	25'-0 1/2" TO 17'-0 1/2"
65 TO 85	17'-0 1/2" TO 17'-0 1/2"
85 TO 95	17'-0 1/2" TO 25'-0 1/2"
95 TO 104	25'-0 1/2" TO 16'-0 1/2"
104 TO 147	16'-0 1/2" TO 16'-0 1/2"

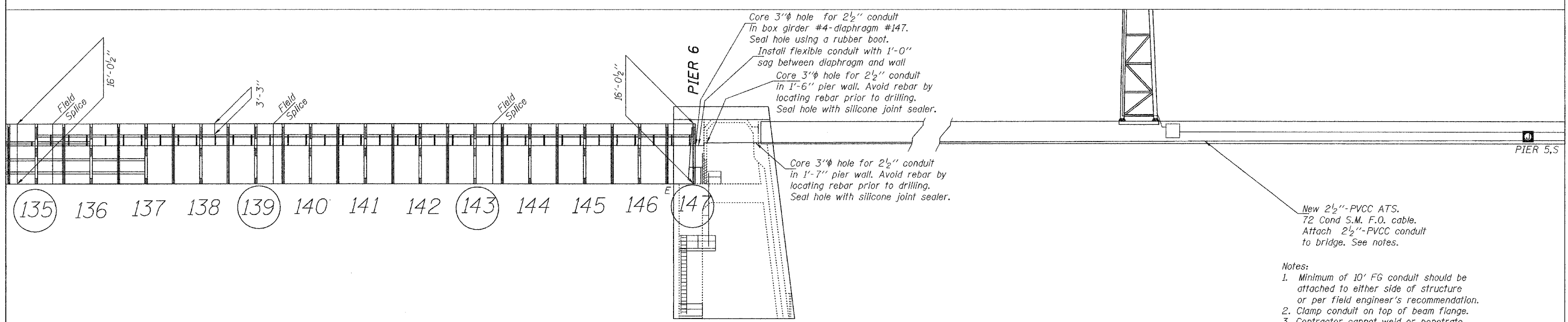
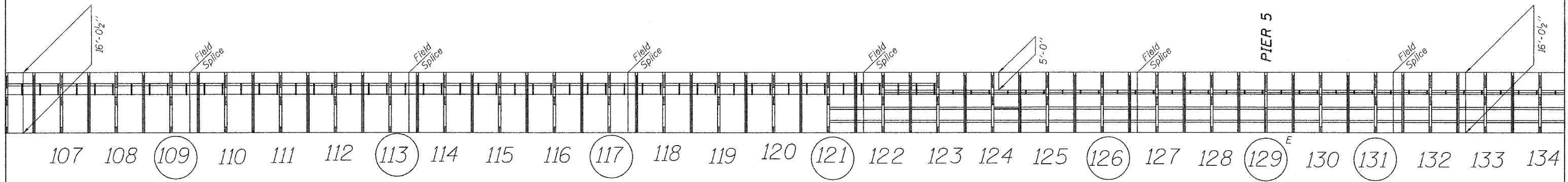
1. Longitudinal web stiffeners are ST7WF15, except at field splices.
2. Field splice longitudinal web stiffeners are Z6 x 3 1/2" x 21.1.
3. 2 1/2"-PVCC conduit w/72 Cond S.M. F.O. cable attached to longitudinal web stiffeners in box girder #4 every 5'-0". Conduits should be placed through the top opening on the diaphragms.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
POPLAR ST. BRIDGE (PSB)
CONDUIT PLAN
SHEET 2 OF 4
 FAI 255
 SECTION DIST 8 ITS 2007-1, 2A
 MADISON COUNTY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***		19
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

- * 55/70
- ** DIST 8 ITS 2006-2
- *** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO



- Notes:
1. Minimum of 10' FG conduit should be attached to either side of structure or per field engineer's recommendation.
 2. Clamp conduit on top of beam flange.
 3. Contractor cannot weld or penetrate structural steel.

1. Longitudinal web stiffeners are ST7WF15, LOOKING SOUTH except at field splices.
2. Field splice longitudinal web stiffeners are 26 x 3 1/2" x 21.1.
3. 2 1/2"-PVCC conduit w/72 Cond S.M. F.O. cable attached to longitudinal web stiffeners in box girder #4 every 5'-0". Conduits should be placed through the top opening on the diaphragms.

BRIDGE LENGTHS

PIER 1 TO PIER 2	300'
PIER 2 TO PIER 3	500'
PIER 3 TO PIER 4	600'
PIER 4 TO PIER 5	500'
PIER 5 TO PIER 6	265'

DIAPHRAGM # TO DIAPHRAGM #	HEIGHT TO HEIGHT
1 TO 46	16'-0 1/2" TO 16'-0 1/2"
46 TO 55	16'-0 1/2" TO 25'-0 1/2"
55 TO 65	25'-0 1/2" TO 17'-0 1/2"
65 TO 85	17'-0 1/2" TO 17'-0 1/2"
85 TO 95	17'-0 1/2" TO 25'-0 1/2"
95 TO 104	25'-0 1/2" TO 16'-0 1/2"
104 TO 147	16'-0 1/2" TO 16'-0 1/2"

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**POPLAR ST. BRIDGE (PSB)
CONDUIT PLAN
SHEET 3 OF 4**

FAI 255
SECTION DIST 8 ITS 2007-1, 2A
MADISON COUNTY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
..	52	21
STA. TO STA.				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

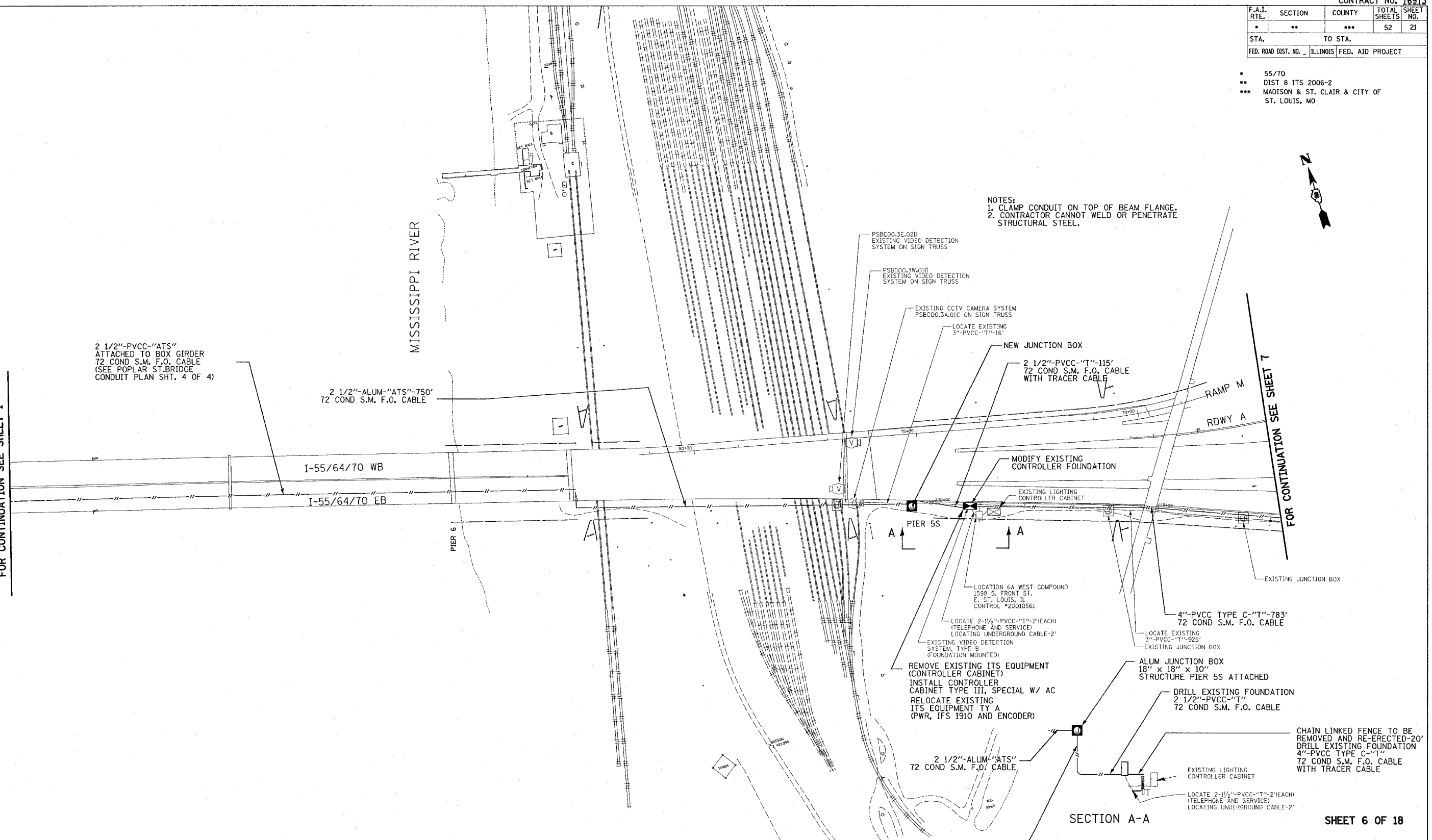
- .. 55/70
- ... DIST 8 ITS 2006-2
- ... MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO



NOTES:
 1. CLAMP CONDUIT ON TOP OF BEAM FLANGE.
 2. CONTRACTOR CANNOT WELD OR PENETRATE STRUCTURAL STEEL.

FOR CONTINUATION SEE SHEET 1

FOR CONTINUATION SEE SHEET 7



2 1/2"-PVCC-"ATS"
 ATTACHED TO BOX GIRDER
 72 COND S.M. F.O. CABLE
 (SEE POPLAR ST. BRIDGE
 CONDUIT PLAN SHT. 4 OF 4)

2 1/2"-ALUM-"ATS"-750'
 72 COND S.M. F.O. CABLE

I-55/64/70 WB

I-55/64/70 EB

MISSISSIPPI RIVER

PIER 6

PSBC00.3E.02D
 EXISTING VIDEO DETECTION
 SYSTEM ON SIGN TRUSS

PSBC00.3W.01D
 EXISTING VIDEO DETECTION
 SYSTEM ON SIGN TRUSS

EXISTING CCTV CAMERA SYSTEM
 PSBC00.3A.01C ON SIGN TRUSS

LOCATE EXISTING
 3"-PVCC-"T"-16'

NEW JUNCTION BOX

2 1/2"-PVCC-"T"-115'
 72 COND S.M. F.O. CABLE
 WITH TRACER CABLE

MODIFY EXISTING
 CONTROLLER FOUNDATION

EXISTING LIGHTING
 CONTROLLER CABINET

PIER 55

LOCATION 6A WEST COMPOUND
 1599 S. FRONT ST.
 E. ST. LOUIS, IL
 CONTROL #20010561

LOCATE 2-1/2"-PVCC-"T"-2'(EACH)
 (TELEPHONE AND SERVICE)
 LOCATING UNDERGROUND CABLE-2'

EXISTING VIDEO DETECTION
 SYSTEM, TYPE B
 (FOUNDATION MOUNTED)

REMOVE EXISTING ITS EQUIPMENT
 (CONTROLLER CABINET)
 INSTALL CONTROLLER
 CABINET TYPE III, SPECIAL W/ AC
 RELOCATE EXISTING
 ITS EQUIPMENT TY A
 (PWR, IFS 1910 AND ENCODER)

2 1/2"-ALUM-"ATS"
 72 COND S.M. F.O. CABLE

2 1/2"-ALUM-"ATS"-40'
 72 COND S.M. F.O. CABLE

4"-PVCC TYPE C-"T"-783'
 72 COND S.M. F.O. CABLE

LOCATE EXISTING
 3"-PVCC-"T"-925'
 EXISTING JUNCTION BOX

ALUM JUNCTION BOX
 18" x 18" x 10"
 STRUCTURE PIER 55 ATTACHED

DRILL EXISTING FOUNDATION
 2 1/2"-PVCC-"T"
 72 COND S.M. F.O. CABLE

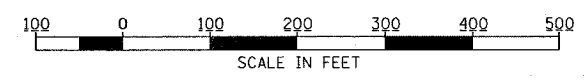
CHAIN LINKED FENCE TO BE
 REMOVED AND RE-ERECTED-20'
 DRILL EXISTING FOUNDATION
 4"-PVCC TYPE C-"T"
 72 COND S.M. F.O. CABLE
 WITH TRACER CABLE

EXISTING LIGHTING
 CONTROLLER CABINET

LOCATE 2-1/2"-PVCC-"T"-2'(EACH)
 (TELEPHONE AND SERVICE)
 LOCATING UNDERGROUND CABLE-2'

SECTION A-A

SHEET 6 OF 18



REVISIONS	
NAME	DATE

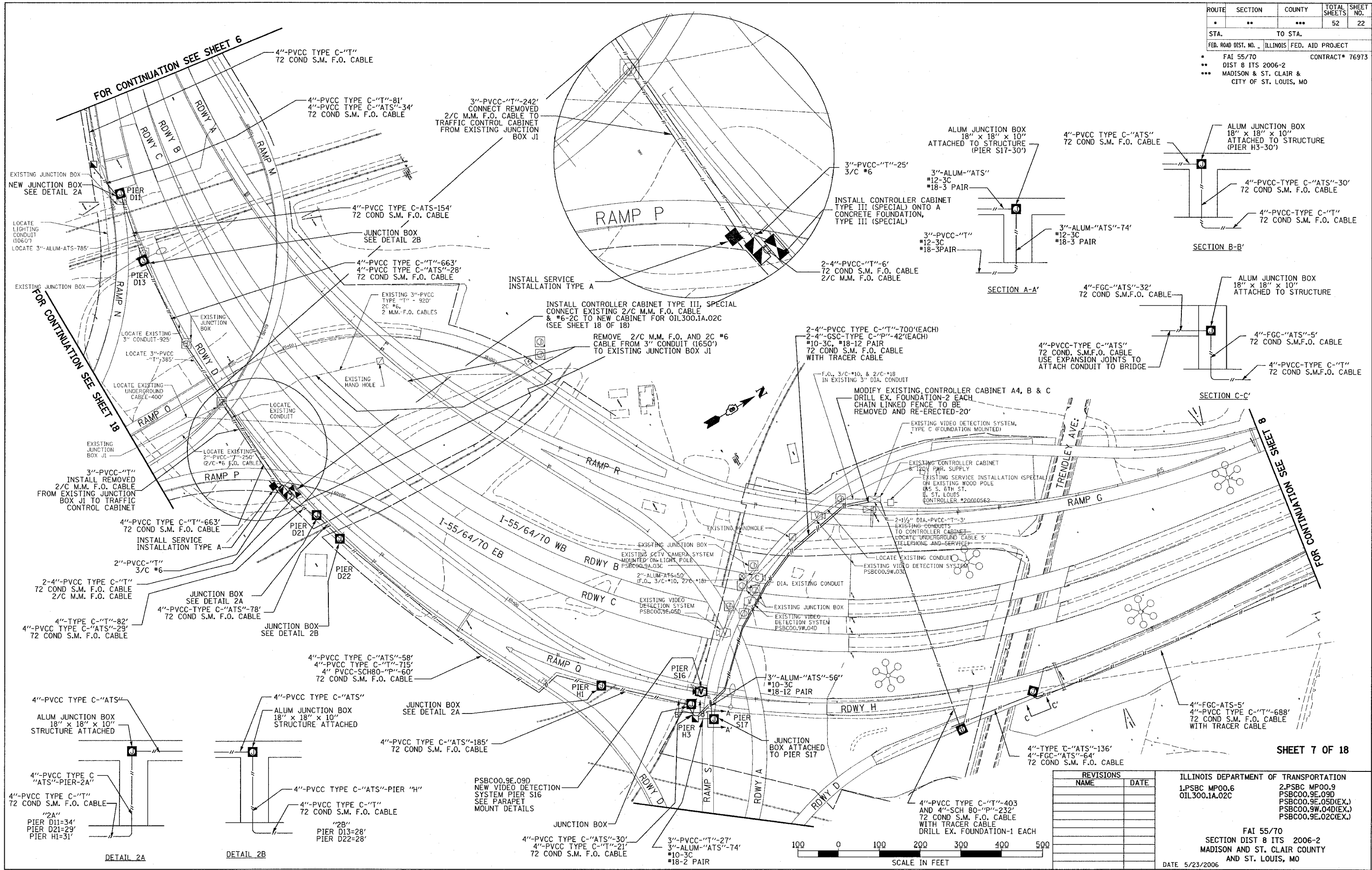
ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOCATION PSBC00.3A.01C(EX.)
 LOCATION PSBC00.3W.01D(EX.)
 LOCATION PSBC00.3E.02D(EX.)

FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO

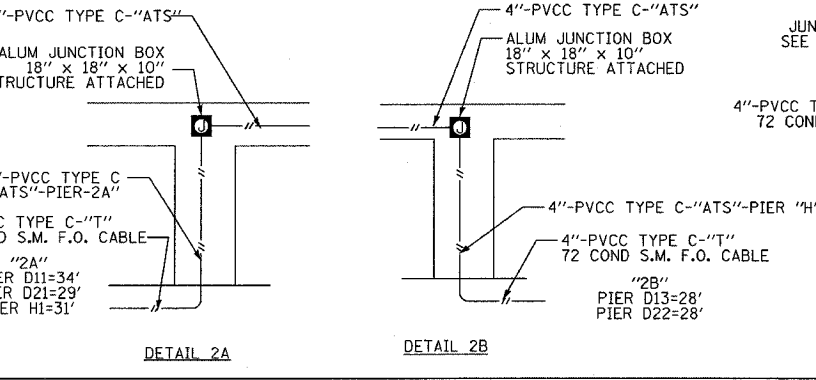
DATE 6/15/2006

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ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	22
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
FAI 55/70 CONTRACT# 76973 DIST 8 ITS 2006-2 MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



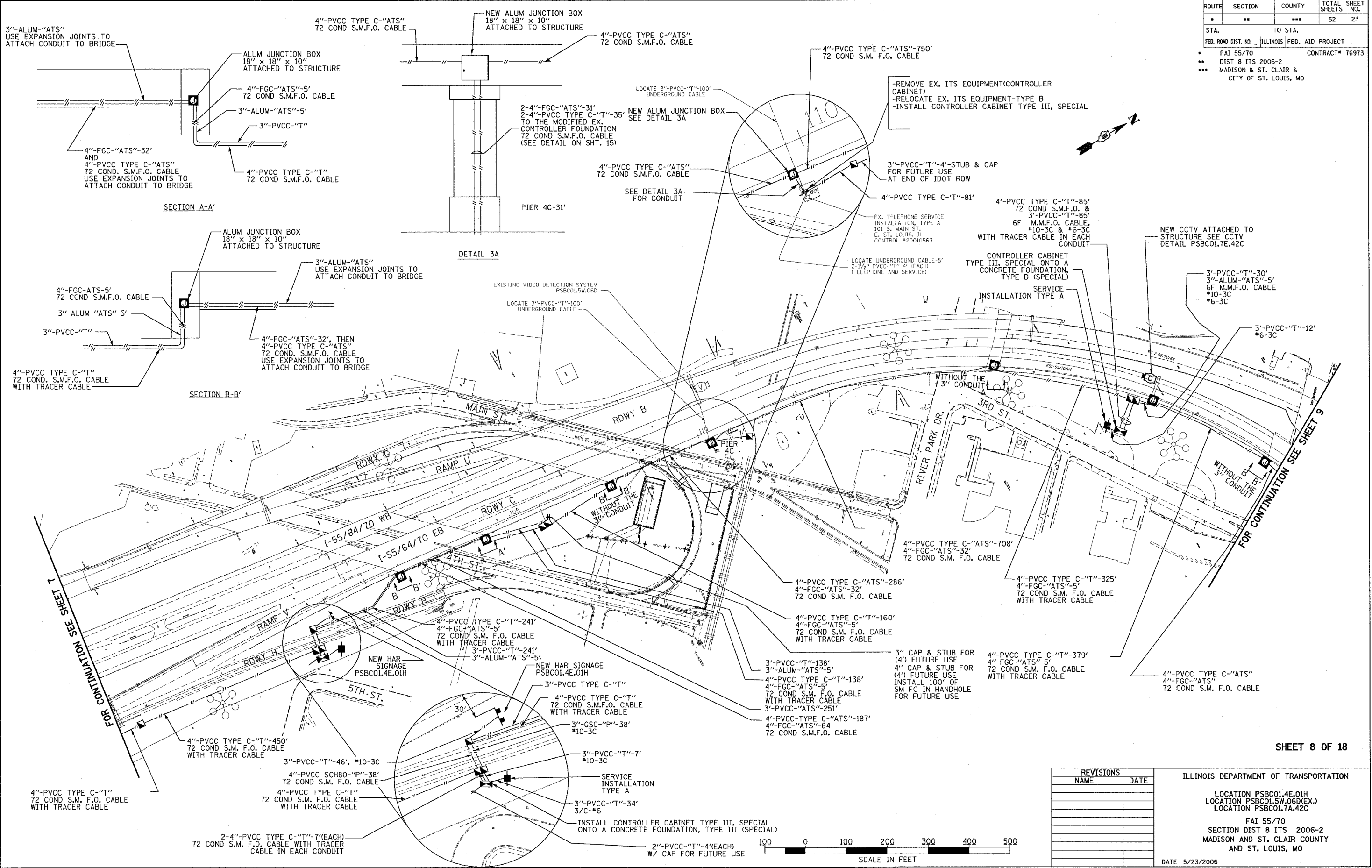
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 REFERENCE = #REF#



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 1.PSBC MP00.6
 OIL300.1A.02C
 2.PSBC MP00.9
 PSBC00.9E.09D
 PSBC00.9E.05D(EX.)
 PSBC00.9W.04D(EX.)
 PSBC00.9E.02C(EX.)
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 DATE 5/23/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55/70	DIST 8 ITS 2006-2	MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO	52	23
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	CONTRACT# 76973	



PLOT DATE = 5/23/2006
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 REFERENCE = BRIF#

SHEET 8 OF 18

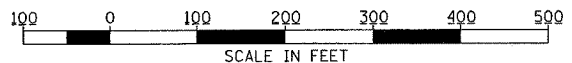
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

