

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	1
ILLINOIS		CONTRACT NO. 60134		

SHEET NO. DESCRIPTION

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES
- 3 GENERAL NOTES
- 4 OVERALL MAP OF PROJECT SITE LOCATIONS
- 5 ISP DISTRICT 2 (ELGIN) / ISTHA M5 FACILITY (SCHAUMBURG)
- 6 ISP DISTRICT 5 (JOLIET) / ISTHA TOLL PLAZA 99 (I-355)
- 7 IDOT ETP BUILDING / DAN RYAN & W. 33RD ST.
- 8 ISP DISTRICT CHICAGO / COOK COUNTY SHERIFF (MAINE NORTH)
- 9 ISP DISTRICT 15 (DOWNERS GROVE)
- 10 IDOT BUILDING E (KENNEDY / EDENS)
- 11 ONE LINE DIAGRAMS
- 12 RADIO, ANTENNA, & EQUIPMENT DETAILS - ISP DIST. 2 / ISTHA M5
- 13 RADIO, ANTENNA, & EQUIPMENT DETAILS - ISP DIST. 5 / ISTHA PLAZA 99
- 14 RADIO, ANTENNA, & EQUIPMENT DETAILS - IDOT ETP / DAN RYAN
- 15 DETAILS (1 OF 3)
- 16 DETAILS (2 OF 3)
- 17 DETAILS (3 OF 3)

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

PROJECT:
ITS CENTER TO CENTER
INTEGRATION PROJECT
VARIOUS COUNTIES
SECTION NO. 2009-0871
JOB NO. C-91-021-10

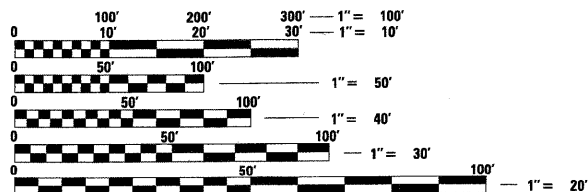
PROJECT: CM-0005(860)



LIST OF STATE STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 701456-01 PARTIAL EXIT RAMP CLOSURE FREEWAY / EXPRESSWAY
- 701601-07 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701901-01 TRAFFIC CONTROL DEVICES

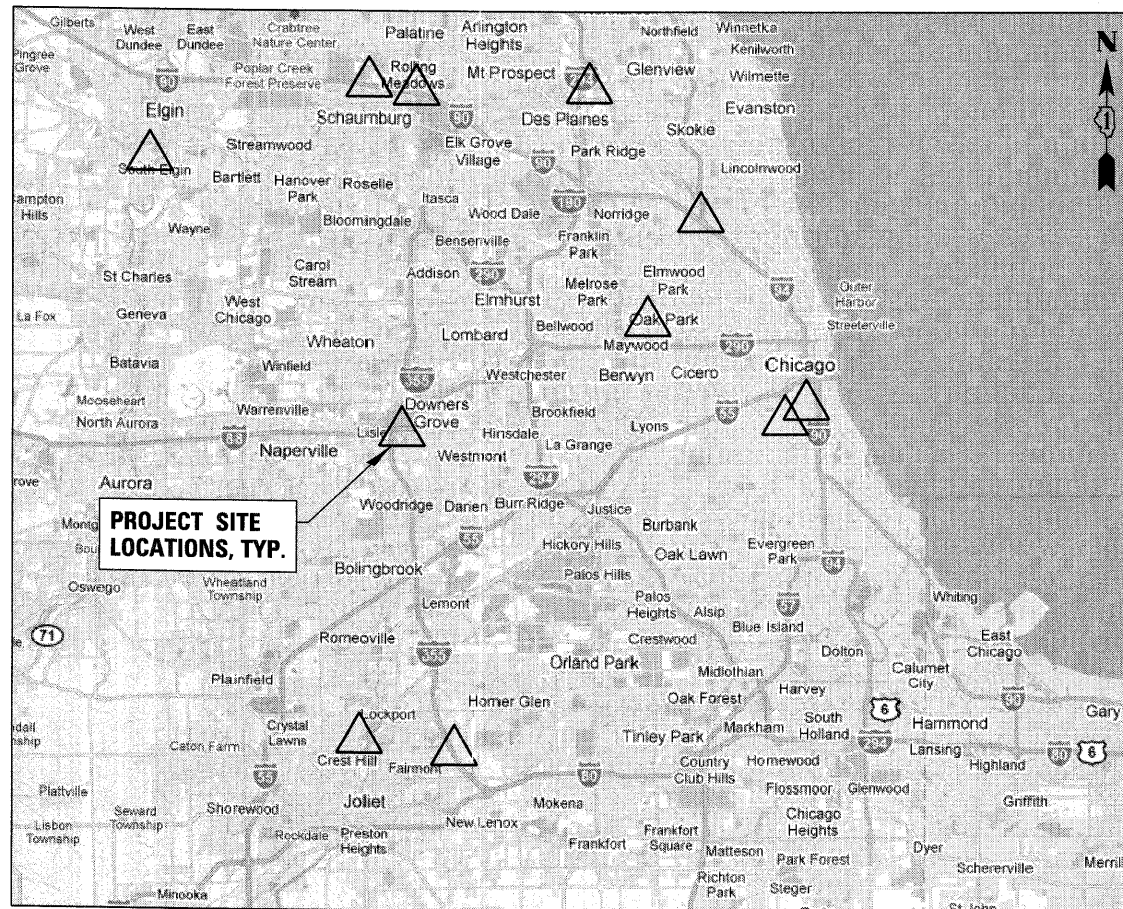
THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.



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 MAY 16, 20 11

Diane M. O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 19 20 11
Scott E. Stitt, P.E.
 acting ENGINEER OF DESIGN AND ENVIRONMENT

August 19 20 11
Christine M. Fiedler
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



ANTHONY J. DERICCO P.E. 5-12-11
 ELECTRICAL ENGINEER DATE
Anthony J. DeRicco
 ILLINOIS REGISTRATION No. 062-057484
 EXPIRATION DATE: 11-30-2011

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

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 TOLL HIGHWAY AUTHORITY REQUIREMENTS.
 - E. 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)

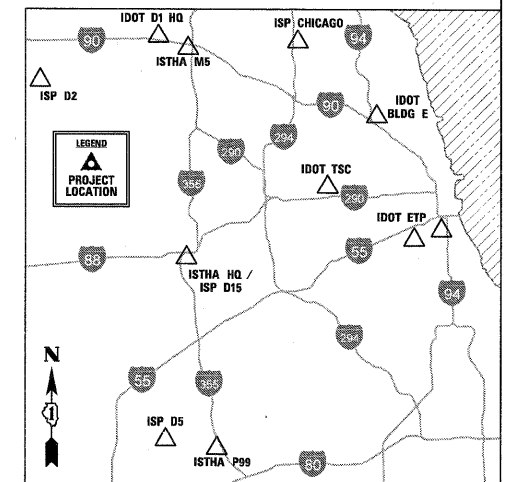
10. ANY GROUND AREAS DISTURBED DURING THE INSTALLATION OF EQUIPMENT SHALL BE REGRADED AND SEEDED TO THE SATISFACTION OF THE ENGINEER. COST FOR THIS WORK SHALL BE INCIDENTAL.
11. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, CONSTRUCTION METHODOLOGIES, PRODUCT MANUFACTURER SPECIFICATIONS, OWNERS MANUALS, 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 SUPERVISON/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
17. CONTRACTOR SHALL PERFORM ALL ELECTRICAL TESTING AS REQUIRED BY IDOT, ISTHA, 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. SEE SPECIAL PROVISIONS FOR INSURANCE REQUIREMENTS. THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY PERMIT NUMBER IS TO BE NOTED ON THE POLICY IN THE DESCRIPTION OF OPERATION/LOCATIONS/VEHICLES/SPECIAL ITEMS AREA OF THE POLICY.

A PAPER COPY OF THE POLICY IS TO BE SENT TO THE FOLLOWING ADDRESS:
 MR. THOMAS CAMERON
 I.T. DEPARTMENT
 THE ILLINOIS TOLLWAY
 2700 OGDEN AVENUE
 DOWNERS GROVE, IL 60515

AN ELECTRONIC COPY (ADOBE ACROBAT .PDF FORMAT) IS TO BE E-MAILED TO TCAMERON@GETIPASS.COM.
21. ALL EQUIPMENT IS SHOWN DIAGRAMMATICALLY. CONTRACTOR SHALL COORDINATE AND VERIFY EXACT EQUIPMENT SIZES, LOCATIONS, ROUTINGS, ETC.
22. 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.
23. 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.
24. 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
ISTHA	ILLINOIS STATE TOLL HIGHWAY AUTHORITY
ISP	ILLINOIS STATE POLICE
TSC	TRAFFIC SYSTEMS CENTER
ETP	EMERGENCY TRAFFIC PATROL



CHRISTOPHER B. BURKE ENGINEERING, LTD.
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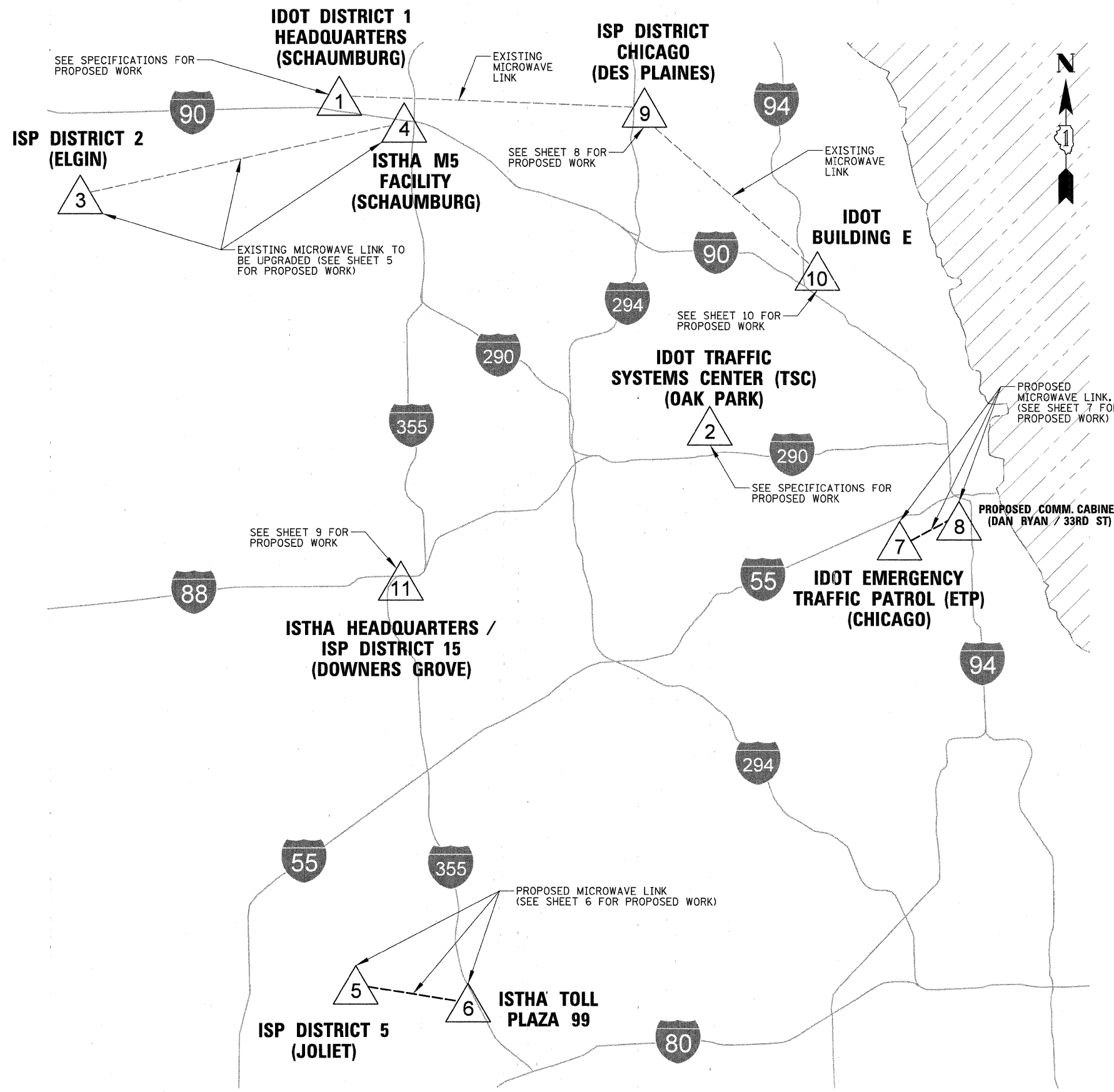
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**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	VARIES	17	3
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				



SITE NO.

SITE LOCATION

1

IDOT DISTRICT 1 HEADQUARTERS

201 WEST CENTER COURT
SCHAUMBURG, IL 60196

2

IDOT TRAFFIC SYSTEMS CENTER

445 HARRISON STREET
OAK PARK, IL 60304

3

ISP DISTRICT 2

777 SOUTH STATE STREET
ELGIN, IL 60123

4

ISTHA M5 FACILITY

AT SOUTHWEST CORNER OF
I-90 & IL ROUTE 53, SCHAUMBURG, IL

5

ISP DISTRICT 5

16648 SOUTH BROADWAY STREET
LOCKPORT, IL 60441

6

ISTHA TOLL PLAZA 99

ON I-355 BETWEEN W. 167TH ST & BRUCE ROAD
NB MILE MARKER 3 1/4, LOCKPORT, IL

7

IDOT EMERGENCY TRAFFIC PATROL

3501 SOUTH NORMAL AVENUE
CHICAGO, IL 60609

8

PROPOSED COMMUNICATIONS CABINET

AT SOUTHWEST CORNER OF
DAN RYAN & 33RD STREET, CHICAGO, IL

9

ISP DISTRICT CHICAGO

9511 WEST HARRISON STREET
DES PLAINES, IL 60016

10

IDOT BUILDING E

AT JUNCTION OF KENNEDY &
EDENS EXPRESSWAYS, CHICAGO, IL

11

ISP DISTRICT 15 / ISTHA HQ

2700 OGDEN AVENUE
DOWNERS GROVE, IL 60515

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 TOLL HIGHWAY AUTHORITY	2700 OGDEN AVENUE DOWNERS GROVE, IL 60515	TOM CAMERON (630) 241-6800 x3411	4 6 11
ILLINOIS STATE POLICE	9511 WEST HARRISON STREET DES PLAINES, IL 60016	DAN QUINN (312) 636-4514	3 4 5 6 9

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

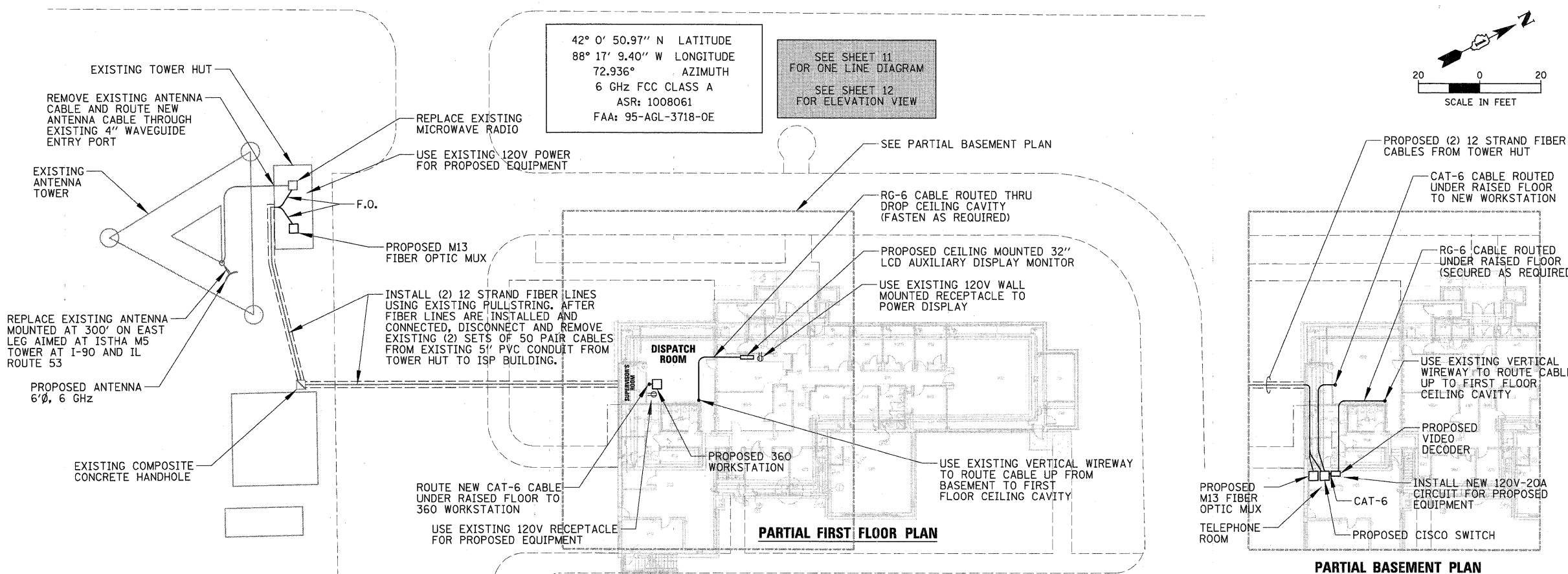
ITS CENTER-TO-CENTER INTEGRATION PROJECT
OVERALL MAP OF PROJECT SITE LOCATIONS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	4
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ILLINOIS FED. AID PROJECT				

