

06-14-13 LETTING ITEM 199

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	# 20	1
ILLINOIS			CONTRACT NO. 60134	
# 20 + 5 = 25				

**SHEET**

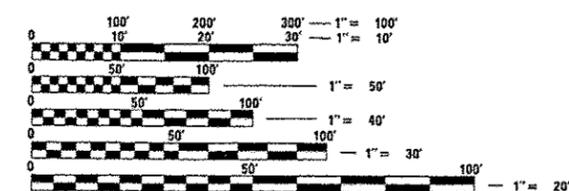
NO.	DESCRIPTION
1	COVER SHEET
2	SUMMARY OF QUANTITIES
3	GENERAL NOTES
4	OVERALL MAP OF PROJECT SITE LOCATIONS
5	IDOT ETP BUILDING / DAN RYAN & W. 33RD ST.
6	ISP DISTRICT CHICAGO / COOK COUNTY SHERIFF (MAINE NORTH)
7	IDOT BUILDING E (KENNEDY / EDENS)
8	ONE LINE DIAGRAMS
9	RADIO, ANTENNA, & EQUIPMENT DETAILS - IDOT ETP / DAN RYAN
10-15	VIDEO WALL UPGRADE, D1 HQ
16	VIDEO WALL UPGRADE, TSC
17	DETAILS (1 OF 3)
18	DETAILS (2 OF 3)
19	DETAILS (3 OF 3)
20	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)
20A.	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
- 701601-08 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701901-02 TRAFFIC CONTROL DEVICES
- ~~TC-17 TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES~~

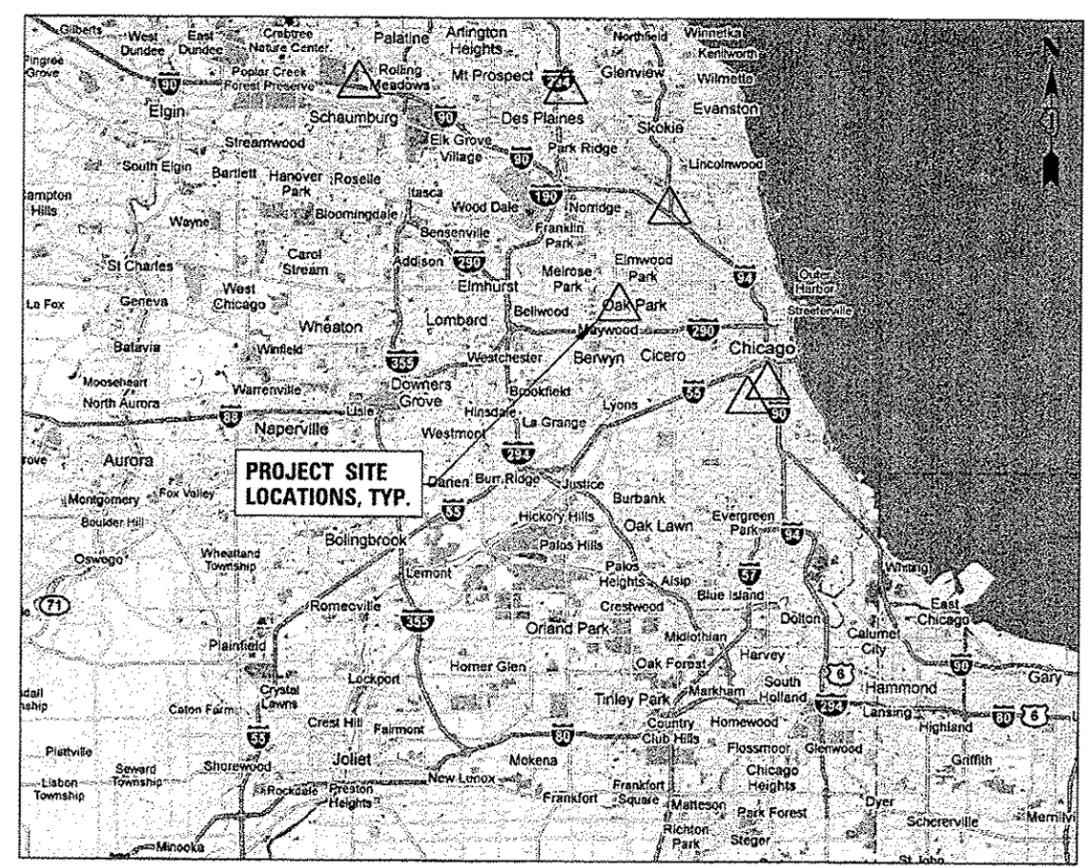
THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.



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.

PROJECT ENGINEER  
 PROJECT MANAGER MARK JENKINS, P.E.

CONTRACT NO. 60134



LOCATION MAP



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED 21 May 20 13

*John D. Baroneoli*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 10 20 13

*John D. Baroneoli, P.E.*  
 acting ENGINEER OF DESIGN AND ENVIRONMENT

May 10 20 13

*Orlando Cesana, P.E.*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



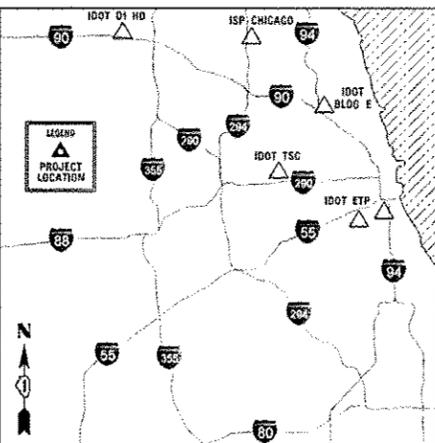
ANTHONY J. DORICCO, P.E. 3-21-13  
 ELECTRICAL ENGINEER DATE

*Anthony J. Doricco*  
 ILLINOIS REGISTRATION No. 062-057484  
 EXPIRATION DATE: 11-30-2013

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

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

CODE NO.	ITEM	UNIT	URBAN 80% FED / 20% STATE TOTAL 0021	IDOT DIST 1 HO	IDOT ETP BUILDING	DAN RYAN & WEST 33RD ST.	ISP DIST CHICAGO	IDOT BUILDING E	IDOT TSC
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 LINK - 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
XX006614	MODIFY EXISTING CABINET EQUIPMENT AND APPURTENANCES	EACH	1	0	0	1	0	0	0
X0327561	BUDGETARY ALLOWANCE, CCTV INTEGRATION	L SUM	1	1	0	0	0	0	0



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## GENERAL NOTES

**1. UTILITIES - LOCATIONS/INFORMATION ON PLANS**

THE LOCATIONS OF EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO FACILITIES RESULTING FROM INACCURATE LOCATING.

THE CONTRACTOR MAY OBTAIN, ON REQUEST, PLANS FOR THE EXISTING ELECTRICAL FACILITIES FROM THE DEPARTMENT.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR LOCATING AND PROVIDING PROTECTION FOR FACILITIES DURING ALL PHASES OF CONSTRUCTION. IF AT ANY TIME, THE FACILITIES ARE DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DEPARTMENT AND MAKE ALL NECESSARY ARRANGEMENTS FOR REPAIR TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE.

**2. CRITICAL PATH WORK SCHEDULE REQUIREMENT**

THE CONTRACTOR WILL SUBMIT TO THE ENGINEER A SATISFACTORY PROGRESS SCHEDULE AND CRITICAL PATH SCHEDULE WHICH SHOWS THE PROPOSED SEQUENCE OF WORK AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.

**3. THE DEPARTMENT CONTACT PERSON FOR THIS CONTRACT IS MARK JENKINS, ELECTRICAL OPERATIONS, 847-705-4350. THE CONTRACTOR MUST COORDINATE AND COOPERATE WITH THE DEPARTMENT AND THE INVOLVED PARTIES AS DIRECTED BY THE DEPARTMENT.**

**4. THE ENGINEERING DESIGN IN THESE PLANS IS BASED UPON FIELD INVESTIGATIONS OF CURRENT CONDITIONS, REVIEW OF EXISTING AS-BUILT DOCUMENTATION, AND INFORMATION OBTAINED FROM PRELIMINARY DESIGN DOCUMENTS FOR THE RECONSTRUCTION PROJECT. DUE TO THE CHANGING NATURE OF THESE ITEMS, THE ACTUAL CONDITIONS MAY BE DIFFERENT THAN THOSE DEPICTED. THE CONTRACTOR SHALL VERIFY THE EXISTING FIELD CONDITIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES AND CORRELATE THESE CONDITIONS WITH THE PROPOSED CONSTRUCTION ACTIVITIES OF THIS AND OTHER CONTRACTS. THE CONTRACTOR SHALL IDENTIFY TO THE ENGINEER ANY SIGNIFICANT DIFFERENCES BETWEEN THESE PLANS AND THE EXISTING FIELD CONDITIONS OR PROPOSED CONSTRUCTION THAT COULD IMPACT HIS/HER EFFORTS PRIOR TO BEGINNING WORK. CORRECTIVE ACTIONS FOR PROBLEMS ENCOUNTERED AFTER THE CONTRACTOR HAS BEGUN WORK WILL BE INCLUDED IN THE TASK UNLESS PREVIOUSLY IDENTIFIED TO THE ENGINEER.**

**5. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION OF:**

- A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION." BY ILLINOIS DEPARTMENT OF TRANSPORTATION.
- B. NATIONAL ELECTRICAL CODE
- C. "R56 STANDARDS AND GUIDELINES FOR COMMUNICATION SITES" BY MOTOROLA.
- D. ILLINOIS STATE POLICE REQUIREMENTS.

**6. THE CONTRACTOR SHALL BE AWARE THAT TEST SOIL BORINGS WERE NOT MADE AT LOCATION WHERE THE DAN RYAN MONOPOLE OR RELATED EQUIPMENT ARE TO BE INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE SITE CONDITIONS AT THESE FIELD LOCATIONS BEFORE SUBMITTING BID PROPOSALS.**

**7. WHENEVER CONDUITS (INCLUDING SPARES) ARE INSTALLED FOR FIBER OPTIC OR ELECTRICAL POWER CABLE, A POLYETHYLENE PULL ROPE WITH DETECTABLE METALLIC CONDUCTOR SHALL BE INSTALLED WITH THE CONDUIT. ALL PULL ROPE-RELATED COSTS ARE TO BE INCLUDED IN THE BID PRICE FOR CONDUIT.**

**8. THE QUANTITIES OF RACEWAYS WHERE INDICATED IN THESE PLANS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLETE COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.**

**9. EXACT FIELD LOCATIONS OF EQUIPMENT SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL COORDINATE ALL EQUIPMENT LOCATIONS PRIOR TO STARTING WORK.**

## GENERAL NOTES (CONTINUED)

**10. ANY GROUND AREAS DISTURBED DURING THE INSTALLATION OF EQUIPMENT SHALL BE REGRADED AND SEEDED TO THE SATISFACTION OF THE ENGINEER. COST FOR THIS WORK SHALL BE INCIDENTAL.**

**11. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, CONSTRUCTION METHODOLOGIES, PRODUCT MANUFACTURER SPECIFICATIONS, OWNERS MANUALS, AND USERS MANUALS BEFORE PROCURING AND INSTALLING ANY EQUIPMENT AS PART OF THIS CONTRACT. ALL PROPOSED WORK SHALL BE REVIEWED AND APPROVED BY THE DEPARTMENT IN CONSULTATION WITH THE DESIGN ENGINEER.**

**12. THE CONTRACTOR SHALL COORDINATE WITH THE DEPARTMENT ALL WORK TO BE CONDUCTED. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT 72 HOURS BEFORE COMMENCING ANY WORK AT THESE LOCATIONS.**

**13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TRAFFIC CONTROL FOR THE INSTALLATION OF THE ANTENNA MONOPOLE AND RELATED EQUIPMENT WITH OTHER CONTRACTS AND THAT MAY WORK IN THE AREA.**

**14. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND ALL APPLICABLE TRAFFIC CONTROL RULES AND REGULATIONS ACCORDING TO SECTION 701 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR WILL BE REQUIRED TO INSTALL ADDITIONAL SIGNS AND APPURTENANCES TO MAINTAIN SAFE CONDITIONS IN THE WORK ZONE AT ALL TIMES AT NO ADDITIONAL COST TO THE DEPARTMENT.**

**15. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL PROPOSED EQUIPMENT FOR EXAMINATION AND CONFIRMATION WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO AUGERING FOR LIGHT POLE FOUNDATIONS. THE EXACT LOCATIONS OF ALL PROPOSED ITEMS SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.**

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

**17. CONTRACTOR SHALL PERFORM ALL ELECTRICAL TESTING AS REQUIRED BY IDOT AND ISP.**

**18. CONTRACTOR SHALL PROVIDE FIVE FULL SIZE SETS OF RECORD DRAWINGS. RECORD DRAWINGS WILL BE SUBJECT TO REVIEW BY THE DEPARTMENT.**

**19. ANY AND ALL REQUIRED SOIL TESTING OR RELATED ITEMS SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE PAY ITEMS TO WHICH THEY PERTAIN. ADD THE FOLLOWING NOTE TO THE DRAWINGS AND SPECIAL PROVISIONS "ALL REMOVAL OR EXCAVATION ITEMS BEING DISPOSED OF AT AN UNCONTAMINATED SOIL FILL OPERATION OR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) FILL SITE SHALL MEET THE REQUIREMENTS OF PUBLIC ACT 96-1416. ALL COSTS ASSOCIATED WITH MEETING THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE ASSOCIATED REMOVAL OR EXCAVATION ITEMS IN THE CONTRACT. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION BY A LICENSED PROFESSIONAL ENGINEER, AND STATE AND LOCAL TIPPING FEES."**

**20. ALL EQUIPMENT IS SHOWN DIAGRAMMATICALLY. CONTRACTOR SHALL COORDINATE AND VERIFY EXACT EQUIPMENT SIZES, LOCATIONS, ROUTINGS, ETC.**

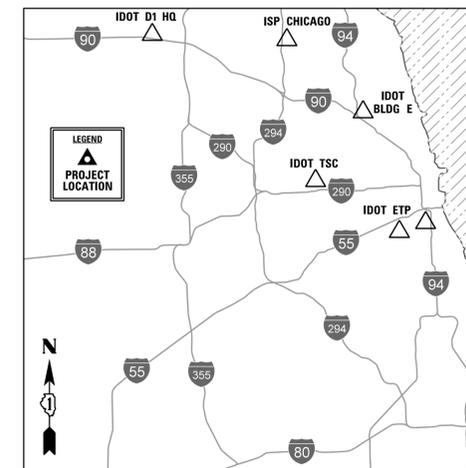
**21. THE CONTRACT DOCUMENTS ARE NOT INTENDED TO SHOW EVERY AND ALL DETAILS OF WORK TO BE PERFORMED OR EQUIPMENT TO BE SUPPLIED. THE INTENT OF THE CONTRACT DOCUMENTS IS TO ILLUSTRATE THE CONCEPTUAL DESIGN AND LAYOUT. THE CONTRACTOR SHALL BE KNOWLEDGEABLE AND REGULARLY ENGAGED IN THE TYPE OF WORK DESCRIBED BY THESE CONTRACT DOCUMENTS, AND SHALL BE RESPONSIBLE FOR UNDERSTANDING THEIR INTENT. ANY WORK TO BE PERFORMED OR ITEM OF EQUIPMENT TO BE SUPPLIED WHICH IS NOT SPECIFICALLY CALLED FOR BY THESE CONTRACT DOCUMENTS BUT WHICH IS NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFUL WORKING SYSTEM SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.**

**22. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRAISE HIMSELF/HERSELF OF ALL CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS THE TOTAL COST FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED DUE TO THE CONTRACTOR'S FAILURE TO UNDERSTAND THE SCOPE OF WORK.**

**23. THE CONTRACTOR (AND SUBS) SHALL BE LICENSED & BONDED WITH THE LOCAL MUNICIPALITIES (JURISDICTIONS) AS REQUIRED. THIS COST SHALL BE INCIDENTAL TO THE CONTRACT.**

## ABBREVIATIONS

IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION
ISP	ILLINOIS STATE POLICE
TSC	TRAFFIC SYSTEMS CENTER
ETP	EMERGENCY TRAFFIC PATROL



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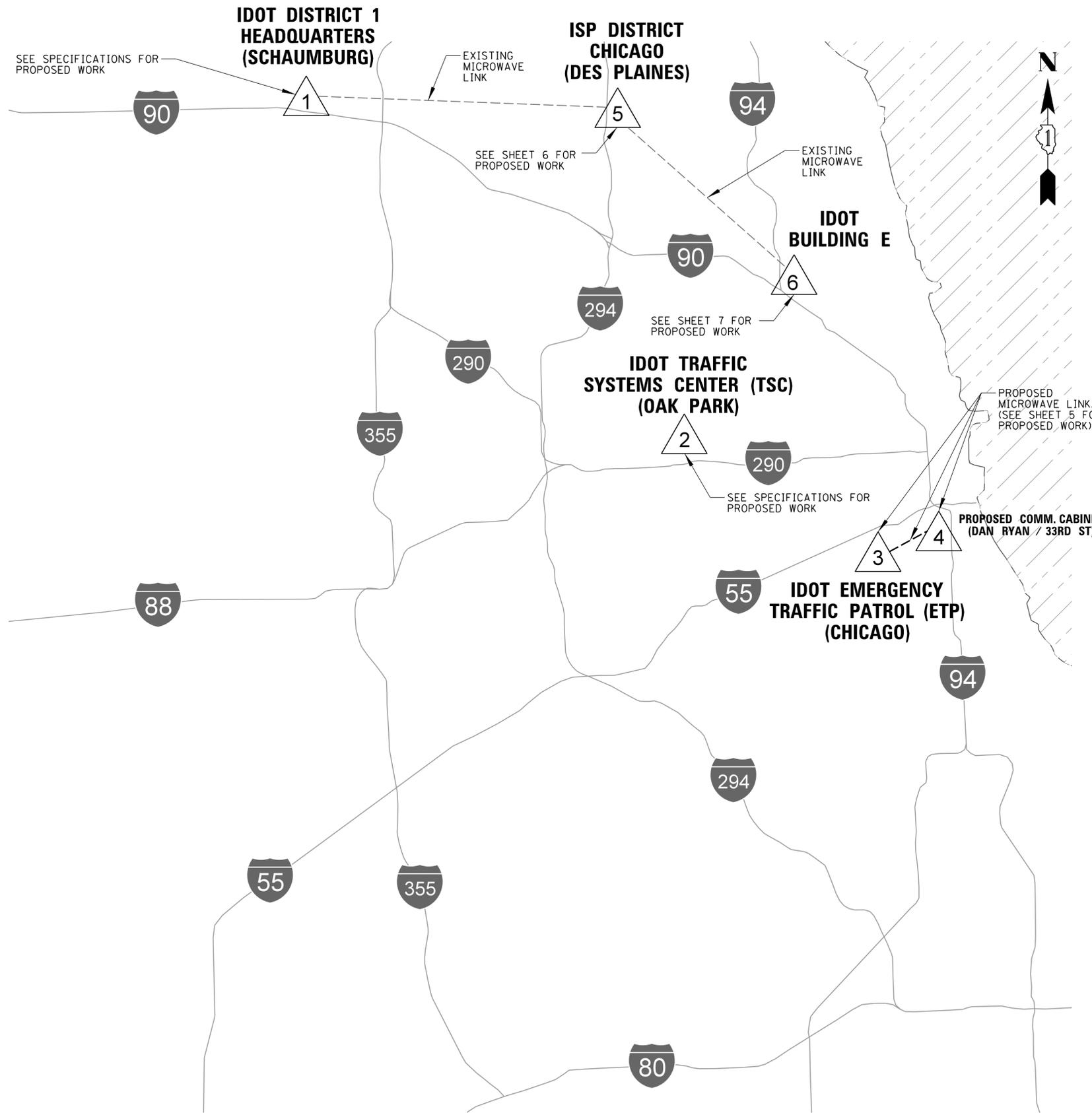
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		3/21/2013	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ITS CENTER-TO-CENTER INTEGRATION PROJECT  
GENERAL NOTES**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	3
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				