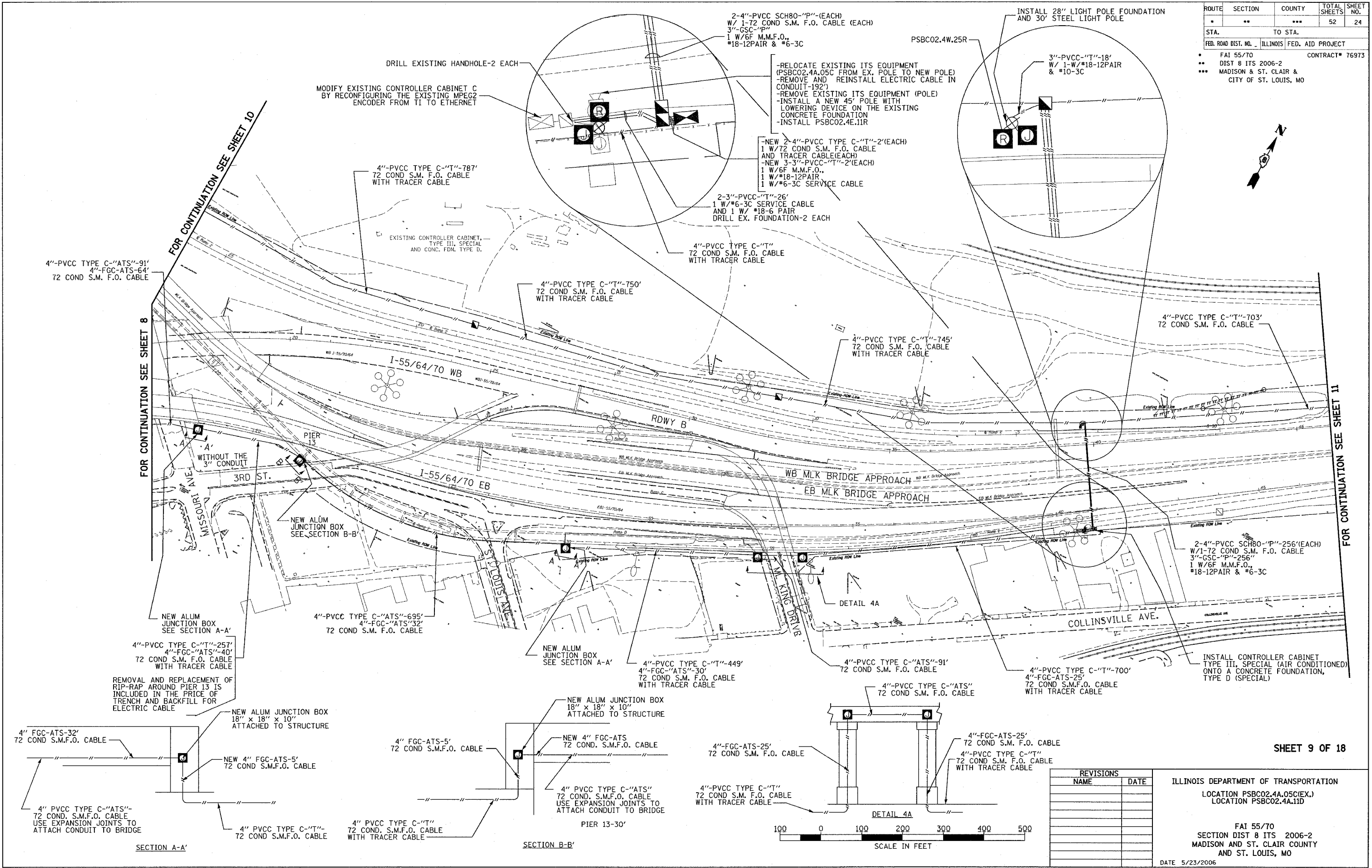
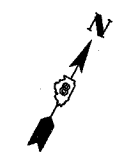
LOCATION PSBC01.4E.01H
 LOCATION PSBC01.5W.06D(EX.)
 LOCATION PSBC01.7A.42C

FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO

DATE 5/23/2006



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	24
STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
• FAI 55/70		CONTRACT# 76973		
•• DIST 8 ITS 2006-2		MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO		



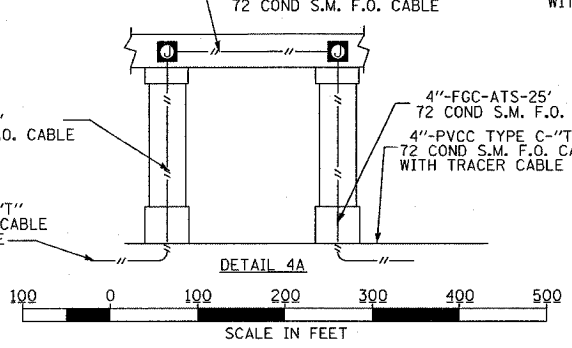
FOR CONTINUATION SEE SHEET 10

FOR CONTINUATION SEE SHEET 8

FOR CONTINUATION SEE SHEET 11

SECTION A-A'

SECTION B-B'



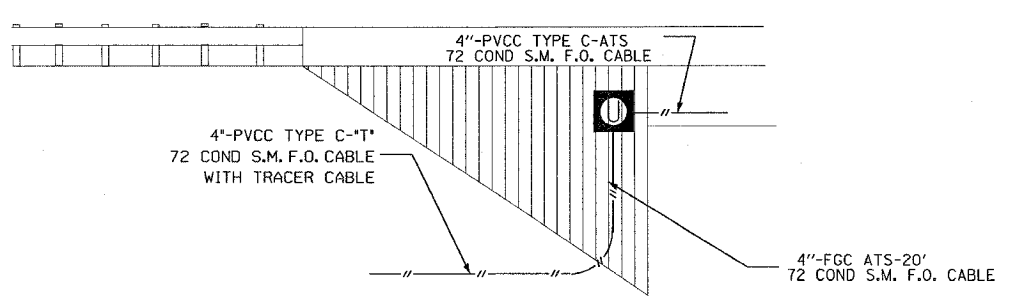
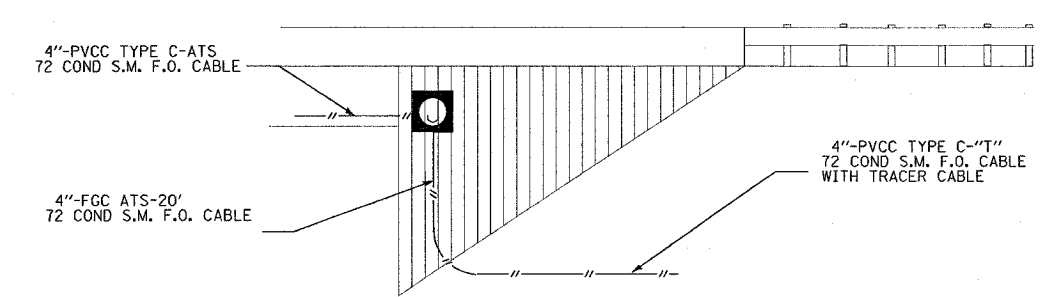
SHEET 9 OF 18

REVISIONS	
NAME	DATE

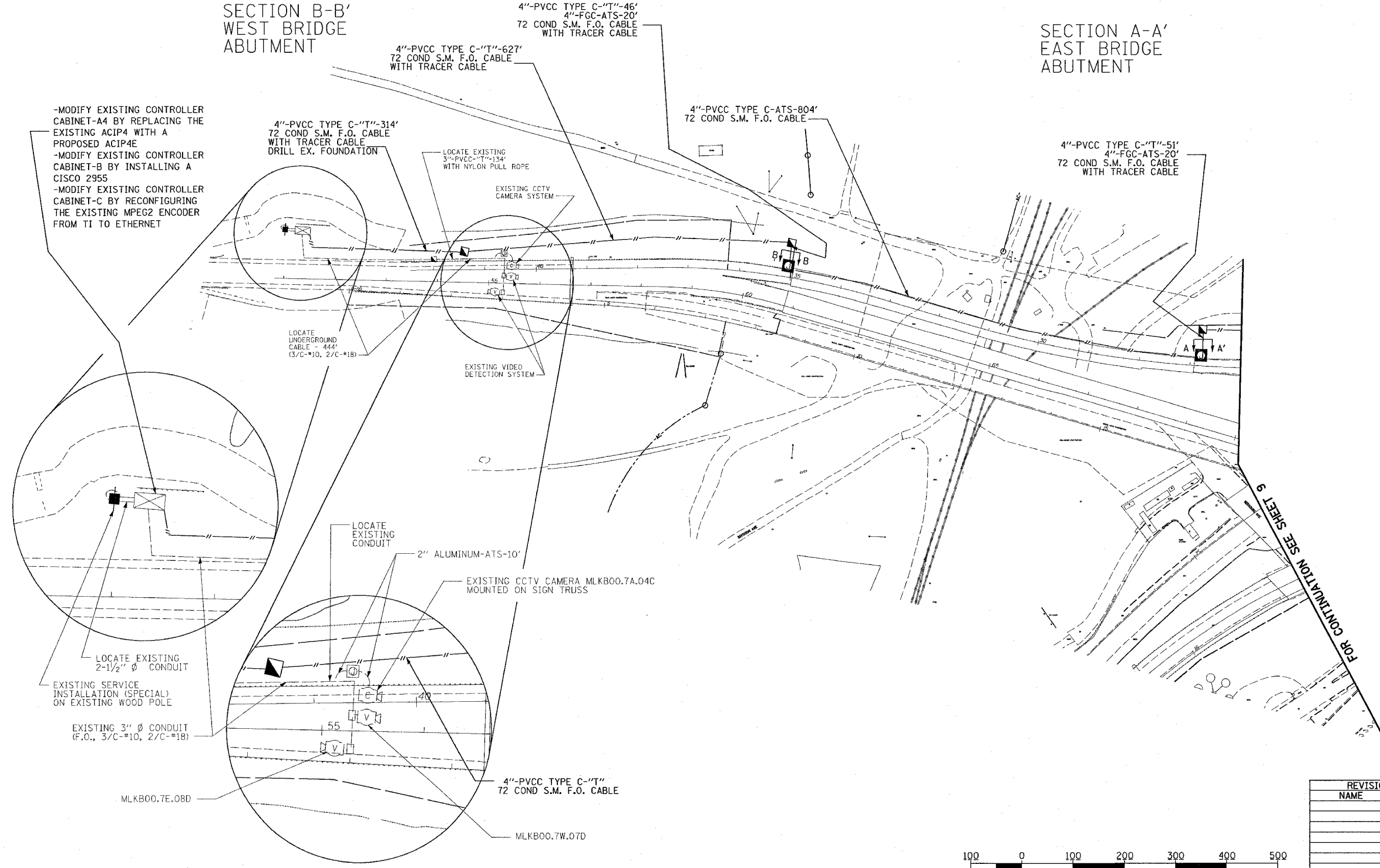
ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOCATION PSBC02.4A.05C(EX.)
 LOCATION PSBC02.4A.11D
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 DATE 5/23/2006

PLOT DATE = 5/23/2006
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 REFERENCE = #REF#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	25
STA.		TO STA.		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
• FAI 55/70		CONTRACT# 76973		
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



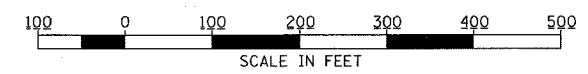
-MODIFY EXISTING CONTROLLER CABINET-A4 BY REPLACING THE EXISTING ACIP4 WITH A PROPOSED ACIP4E
 -MODIFY EXISTING CONTROLLER CABINET-B BY INSTALLING A CISCO 2955
 -MODIFY EXISTING CONTROLLER CABINET-C BY RECONFIGURING THE EXISTING MPEG2 ENCODER FROM TI TO ETHERNET



FOR CONTINUATION SEE SHEET 9

SHEET 10 OF 18

PLOT DATE = 5/23/2006
 FILE NAME = c:\pcc\projects\ed16805\electrical\sup11680a.dgn
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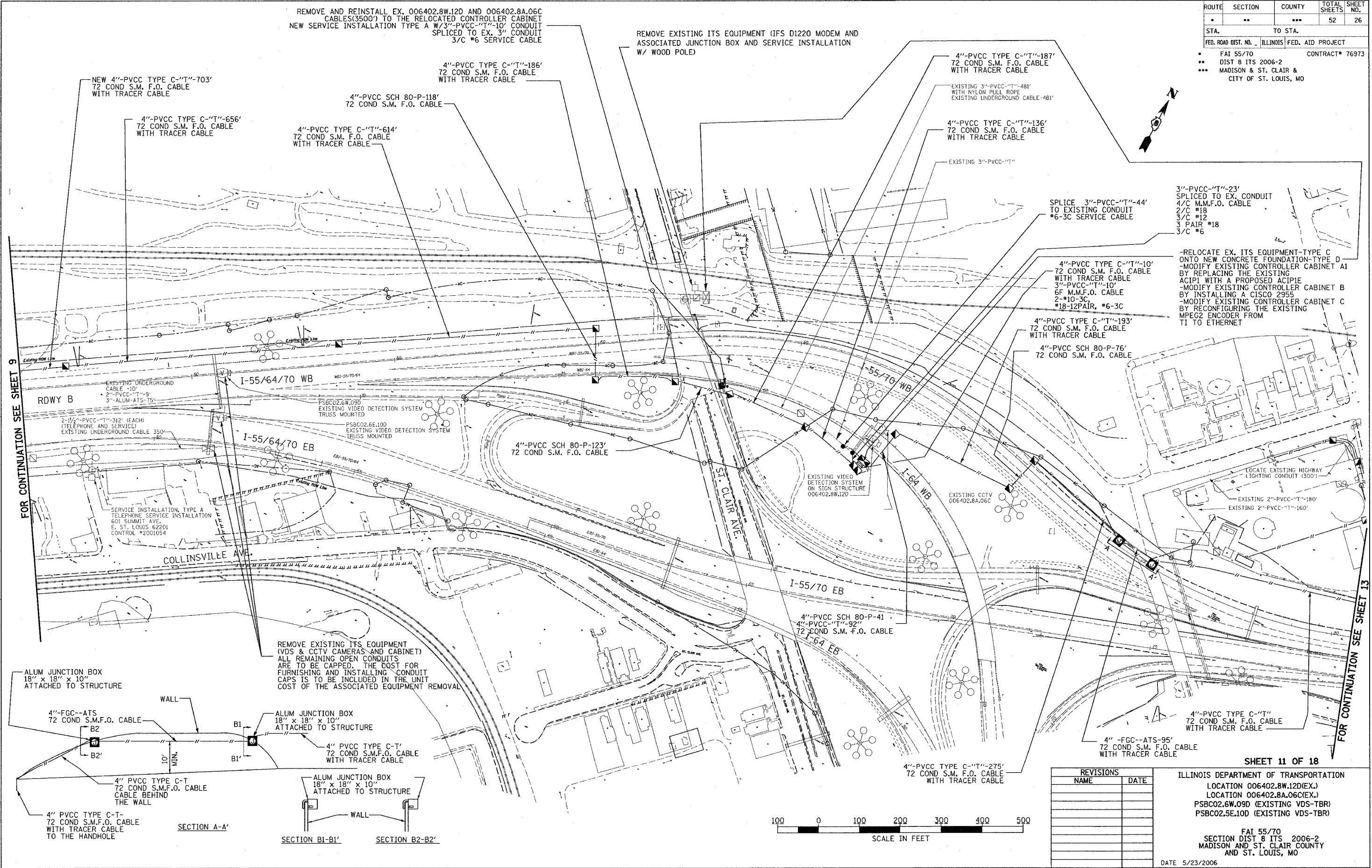
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOCATION MLKB00.7E.08D(EX.)
 LOCATION MLKB00.7W.07D(EX.)
 LOCATION MLKB00.7A.XXC(EX.)

FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO

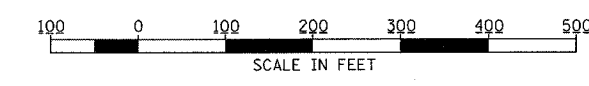
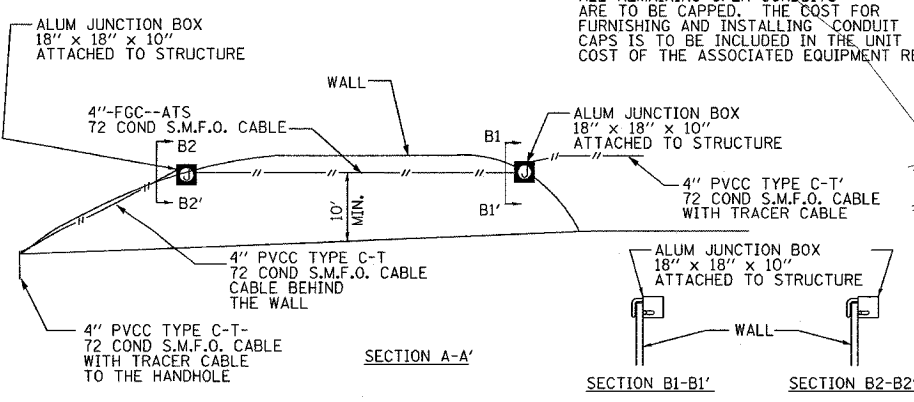
DATE 5/23/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	26
STA.		TO STA.		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
• FAI 55/70 CONTRACT# 76973				
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



FOR CONTINUATION SEE SHEET 9

FOR CONTINUATION SEE SHEET 13



REVISIONS	
NAME	DATE

SHEET 11 OF 18

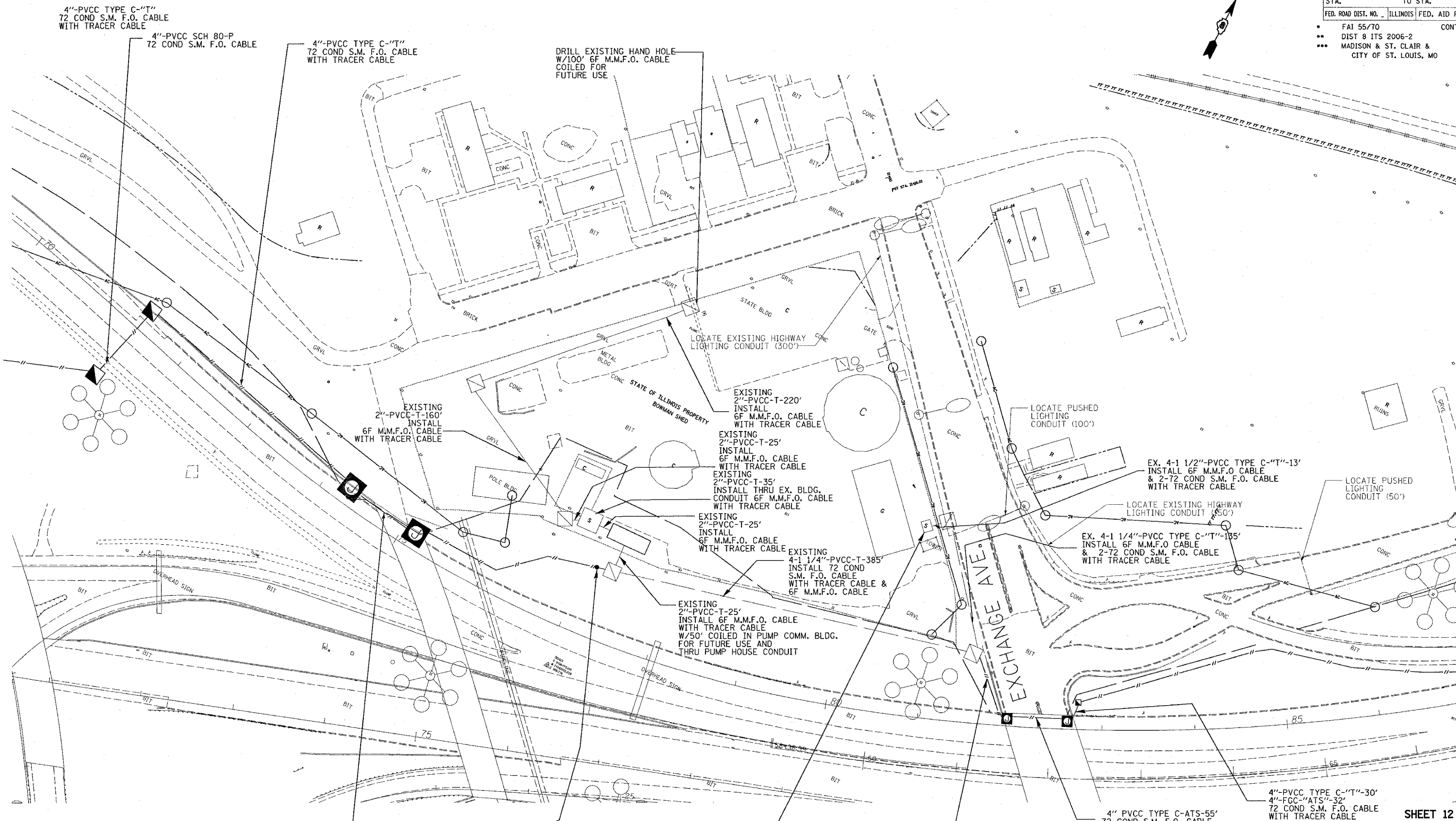
ILLINOIS DEPARTMENT OF TRANSPORTATION
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 LOCATION 006402.8A.06C(EX.)
 PSBC02.6W.09D (EXISTING VDS-TBR)
 PSBC02.5E.10D (EXISTING VDS-TBR)

FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO

DATE 5/23/2006

PLOT DATE = 5/23/2006
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 REFERENCE = SHEET#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	27
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• FAI 55/70		CONTRACT# 76973		
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



4"-PVCC TYPE C-"T"
72 COND S.M. F.O. CABLE
WITH TRACER CABLE

4"-PVCC SCH 80-P
72 COND S.M. F.O. CABLE

4"-PVCC TYPE C-"T"
72 COND S.M. F.O. CABLE
WITH TRACER CABLE

DRILL EXISTING HAND HOLE
W/100' 6F M.M.F.O. CABLE
COILED FOR
FUTURE USE

LOCATE EXISTING HIGHWAY
LIGHTING CONDUIT (300')