SCOPE OF WORK

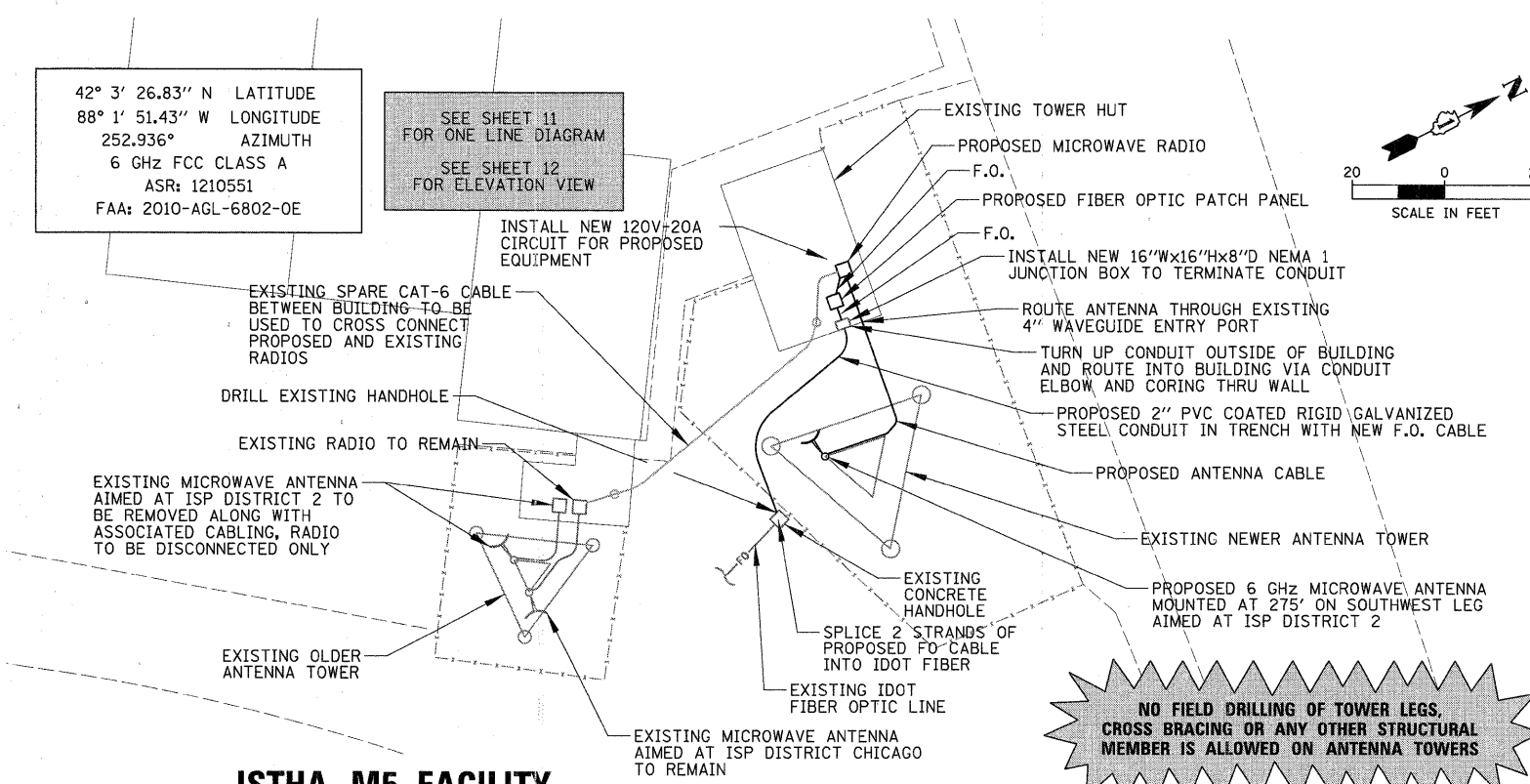
- ISP DISTRICT 2 (ELGIN) AND ISTHA M5 FACILITY (SCHAUMBURG) ARE CONNECTED VIA MICROWAVE LINK. THE EXISTING LINK SHALL BE UPGRADED WITH NEW RADIOS, ANTENNAS, AND CABLES. OUTAGE TO LINK SHALL NOT EXCEED 48 HOURS. THE EXISTING VIDEO SIGNAL FOR IDOT'S TRAFFIC CAMERAS SHALL BE ADDED TO THE MICROWAVE LINK. CONTRACTOR SHALL COORDINATE, FURNISH, AND INSTALL REQUIRED EQUIPMENT FOR THE ISP DISTRICT 2 TO VIEW VIDEO FROM UP TO 4 OF ANY OF IDOT'S TRAFFIC CAMERAS THRU LINK.
- THE EXISTING TOWER AT ISP DISTRICT 2 SHALL BE REINFORCED TO ACCOMMODATE THE PROPOSED UPGRADES
- THE EXISTING COPPER LINES FROM THE TOWER HUT TO THE ISP DISTRICT 2 BUILDING SHALL BE REPLACED WITH FIBER. THE EXISTING (1) ISP T1 LINE AND (4) STARCOM T1 LINES SHALL BE CONVERTED TO FIBER WITH A M13 FIBER OPTIC MUX IN THE HUT AND DECONVERTED BACK TO T1 LINES WITH MATCHING MUX IN BUILDING. OUTAGE TO STARCOM SYSTEM DURING CONSTRUCTION SHALL NOT EXCEED 15 MINUTES.



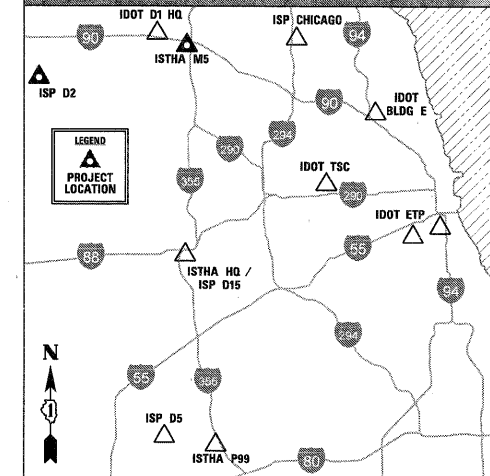
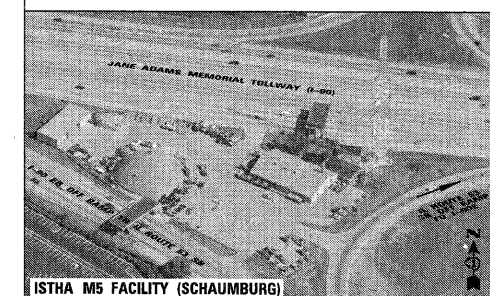
ISP DISTRICT 2 (ELGIN)

SPECIAL NOTES FOR WORK AT M5 LOCATION

- PRIOR TO THE COMMENCEMENT OF ANY UNDERGROUND WORK, PLEASE CONTACT THE ILLINOIS TOLLWAY'S ENGINEERING UTILITY PERMIT DIVISION. PLEASE NOTE THAT J.U.L.I.E LOCATION OF BURIED UTILITIES DOES NOT INCLUDE ISTHA BURIED FACILITIES AND THAT ENGINEERING UTILITY PERMIT DIVISION NEEDS TO BE CONTACTED A MINIMUM OF FOUR BUSINESS DAYS PRIOR TO UNDERGROUND WORK TO OBTAIN AND SUBMIT AN ONLINE ISTHA A-36 FORM, AT: WWW.ILLINOISVIRTUALTOLLWAY/UTILITYLOCATES.
- EXISTING VERTICAL WAVEGUIDE LADDERS MAY NOT BE UTILIZED TO MOUNT NEW COAXIAL CABLE OR WAVEGUIDE. A NEW VWGL SHALL BE MOUNTED, ALONG A LEG AGREED UPON BY THE ILLINOIS TOLLWAY (THE EDGE OF THE VERTICAL LADDER SHOULD BE NO CLOSER THAN ONE FOOT FROM THE ADJACENT EDGE OF THE TOWER LEG). THE VWGL SHALL BE ATTACHED TO THE TOWER WITHOUT DRILLING, UTILIZING "J-HOOKS" OR "J-PLATES." CATEGORY 5 CABLE (IN INSTANCES OF WIRELESS BROADBAND LEASING) MAY BE RUN ALONG THE SIDE OF THE VWGL, AS DIRECTED BY THE ILLINOIS TOLLWAY I.T. DEPARTMENT.
- WAVEGUIDE SHALL BE RUN UPWARD ON VWGL TO EITHER A TOWER CROSS-MEMBER DIRECTLY DIAGONAL TO THE PLANNED ANTENNAS AND/OR (IN INSTANCES WITH SECTOR ANTENNAS) ALSO LEAVING THE VERTICAL LADDER AND RUNNING ALONG AN X BRACE UPWARD TO ANTENNAS ON OTHER TOWER SIDES.
- THE ANTENNA HEIGHT SHOWN IS "CENTER LINE," NOT TO TOP OR BOTTOM OF THE ARRAY. THIS HEIGHT IS SET BY THE ILLINOIS TOLLWAY I.T. DEPARTMENT AT INITIAL SITE MEETINGS AND MAY NOT BE ADJUSTED AT ANY TIME WITHOUT WRITTEN PERMISSION FROM SAID DEPARTMENT.
- ALL UNDERGROUND ELECTRICAL CONDUIT SHALL BE UL LISTED PVC COATED RIGID GALVANIZED.



ISTHA M5 FACILITY



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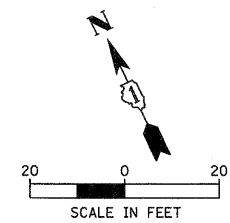
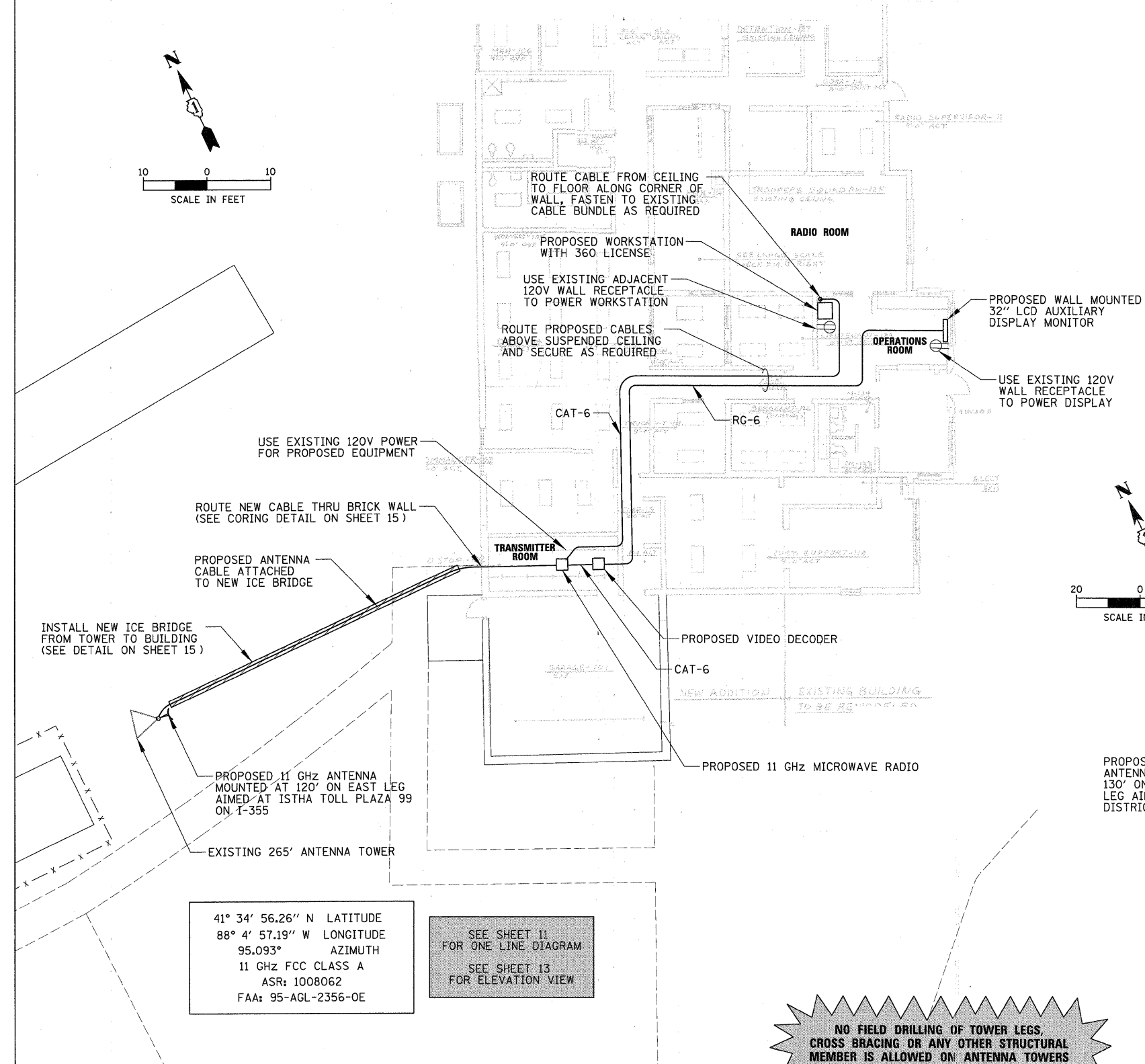
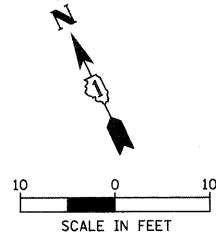
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					ILLINOIS FED. AID PROJECT			

SPECIAL NOTES FOR WORK AT PLAZA 99 LOCATION

1. PRIOR TO THE COMMENCEMENT OF ANY UNDERGROUND WORK, PLEASE CONTACT THE ILLINOIS TOLLWAY'S ENGINEERING UTILITY PERMIT DIVISION. PLEASE NOTE THAT J.U.L.I.E LOCATION OF BURIED UTILITIES DOES NOT INCLUDE ISTHA BURIED FACILITIES AND THAT ENGINEERING UTILITY PERMIT DIVISION NEEDS TO BE CONTACTED A MINIMUM OF FOUR BUSINESS DAYS PRIOR TO UNDERGROUND WORK TO OBTAIN AND SUBMIT AN ONLINE ISTHA A-36 FORM. AT: WWW.ILLINOISVIRTUALTOLLWAY/UTILITYLOCATES.
2. EXISTING VERTICAL WAVEGUIDE LADDERS MAY NOT BE UTILIZED TO MOUNT NEW COAXIAL CABLE OR WAVEGUIDE. A NEW VWGL SHALL BE MOUNTED, ALONG A LEG AGREED UPON BY THE ILLINOIS TOLLWAY (THE EDGE OF THE VERTICAL LADDER SHOULD BE NO CLOSER THAN ONE FOOT FROM THE ADJACENT EDGE OF THE TOWER LEG). THE VWGL SHALL BE ATTACHED TO THE TOWER WITHOUT DRILLING, UTILIZING "J-HOOKS" OR "J-PLATES." CATEGORY 5 CABLE (IN INSTANCES OF WIRELESS BROADBAND LEASING) MAY BE RUN ALONG THE SIDE OF THE VWGL, AS DIRECTED BY THE ILLINOIS TOLLWAY I.T. DEPARTMENT.
3. WAVEGUIDE SHALL BE RUN UPWARD ON VWGL TO EITHER A TOWER CROSS-MEMBER DIRECTLY DIAGONAL TO THE PLANNED ANTENNAS AND/OR (IN INSTANCES WITH SECTOR ANTENNAS) ALSO LEAVING THE VERTICAL LADDER AND RUNNING ALONG AN X BRACE UPWARD TO ANTENNAS ON OTHER TOWER SIDES.
4. THE ANTENNA HEIGHT SHOWN IS "CENTER LINE," NOT TO TOP OR BOTTOM OF THE ARRAY. THIS HEIGHT IS SET BY THE ILLINOIS TOLLWAY I.T. DEPARTMENT AT INITIAL SITE MEETINGS AND MAY NOT BE ADJUSTED AT ANY TIME WITHOUT WRITTEN PERMISSION FROM SAID DEPARTMENT.
5. ALL UNDERGROUND ELECTRICAL CONDUIT SHALL BE UL LISTED PVC COATED RIGID GALVANIZED.

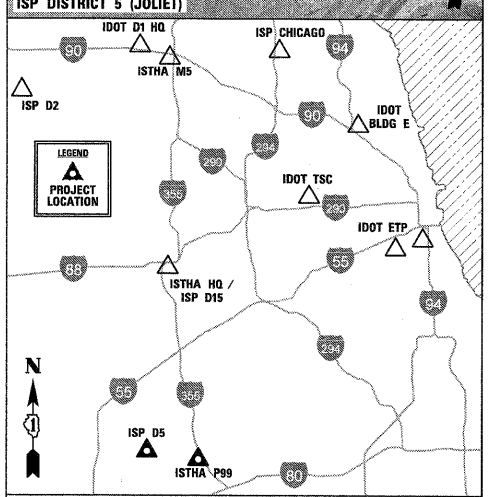
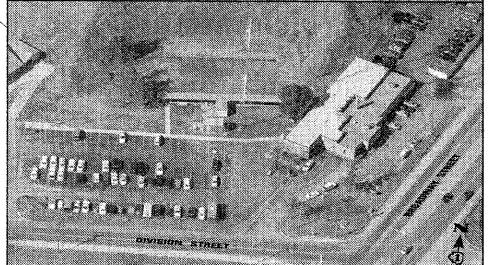
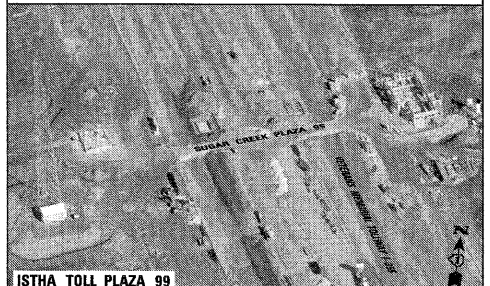
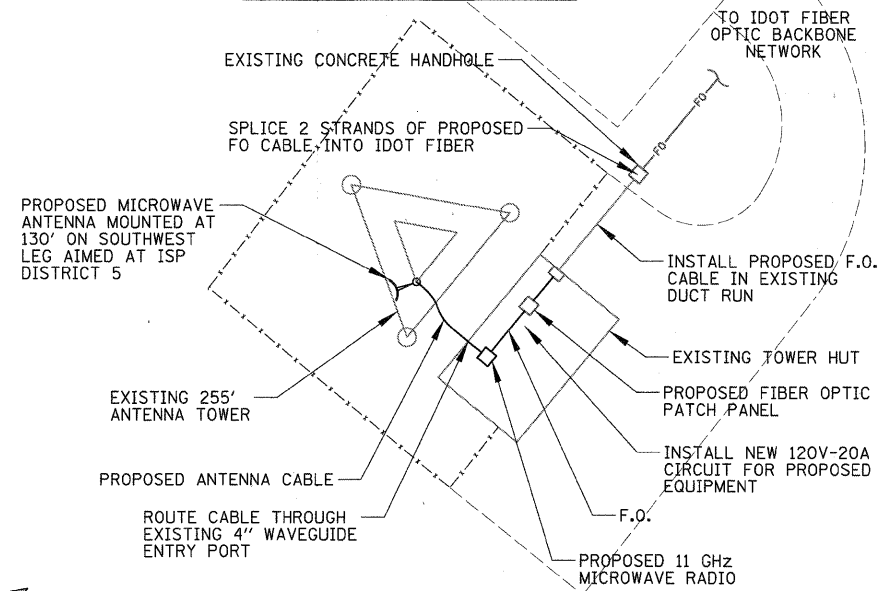
SCOPE OF WORK

1. INSTALL NEW LICENSED MICROWAVE LINK BETWEEN ISP DISTRICT 5 AND ISTHA TOLL PLAZA 99. CONTRACTOR SHALL COORDINATE, FURNISH, AND INSTALL ALL REQUIRED EQUIPMENT FOR THE ISP DISTRICT 5 TO VIEW VIDEO FROM UP TO 4 OF ANY OF IDOT'S TRAFFIC CAMERAS THRU LINK.
2. THE EXISTING TOWER AT ISP DISTRICT 5 SHALL BE REINFORCED TO ACCOMMODATE THE PROPOSED UPGRADES
3. A NEW WAVEGUIDE ICE BRIDGE SHALL BE INSTALLED BETWEEN TOWER AND ISP DISTRICT 5 BUILDING TO SUPPORT EXISTING AND PROPOSED CABLES.



