

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PROPOSED  
 HIGHWAY PLANS**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	1
ILLINOIS CONTRACT NO. 60134			25 x 5 = 30	

- SHEET NO. DESCRIPTION**
- 1 COVER SHEET
  - 2 SUMMARY OF QUANTITIES
  - 3 GENERAL NOTES
  - 4 OVERALL MAP OF PROJECT SITE LOCATIONS
  - 5 IDOT ETP BUILDING / DAN RYAN & W. 33RD ST.
  - 6 ISP DISTRICT CHICAGO / COOK COUNTY SHERIFF (MAINE NORTH)
  - 7 IDOT BUILDING E (KENNEDY / EDENS)
  - 8-10 ONE LINE DIAGRAMS
  - 11 RADIO, ANTENNA, & EQUIPMENT DETAILS - IDOT ETP / DAN RYAN
  - 12-17 VIDEO WALL UPGRADE, D1 HQ
  - 18-21 VIDEO WALL UPGRADE, TSC
  - 22-24 DETAILS (1 OF 3)
  - ~~DETAILS (2 OF 3)~~
  - ~~DETAILS (3 OF 3)~~
  - TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)
  - 25, TC-17 TRAFFIC CONTROL STANDARD

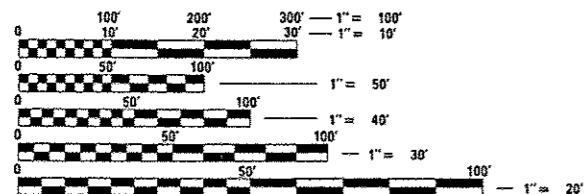
PROJECT: ACCM-0005 (860)  
 ITS CENTER TO CENTER  
 INTEGRATION PROJECT  
 COOK COUNTY  
 VARIOUS ROUTES  
 SECTION NO. 2009-0871  
 JOB NO. C-91-021-10



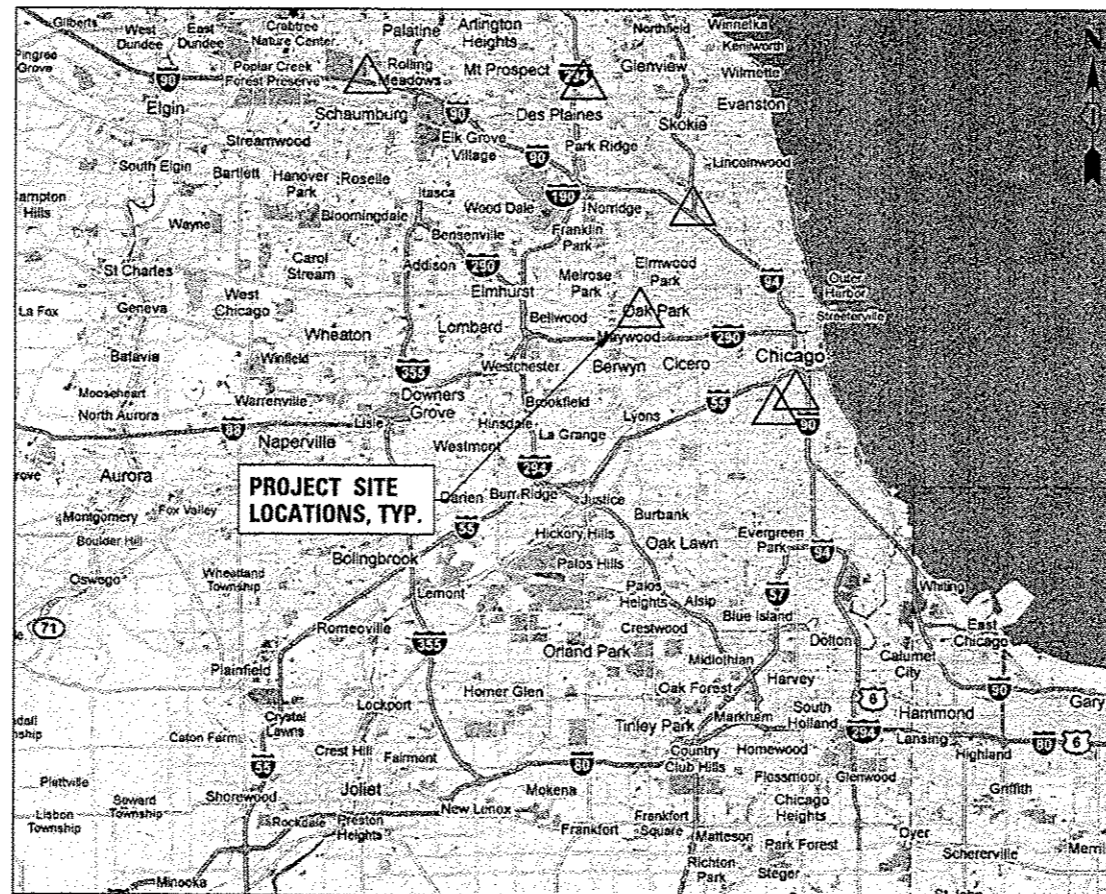
**LIST OF STATE STANDARDS**

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701901-03 TRAFFIC CONTROL DEVICES
- ~~TC-17 TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES~~

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.



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.



LOCATION MAP

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED 21 May 2013

*John F. ...*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 10 2013  
*John D. ...*  
 ENGINEER OF DESIGN AND ENVIRONMENT

May 10 2013  
*Chris ...*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

ANTHONY J. DERICCO P.E. 3-21-13  
 062-057484  
 LICENSED PROFESSIONAL ENGINEER  
 ILLINOIS

ANTHONY J. DERICCO P.E. 3-21-13  
 DATE  
*Anthony J. Dericco*  
 ILLINOIS REGISTRATION No. 062-057484  
 EXPIRATION DATE: 11-30-2013

**CB** CHRISTOPHER B. BURKE ENGINEERING, LTD.  
 9675 W. Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

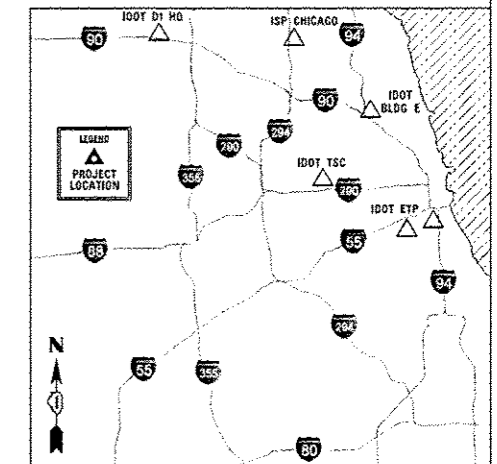
PROFESSIONAL DESIGN FIRM NO. 184-001175  
 EXPIRATION DATE: 04/30/13

PROJECT ENGINEER  
 PROJECT MANAGER MARK JENKINS, P.E.

CONTRACT NO. 60134

Rev.

CODE NO.	ITEM	UNIT	URBAN 80% FED / 20% STATE		IDOT DIST 1 HO	IDOT ETP BUILDING	DAN RYAN & WEST 33RD ST.	ISP DIST CHICAGO	IDOT BUILDING E	IDOT TSC
			TOTAL	0021						
67100100	MOBILIZATION	L SUM	1		0.2	0.2	0.2	0.2	0	0.2
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1		0	0	1	0	0	0
81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	150		0	0	150	0	0	0
81702450	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	150		0	0	150	0	0	0
87900100	DRILL EXISTING FOUNDATION	EACH	1		0	0	1	0	0	0
87900200	DRILL EXISTING HANDHOLE	EACH	1		0	0	1	0	0	0
X0322920	COMMUNICATIONS CABINET AND EQUIPMENT	EACH	1		0	0	1	0	0	0
X0327323	ELECTRICAL WORK, IDOT ETP	L SUM	1		0	1	0	0	0	0
X0327324	ELECTRICAL WORK, IDOT BUILDING E	L SUM	1		0	0	0	0	1	0
X0327328	ELECTRICAL WORK, ISP DISTRICT CHICAGO	L SUM	1		0	0	0	1	0	0
X0327331	FIBER CONNECTIVITY TO IDOT DAN RYAN CABINET	L SUM	1		0	0	1	0	0	0
X0327338	MICROWAVE LINK3- IDOT ETP TO DAN RYAN	L SUM	1		0	0.5	0.5	0	0	0
X0327339	MONOPOLE, 100 FOOT MOUNTING HEIGHT	EACH	1		0	0	1	0	0	0
X0327342	VIDEO WALL UPGRADES, IDOT DISTRICT 1	L SUM	1		1	0	0	0	0	0
X0327343	VIDEO WALL UPGRADES, IDOT TRAFFIC SYSTEMS CENTER	L SUM	1		0	0	0	0	0	1
X0327345	WORKSTATION FURNITURE, IDOT DISTRICT 1	L SUM	1		1	0	0	0	0	0
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1		0	0	1	0	0	0
X8710036	FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	665		0	0	75	540	50	0
① 20076600	TRAINEES	HOUR	1,000		1,000					
XX006614	MODIFY EXISTING CABINET EQUIPMENT AND APPURTENANCES	EACH	1		0	0	1	0	0	0
② 20076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	1,000		1,000					
X0327561	BUDGETARY ALLOWANCE, CCTV INTEGRATION	L SUM	1		1	0	0	0	0	0



**CHRISTOPHER B. BURKE ENGINEERING, LTD.**  
 9575 W. Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

Rev.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871		25	2
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

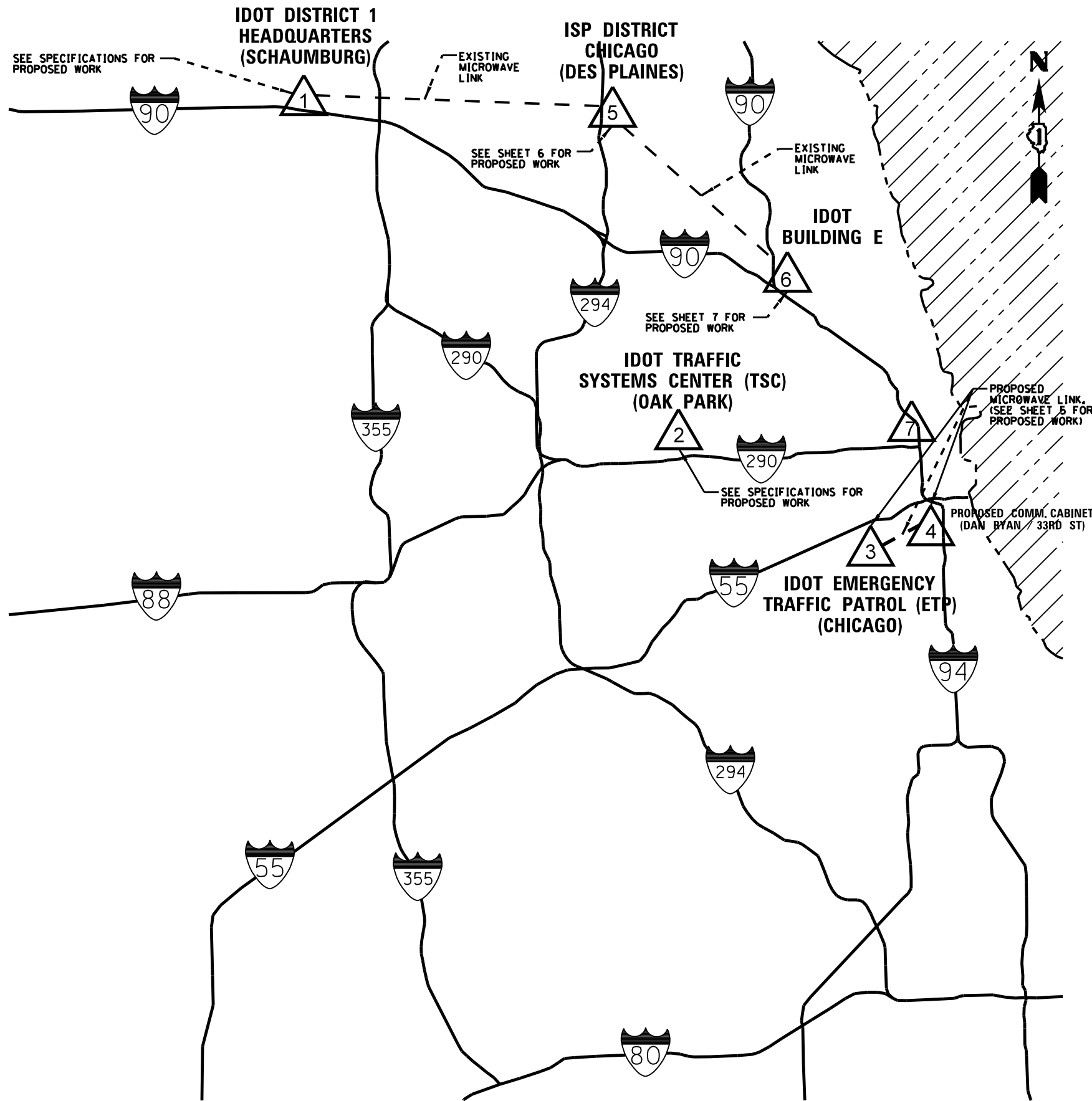
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N:\dot\090122\Mech\090122_02_S00_PLN.dwg		DRAWN - KWB	REVISED -
PLOT SCALE - 20'		CHECKED - JPC	REVISED -
PLOT DATE - 3/22/2013		DATE - 3/21/2013	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ITS CENTER-TO-CENTER INTEGRATION PROJECT  
SUMMARY OF QUANTITIES**

SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.
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SITE NO.	SITE LOCATION
1	<b>IDOT DISTRICT 1 HEADQUARTERS</b> 201 WEST CENTER COURT SCHAUMBURG, IL 60196
2	<b>IDOT TRAFFIC SYSTEMS CENTER</b> 445 HARRISON STREET OAK PARK, IL 60304
3	<b>IDOT EMERGENCY TRAFFIC PATROL</b> 3501 SOUTH NORMAL AVENUE CHICAGO, IL 60609
4	<b>PROPOSED COMMUNICATIONS CABINET</b> AT SOUTHWEST CORNER OF DAN RYAN & 33RD STREET, CHICAGO, IL
5	<b>ISP DISTRICT CHICAGO</b> 9511 WEST HARRISON STREET DES PLAINES, IL 60016
6	<b>IDOT BUILDING E</b> AT JUNCTION OF KENNEDY & EDENS EXPRESSWAYS, CHICAGO, IL
7	<b>IDOT BUILDING A</b> AT JUNCTION OF OHIO ST. & KENNEDY EXPRESSWAYS, CHICAGO, IL

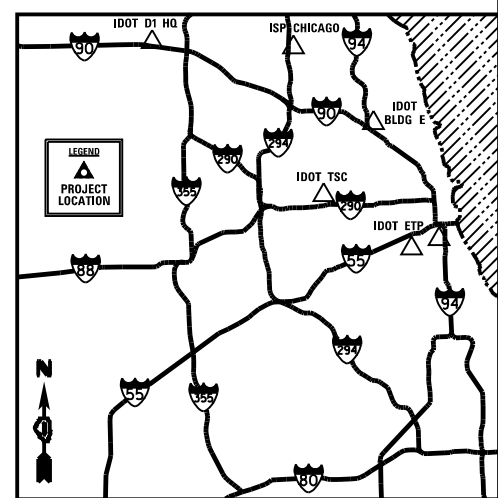
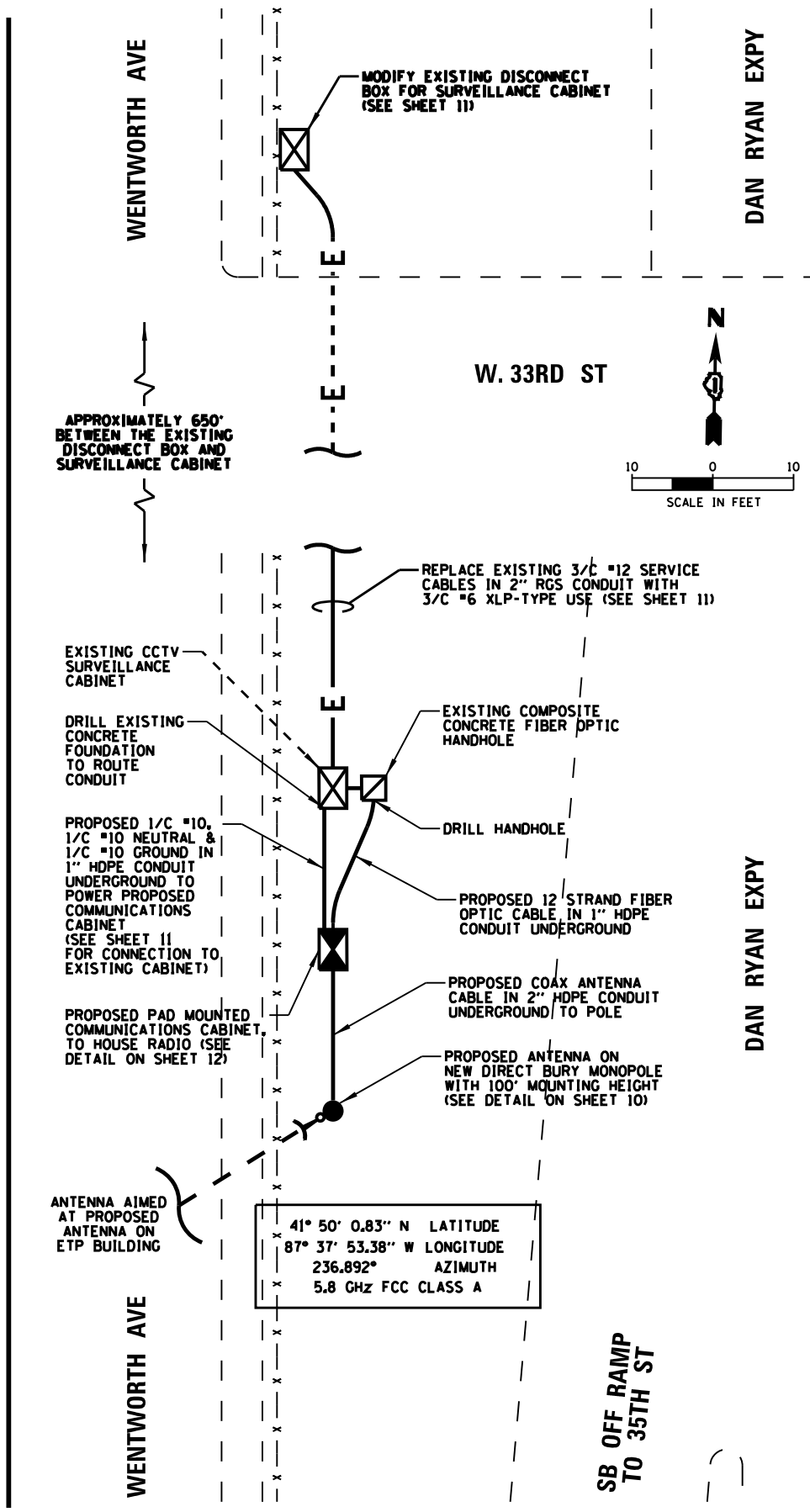
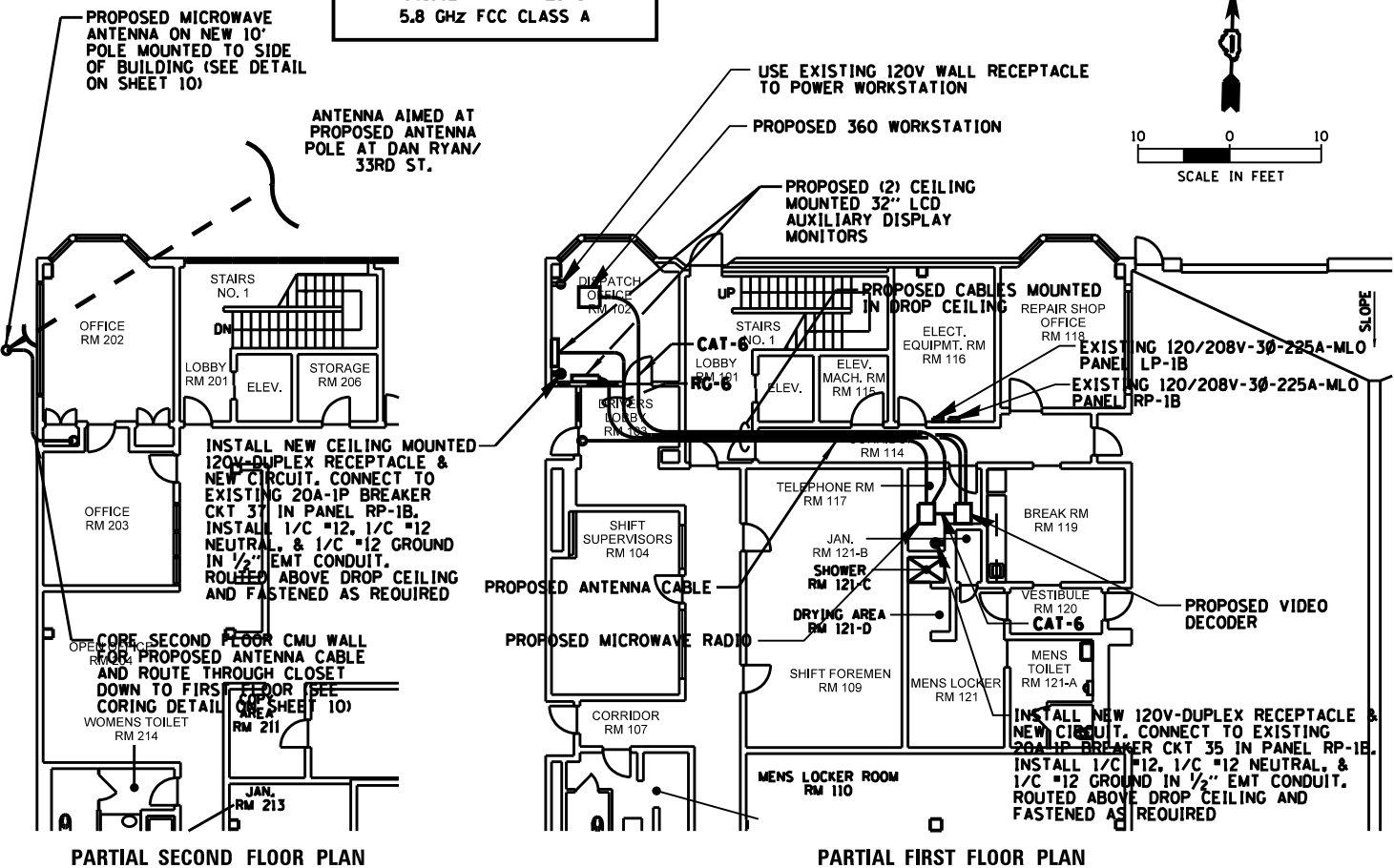
PROJECT CONTACTS			
OWNER	ADDRESS	CONTACT	SITE NO.
ILLINOIS DEPARTMENT OF TRANSPORTATION	201 WEST CENTER COURT SCHAUMBURG, IL 60196	MARK JENKINS (847) 705-4350	ALL
ILLINOIS STATE POLICE	9511 WEST HARRISON STREET DES PLAINES, IL 60016	DAN QUINN (312) 636-4514	5

FILE NAME SFILES	USER NAME RUSERS	DESIGNED R.T.	REVISOR -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ITS CENTER-TO-CENTER INTEGRATION PROJECT OVERALL MAP OF PROJECT SITE LOCATIONS	F.A. RTE.	SECTION 2009-0871	COUNTY COOK	TOTAL SHEETS 25	SHEET NO. 4		
	PLOT SCALE SCALE	DRAWN G.M.	REVISOR -			N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60134			
	PLOT DATE 1/4/2012	CHECKED R.T.	REVISOR -			ILLINOIS FED. AID PROJECT						
		DATE 12/11/2013	REVISOR -									

### SCOPE OF WORK

1. INSTALL NEW MICROWAVE LINK BETWEEN IDOT ETP AND THE PROPOSED COMMUNICATIONS CABINET ON WEST SIDE OF DAN RYAN SOUTH OF 33RD ST. CONTRACTOR SHALL COORDINATE, FURNISH AND INSTALL ALL REQUIRED EQUIPMENT FOR IDOT ETP TO VIEW VIDEO FROM UP TO 4 OF ANY OF IDOT'S TRAFFIC CAMERAS THRU LINK.
2. IDOT HAS PERFORMED A FREQUENCY INTERFERENCE FIELD TEST FOR AN UNLICENSED 5 GHZ FREQUENCY AND DETERMINED THAT INTERFERENCE LEVEL IS ACCEPTABLE.

41° 49' 49.31" N LATITUDE  
87° 38' 16.97" W LONGITUDE  
56.892° AZIMUTH  
5.8 GHZ FCC CLASS A



FILE NAME	USER NAME	DESIGNED	REVISED
FILES	USERS	R.T.	-
		G.M.	-
		R.T.	-
		12/11/2013	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CENTER-TO-CENTER INTEGRATION PROJECT	
IDOT ETP BUILDING / DAN RYAN & W. 33RD ST	
SCALE: 1" = 10'	SHEET NO. OF SHEETS STA. TO STA.