EXISTING
2"-PVCC-T-160'
INSTALL
6F M.M.F.O. CABLE
WITH TRACER CABLE

EXISTING
2"-PVCC-T-220'
INSTALL
6F M.M.F.O. CABLE
WITH TRACER CABLE

EXISTING
2"-PVCC-T-25'
INSTALL
6F M.M.F.O. CABLE
WITH TRACER CABLE

EXISTING
2"-PVCC-T-35'
INSTALL THRU EX. BLDG.
CONDUIT 6F M.M.F.O. CABLE
WITH TRACER CABLE

EXISTING
2"-PVCC-T-25'
INSTALL
6F M.M.F.O. CABLE
WITH TRACER CABLE

EXISTING
4-1 1/4"-PVCC-T-385'
INSTALL 72 COND
S.M. F.O. CABLE
WITH TRACER CABLE &
6F M.M.F.O. CABLE

EXISTING
2"-PVCC-T-25'
INSTALL 6F M.M.F.O. CABLE
WITH TRACER CABLE
W/50' COILED IN PUMP COMM. BLDG.
FOR FUTURE USE AND
THRU PUMP HOUSE CONDUIT

LOCATE PUSHED
LIGHTING
CONDUIT (100')

EX. 4-1 1/2"-PVCC TYPE C-"T"-13'
INSTALL 6F M.M.F.O. CABLE
& 2-72 COND S.M. F.O. CABLE
WITH TRACER CABLE

LOCATE EXISTING HIGHWAY
LIGHTING CONDUIT (50')

EX. 4-1 1/4"-PVCC TYPE C-"T"-135'
INSTALL 6F M.M.F.O. CABLE
& 2-72 COND S.M. F.O. CABLE
WITH TRACER CABLE

LOCATE PUSHED
LIGHTING
CONDUIT (50')

4"-FGC-"ATS"
72 COND S.M. F.O. CABLE
WITH TRACER CABLE

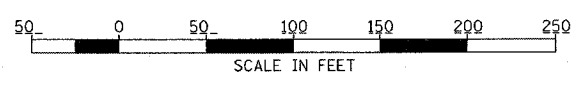
SPLICE ONTO EX.
4"-PVCC TYPE C-"T"-2' CAPPED
4"-PVCC TYPE C-"T"-410'
72 COND S.M. F.O. CABLE
WITH TRACER CABLE

100' EACH OF COILED 72 COND S.M. F.O. CABLE
& 6F M.M.F.O. CABLE WITH TRACER CABLE IN
THE COMMUNICATION'S TOWER BUILDING
MODIFY TOWER COMMUNICATIONS BUILDING

DRILL EX. HANDHOLE
4"-PVCC TYPE C-"T"-60'
4"-FGC-"ATS"-32'
72 COND S.M. F.O. CABLE
WITH TRACER CABLE

4" PVCC TYPE C-ATS-55'
72 COND S.M. F.O. CABLE
WITH TRACER CABLE

4"-PVCC TYPE C-"T"-30'
4"-FGC-"ATS"-32'
72 COND S.M. F.O. CABLE
WITH TRACER CABLE



REVISIONS	
NAME	DATE

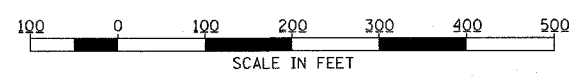
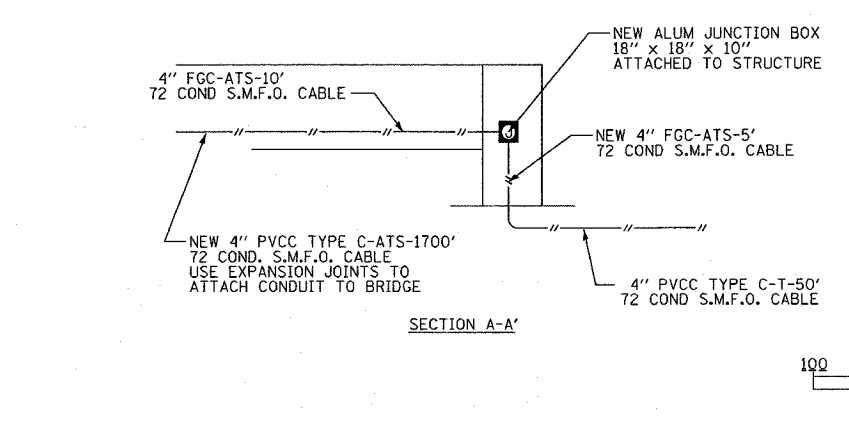
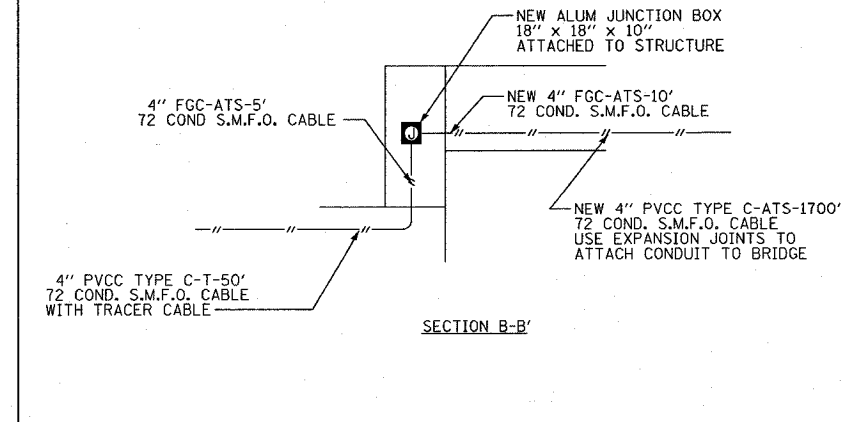
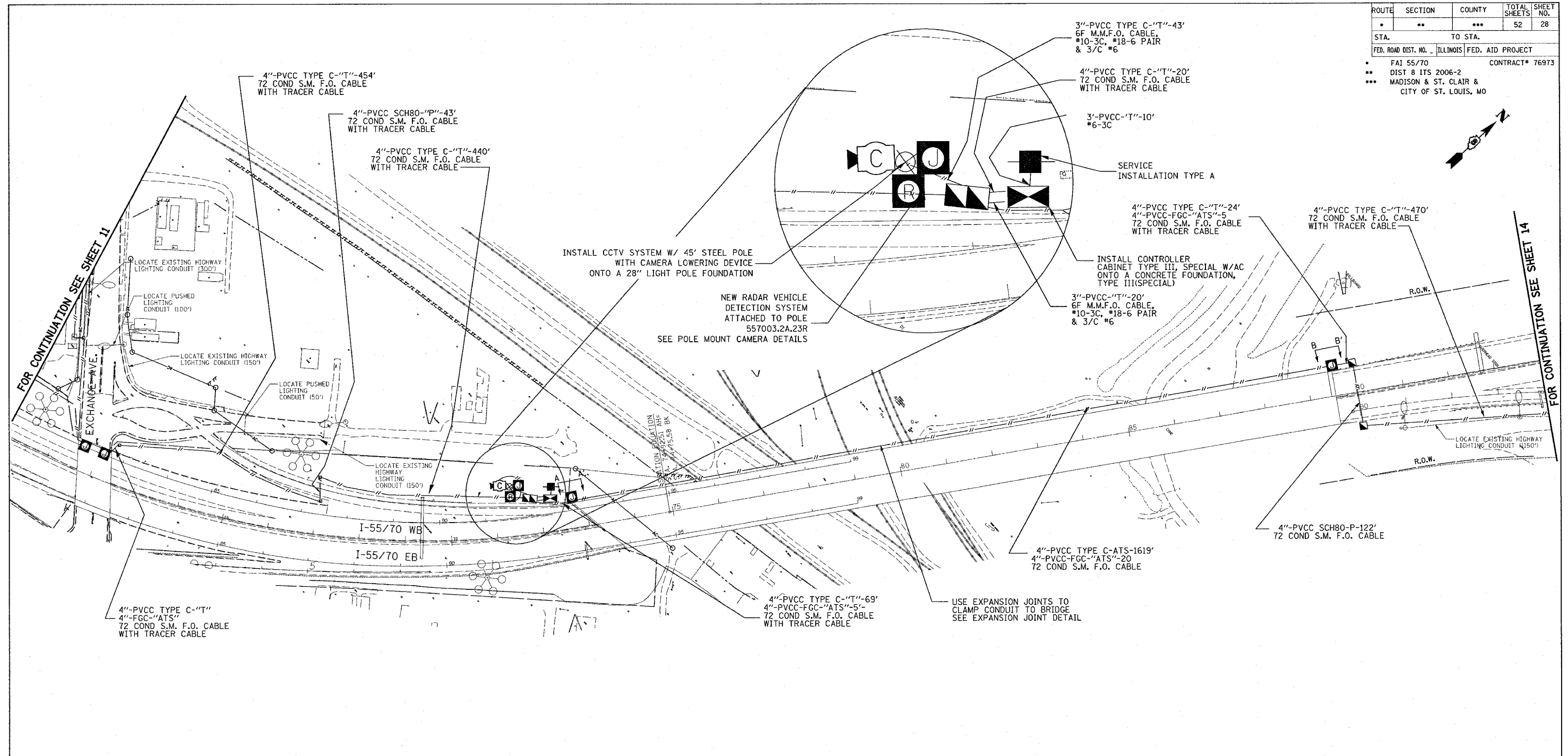
ILLINOIS DEPARTMENT OF TRANSPORTATION
BOWMAN YARD VICINITY
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

DATE 6/15/2006

SHEET 12 OF 18

DATE: 6/15/2006
FILE NAME: c:\projects\mtd\1685\valer\total\1685.dgn
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REFERENCE: #REF#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	28
STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
• FAI 55/70		CONTRACT# 76973		
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



REVISIONS	
NAME	DATE

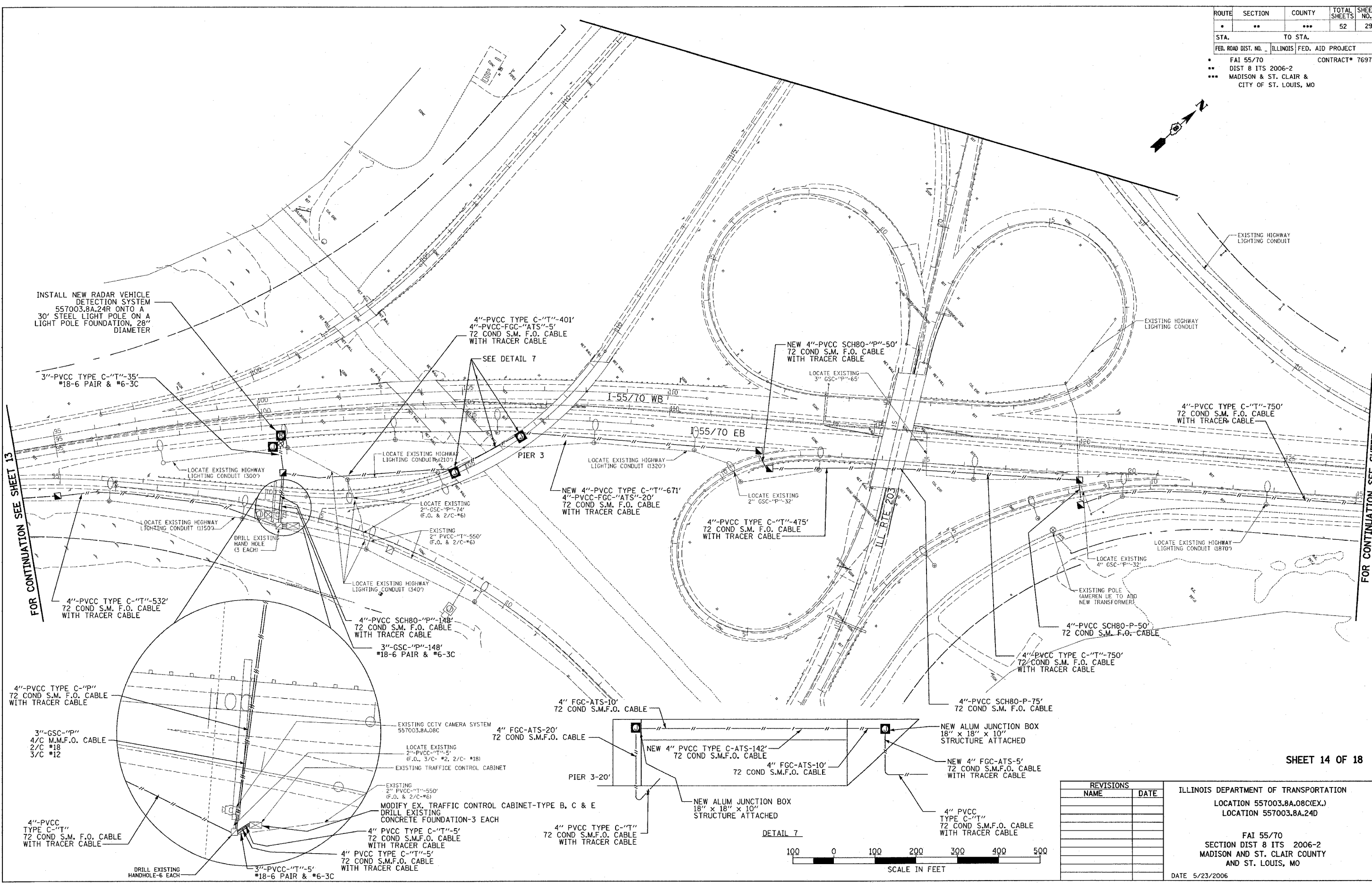
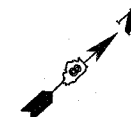
ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOCATION 557003.2A.23R
 LOCATION 557003.2A.41C

FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO

DATE 6/15/2006

PLOT DATE = 6/15/2006
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 REFERENCE = SHEET#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	29
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
FAI 55/70		CONTRACT# 76973		
DIST 8 ITS 2006-2				
MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



FOR CONTINUATION SEE SHEET 13

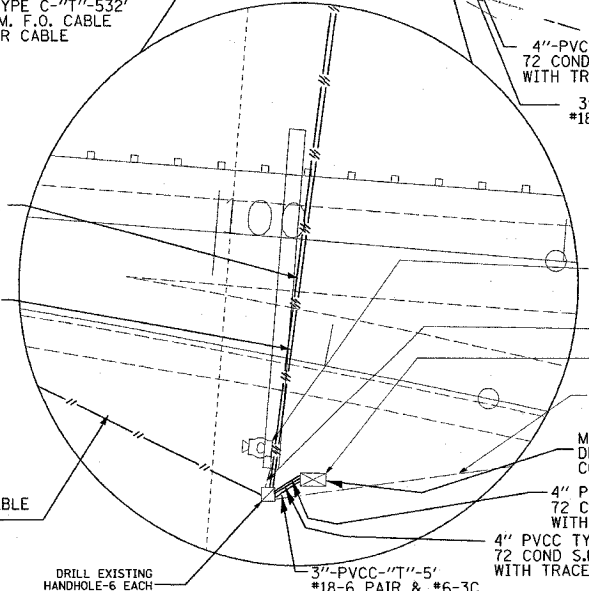
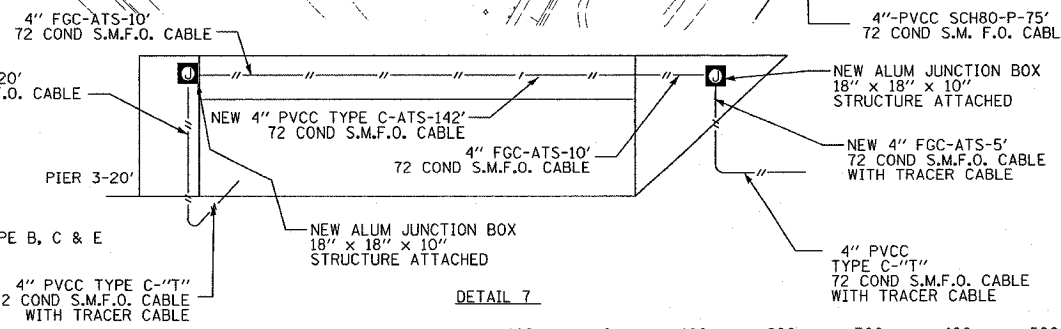
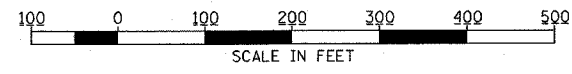
FOR CONTINUATION SEE SHEET 15

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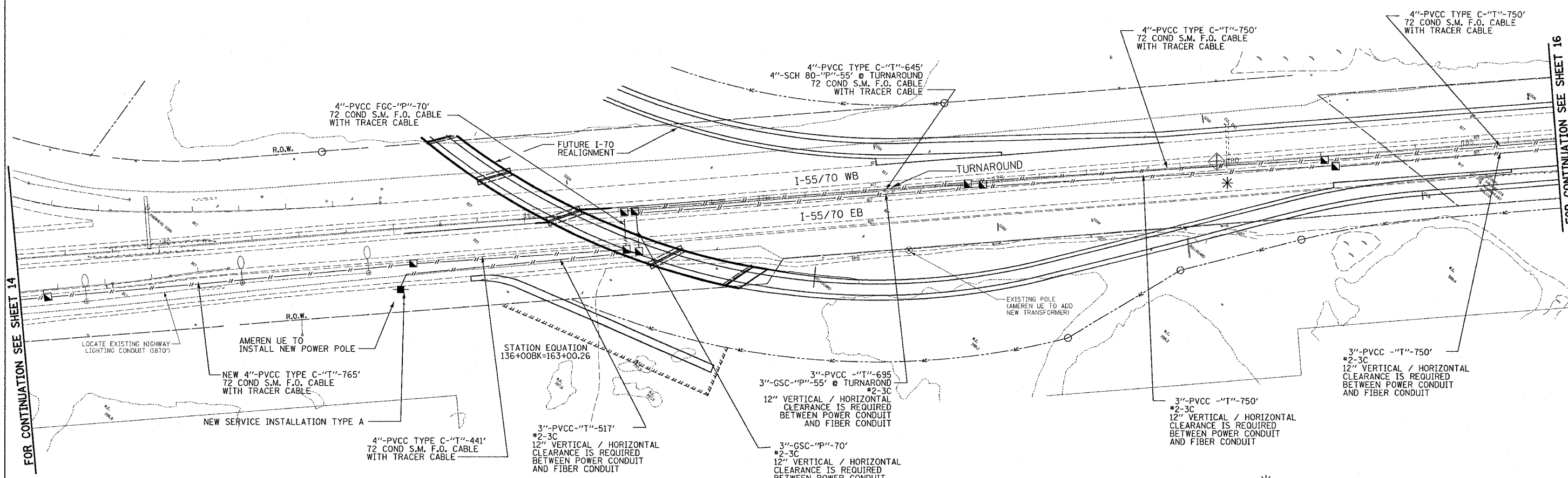
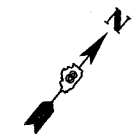
SHEET 14 OF 18

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOCATION 557003.8A.08C(EX.)
 LOCATION 557003.8A.24D
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 DATE 5/23/2006



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	30
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* FAI 55/70	CONTRACT# 76973			
** DIST 8 ITS 2006-2				
*** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



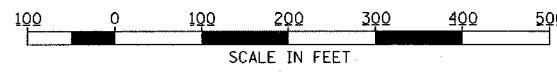
FOR CONTINUATION SEE SHEET 14

FOR CONTINUATION SEE SHEET 16

* LOCATE CULVERT / DRAINS
VERIFY DEPTH. TRENCH OVER
OR TRENCH AROUND PER FIELD
ENGINEER'S RECOMMENDATION.

SHEET 15 OF 18

PLOT DATE = 5/23/2006
 PLOT SCALE = 1/8" = 100'-0" / IN.
 REFERENCE = MREF#

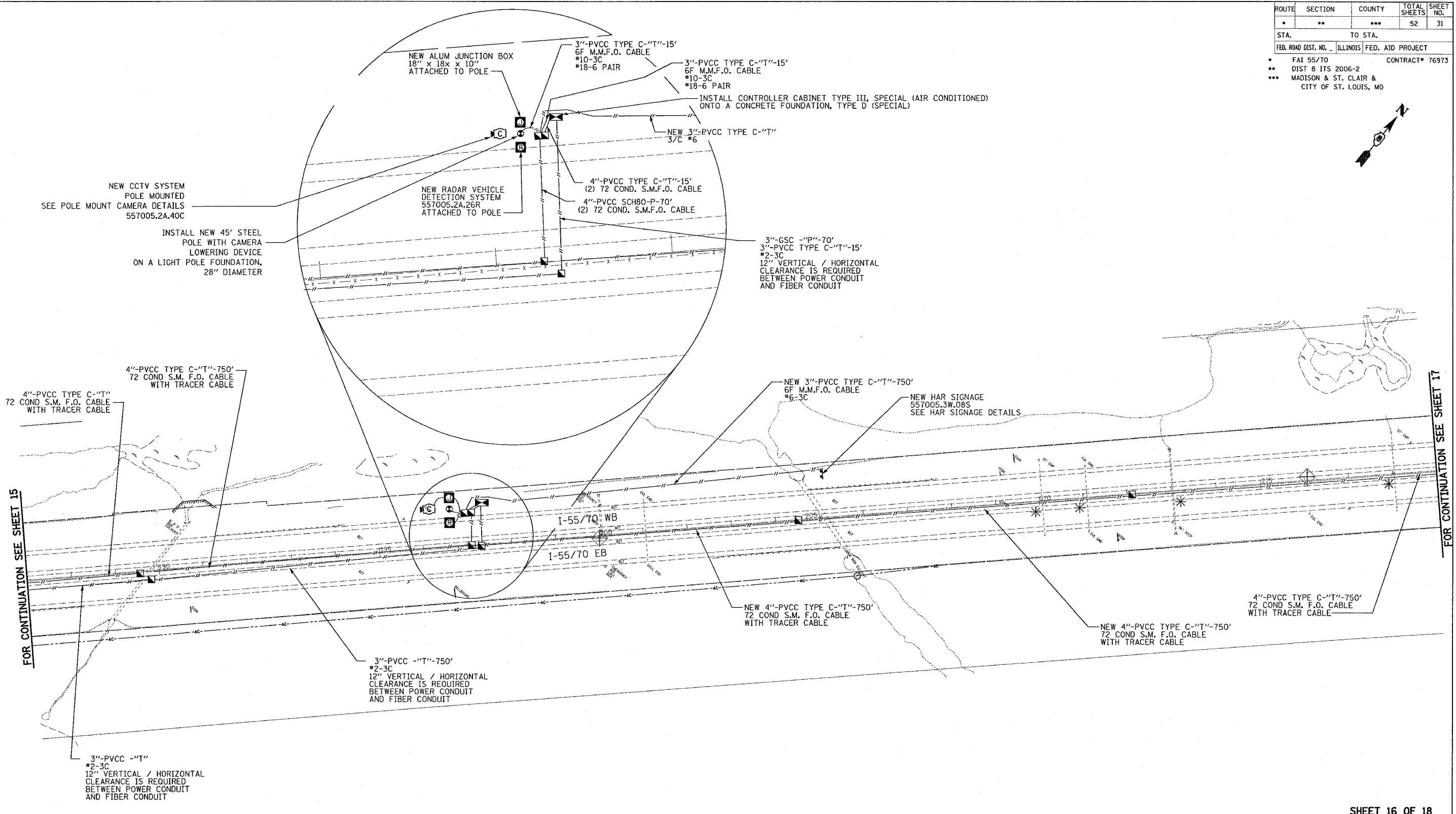
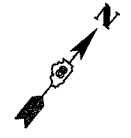


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOCATION 557004.5A.25D
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 DATE 5/23/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	8	ST. CLAIR	52	31
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT# 76973		

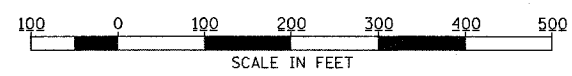
FAI 55/70
DIST 8 ITS 2006-2
MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO



FOR CONTINUATION SEE SHEET 15

FOR CONTINUATION SEE SHEET 17

* LOCATE CULVERT / DRAINS
VERIFY DEPTH, TRENCH OVER
OR TRENCH AROUND PER FIELD
ENGINEER'S RECOMMENDATION.