41° 34' 35.79" N LATITUDE
88° 0' 1.88" W LONGITUDE
275.093° AZIMUTH
11 GHz FCC CLASS A
ASR: 1254899
FAA: 2005-AGL-5064-OE

SEE SHEET 11
FOR ONE LINE DIAGRAM
SEE SHEET 13
FOR ELEVATION VIEW



ISP DISTRICT 5 (JOLIET)

ISTHA TOLL PLAZA 99 (I-355)

FILE NAME =	USER NAME = ADERICCO	DESIGNED = AJD	REVISED = -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

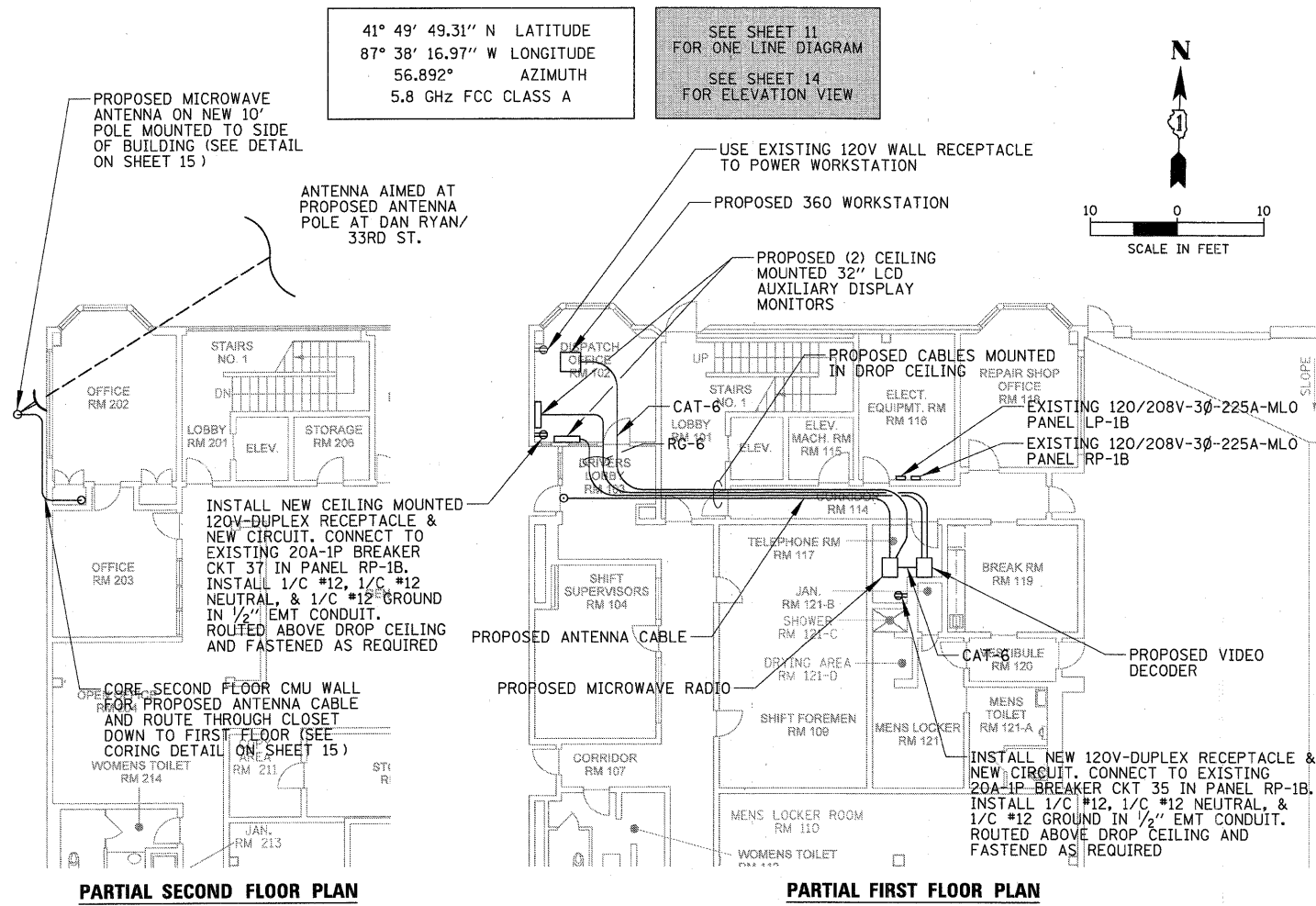
**ITS CENTER-TO-CENTER INTEGRATION PROJECT
ISP DISTRICT 5 (JOLIET) / ISTHA TOLL PLAZA 99 (I-355)**

SCALE: AS SHOWN	SHEET NO. OF SHEETS	STA. TO STA.
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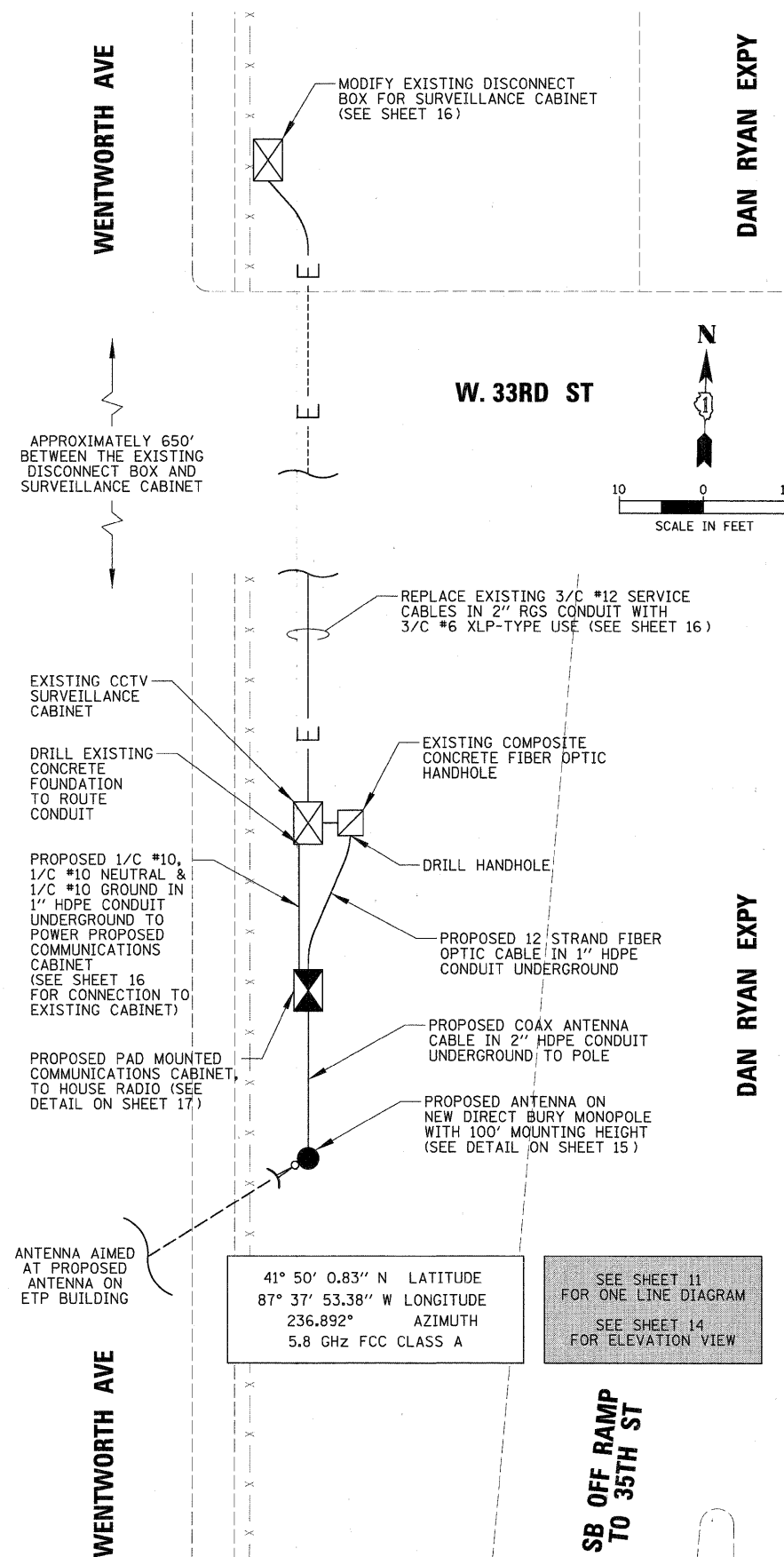
CB CHRISTOPHER B. BURKE ENGINEERING, LTD. 9575 W. HIGGINS ROAD, SUITE 600 ROSEMONT, ILLINOIS 60018 (847) 823-0500	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		2009-0871	VARIES	17	6
CONTRACT NO. 60134				ILLINOIS FED. AID PROJECT	

SCOPE OF WORK

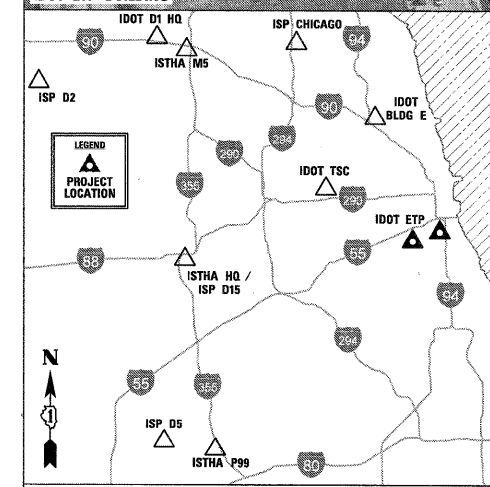
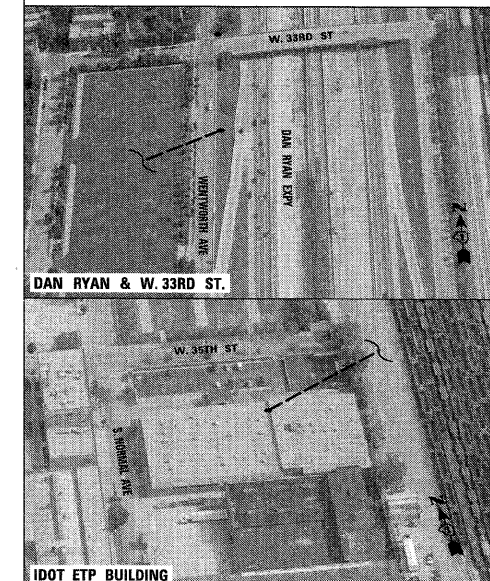
1. INSTALL NEW MICROWAVE LINK BETWEEN IDOT ETP AND THE PROPOSED COMMUNICATIONS CABINET ON WEST SIDE OF DAN RYAN SOUTH OF 33RD ST. CONTRACTOR SHALL COORDINATE, FURNISH AND INSTALL ALL REQUIRED EQUIPMENT FOR IDOT ETP TO VIEW VIDEO FROM UP TO 4 OF ANY OF IDOT'S TRAFFIC CAMERAS THRU LINK.
2. IDOT HAS PERFORMED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



IDOT ETP BUILDING



DAN RYAN & W. 33RD ST

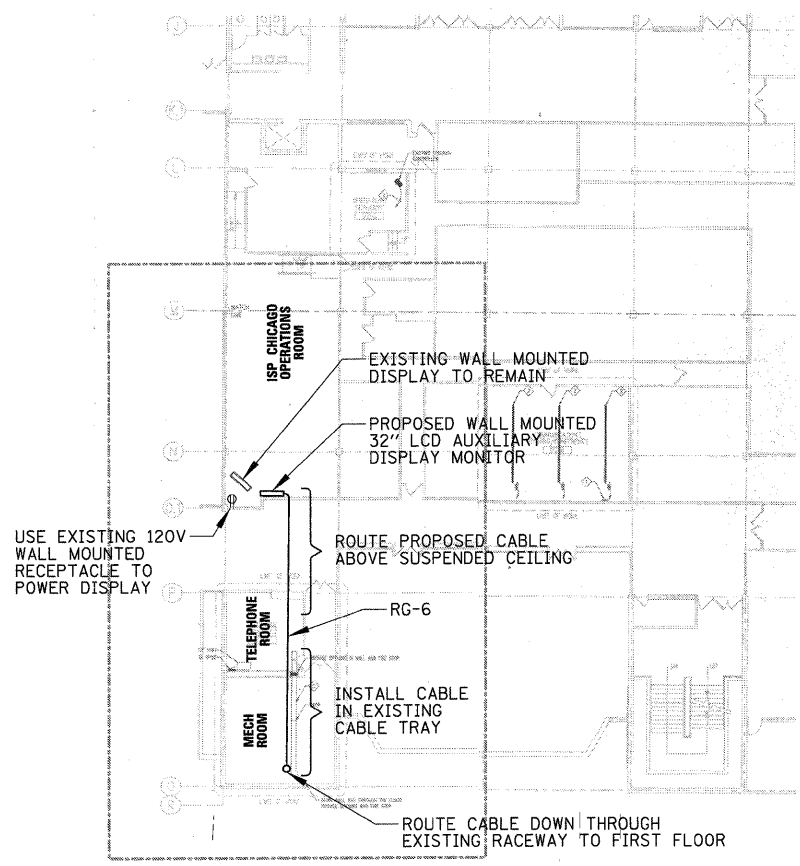


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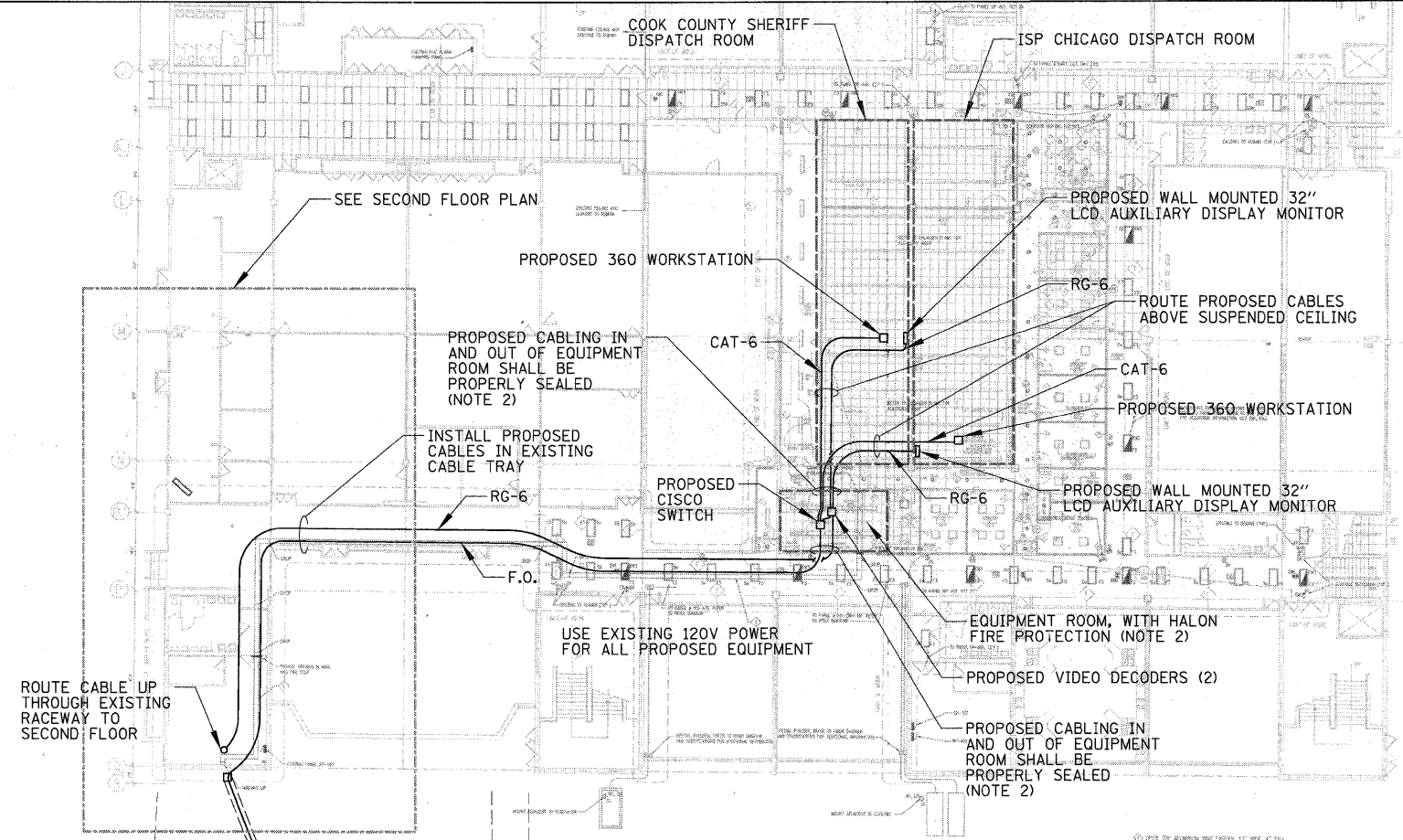
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

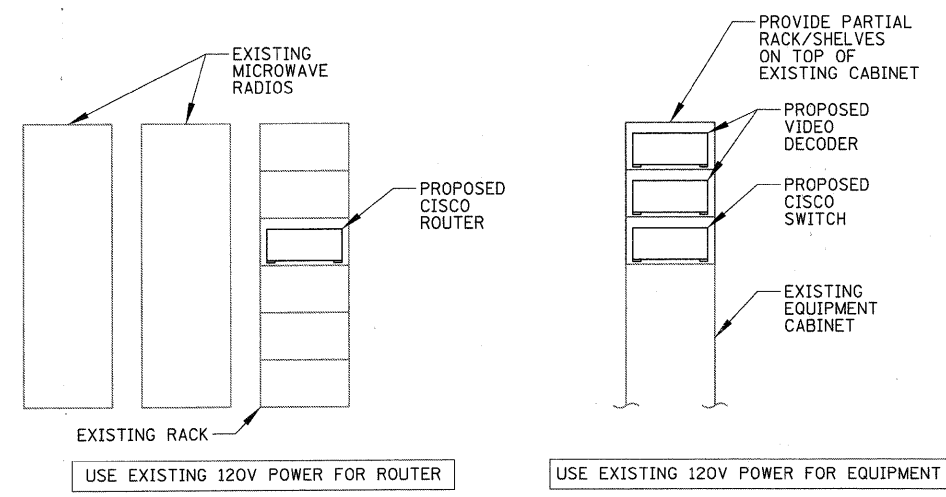
CHRISTOPHER B. BURKE ENGINEERING, LTD.			
9575 W. Higgins Road, Suite 600			
Rosemont, Illinois 60018			
(847) 823-0500			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
	2009-0871	VARIES	17
			SHEET NO. 7
			CONTRACT NO. 60I34
ILLINOIS FED. AID PROJECT			



PARTIAL SECOND FLOOR PLAN



PARTIAL LOWER LEVEL PLAN

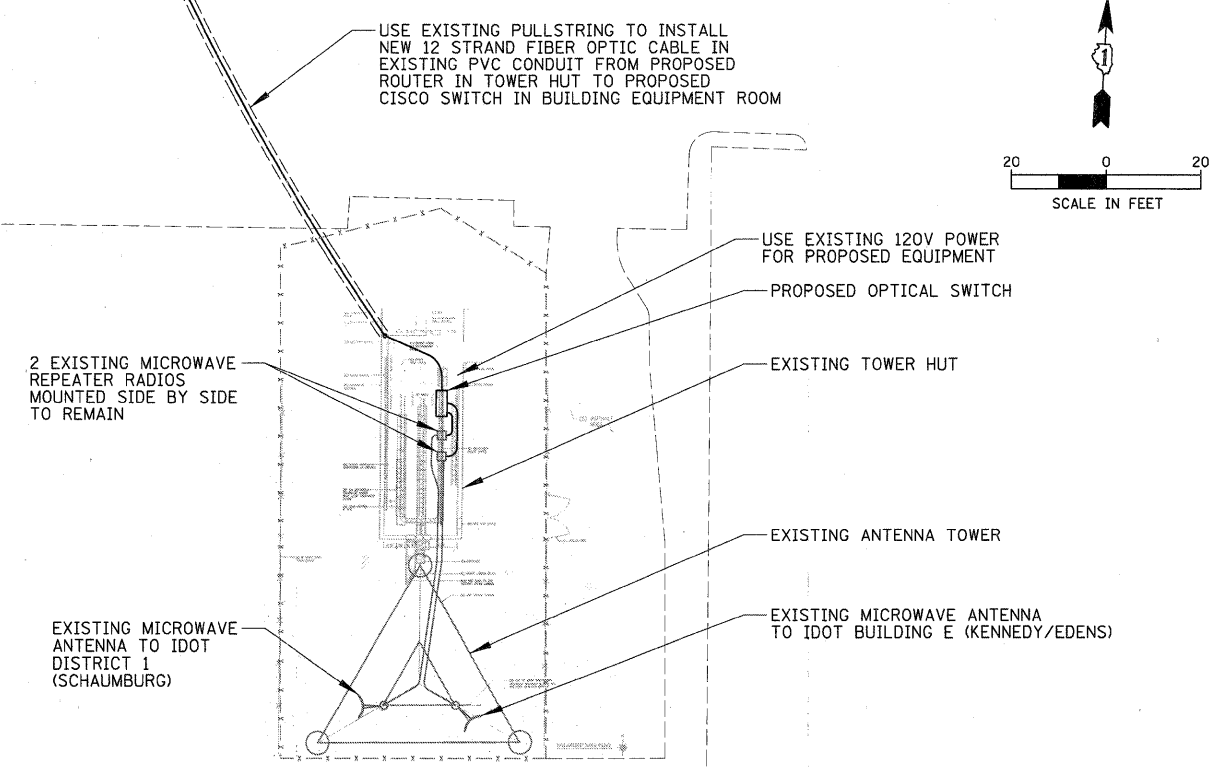


TOWER HUT CENTER AISLE EAST ELEVATION

EQUIPMENT ROOM EAST ELEVATION

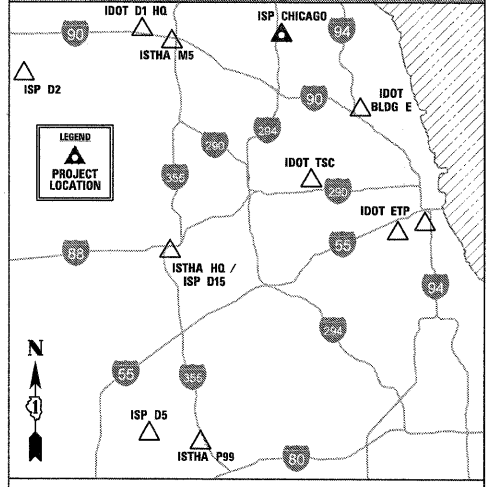
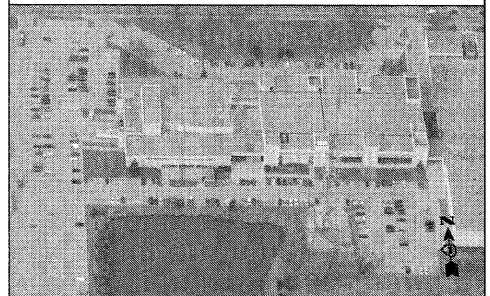
EQUIPMENT LAYOUT DETAIL – ISP DISTRICT CHICAGO

N.T.S.