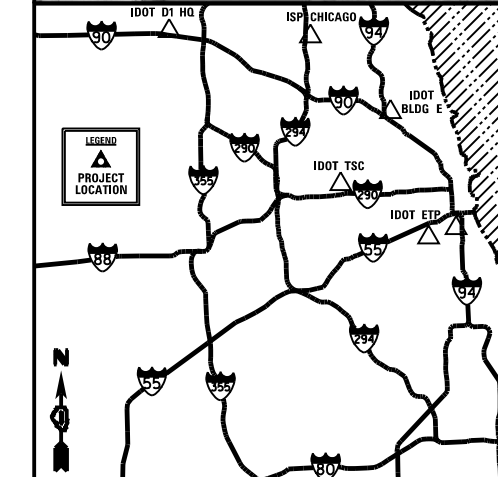
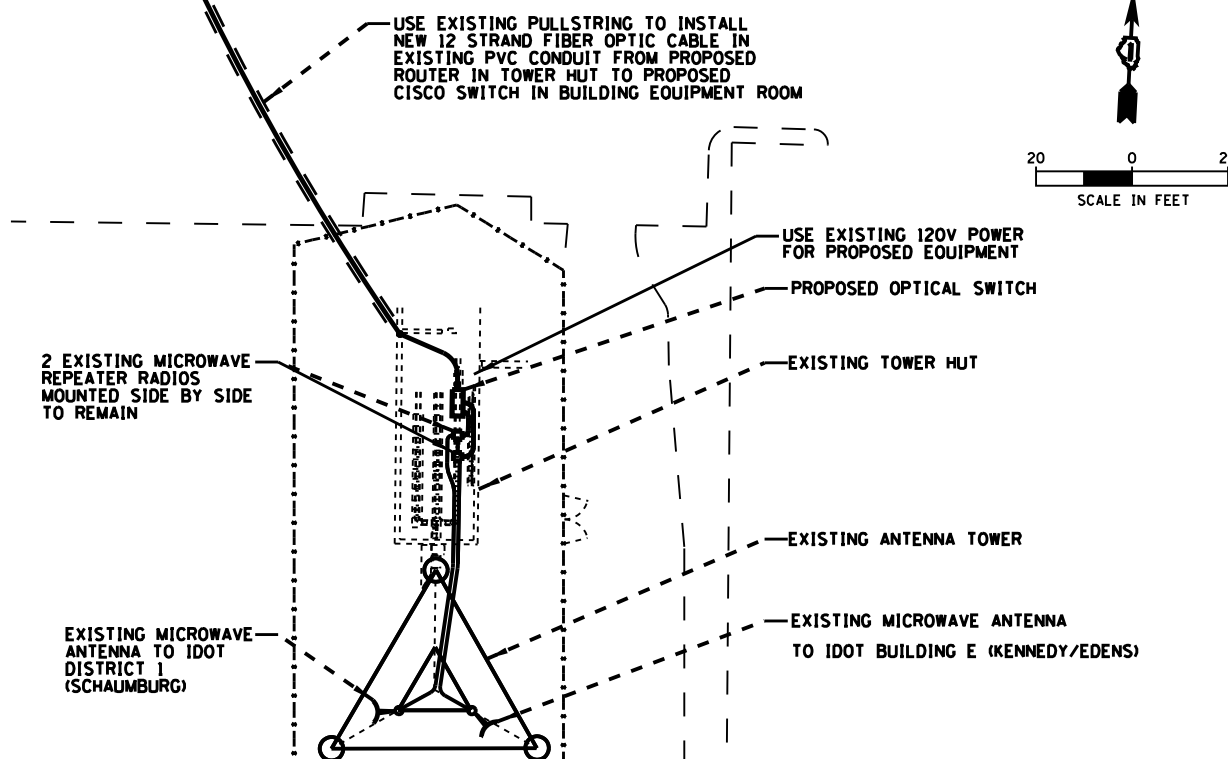
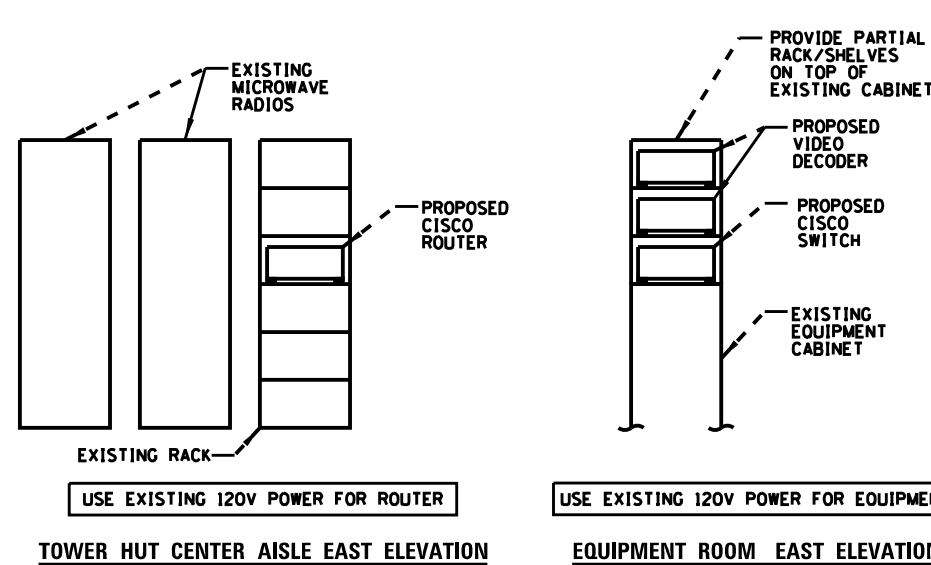
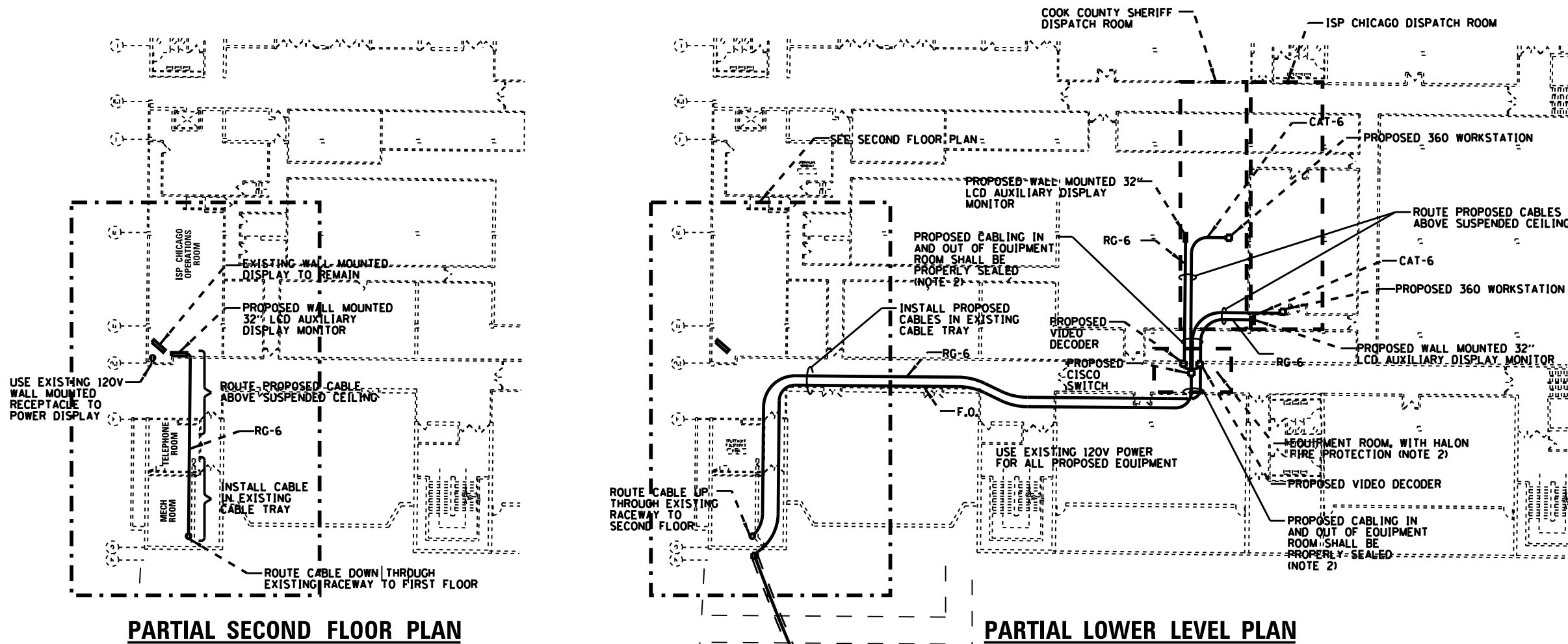
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	5
			CONTRACT NO. 60134	
ILLINOIS FED. AID PROJECT				

### SCOPE OF WORK

1. EXISTING ANTENNA TOWER OPERATES AS A SIGNAL REPEATER CONNECTING IDOT'S FIBER OPTIC BACKBONE NETWORK FROM IDOT DISTRICT 1 (SCHALMBURG) TO IDOT BUILDING (KENNEDY / EDENS). THE EXISTING CROSS CONNECTION LINES BETWEEN THE REPEATER RADIOS SHALL BE INTERCEPTED AND CONNECTED TO AN OPTICAL SWITCH TO ALLOW LOCAL ACCESS TO IDOT'S NETWORK TO VIEW CAMERAS. THIS WORK SHALL NOT AFFECT OR CAUSE AN OUTAGE TO EXISTING NETWORK.

CONTRACTOR SHALL COORDINATE, FURNISH, AND INSTALL ALL REQUIRED EQUIPMENT FOR THE ISP AND CCS TO ACCESS AND DISPLAY VIDEO FROM UP TO 4 OF ANY OF IDOT'S TRAFFIC CAMERAS.

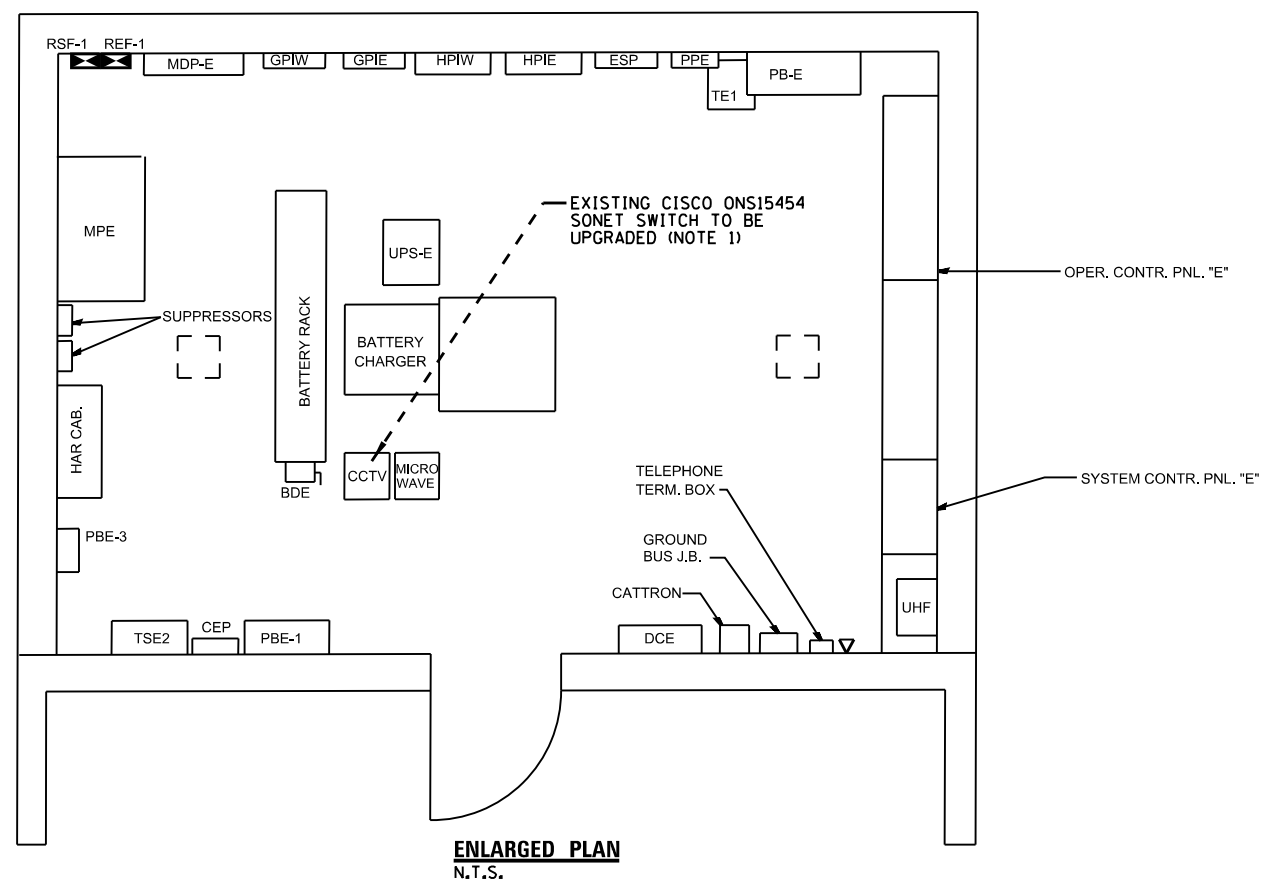
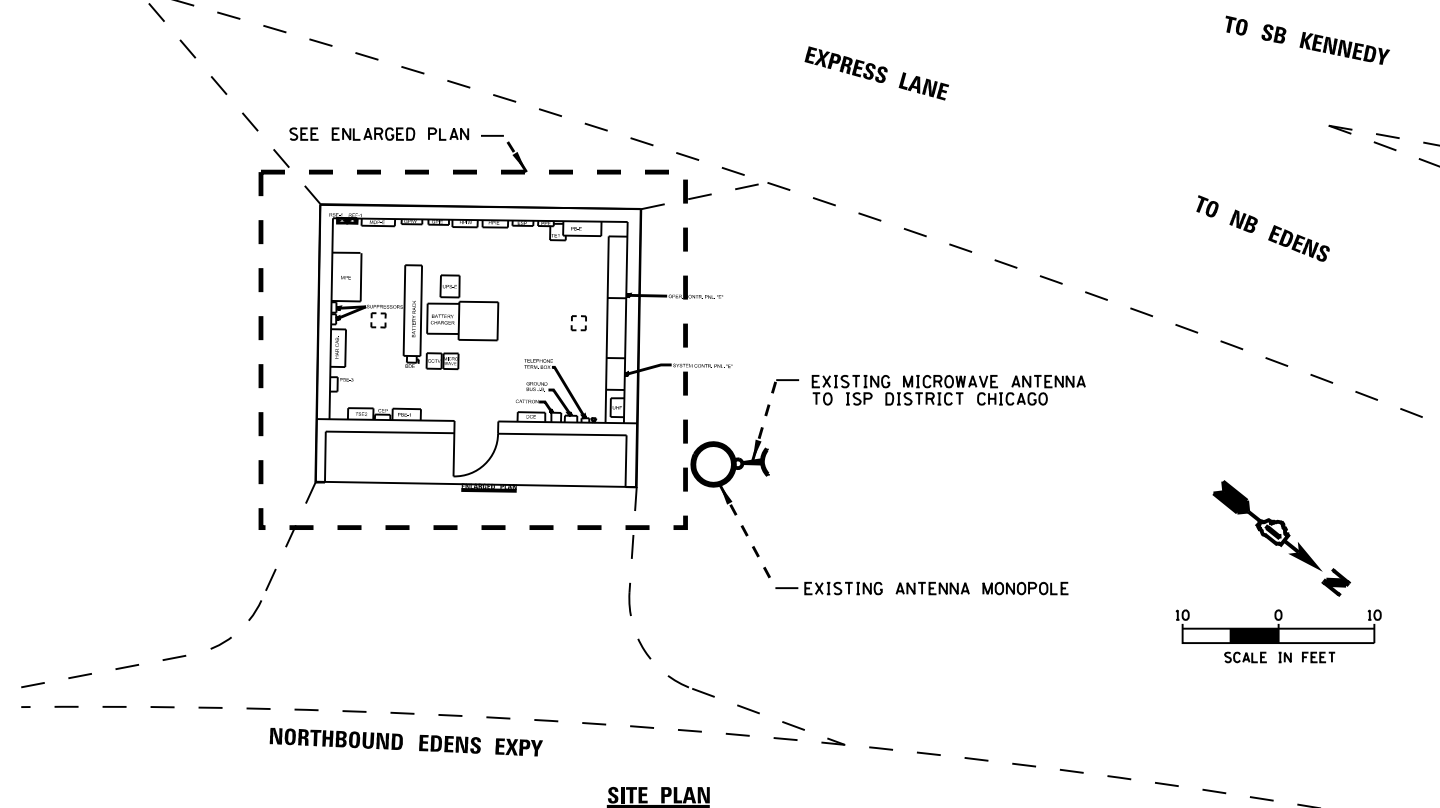
2. THE EXISTING EQUIPMENT ROOM AT ISP DISTRICT CHICAGO BUILDING HAS HALON FIRE PROTECTION. ANY PROPOSED WALL PENETRATIONS TO THIS ROOM SHALL BE PROPERLY SEALED AS REQUIRED.



FILE NAME: SF1E15	USER NAME: *USERS	DESIGNED: R.T.	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ITS CENTER-TO-CENTER INTEGRATION PROJECT ISP DISTRICT CHICAGO / COOK COUNTY SHERIFF (MAINE NORTH)	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN: G.M.	REVISED: -					2009-0871	COOK	25	6
		CHECKED: R.T.	REVISED: -			SCALE: 1" = 20'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60134		
		DATE: 12/11/2013	REVISED: -			ILLINOIS FED. AID PROJECT					

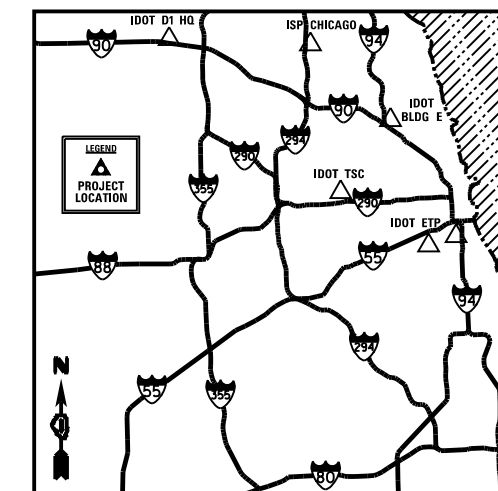
### SCOPE OF WORK

1. AT IDOT BUILDING E, THE CONTRACTOR SHALL COORDINATE, FURNISH, AND INSTALL ALL REQUIRED EQUIPMENT TO COMPLETE THE EXISTING SONET NODE. THE SONET NODE SHALL BE UPGRADED TO AUTOMATIC PATH SWITCHOVER FROM MICROWAVE (PRIMARY MODE) TO FIBER AND VICE VERSA WHEN ACTIVE PATH EXPERIENCES AN OUTAGE. SEE SPECIAL PROVISION FOR DETAILS.



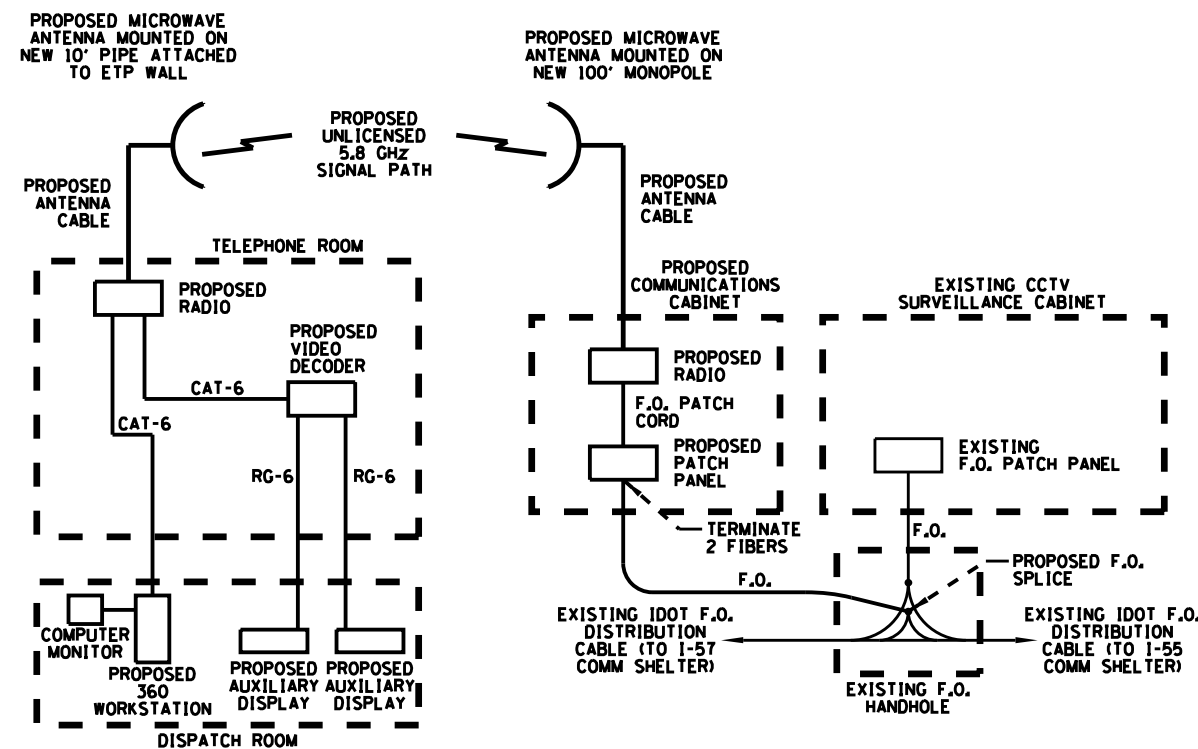
### IDOT BUILDING E (KENNEDY / EDENS)

FOR ADDITIONAL DETAIL, SEE SHEET 7A

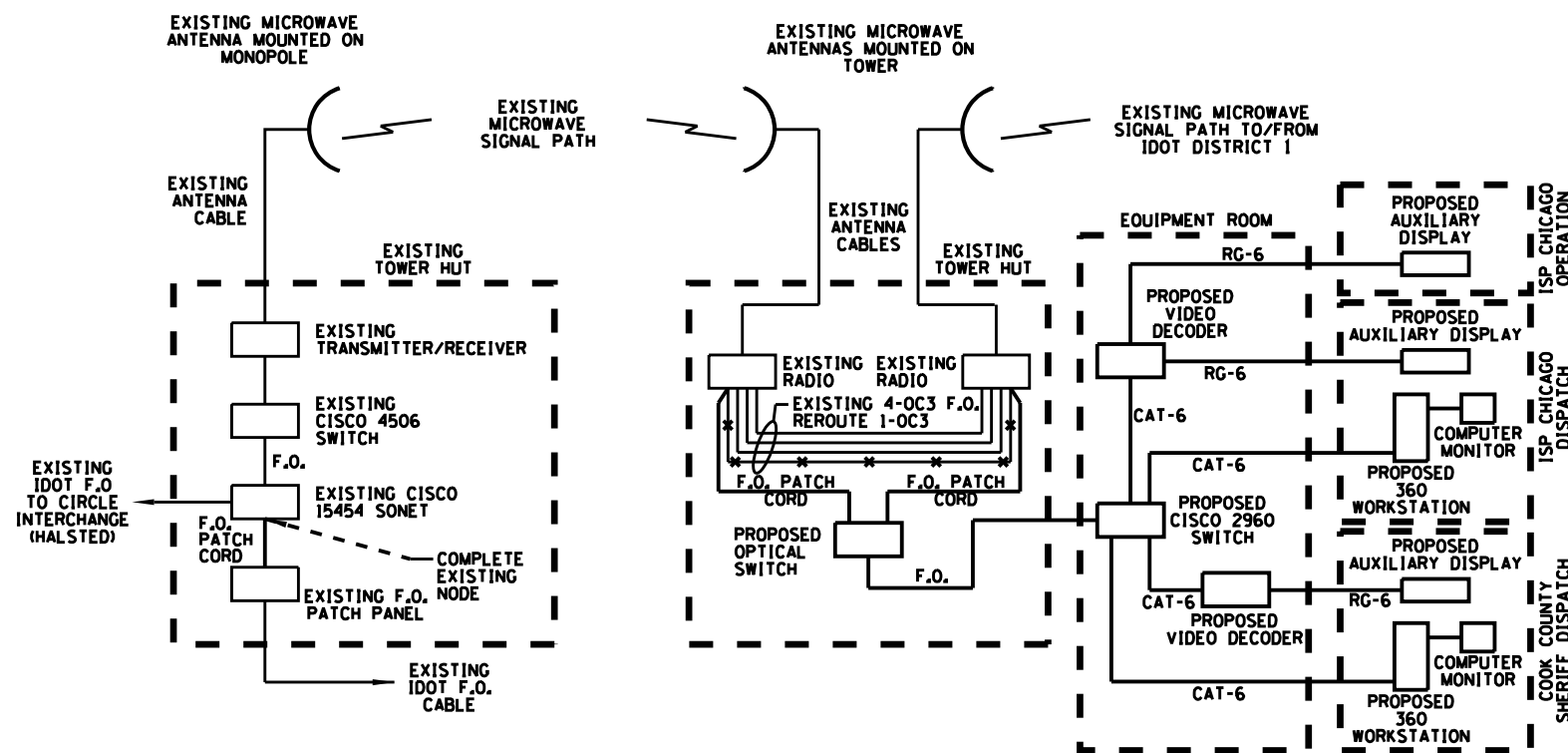


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	PLOT SCALE * #SCALE#	DRAWN <i>G.M.</i>	REVISED -		SCALE: AS SHOWN	SHEET NO. ___ OF ___ SHEETS	STA. _____ TO STA. _____	2009-0871	COOK	25	7
	PLOT DATE * #DATE#	CHECKED <i>R.T.</i>	REVISED -								
		DATE <i>12/11/2013</i>	REVISED -								
							ILLINOIS FED. AID PROJECT		CONTRACT NO. 60134		



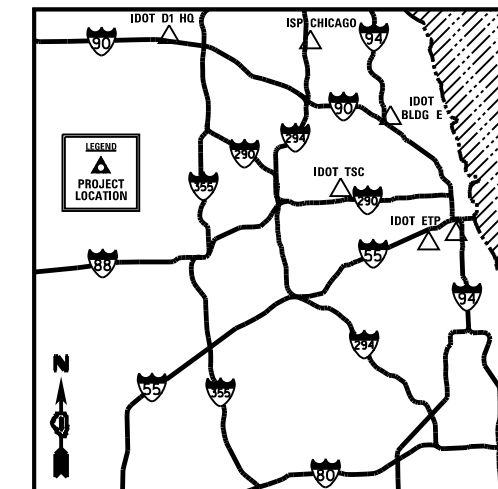


**IDOT ETP BUILDING (35TH & NORMAL) DAN RYAN EXPY / W. 33TH ST.**



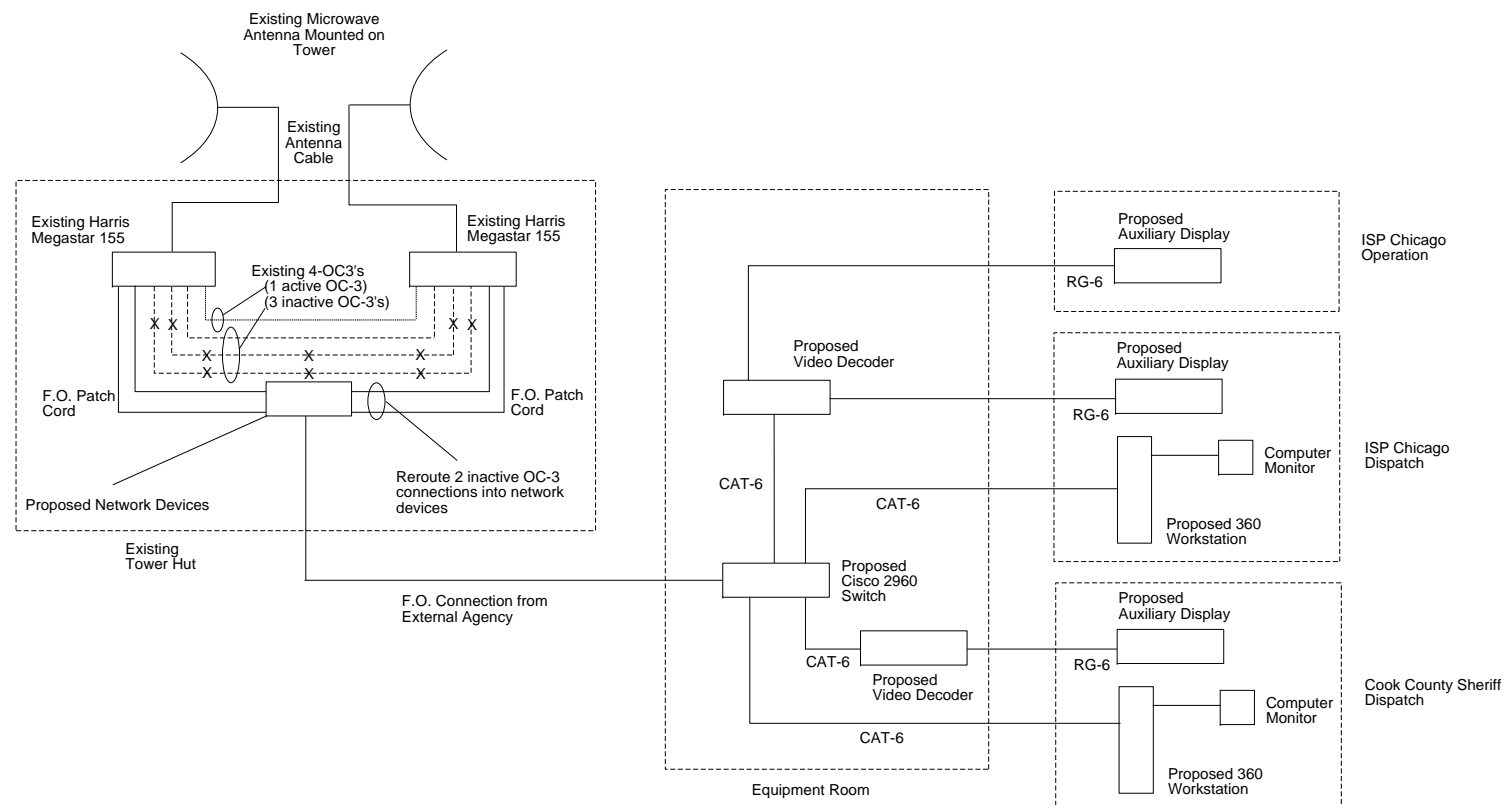
**BUILDING E (KENNEDY / EDENS EXPY) ISP CHICAGO / COOK COUNTY SHERIFF**

EXISTING CONDITIONS SHOWN IN HALF TONE  
PROPOSED CONDITIONS SHOWN IN BOLD



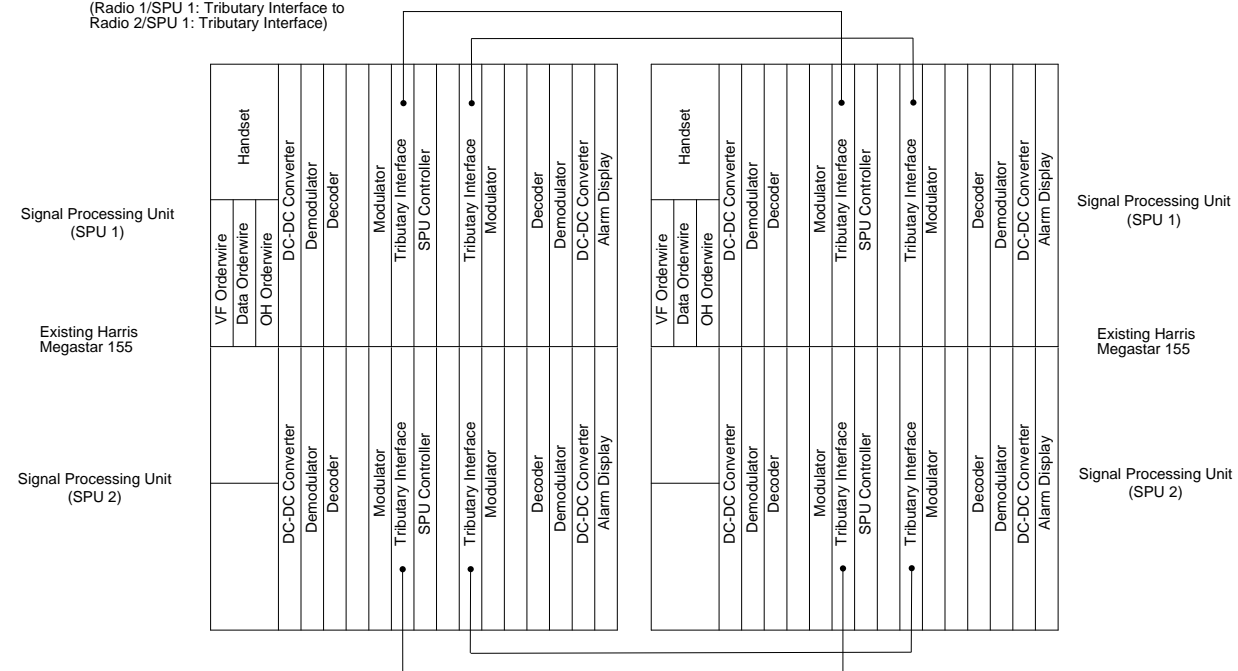
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	PLOT SCALE SCALE	DRAWN G.M.	REVISED -		SCALE N.T.S.	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60134	
	PLOT DATE DATE	CHECKED R.T.	REVISED -								ILLINOIS FED. AID PROJECT	
		DATE 12/11/2013	REVISED -									