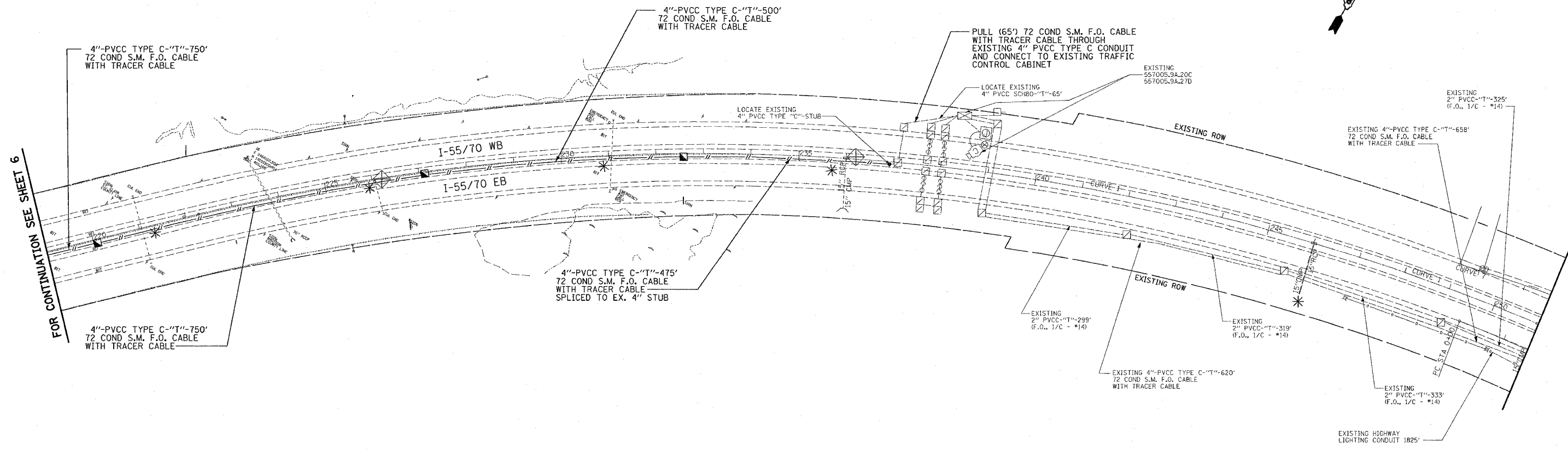


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
LOCATION 557005.2A.26R
LOCATION 557005.2A.40C
LOCATION 557005.5W.08S
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO
DATE 5/23/2006

PLOT DATE = 5/23/2006
PLOT SCALE = 1/8" = 100'-0" / IN.
REFERENCE = #REF#

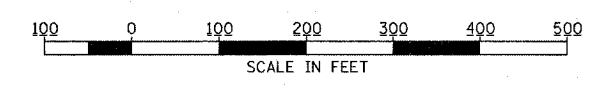
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	**	***	52	32
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
•	FAI 55/70	CONTRACT# 76973		
**	DIST 8 ITS 2006-2			
***	MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO			



FOR CONTINUATION SEE SHEET 6

* LOCATE CULVERT / DRAINS
VERIFY DEPTH, TRENCH OVER
OR TRENCH AROUND PER FIELD
ENGINEER'S RECOMMENDATION.

SHEET 17 OF 18

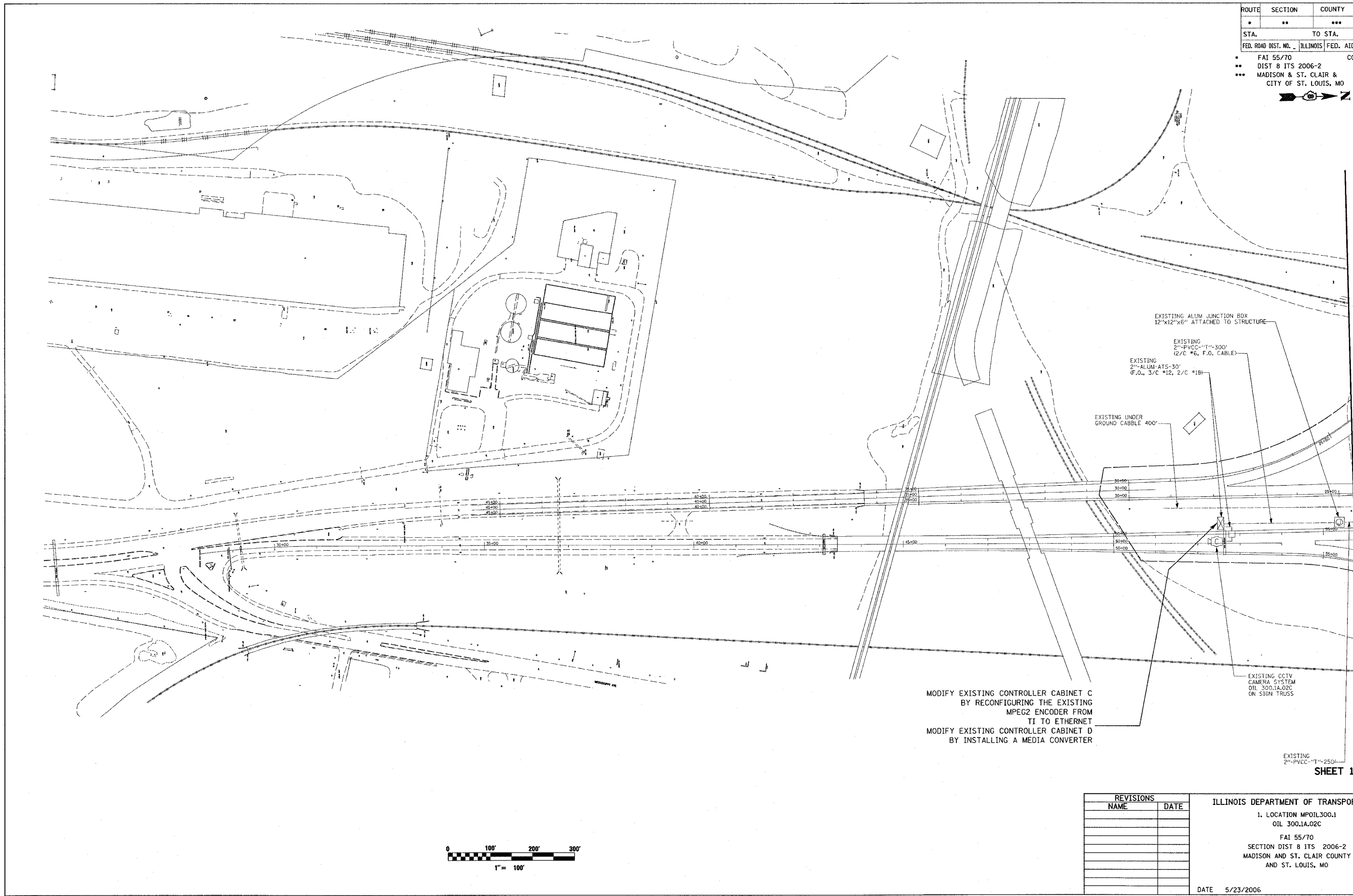


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
LOCATION 557005.9A.20C(EX.)
LOCATION 557005.9A.27D(EX.)
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO
DATE 5/23/2006

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PLOT SCALE = 1/8"=1'-0" / IN.
REFERENCE = REF#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	33
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
FAI 55/70		CONTRACT# 76973		
DIST 8 ITS 2006-2				
MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



FOR CONTINUATION SEE SHEET 7

SHEET 18 OF 18

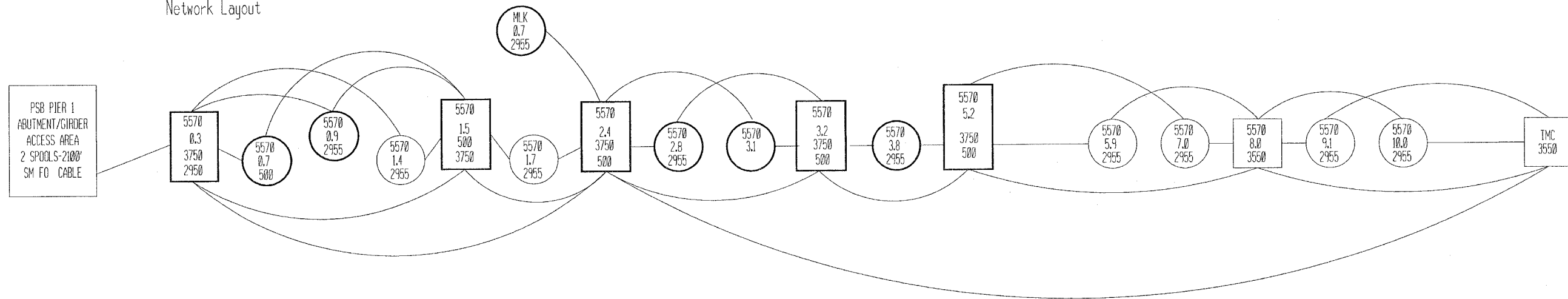
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 1. LOCATION MPOIL300.1
 OIL 300.1A.02C
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 DATE 5/23/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	34
STA. TO STA.				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				
* FAI 55/70			CONTRACT# 76973	
** DIST 8 ITS 2006-2				
*** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				

Network Layout

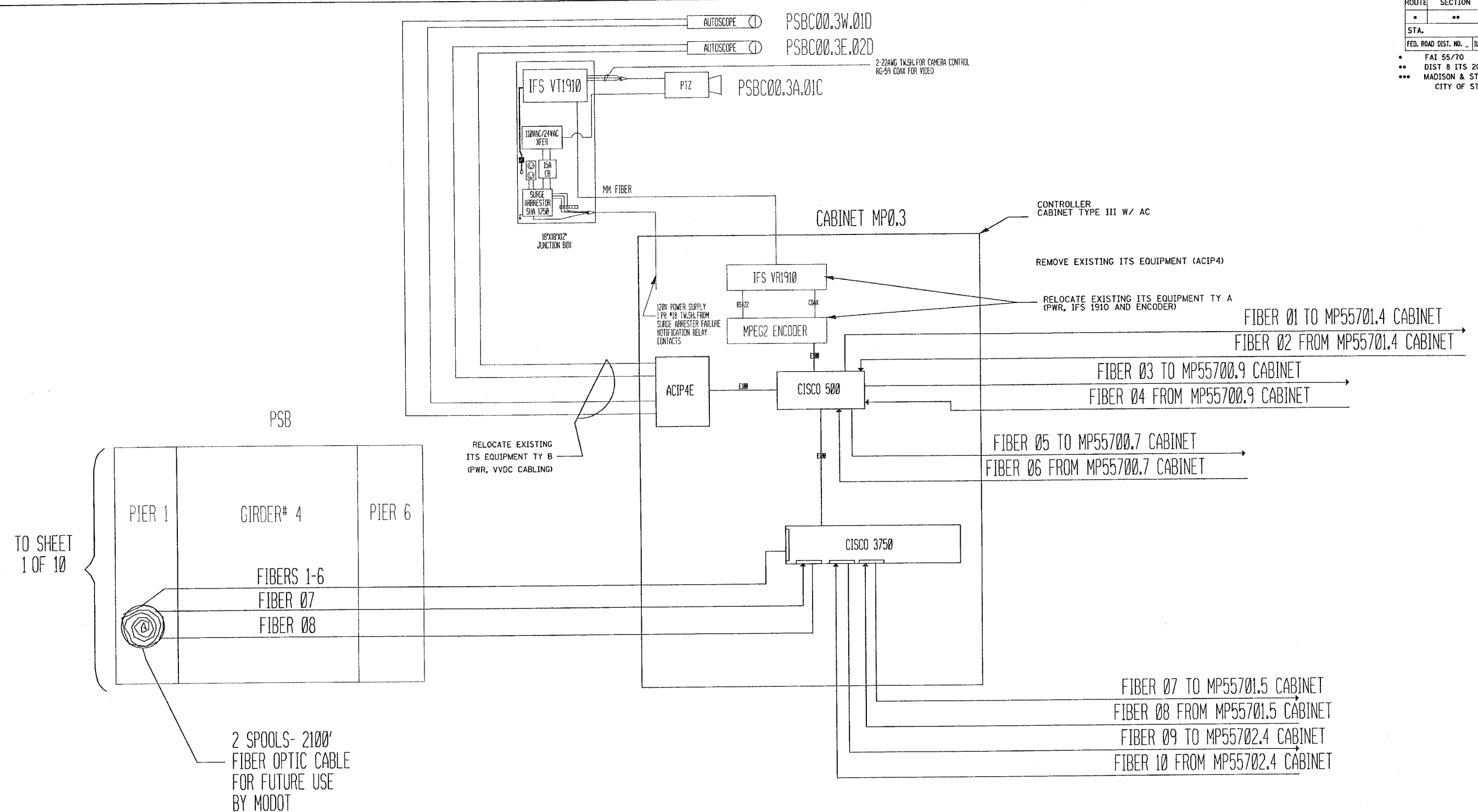


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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 COMMUNICATION SYSTEM COVER SHEET
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 DATE 6/28/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	36
STA.		TO STA.		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
• FAI 55/70			CONTRACT # 76973	
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



TO SHEET
1 OF 10

2 SPOOLS- 2100'
FIBER OPTIC CABLE
FOR FUTURE USE
BY MODOT

PSBC MP0.3
COMMUNICATION SHEET 2 OF 10

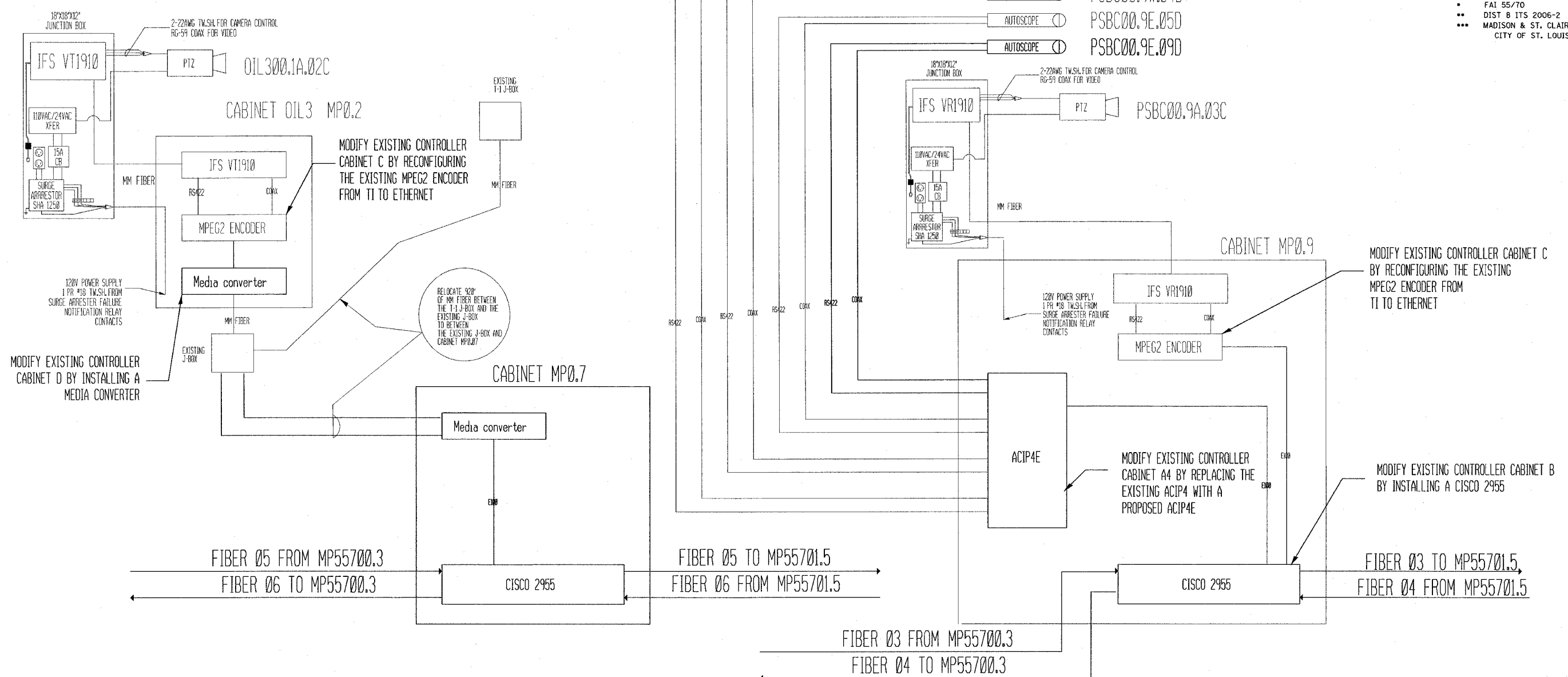
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
1.PSBC CABINET MP0.3
PSBC00.3W.01D(EX.)
PSBC00.3E.02D(EX.)
PSBC00.3A.01C(EX.)
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

DATE 6/28/2006

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ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	37
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
•	FAI 55/70			CONTRACT# 76973
••	DIST 8 ITS 2006-2			
•••	MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO			

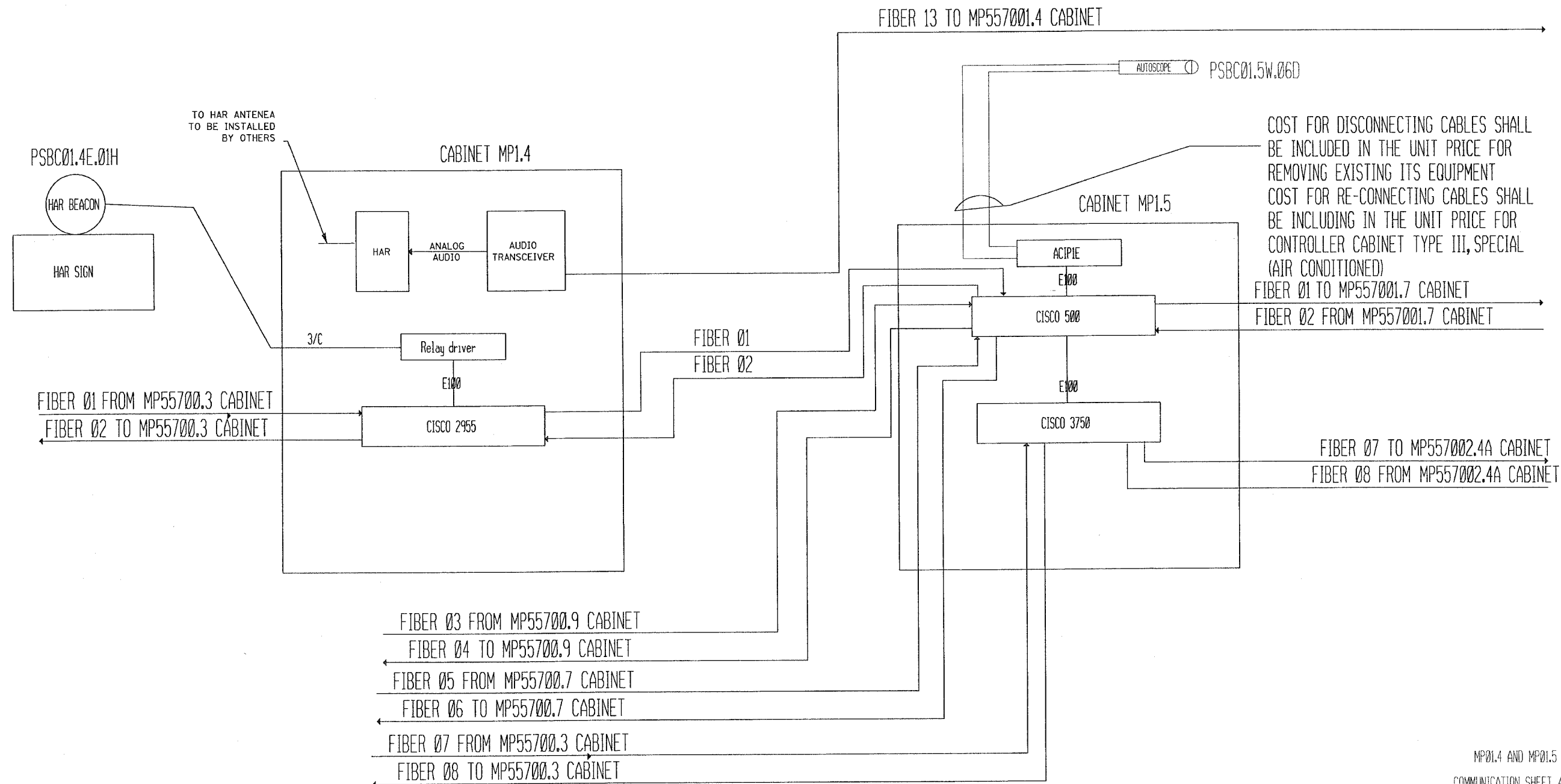


OIL3 MP0.2/PSBC MP0.7/PSB MP0.9
COMMUNICATION SHEET 3 OF 10

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		3.PSBC CABINET MP0.9
		1.OIL3 CABINET MP0.2
		PSBC00.9W.03D(EX.)
		PSBC00.9W.04D(EX.)
		2.PSBC CABINET MP0.7
		PSBC00.9E.09D
		PSBC00.9A.03C(EX.)
		FAI 55/70
		SECTION DIST 8 ITS 2006-2
		MADISON AND ST. CLAIR COUNTY
		AND ST. LOUIS, MO
		DATE 6/15/2006