SCOPE OF WORK

1. 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.
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.



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FILE NAME =	USER NAME = ADERICCO	DESIGNED <i>AJD</i>	REVISED -
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	PLOT SCALE = 20'	CHECKED <i>JPC</i>	REVISED -
	PLOT DATE = 5/12/2011	DATE <i>5/12/2011</i>	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

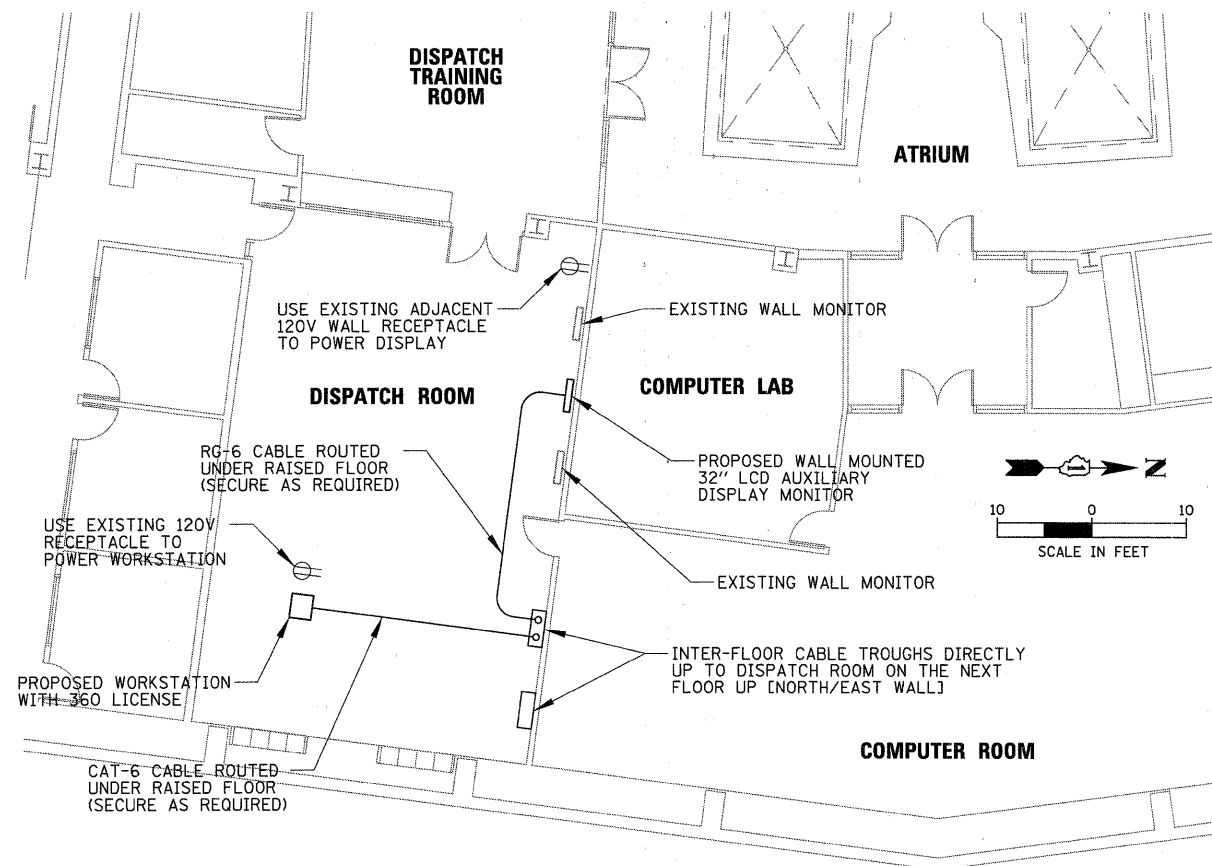
**ITS CENTER-TO-CENTER INTEGRATION PROJECT
ISP DISTRICT CHICAGO / COOK COUNTY SHERIFF (MAINE NORTH)**

SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

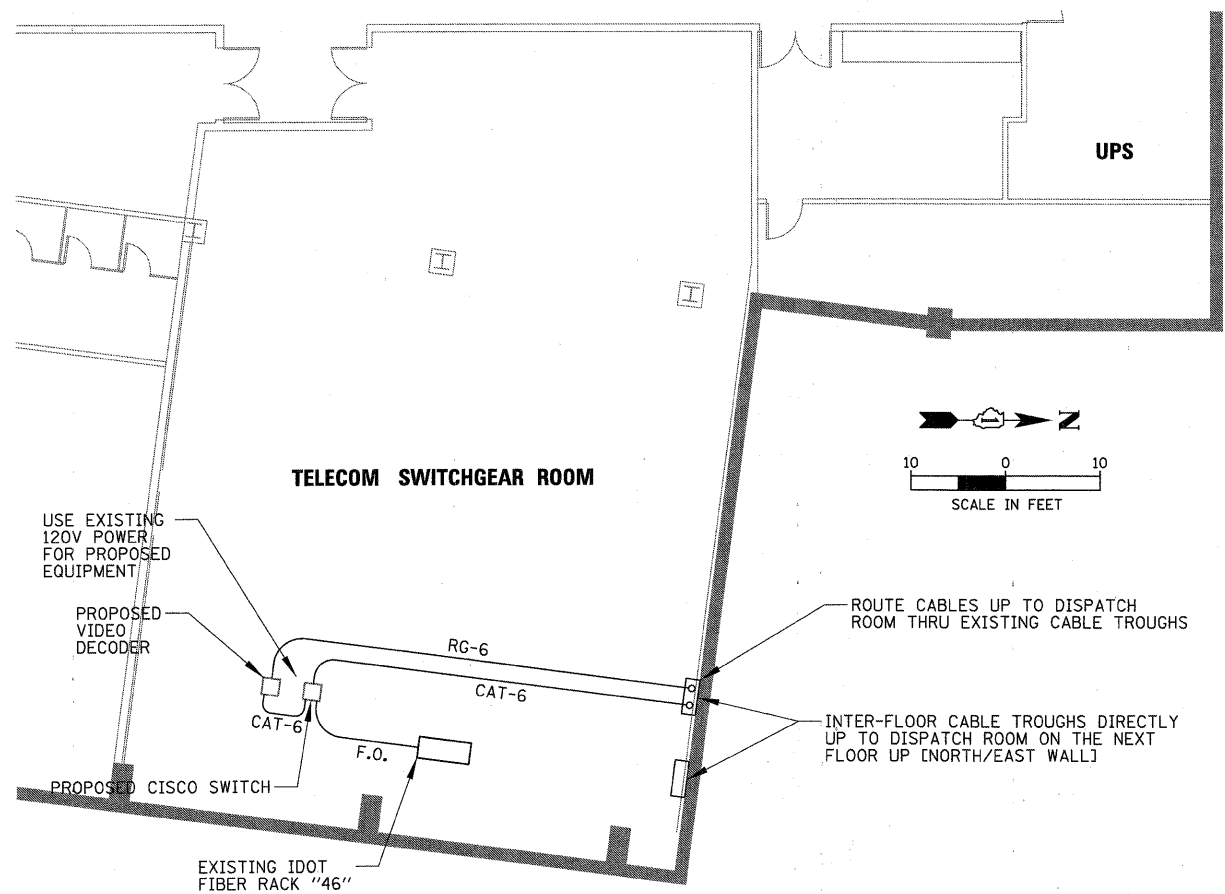
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	8
CONTRACT NO. 60134			ILLINOIS FED. AID PROJECT	

SCOPE OF WORK

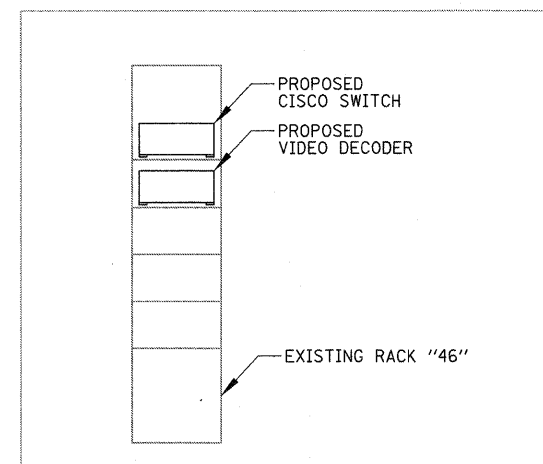
- CONTRACTOR SHALL COORDINATE, FURNISH, AND INSTALL ALL REQUIRED EQUIPMENT FOR THE ISP DISTRICT 15 TO VIEW VIDEO FROM UP TO 4 OF ANY OF IDOT'S TRAFFIC CAMERAS.



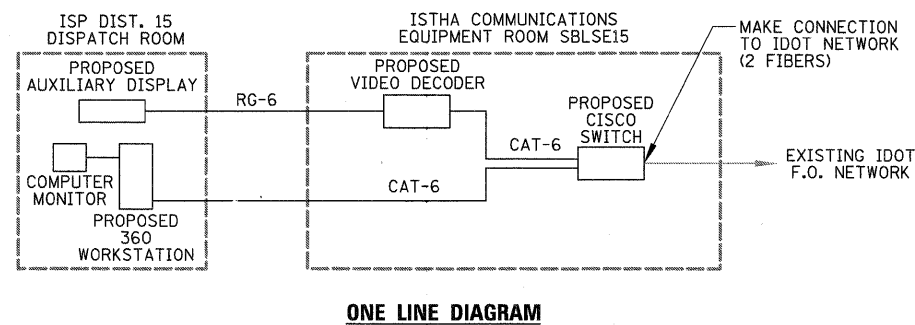
PARTIAL LOWER LEVEL FLOOR PLAN



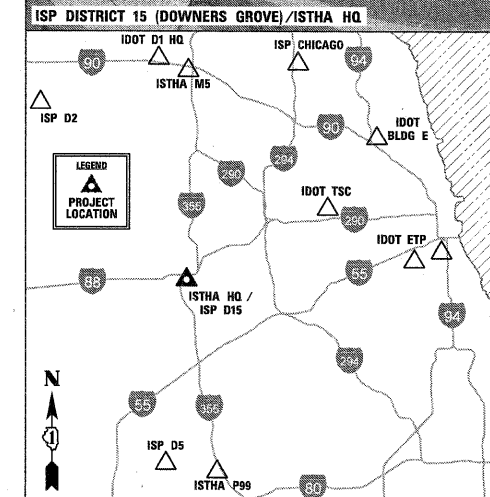
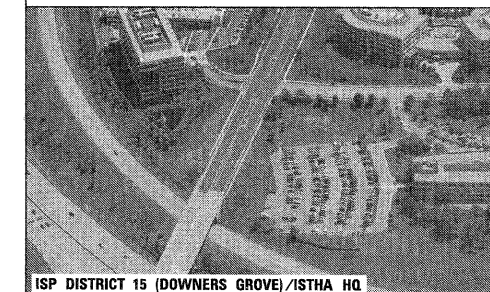
PARTIAL SUB-LEVEL FLOOR PLAN



COMMUNICATIONS ROOM SBLSE15 - EQUIPMENT ELEVATION



ISP DISTRICT 15 / ISTHA HQ (DOWNERS GROVE)



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 Rosemont, Illinois 60018
 (847) 823-0500

FILE NAME =	USER NAME = ADERICCO	DESIGNED = AJD	REVISED = -
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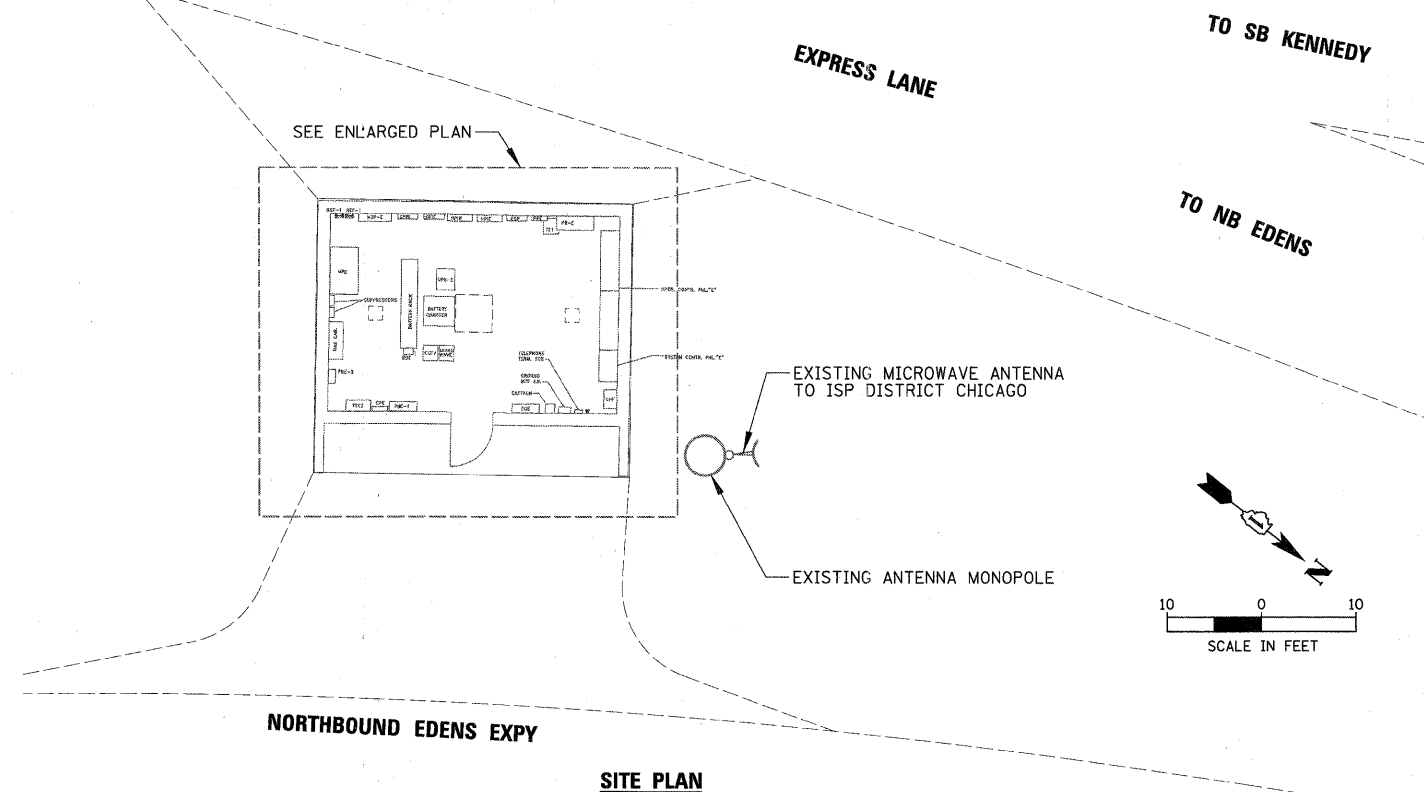
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS CENTER-TO-CENTER INTEGRATION PROJECT			
ISP DISTRICT 15 (DOWNERS GROVE)			
SCALE: AS SHOWN	SHEET NO. OF SHEETS	STA. TO STA.	

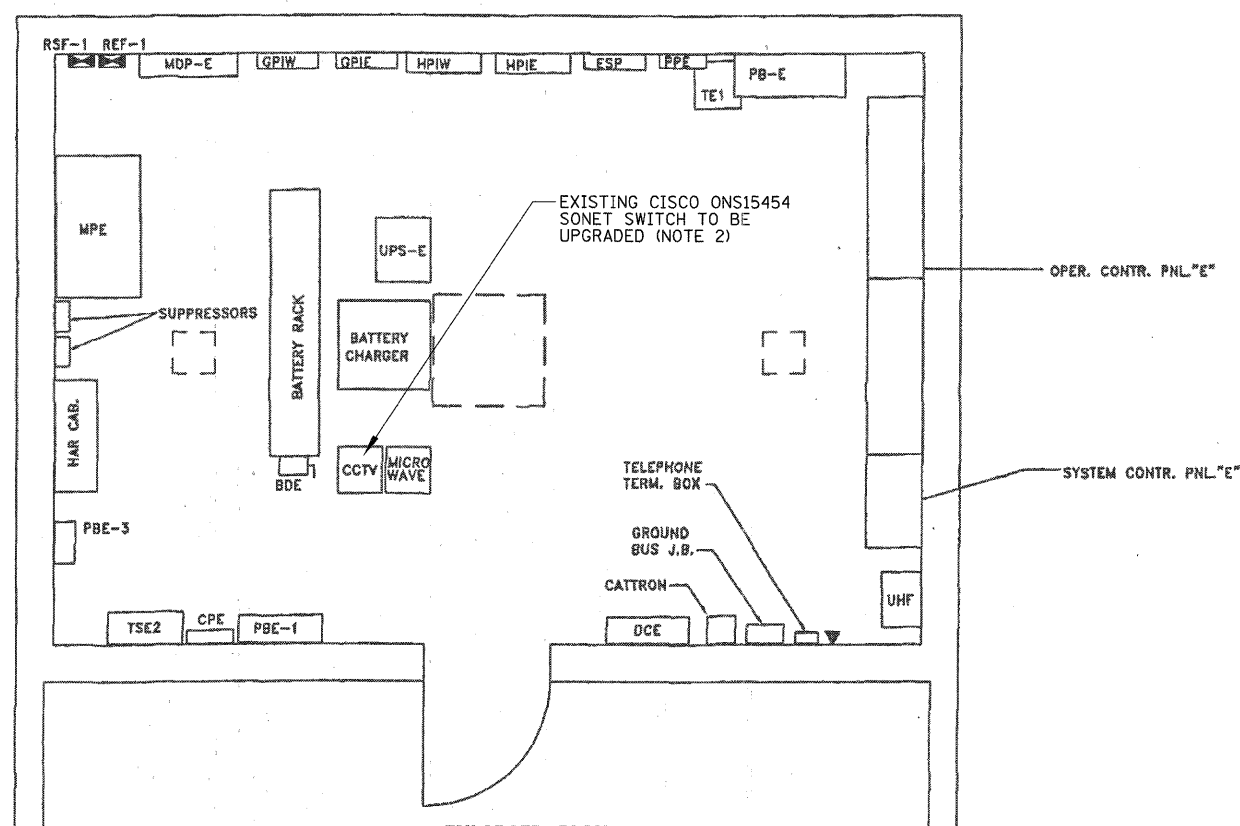
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	9
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

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.