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

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

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ITS CENTER-TO-CENTER INTEGRATION PROJECT  
OVERALL MAP OF PROJECT SITE LOCATIONS**

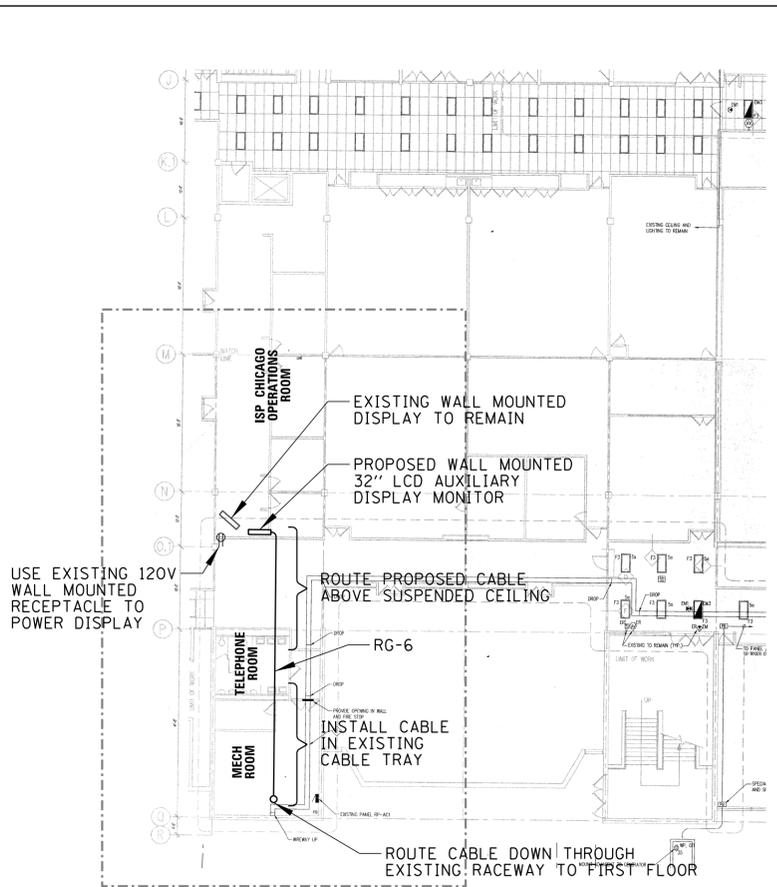
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	4
				CONTRACT NO. 60134
ILLINOIS FED. AID PROJECT				

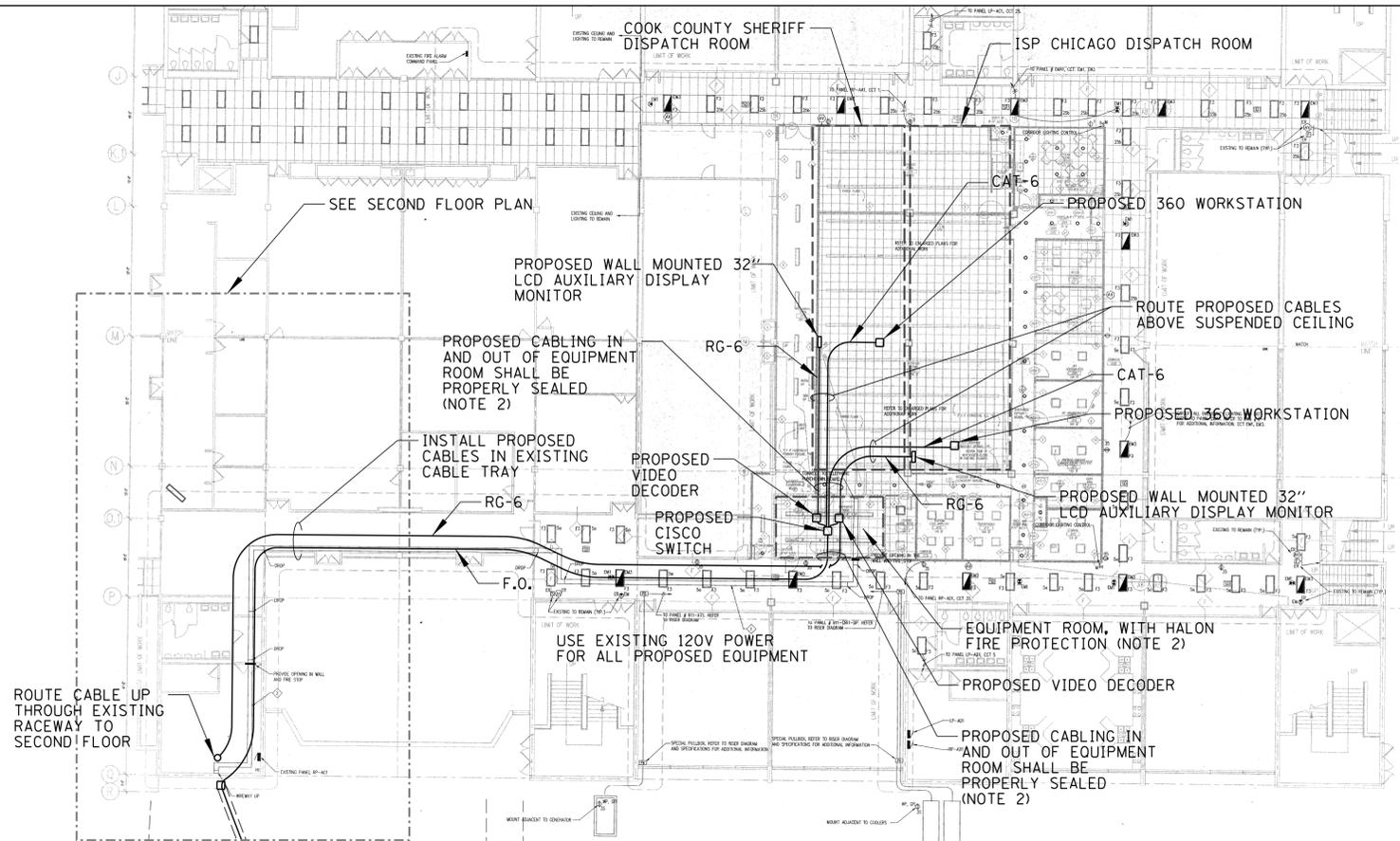


# SCOPE OF WORK

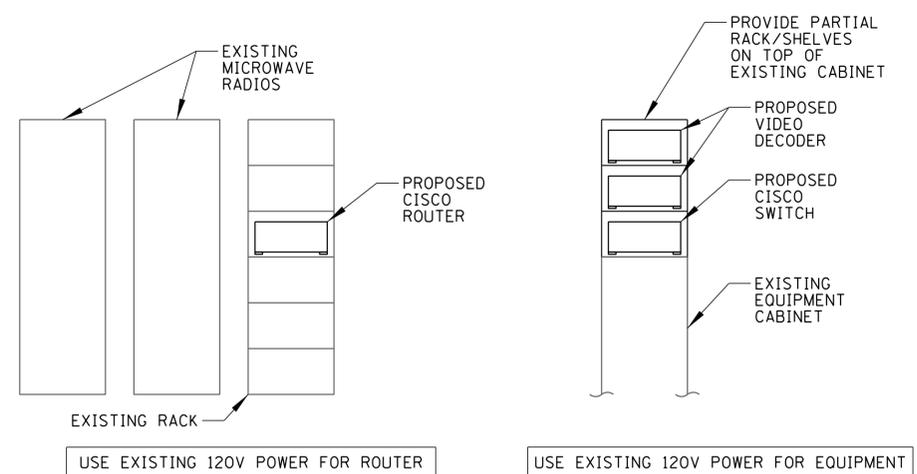
- EXISTING ANTENNA TOWER OPERATES AS A SIGNAL REPEATER CONNECTING IDOT'S FIBER OPTIC BACKBONE NETWORK FROM IDOT DISTRICT 1 (SCHAUMBURG) TO IDOT BUILDING (KENNEDY / EDENS). THE EXISTING CROSS CONNECTION LINES BETWEEN THE REPEATER RADIOS SHALL BE INTERCEPTED AND CONNECTED TO AN OPTICAL SWITCH TO ALLOW 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.
- 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.



**PARTIAL SECOND FLOOR PLAN**

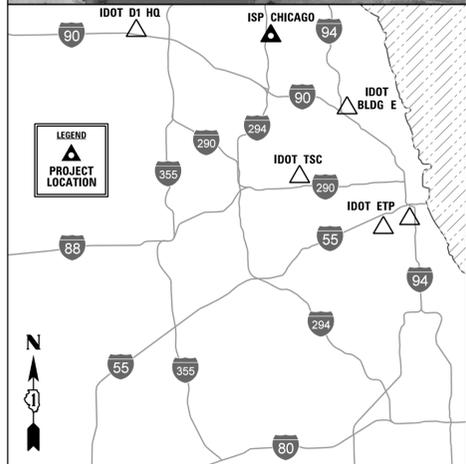
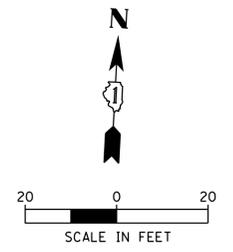
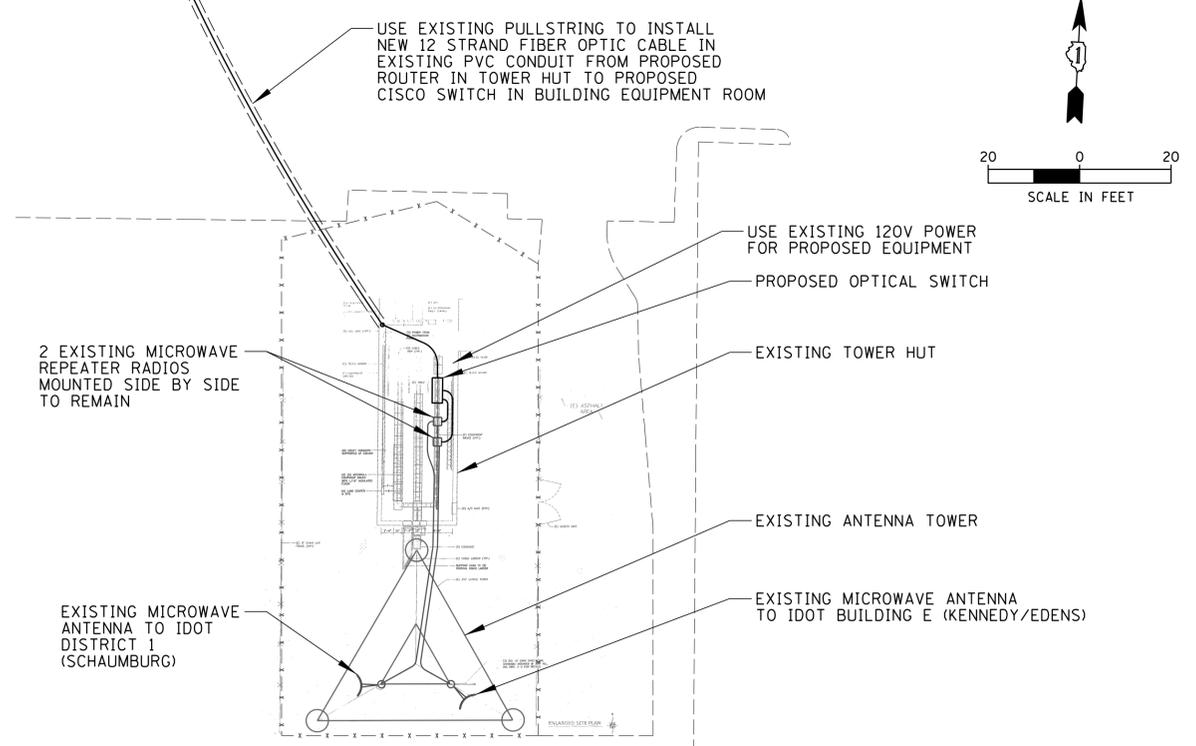


**PARTIAL LOWER LEVEL PLAN**



**TOWER HUT CENTER AISLE EAST ELEVATION      EQUIPMENT ROOM EAST ELEVATION**

**EQUIPMENT LAYOUT DETAIL – ISP DISTRICT CHICAGO**  
N.T.S.



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

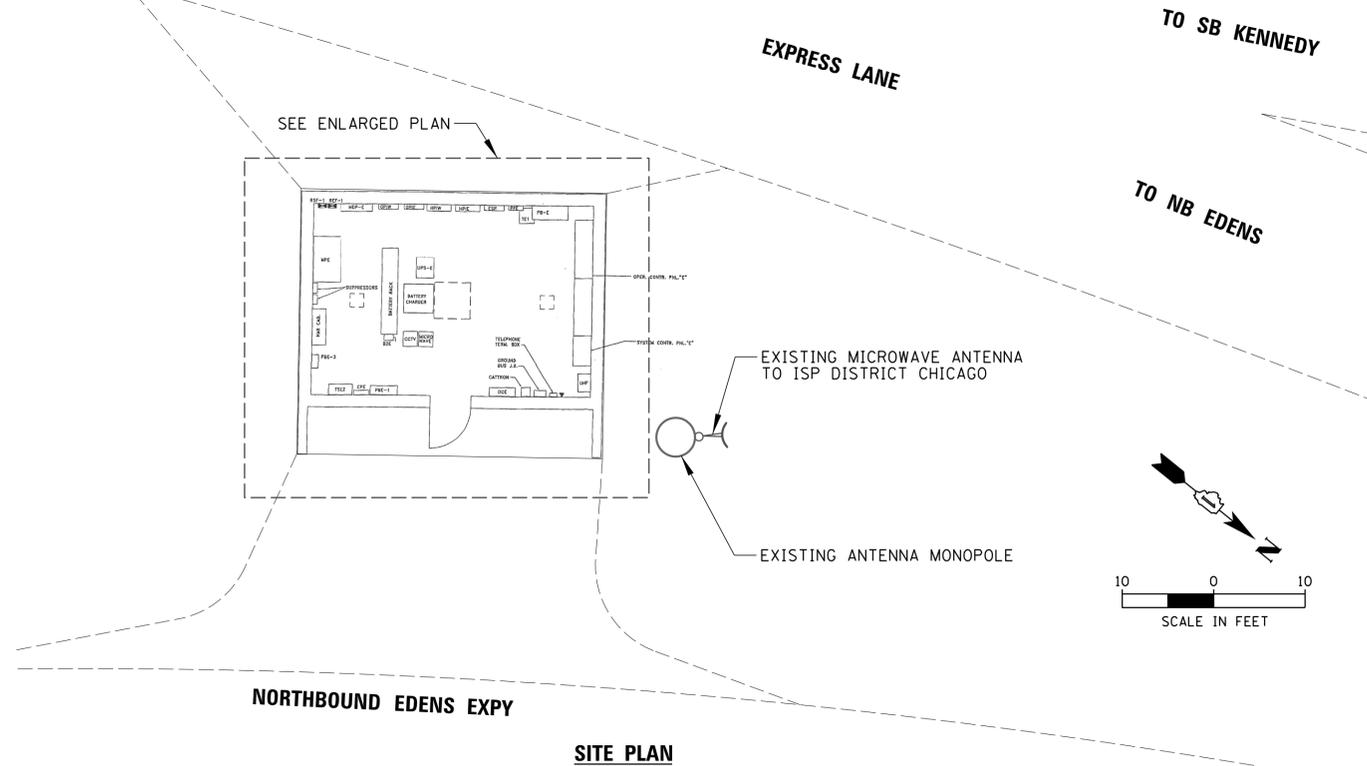
**ITS CENTER-TO-CENTER INTEGRATION PROJECT  
ISP DISTRICT CHICAGO / COOK COUNTY SHERIFF (MAINE NORTH)**

SCALE: 1" = 20'	SHEET NO. OF SHEETS	STA. TO STA.
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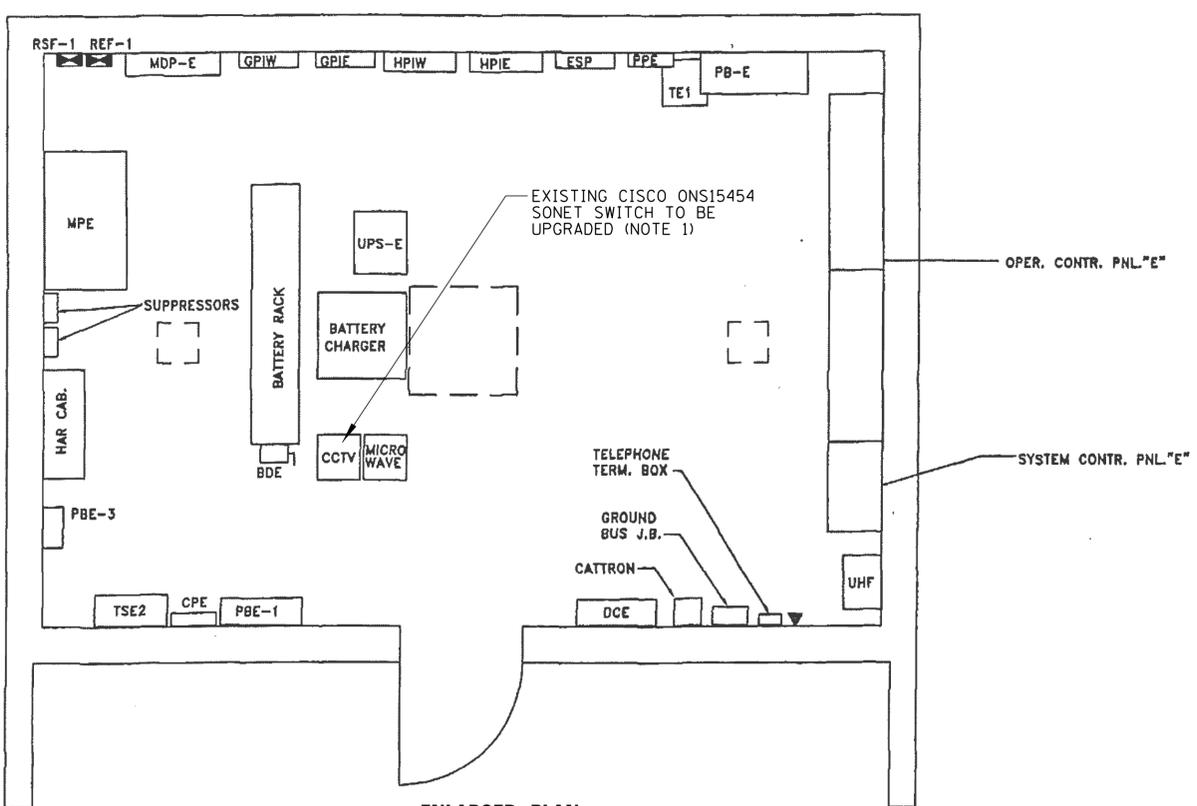
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	6
				CONTRACT NO. 60134
ILLINOIS FED. AID PROJECT				