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.	**	***	52	38
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
.	FAI 55/70	CONTRACT# 76973		
**	DIST 8 ITS 2006-2			
***	MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO			

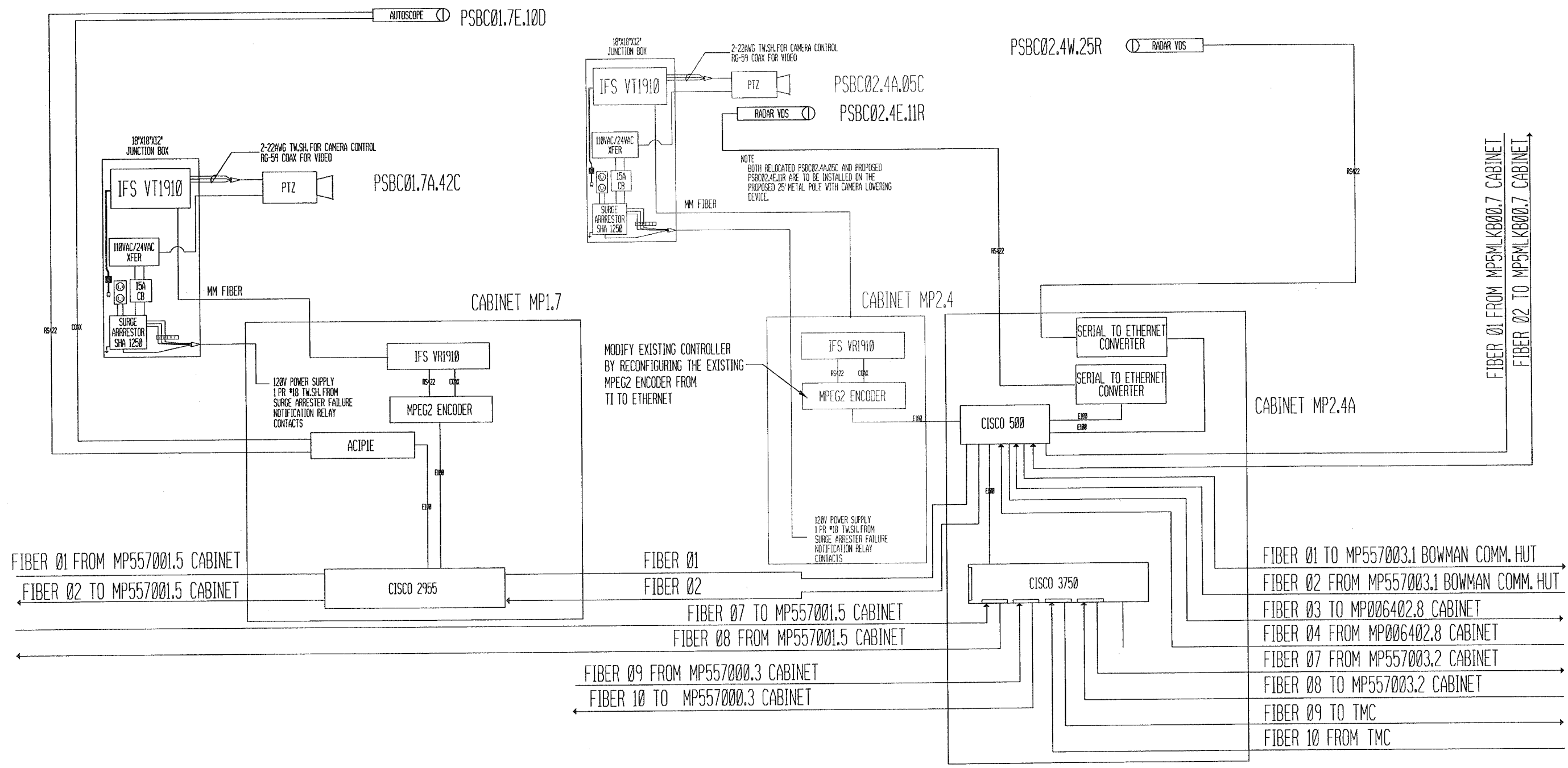


MP01.4 AND MP01.5
COMMUNICATION SHEET 4 OF 10

REVISIONS		NAME	DATE
NO.	DESCRIPTION		
1.	PSBC CABINET (HAR) MP1.4 PSBC01.4E.01H	3.PSBC CABINET MP1.5 PSBC01.5W.06D	
2.	PSBC CABINET CABINET MP1.4 HAR		
		FAI 55/70	
		SECTION DIST 8 ITS 2006-2	
		MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO	
		DATE 6/28/2006	

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ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	39
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
•	FAI 55/70	CONTRACT# 76973		
••	DIST 8 ITS 2006-2			
•••	MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO			



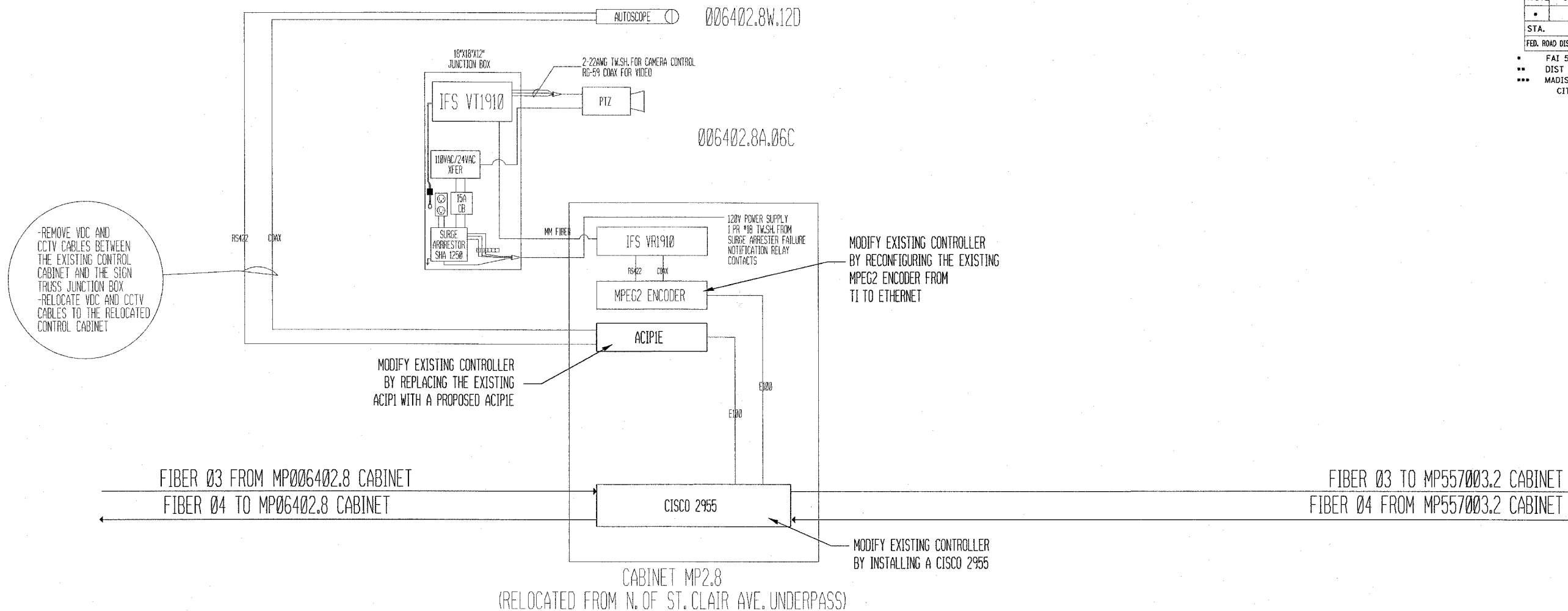
PSBC MP1.7 AND PSBC MP2.4 COMMUNICATION SHEET 5 OF 10

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 1.PSBC CABINET MP1.7 PSBC01.7E.10D(EX.) PSBC01.7A.42C(EX.)
 2.PSBC CABINET MP2.4 PSBC02.4A.05C(EX.) 557002.4A.11D
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO
 DATE 6/28/2006

PLOT DATE = 6/28/2006
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 REFERENCE = #REF#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	40
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* FAI 55/70		CONTRACT# 76973		
** DIST 8 ITS 2006-2				
*** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



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MP02.8
COMMUNICATION SHEET 6 OF 10

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		1.0064 CABINET MP2.8 006402.8W.12D(EX.) 006402.8A.06C(EX.)
		FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO
		DATE 6/15/2006

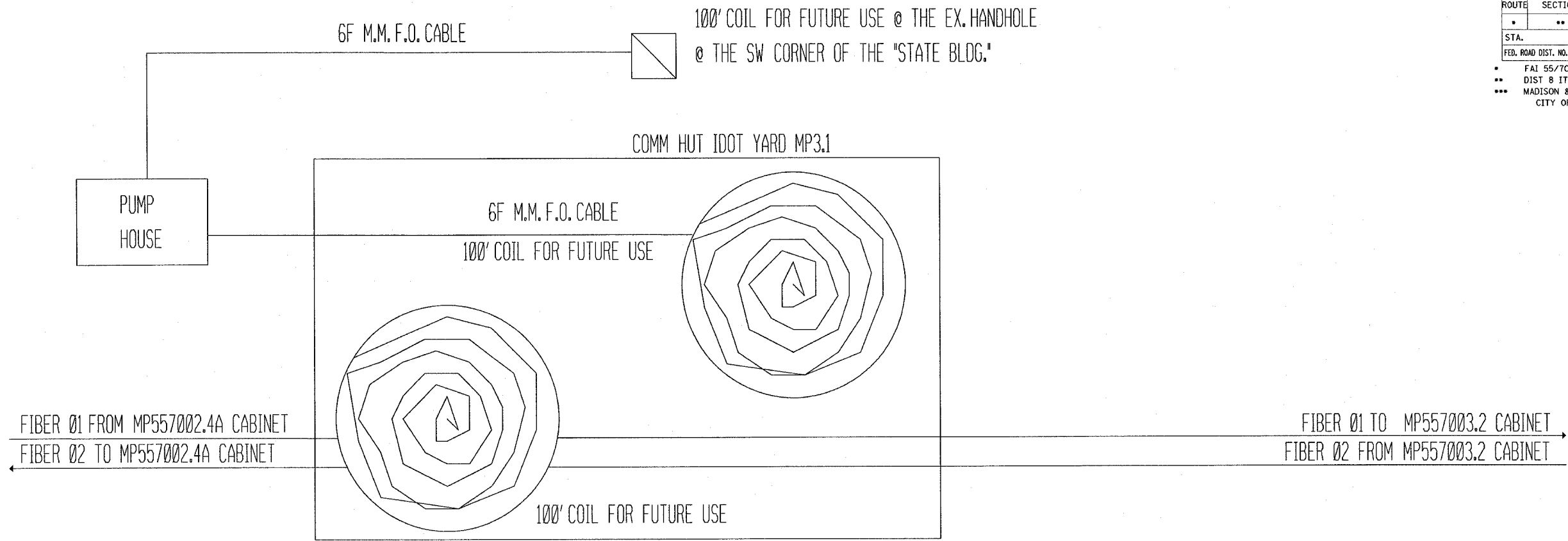
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	41

STA.	TO STA.
------	---------

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

FAI 55/70 CONTRACT# 76973

DIST 8 ITS 2006-2
MADISON & ST. CLAIR &
CITY OF ST. LOUIS, MO



PLOT DATE = 6/15/2006
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COMM HUT IDOT YARD MP3.1
COMMUNICATION SHEET 7 OF 10

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

1. EXCHANGE AVE. IDOT YARD
COMM HUT MP3.1

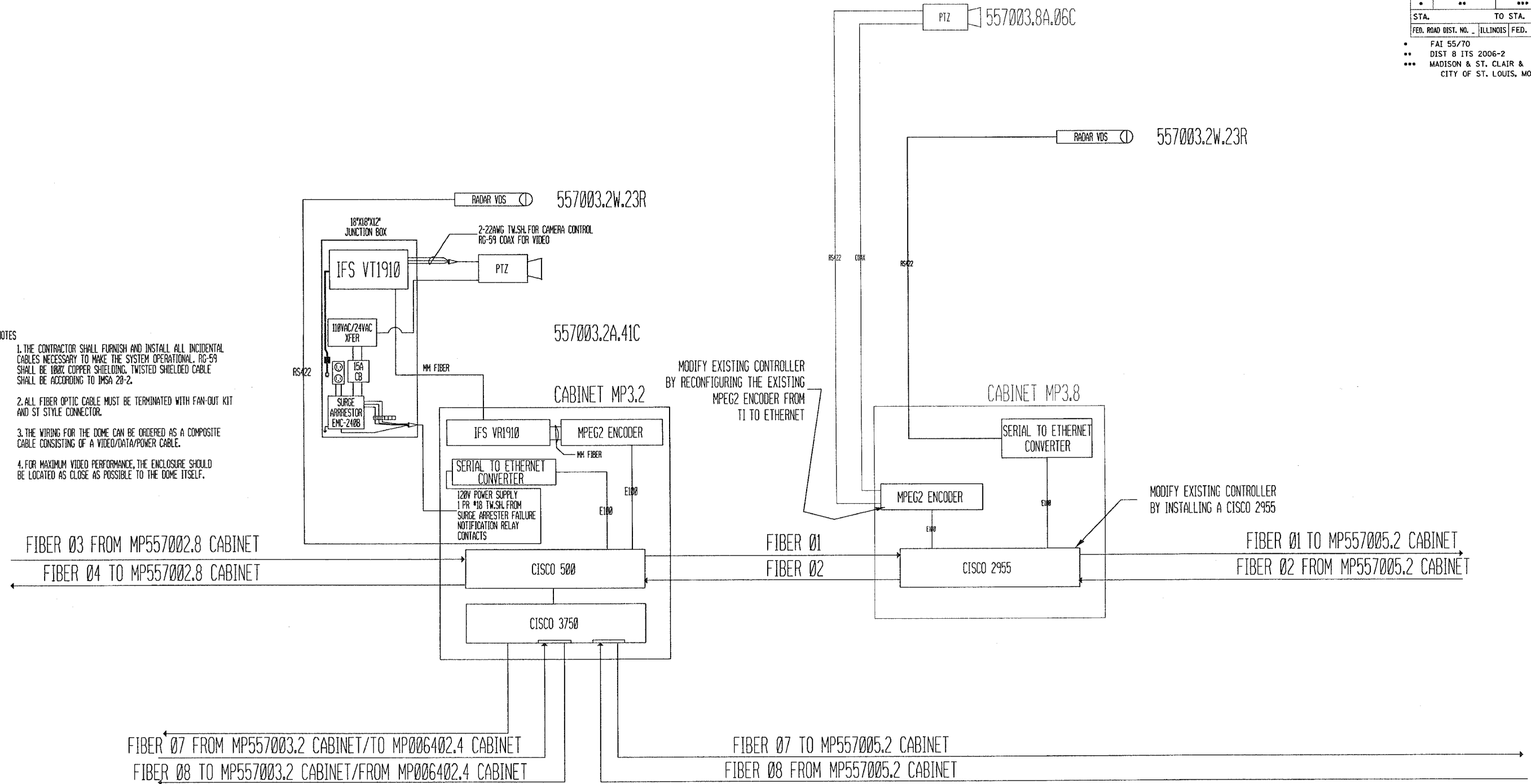
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

DATE 6/15/2006

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	**	***	52	42
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• FAI 55/70		CONTRACT# 76973		
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				

NOTES

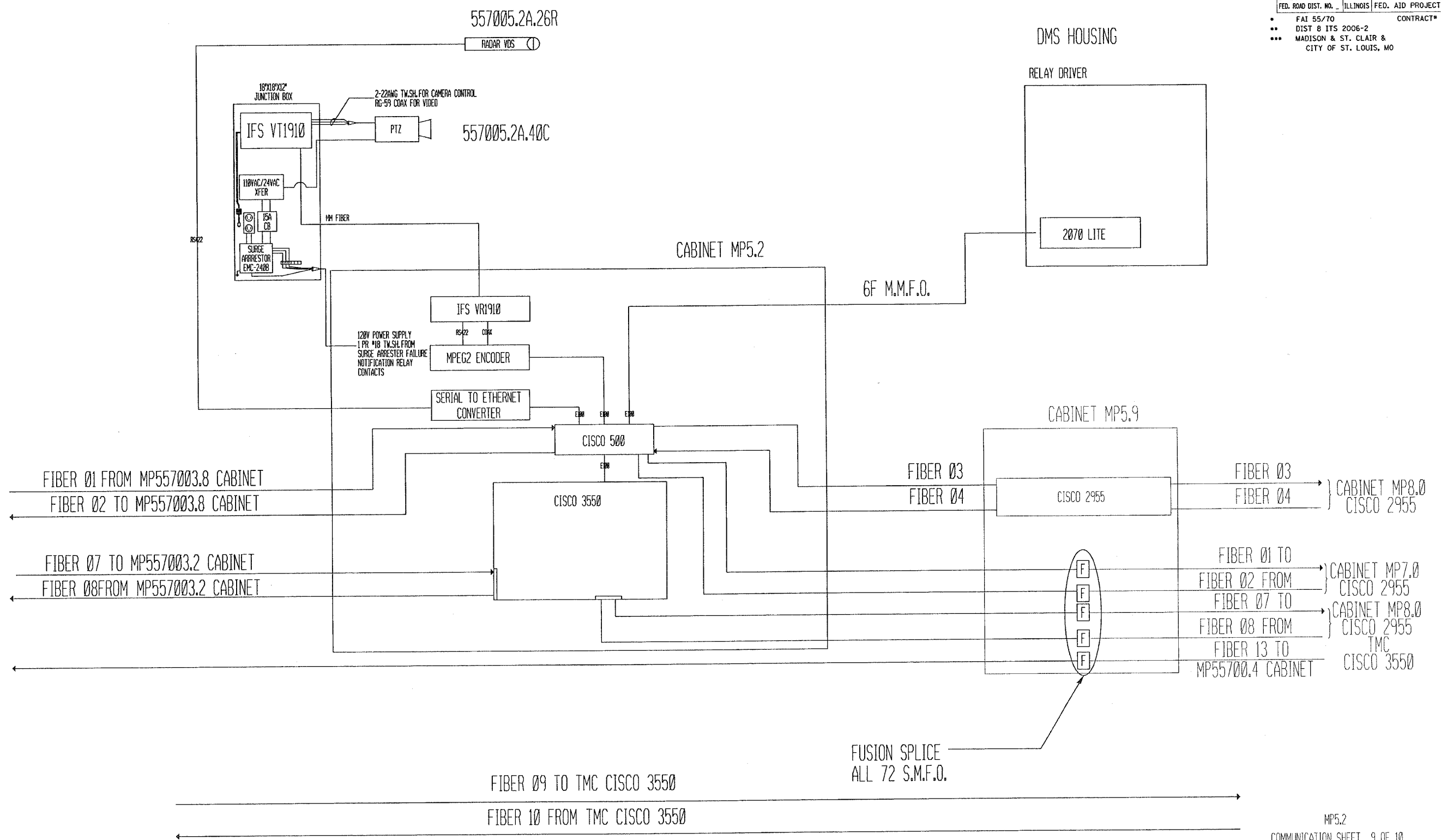
1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL CABLES NECESSARY TO MAKE THE SYSTEM OPERATIONAL. RG-59 SHALL BE 100% COPPER SHIELDING. TWISTED SHIELDED CABLE SHALL BE ACCORDING TO IMSA 20-2.
2. ALL FIBER OPTIC CABLE MUST BE TERMINATED WITH FAN-OUT KIT AND ST STYLE CONNECTOR.
3. THE WIRING FOR THE DOME CAN BE ORDERED AS A COMPOSITE CABLE CONSISTING OF A VIDEO/DATA/POWER CABLE.
4. FOR MAXIMUM VIDEO PERFORMANCE, THE ENCLOSURE SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE DOME ITSELF.