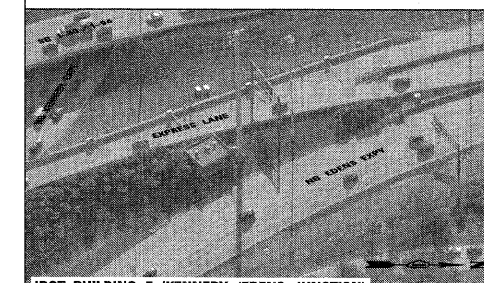


SITE PLAN

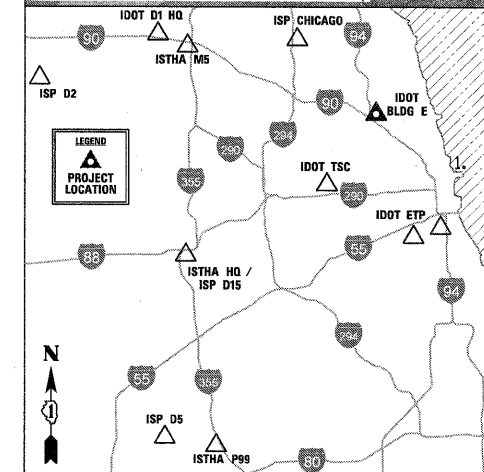


ENLARGED PLAN
N.T.S.

IDOT BUILDNG E (KENNEDY / EDENS)



IDOT BUILDING E (KENNEDY / EDENS JUNCTION)



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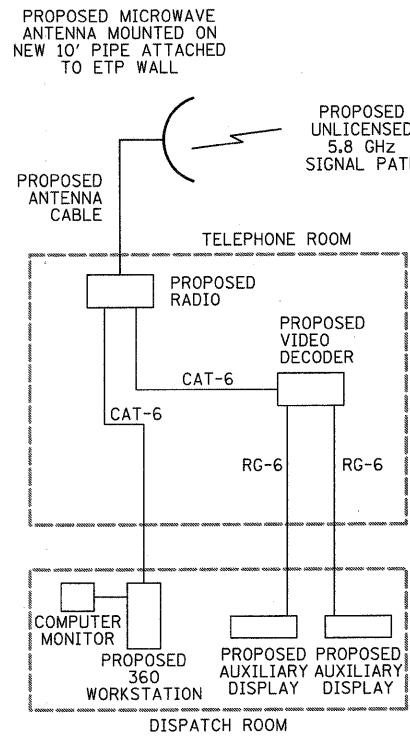
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		DATE <i>5/12/2011</i>	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

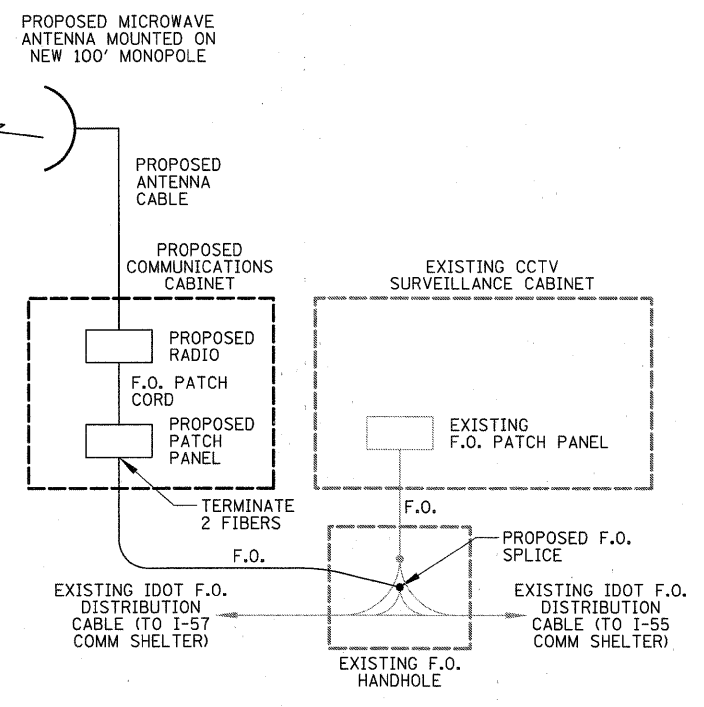
ITS CENTER-TO-CENTER INTEGRATION PROJECT
IDOT BUILDNG E (KENNEDY / EDENS)

SCALE: AS SHOWN SHEET NO. OF SHEETS STA. TO STA.

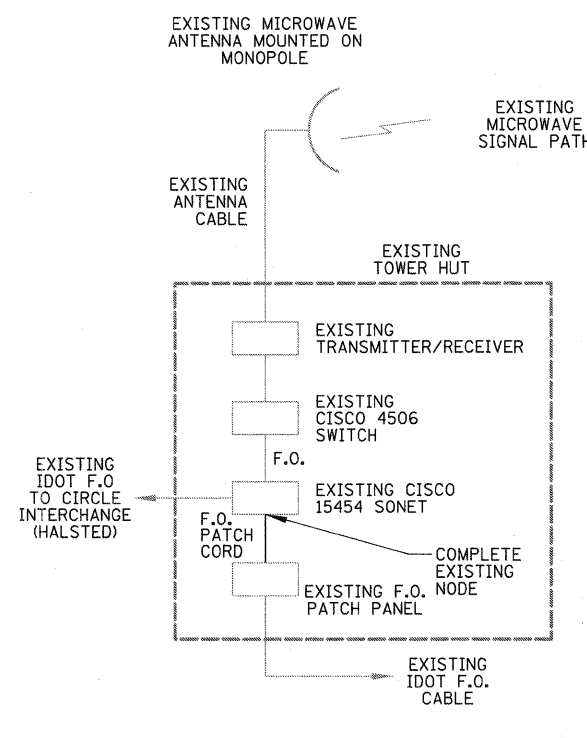
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	10
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				



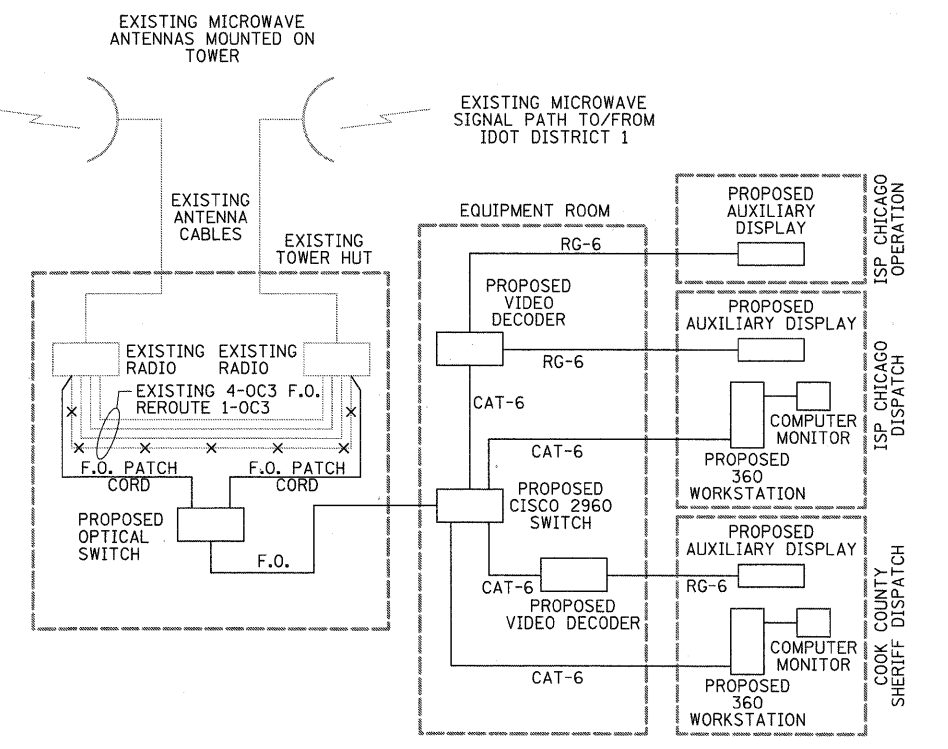
IDOT ETP BUILDING (35TH & NORMAL)



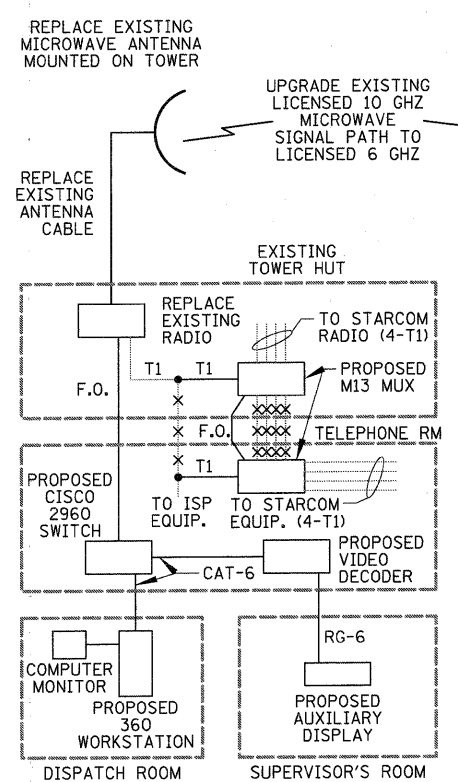
DAN RYAN EXPY / W. 33TH ST.



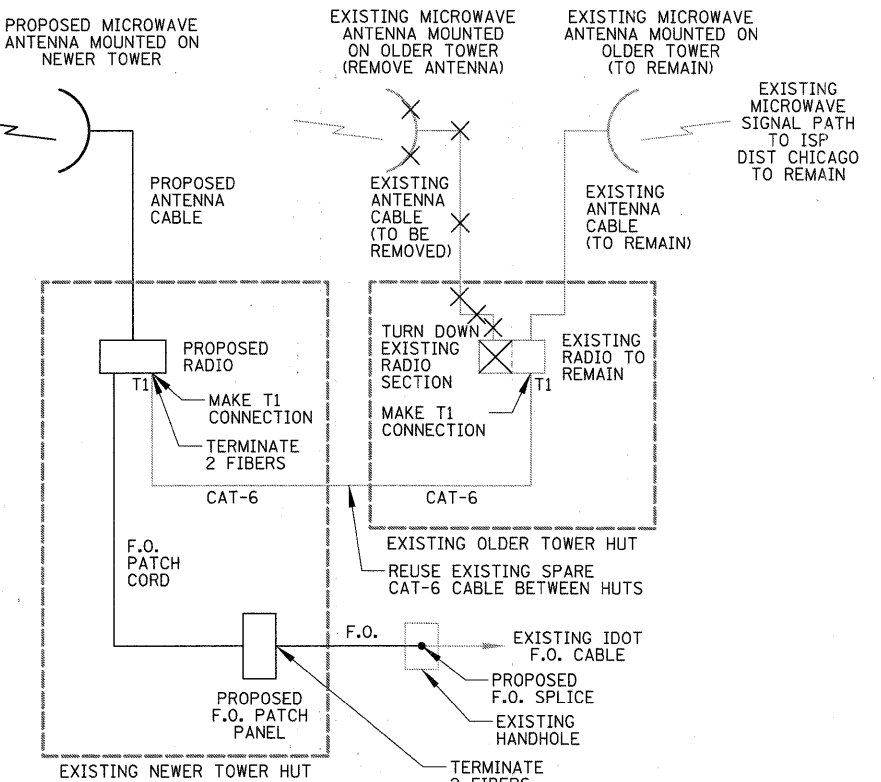
BUILDING E (KENNEDY / EDENS EXPY)



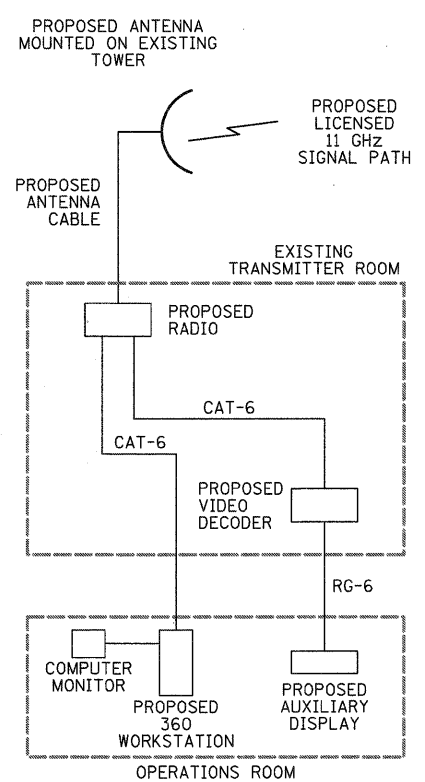
ISP CHICAGO / COOK COUNTY SHERIFF



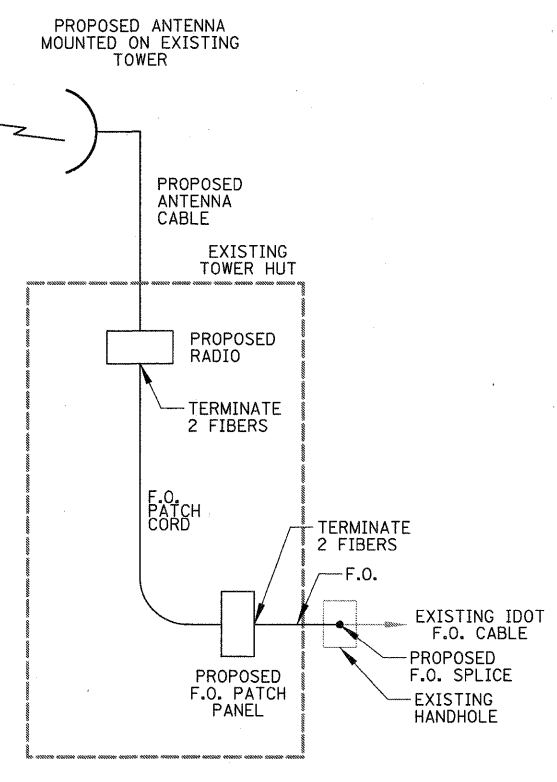
ISP DISTRICT 2 (ELGIN)



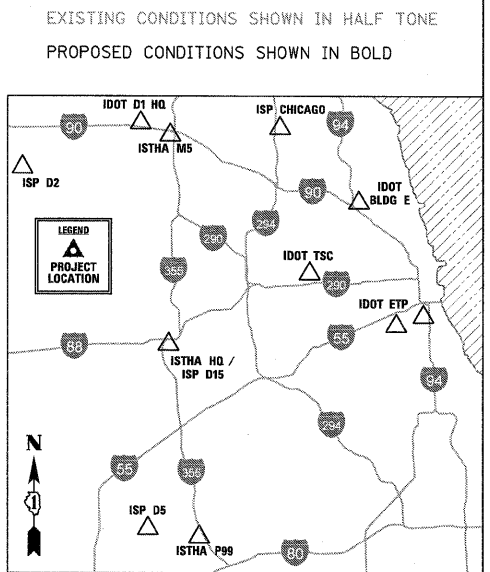
ISTHA M5 FACILITY (I-90 / IL ROUTE 53)



ISP DISTRICT 5 (JOLIET)



ISTHA PLAZA 99 (I-355)



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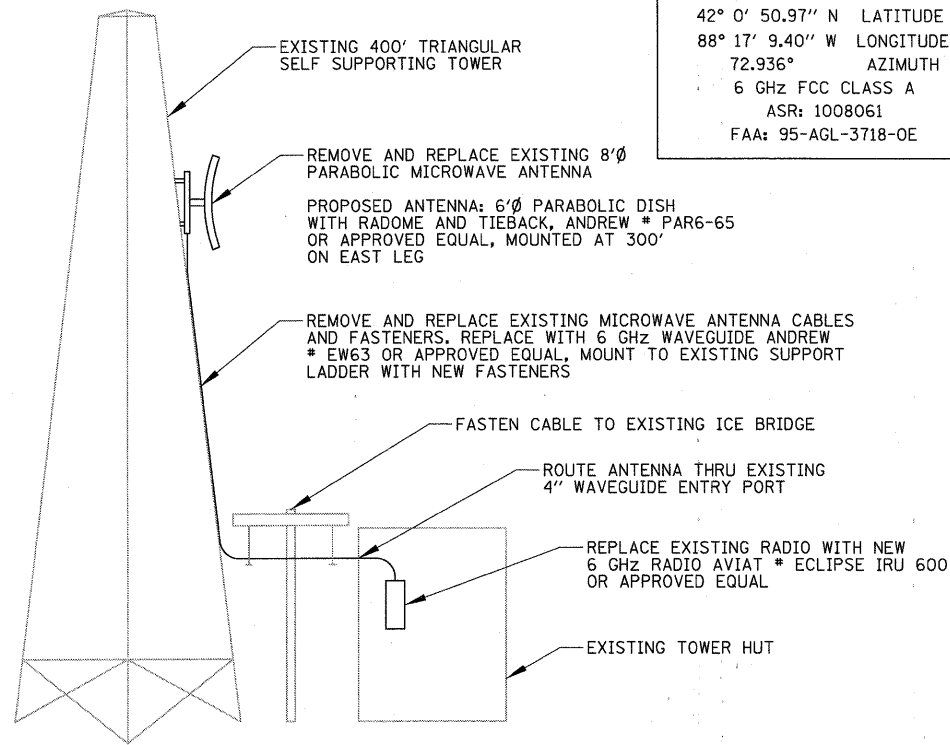
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	PLOT SCALE = 10'	CHECKED <i>JPC</i>	REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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

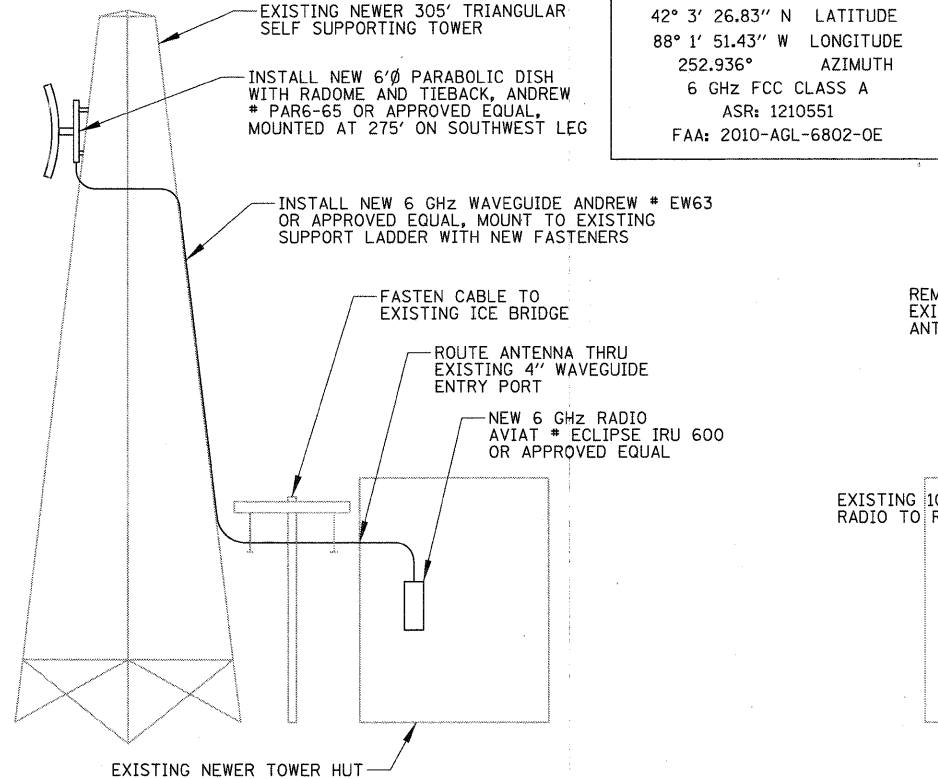
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60134			ILLINOIS FED. AID PROJECT	

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



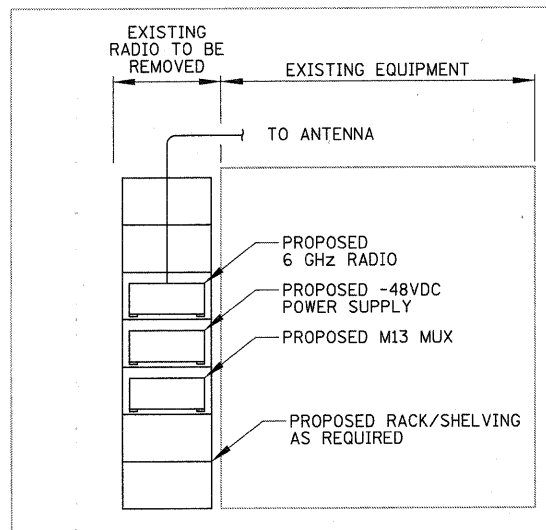
RADIO & ANTENNA DETAIL – ISP DISTRICT 2 (ELGIN)

N.T.S.