# 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.



**SITE PLAN**

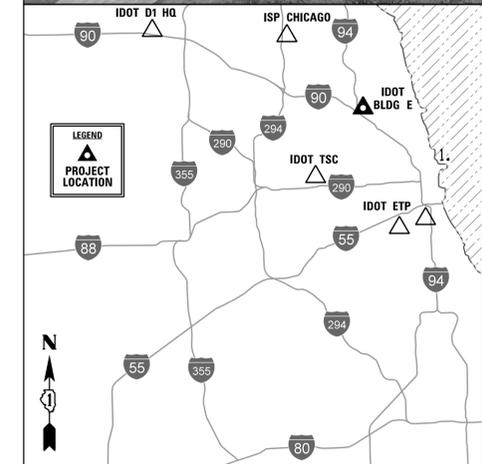


**ENLARGED PLAN**  
N.T.S.

## IDOT BUILDING E (KENNEDY / EDENS)



**IDOT BUILDING E (KENNEDY / EDENS JUNCTION)**



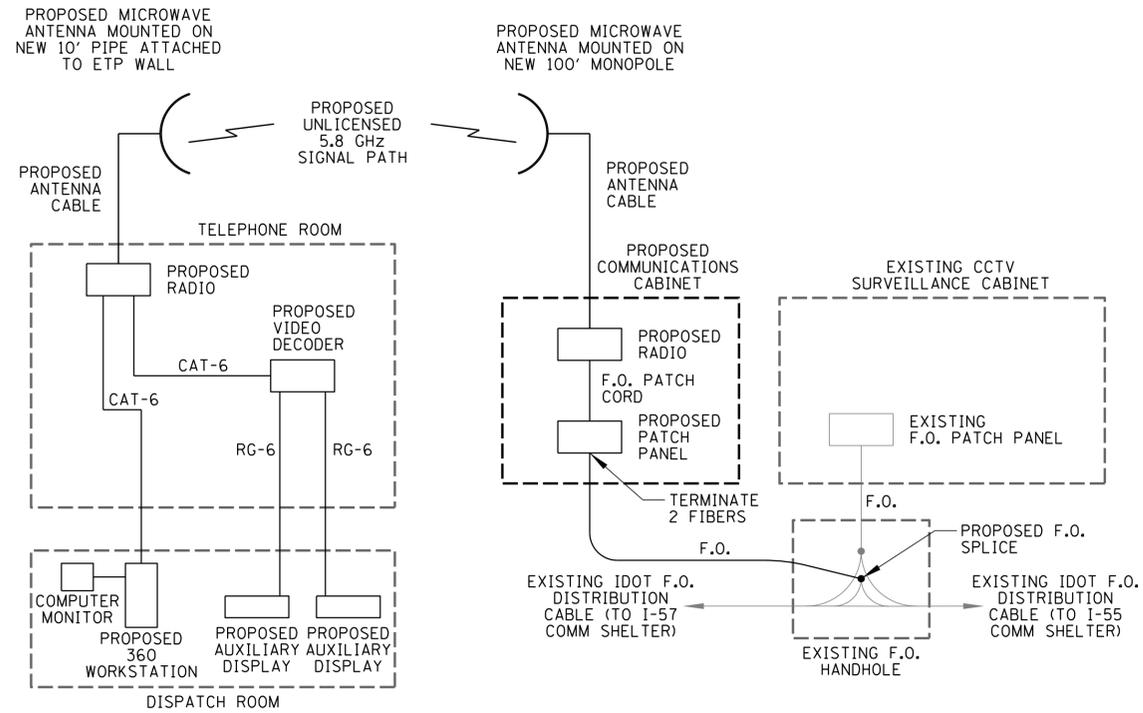
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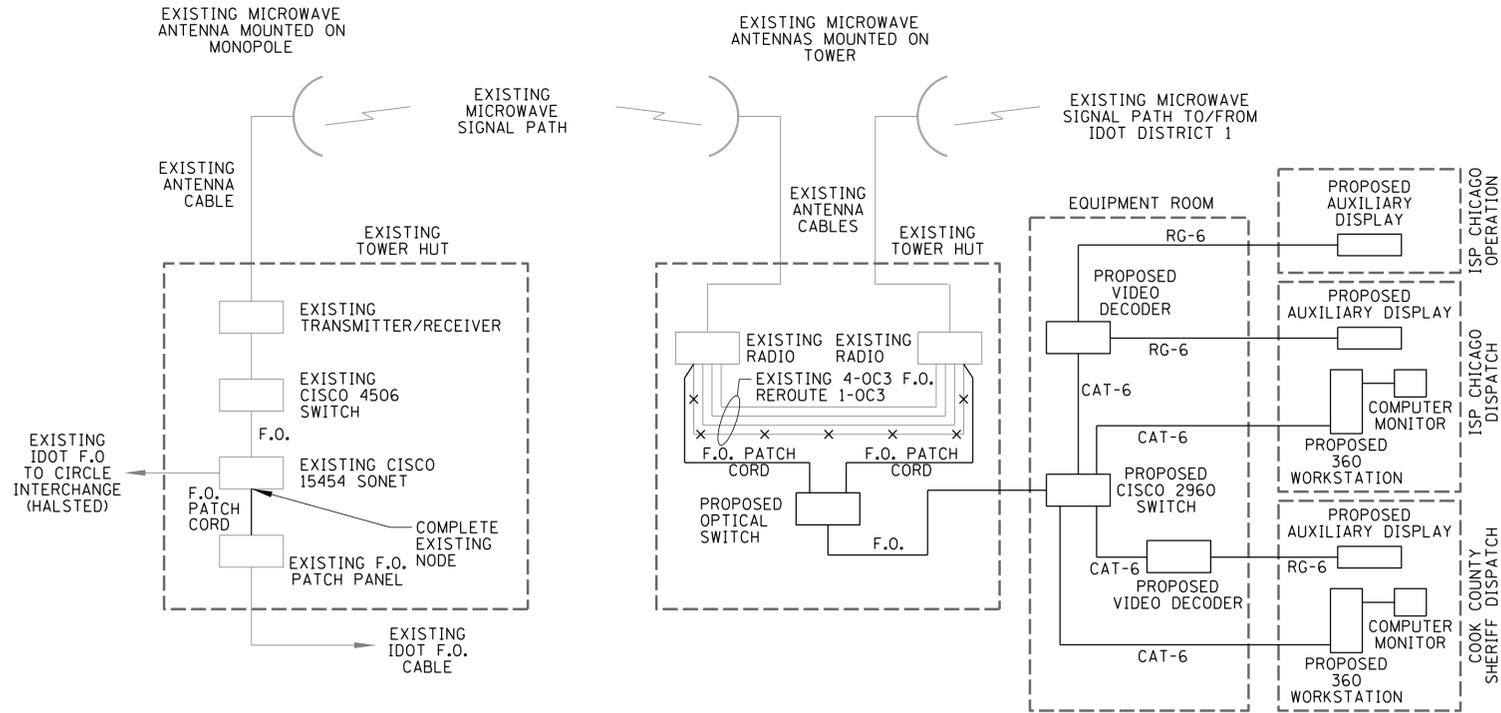
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>ITS CENTER-TO-CENTER INTEGRATION PROJECT</b>			
<b>IDOT BUILDING E (KENNEDY / EDENS)</b>			
SCALE: AS SHOWN	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	7
CONTRACT NO. 60134				
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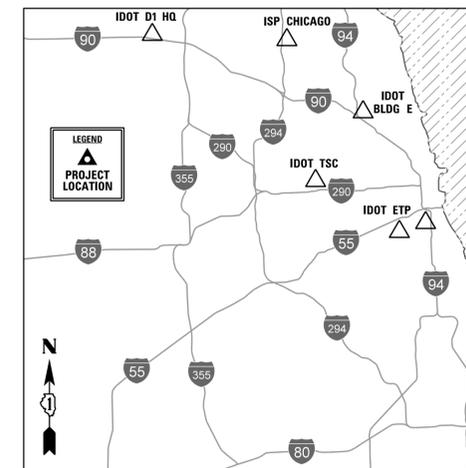


**IDOT ETP BUILDING (35TH & NORMAL) DAN RYAN EXPY / W. 33TH ST.**



**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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(847) 823-0500

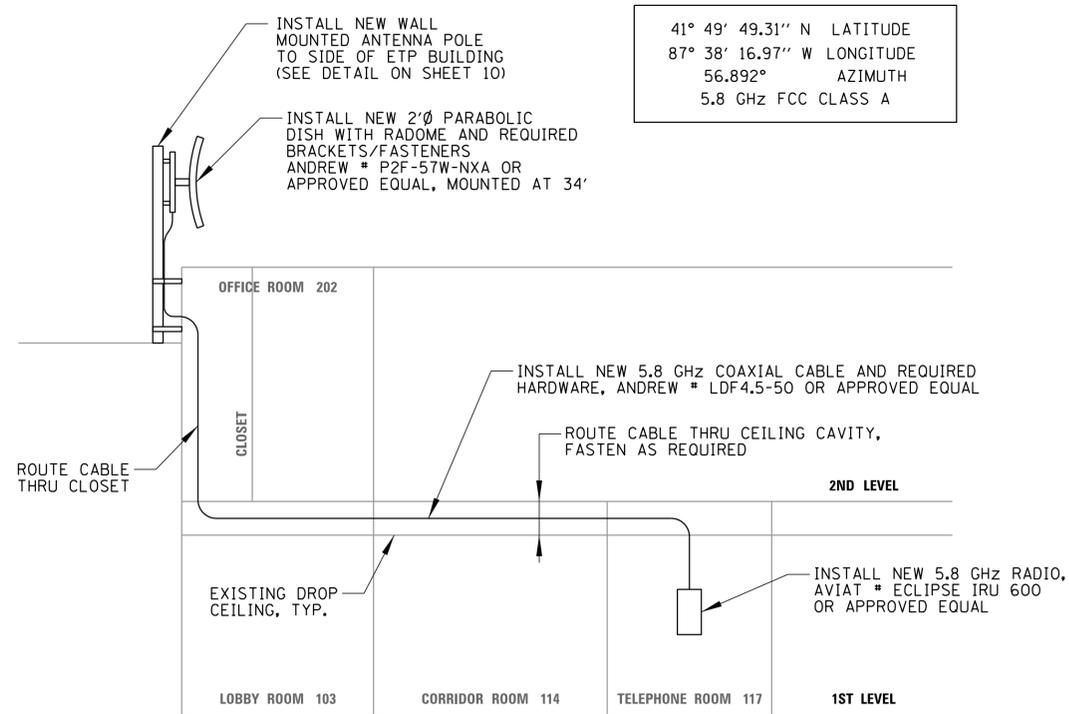
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	PLOT DATE = 3/22/2013	DATE <i>3/21/2013</i>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

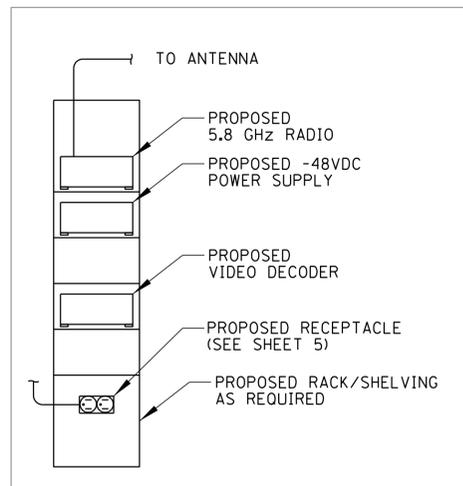
**ITS CENTER-TO-CENTER INTEGRATION PROJECT  
ONE LINE DIAGRAMS**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	8
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				



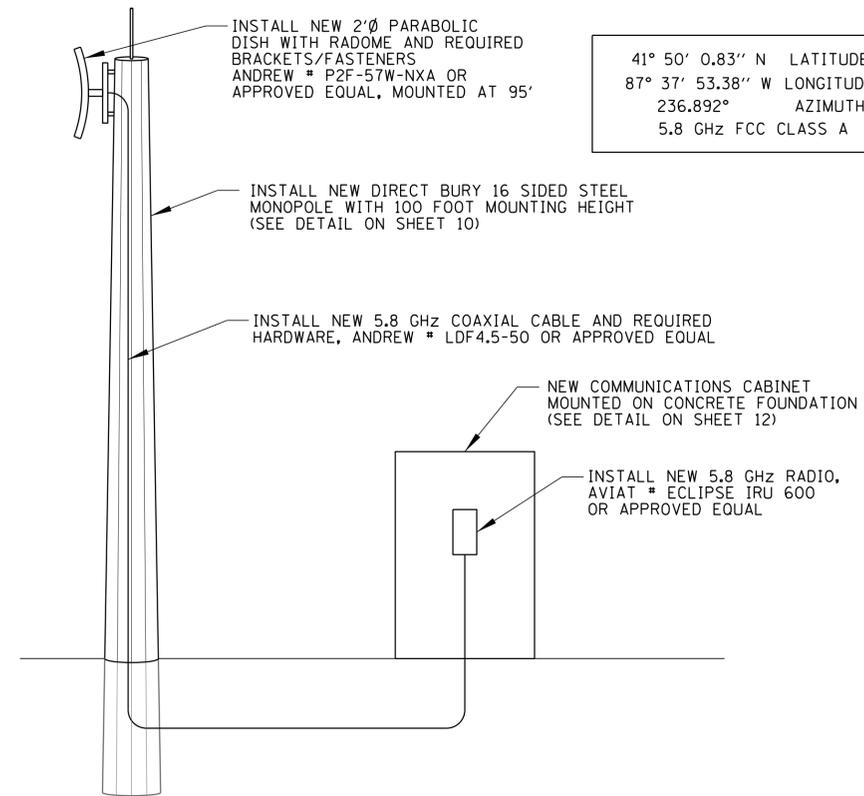
EXISTING ETP BUILDING ELEVATION LOOKING NORTH  
**RADIO & ANTENNA DETAIL – ETP**  
N.T.S.