MP03.2 AND MP03.8
COMMUNICATION SHEET 8 OF 10

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	1.0064 CABINET MP3.2	2.0064 CABINET MP3.8
		006403.2W.23R	006403.8A.06C(EX.)
		006403.2A.41C	557003.8A.24D
		FAI 55/70	
		SECTION DIST 8 ITS 2006-2	
		MADISON AND ST. CLAIR COUNTY	
		AND ST. LOUIS, MO	
		DATE 6/28/2006	

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	52	43
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
• FAI 55/70		CONTRACT# 76973		
•• DIST 8 ITS 2006-2				
••• MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



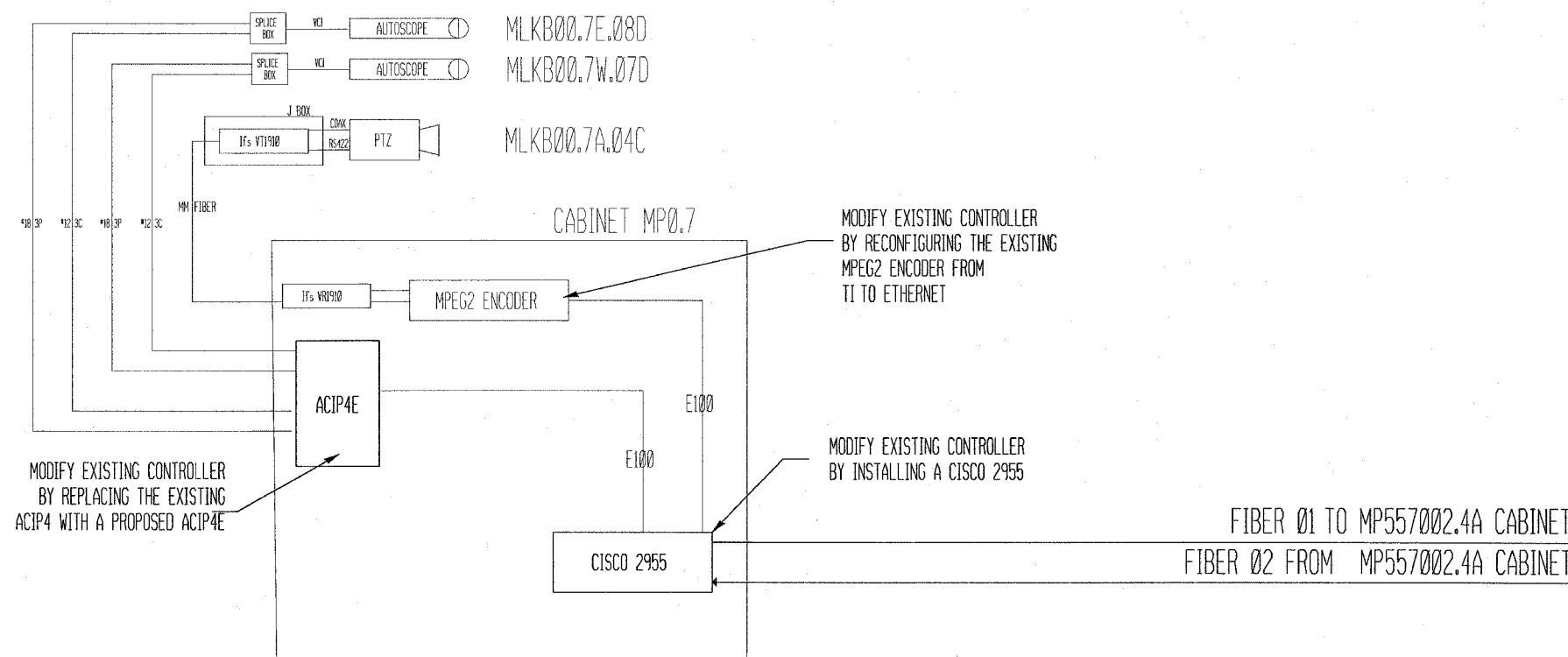
MP5.2
COMMUNICATION SHEET 9 OF 10

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
1.I55/70 CABINET MP5.2
557005.2A.40C
557005.2W.08S
FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO
SCALE: DRAWN BY MAM
DATE 6/28/2006 CHECKED BY CAF

PLOT DATE = 6/28/2006
PLOT SCALE = 1/8"=1'-0"
REFERENCE = REF#

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	52	44
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* FAI 55/70		CONTRACT# 76973		
** DIST 8 ITS 2006-2				
*** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO				



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MLKB MP0.7
 COMMUNICATION SHEET 10 OF 10

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 1.MLKB CABINET MP0.7(EX.)
 MLKB00.7E.07D(EX.)
 MLKB00.7W.07D(EX.)
 MLKB00.7A.04C(EX.)
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 SCALE: DRAWN BY MAM
 DATE 5/23/2006 CHECKED BY CAF

Location (Fibers on East Side) T = Terminate Fiber S = Splice Fiber -UC = Uncut Fiber Run -B = Bare (Unused) ↓ From 2.4

Fiber	557005.9	557005.2	557003.8	557003.2	557003.1	557002.8	557002.4	557002.4 N.	MLK000.7	557001.7	557001.6	557001.4	557000.9	557000.7	557000.3	5570-00.4
1-2	E	S	T	T	S	T	S	T	T	T	T	T	S	T	T	N
3-4	X	P	T		S	T	-B-	-B-	-B-	-B-	-B-	-B-	S	T	T	O
5-6	I	L	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	S	T	T	T
7-8	S	I	T	S	S	T	S	T	S	T	S	S	S	T	T	H
9-10	T	C	S	S	S	T	S	S	S	S	S	S	S	T	T	I
11	I	E	S	S	S	S	S	S	S	S	S	S	S	S	S	S
12	N		S	S	S	S	S	S	S	S	S	S	S	S	S	I
13-14	G	W	T	T	S	T	T	T	T	T	T	T	S	T	T	C
15-16		I	T		S	T	-B-	-B-	-B-	-B-	-B-	-B-	S	T	T	O
17-18	F	T	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	S	T	T	N
19-20	I	H	T	S	S	S	T	S	S	T	S	S	S	T	T	T
21-22	B		S	S	S	T	S	S	S	S	S	S	S	T	T	E
23	E		S	S	S	S	S	S	S	S	S	S	S	S	T	D
24	R		S	S	S	S	S	S	S	S	S	S	S	S	S	E
25-72	W	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	O

Location (Fibers on West Side) ↓ To MLK

Fiber	557005.9	557005.2	557003.8	557003.2	557003.1	557002.8	557002.4	557002.4 N.	MLK000.7	557001.7	557001.6	557001.4	557000.9	557000.7	557000.3	5570-00.4
1-2	T	S	T	T	S	T	S	T	T	T	T	T	S	T	T	N
3-4		-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	S	T	T	O
5-6		S	T	S	S	T	S	T	S	T	S	S	S	T	T	T
7-8		S	S	S	S	T	S	T	S	T	S	S	S	T	T	H
9-10		S	S	S	S	T	S	T	S	T	S	S	S	T	T	I
11		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
12		S	S	S	S	S	S	S	S	S	S	S	S	S	S	I
13-14		S	T	T	S	T	T	T	T	T	T	T	S	T	T	C
15-16	T	T		S	T	-B-	-B-	-B-	-B-	-B-	-B-	-B-	S	T	T	O
17-18		-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	-B-	S	T	T	N
19-20		S	T	S	S	T	S	T	S	T	S	S	S	T	T	T
21-22		S	S	S	S	T	S	S	S	S	S	S	S	T	T	E
23		S	S	S	S	S	S	S	S	S	S	S	S	S	T	D
24		S	S	S	S	S	S	S	S	S	S	S	S	S	S	E
25-72		S	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	-UC-	O

Total Terminations 200 Total Splices 258

LOCATION	CISCO SWITCH	SFP / GBIC MODULES* (IF APPLICABLE)					SERIAL TO ETHERNET CONVERTER	MEDIA CONVERTER	
		SFP-GE-L	SFP-GE-Z	GLC-FE-100FX	GLC-FE-100FX	GLC-T			WS-G5487
PSBC-Cabinet MP 0.3 (EXISTING CABINET)	WS-C3750G-12S	2	1			1			
PSBC-Cabinet MP 0.3 (EXISTING CABINET)	WS-CE500G-12TC				3				
PSBC-Cabinet MP 0.7	WS-C2955S-12							1	
PSBC-Cabinet MP 0.9 (EXISTING CABINET)	WS-C2955S-12								
PSBC-Cabinet MP 1.4	WS-C2955S-12					1			
PSBC-Cabinet MP 1.5 (EXISTING CABINET)	WS-C3750G-12S	2			4				
PSBC-Cabinet MP 1.5 (EXISTING CABINET)	WS-CE500G-12TC								
PSBC-Cabinet MP 1.7	WS-C2955S-12								
PSBC-Cabinet MP 2.4 (EXISTING CABINET)	WS-C3750G-12S	3	1			1		2	
PSBC-Cabinet MP 2.4 (EXISTING CABINET)	WS-CE500G-12TC				3				
0064-Cabinet MP 2.8 (EXISTING CABINET)	WS-C2955S-12								
5570-Cabinet MP 3.2	WS-C3750G-12S	2				1		1	
5570-Cabinet MP 3.2	WS-CE500G-12TC				2				
5570-Cabinet MP 3.8 (EXISTING CABINET)	WS-C2955S-12							1	
5570-Cabinet MP 5.2	WS-C3750G-12S	2				1		1	
5570-Cabinet MP 5.2	WS-CE500G-12TC			1	3				
MLK-Cabinet MP 0.7 (EXISTING CABINET)	WS-C2955S-12								
MoDot (NOT INSTALLED)	WS-C3750G-12S	1	1						
TMC (EXISTING SWITCH)	WS-C3550-12G						1		
TOTALS:		12	3		15	5	1	5	1

*SFP-GE-L = Standard Fiber SFP
 SFP-GE-Z = Long Haul Fiber SFP
 GLC-FE-100FX = 100 Meg MMF SFP
 GLC-FE-100LX = 100 Meg SMF SFP
 GLC-T = Gigabit Copper SFP
 WS-G5487 = Long Haul Fiber GBIC

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TERMINATION-SPLICES TOTALS & SWITCH SCHEDULE FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO SCALE: DATE 6/28/2006 DRAWN BY MAM CHECKED BY CAF

PLOT DATE= 6/28/2006
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 PLOT SCALE= 100.0002
 REFERENCE= NONE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

** DIST 8 ITS 2006-2
*** MADISON & ST. CLAIR &
CITY OF ST. LOUIS, MO

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55/70	**	***	52	46
FED. ROAD DIST. NO. 7			ILLINOIS	FED. AID PROJECT

Contract #76973

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY
WIND LOADING: 30 p.s.f. normal to DMS Cabinet Area and truss elements not behind sign Loading Diagram.
WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES
FIELD UNITS
f_c = 3,500 p.s.i.
f_y = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 35,000 p.s.i., or A500 Grade B or C with a minimum yield of 46,000 p.s.i. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.

All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W* (M183, M223 Gr. 50, or M222). Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.

The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to AASHTO M314 Gr. 55 with a minimum Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F.

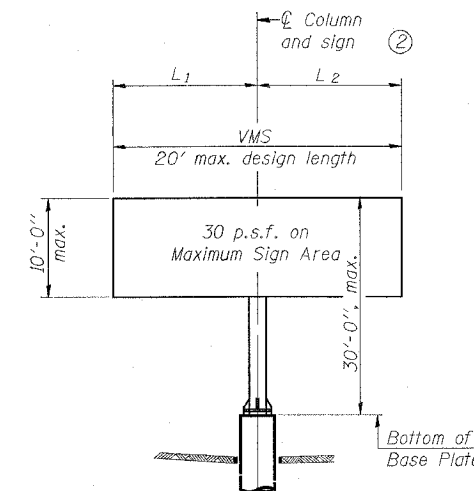
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

TRUSS TYPE	MAXIMUM TOTAL VMS AREA
I-F-A	200 Sq. Ft.

Maximum VMS (Variable Message Sign) Weight = 2500 LB.



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards. Installations not within dimensional limits shown require special analysis for all components.

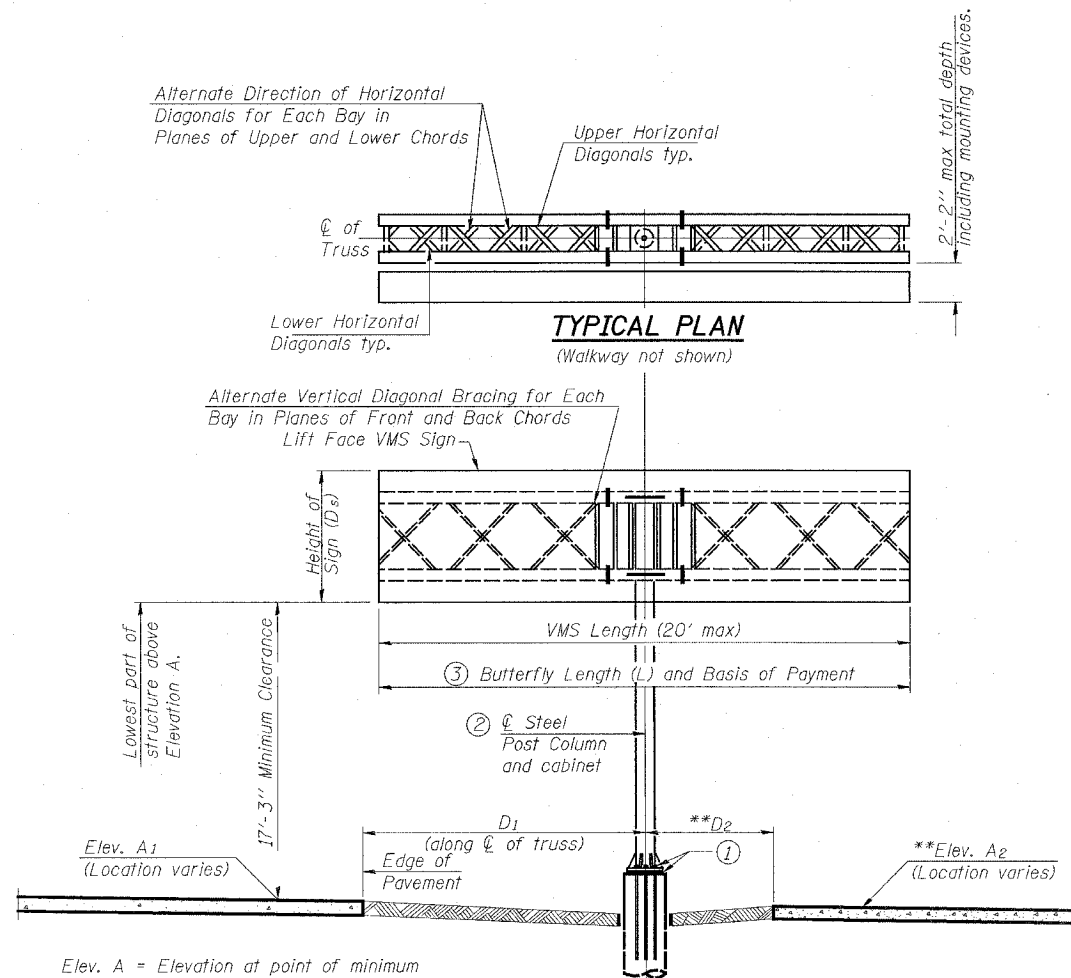
NUMBER	REVISION	DATE

- ① After adjustments to level truss and insure adequate vertical clearance, all top and bottom leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.
- ② Centerline sign must be located at centerline of column.
- ③ Total truss length to match VMS length.

Note:
Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE BUTTERFLY TYPE I-F-A	Foot	20.0
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	4.6



TYPICAL ELEVATION

Looking in Direction of Traffic

** Elevation A₂ and dimension D₂ not used when butterfly structure is mounted on right side of the shoulder.

Sign support structures may be subject to damaging vibrations and oscillations when signs are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

Structure Number	Station	③ Total Butterfly Length (L)	Elev. A ₁	Elev. A ₂	Dim. D ₁	Dim. D ₂	D _s	Total Sign Area

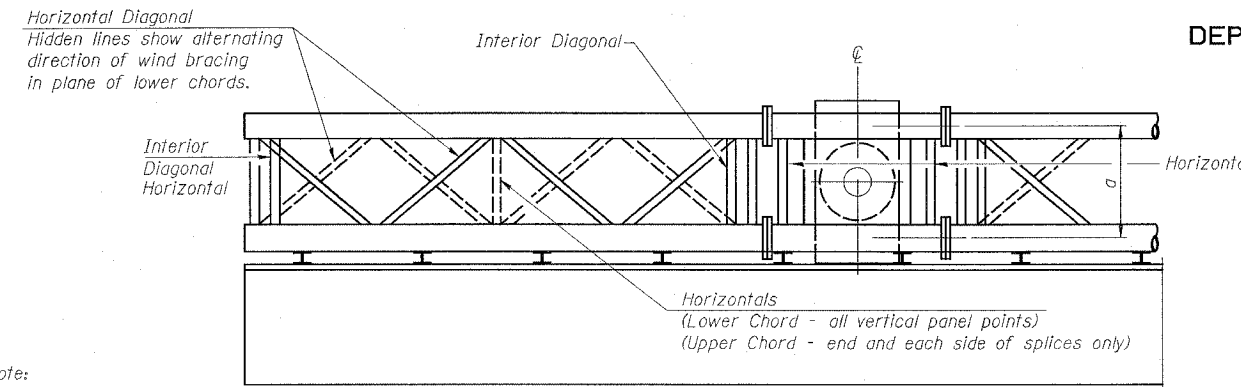
DESIGNED -	200
CHECKED -	EXAMINED
DRAWN -	PASSED
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES

OSF-A-1-VMS 1-7-05

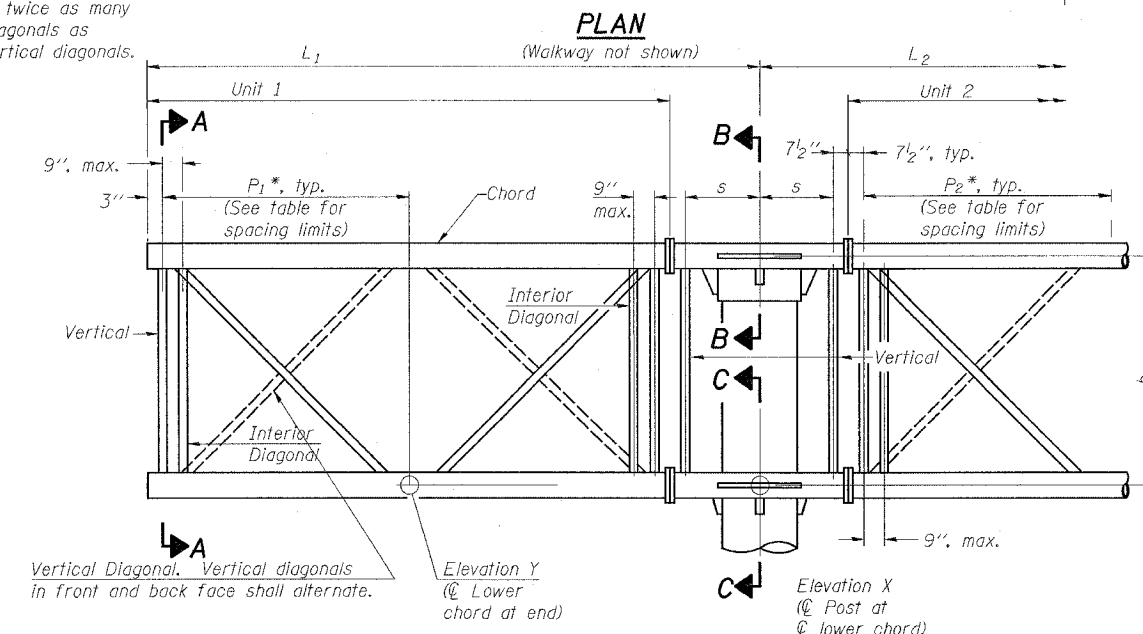
**BUTTERFLY SIGN STRUCTURES
PLAN & ELEVATION FOR FRONT ACCESS VMS
ALUMINUM TRUSS & STEEL POST**

FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Note:
There are twice as many horizontal diagonals as there are vertical diagonals.



ELEVATION
(Sign omitted for clarity)
TYPICAL TRUSS UNIT

For Section B-B and Section C-C, see Base Sheet OSF-A-3-VMS.

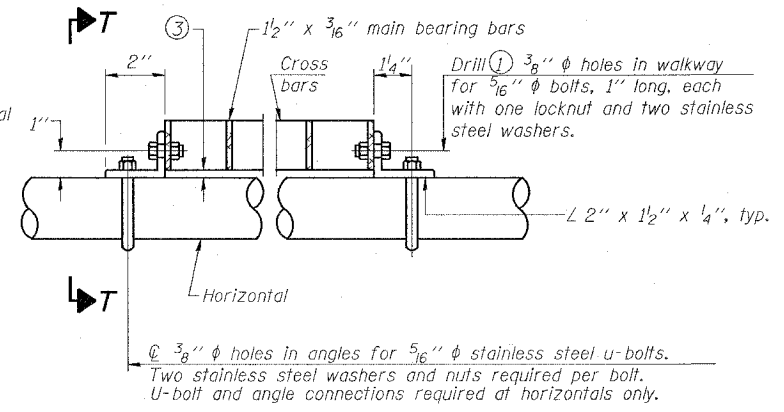
Structure Number	Station	Truss Type	L ₁	L ₂	Number of Panels Unit 1	Panel Length (P ₁)*	Number of Panels Unit 2	Panel Length (P ₂)*
		I-F-A			2		2	

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- Tube to grating gap may vary from 0 to 1/2" max. to align walkway, allow for camber, etc.
- Sign manufacturer must design and supply hardware for connection of VMS to WF(A-N)4's. Bolts must be stainless steel or hot dip galvanized high strength per IDOT specifications

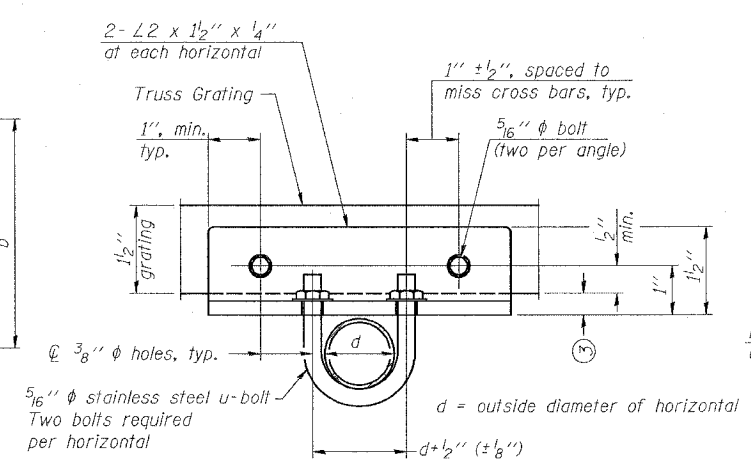
TRUSS UNIT TABLE

Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord		Verticals; Horizontals; Vertical Horizontals; and Interior Diagonals	
					O.D.	Wall		
I-F-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"

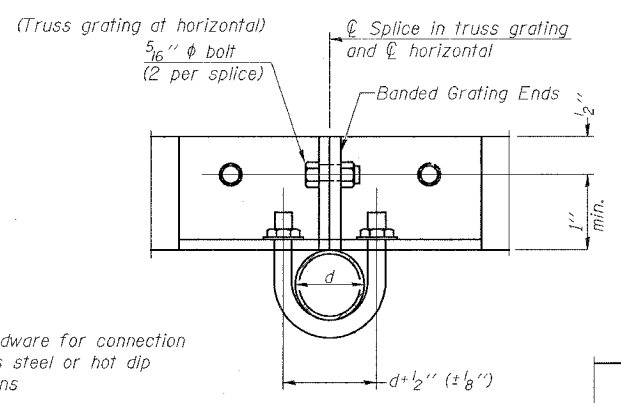
*P = $\frac{L-s-1'-6''}{\# \text{ Panels}}$



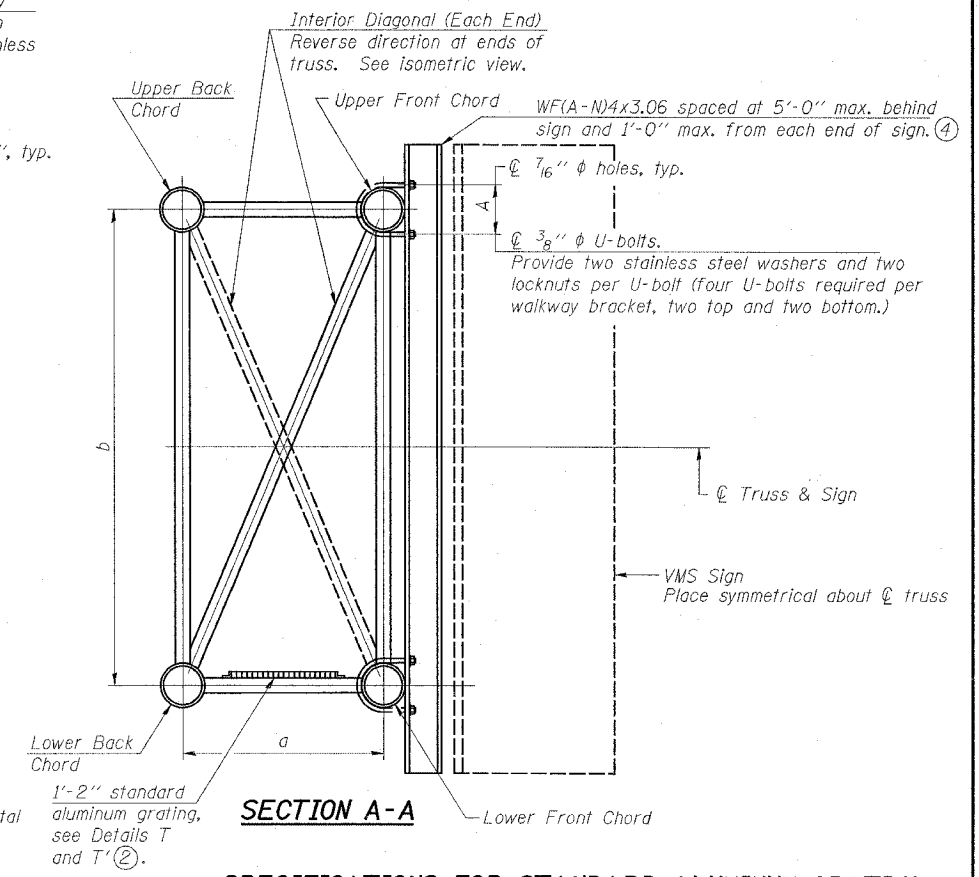
DETAIL T



SECTION T-T



SECTION T'-T'



SECTION A-A

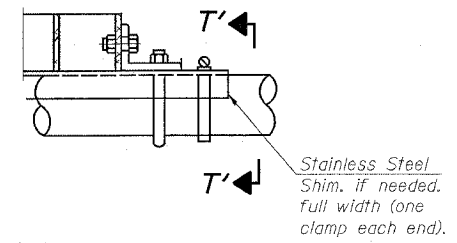
SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars (MBB) shall be 3/16" x 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.
Cross bars (CB) shall be 3/16" x 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "T" sections for main bearing bars shall meet the following requirements:
Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1/2", spaced on 1 3/16" centers.
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

NUMBER	REVISION	DATE



DETAIL T'

(Truss grating splice)
Details not shown same as Detail T.
Alternate materials may be used subject to the Engineer's review and approval.