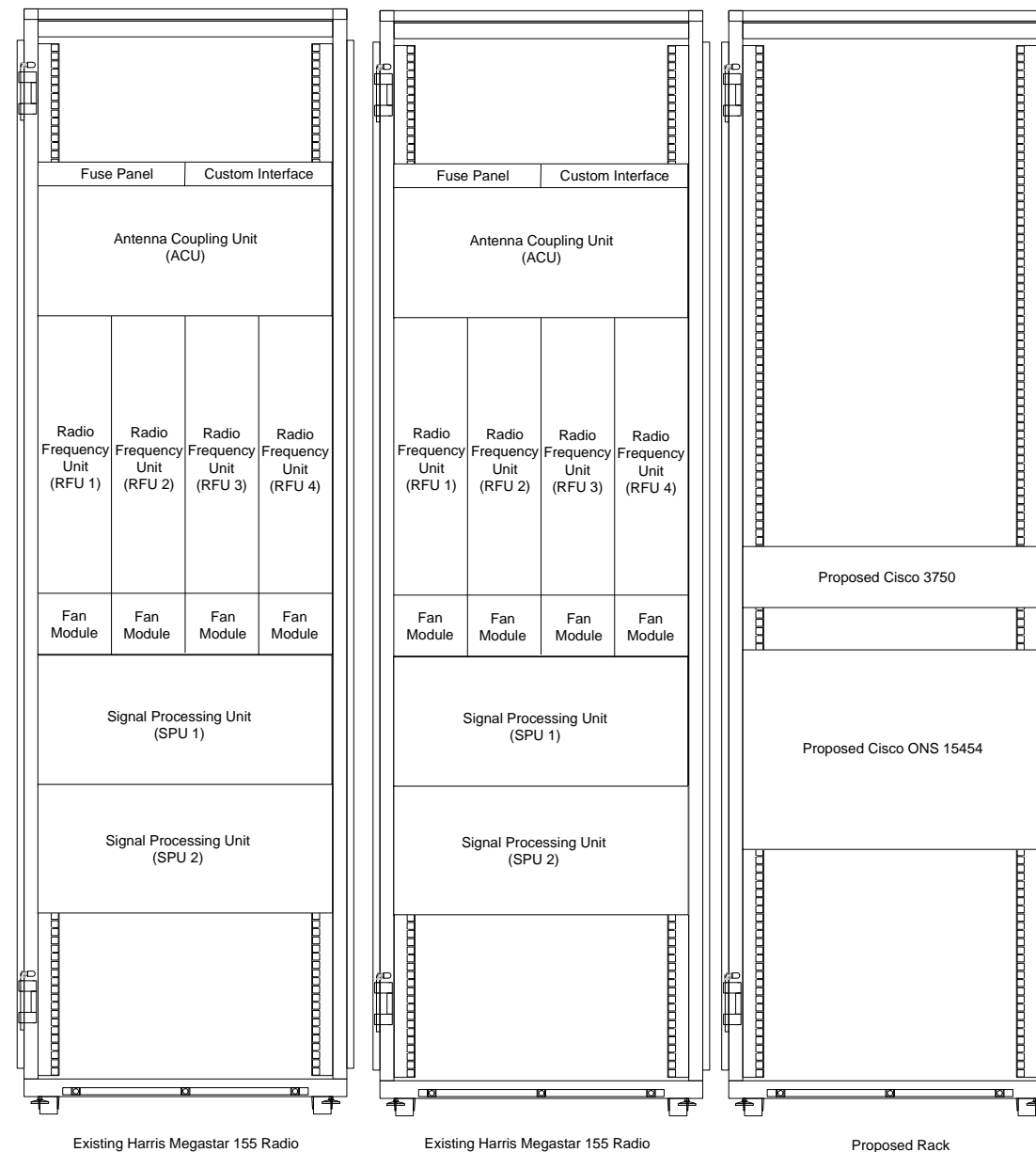


**EQUIPMENT OVERVIEW**

**NOTE:** Connection between Harris Megastar 155 radios are fiber optic jumpers  
 (Radio 1/SPU 1: Tributary Interface to Radio 2/SPU 1: Tributary Interface)



**DETAILED VIEW  
EXISTING HARRIS MEGASTAR 155 RADIOS**



**EQUIPMENT LINEUP**

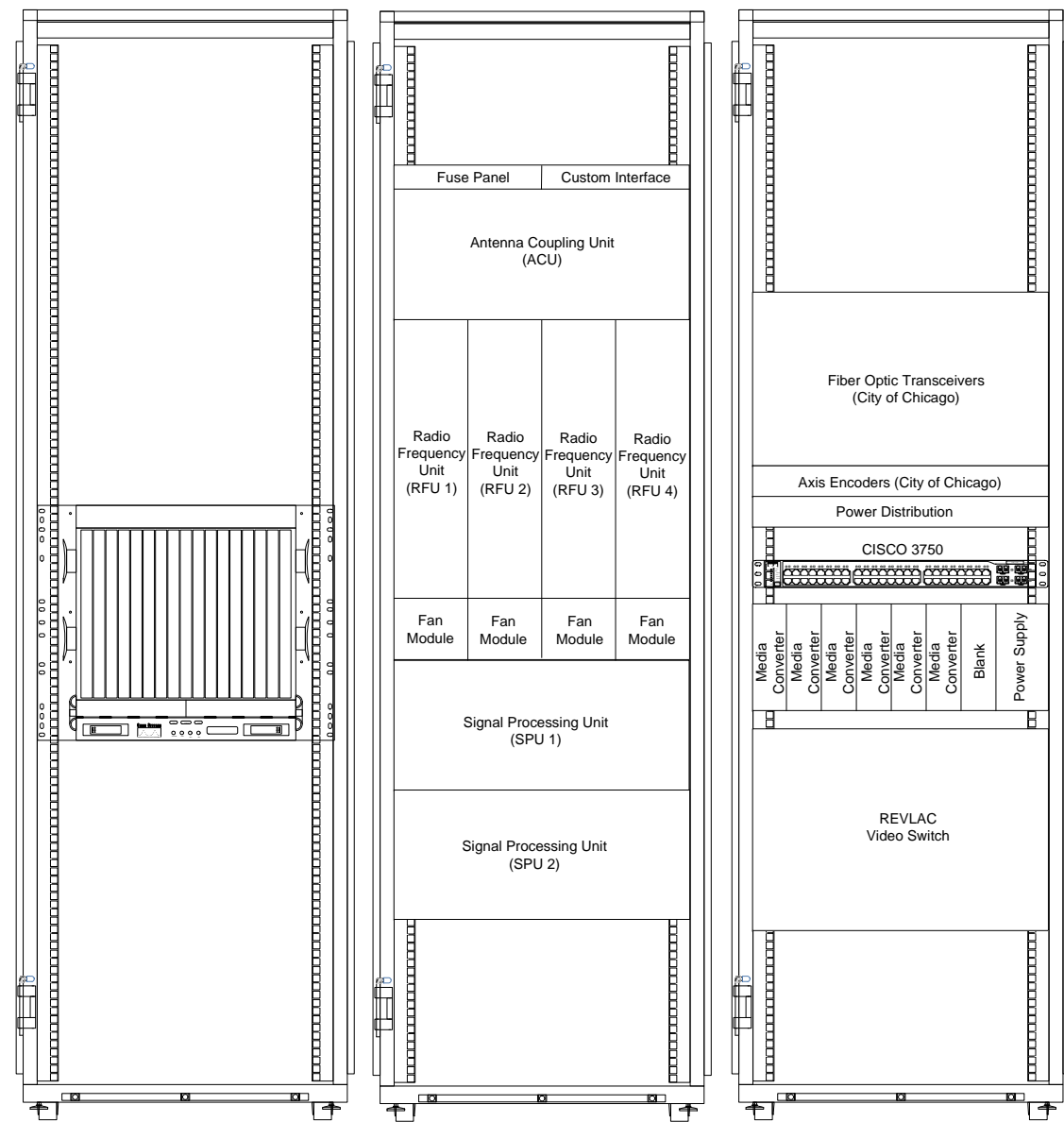
FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ISP DISTRICT CHICAGO**

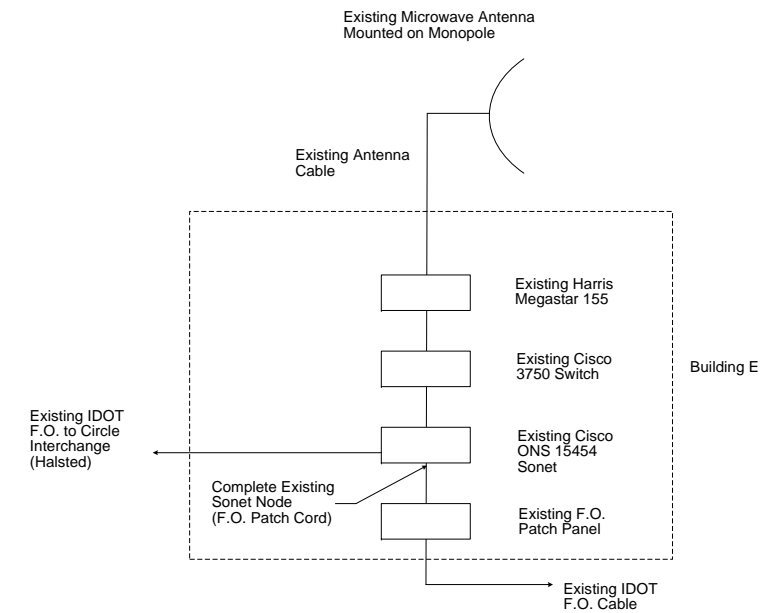
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	9
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

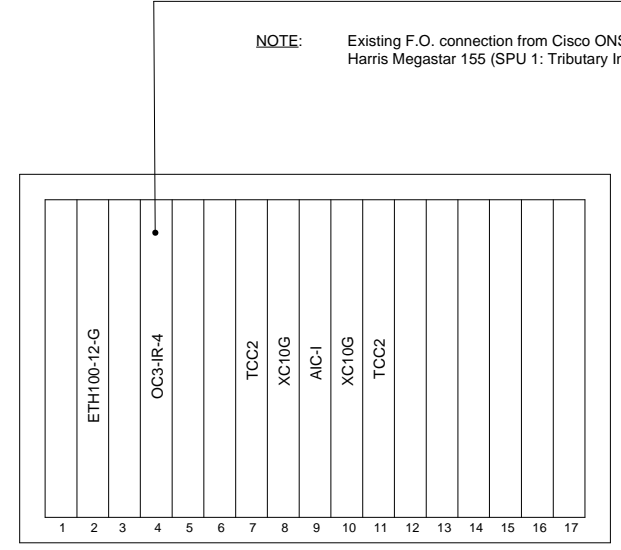


**EQUIPMENT LINEUP**

NOTE: Cisco 3750 IOS to be upgraded at Building E

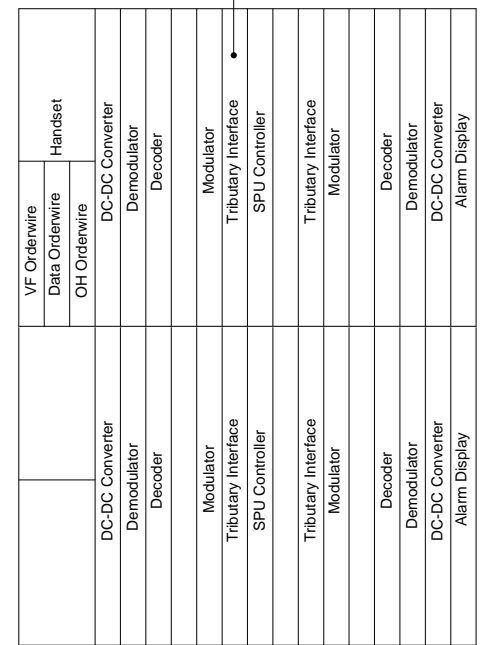


**SYSTEM BLOCK DIAGRAM**



**DETAILED VIEW  
EXISTING CISCO ONS 15454**

NOTE: Existing F.O. connection from Cisco ONS 15454 (Slot 4: OC3-IR-4) to Harris Megastar 155 (SPU 1: Tributary Interface)



**DETAILED VIEW  
EXISTING HARRIS MEGASTAR 155**

FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

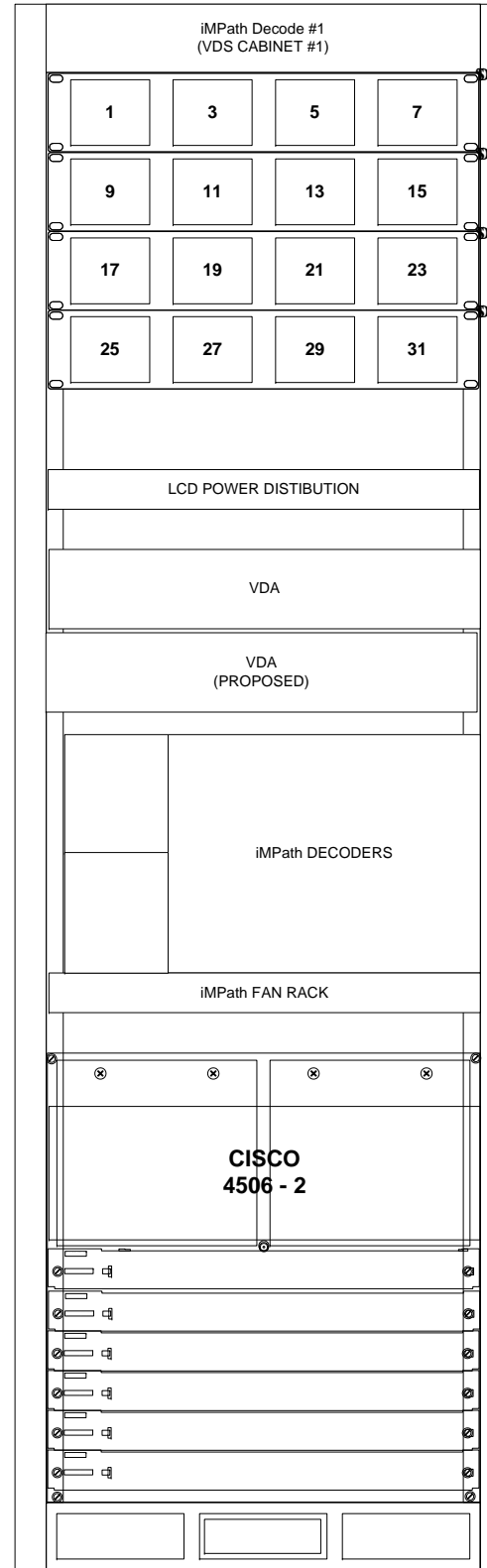
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUILDING E**

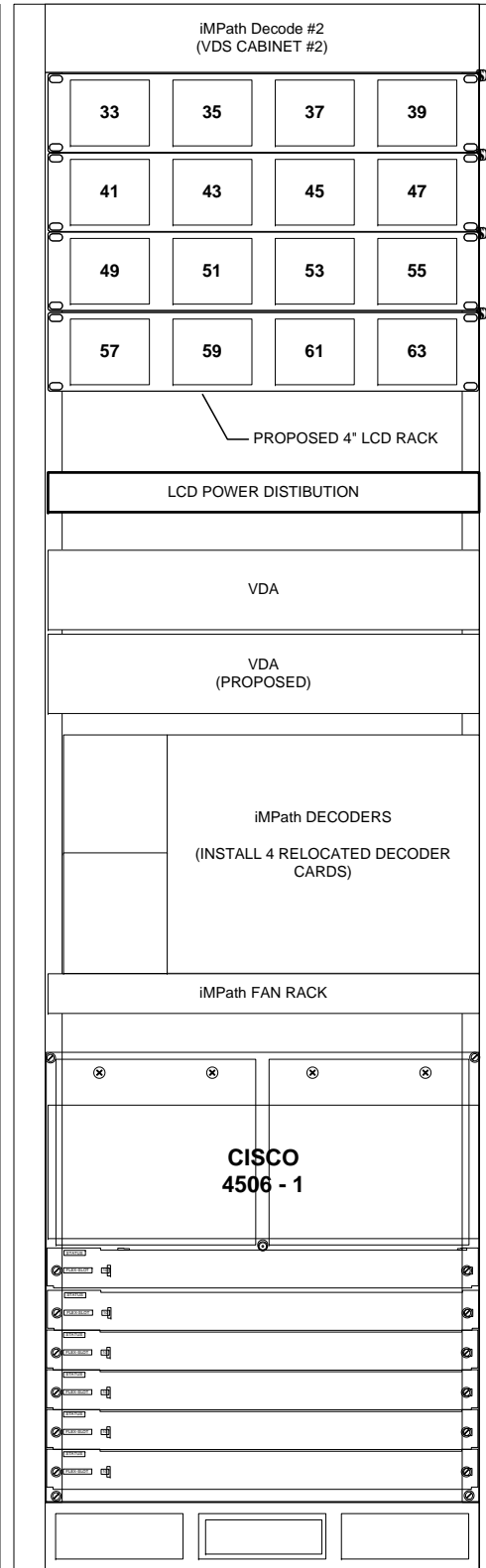
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	10
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

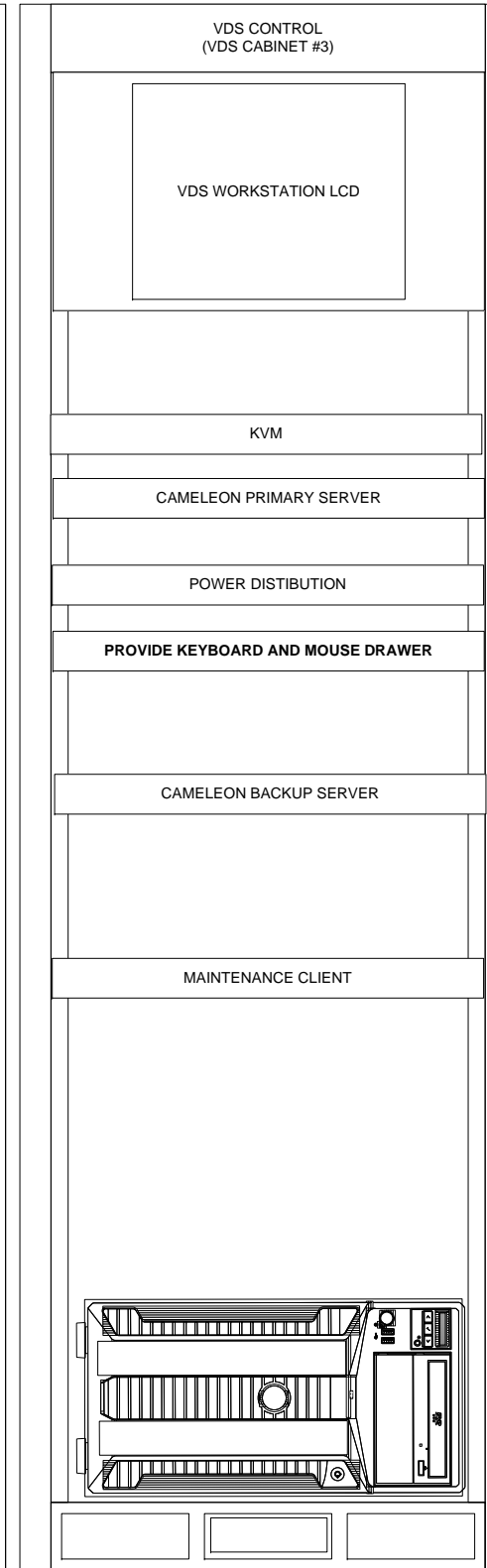
EXISTING EQUIPMENT TO BE RECONFIGURED  
UNLESS OTHERWISE NOTED



EXISTING EQUIPMENT TO BE RECONFIGURED  
UNLESS OTHERWISE NOTED



EXISTING EQUIPMENT TO BE RECONFIGURED  
UNLESS OTHERWISE NOTED



**NOTES:**

THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.

NOT ALL REQUIRED EQUIPMENT OR INTERCONNECTIONS ARE SHOWN FOR CLARITY.

FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

D1 H.Q. EQUIPMENT ROOM  
PROPOSED VIDEO ENCODER / DECODER LINE UP, 1 OF 2

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	10A
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

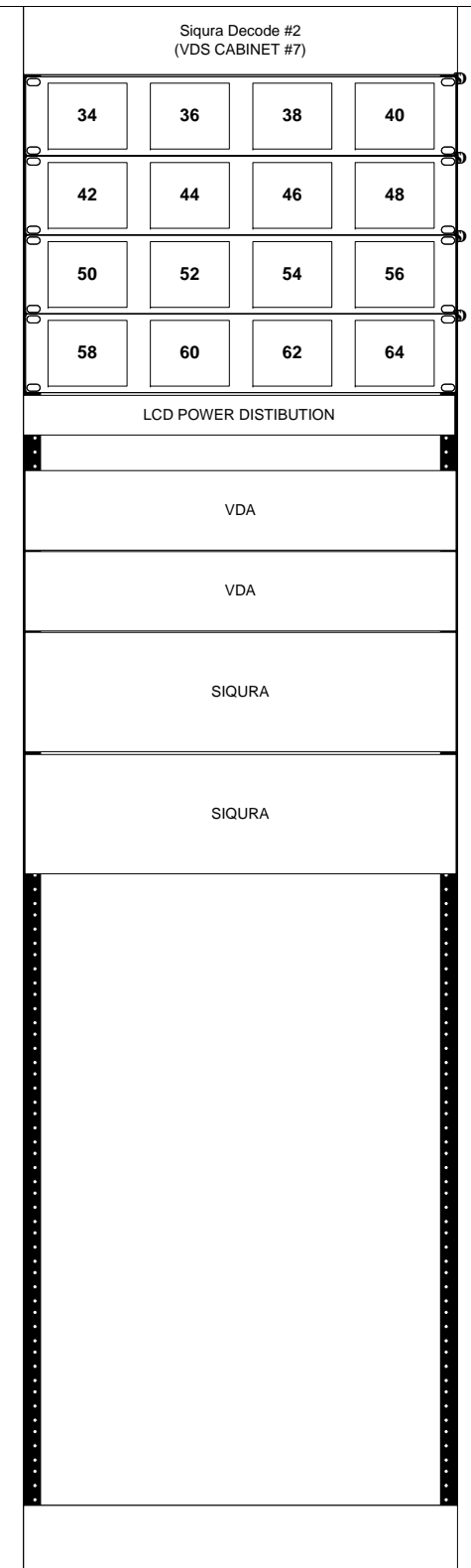
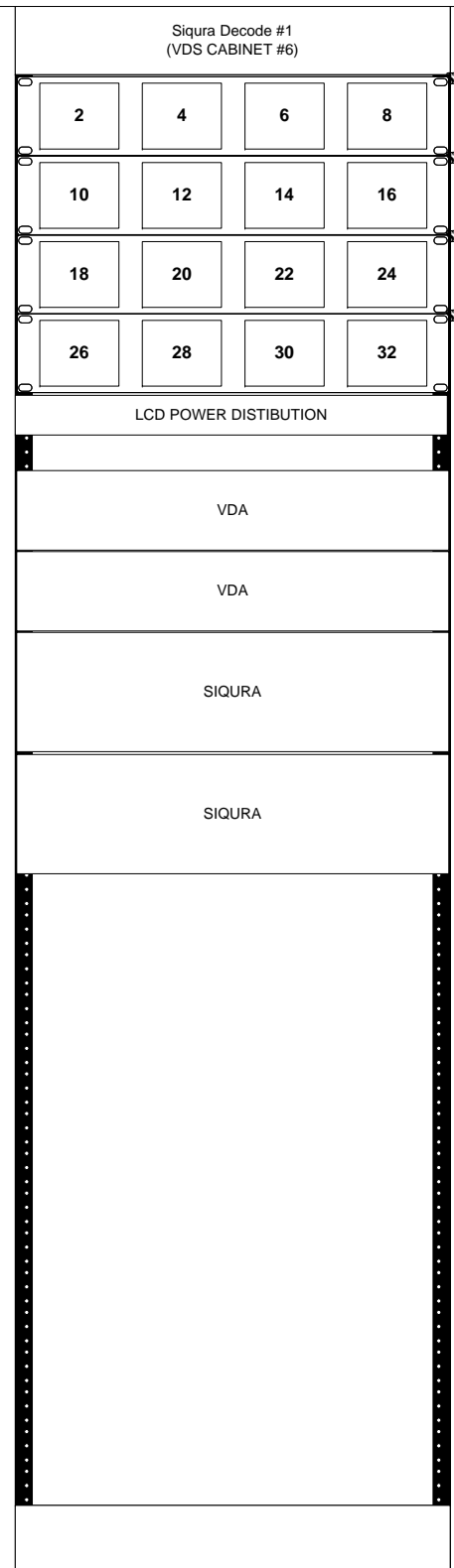
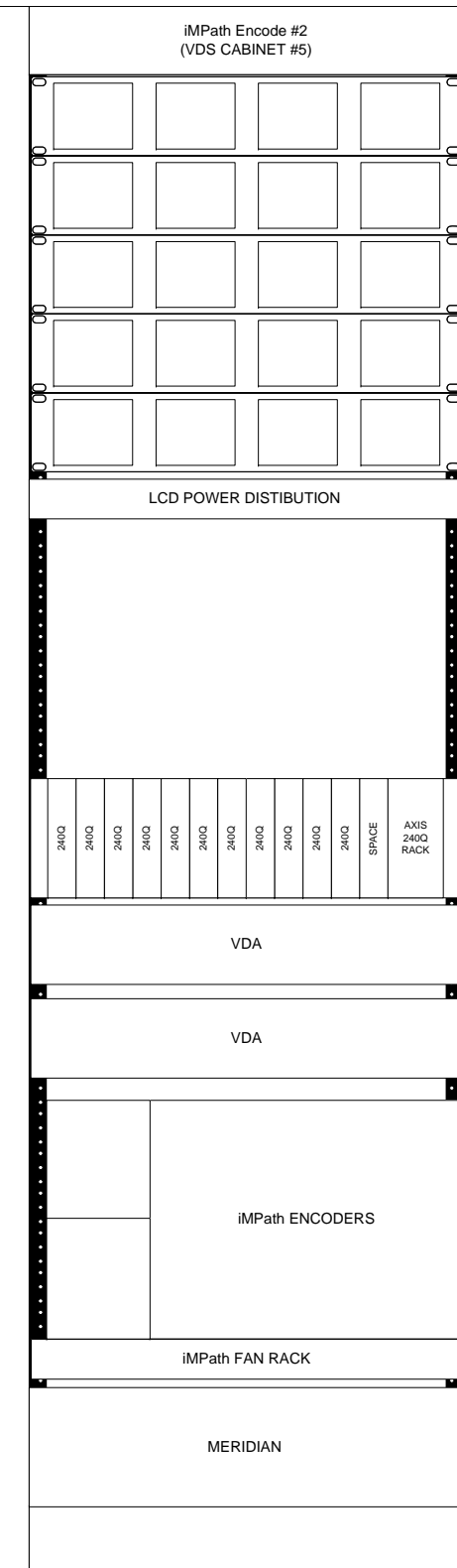
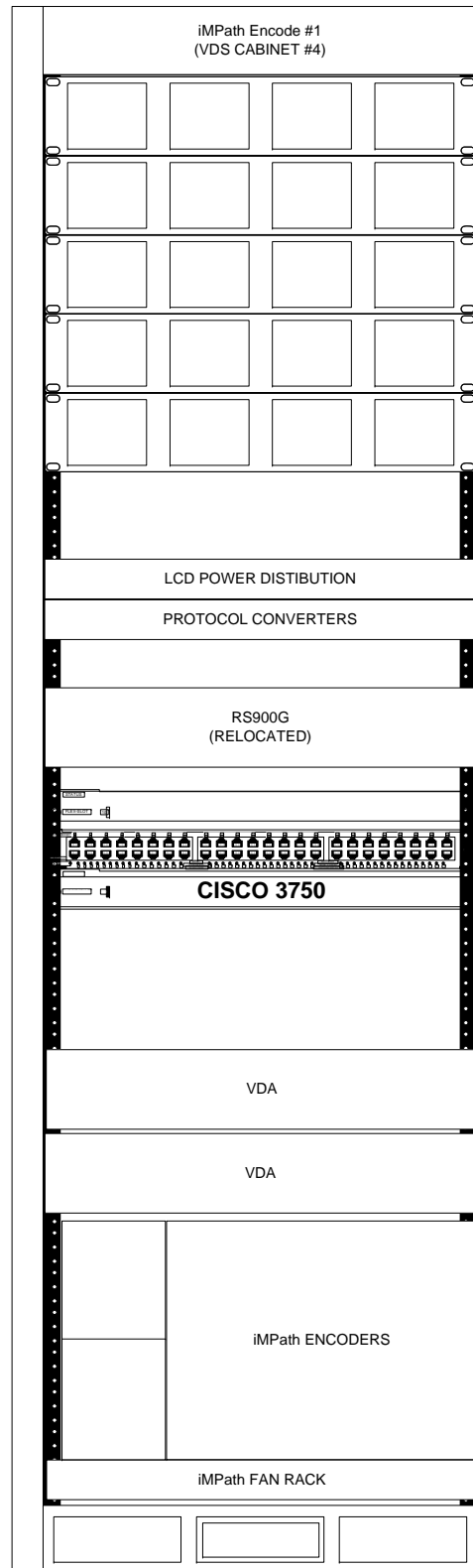
SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

EXISTING EQUIPMENT TO BE RECONFIGURED  
UNLESS OTHERWISE NOTED

EXISTING EQUIPMENT TO BE RECONFIGURED  
UNLESS OTHERWISE NOTED

PROPOSED EQUIPMENT INCLUDING CABINET

PROPOSED EQUIPMENT INCLUDING CABINET



**NOTES:**  
THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.  
NOT ALL REQUIRED EQUIPMENT OR INTERCONNECTIONS ARE SHOWN FOR CLARITY.

