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THIS PROJECT IS LOCATED IN THE CITY OF AURORA AND VILLAGE OF NORTH AURORA

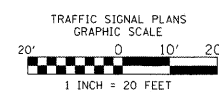
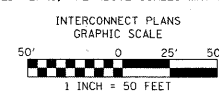
TRAFFIC DATA:	
POSTED SPEED:	ORCHARD RD. BETWEEN JERICO RD. & SULLIVAN RD. = 45 MPH BETWEEN SULLIVAN RD. & RANDALL RD. = 50 MPH
ADT:	27,500 BETWEEN JERICO RD. & GALENA BLVD. 31,700 BETWEEN GALENA BLVD. & I-88 RAMP 26,400 BETWEEN I-88 RAMP & OAK ST. 22,000 BETWEEN OAK ST. & RANDALL RD.
FUNCTIONAL CLASSIFICATION:	ARTERIAL (ORCHARD RD.)

CONTRACT NO. 63540

J.U.L.I.E.
JOINT
UTILITY
LOCATION
INFORMATION
FOR
EXCAVATION
CALL 811



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.

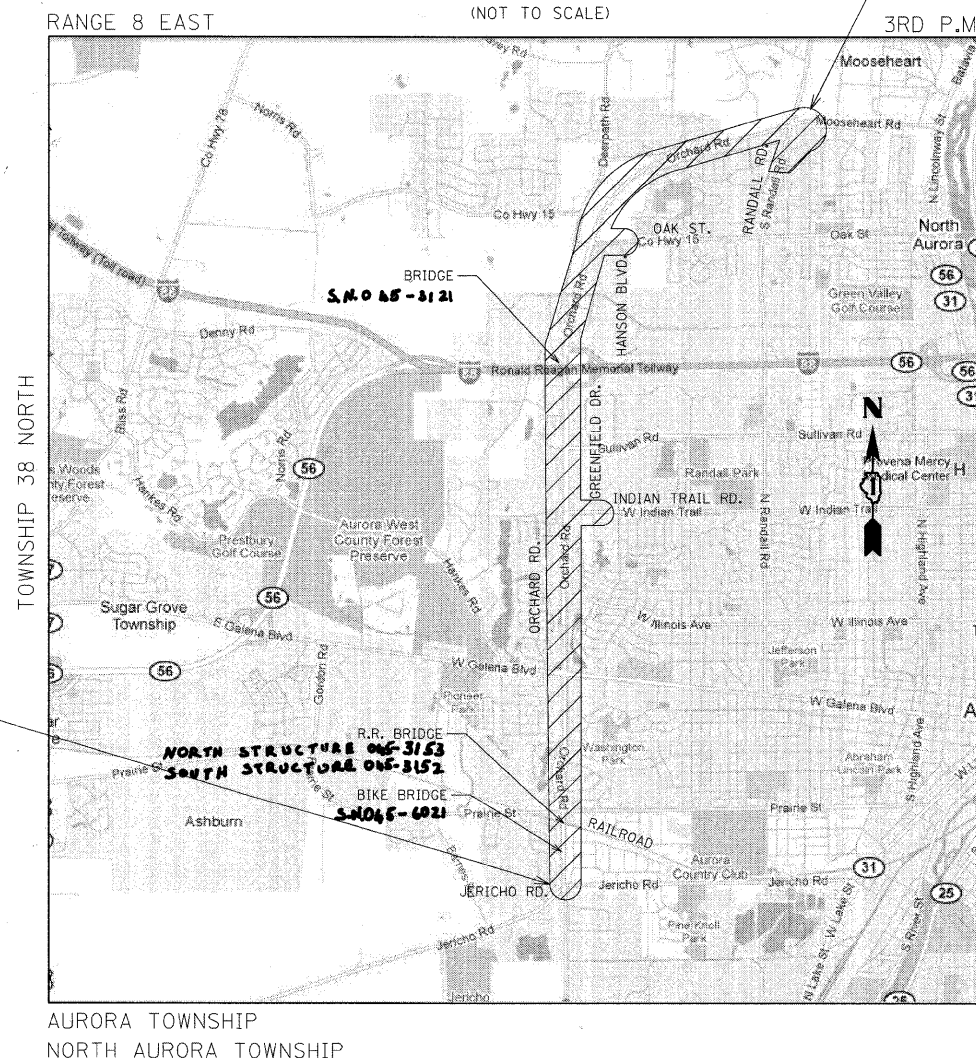


STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP 336 (ORCHARD ROAD)
JERICO RD. TO RANDALL RD.
TRAFFIC SIGNAL MODERIZATION AND
FIBER OPTIC COMMUNICATION SYSTEM
SECTION: 09-00272-01-TL
FEDERAL PROJECT NO.: CMM-9003 (207)
KANE COUNTY
JOB NO.: C-91-263-09

LOCATION MAP
(NOT TO SCALE)