**BUTTERFLY SIGN STRUCTURES
TRUSS DETAILS FOR FRONT ACCESS VMS
ALUMINUM TRUSS & STEEL POST**

FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

PLOT DATE = 5/23/2006
FILE NAME = c:\projects\mads\dist8\electr\osf-a-2-vms\1-7-05.dgn
PLOT SCALE = 1/8"=1'-0"
REFERENCE = SHEET

OSF-A-2-VMS

1-7-05

DESIGNED -	200
CHECKED -	EXAMINED
DRAWN	PASSED
CHECKED -	ENGINEER OF BRIDGE DESIGN
	ENGINEER OF BRIDGES AND STRUCTURES

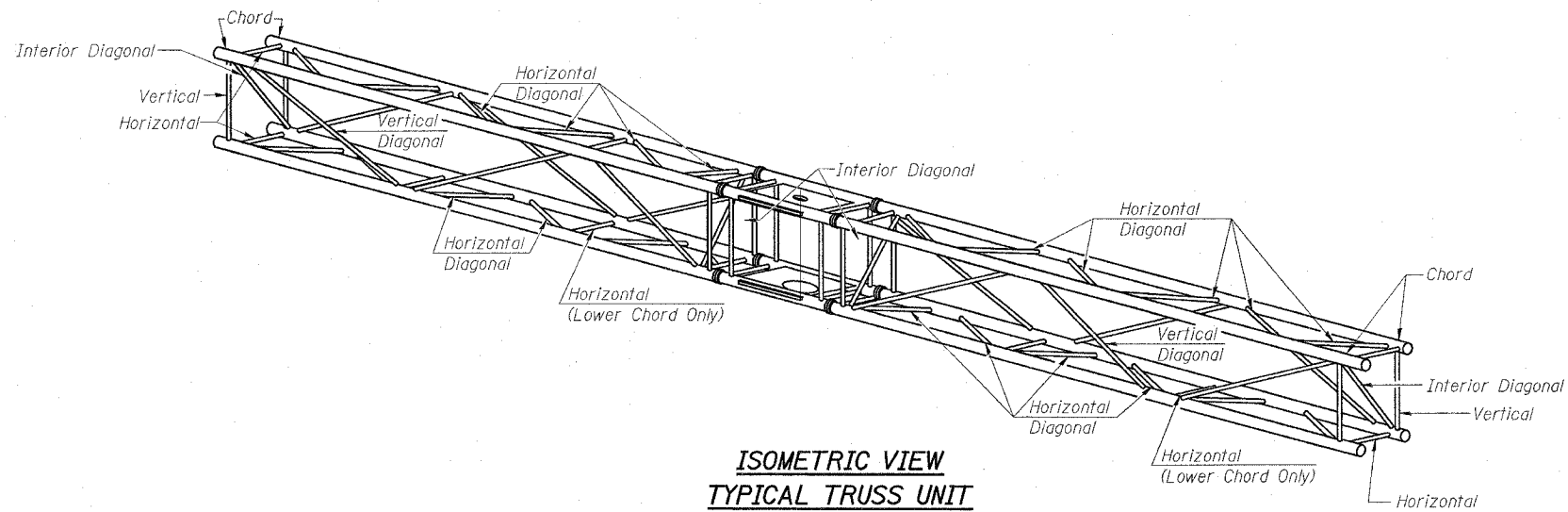
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

** DIST 8 ITS 2006-2
*** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO

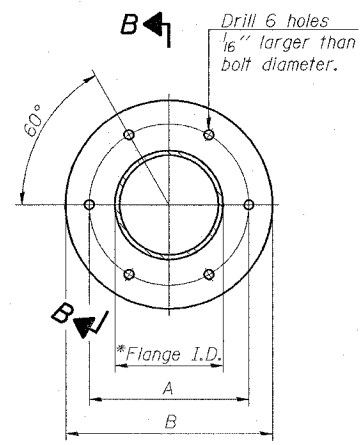
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55/70	***	***	52	48
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 3
6 SHEETS

Contract #76973



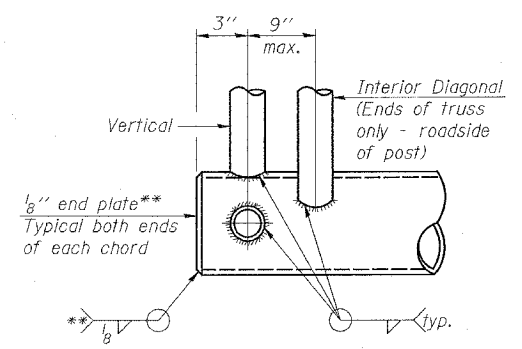
**ISOMETRIC VIEW
TYPICAL TRUSS UNIT**
ASTM B221 Alloy 6061 Temper T6



SPlicing FLANGE
ASTM b221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651

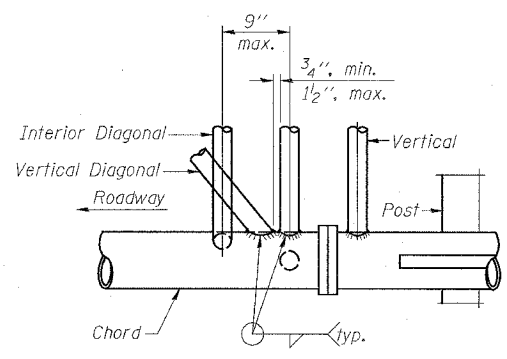
* To fit O.D. of Chord with maximum gap of 1/16".

① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.

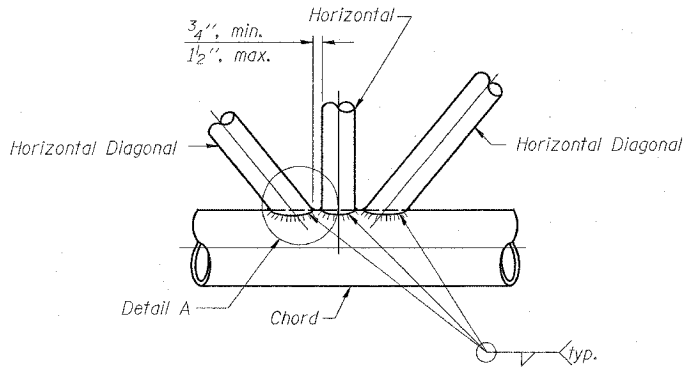


BUTTERFLY END JOINT DETAIL

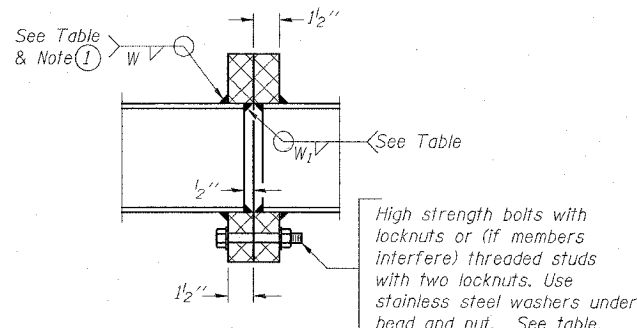
** Contractor may alternatively use standard aluminum drive-fit cap to close ends.



POST END JOINT DETAIL



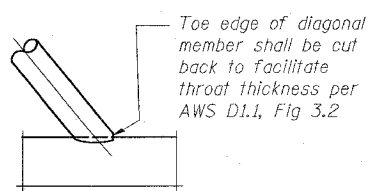
TRUSS INTERIOR JOINT DETAIL



SECTION B-B

High strength bolts with locknuts or (if members interfere) threaded studs with two locknuts. Use stainless steel washers under head and nut. See table.

Truss Type	Bolts Dia.	Weld Sizes		A	B
		W	W ₁		
I-F-A	7/8"	5/16"	1/4"	8 3/4"	11 3/4"



DETAIL A

Toe edge of diagonal member shall be cut back to facilitate throat thickness per AWS D1.1, Fig 3.2

**BUTTERFLY SIGN STRUCTURES
TRUSS DETAILS FOR FRONT ACCESS VMS
ALUMINUM TRUSS & STEEL POST**

FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

DESIGNED -	200
CHECKED -	EXAMINED
DRAWN -	PASSED
CHECKED -	ENGINEER OF BRIDGE DESIGN
	ENGINEER OF BRIDGES AND STRUCTURES

OSF-A-2A-VMS 1-7-05

PLOT DATE = 5/23/2005
FILE NAME = c:\v\m\1685\electrical\truss\truss.dgn
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REFERENCE = #REF#

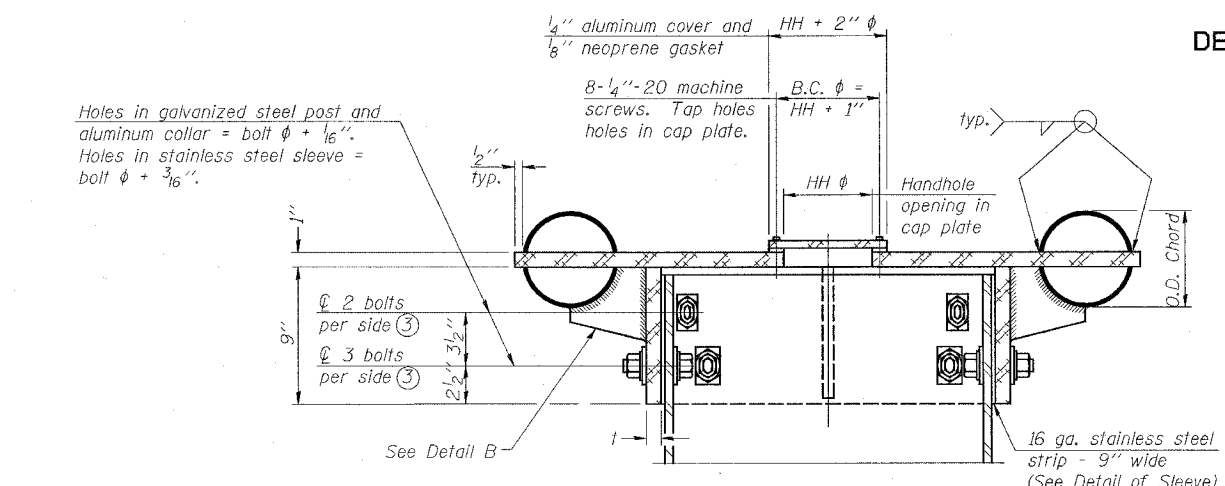
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

** DIST 8 ITS 2006-2
*** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55/70	**	***	52	49
FED. ROAD DIST. NO. 7	BUILDING	FED. AID PROJECT		

Contract #76973

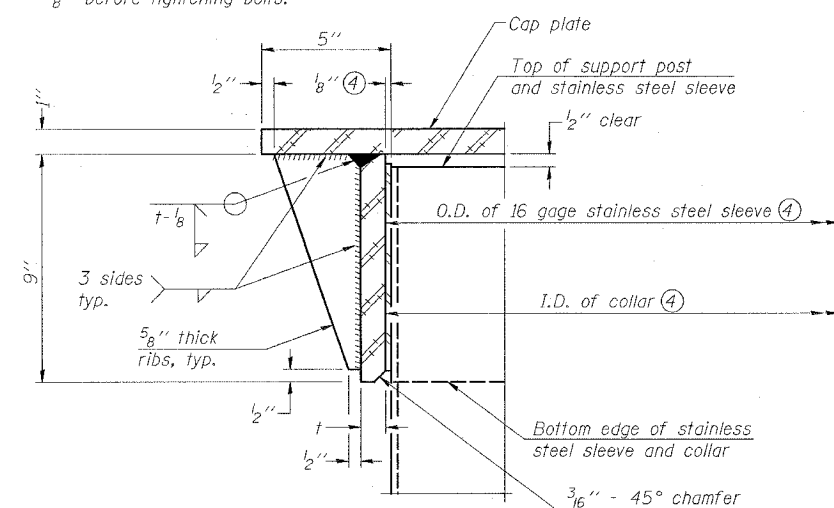
SHEET NO. 4
6 SHEETS



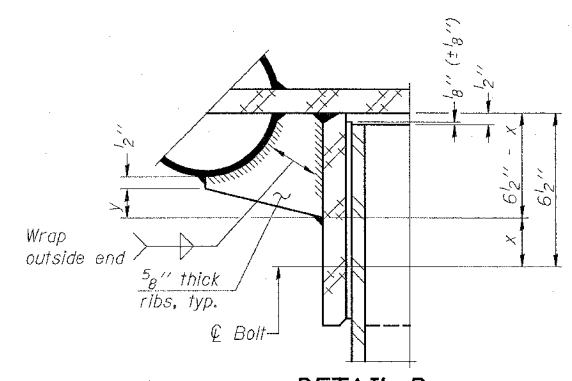
④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8" (+/- 1/16"). Maximum gap between post and collar at any location equals 1/8" before tightening bolts.

SECTION B-B

Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

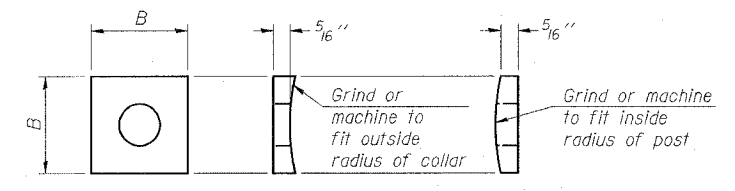


DETAIL A
(Two locations)

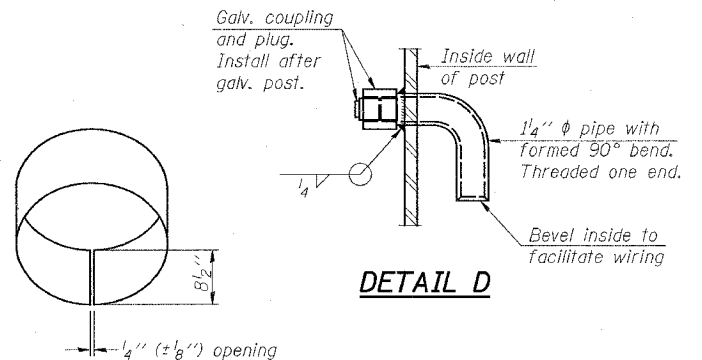


DETAIL B

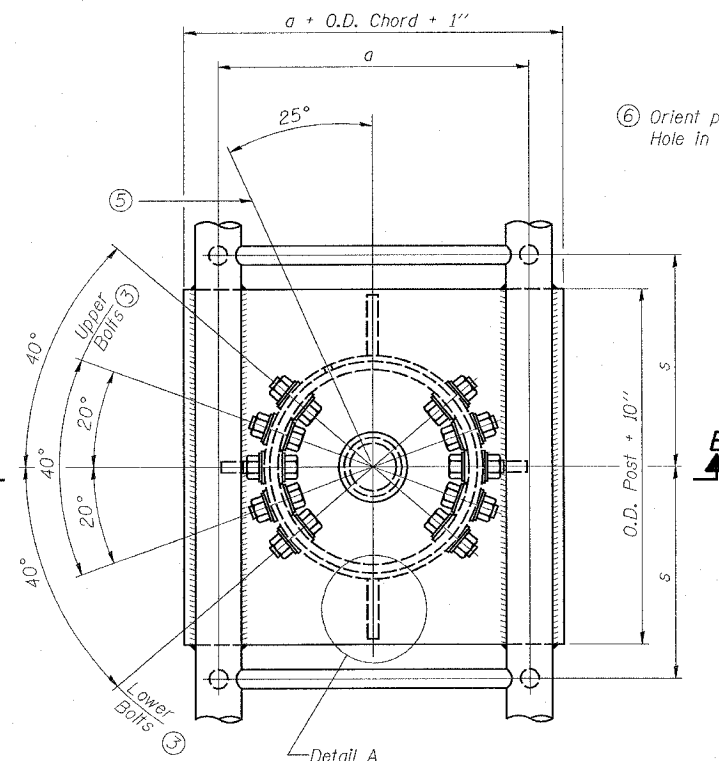
Two locations
(For details not shown, see Detail C)



DETAIL C

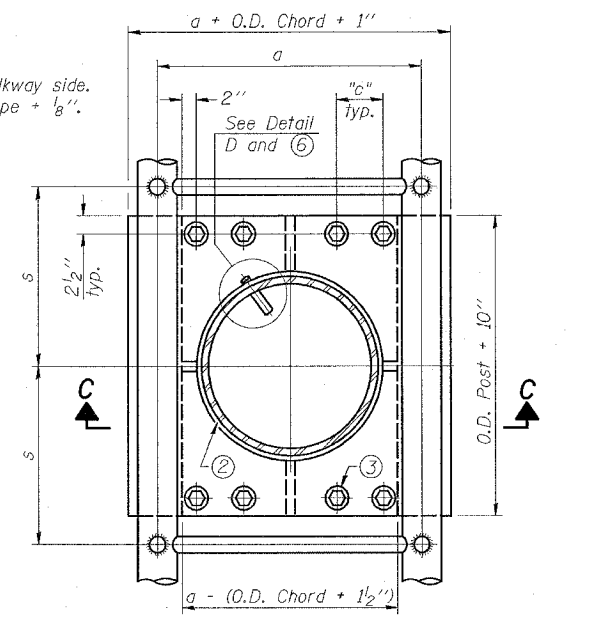


DETAIL D

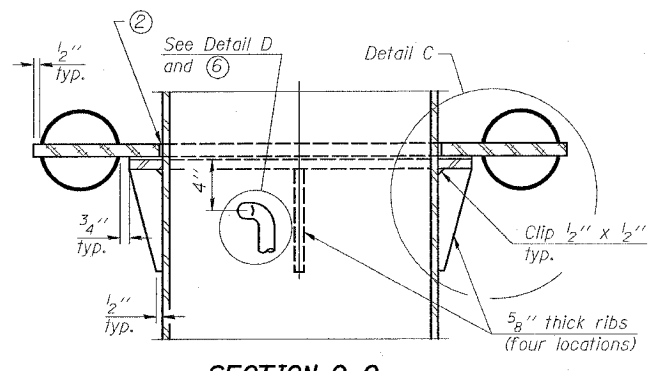


PLAN VIEW - TOP OF COLUMN

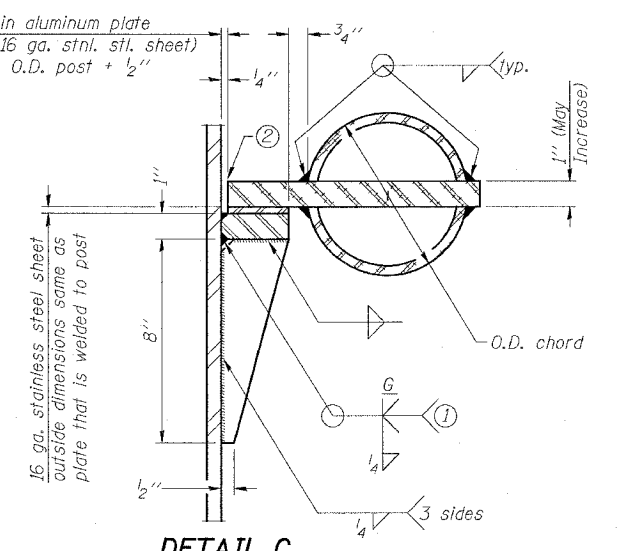
⑤ Optional full penetration weld in collar.
(Two locations maximum... (180° apart)... X-ray or UT 100%)



SECTION THRU POST ABOVE LOWER CHORDS



SECTION C-C



DETAIL C

- ① Grind top if required to fully seat aluminum plate and stainless steel sheet.
- ② After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Butterfly.