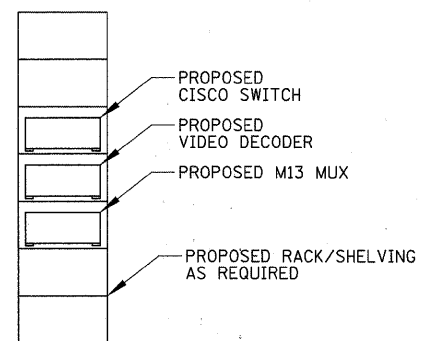
RADIO & ANTENNA DETAIL – ISTHA M5 FACILITY

N.T.S.



USE EXISTING 120V RECEPTACLE FOR POWER TO EQUIPMENT

TOWER HUT – CENTER AISLE SOUTH ELEVATION

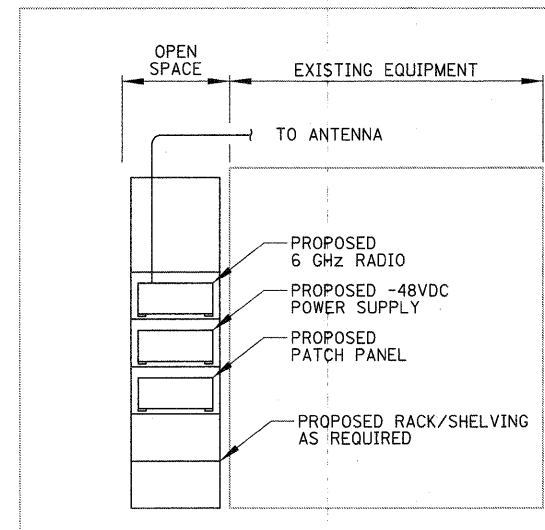


PROPOSED 120V -20A CIRCUIT FOR POWER TO EQUIPMENT

TELEPHONE ROOM – WEST WALL ELEVATION

EQUIPMENT LAYOUT DETAIL – ISP DISTRICT 2 (ELGIN)

N.T.S.

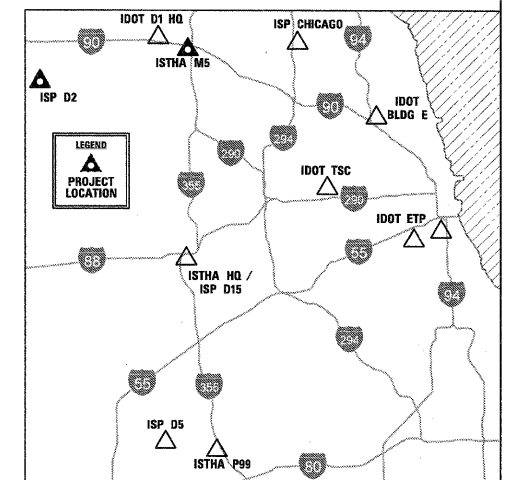


PROPOSED 120V - 20A CIRCUIT FOR POWER TO EQUIPMENT

NEWER TOWER HUT – CENTER AISLE SOUTH ELEVATION

EQUIPMENT LAYOUT DETAIL – ISTHA M5 FACILITY

N.T.S.



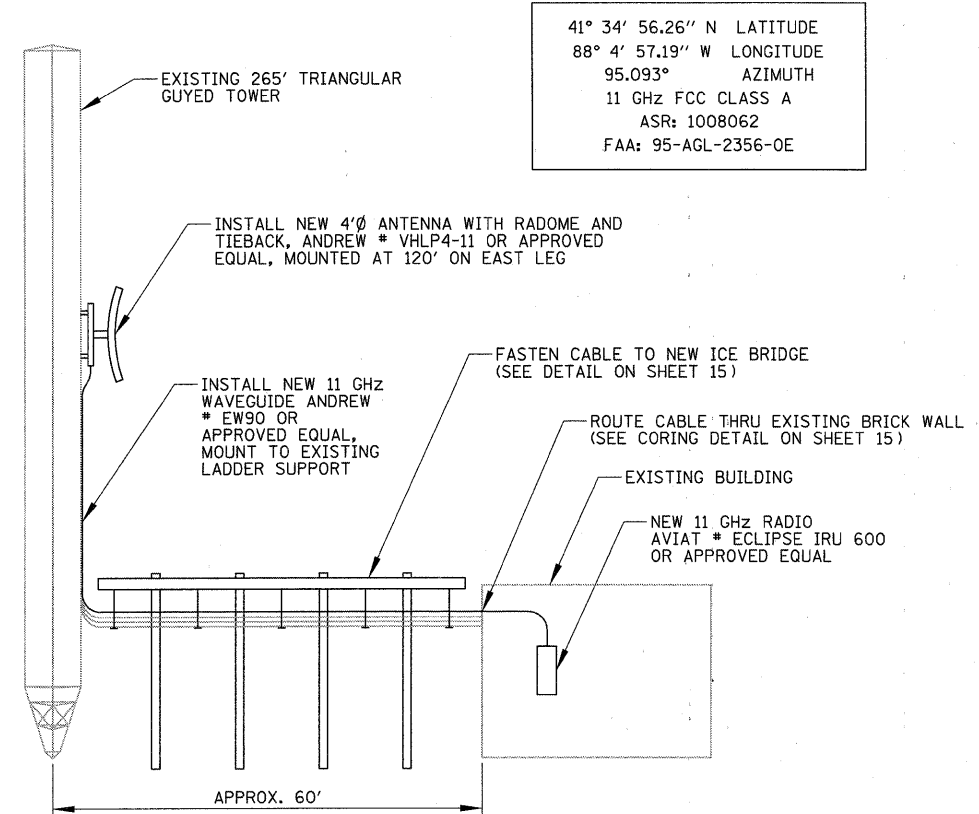
CHRISTOPHER B. BURKE ENGINEERING, LTD.
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 Rosemont, Illinois 60018
 (847) 823-0500

FILE NAME =	USER NAME = ADERICCO	DESIGNED AJD	REVISED -
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	PLOT DATE = 5/12/2011	DATE 5/12/2011	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

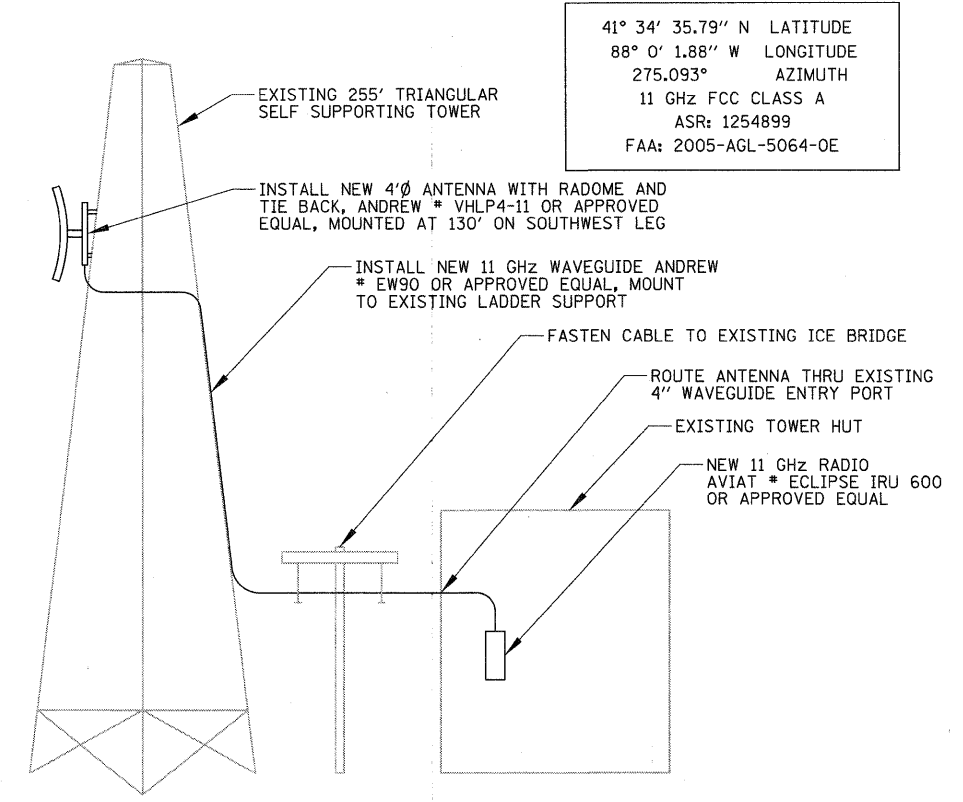
ITS CENTER-TO-CENTER INTEGRATION PROJECT			
RADIO, ANTENNA, & EQUIPMENT DETAILS – ISP DIST. 2 / ISTHA M5			
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	12
CONTRACT NO. 60I34				
ILLINOIS FED. AID PROJECT				



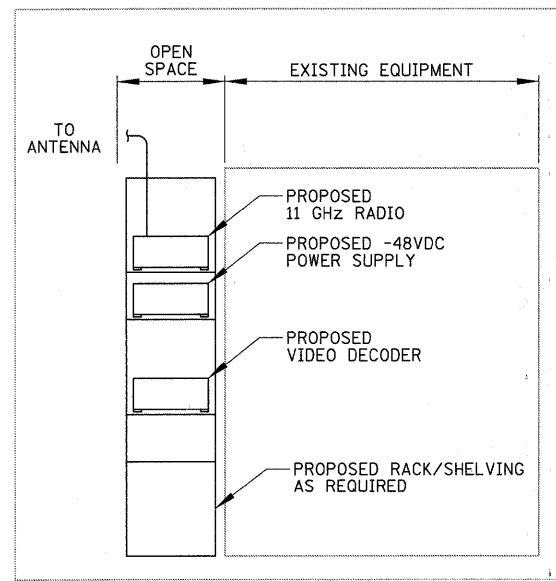
41° 34' 56.26" N LATITUDE
 88° 4' 57.19" W LONGITUDE
 95.093° AZIMUTH
 11 GHZ FCC CLASS A
 ASR: 1008062
 FAA: 95-AGL-2356-0E

RADIO & ANTENNA DETAIL – ISP DISTRICT 5 (JOLIET)
 N.T.S.



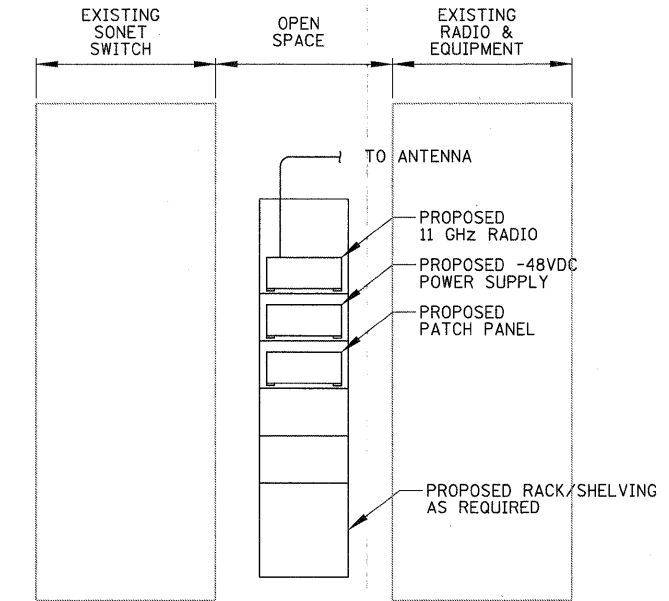
41° 34' 35.79" N LATITUDE
 88° 0' 1.88" W LONGITUDE
 275.093° AZIMUTH
 11 GHZ FCC CLASS A
 ASR: 1254899
 FAA: 2005-AGL-5064-0E

RADIO & ANTENNA DETAIL – ISTHA PLAZA 99
 N.T.S.



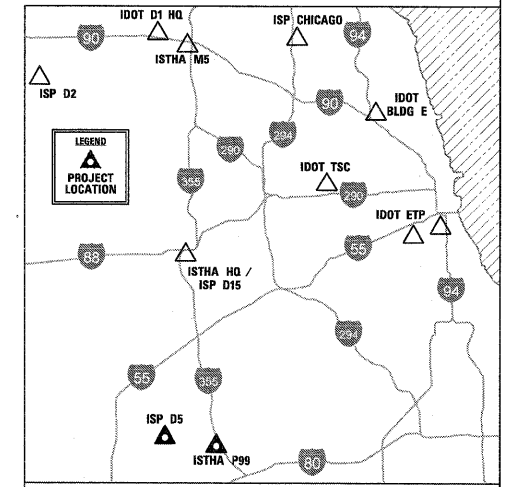
TRANSMITTER ROOM – CENTER AISLE NORTH ELEVATION

EQUIPMENT LAYOUT DETAIL – ISP DISTRICT 5 (JOLIET)
 N.T.S.



TOWER HUT – CENTER AISLE SOUTH ELEVATION

EQUIPMENT LAYOUT DETAIL – ISTHA PLAZA 99
 N.T.S.

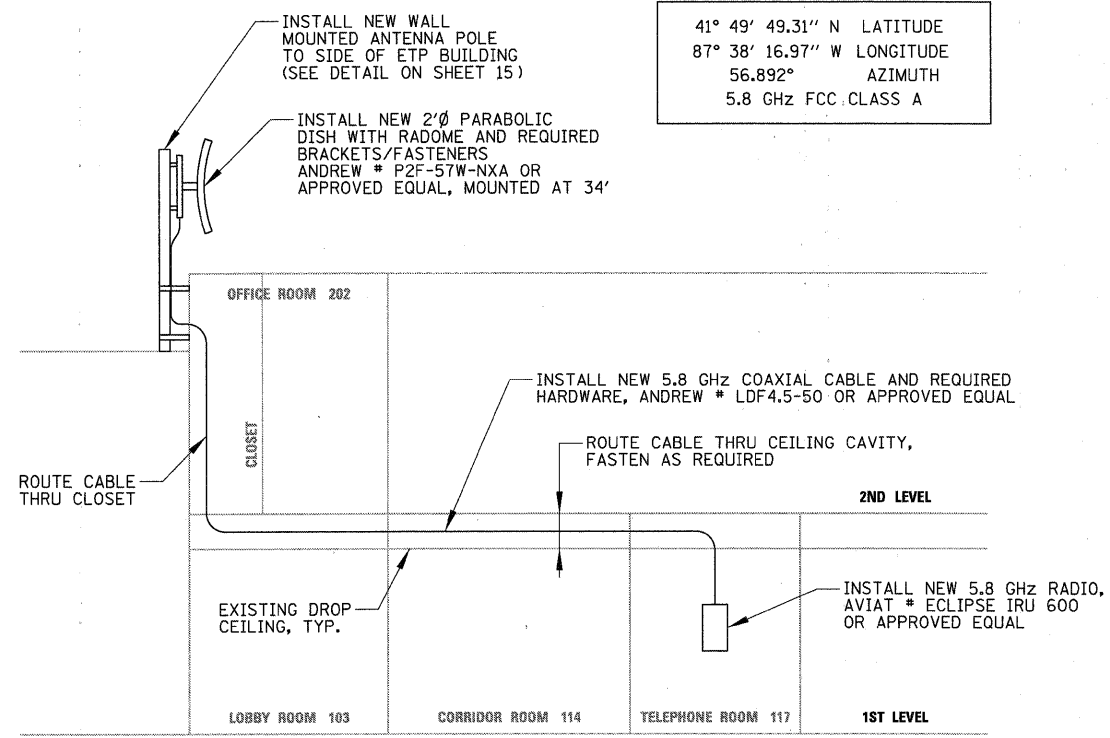


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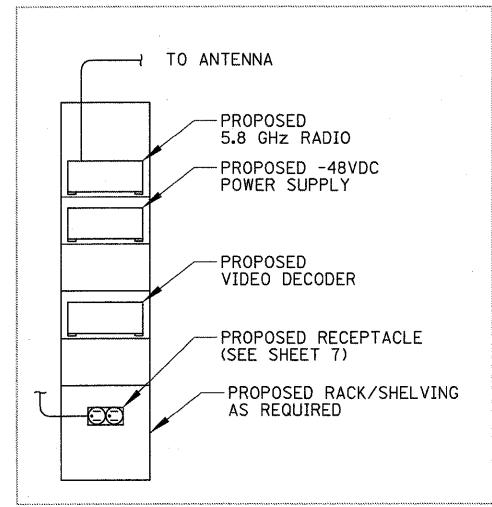
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		ITS CENTER-TO-CENTER INTEGRATION PROJECT RADIO, ANTENNA, & EQUIPMENT DETAILS – ISP DIST. 5 / ISTHA PLAZA 99			
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.			