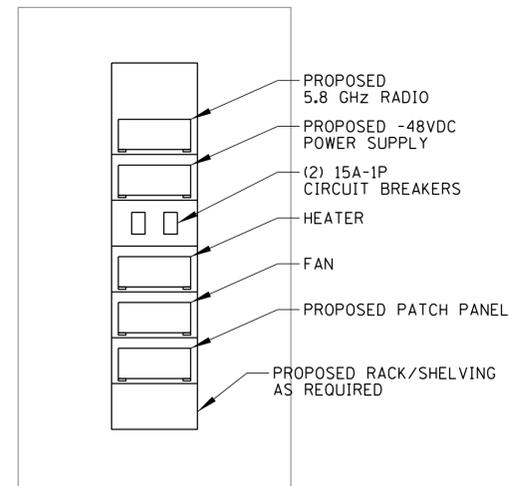
USE PROPOSED 120V RECEPTACLE FOR POWER TO EQUIPMENT

**TELEPHONE ROOM – SOUTH WALL ELEVATION**

**EQUIPMENT LAYOUT DETAIL – ETP**  
N.T.S.

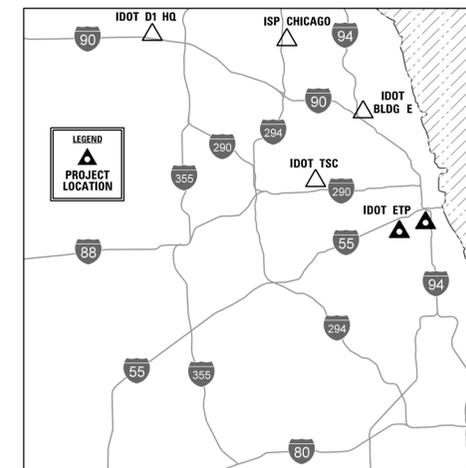


**RADIO & ANTENNA DETAIL – DAN RYAN**  
N.T.S.



**PROPOSED COMMUNICATIONS CABINET ELEVATION**

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



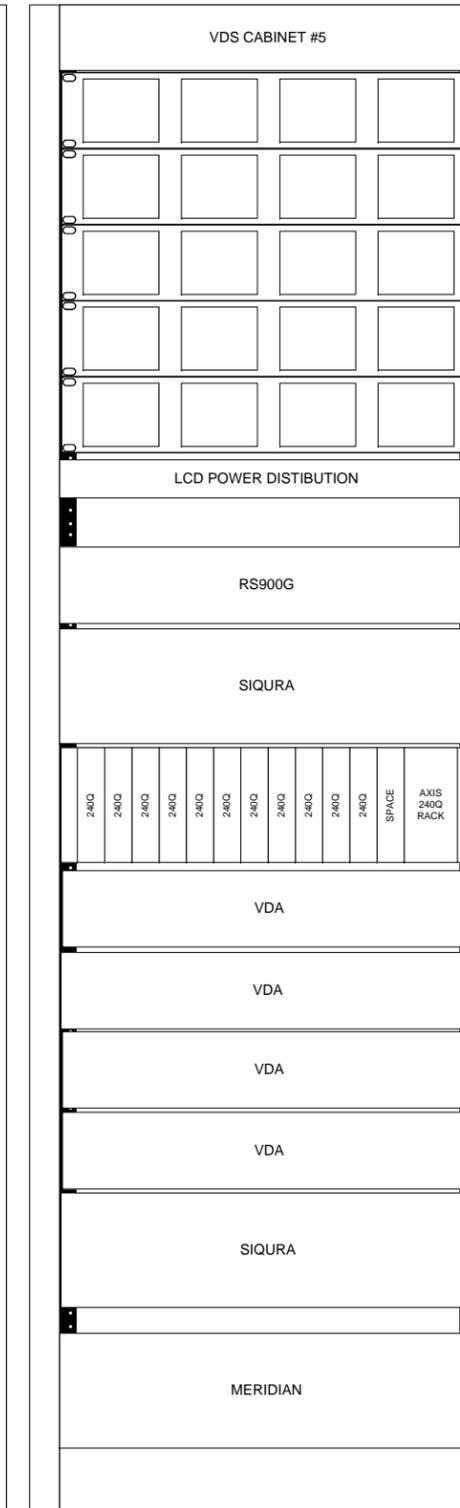
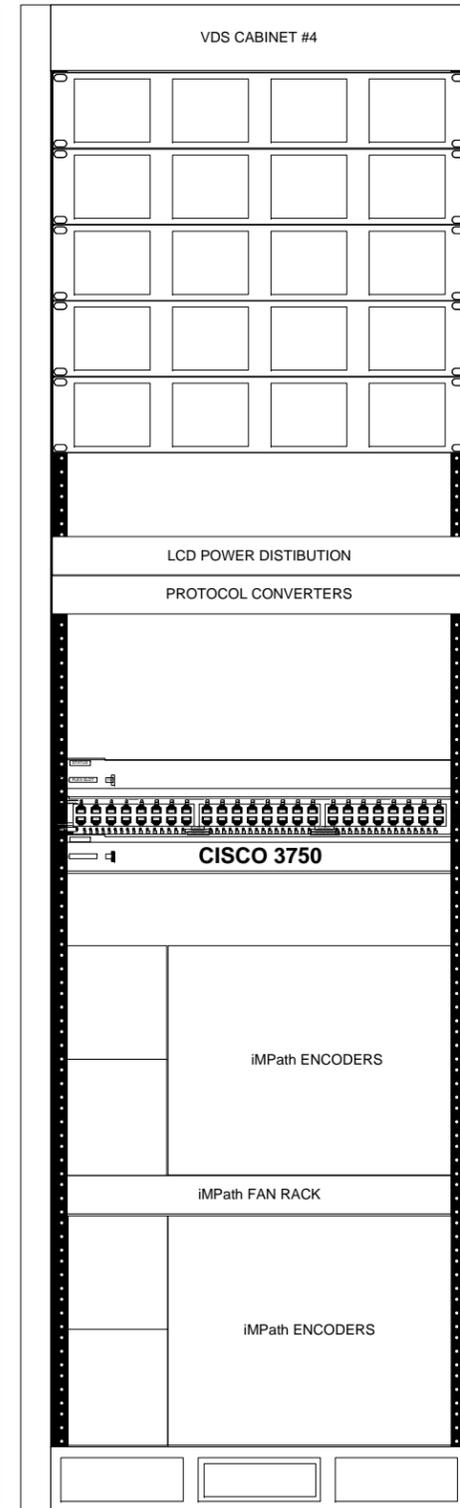
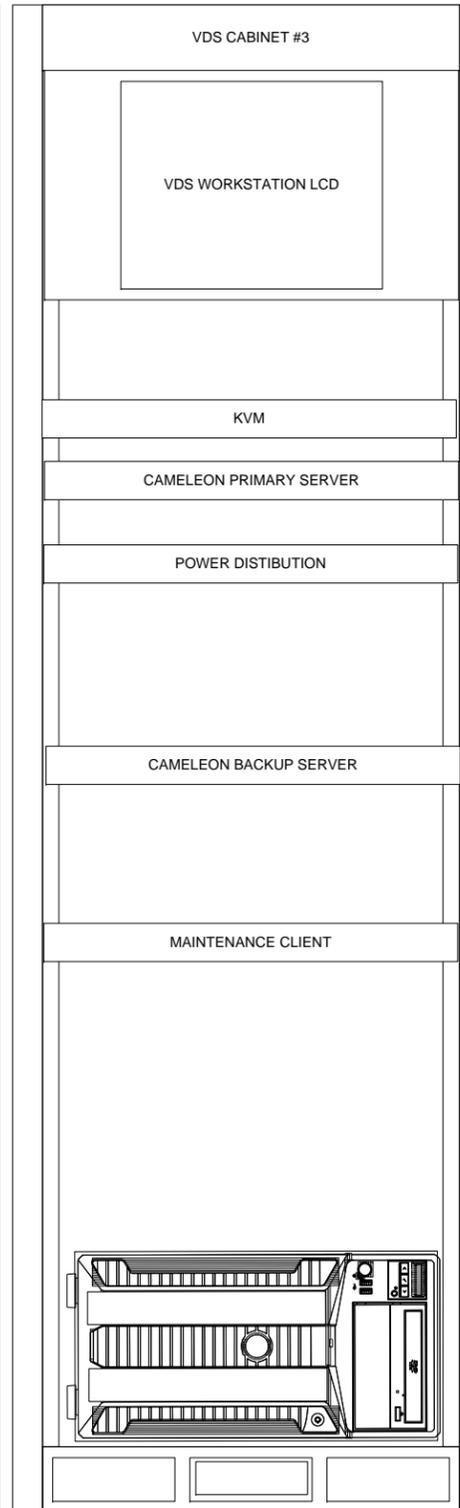
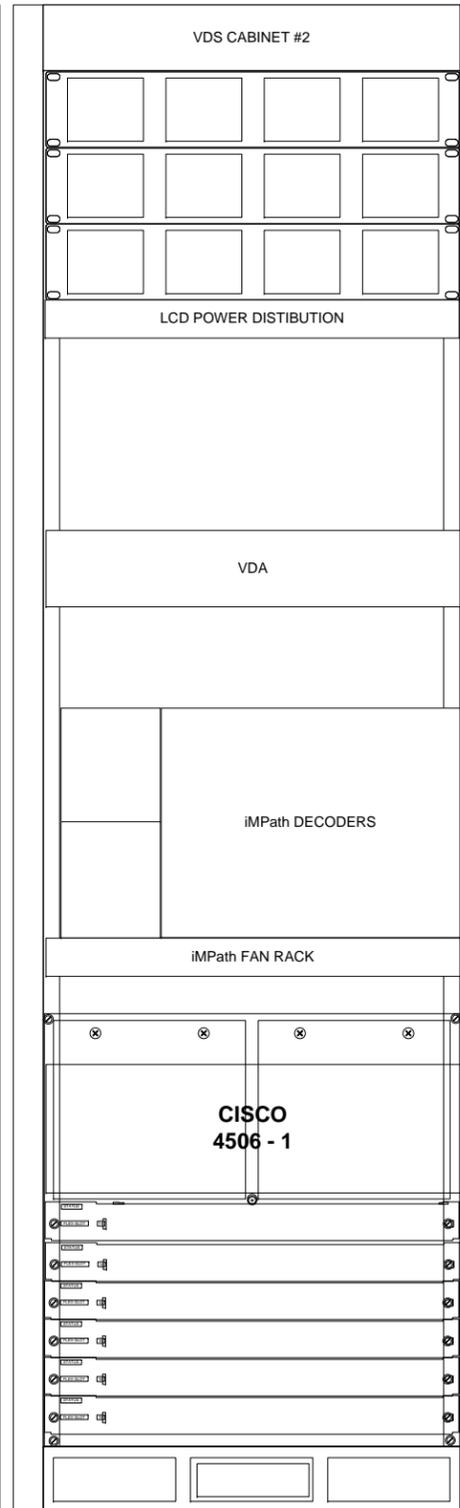
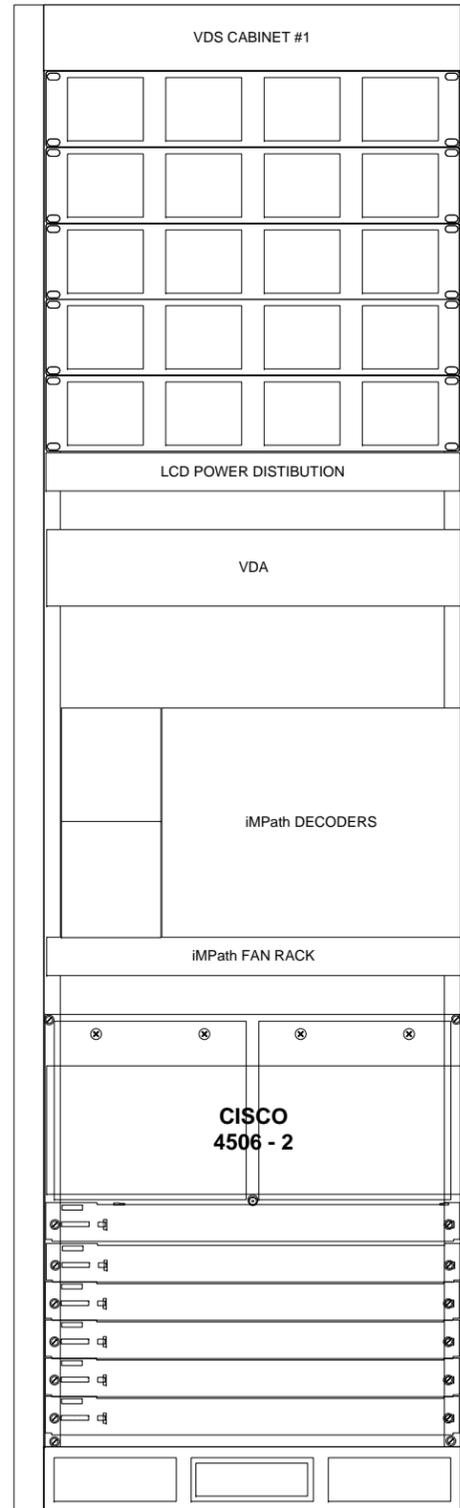
**CHRISTOPHER B. BURKE ENGINEERING, LTD.**  
9575 W. Higgins Road, Suite 600  
Rosemont, Illinois 60018  
(847) 823-0500

FILE NAME =	USER NAME = omericco	DESIGNED <i>AJD</i>	REVISED -
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		CHECKED <i>JPC</i>	REVISED -
		DATE <i>3/21/2013</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	20	9
				CONTRACT NO. 60134
ILLINOIS FED. AID PROJECT				



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

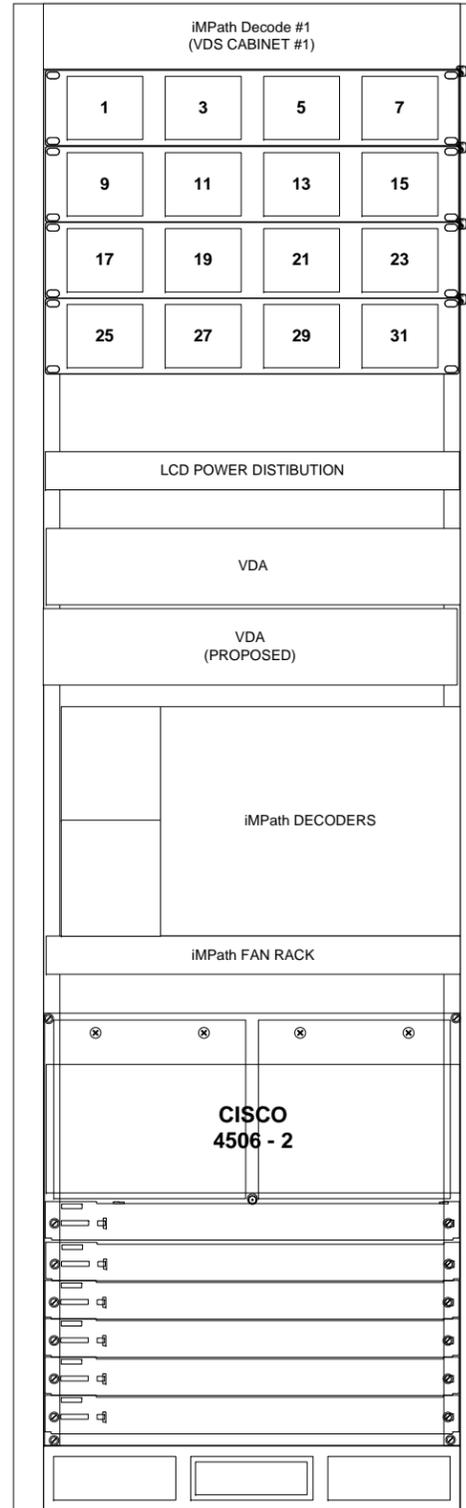
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

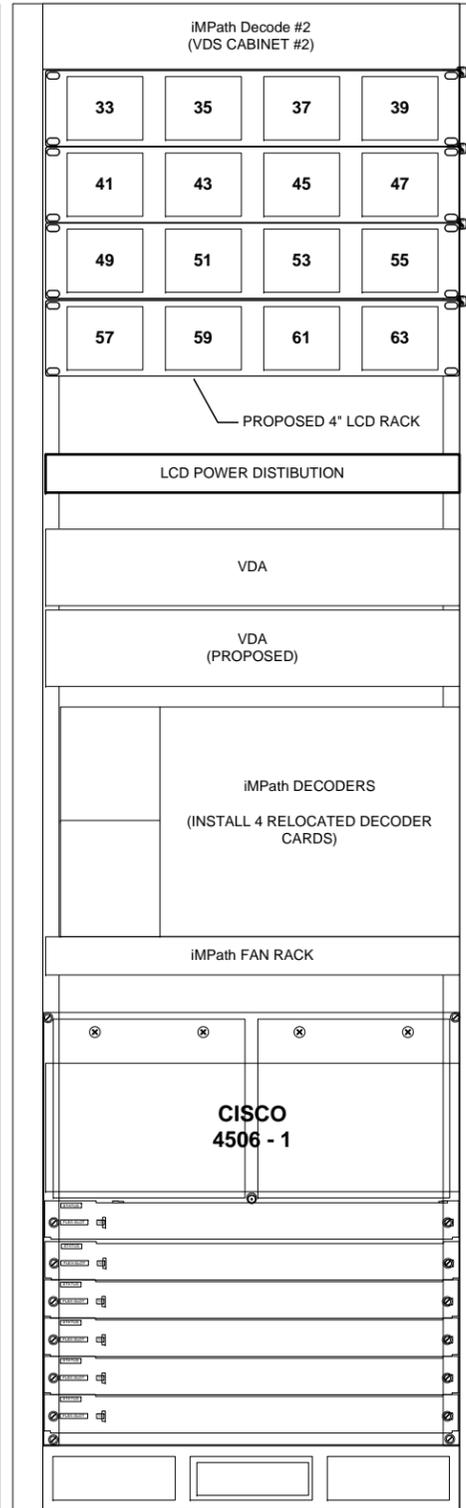
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

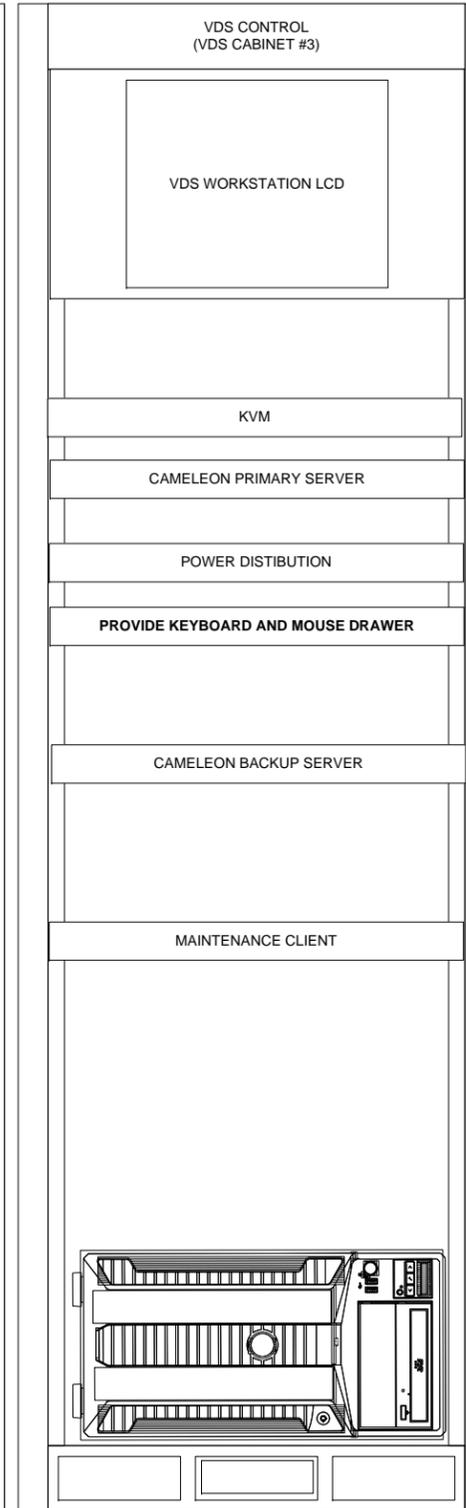
EXISTING EQUIPMENT TO BE RECONFIGURED  
UNLESS OTHERWISE NOTED



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				

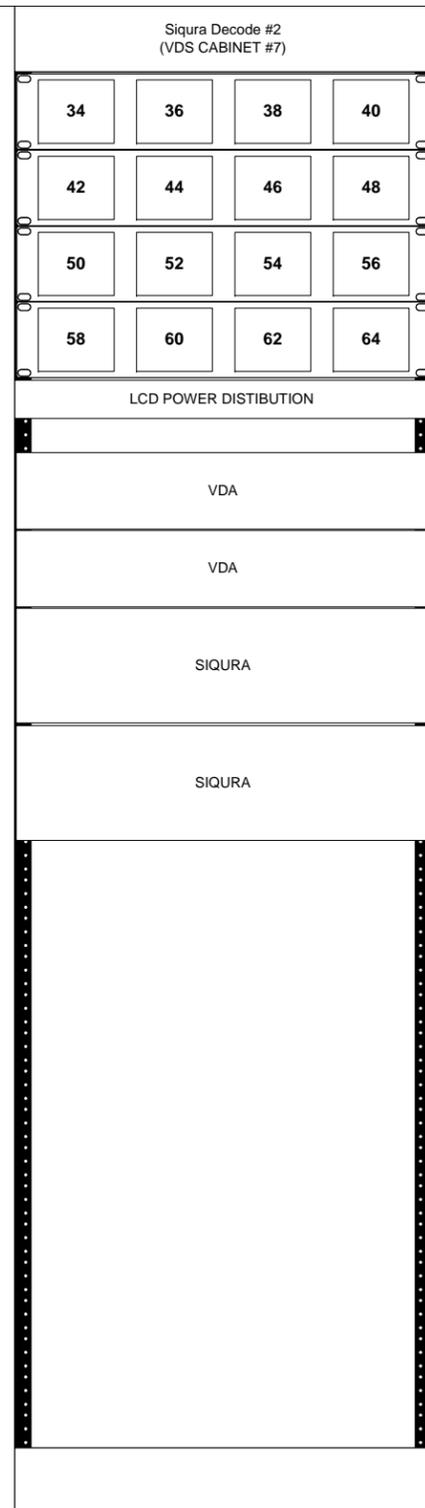
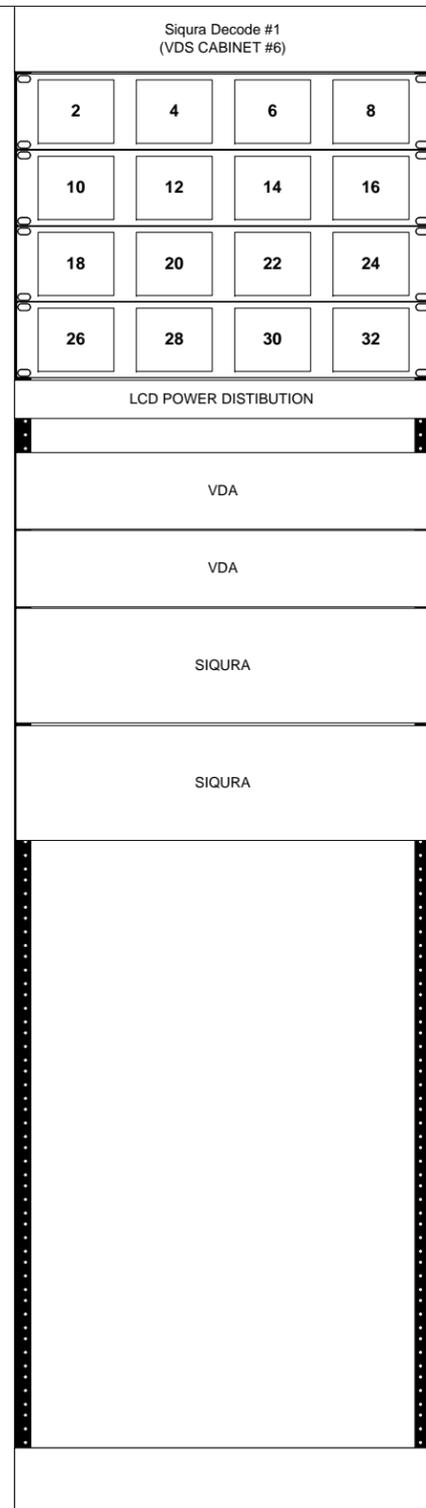
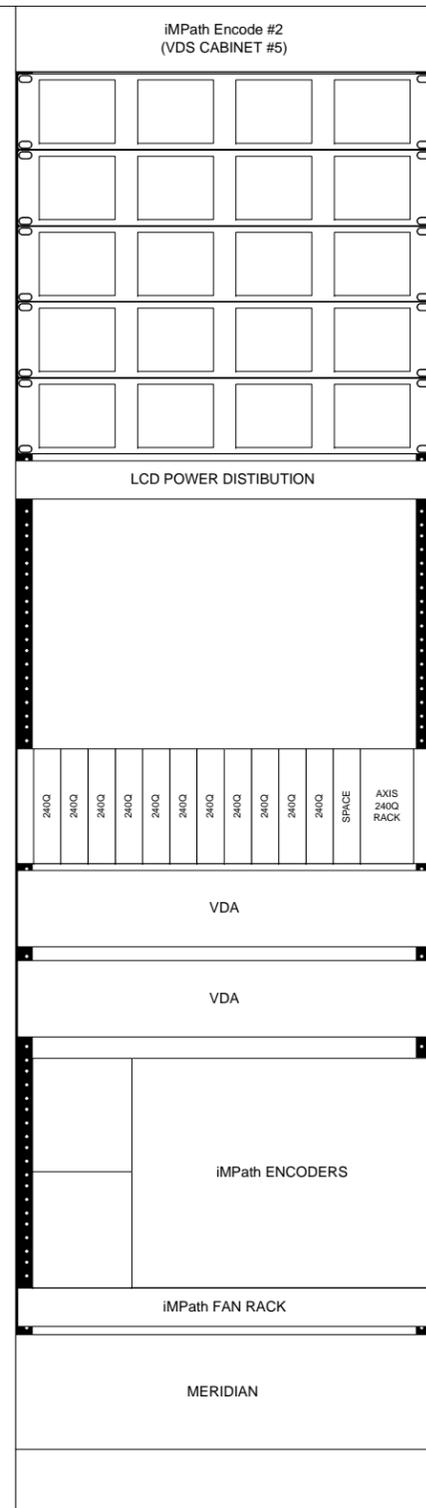
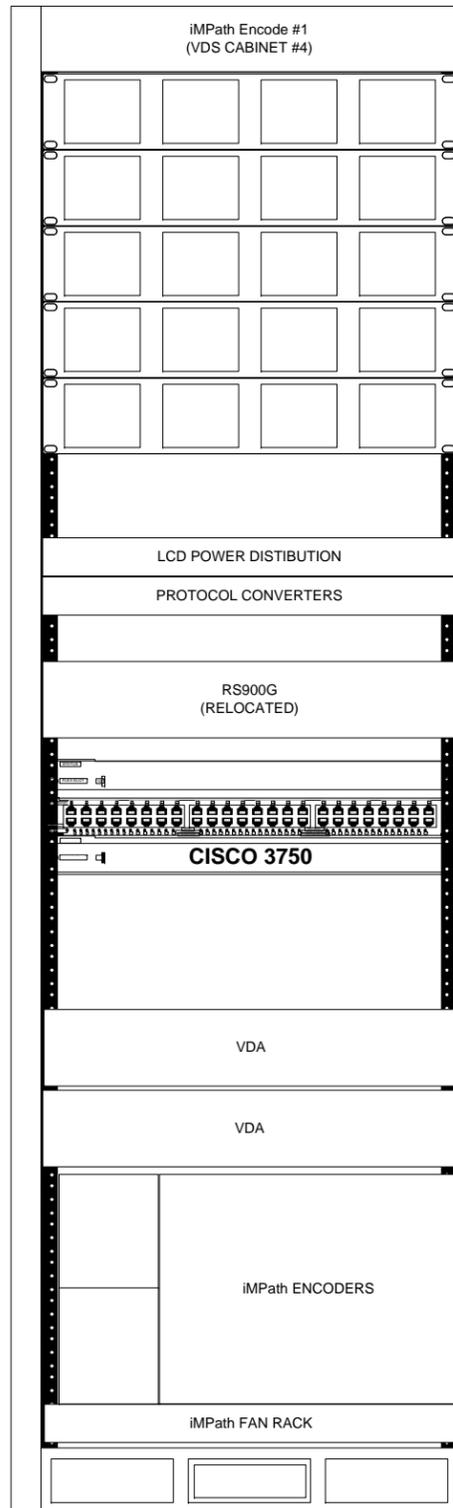
SCALE: \_\_\_\_\_ SHEET NO. \_\_\_ OF \_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