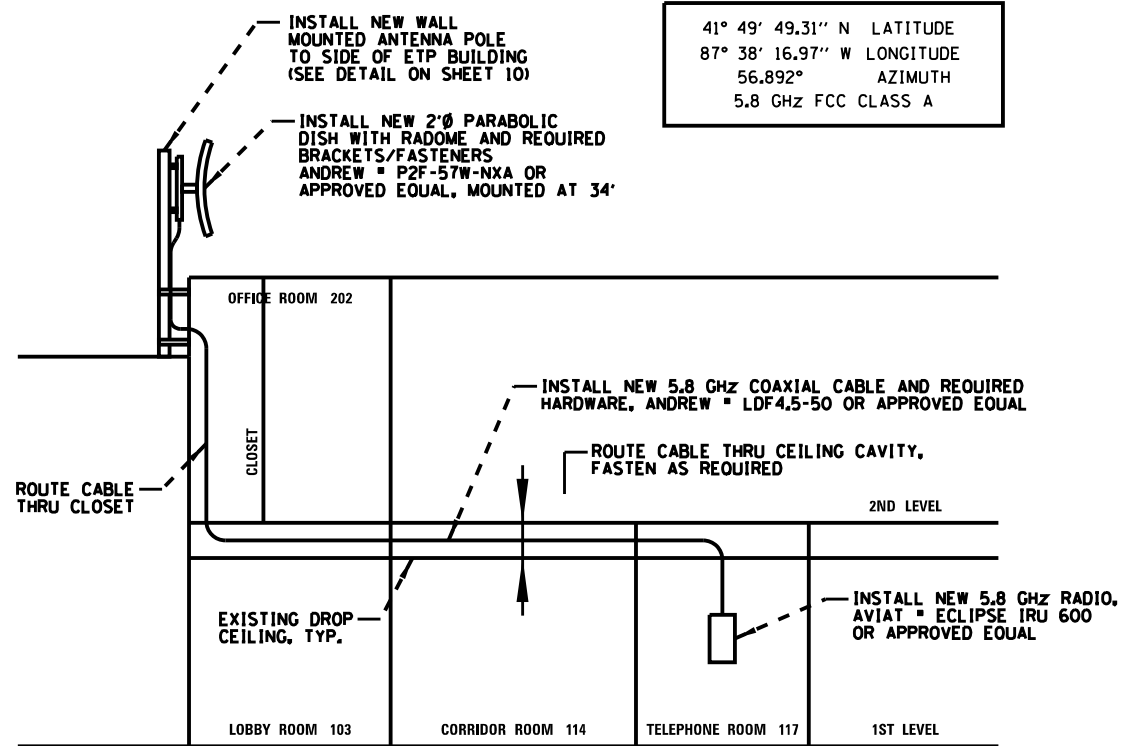
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		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

D1 H.Q. EQUIPMENT ROOM  
PROPOSED VIDEO ENCODER / DECODER LINE UP, 2 OF 2

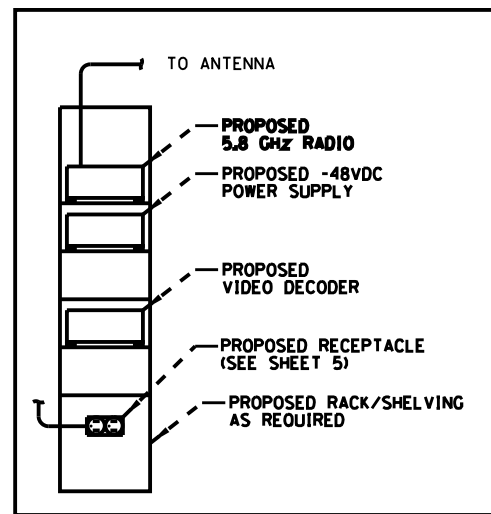
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	10B
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_



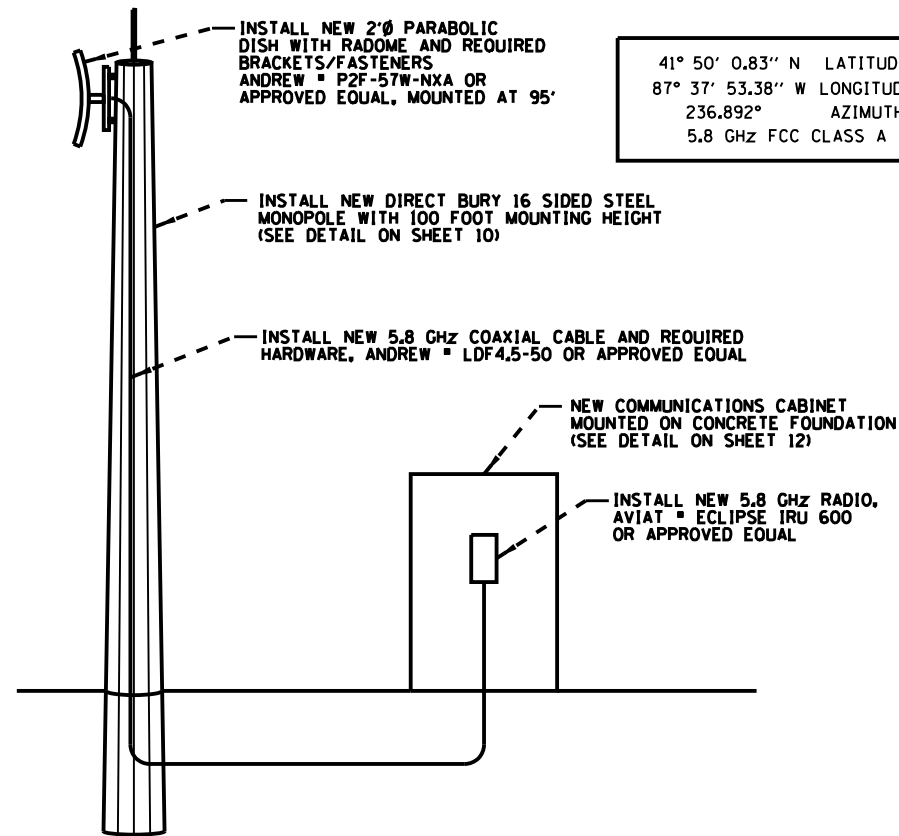
41° 49' 49.31" N LATITUDE  
 87° 38' 16.97" W LONGITUDE  
 56.892° AZIMUTH  
 5.8 GHZ FCC CLASS A

EXISTING ETP BUILDING ELEVATION LOOKING NORTH  
**RADIO & ANTENNA DETAIL – ETP**  
 N.T.S.



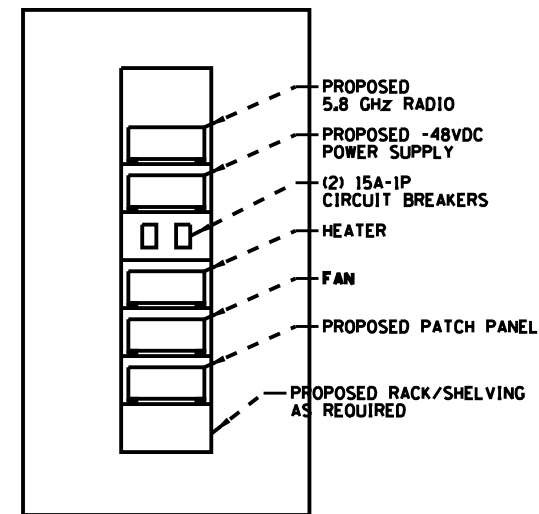
USE PROPOSED 120V RECEPTACLE FOR POWER TO EQUIPMENT

**TELEPHONE ROOM – SOUTH WALL ELEVATION**  
**EQUIPMENT LAYOUT DETAIL – ETP**  
 N.T.S.



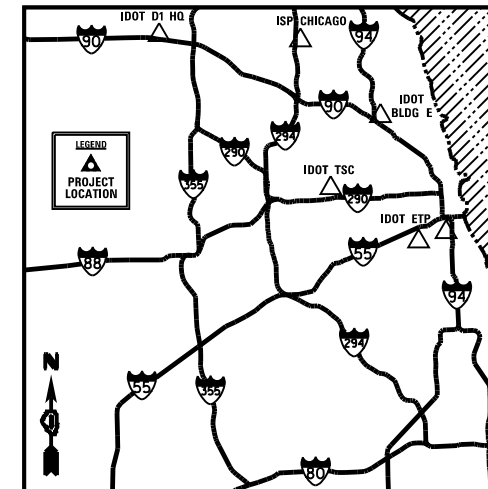
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 87° 37' 53.38" W LONGITUDE  
 236.892° AZIMUTH  
 5.8 GHZ FCC CLASS A

**RADIO & ANTENNA DETAIL – DAN RYAN**  
 N.T.S.



**PROPOSED COMMUNICATIONS CABINET ELEVATION**

**EQUIPMENT LAYOUT DETAIL – DAN RYAN**  
 N.T.S.

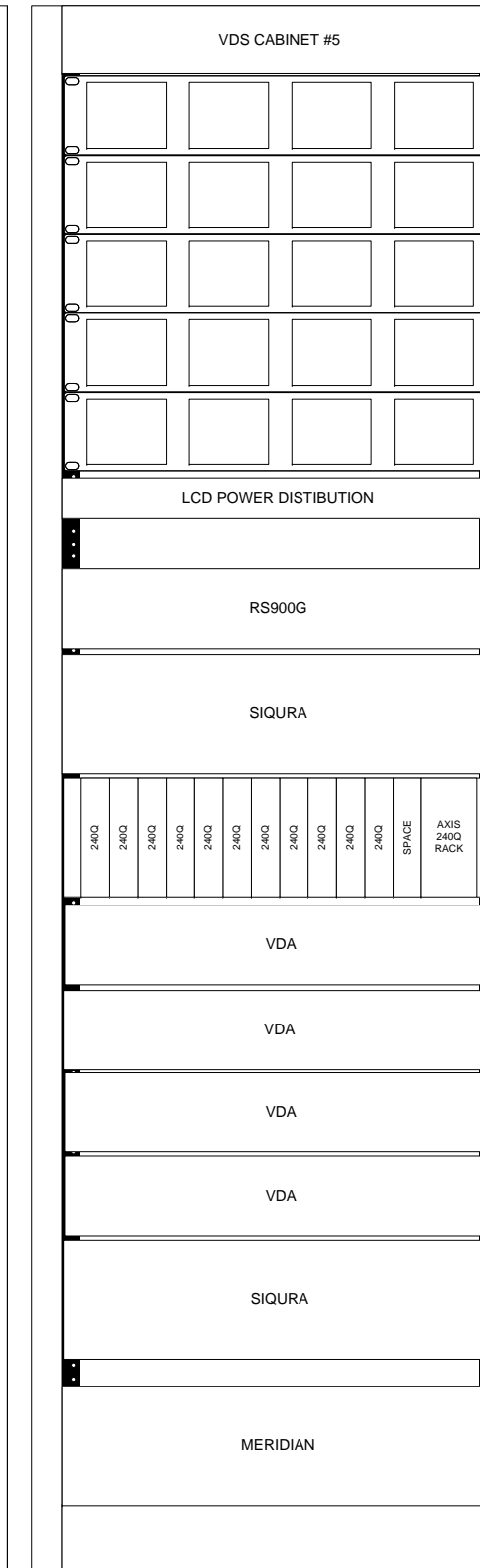
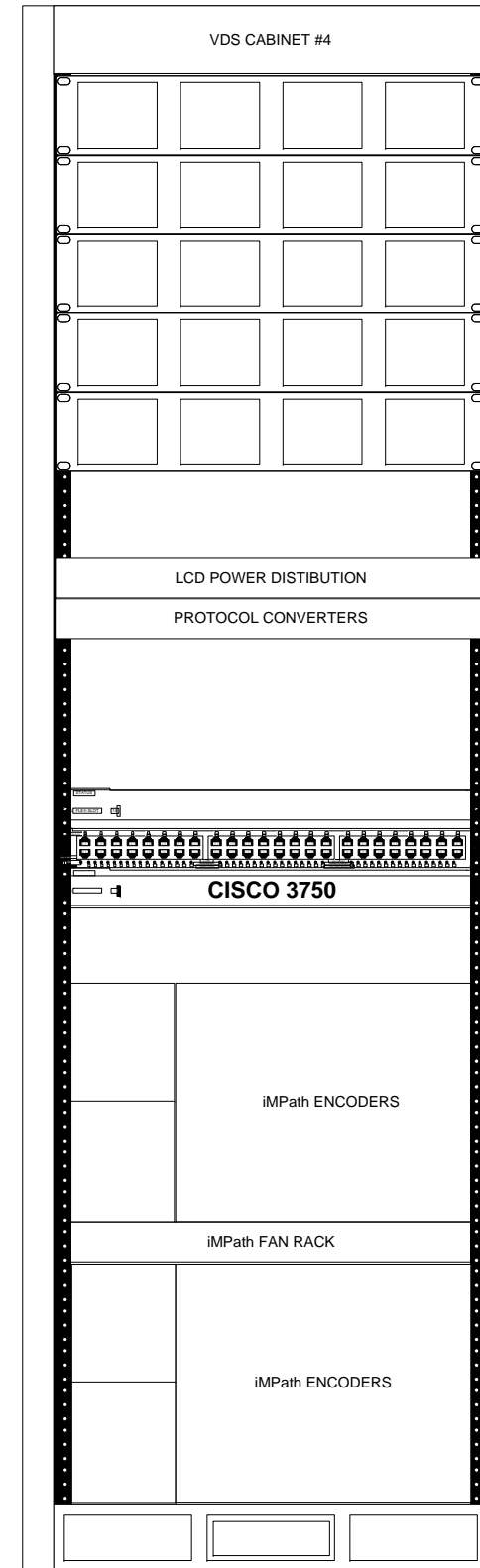
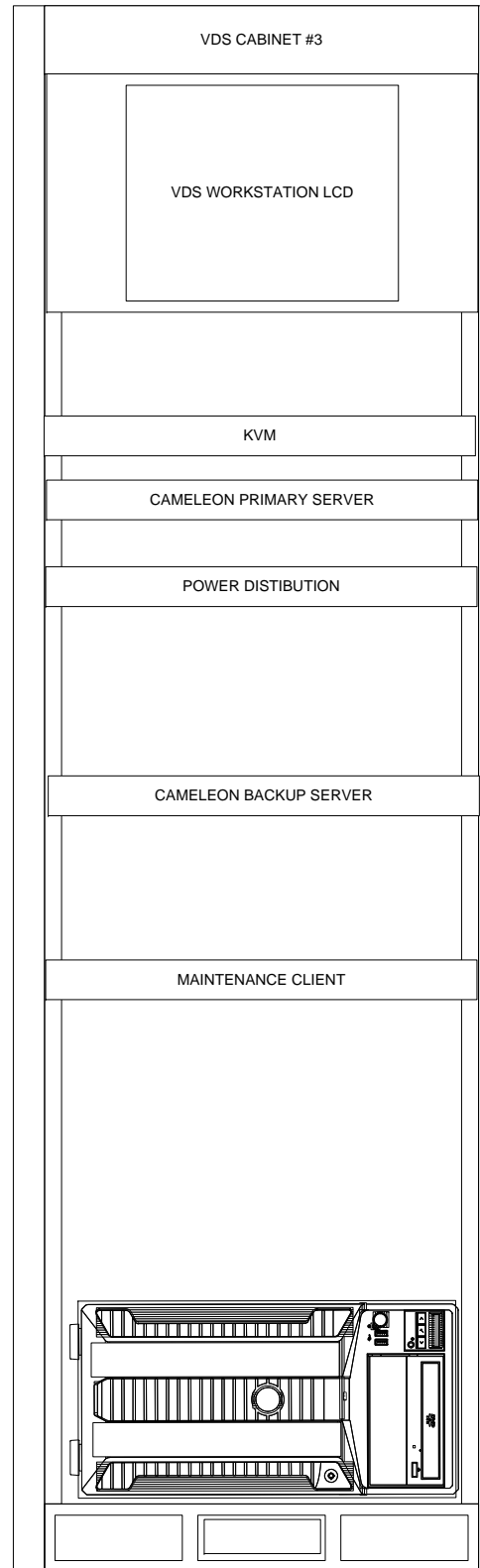
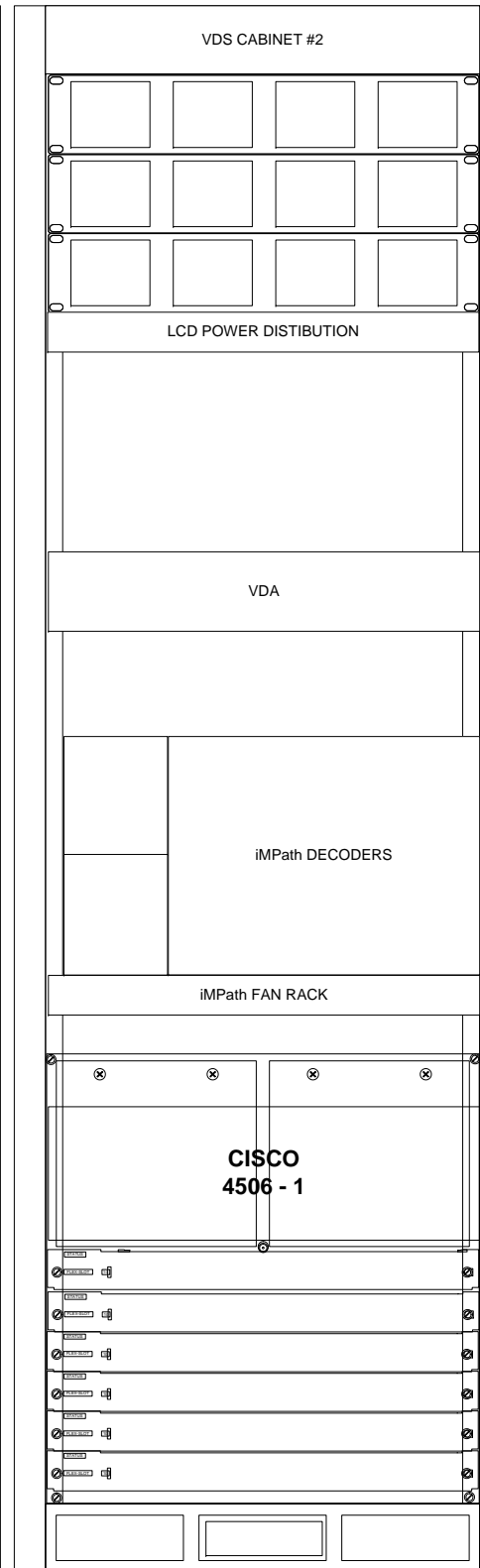
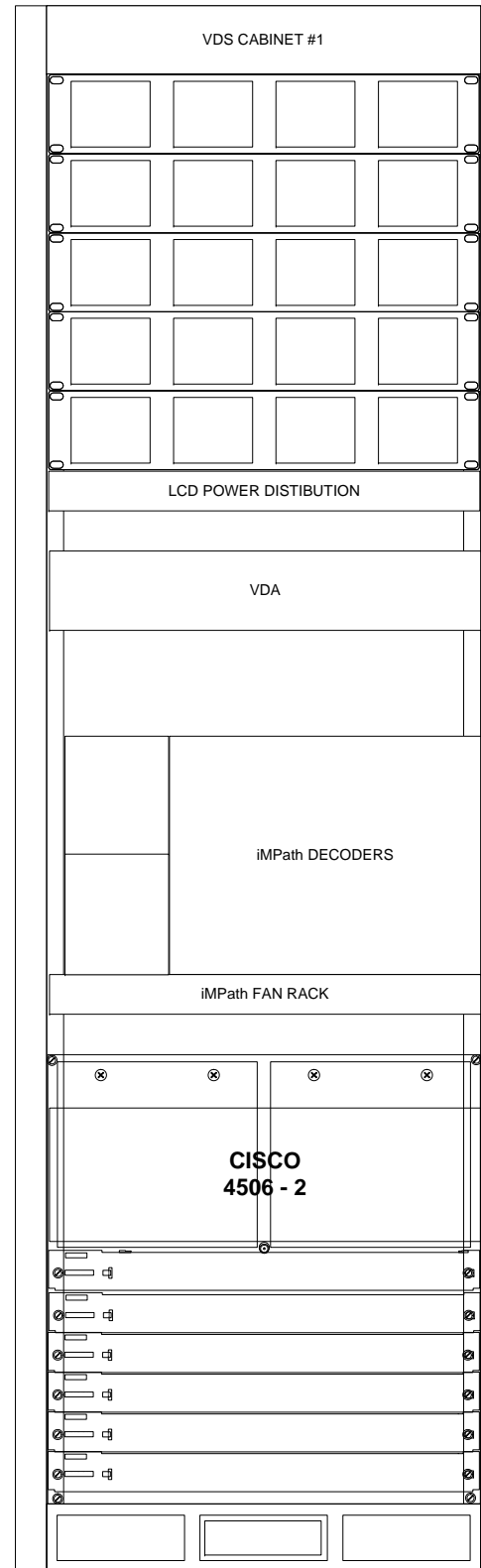


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		DRAWN <i>G.M.</i>	REVISED -
		CHECKED <i>R.T.</i>	REVISED -
		DATE <i>12/11/2013</i>	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ITS CENTER-TO-CENTER INTEGRATION PROJECT			
RADIO, ANTENNA, & EQUIPMENT DETAILS – IDOT ETP / DAN RYAN			
SCALE: N.T.S.	SHEET NO. ___ OF ___ SHEETS	STA. _____ TO STA. _____	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	11
			CONTRACT NO. 60134	
ILLINOIS FED. AID PROJECT				



FILE NAME	USER NAME	DESIGNED	REVISED
	DRAWN	REVISION	
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

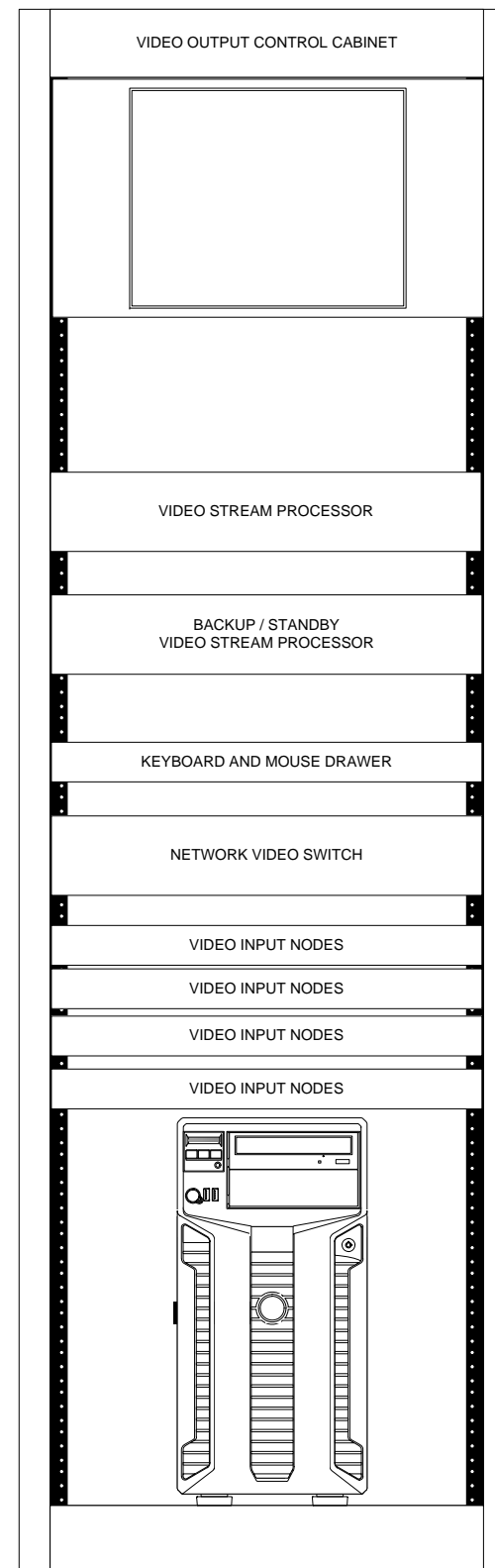
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**D1 H.Q. EQUIPMENT ROOM  
EXISTING VIDEO ENCODER / DECODER LINE UP**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	12
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

PROPOSED EQUIPMENT INCLUDING CABINET



LCD RACK MOUNT MONITOR

RACK MOUNT COMPUTER KEYBOARD WITH SLIDING SHELF

PROPOSED VIDEO CONTROL WORKSTATION

**NOTES:**

THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.

NOT ALL REQUIRED EQUIPMENT OR INTERCONNECTIONS ARE SHOWN FOR CLARITY.

FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

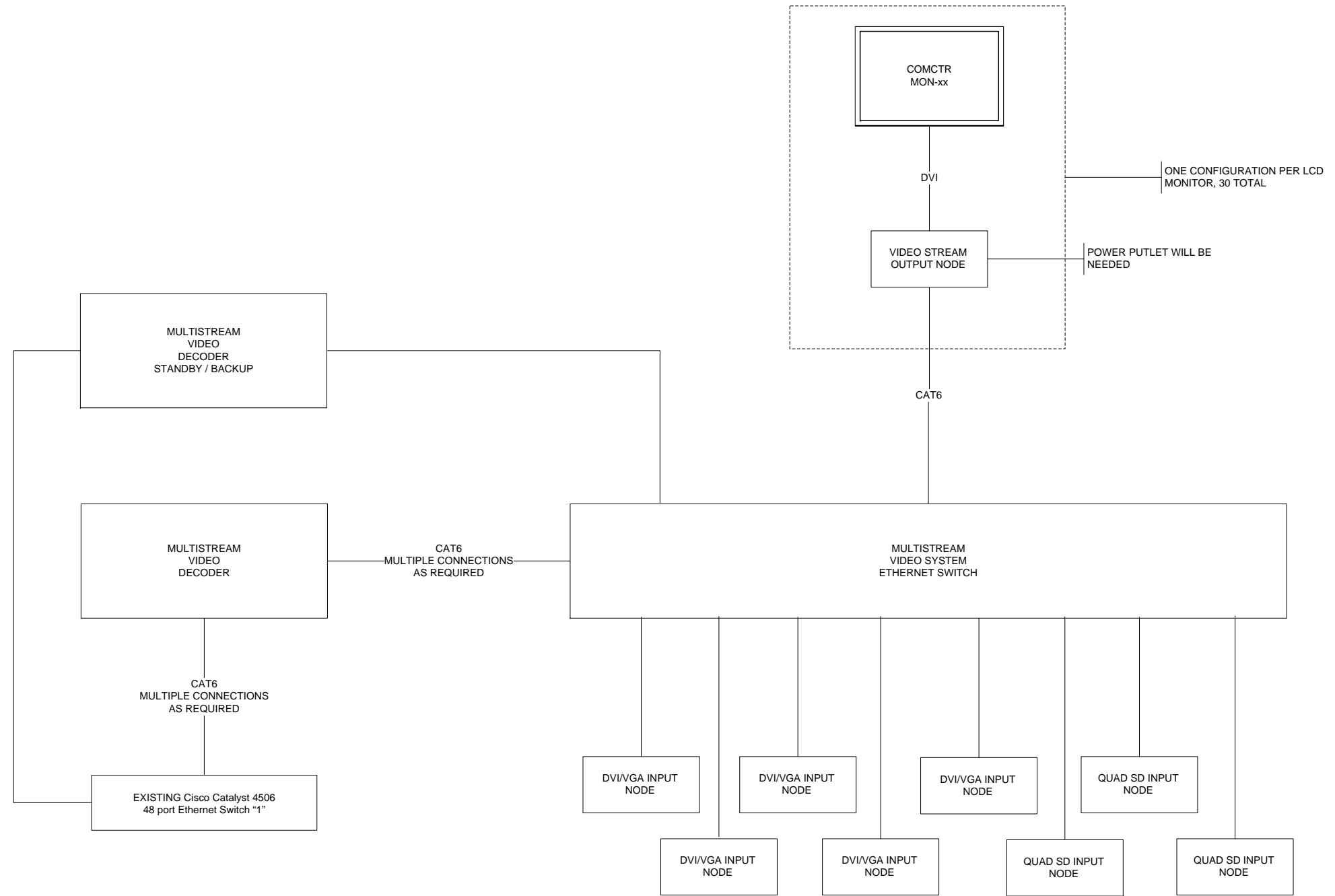
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

D1 H.Q. EQUIPMENT ROOM  
PROPOSED VIDEO OUTPUT LINE UP

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	13
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_





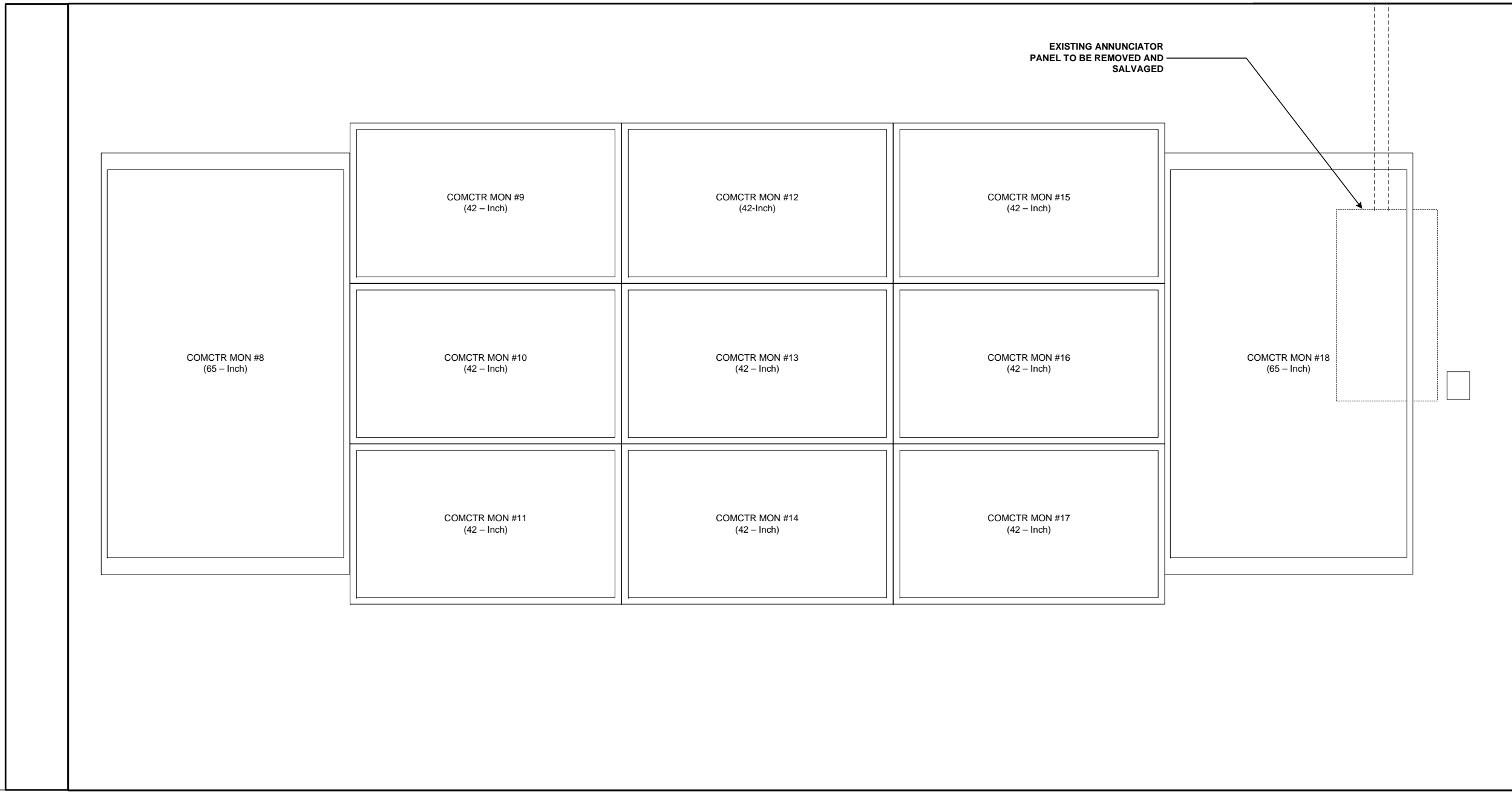
FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**D1 H.Q. PROPOSED  
VIDEO WALL DISTRIBUTION CONFIGURATION**

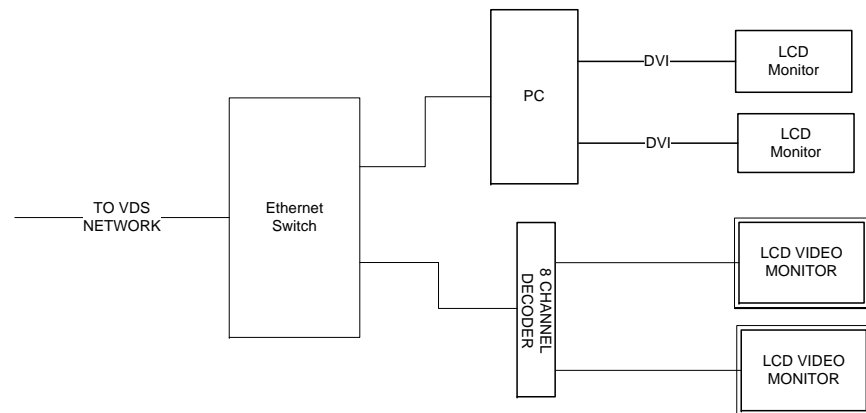
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	14
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_



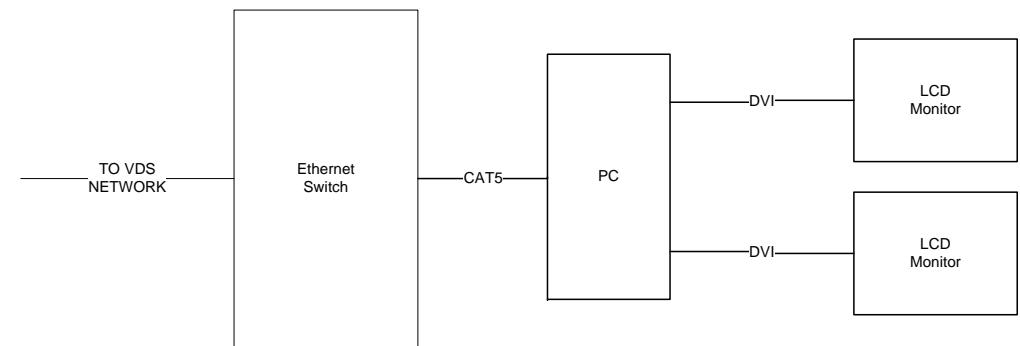
**NOTES:**  
 THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.  
 NOT ALL REQUIRED EQUIPMENT OR INTERCONNECTIONS ARE SHOWN FOR CLARITY.

FILE NAME	USER NAME	DESIGNED	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>D1 H.Q. COMMUNICATIONS CENTER VIDEO WALL DISPLAY</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE NONE	DRAWN	REVISED				2009-0871	COOK	25	15	
	PLOT DATE	CHECKED	REVISED				CONTRACT NO. <b>60134</b>				
	DATE 5/15/2013	REVISED	SCALE: _____				SHEET NO. ___ OF ___ SHEETS	STA. _____ TO STA. _____	ILLINOIS	FED. AID PROJECT	



CODEC/MONITOR  
CONFIGURATION AS  
REQUIRED

VIDEO DISTRIBUTION SYSTEM  
WORKSTATION TYPE A



VIDEO DISTRIBUTION SYSTEM  
WORKSTATION TYPE B

FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

VIDEO DISTRIBUTION SYSTEM  
VIDEO WORKSTATIONS

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	16
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

PROPOSED EQUIPMENT INCLUDING CABINET

EXISTING EQUIPMENT TO BE RECONFIGURED  
UNLESS OTHERWISE NOTED

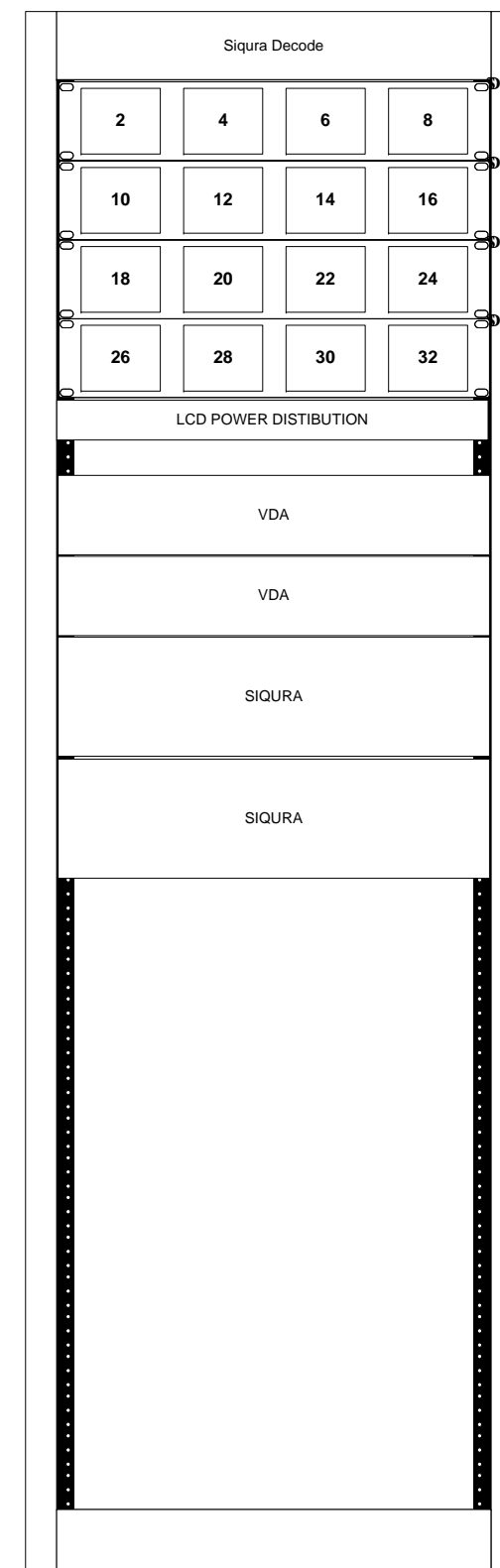
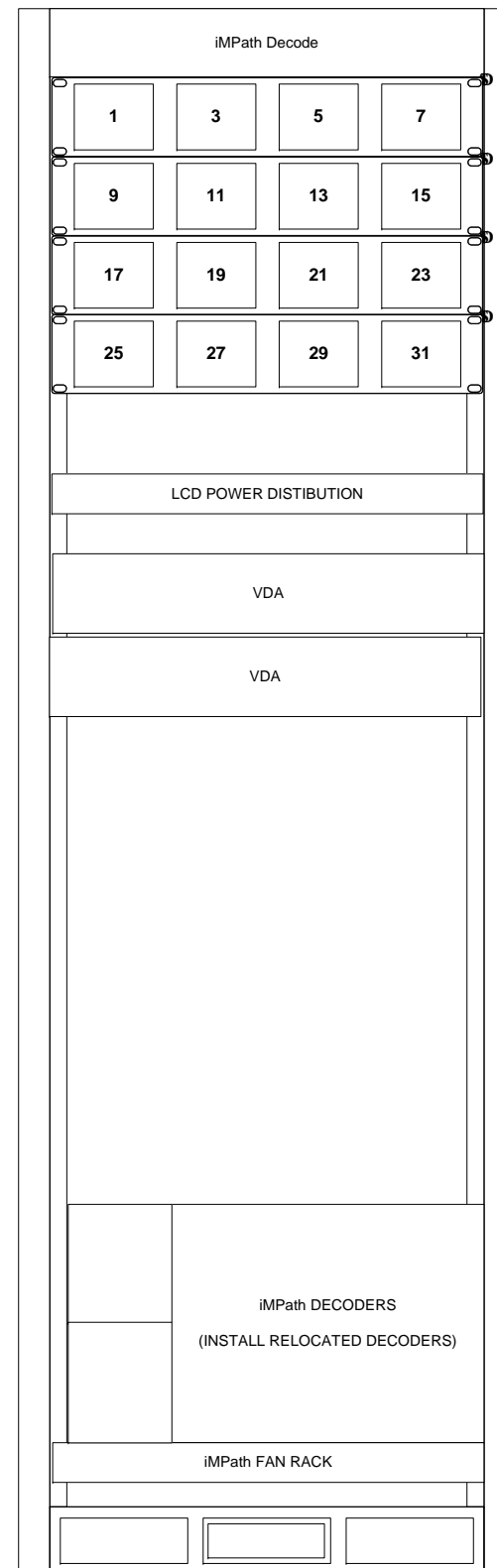
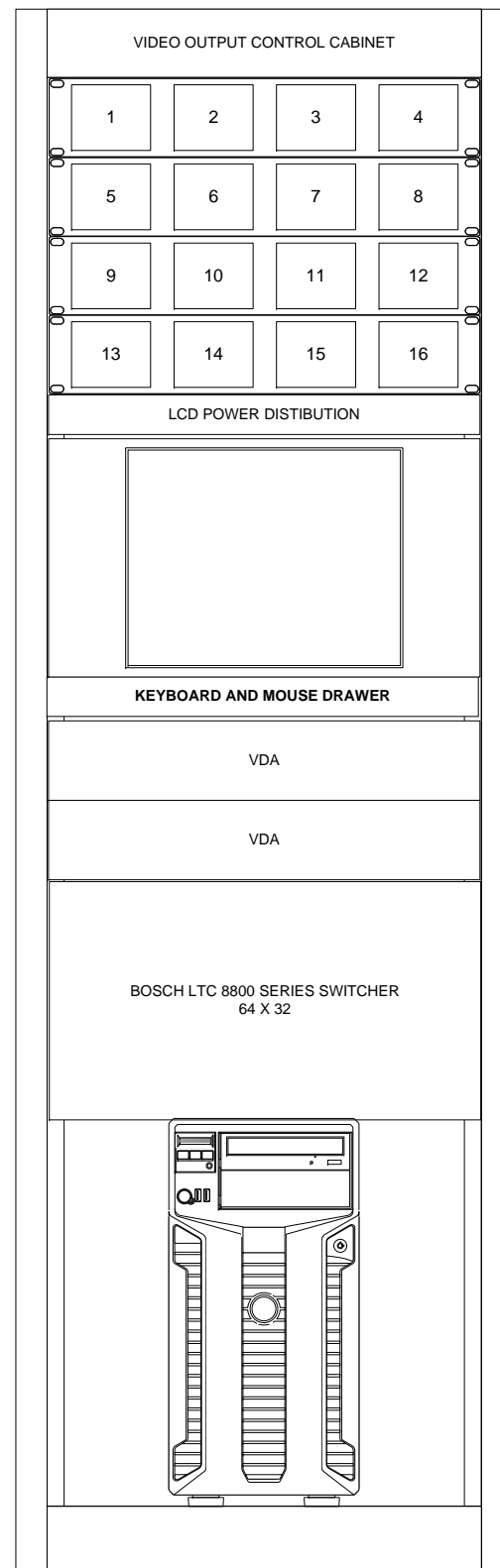
PROPOSED EQUIPMENT INCLUDING CABINET

4" LCD RACKS  
ONE DISPLAY PER  
SWITCHER OUTPUT

RACK MOUNT LCD MONITOR

RACK MOUNT COMPUTER  
KEYBOARD WITH SLIDING  
SHELF

PROPOSED BOSCH LTC 8800 SERIES  
SWITCHER



**NOTES:**

THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.

NOT ALL REQUIRED EQUIPMENT OR INTERCONNECTIONS ARE SHOWN FOR CLARITY.

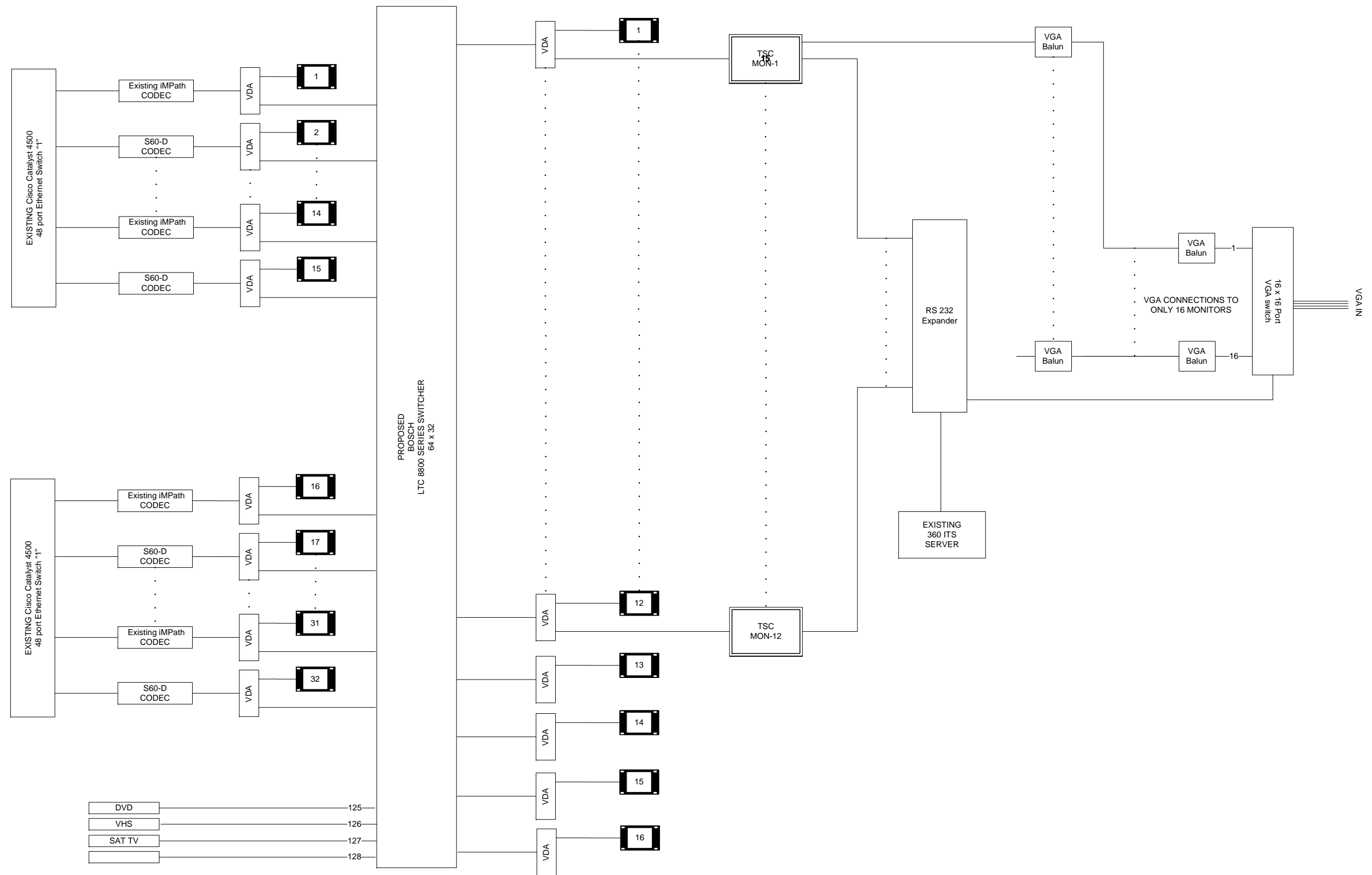
FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
		CHECKED	REVISED
		DATE 5/15/2013	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SYSTEMS CENTER EQUIPMENT ROOM  
PROPOSED VIDEO ENCODER / DECODER LINE UP

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	16A
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				



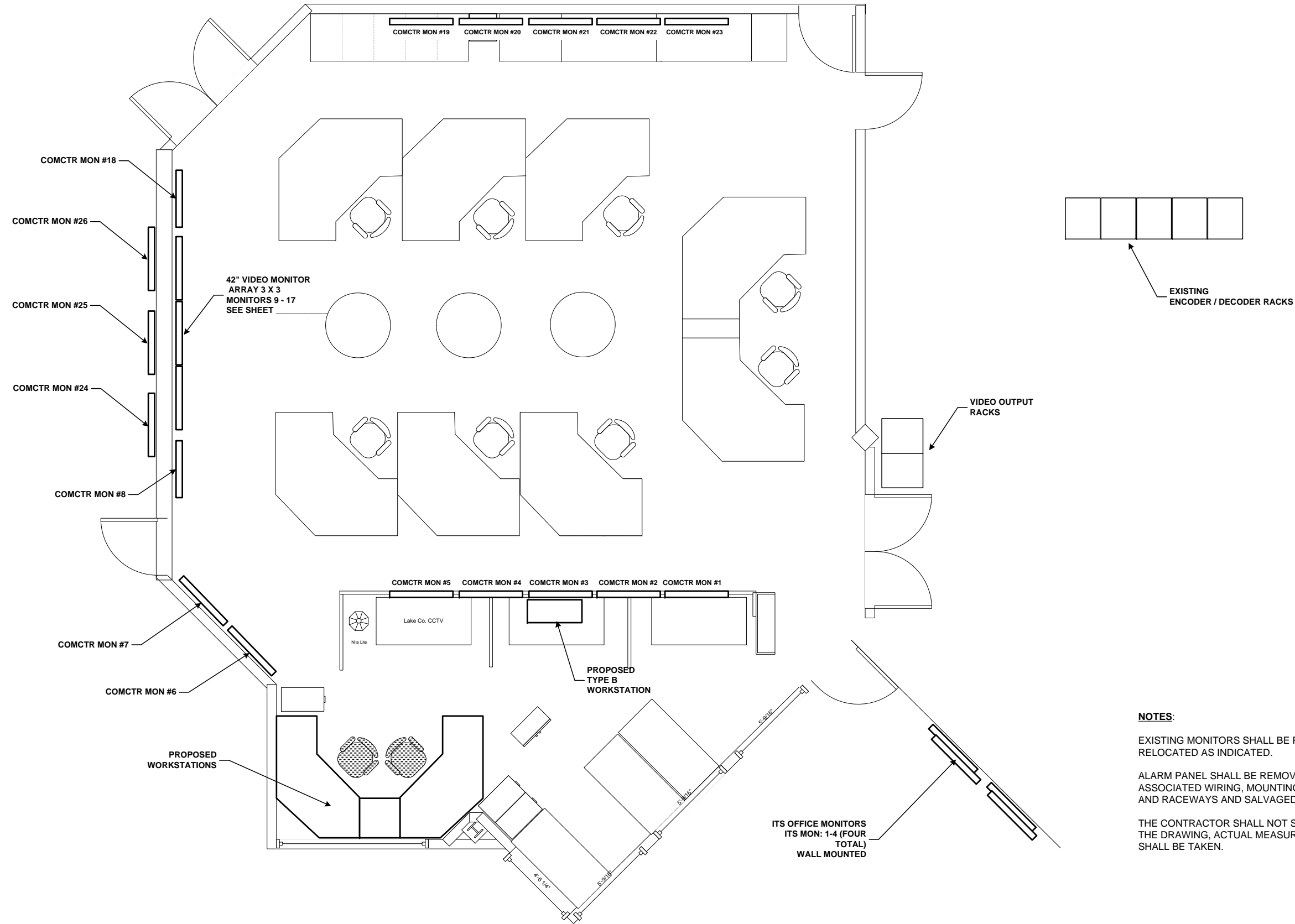
FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SYSTEMS CENTER PROPOSED  
VIDEO WALL DISTRIBUTION CONFIGURATION**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	16B
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				



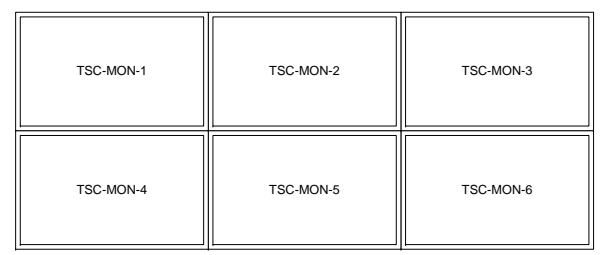
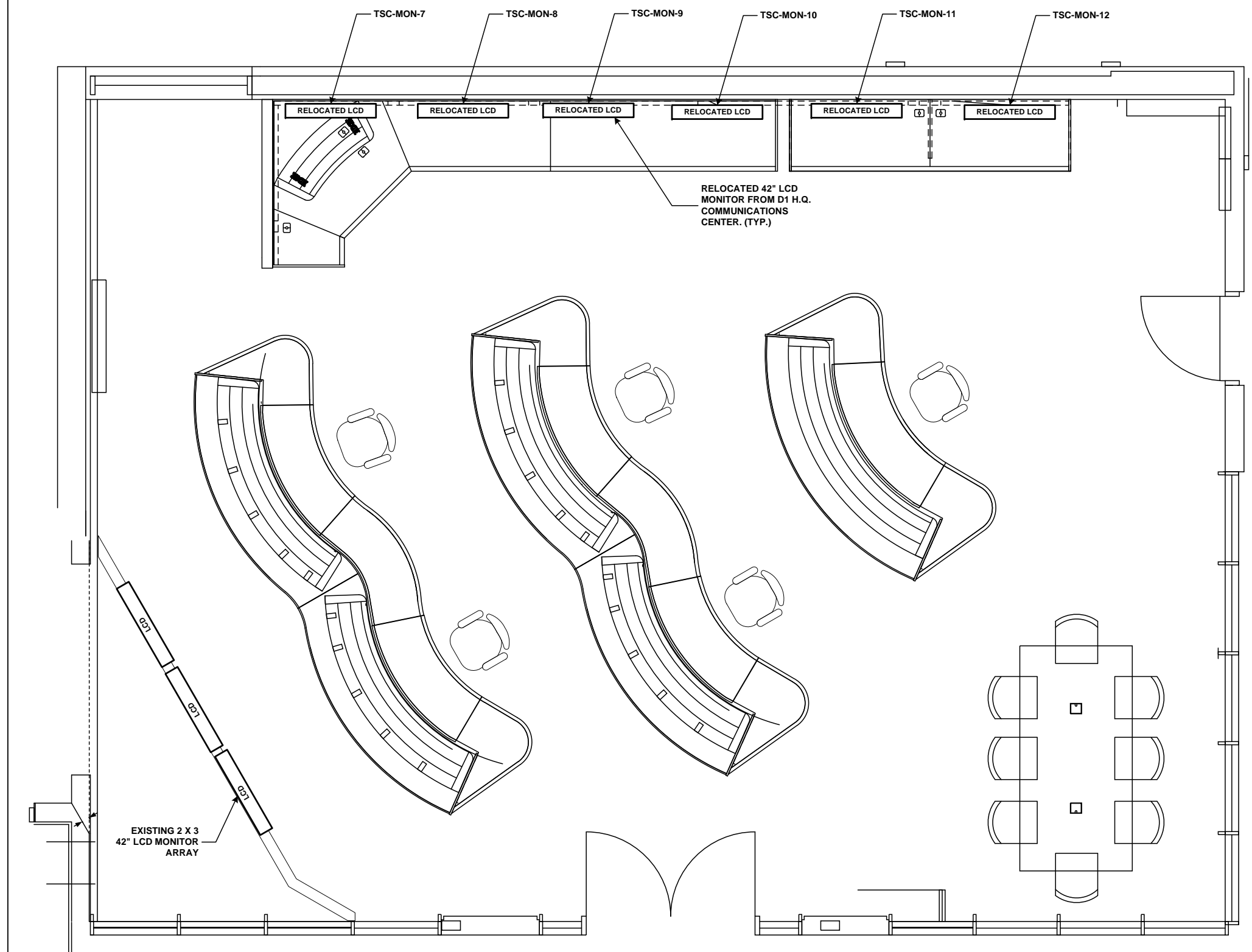
**NOTES:**

EXISTING MONITORS SHALL BE REMOVED AND RELOCATED AS INDICATED.