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	13
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

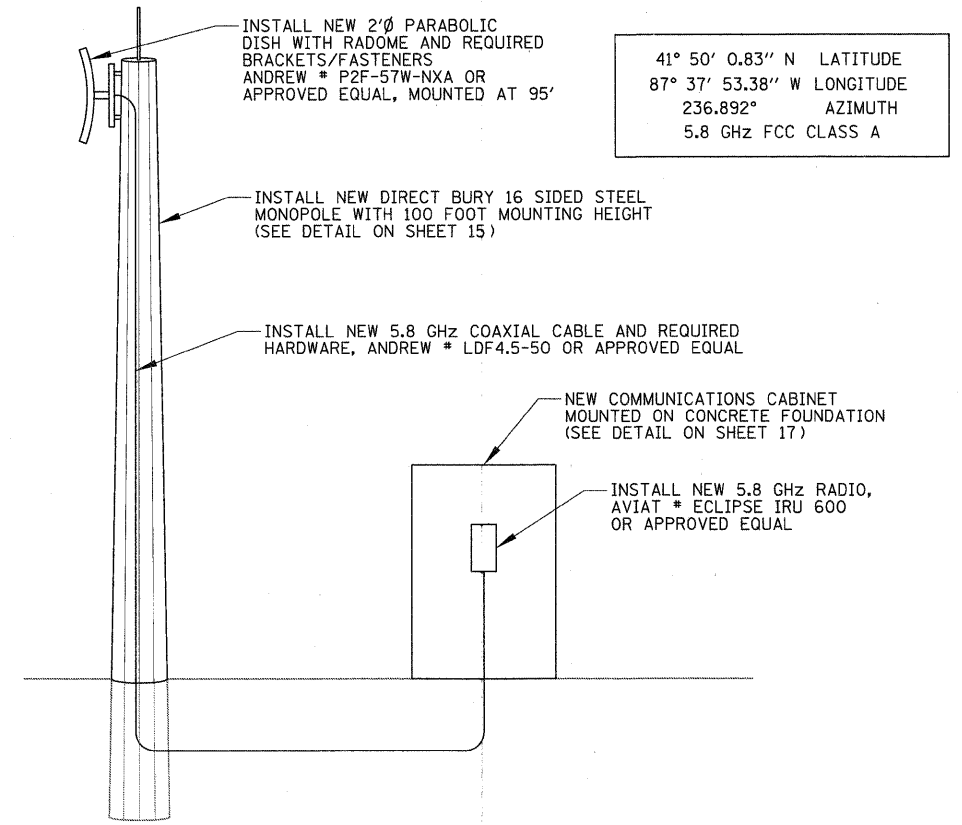


EXISTING ETP BUILDING ELEVATION LOOKING NORTH
RADIO & ANTENNA DETAIL - ETP
 N.T.S.

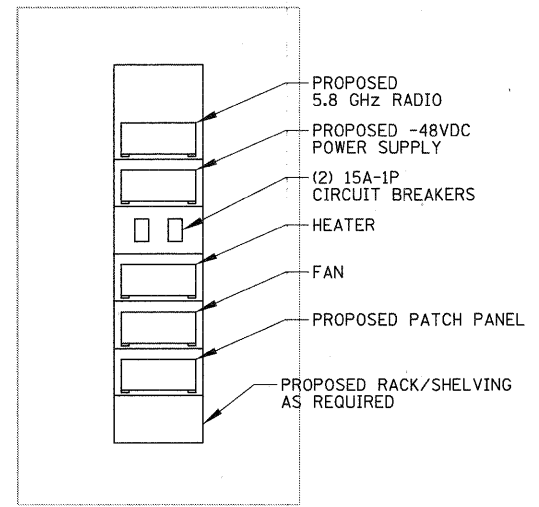


USE PROPOSED 120V RECEPTACLE FOR POWER TO EQUIPMENT
TELEPHONE ROOM - SOUTH WALL ELEVATION

EQUIPMENT LAYOUT DETAIL - ETP
 N.T.S.

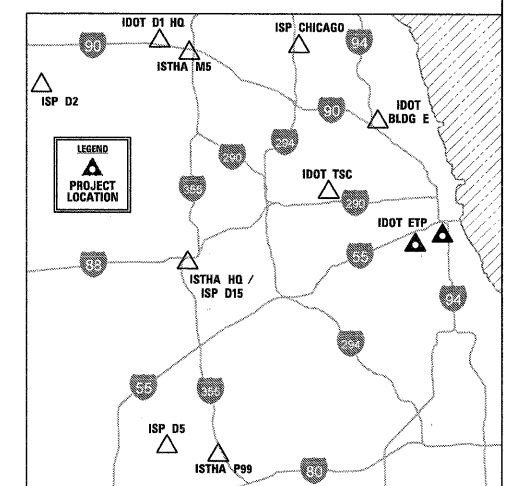


RADIO & ANTENNA DETAIL - DAN RYAN
 N.T.S.



PROPOSED COMMUNICATIONS CABINET ELEVATION

EQUIPMENT LAYOUT DETAIL - DAN RYAN
 N.T.S.



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 Rosemont, Illinois 60018
 (847) 823-0500

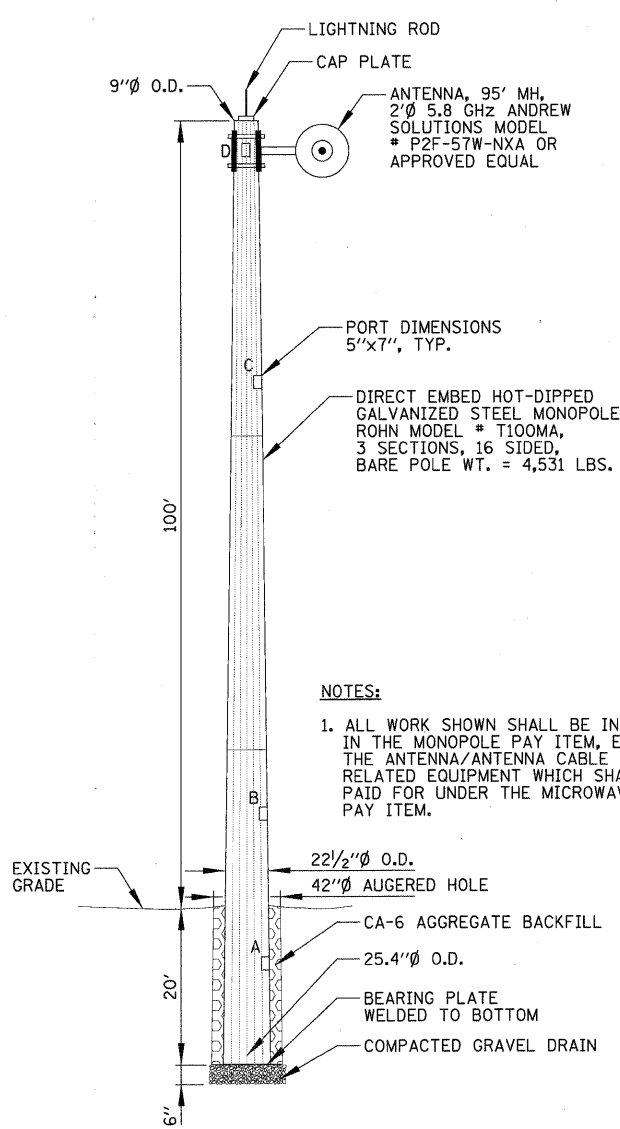
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ITS CENTER-TO-CENTER INTEGRATION PROJECT
RADIO, ANTENNA, & EQUIPMENT DETAILS - IDOT ETP / DAN RYAN

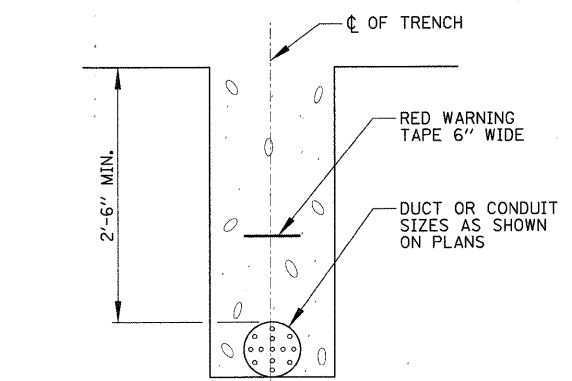
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	14
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				

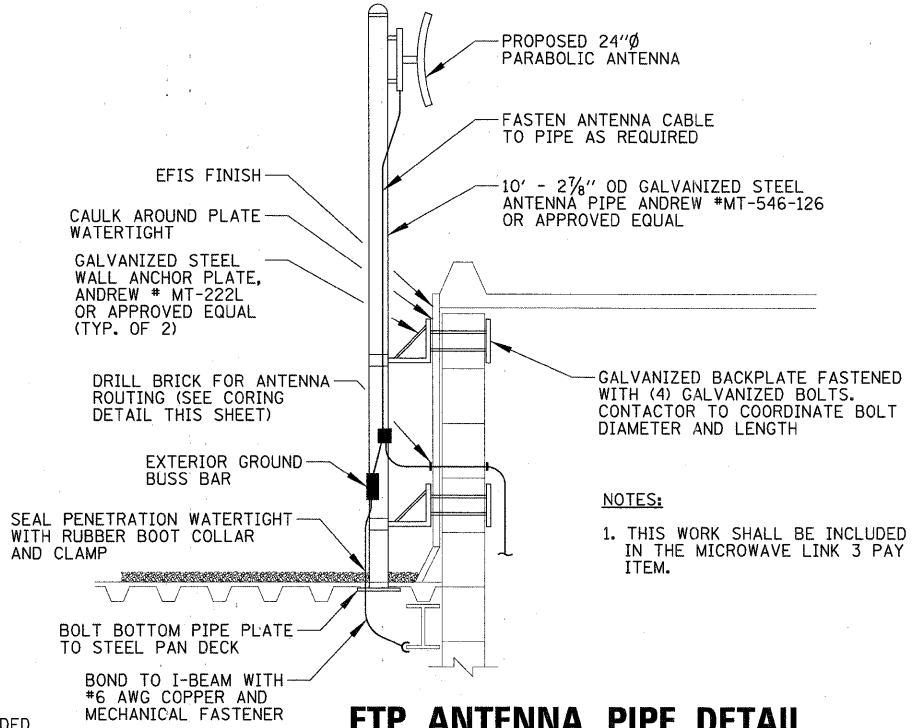


MONOPOLE DETAIL
N.T.S.

NOTES:
1. ALL WORK SHOWN SHALL BE INCLUDED IN THE MONOPOLE PAY ITEM, EXCEPT THE ANTENNA/ANTENNA CABLE AND RELATED EQUIPMENT WHICH SHALL BE PAID FOR UNDER THE MICROWAVE LINK 3 PAY ITEM.

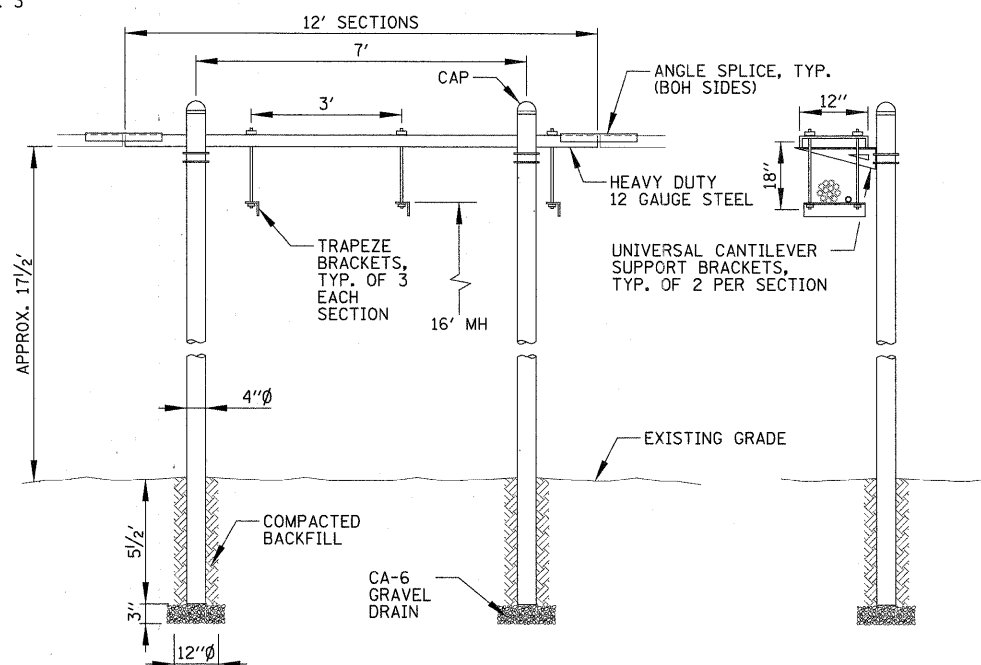


CONDUIT IN TRENCH DETAIL
N.T.S.



ETP ANTENNA PIPE DETAIL
N.T.S.

NOTES:
1. THIS WORK SHALL BE INCLUDED IN THE MICROWAVE LINK 3 PAY ITEM.

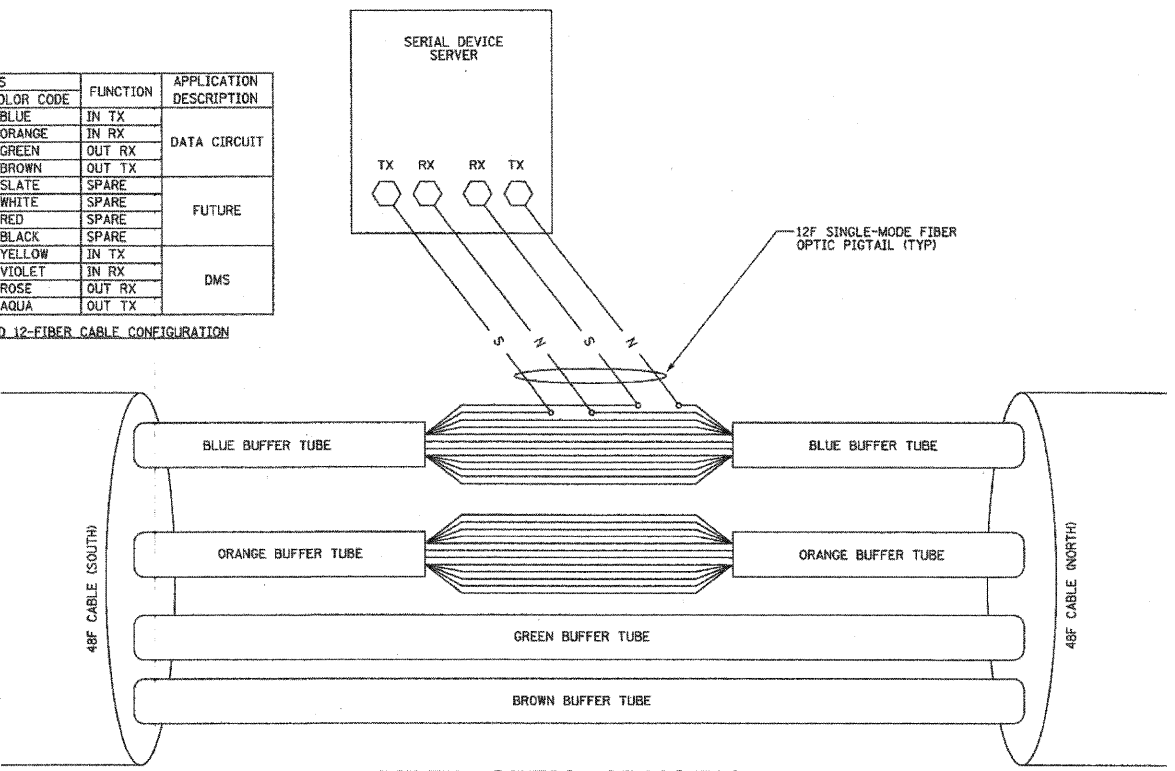


NEW ICE BRIDGE DETAIL
N.T.S.

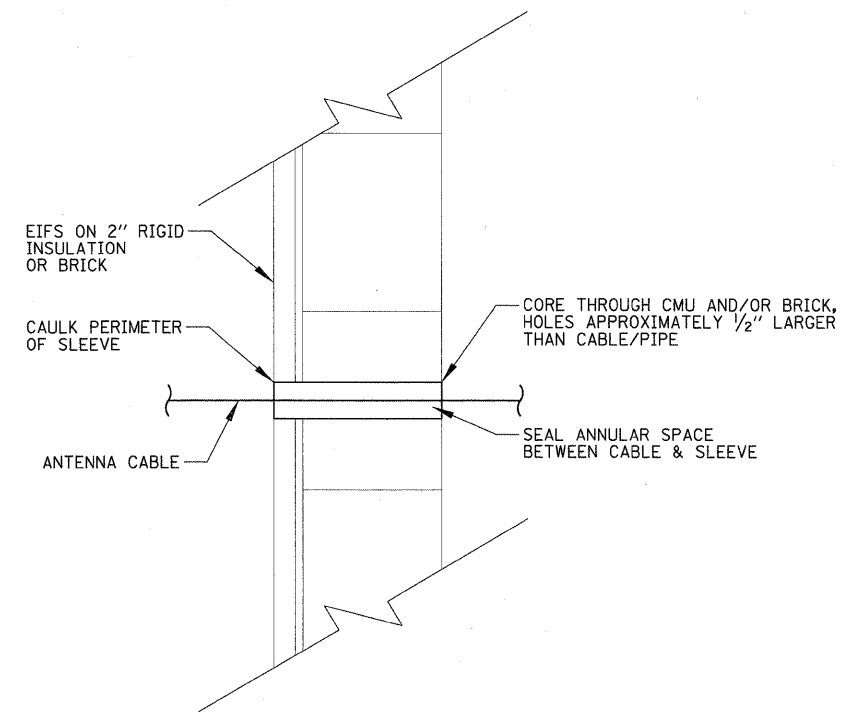
NOTES:
1. THE ICE BRIDGE SHALL BE CONSTRUCTED AT ISP DISTRICT 5 IN JOLIET AND SHALL SPAN BETWEEN THE EXISTING TOWER AND BUILDING. THE SPAN IS APPROXIMATELY 60' IN LENGTH, CONTRACTOR SHALL VERIFY SPAN LENGTH AND ACTUAL SITE CONDITIONS.
2. THE BRIDGE SHALL SUPPORT THE PROPOSED WAVEGUIDE/COAX RUN PLUS ALL EXISTING WAVEGUIDE/COAX RUNS. THE BRIDGE SHALL BE CONSTRUCTED AROUND THE EXISTING RUNS, WHICH SHALL NOT BE DISCONNECTED NOR HAVE SERVICE INTERRUPTED. CONTRACTOR SHALL TAKE EXTREME CARE RESUPPORTING EXISTING RUNS.
3. ALL COMPONENTS SHALL BE HOT DIPPED GALVANIZED STEEL.

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



FIBER OPTIC SPLICING DETAIL
N.T.S.



CORING DETAIL
N.T.S.