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.

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

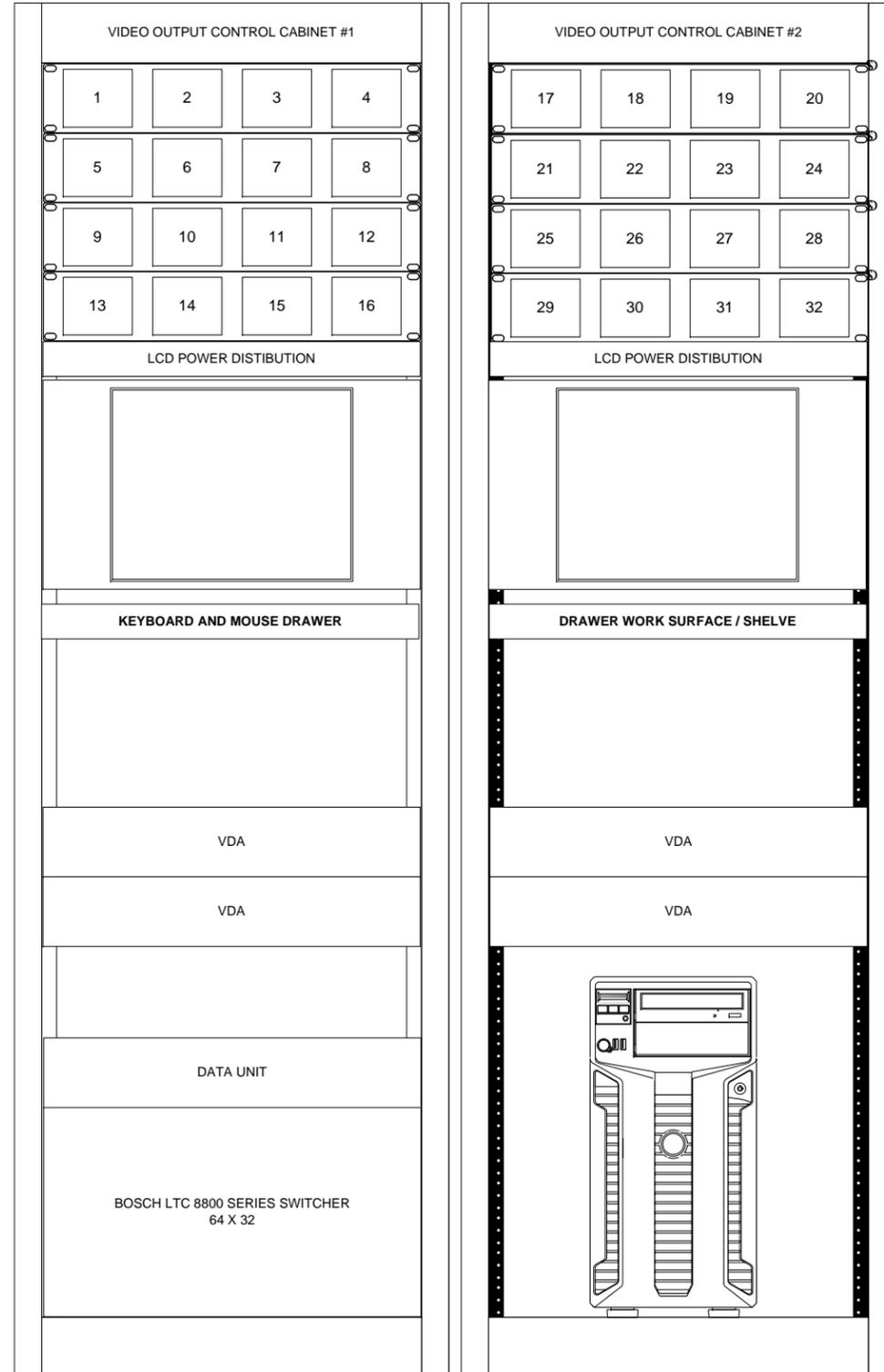
D1 H.Q. EQUIPMENT ROOM  
PROPOSED VIDEO ENCODER / DECODER LINE UP, 2 OF 2

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. \_\_\_\_\_

PROPOSED EQUIPMENT INCLUDING CABINET

PROPOSED EQUIPMENT INCLUDING CABINET



4" LCD RACKS  
ONE DISPLAY PER  
SWITCHER OUTPUT

4" LCD RACKS  
ONE DISPLAY PER  
SWITCHER OUTPUT

LCD RACK MOUNT MONITOR

LCD RACK MOUNT MONITOR

RACK MOUNT COMPUTER  
KEYBOARD WITH SLIDING  
SHELF

SLIDING SHELF

PROPOSED BOSCH LTC 8800 SERIES  
SWITCHER

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.

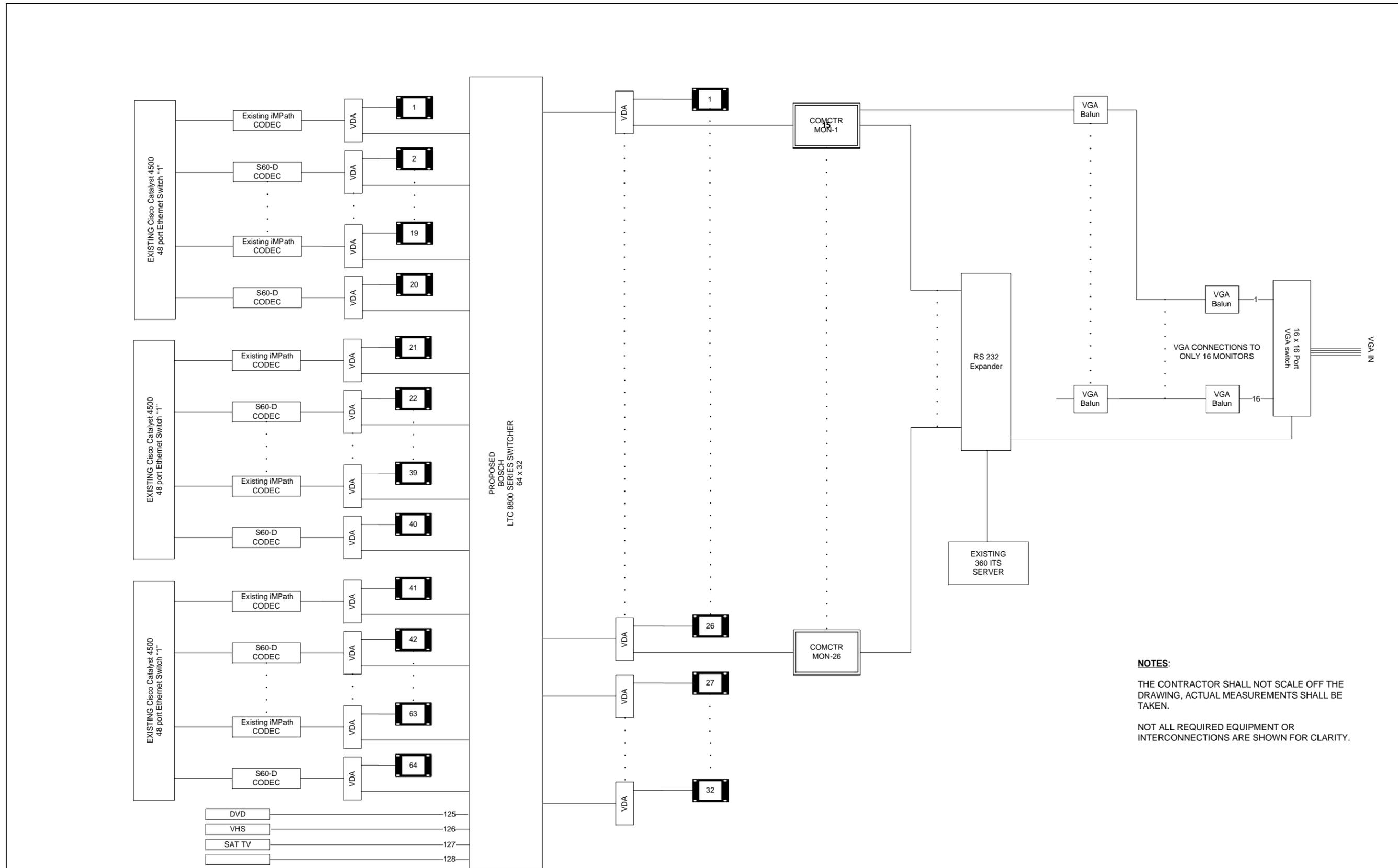
FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
	PLOT SCALE NONE	CHECKED	REVISED
	PLOT DATE	DATE 5/15/2013	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

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

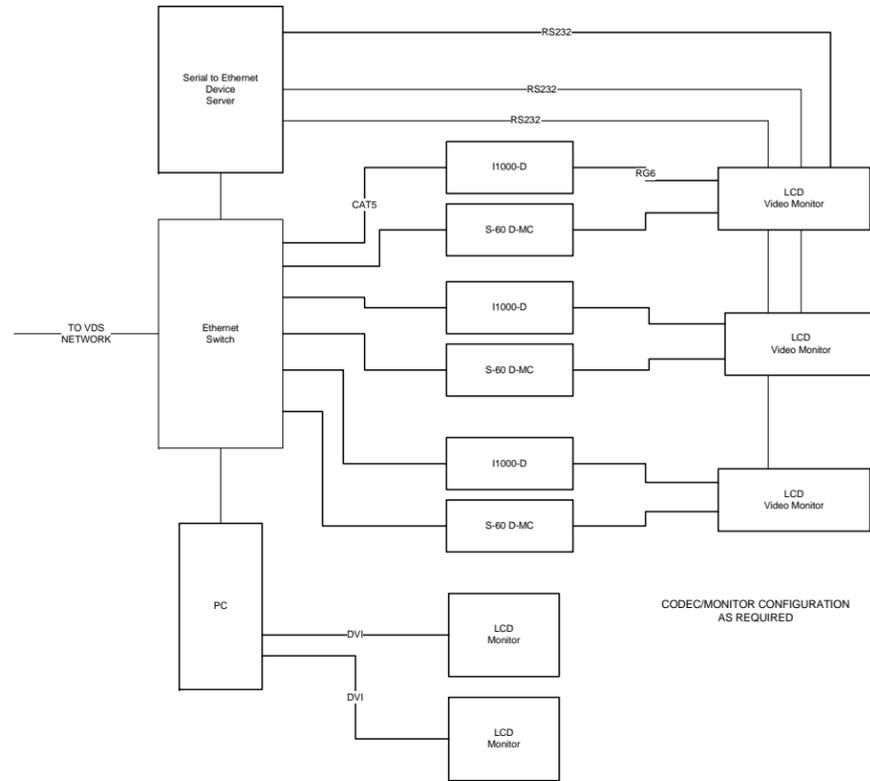
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	11
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				



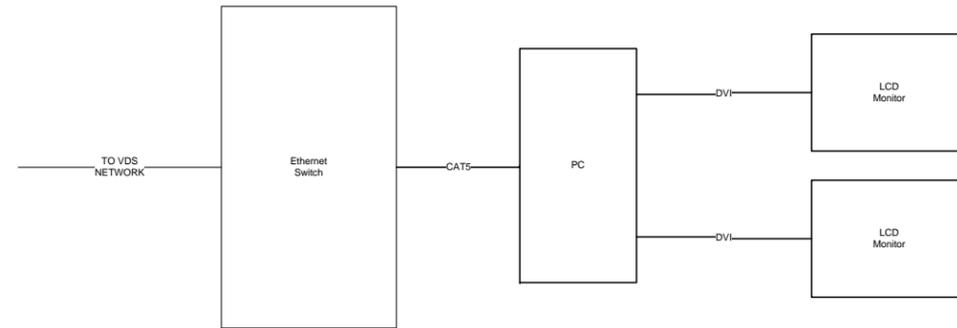
**NOTES:**  
 THE CONTRACTOR SHALL NOT SCALE OFF THE DRAWING, ACTUAL MEASUREMENTS SHALL BE TAKEN.  
 NOT ALL REQUIRED EQUIPMENT OR INTERCONNECTIONS ARE SHOWN FOR CLARITY.

FILE NAME	USER NAME	DESIGNED	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>D1 H.Q. PROPOSED VIDEO WALL DISTRIBUTION CONFIGURATION</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE NONE	CHECKED	REVISED				2009-0871	COOK	20	12	
	PLOT DATE	DATE 5/15/2013	REVISED				CONTRACT NO. <b>60134</b>				
								ILLINOIS	FED. AID PROJECT		

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



VIDEO DISTRIBUTION SYSTEM  
WORKSTATION TYPE A



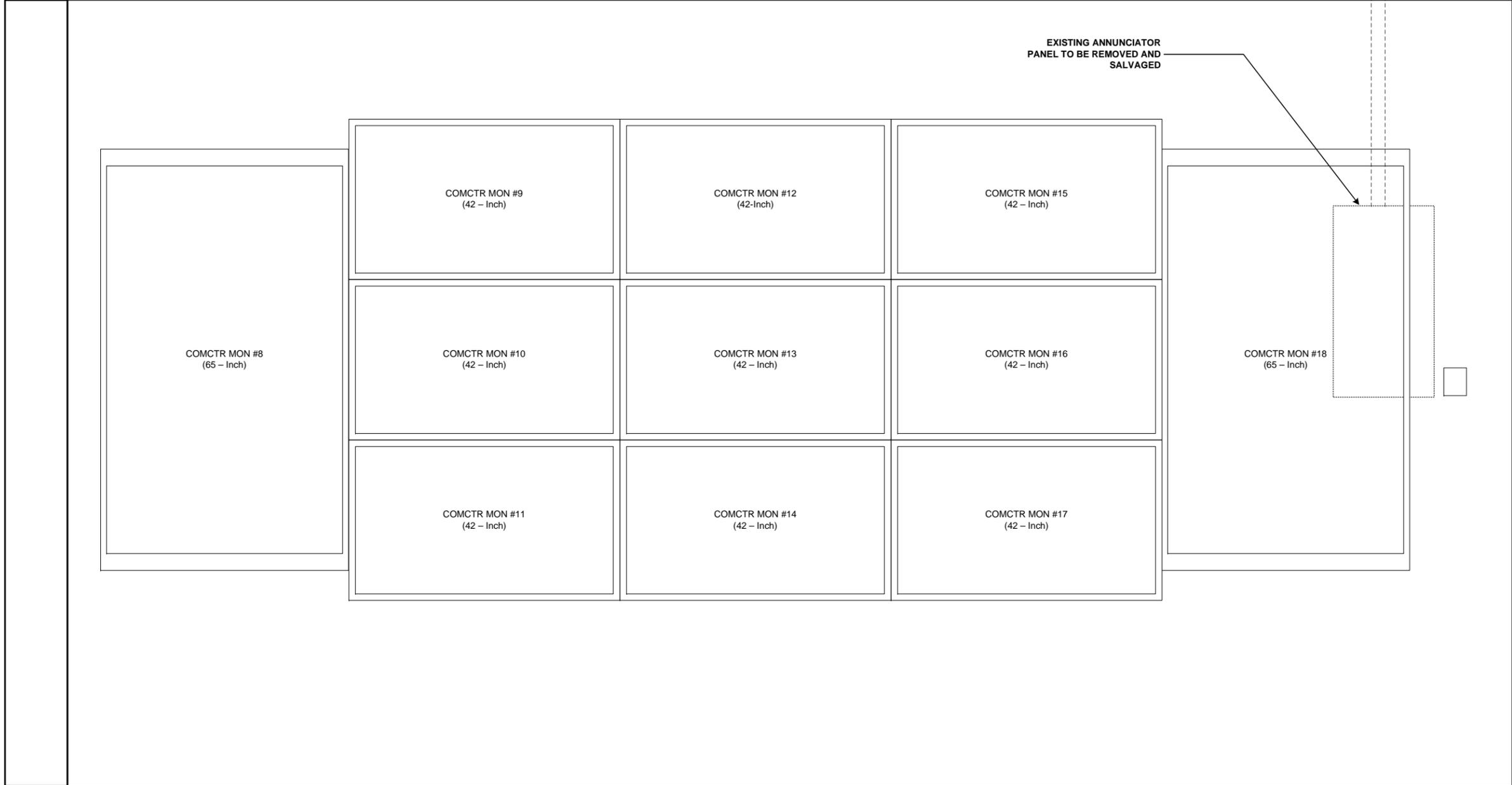
VIDEO DISTRIBUTION SYSTEM  
WORKSTATION TYPE B

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**

<b>VIDEO DISTRIBUTION SYSTEM VIDEO WORKSTATIONS</b>	
SCALE: _____	SHEET NO. ___ OF ___ SHEETS
STA. _____ TO STA. _____	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	13
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