ALARM PANEL SHALL BE REMOVED WITH ASSOCIATED WIRING, MOUNTING HARDWARE AND RACEWAYS AND SALVAGED.

THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.

FILE NAME	USER NAME	DESIGNED	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>D1 H.Q. COMMUNICATIONS CENTER PROPOSED VIDEO DISTRIBUTION CONFIGURATION</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE NONE	CHECKED	REVISED			2009-0871	COOK	25	17	
	PLOT DATE	DATE 5/15/2013	REVISED			CONTRACT NO. 60134				
						SCALE: _____	SHEET NO. ___ OF ___ SHEETS	STA. _____ TO STA. _____	ILLINOIS FED. AID PROJECT	



EXISTING 2 X 3  
42" LCD VIDEO MONITOR ARRAY

**NOTES:**  
THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.  
NOT ALL REQUIRED EQUIPMENT OR INTERCONNECTIONS ARE SHOWN FOR CLARITY.

FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

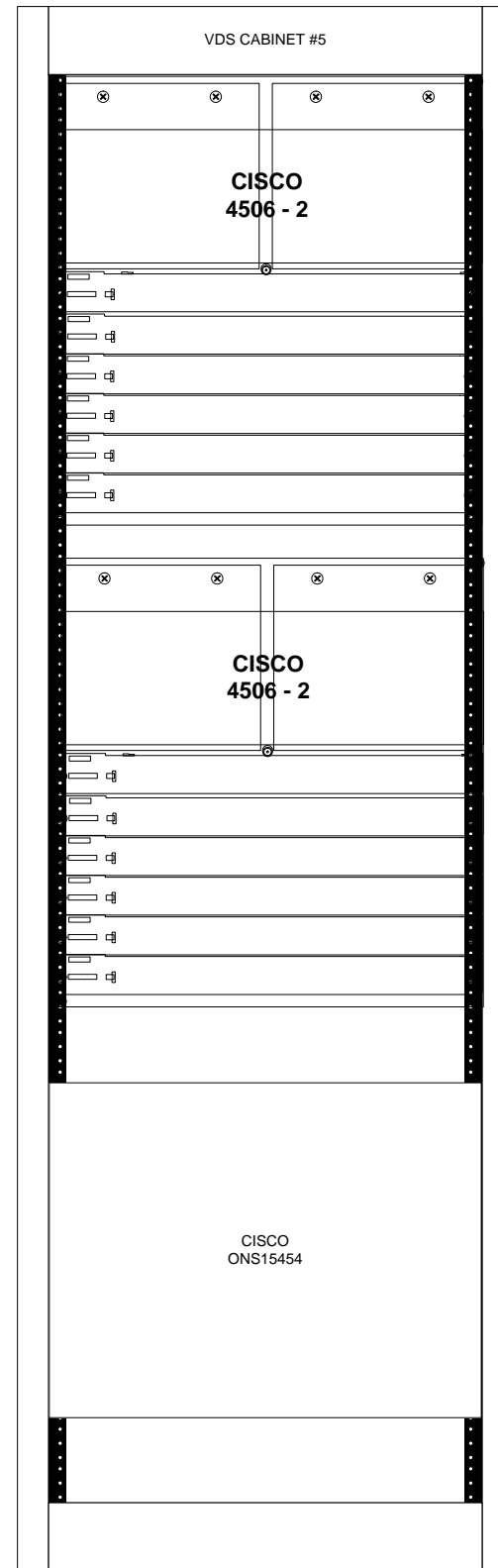
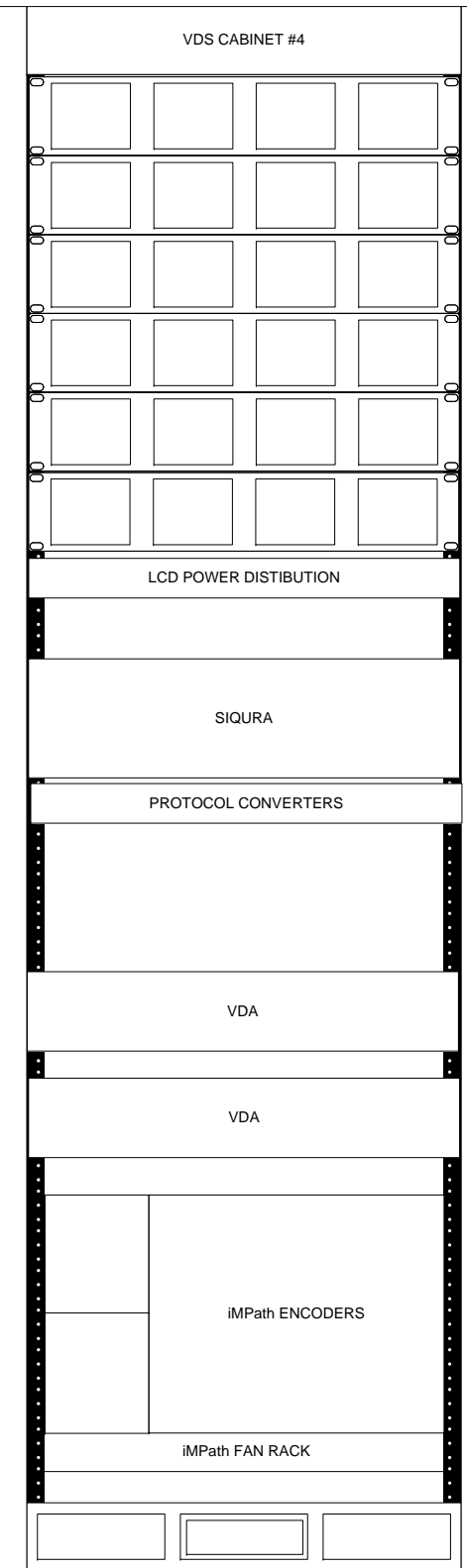
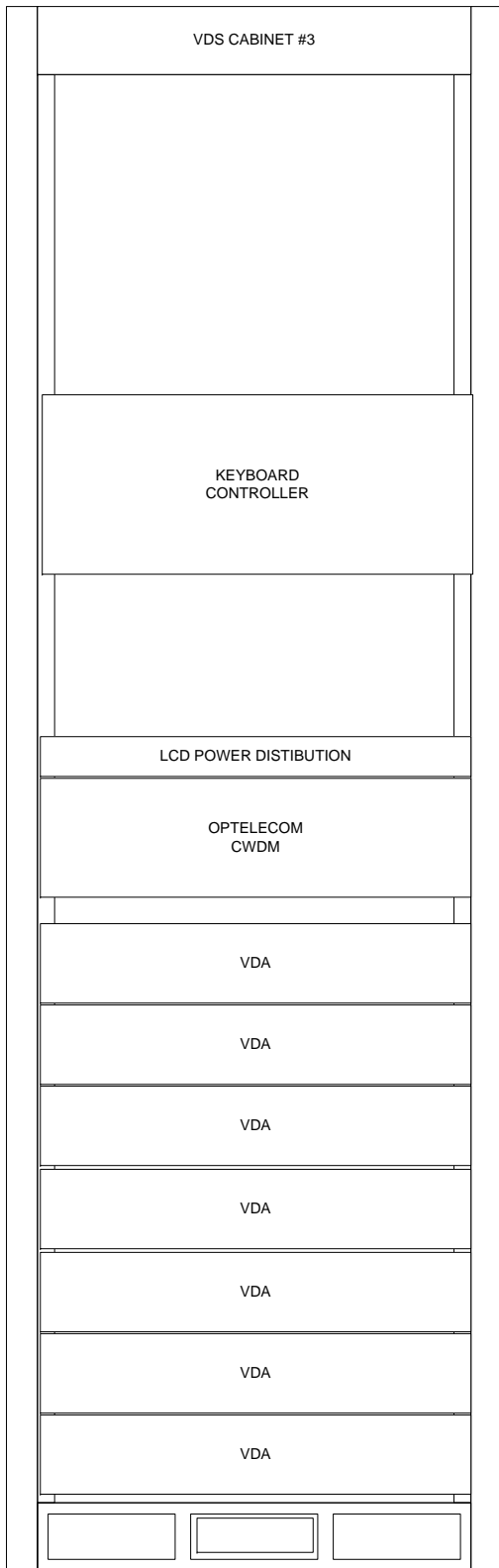
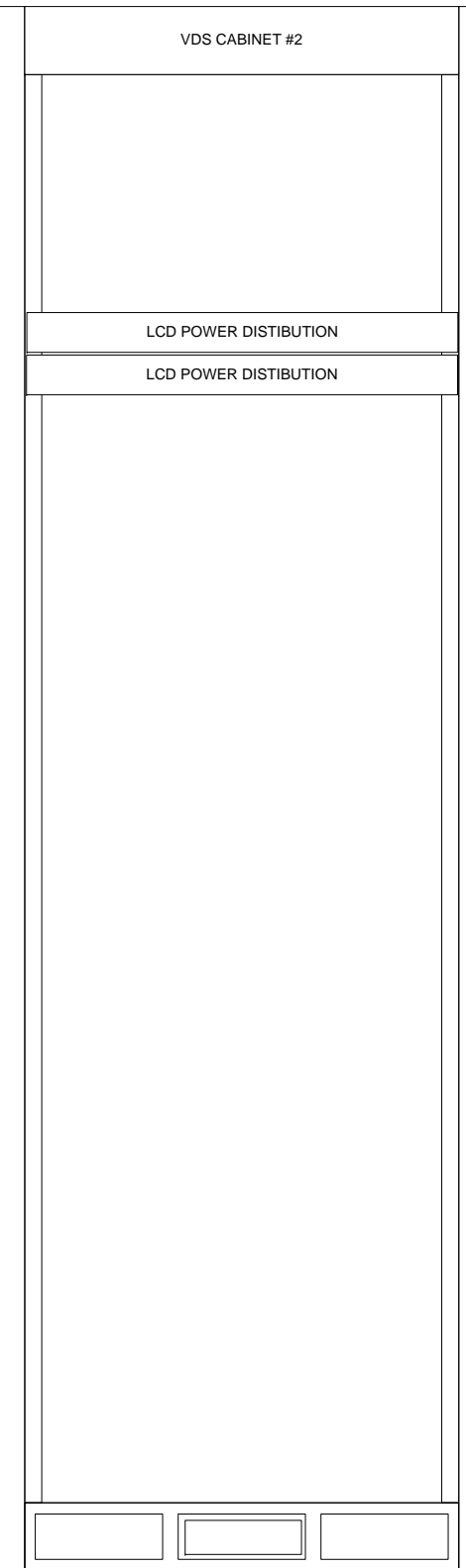
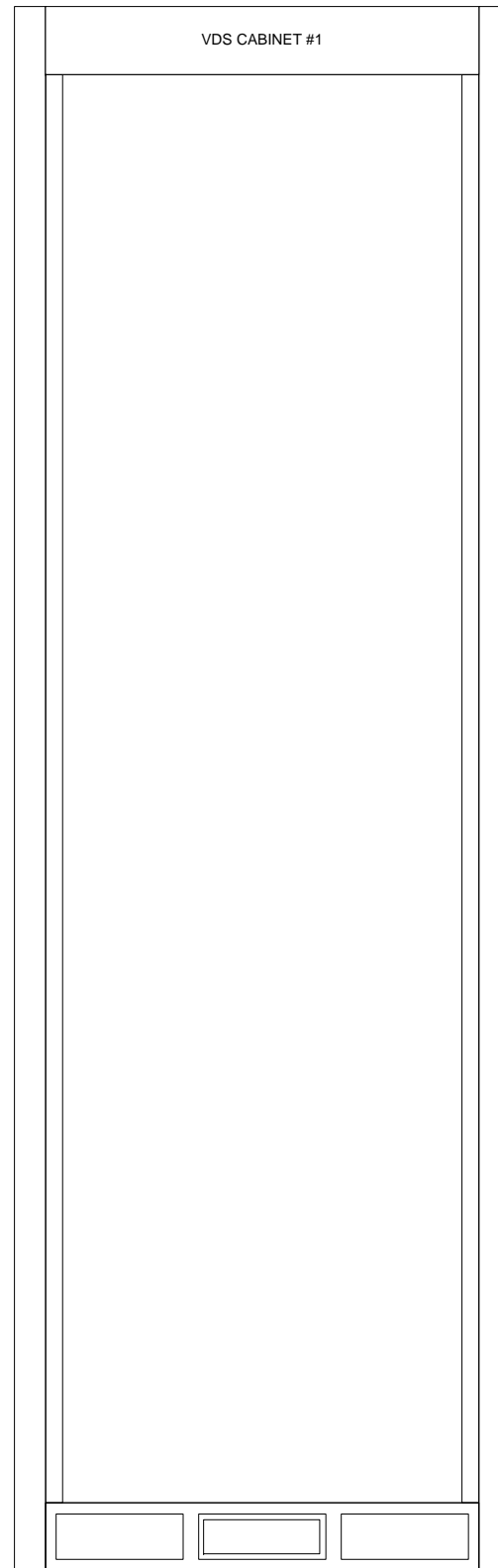
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**D1 TRAFFIC SYSTEMS CENTER  
PROPOSED CONTROL ROOM**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	18
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_





FILE NAME	USER NAME	DESIGNED	REVISED
	DRAWN	REVISED	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

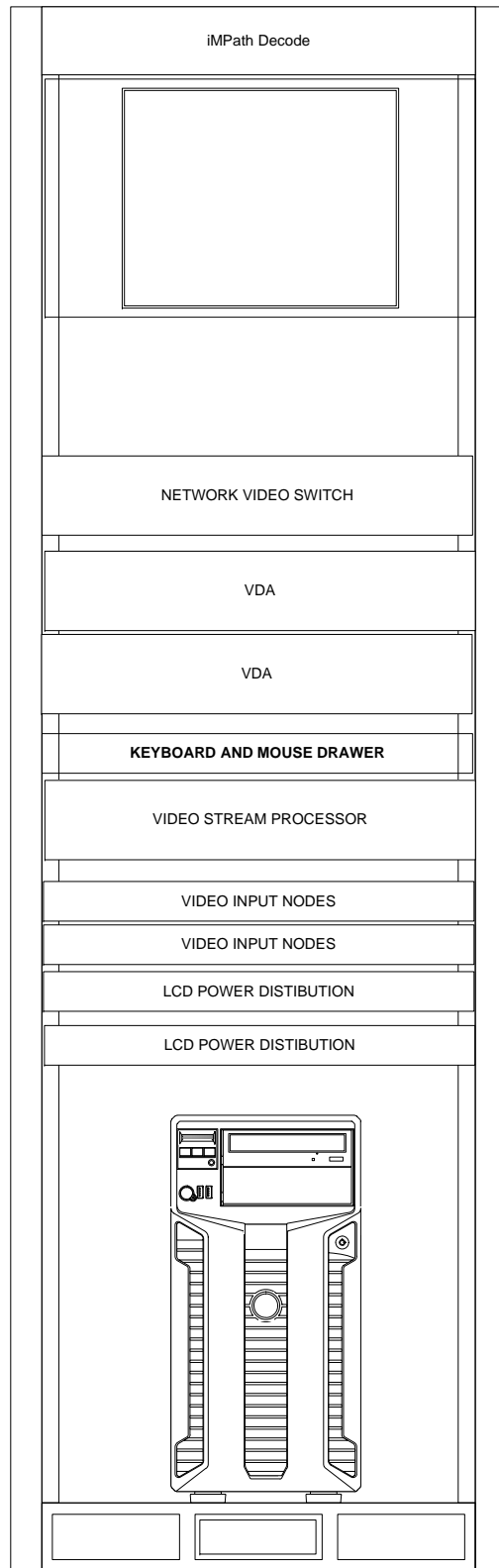
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SYSTEMS CENTER EQUIPMENT ROOM  
EXISTING VIDEO ENCODER / DECODER LINE UP

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	19
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

PROPOSED EQUIPMENT INCLUDING CABINET



RACK MOUNT LCD MONITOR

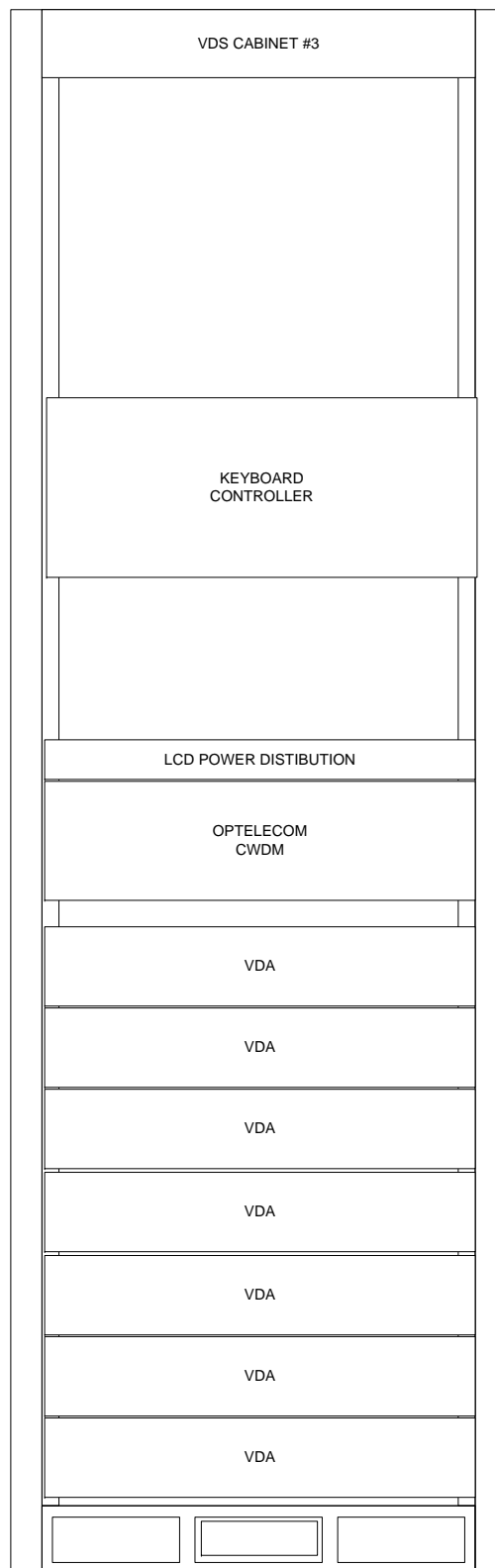
**NOTES:**

THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.

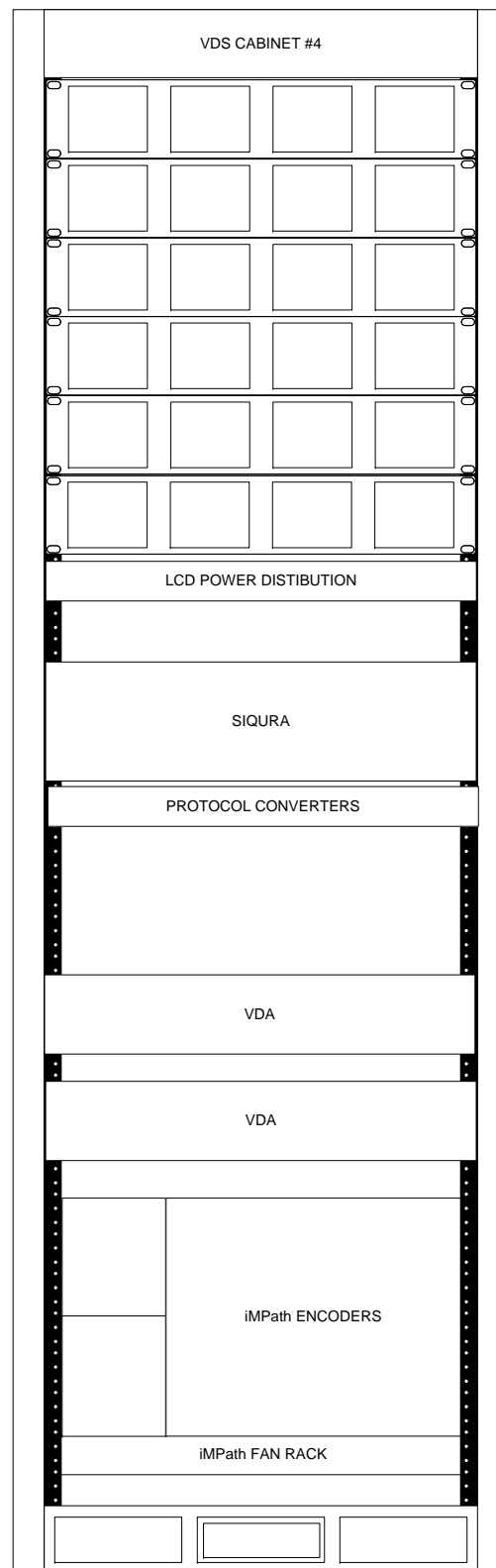
NOT ALL REQUIRED EQUIPMENT OR INTERCONNECTIONS ARE SHOWN FOR CLARITY.

VIDEO WORKSTATION

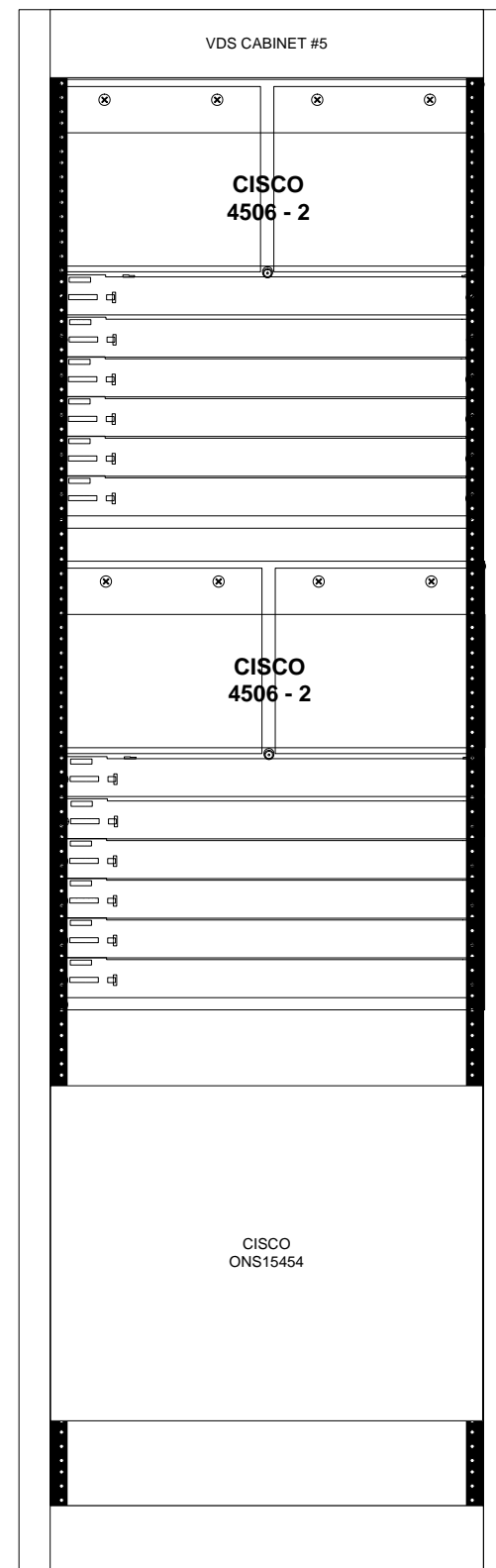
EXISTING EQUIPMENT



EXISTING EQUIPMENT



EXISTING EQUIPMENT



FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

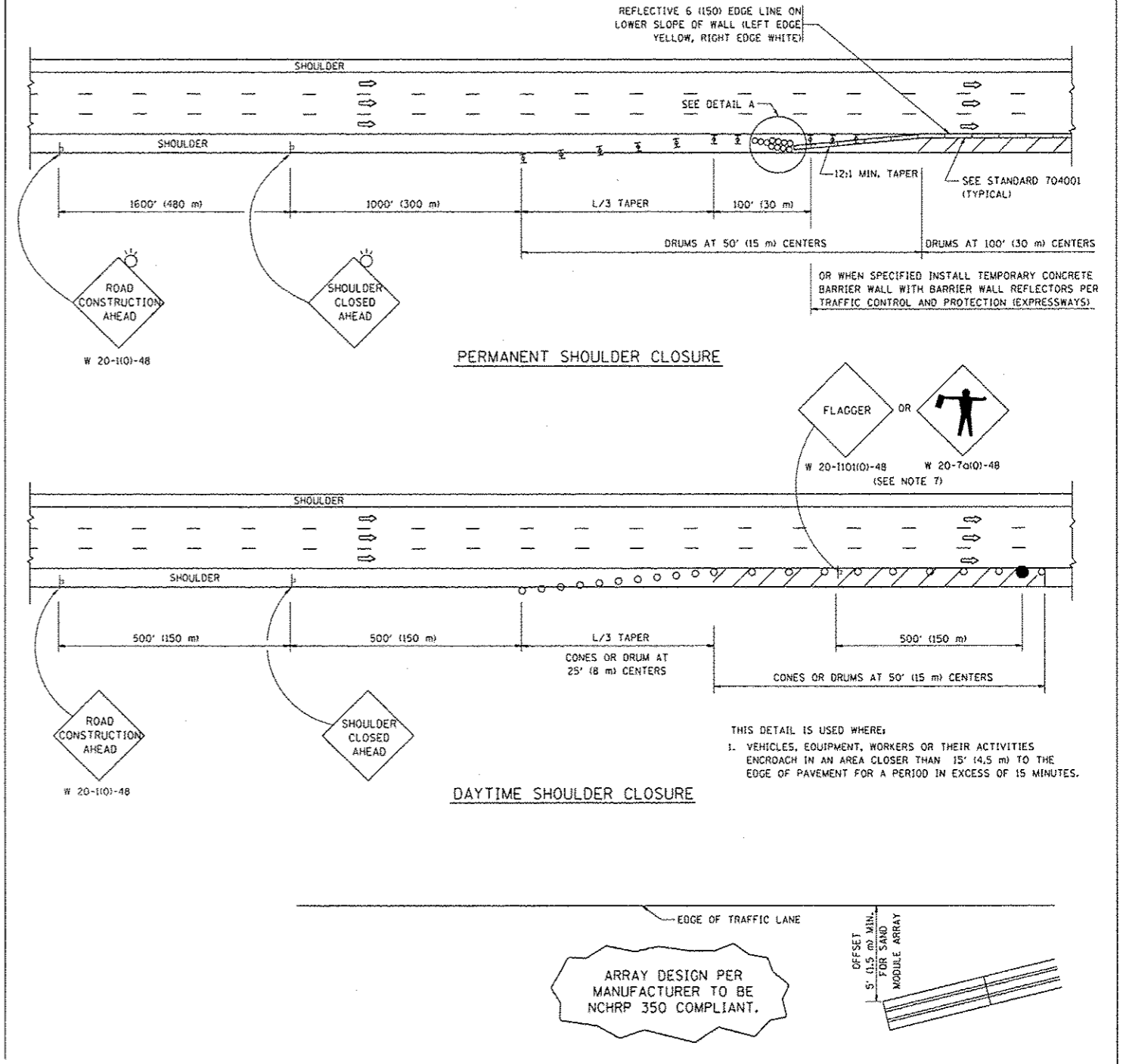
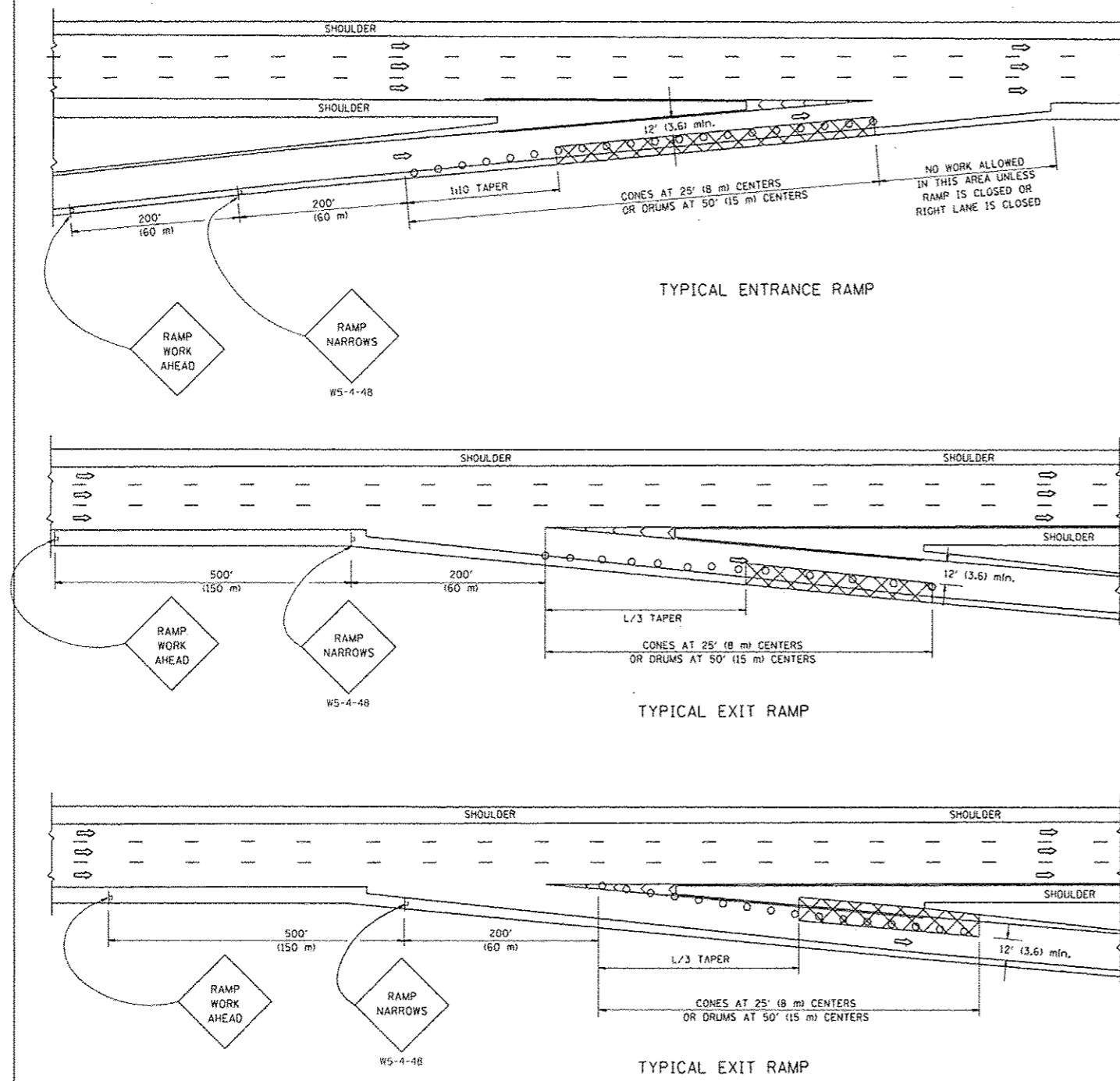
TRAFFIC SYSTEMS CENTER EQUIPMENT ROOM  
PROPOSED VIDEO ENCODER / DECODER LINE UP