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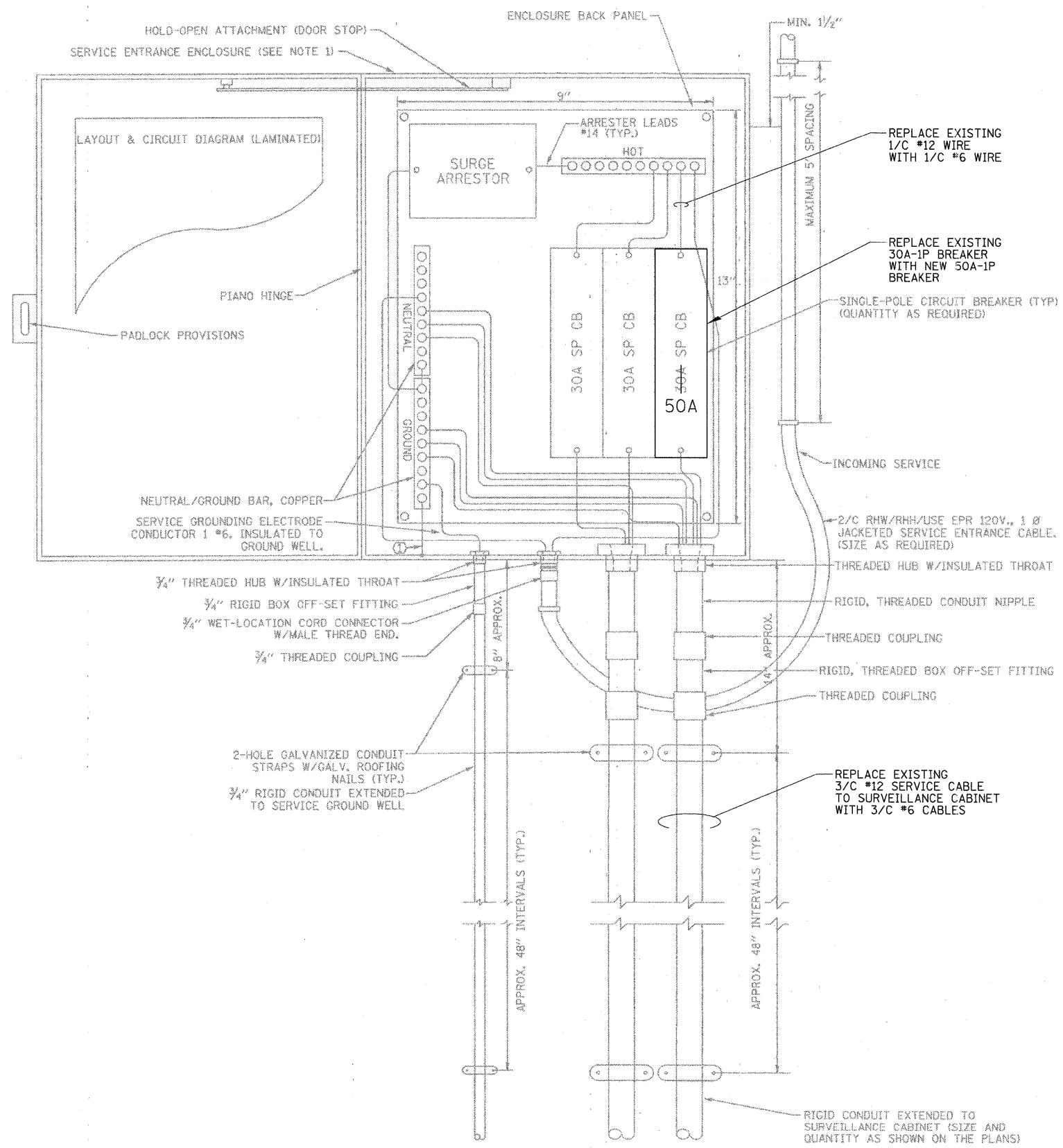
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

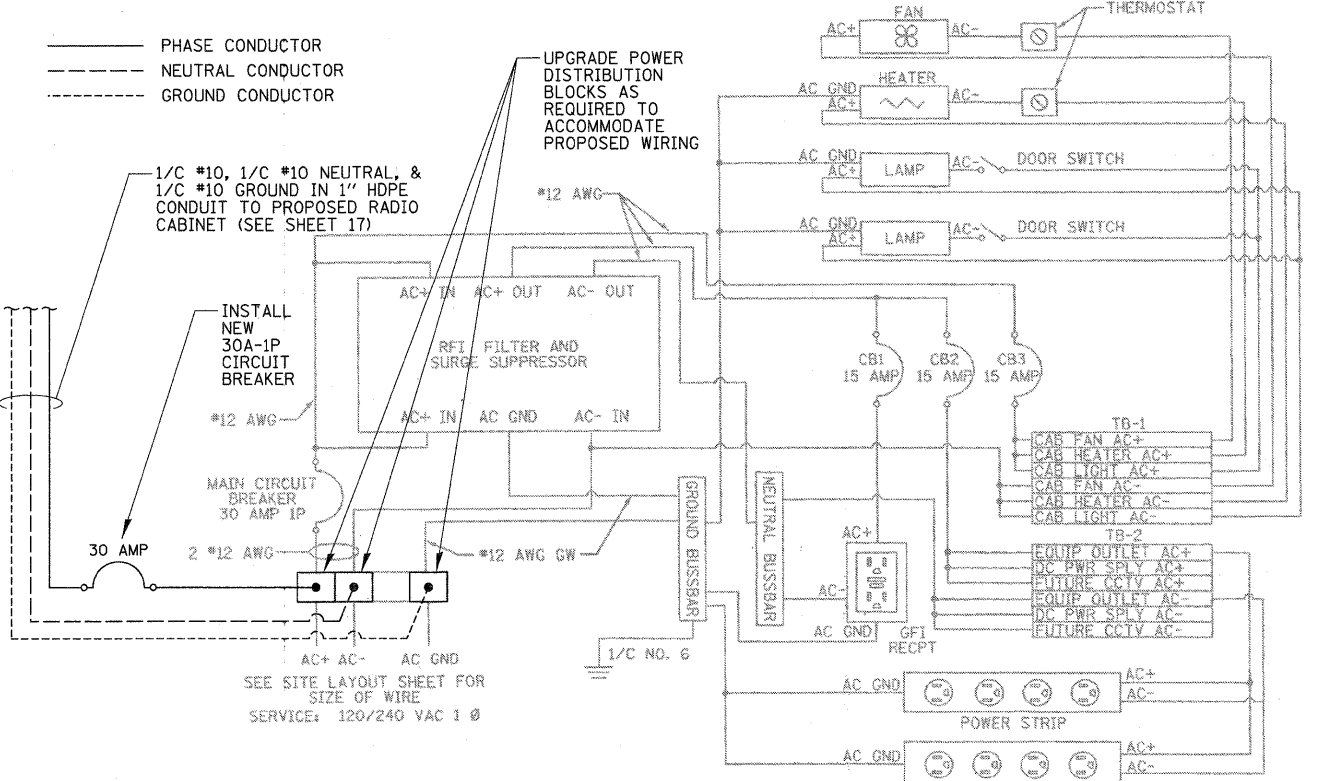
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.
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Rosemont, Illinois 60018
(847) 823-0500

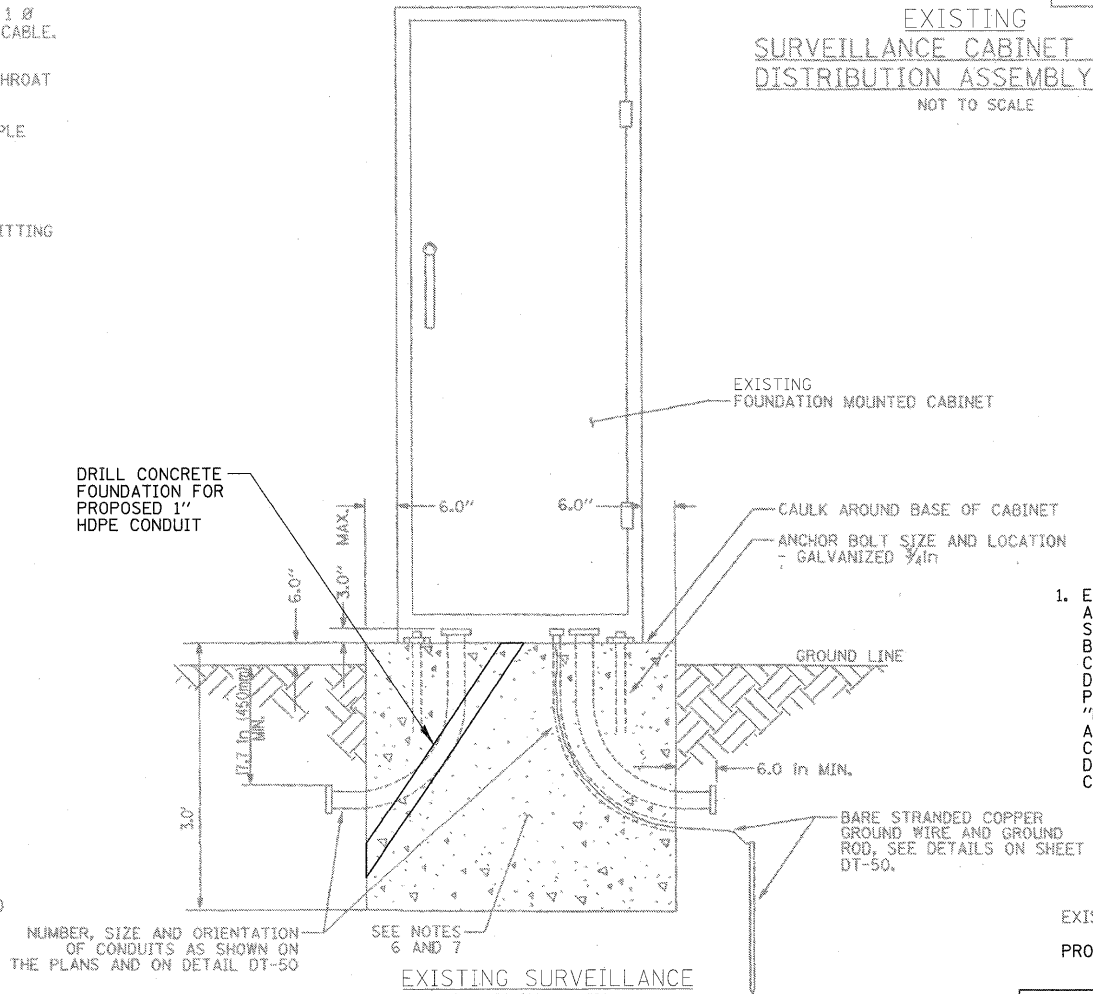
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	15
CONTRACT NO. 60134				
ILLINOIS FED. AID PROJECT				



EXISTING 120V ELECTRIC SERVICE TO SURVEILLANCE CABINET



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



EXISTING SURVEILLANCE CABINET DETAIL CONCRETE BASE MOUNTED (MODEL 334)

SCOPE OF WORK

1. EXISTING SURVEILLANCE CABINET AND ASSOCIATED SERVICE WIRING/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 CONDUIT/WIRING FROM THE SERVICE DISCONNECT TO THE COMMUNICATIONS CABINET.

EXISTING CONDITIONS SHOWN IN HALF TONE
PROPOSED CONDITIONS SHOWN IN BOLD

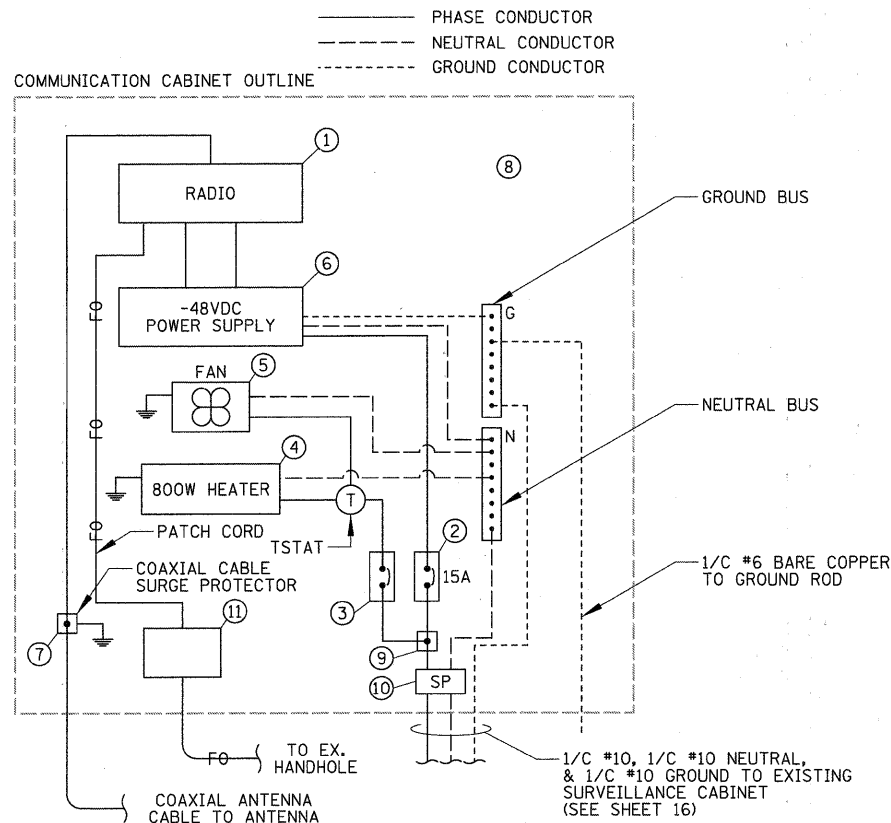
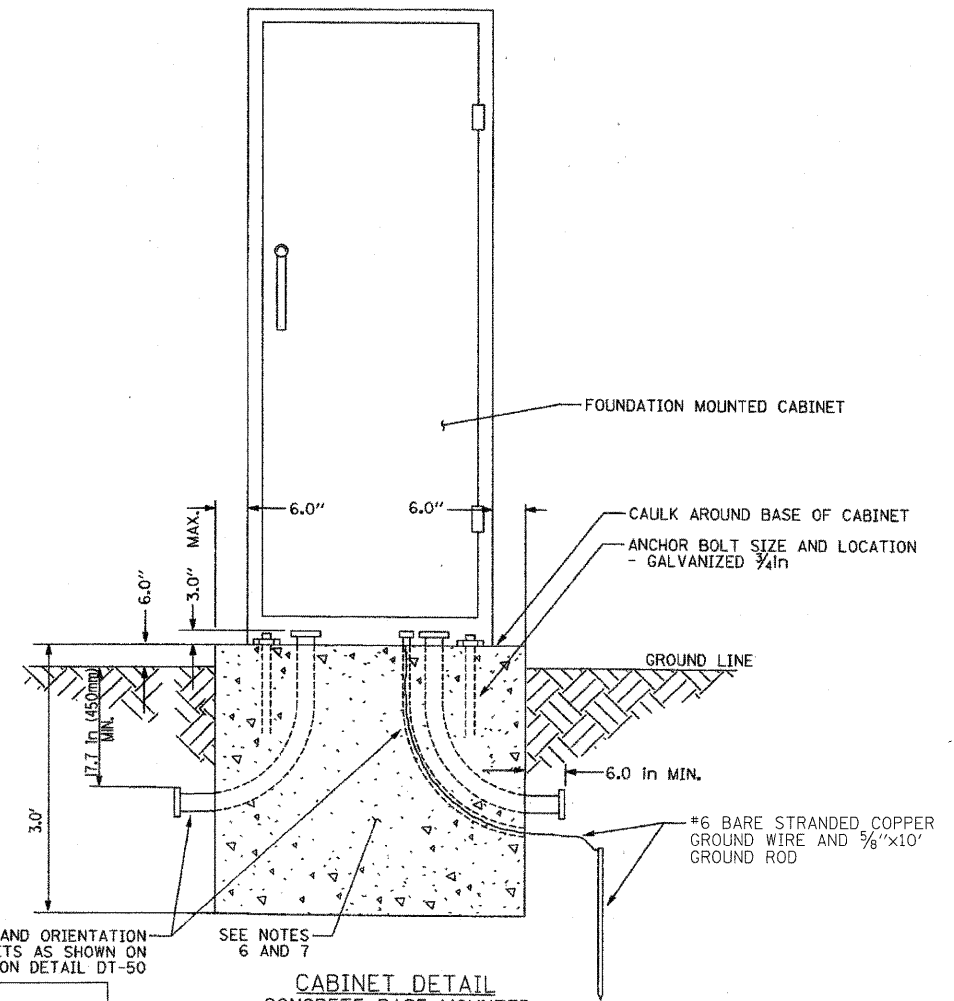
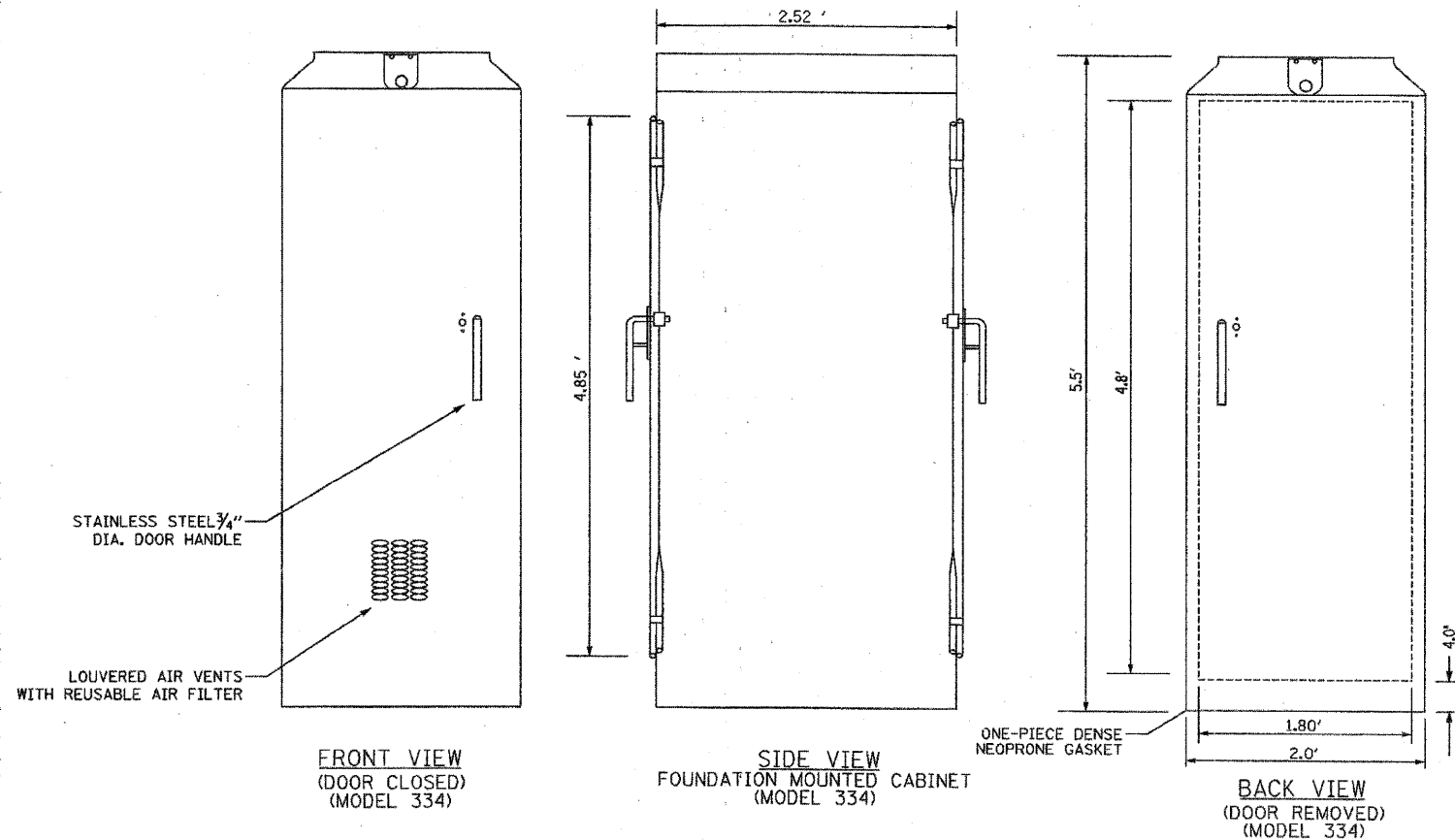
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS CENTER-TO-CENTER INTEGRATION PROJECT
DETAILS (2 OF 3)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	16
CONTRACT NO. 60I34				
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

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.

COMPONENT SCHEDULE

DAN RYAN COMMUNICATIONS CABINET DETAIL

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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.

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2009-0871	VARIES	17	17
CONTRACT NO. 60I34				
ILLINOIS FED. AID PROJECT				