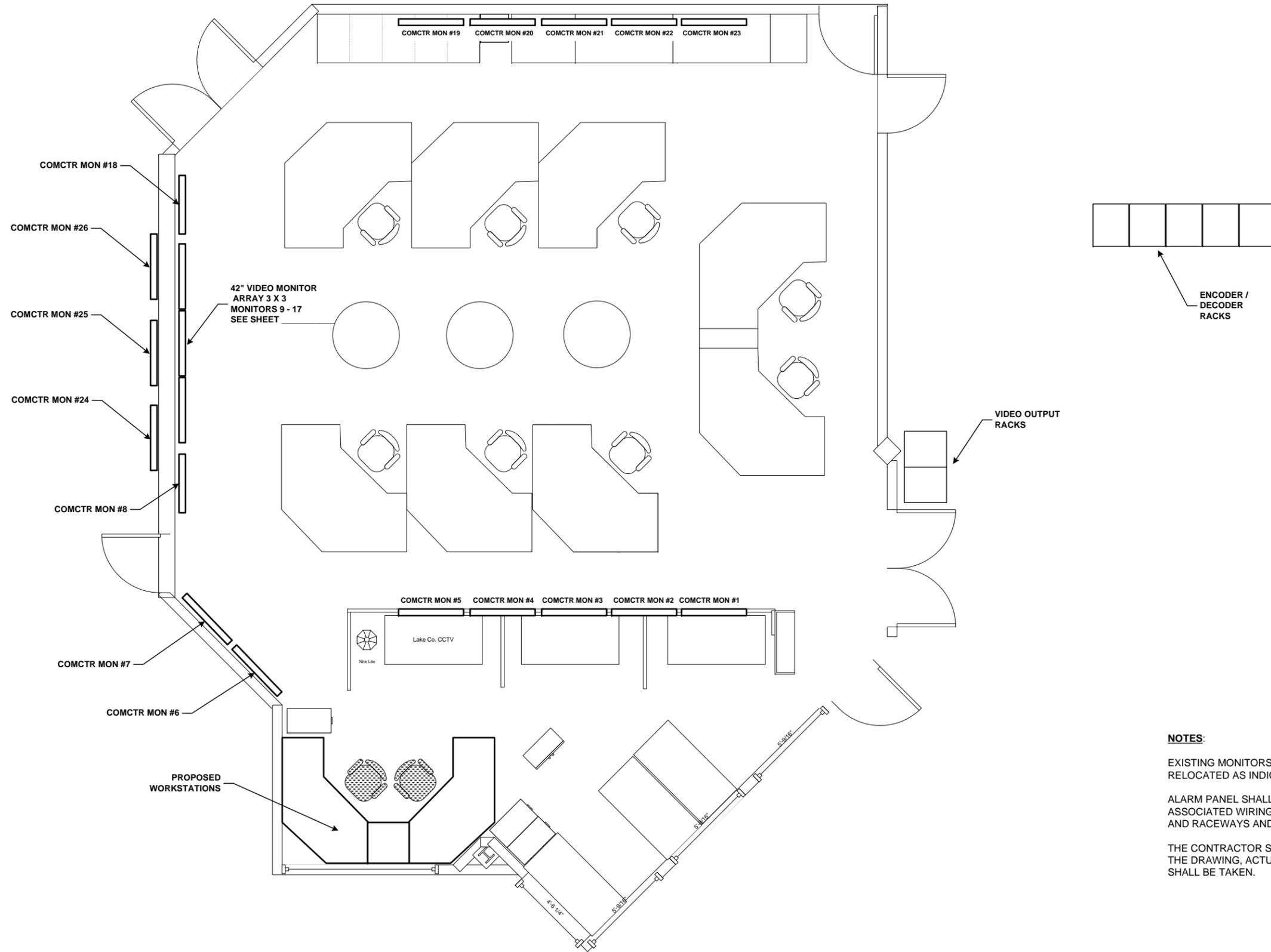


**NOTES:**

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	20	14	
	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	



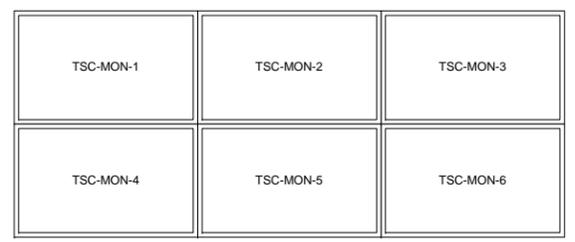
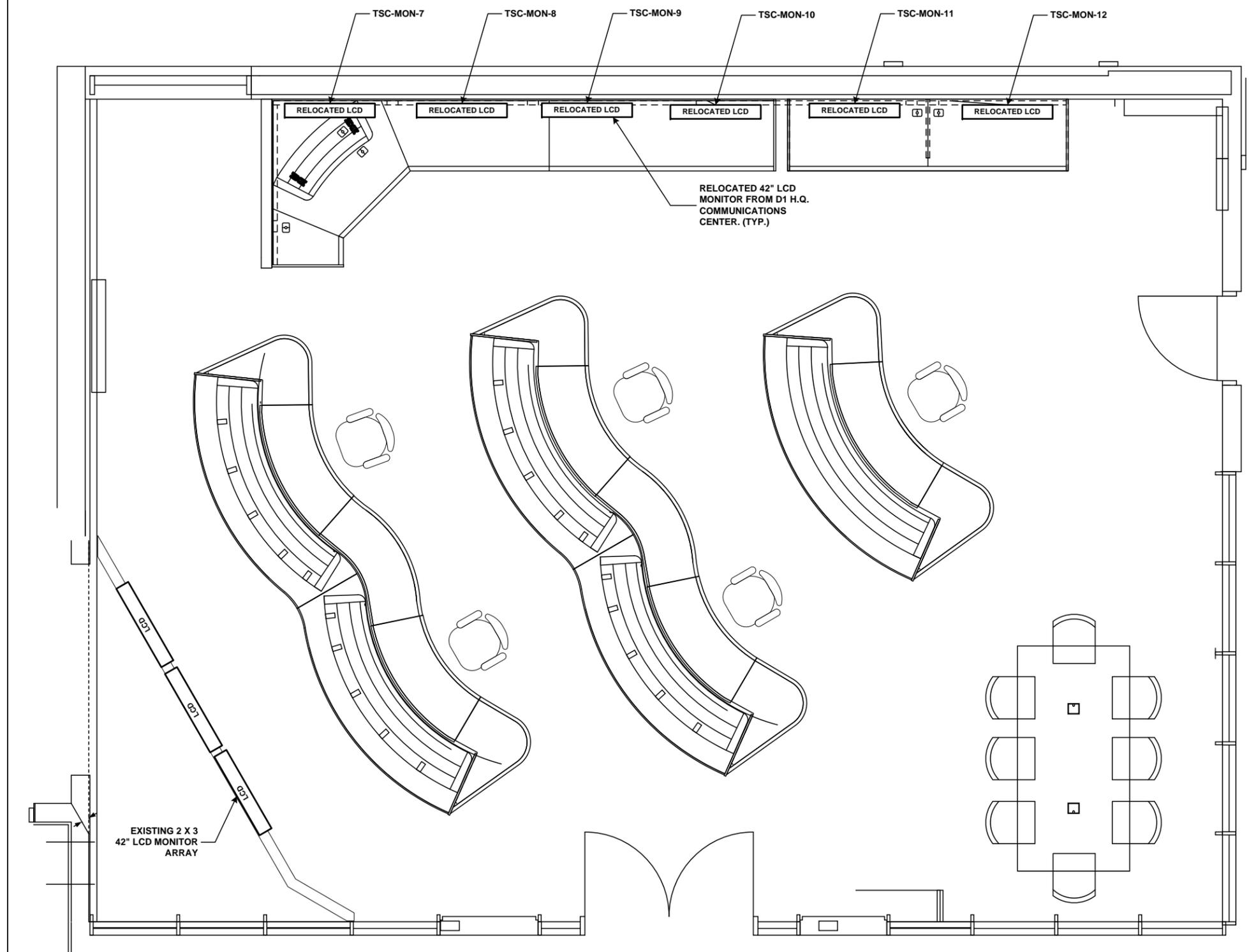
**NOTES:**

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.	
		DRAWN	REVISED					2009-0871	COOK	20	15
PLOT SCALE NONE		CHECKED	REVISED			CONTRACT NO. 60134					
PLOT DATE		DATE 5/15/2013	REVISED			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	20	16
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

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

PROPOSED EQUIPMENT INCLUDING CABINET

EXISTING EQUIPMENT TO BE RECONFIGURED  
UNLESS OTHERWISE NOTED

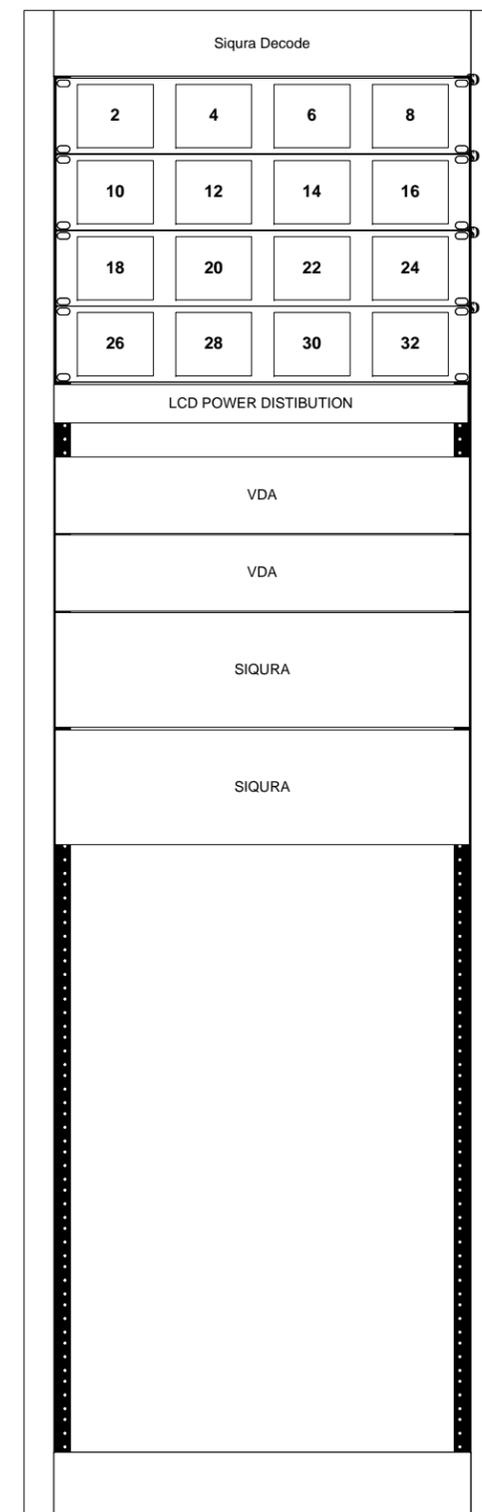
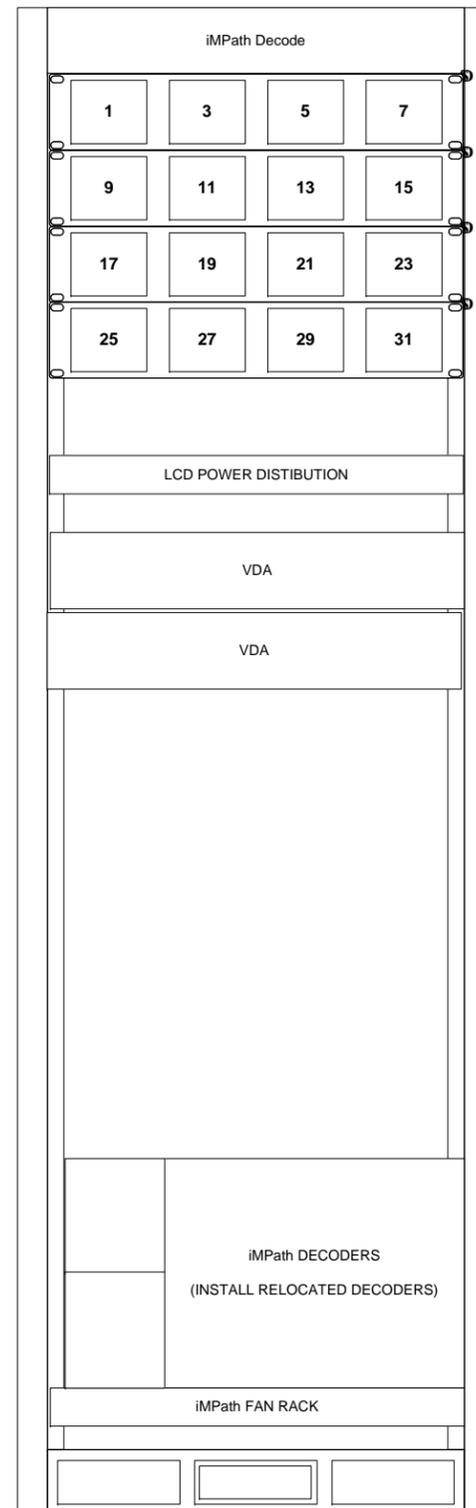
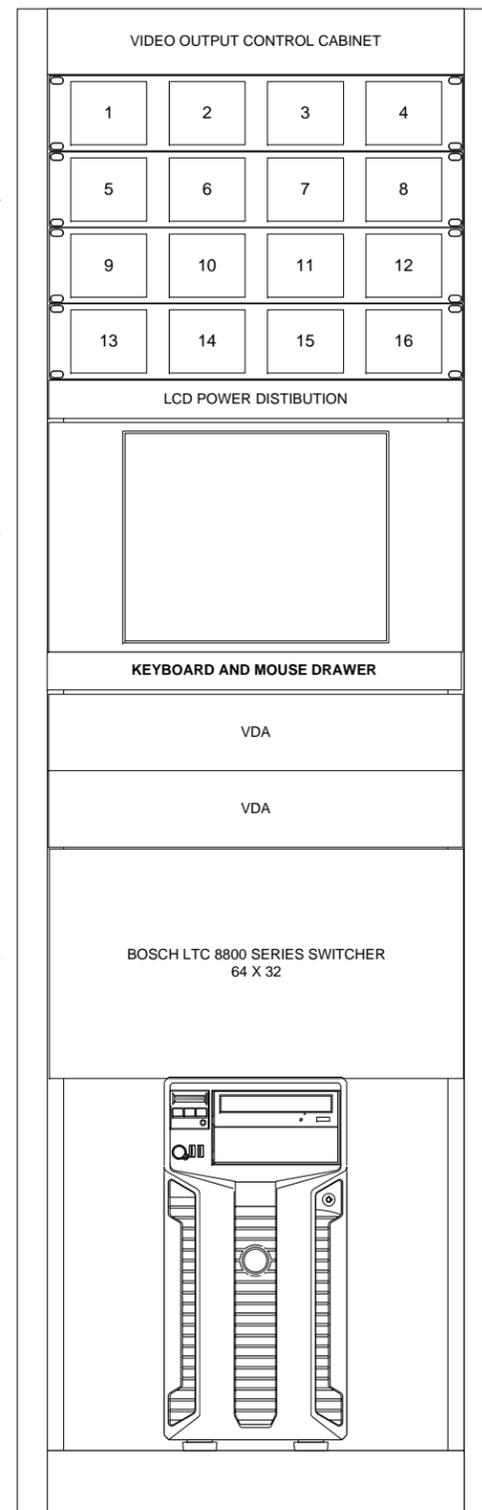
PROPOSED EQUIPMENT INCLUDING CABINET

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.

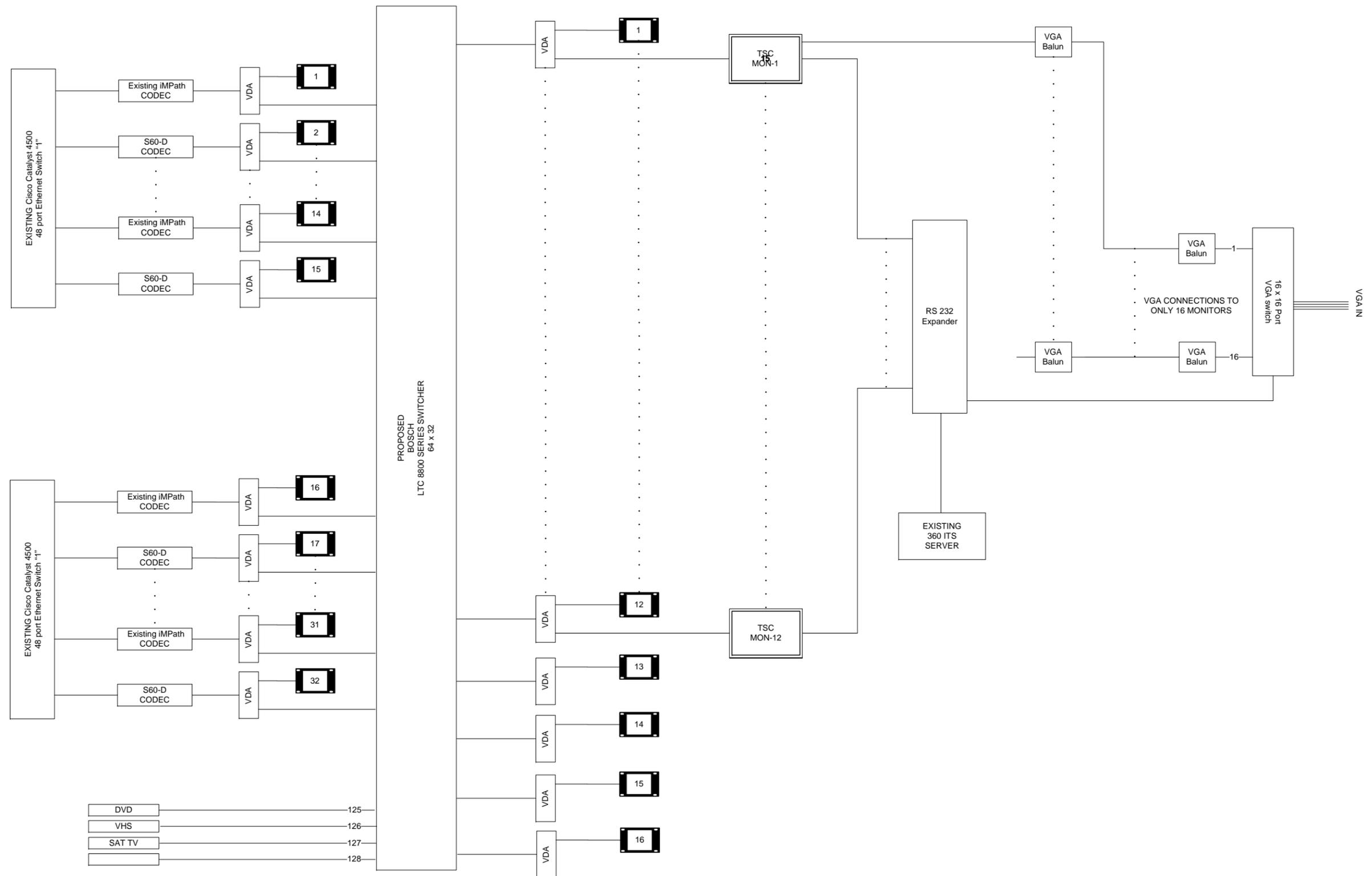
FILE NAME	USER NAME	DESIGNED	REVISED
		DRAWN	REVISED
		CHECKED	REVISED
		DATE 5/15/2013	REVISED