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	20
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS



SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

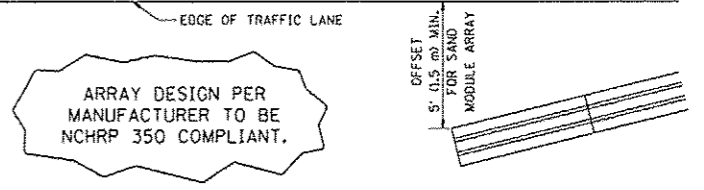
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC    ENGLISH
	$L = 0.65(W)(S)$ $L = (W)(S)$

W = WIDTH OF OFFSET IN FEET (METERS)  
S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

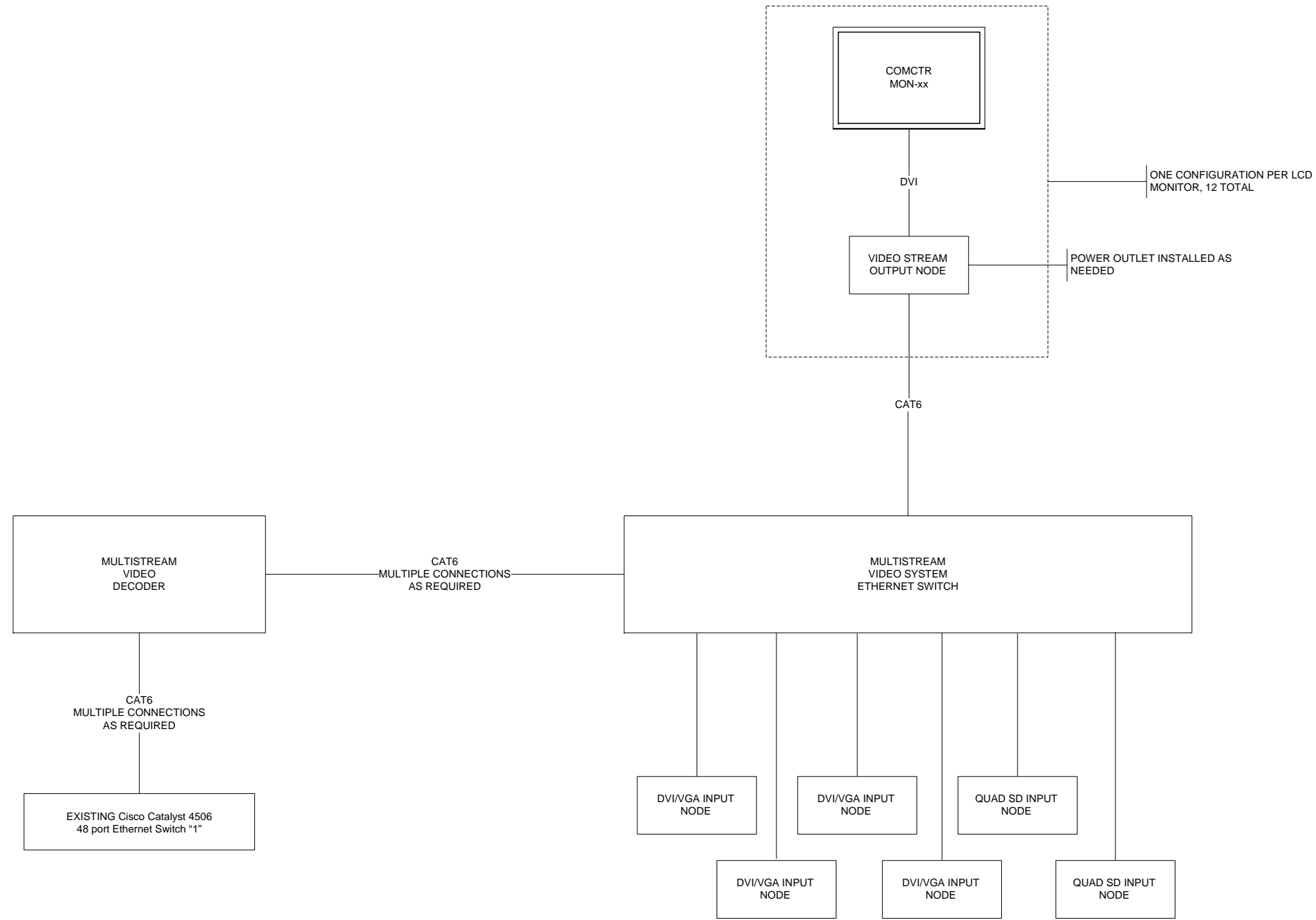
DETAIL "A"  
IMPACT ATTENUATOR, TEMPORARY  
(SEE NOTE 5)



THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME W:\data\22x34\col7.dgn	USER NAME lmgoo	DESIGNED -	REVISED 04-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES</b>	F.A. RTE. VAR 2009-087 I	SECTION TC-17	COUNTY COOK	TOTAL SHEETS 20	SHEET NO. 20A	
		DRAWN D.W.S.	REVISED J.A.F. 12-06		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 60134		
		CHECKED -	REVISED S.P.B. 01-07		FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT					
		DATE 11-96	REVISED S.P.B. 12-09								



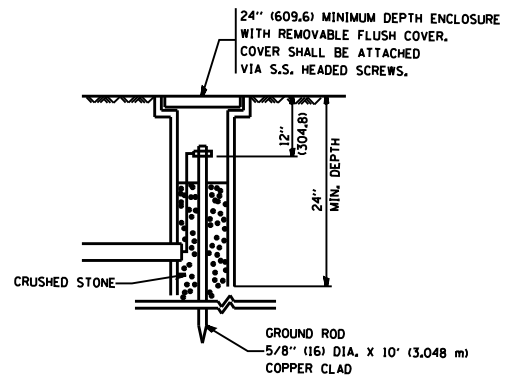
FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

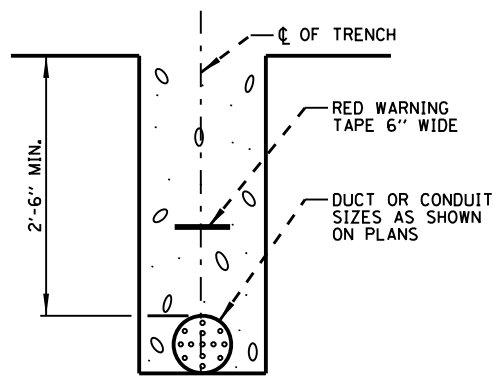
**TRAFFIC SYSTEMS CENTER PROPOSED  
VIDEO WALL DISTRIBUTION CONFIGURATION**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	25	21
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_



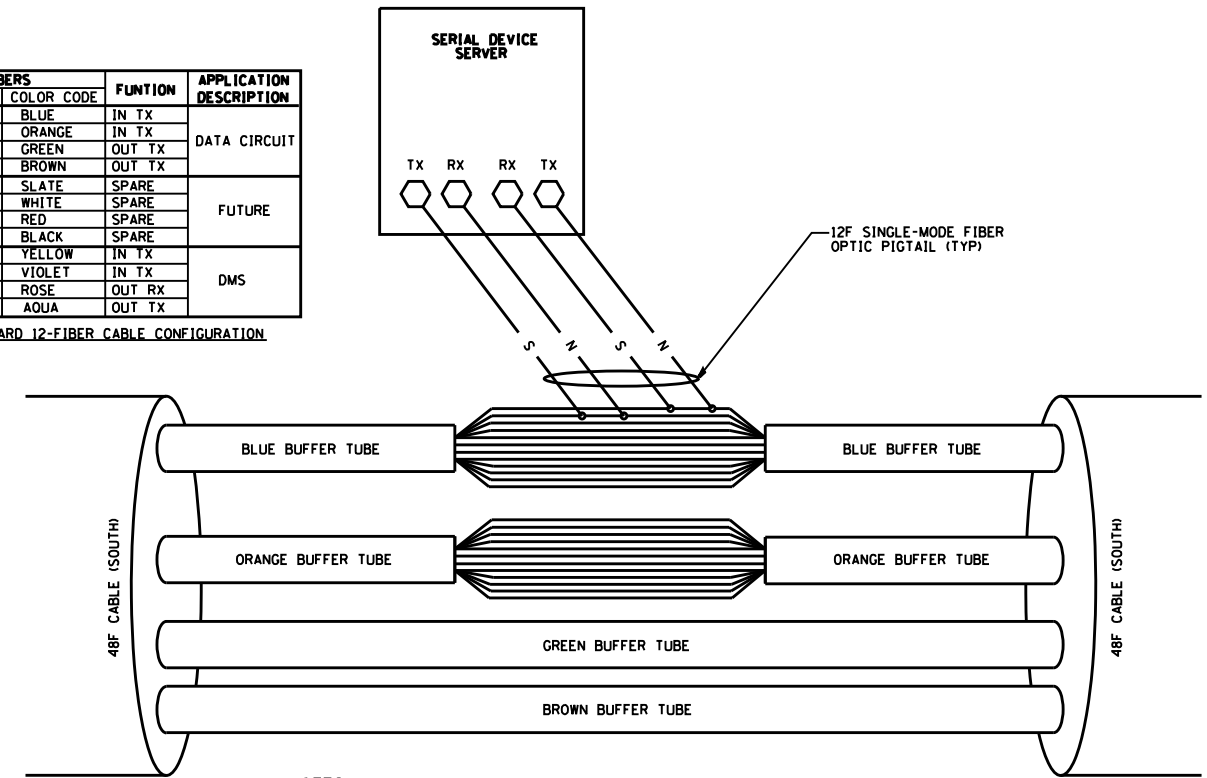
**GROUND WELL DETAIL**  
N.T.S.



**CONDUIT IN TRENCH DETAIL**  
N.T.S.

FIBER NO.	COLOR CODE	FUNCTION	APPLICATION DESCRIPTION
1	BLUE	IN TX	DATA CIRCUIT
2	ORANGE	IN TX	
3	GREEN	OUT TX	
4	BROWN	OUT TX	
5	SLATE	SPARE	FUTURE
6	WHITE	SPARE	
7	RED	SPARE	
8	BLACK	SPARE	DMS
9	YELLOW	IN TX	
10	VIOLET	IN TX	
11	ROSE	OUT RX	
12	AQUA	OUT TX	

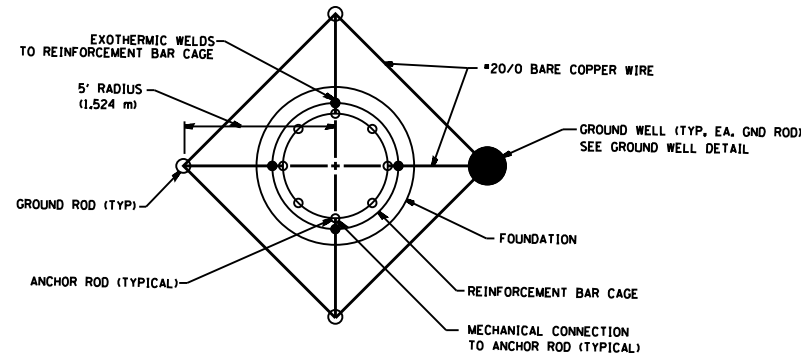
STANDARD 12-FIBER CABLE CONFIGURATION



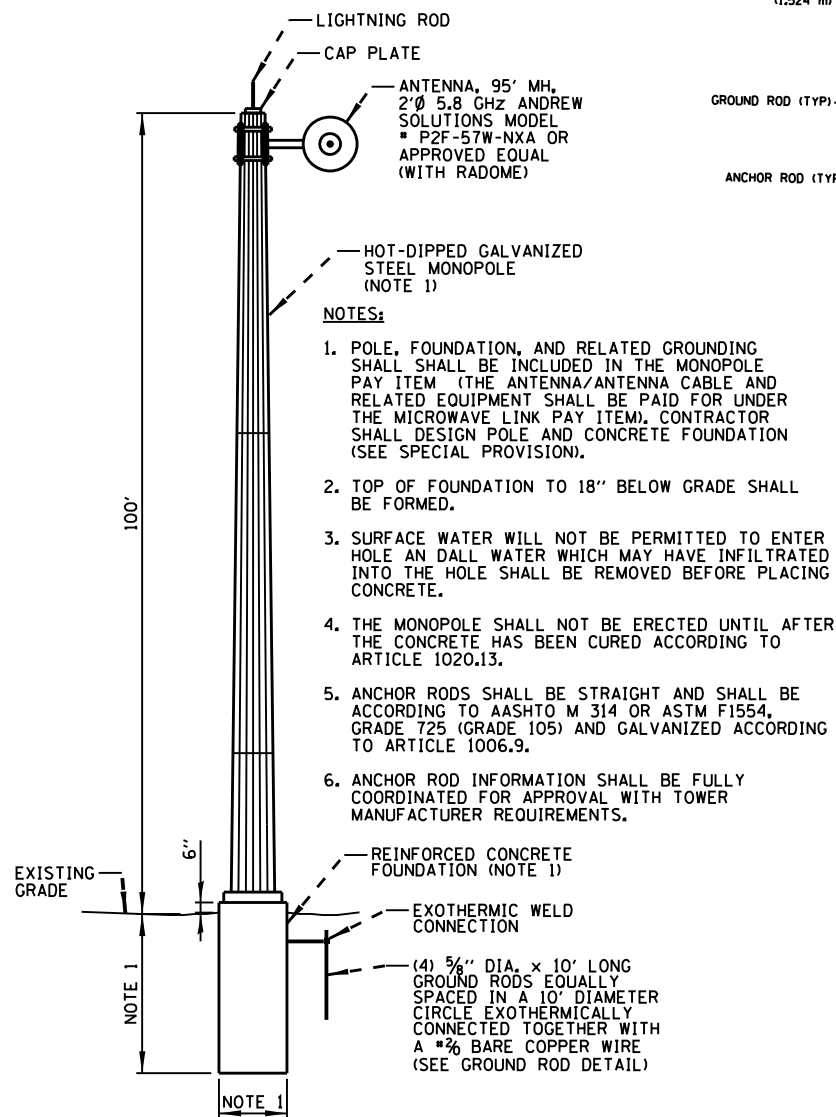
NOTES:

- CONTRACTOR SHALL VERIFY AND COORDINATE FIBERS TO BE SPLICED.

**FIBER OPTIC SPLICING DETAIL**  
N.T.S.



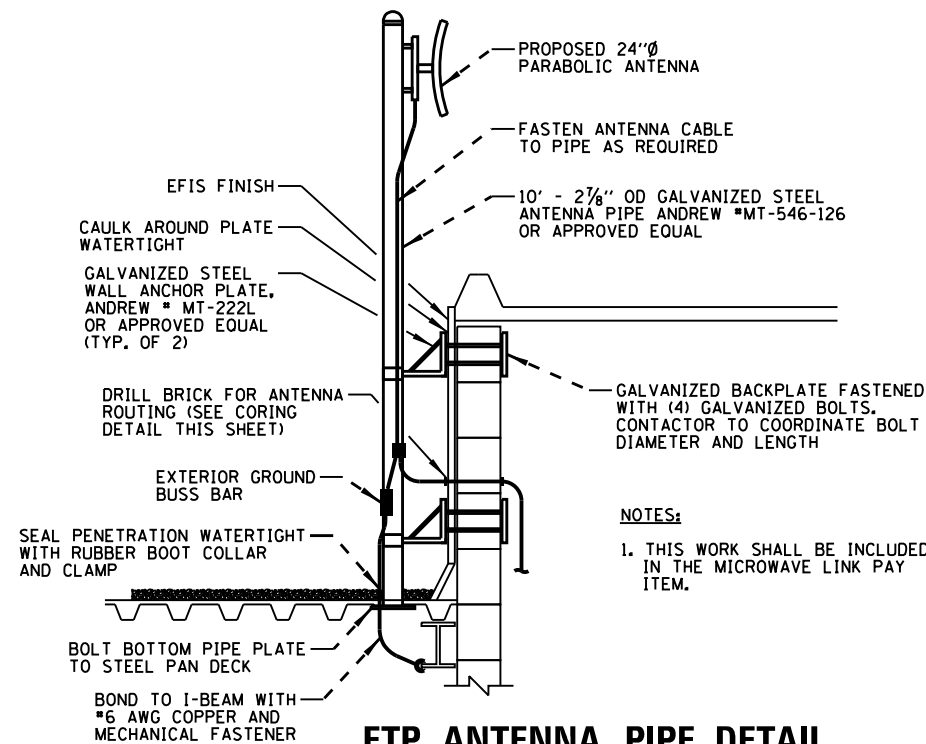
**GROUND ROD DETAIL**  
N.T.S.



NOTES:

- POLE, FOUNDATION, AND RELATED GROUNDING SHALL BE INCLUDED IN THE MONOPOLE PAY ITEM (THE ANTENNA/ANTENNA CABLE AND RELATED EQUIPMENT SHALL BE PAID FOR UNDER THE MICROWAVE LINK PAY ITEM). CONTRACTOR SHALL DESIGN POLE AND CONCRETE FOUNDATION (SEE SPECIAL PROVISION).
- TOP OF FOUNDATION TO 18" BELOW GRADE SHALL BE FORMED.
- SURFACE WATER WILL NOT BE PERMITTED TO ENTER HOLE AND ALL WATER WHICH MAY HAVE INFILTRATED INTO THE HOLE SHALL BE REMOVED BEFORE PLACING CONCRETE.
- THE MONOPOLE SHALL NOT BE ERECTED UNTIL AFTER THE CONCRETE HAS BEEN CURED ACCORDING TO ARTICLE 1020.13.
- ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO AASHTO M 314 OR ASTM F1554, GRADE 725 (GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.9.
- ANCHOR ROD INFORMATION SHALL BE FULLY COORDINATED FOR APPROVAL WITH TOWER MANUFACTURER REQUIREMENTS.

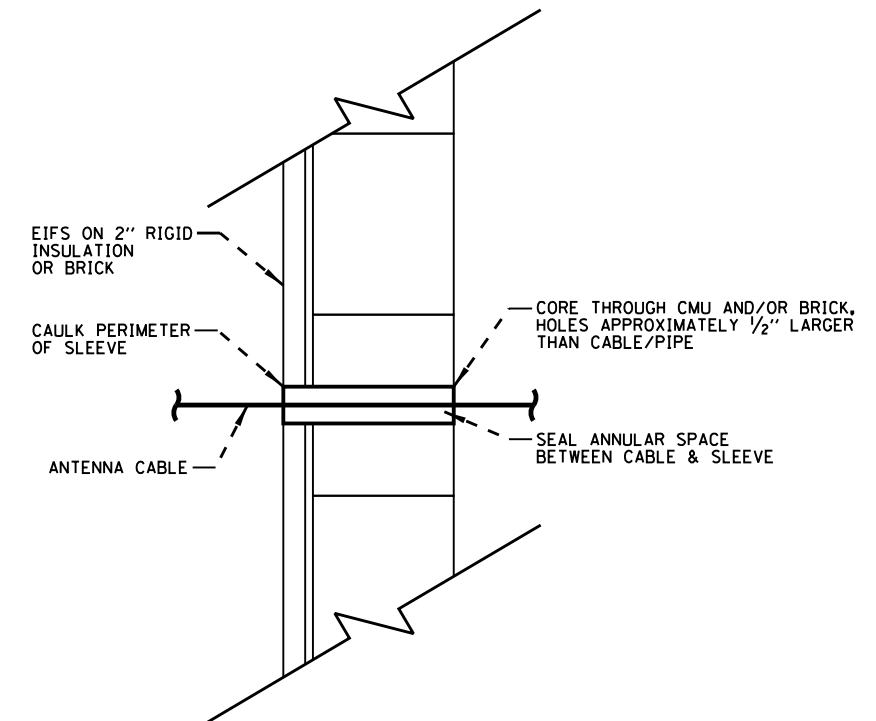
**MONOPOLE DETAIL**  
N.T.S.



NOTES:

- THIS WORK SHALL BE INCLUDED IN THE MICROWAVE LINK PAY ITEM.

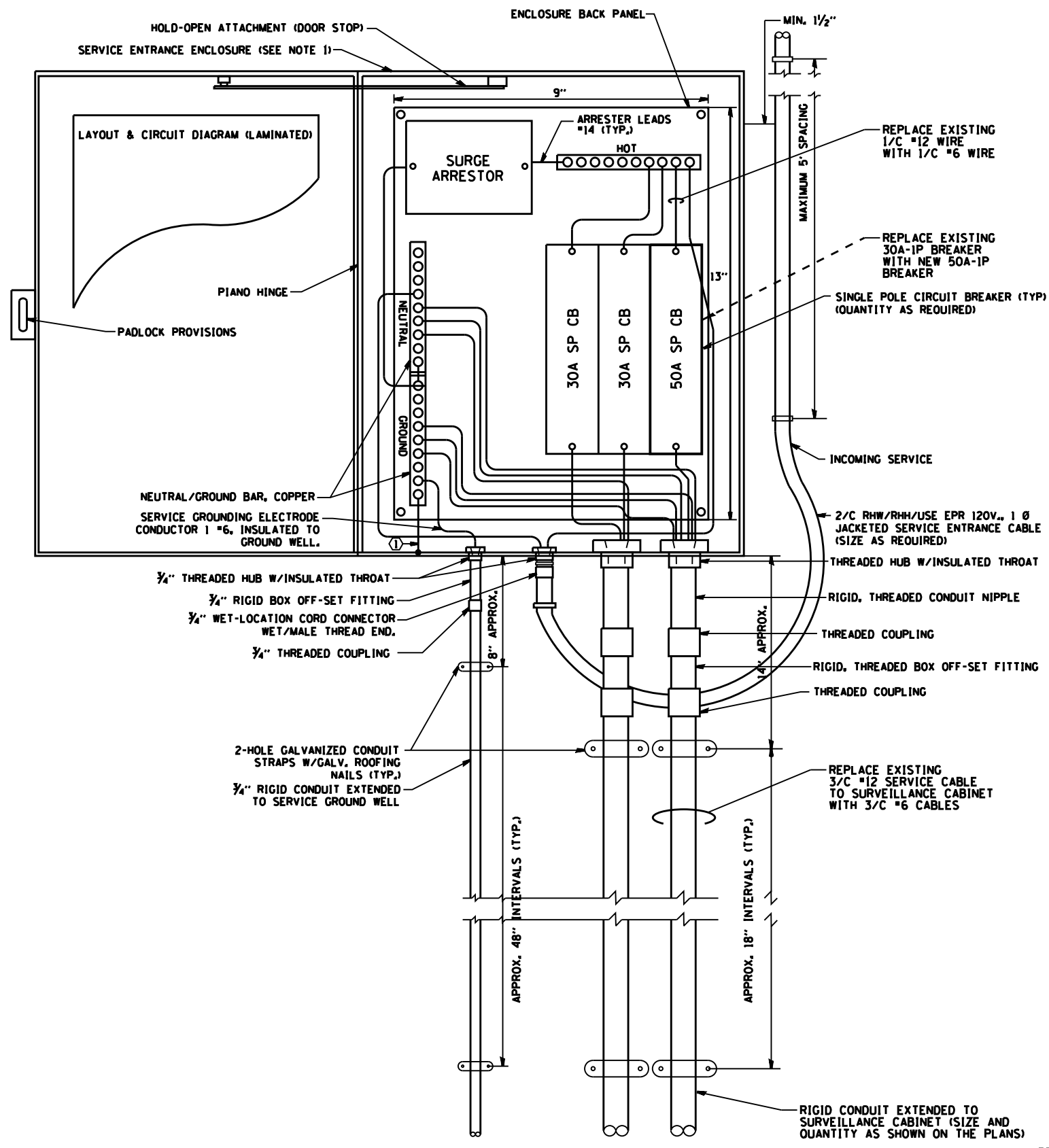
**ETP ANTENNA PIPE DETAIL**  
N.T.S.