CONTOURED WASHERS

Bolt Size	Contoured Washers	
	Hole Dia.	B
7/8"	1"	2 1/2"

DETAIL OF STAINLESS STEEL SLEEVE

Weld to post after galvanizing.
(Prepare post surface to insure tight, uniform fit and allow welding.)
Welds to be 1 1/2" long at 6" cts. along top edge and at 1/4" opening.

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-F-A	16" φ (83#1)	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"

③ Upper and lower connection bolts in collar and bolts at lower chord connection must be high strength with matching locknuts. Connection bolts shall have two stainless steel flat washers each.

DESIGNED	200
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OSF-A-3-VMS

1-7-05

**BUTTERFLY SIGN STRUCTURES
JUNCTURE DETAILS FOR FRONT ACCESS VMS
ALUMINUM TRUSS & STEEL POST**

FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

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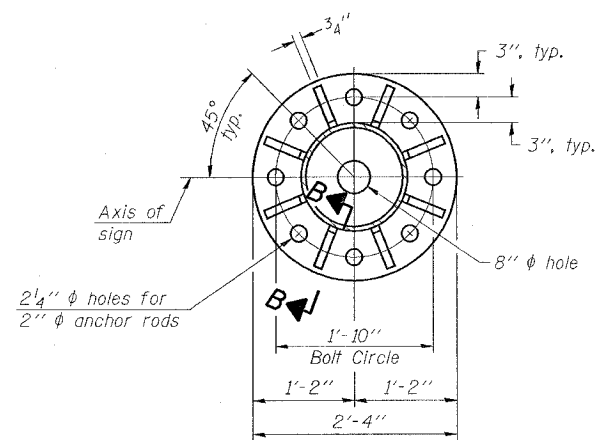
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

** DIST 8 ITS 2006-2
*** MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO

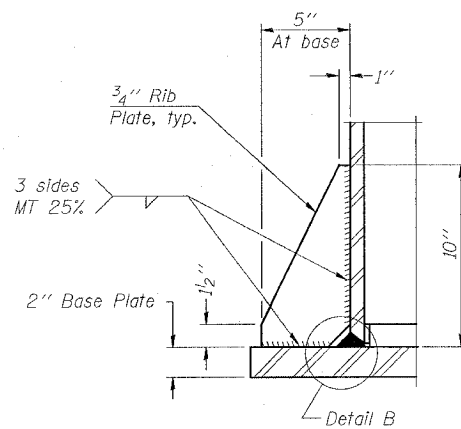
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55/70	**	***	52	50
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 5
6 SHEETS

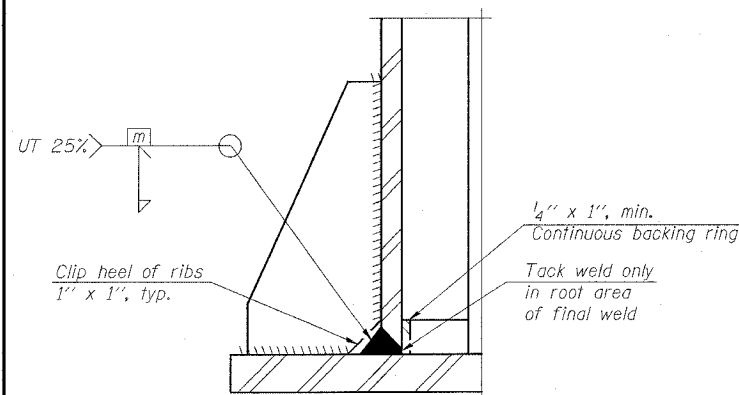
Contract #76973



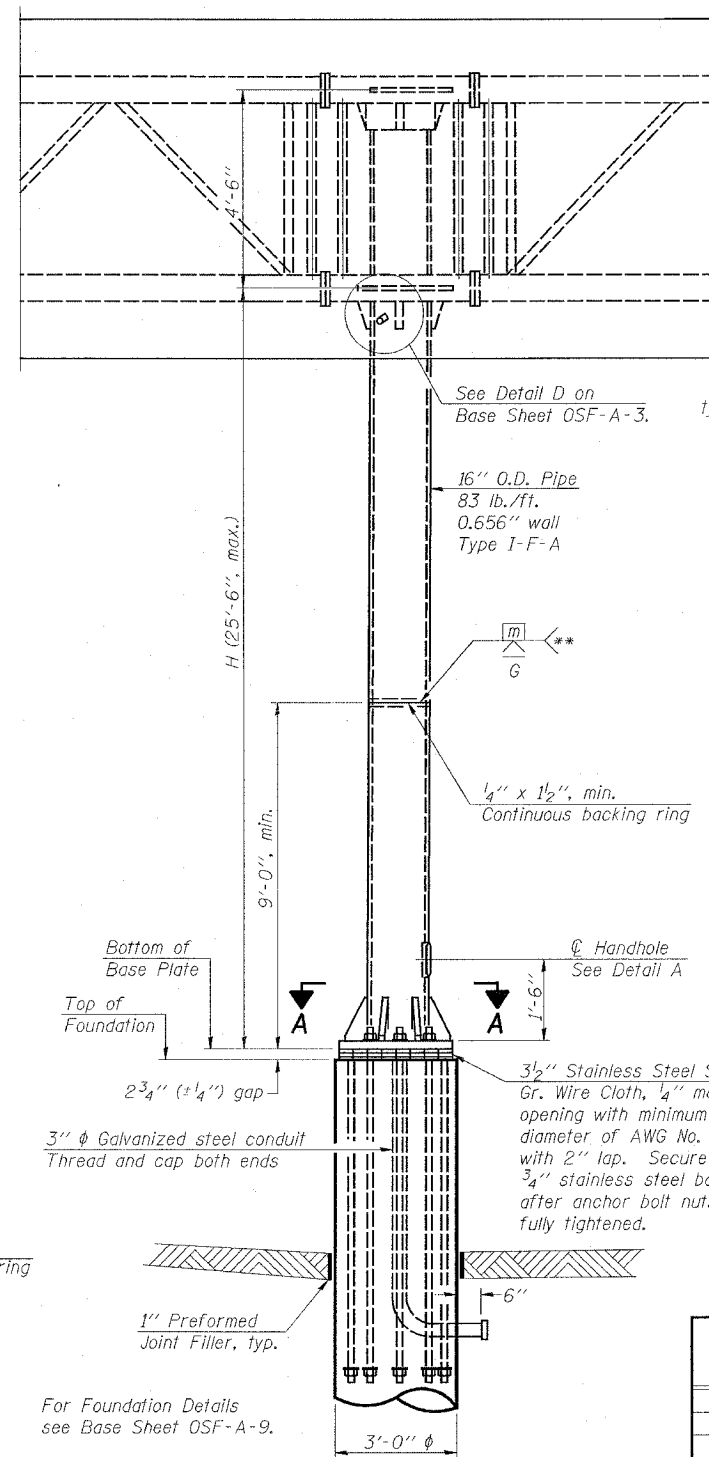
SECTION A-A



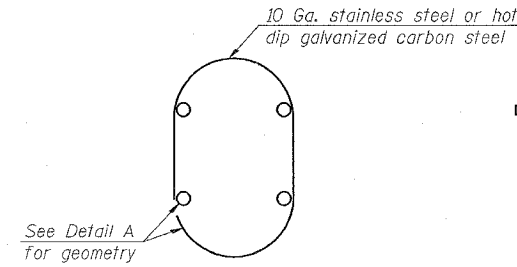
SECTION B-B



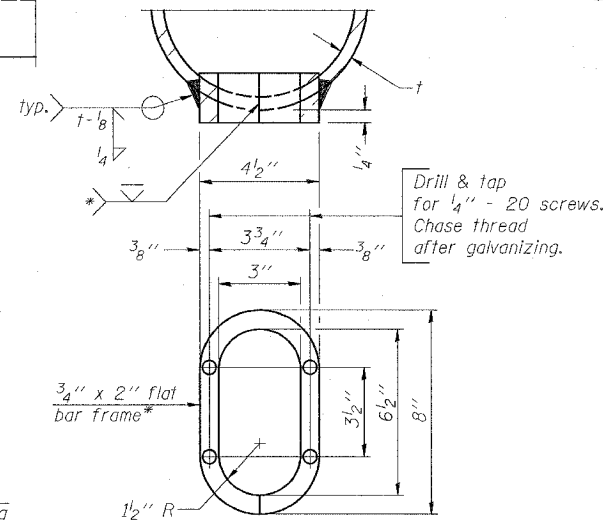
DETAIL B
(Typical rib)



FRONT ELEVATION



HANDHOLE COVER

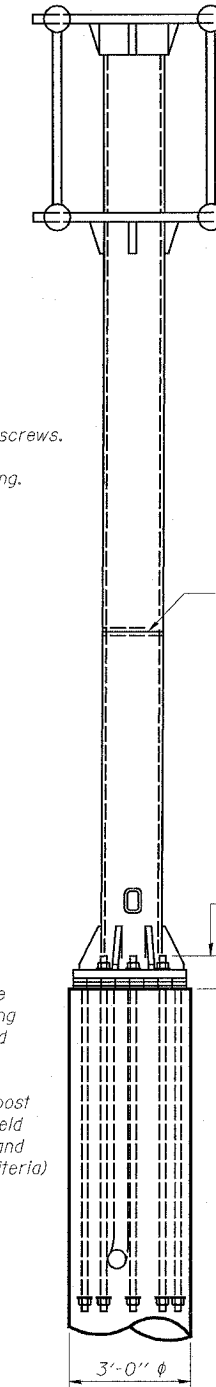


DETAIL A

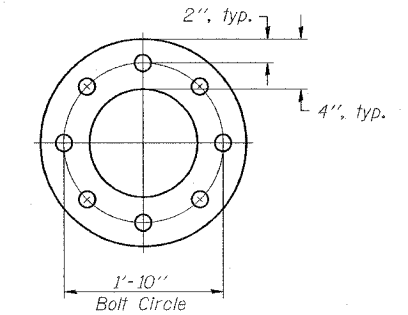
Provide 8" x 4 1/2" cover. Outside corners = 2 1/4" radius. Provide 4-5/16" diameter holes in for 1/4" - 20 round head hot dip galvanized or stainless steel machine screws. (See cover details.)

* Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 min or less.

** Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.



SIDE ELEVATION



SUGGESTED POSITIONING PLATE

For UT, grind top of rod square and smooth before galvanizing.

Utilize positioning plate and temporary nuts with leveling nuts or other Engineer approved methods to maintain anchor bolts' alignment during concrete placement. Plate, extra nuts and other positioning aids become Contractor's property. Cost included in "Drilled Shaft Concrete Foundations".

Protect threads during concreting with tape, sleeves, or other means.

*** 18" is minimum to be galvanized. Entire rod may be galvanized at Contractor's option.

All Thread = NC (National Coarse)

Provide 1 uncoated nut per rod. Deform thread or use chemical thread lock to secure.

ANCHOR ROD DETAIL

Anchor rods shall conform to AASHTO M314 Grade 55 and meet Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F. before galvanizing. Galvanize the upper 18" (minimum) and associated M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide an unfinished nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, using a straight beam, 1/2" diameter 3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

BUTTERFLY SIGN STRUCTURES
TYPE I-F-A SUPPORT POST FOR FRONT
ACCESS VMS - ALUMINUM TRUSS & STEEL POST

FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO

Structure Number	Station	H

NUMBER	REVISION	DATE

DESIGNED -	200
CHECKED -	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

OSF-A-4-VMS

1-7-05

PLOT DATE = 5/23/2005
FILE NAME = c:\projects\1606\electrical\1606\1606.dwg
PLOT SCALE = 1/8" = 1'-0"
REFERENCE = SHEET

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

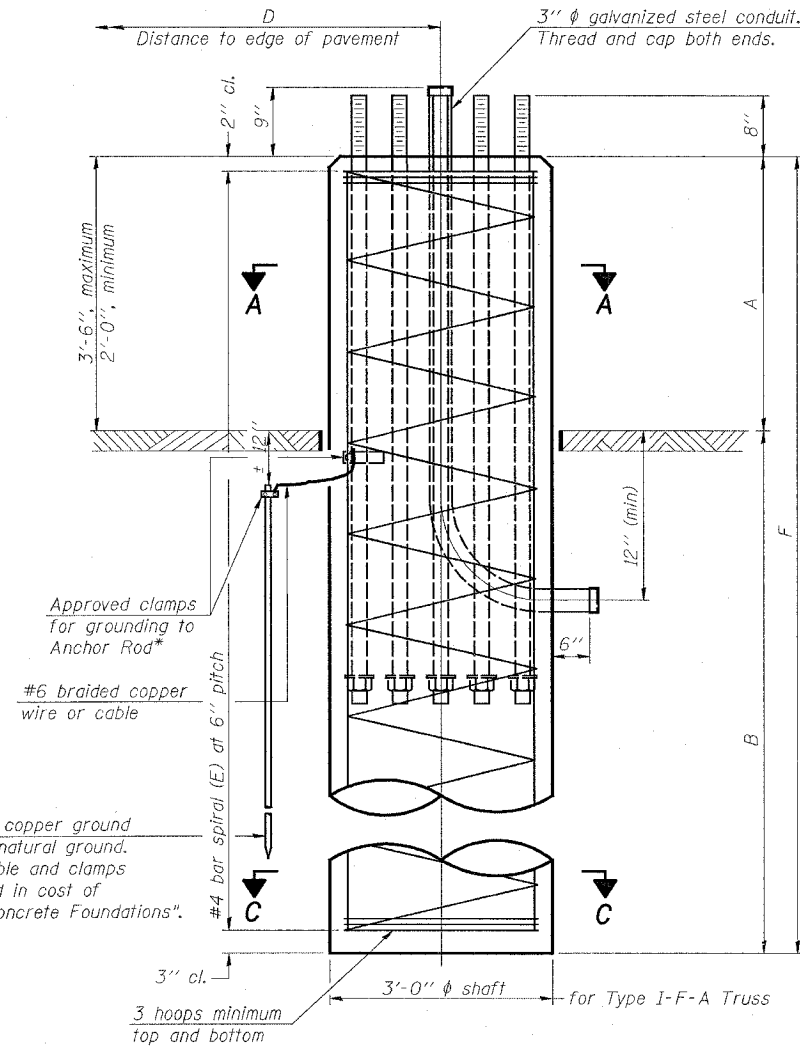
** DIST 8 ITS 2006-2
*** MADISON & ST. CLAIR &
CITY OF ST. LOUIS, MO

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55/70	***	***	52	51
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

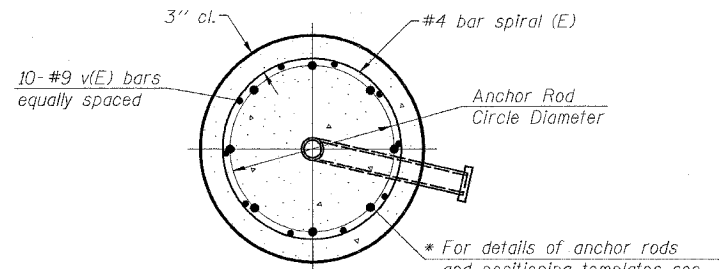
SHEET NO. 6
6 SHEETS

Contract #76973

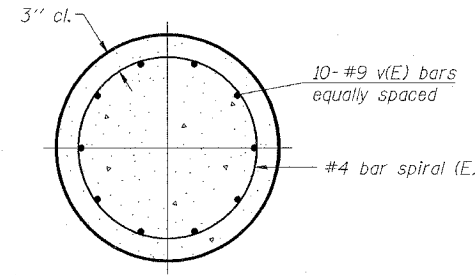
* Grind anchor rod to bright finish at ground clamp location before installing clamp.



ELEVATION



SECTION A-A
3'-0" ϕ shaft



SECTION C-C
3'-0" ϕ shaft

NOTES:

The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Q_u) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints. Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

FOUNDATION DATA TABLE

Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	A	B	F	Class SI Concrete Cubic Yards

NUMBER	REVISION	DATE

FOUNDATION DESIGN TABLE

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (in)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	Diameter (in)	
I-F-A	OSF-A-4	10	200	3.0	17'-6"	8	2	22

**BUTTERFLY SIGN STRUCTURES
DRILLED SHAFT FOR FRONT ACCESS VMS
ALUMINUM TRUSS & STEEL POST**

**FAI 55/70
SECTION DIST 8 ITS 2006-2
MADISON AND ST. CLAIR COUNTY
AND ST. LOUIS, MO**

DESIGNED -	200
CHECKED -	EXAMINED
DRAWN -	PASSED
CHECKED -	

OSF-A-9-VMS 1-7-05

PLOT DATE = 5/23/2006
 PLOT SCALE = 1/8" = 1'-0"
 REFERENCE = #REF#



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 4/5/06

ROUTE FAI 55/70 DESCRIPTION HAR Sign on I-55/70 LOGGED BY E. Stewart

SECTION Dist 8 ITS 2006-2 LOCATION SEC. 5, TWP. 2N, RNG. 9W, 3 PM

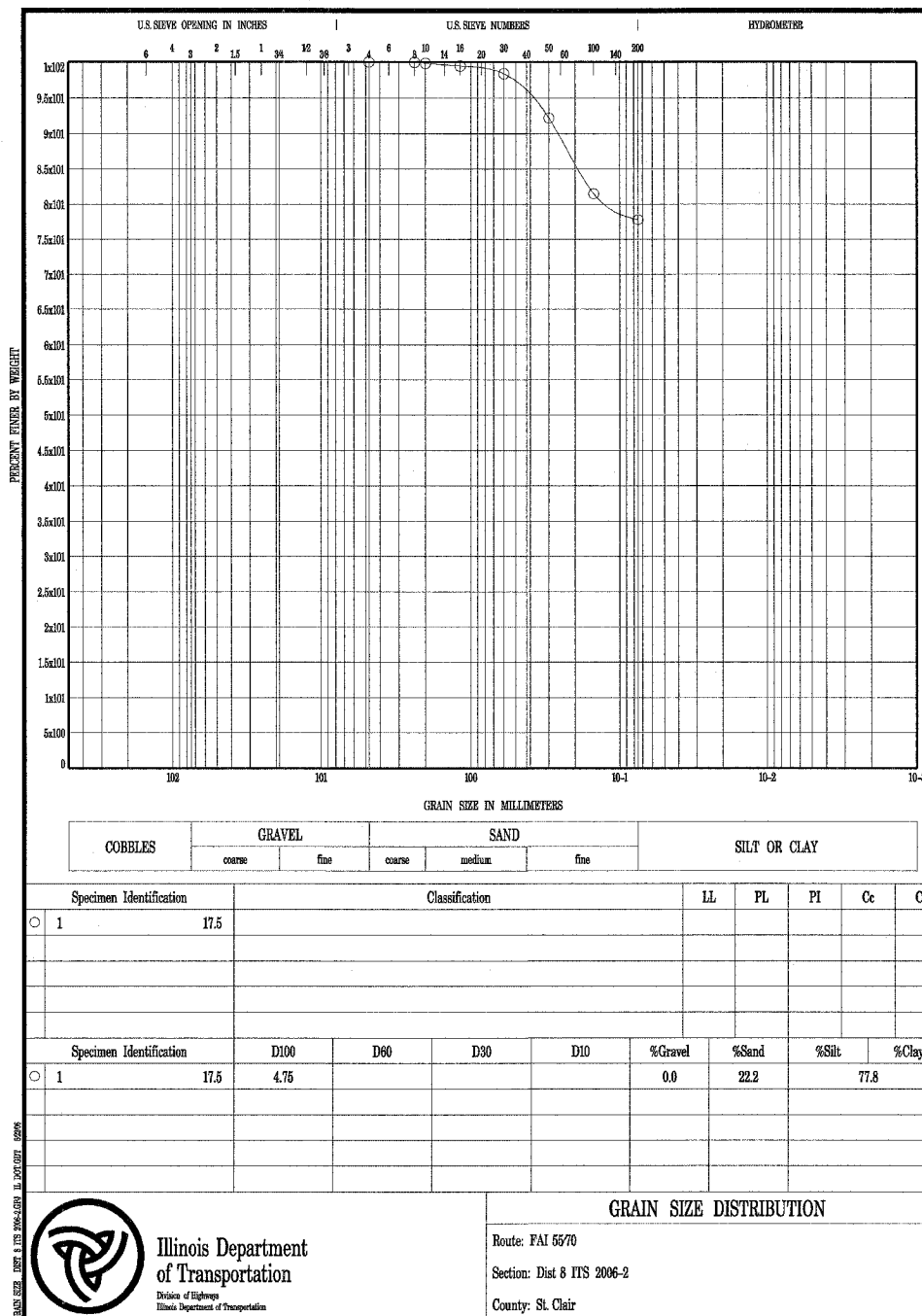
COUNTY St. Clair DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. NA
Station _____
BORING NO. 1
Station 205+30
Offset 100.00ft Right
Ground Surface Elev. _____ ft

D	B	U	M	Surface Water Elev.	ft	D	B	U	M
E	L	C	O	Stream Bed Elev.	ft	E	L	C	O
P	O	S	I	Groundwater Elev.:		P	O	S	I
T	W	S	S	First Encounter	ft	T	W	S	S
H	S	Qu	T	Upon Completion	ft	H	S	Qu	T
				After	Hrs.	ft	(6")	(tsf)	(%)

Dark Gray Silty LOAM (continued)	4				0				
	6	1.56	28		2	0.33	56		
	8	B/20			7	B/20			
Dark Brown and Gray CLAY	4				0				
	6	2.17	29		0	NC			
	7	B/20			0				
Dark Blue and Gray Silty Clay LOAM	4								
	6	0.37	28						
	8	B/10							
Speckled Brown and Dark Gray Silty Clay LOAM	3								
	4	0.65	30						
	5	B/20							
Dark Gray Silty LOAM	0								
	2	0.69	62						
	2	0.65	49						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

Route: FAI 55/70
Section: Dist 8 ITS 2006-2
County: St. Clair

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION SOIL BORINGS
NAME	DATE	
		FAI 55/70 SECTION DIST 8 ITS 2006-2 MADISON AND ST. CLAIR COUNTY AND ST. LOUIS, MO
DATE 5/23/2006		