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				



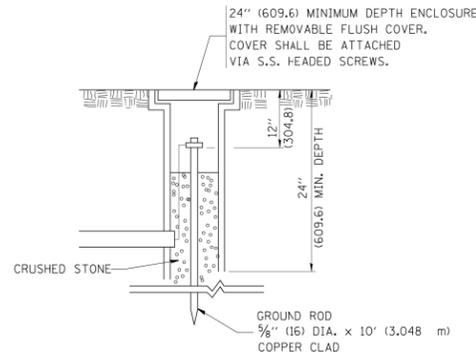
FILE NAME	USER NAME	DESIGNED	REVISED
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	PLOT DATE	DATE 5/15/2013	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

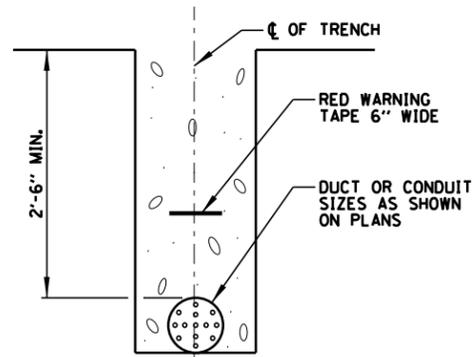
**TRAFFIC SYSTEMS CENTER PROPOSED  
VIDEO WALL DISTRIBUTION CONFIGURATION**

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

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



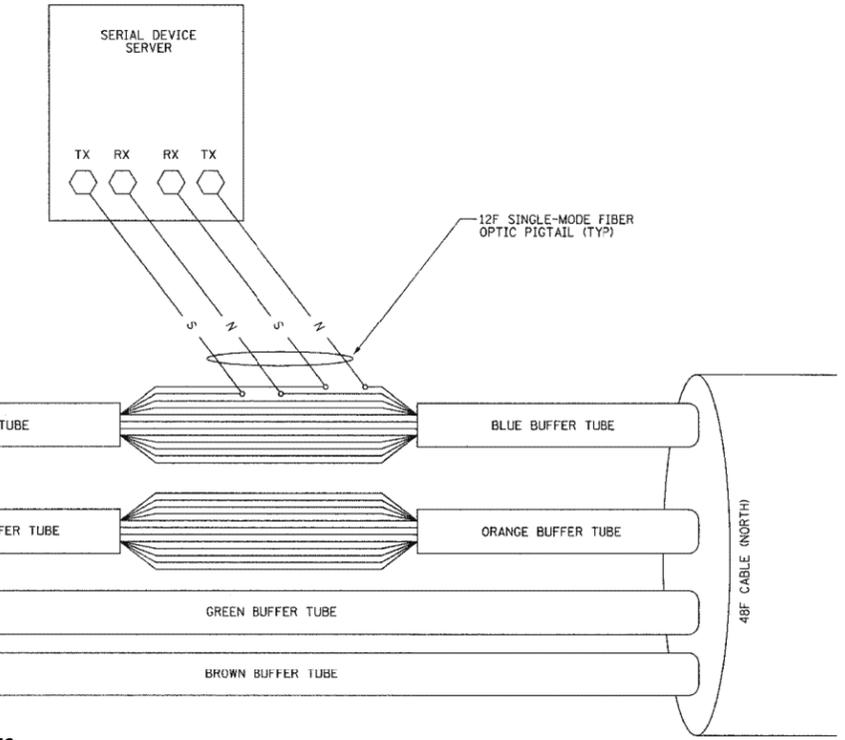
**GROUND WELL DETAIL**  
N.T.S.



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

FIBER NO.	COLOR CODE	FUNCTION	APPLICATION DESCRIPTION
1	BLUE	IN TX	DATA CIRCUIT
2	ORANGE	IN RX	
3	GREEN	OUT RX	
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 RX	
11	ROSE	OUT RX	
12	AQUA	OUT TX	

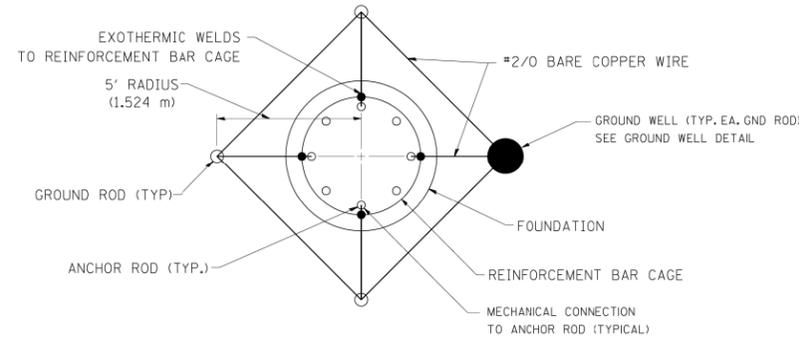
STANDARD 12-FIBER CABLE CONFIGURATION



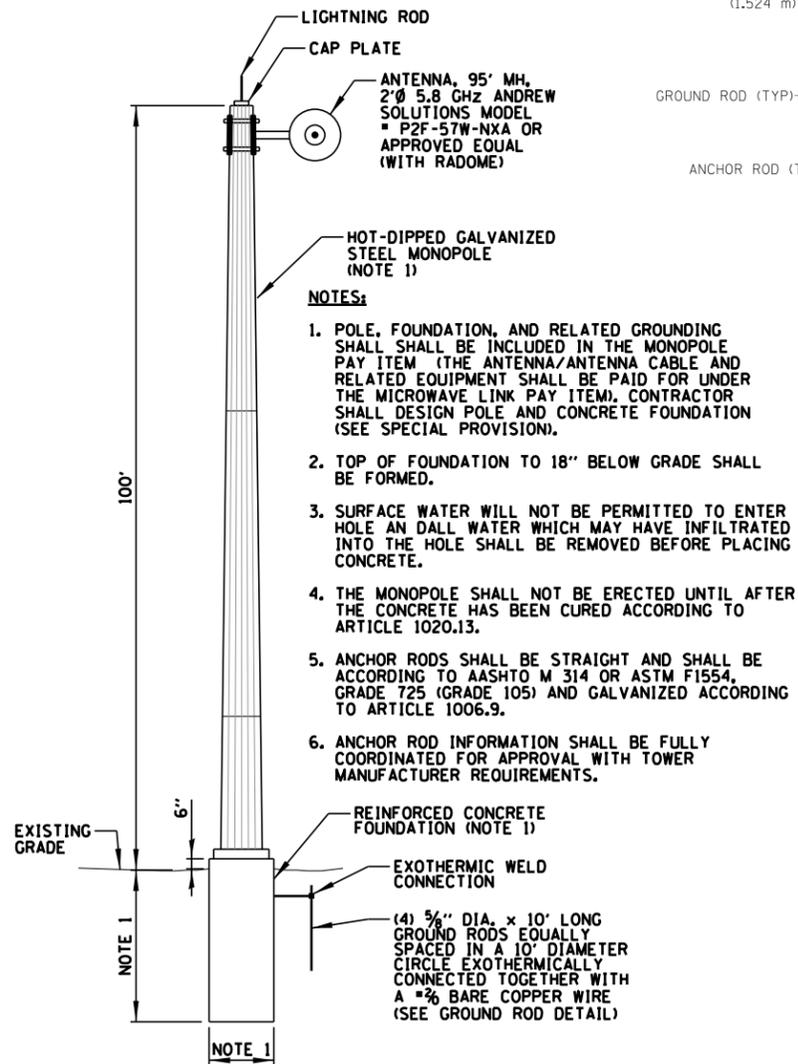
**NOTES:**

- CONTRACTOR SHALL VERIFY AND COORDINATE FIBERS TO BE SPLICED.

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



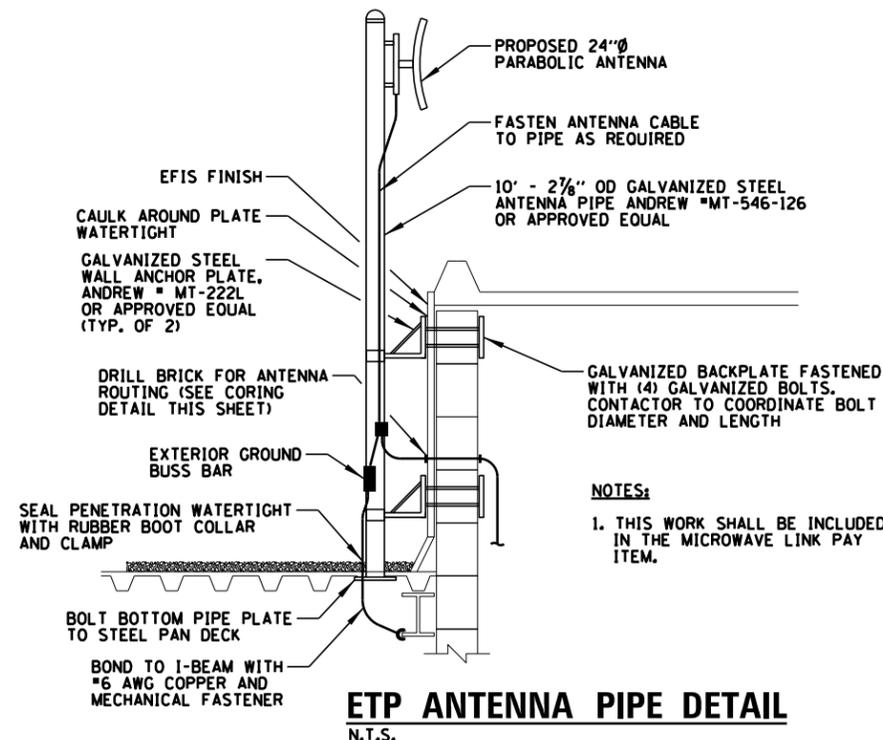
**GROUND ROD DETAIL**  
N.T.S.



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

**NOTES:**

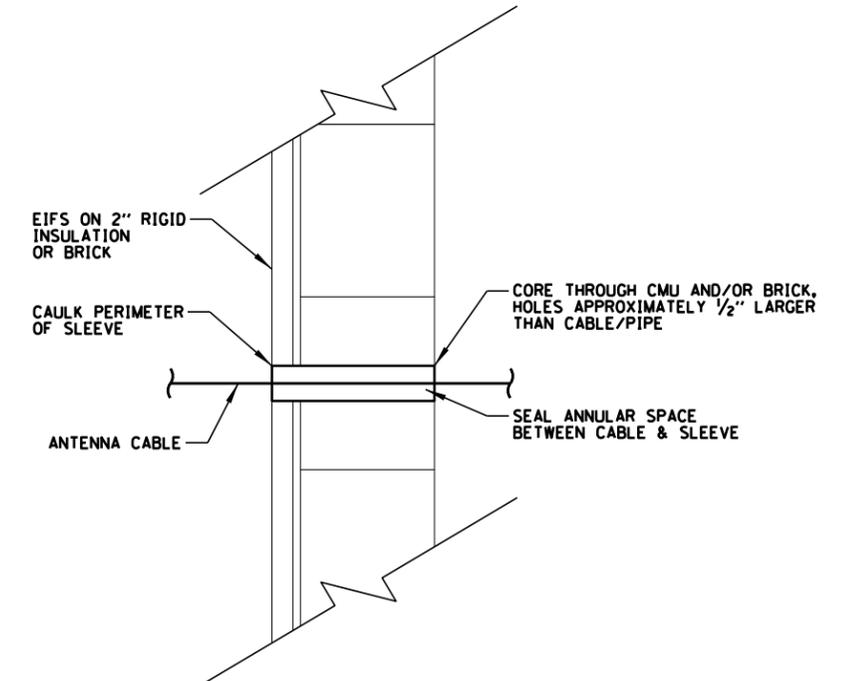
- POLE, FOUNDATION, AND RELATED GROUNDING SHALL BE INCLUDED IN THE MONOPOLE PAY ITEM (THE ANTENNA/ANTENNA CABLE AND RELATED EQUIPMENT SHALL BE PAID FOR UNDER THE MICROWAVE LINK PAY ITEM). CONTRACTOR SHALL DESIGN POLE AND CONCRETE FOUNDATION (SEE SPECIAL PROVISION).
- TOP OF FOUNDATION TO 18" BELOW GRADE 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.



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

**NOTES:**

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



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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-087I	COOK	20	17
<b>CONTRACT NO. 60134</b>				
ILLINOIS FED. AID PROJECT				

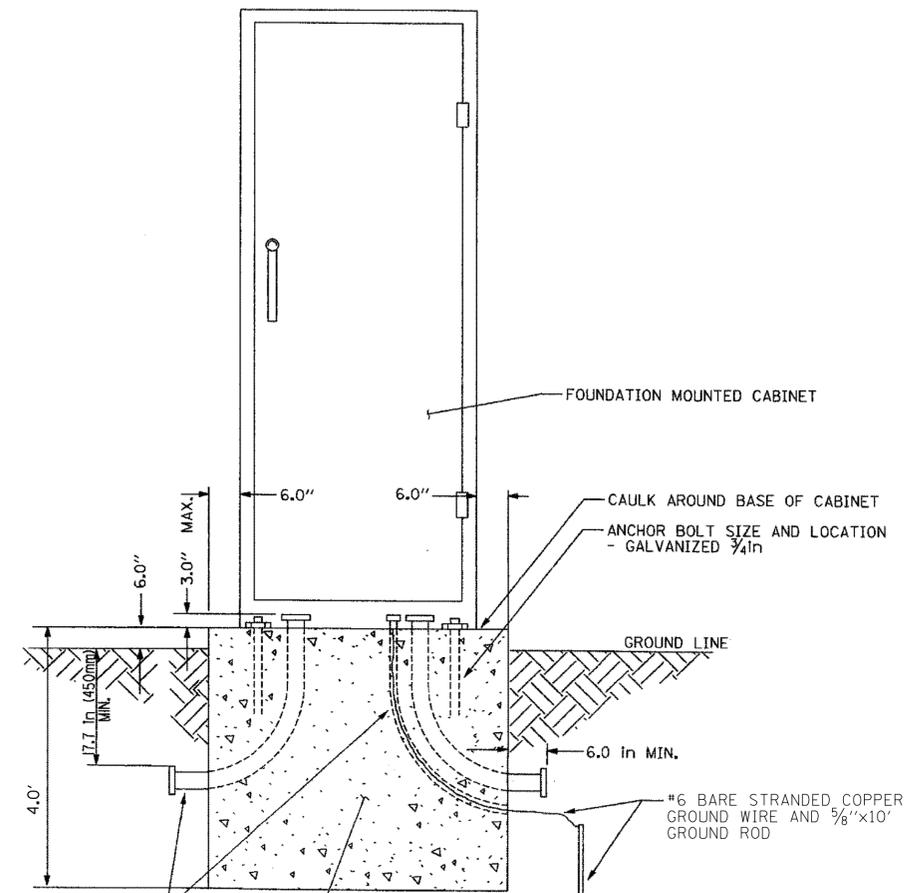
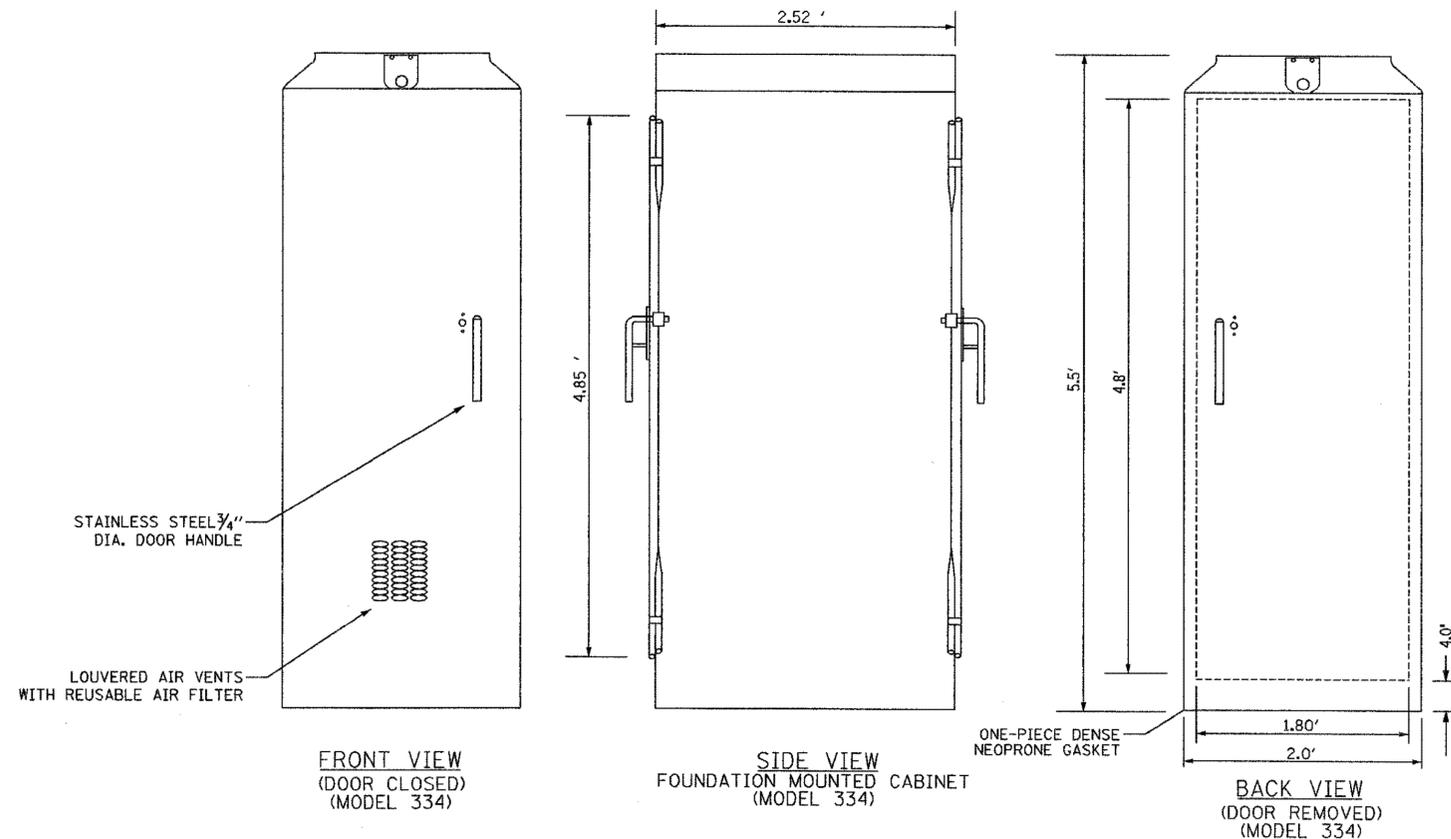
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	PLOT SCALE = 20'	CHECKED = JPC	REVISED =
	PLOT DATE = 5/15/2013	DATE = 3/21/2013	REVISED =

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CENTER-TO-CENTER INTEGRATION PROJECT  
DETAILS (1 OF 3)

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.