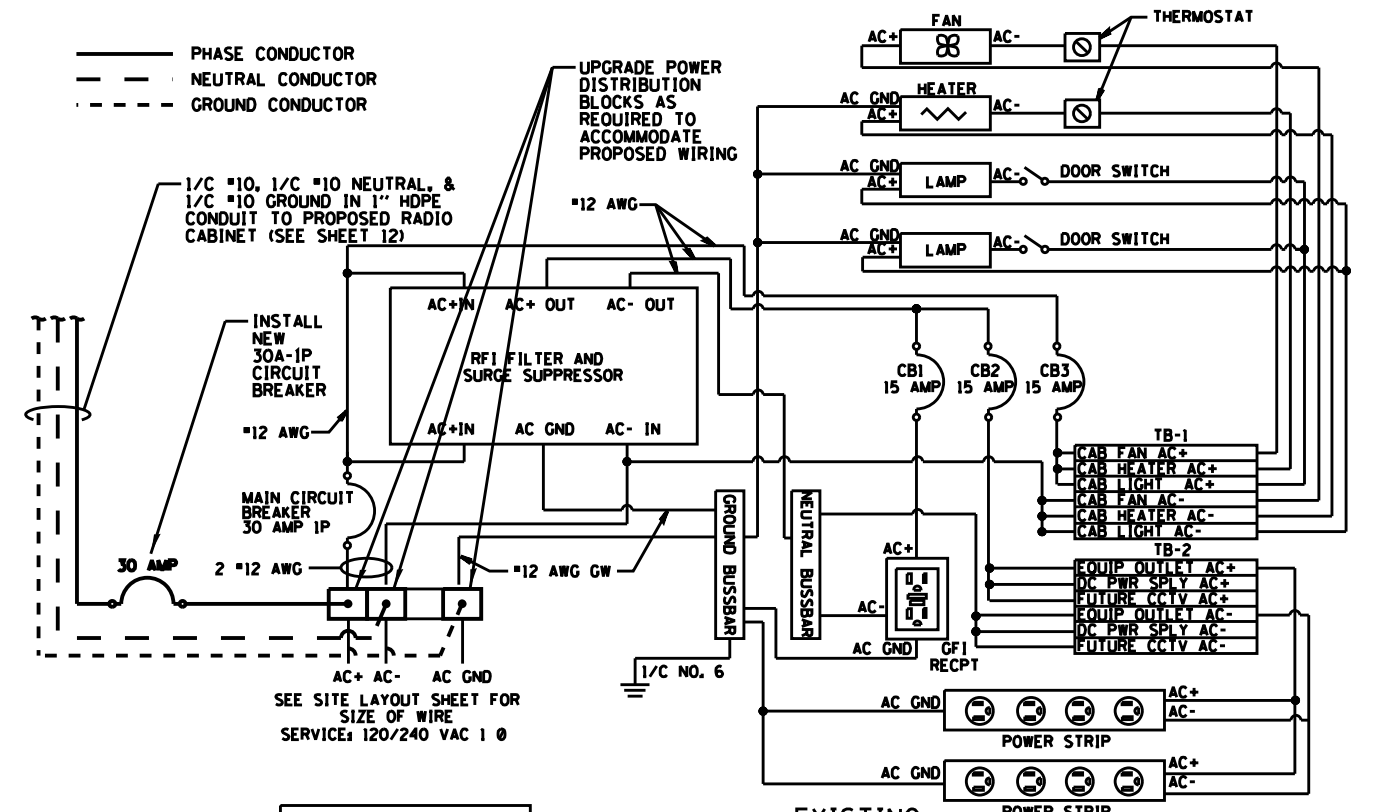
**CORING DETAIL**  
N.T.S.

FILE NAME: <b>01FILES</b>	USER NAME: <b>0USERS</b>	DESIGNED: <b>R.T.</b>	REVISED: -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ITS CENTER-TO-CENTER INTEGRATION PROJECT</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN: <b>G.M.</b>	REVISED: -		<b>DETAILS (1 OF 3)</b>				2009-0871	COOK	25	22	
		CHECKED: <b>R.T.</b>	REVISED: -										
		DATE: <b>12/11/2013</b>	REVISED: -					SCALE: <b>N.T.S.</b>	SHEET NO. <b>1</b> OF <b>3</b> SHEETS	STA. <b>1</b> TO STA. <b>1</b>	CONTRACT NO. <b>60134</b>		

ILLINOIS FED. AID PROJECT



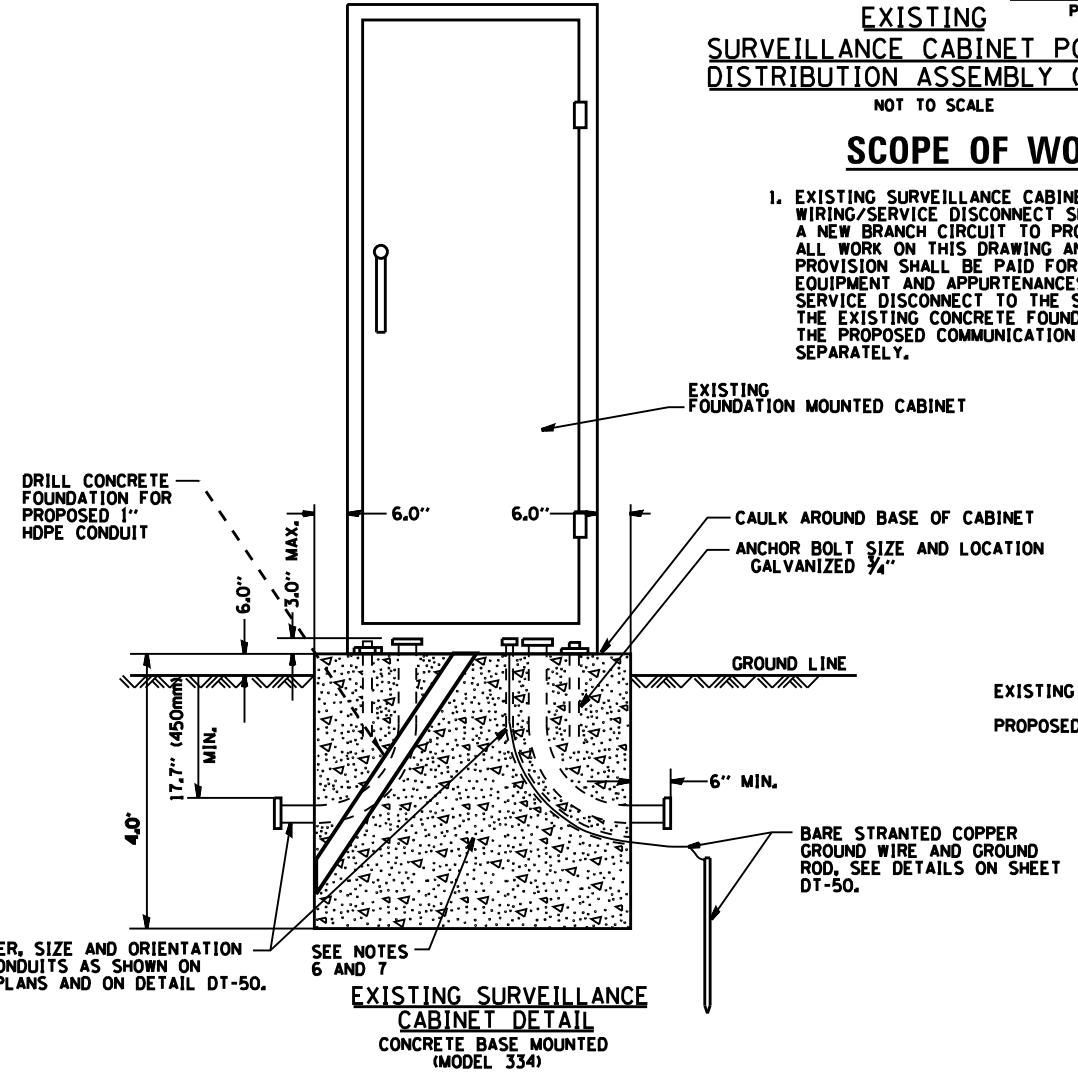
**EXISTING 120V ELECTRIC SERVICE TO SURVEILLANCE CABINET**



**EXISTING SURVEILLANCE CABINET POWER DISTRIBUTION ASSEMBLY (PDA)**  
NOT TO SCALE

**SCOPE OF WORK**

- EXISTING SURVEILLANCE CABINET AND ASSOCIATED SERVICE WIRING/SERVICE DISCONNECT SHALL BE MODIFIED TO PROVIDE A NEW BRANCH CIRCUIT TO PROPOSED COMMUNICATIONS CABINET. ALL WORK ON THIS DRAWING AND IN THE RELATED SPECIAL PROVISION SHALL BE PAID FOR UNDER "MODIFY EXISTING CABINET EQUIPMENT AND APPURTENANCES", INCLUDING ALL WIRING FROM THE SERVICE DISCONNECT TO THE SURVEILLANCE CABINET, DRILLING THE EXISTING CONCRETE FOUNDATION AND CONDUIT/WIRING TO THE PROPOSED COMMUNICATION CABINET WILL BE PAID FOR SEPARATELY.



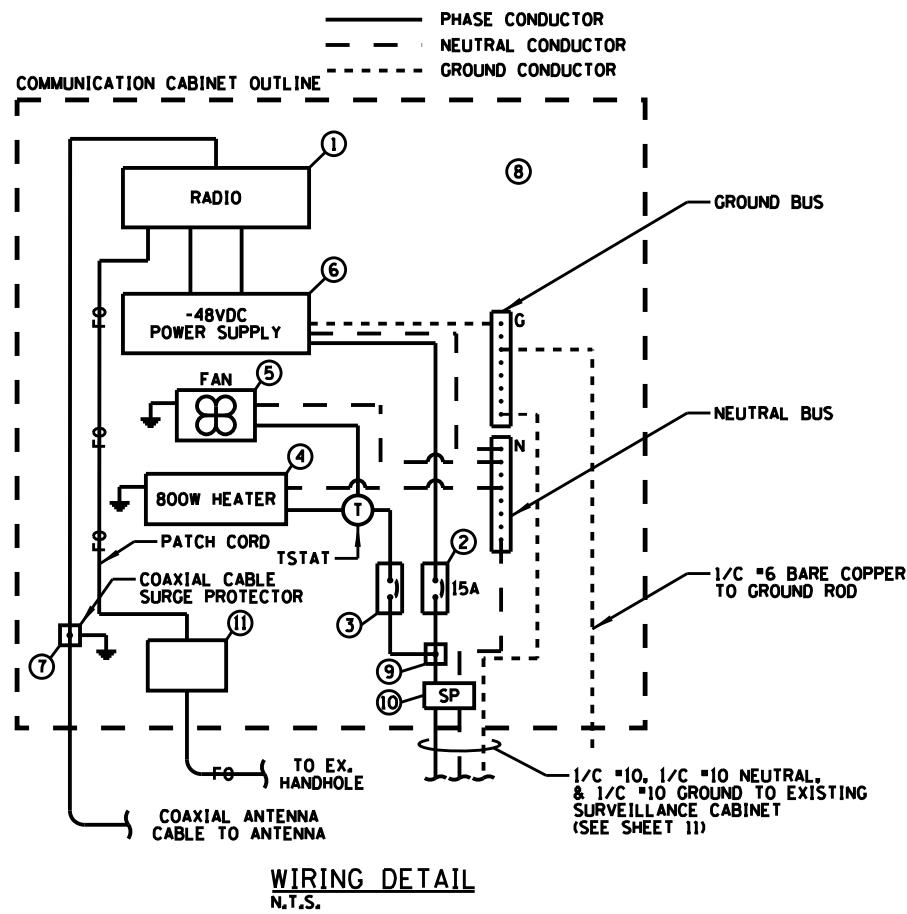
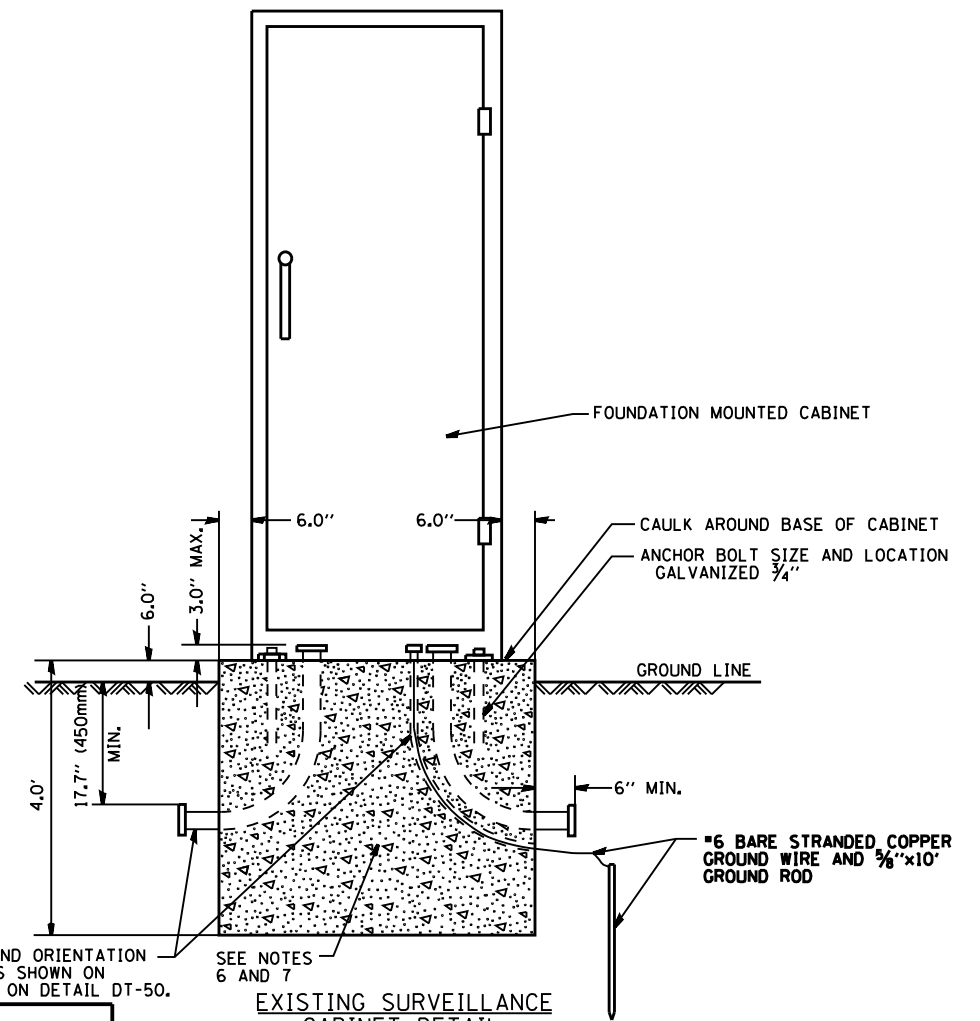
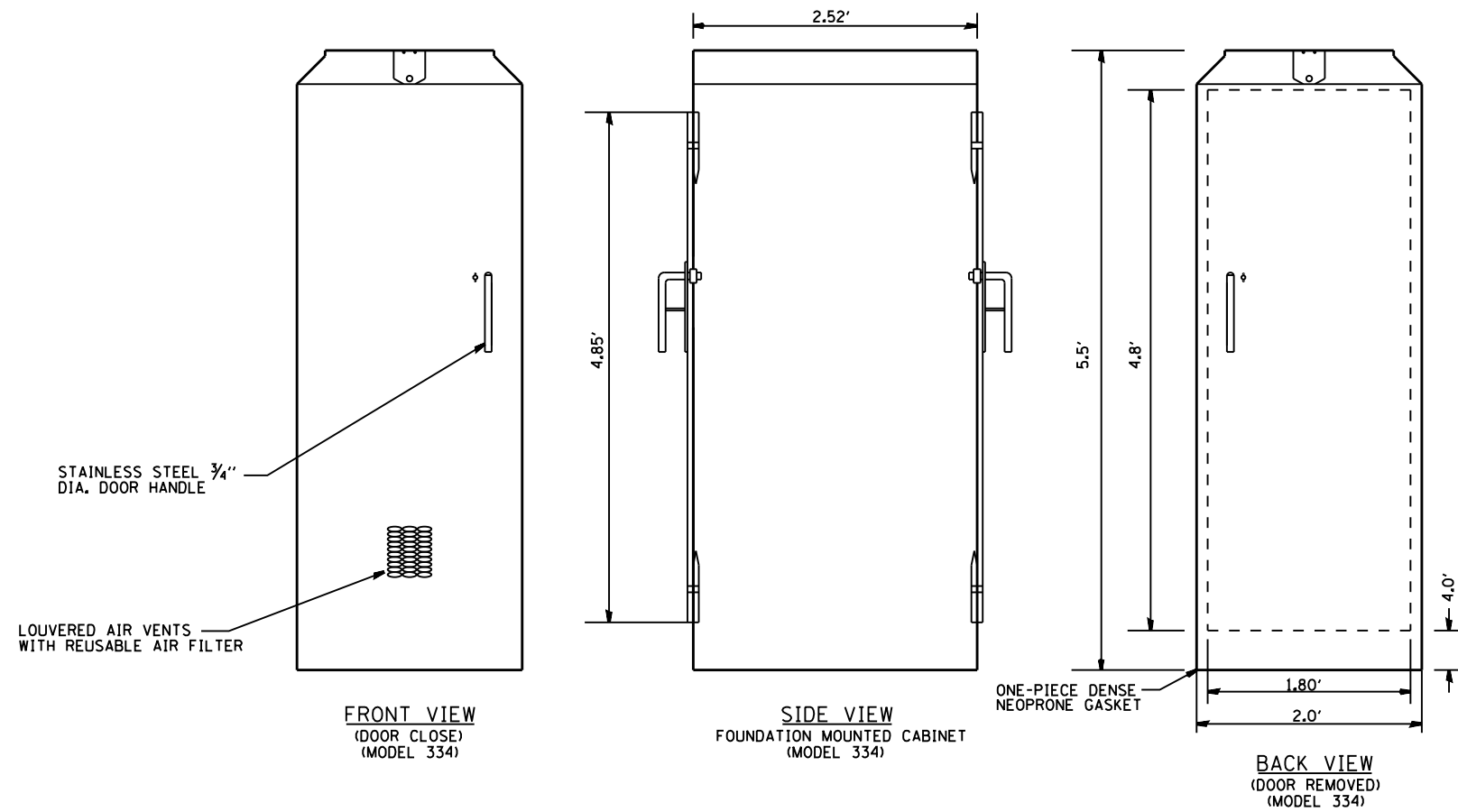
**EXISTING SURVEILLANCE CABINET CONCRETE BASE MOUNTED (MODEL 534)**

FILE NAME	USER NAME	DESIGNED	REVISED
sf FILEs	*USERS	R.T.	-
		DRAWN	REVISED
		G.M.	-
		CHECKED	REVISED
		R.T.	-
		DATE	REVISED
		12/11/2013	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CENTER-TO-CENTER INTEGRATION PROJECT		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DETAILS (2 OF 3)			2009-0871	COOK	25	23
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60134			

ILLINOIS FED. AID PROJECT
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ITEM	SPECIFICATION	MFG./MODEL NO. OR APPROVED EQUAL
① MICROWAVE RADIO	SEE "MICROWAVE SYSTEMS" SPECIFICATION	N/A
② POWER SUPPLY CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 22KAIC	SIEMENS NO. ED41B015
③ CABINET HEATER/FAN CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 22KAIC	SIEMENS NO. ED41B015
④ CABINET HEATER	800W - 120V WITH INTEGRAL THERMOSTAT	HOFFMAN NO. DAH8001B
⑤ CABINET FAN	THERMOSTAT CONTROLLED 450 CFM MIN. COOLING CABINET FAN (WITH FAN FILTER)	HOFFMAN NO. A10AXFN
⑥ POWER SUPPLY	120V INPUT TO -48VDC OUTPUT SEE "MICROWAVE SYSTEMS" SPECIFICATION	N/A
⑦ COAXIAL CABLE SURGE PROTECTOR	SEE "MICROWAVE SYSTEMS" SPECIFICATION	N/A
⑧ BACK PANEL	1/2" THICK SOLID PHENOLIC LAMINATE	ARBORON
⑨ POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQUIRED	MARATHON
⑩ SURGE PROTECTOR	120VAC W/ 340V-20KA SERIES CHOKE & 5ns RESPONSE (SEE "COMM. CABINET & EQUIPMENT")	N/A
⑪ F.O. PATCH PANEL	SEE "FIBER OPTIC WORK" SPECIFICATION	N/A

EXISTING SURVEILLANCE CABINET DETAIL  
CONCRETE BASE MOUNTED (MODEL 334)

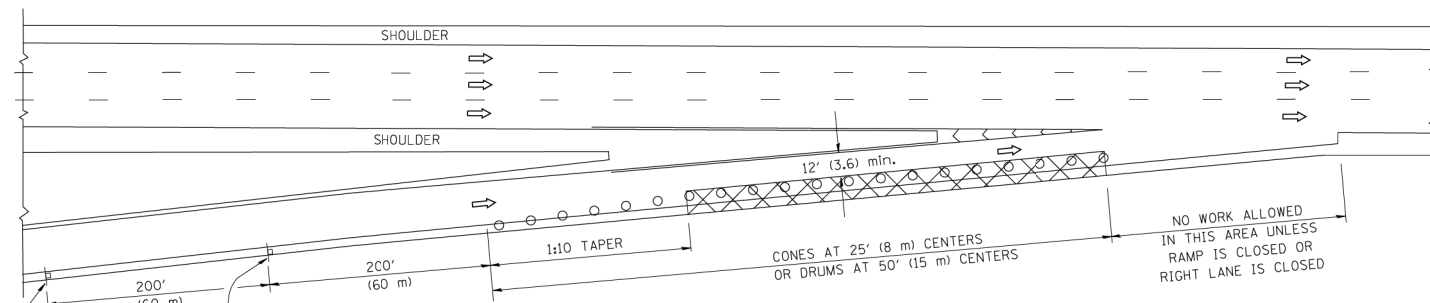
- NOTES:**
- REFER TO SPECIAL PROVISIONS FOR CABINET DETAILS AND ADDITIONAL REQUIREMENTS.
  - CABINET ENTRIES INCLUDE VERTICAL ARRANGEMENT FOR MAJOR EQUIPMENT ITEMS ONLY.
  - INSTALL ADDITIONAL ITEMS ON SIDE AND BACK PANELS PER THE SPECIAL PROVISIONS.
  - THE CONTRACTOR SHALL INSTALL INSULATED BUSHINGS AND DUCT SEALANT AT ALL CONDUIT BEND TERMINATIONS IN FOUNDATIONS.
  - CONCRETE BASE TO BE FORMED AT LEAST 6.0" ABOVE THE GROUND SURFACE.
  - CONCRETE BASE MUST BE CAST IN PLACE.

**DAN RYAN COMMUNICATIONS CABINET DETAIL**

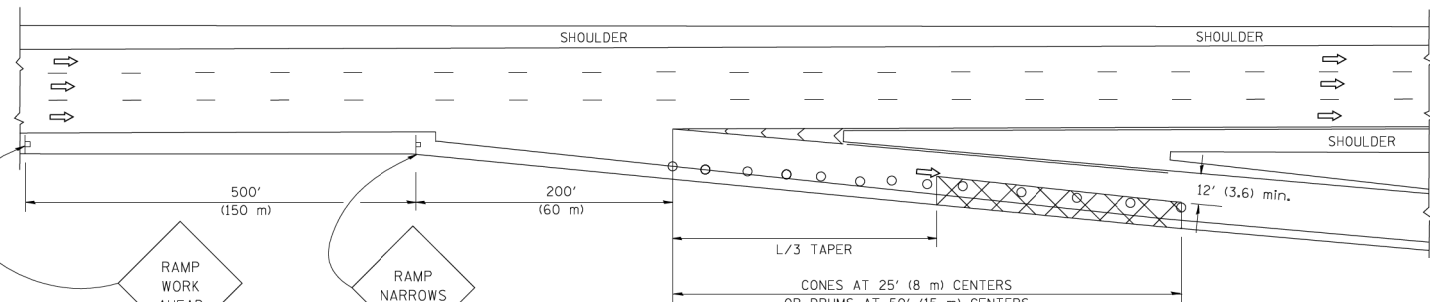
FILE NAME #FILES	USER NAME #USERS	DESIGNED DRAWN CHECKED DATE	R.T. G.M. R.T. 12/11/2013	REVISED REVISED REVISED REVISED	- - - -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ITS CENTER-TO-CENTER INTEGRATION PROJECT DETAILS (3 OF 3)	F.A. RTE.	SECTION 2009-0871	COUNTY COOK	TOTAL SHEETS 25	SHEET NO. 24	CONTRACT NO. 60134	ILLINOIS FED. AID PROJECT
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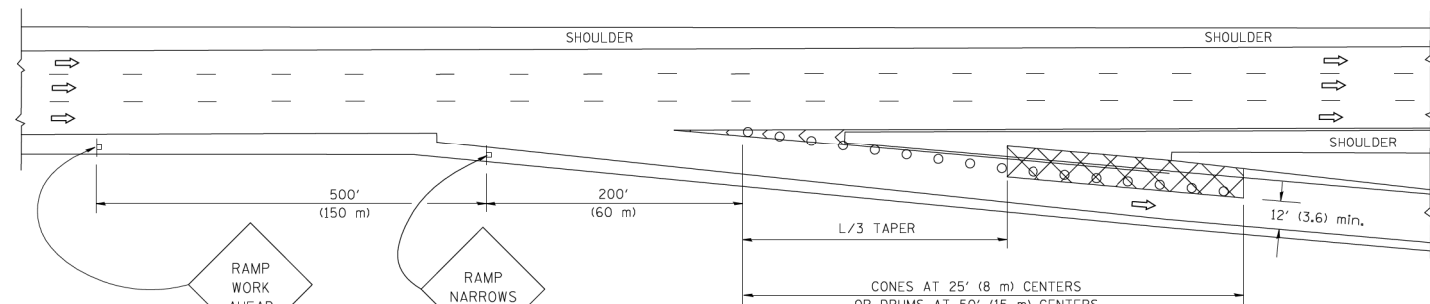
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

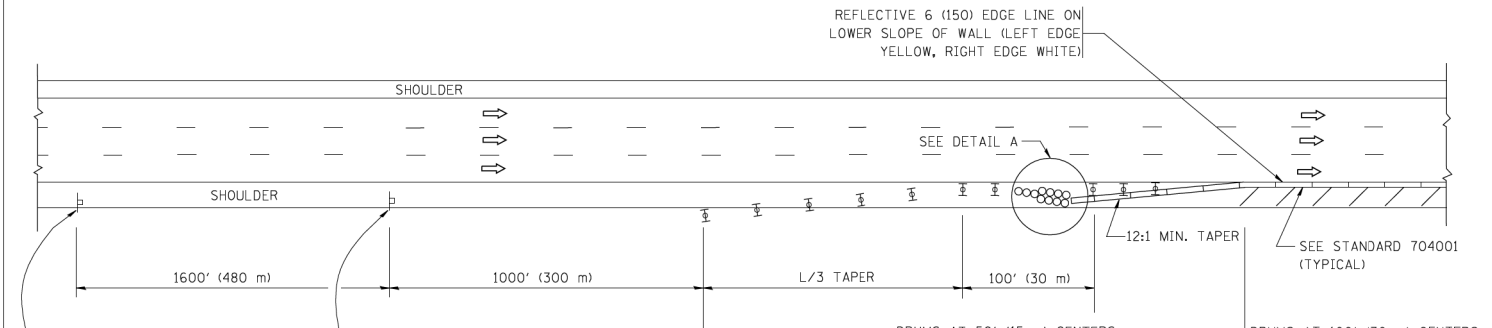
SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

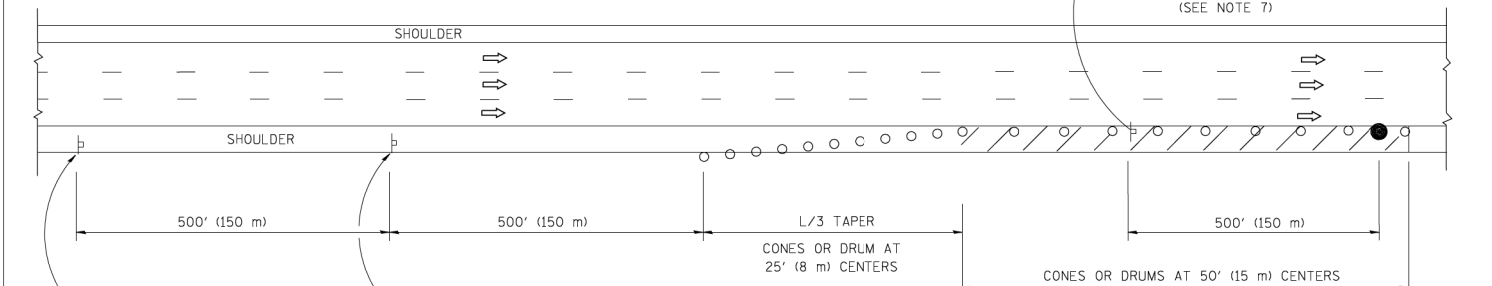
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:  
SPEED LIMIT FORMULAS  
45 mph (80 km/h) METRIC ENGLISH  
OR GREATER:  $L=0.65(W)(S)$   $L=(W)(S)$   
W = WIDTH OF OFFSET IN FEET (METERS)  
S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS

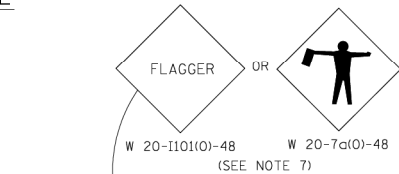


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

OR WHEN SPECIFIED INSTALL TEMPORARY CONCRETE BARRIER WALL WITH BARRIER WALL REFLECTORS PER TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)



THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCOACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT.

DETAIL "A"  
IMPACT ATTENUATOR, TEMPORARY  
(SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\to17.dgn	USER NAME = leisa	DESIGNED - D.W.S.	REVISED - 04-03
PLOT SCALE = 50.0000' / IN.	CHECKED - 11-96	DATE - 11-96	REVISED - J.A.F. 12-06
PLOT DATE = 1/26/2010			REVISED - S.P.B. 01-07
			REVISED - S.P.B. 12-09

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	107	117
	TC-17		CONTRACT NO. 60134	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				