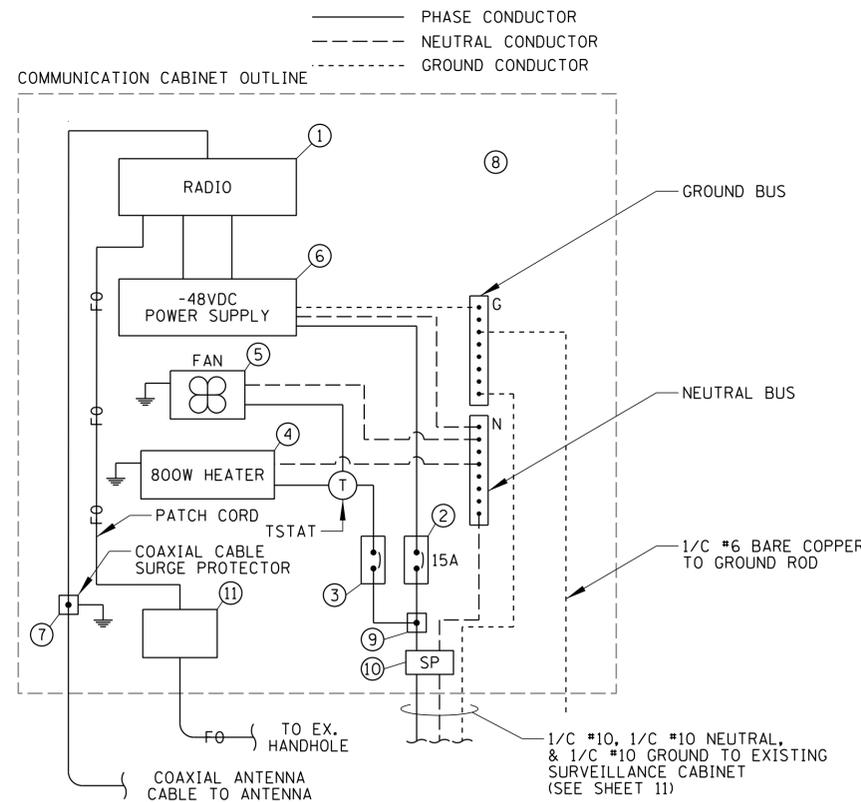
NUMBER, SIZE AND ORIENTATION OF CONDUITS AS SHOWN ON THE PLANS AND ON DETAIL DT-50

SEE NOTES 6 AND 7

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 in ABOVE THE GROUND SURFACE.
- CONCRETE BASE MUST BE CAST IN PLACE.
- ALL WORK SHOWN SHALL BE PAID FOR UNDER ITEM "COMMUNICATIONS CABINET AND EQUIPMENT", EXCEPT THE RADIO, COAX CABLE, DC POWER SUPPLY, COAX SURGE SUPPRESSOR, PATCH PANEL AND F.O. CABLING WHICH SHALL BE PAID FOR SEPARATELY.



WIRING DETAIL N.T.S.

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

COMPONENT SCHEDULE

DAN RYAN COMMUNICATIONS CABINET DETAIL

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

FILE NAME =	USER NAME = omerico	DESIGNED	AJD	REVISED	-
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		CHECKED	JPC	REVISED	-
		DATE	3/21/2013	REVISED	-

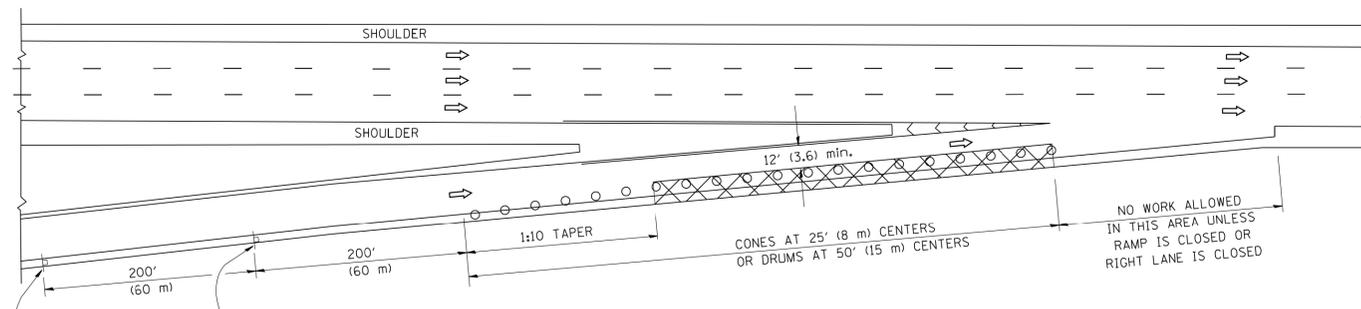
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ITS CENTER-TO-CENTER INTEGRATION PROJECT				
DETAILS (3 OF 3)				
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA.	TO STA.

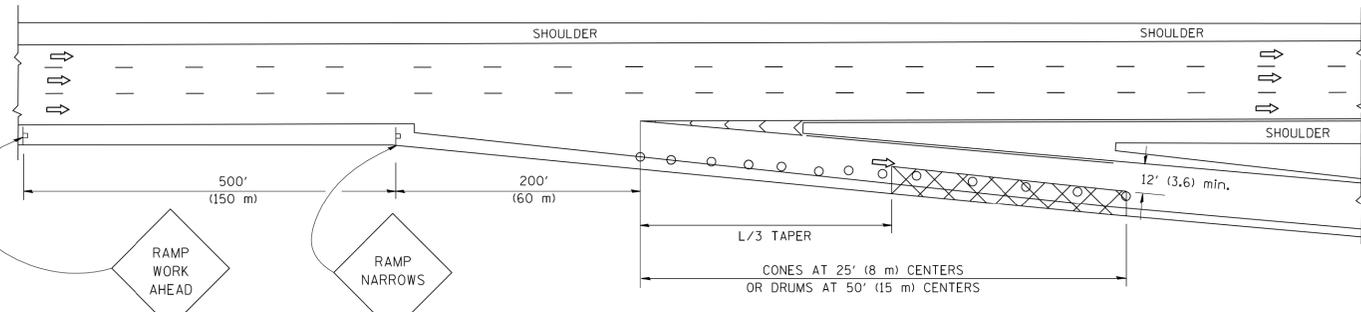
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	COOK	20	19
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

PARTIAL RAMP CLOSURE DETAILS

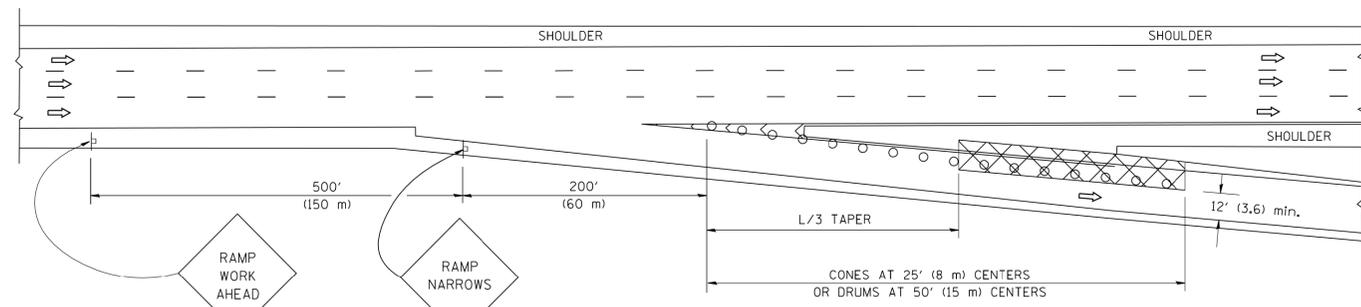
SHOULDER CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

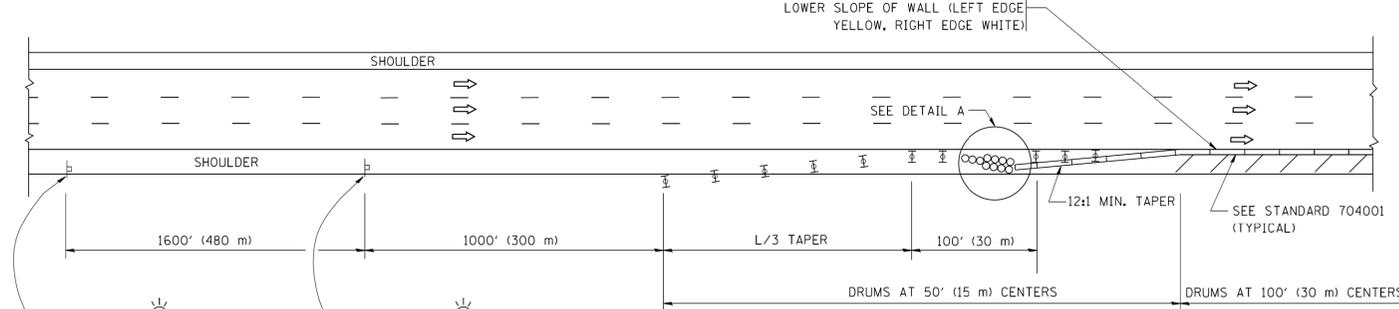
SYMBOLS

- 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

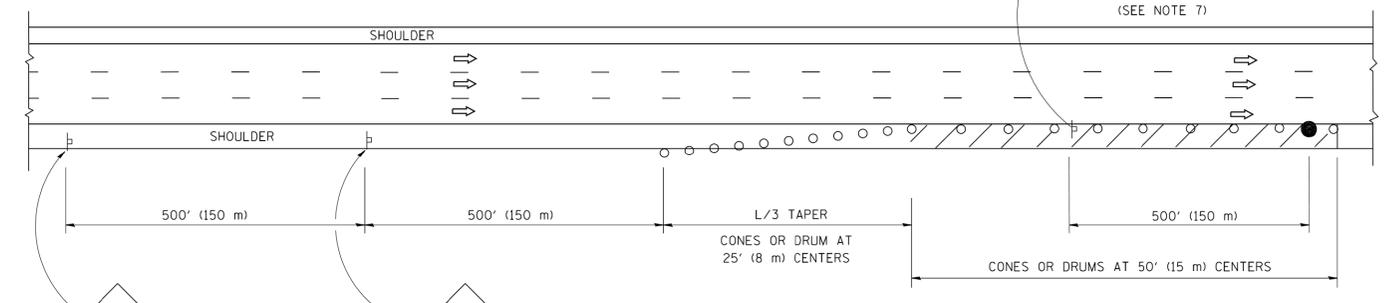
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
45 mph (80 km/h) 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.

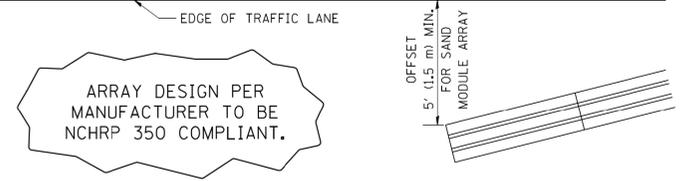


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

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



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

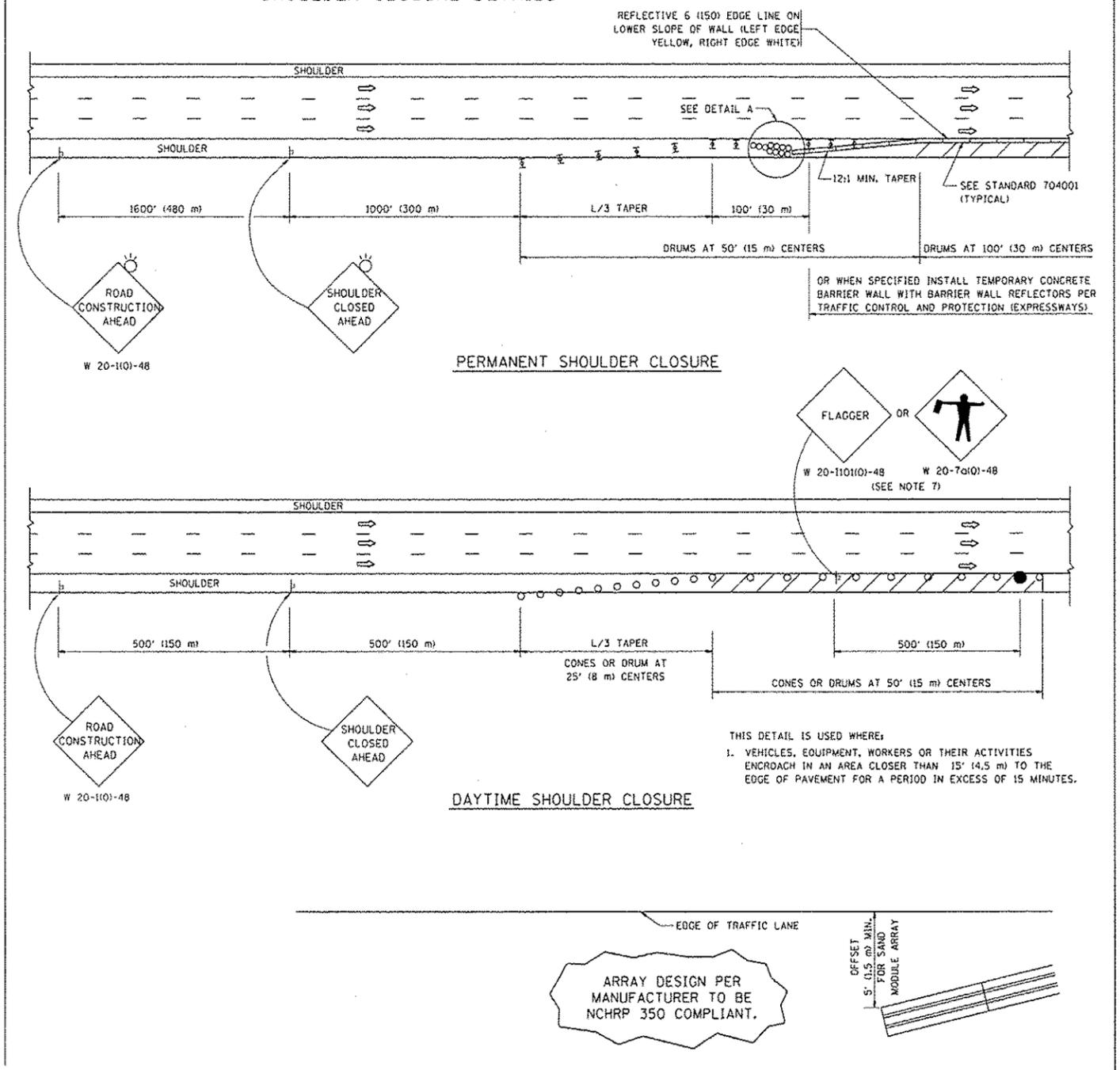
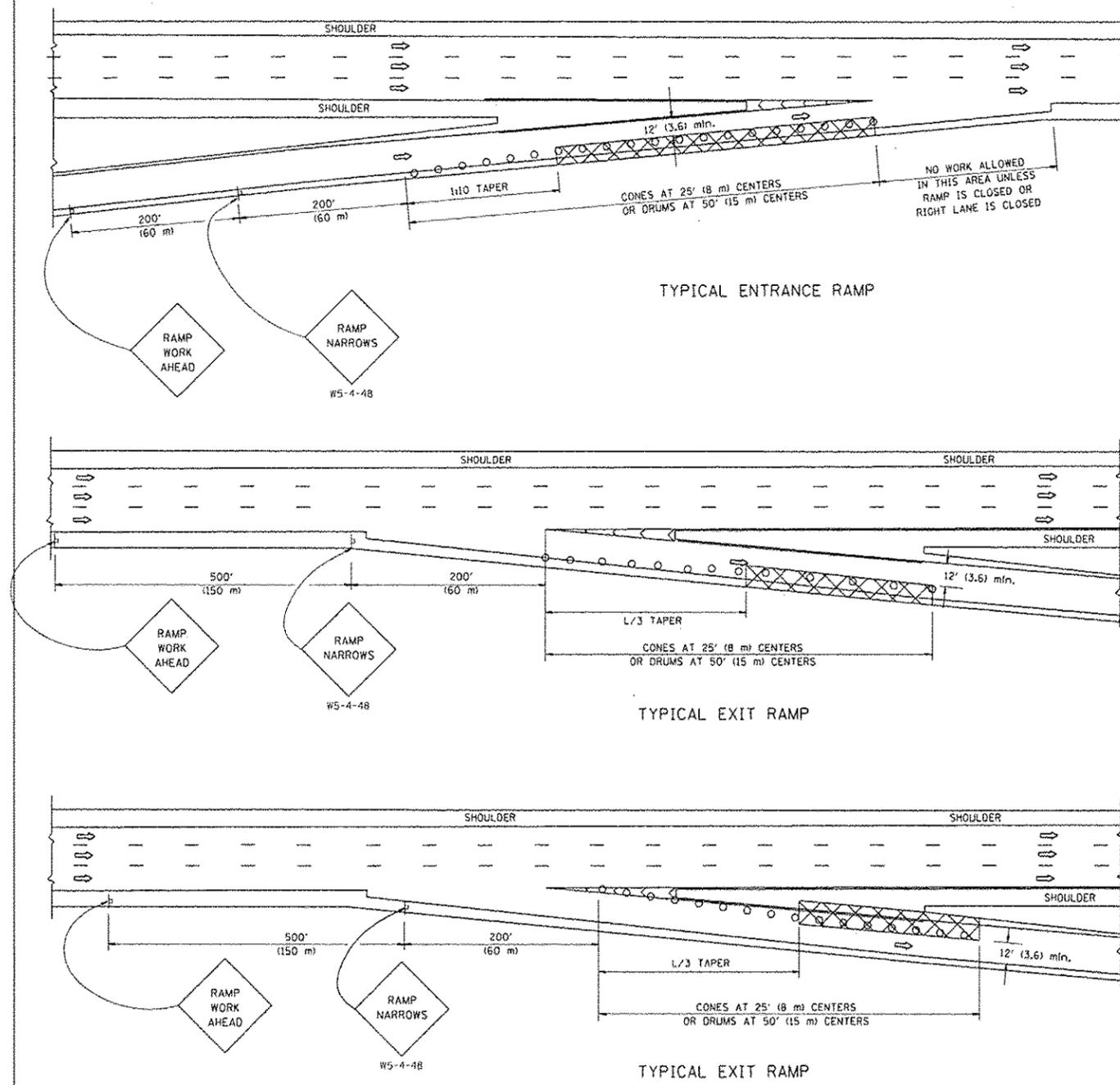
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY 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 AVTIVITY 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.

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

FILE NAME = W:\dststd\22x34\17.dgn	USER NAME = lrysa	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.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - D.W.S.	REVISED - J.A.F. 12-06					2009-0871	COOK	20	20
		PLOT SCALE = 50.0000' / IN.	REVISED - S.P.B. 01-07					<b>TC-17</b>		CONTRACT NO. 60134	
		PLOT DATE = 1/26/2010	REVISED - S.P.B. 12-09				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	
						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS



SYMBOLS

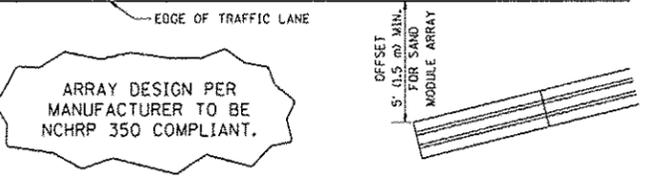
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FILE NAME W:\data\22x34\col7.dgn	USER NAME lmgoo	DESIGNED D.W.S.	REVISED 04-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES</b>	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>CONTRACT 00134</b>
			REVISED J.A.F. 12-06		F.A. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.				VAR 2009-087 I C00K 20 20A
			REVISED S.P.B. 01-07		TC-17				CONTRACT NO.
			REVISED S.P.B. 12-09		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				