END PROJECT
ORCHARD RD.
STA. 184+00

BEGIN PROJECT
ORCHARD RD.
STA. 178+00

GROSS LENGTH = 34,302 FT. (6.49 MILES)
NET LENGTH = 32,895 FT. (6.23 MILES)

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	1
ILLINOIS CONTRACT NO. 63540				



IDOT STANDARDS

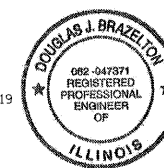
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-02	OFF-ROAD OPERATIONS 2L, 2W, >15' AWAY
701006-03	OFF-ROAD OPERATIONS 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE
701101-02	OFF-ROAD OPERATIONS MULTILANE 15' TO 24' FROM PAVEMENT EDGE
701011-02	OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-04	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701602-05	URBAN LANE CLOSURE, MULTILANE 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-07	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNT DETAILS
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTIBLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS



KANE COUNTY
DIVISION OF TRANSPORTATION

Delcan

ILLINOIS REGISTRATION NO. 062-047371
EXPIRATION DATE: 11/30/2011
PROFESSIONAL DESIGN FIRM NO. 184-000919



SIGNED: *Douglas J. Brazelton*
DOUGLAS J. BRAZELTON
DATE: DECEMBER 16, 2010

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
APPROVED: <i>December 17, 2010</i>	
KANE COUNTY DIVISION OF TRANSPORTATION DIRECTOR OF TRANSPORTATION/COUNTY ENGINEER	
PASSED: <i>January 3, 2011</i>	
DISTRICT 1 ENGINEER OF LOCAL STREETS & ROADS	
RELEASING FOR BID BASED ON LIMITED REVIEW: <i>January 3, 2011</i>	
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER	

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS



INTERSECTION LIST

- INT-1 ORCHARD RD. & JERICOH RD.
- INT-2 ORCHARD RD. & PRAIRIE ST.
- INT-3 ORCHARD RD. & COACH/SURREY LN.
- INT-4 ORCHARD RD. & GALENA BLVD.
- INT-5 ORCHARD RD. & ILLINOIS AVE.
- INT-6 ORCHARD RD. & INDIAN TRAIL RD.
- INT-7 INDIAN TRAIL RD. & GREENFIELD DR.
- INT-8 ORCHARD RD. & COMMERCIAL ENTRANCE (HOME DEPOT)
- INT-9 ORCHARD RD. & SULLIVAN RD.
- INT-10 ORCHARD RD. & I-88 (EB EXIT/ENTRANCE RAMP)
- INT-11 ORCHARD RD. & I-88 (WB EXIT/ENTRANCE RAMP)
- INT-12 ORCHARD RD. & ORCHARD GATEWAY
- INT-13 ORCHARD RD. & OAK ST.
- INT-14 OAK ST. & HANSON BLVD.
- INT-15 ORCHARD RD. & WHITE OAK DR.
- INT-16 ORCHARD RD. & COMMISKY DR.
- INT-17 ORCHARD RD. & RANDALL RD.
- INT-18 RANDALL RD. & DOGWOOD DR./RITTER ST.



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAP OF LOCATIONS

SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	2
CONTRACT NO. 63540				
MAP	ILLINOIS FED. AID PROJECT			

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

- STATE OF ILLINOIS**
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES			F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			336	09-00272-01-TL	KANE	68	3
			CONTRACT NO. 63540				
OF	SHEETS	STA.	TO STA.				

SCHEDULE OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE							
				ORCHARD RD. & JERICHO RD.	ORCHARD RD. & PRAIRIE ST.	ORCHARD RD. & COACH & SURREY	ORCHARD RD. & GALENA BLVD.	ORCHARD RD. & ILLINOIS AVE.	ORCHARD RD. & INDIAN TRAIL RD.	INDIAN TRAIL RD. & GREENFIELD DR.	ORCHARD RD. & COMMERCIAL ENTRANCE (HOME DEPOT)
				ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL
67100100	MOBILIZATION	L SUM	1								
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1								
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1								
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1								
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1								
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1								
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	17	1	1	1	1	1	1	1	1
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	3						1		
85700500	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	11		1	1	1	1		1	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1560		419	49	170	634	288		
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	14		6				6		2
88800100	PEDESTRIAN PUSH-BUTTON	EACH	37		6	4	7	8	6		2
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	14	1	1	1	1	1		1	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1200								
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	17	1	1	1	1	1	1	1	1
X0324264	SIGNAL HEAD, LED, RETROFIT	EACH	15			2	4	3			
X0325462	MEDIA CONVERTER	EACH	2						1		
X0329851	FIBER OPTIC PATCH PANEL	EACH	17	1	1	1	1	1	1	1	1
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1200								
87301215	ELECTRIC CABLE IN CONDUIT, <i>Equipment Grounding Conductor Note 1C</i>	FOOT	2680						599		494
XX007017	TERMINATE FIBER IN CABINET	EACH	140	4	4	8	12	8	12	4	8
XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	7	1	1		1		1		
XX008019	UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	12		1	1	1	1	1		1
XX008251	SPLICE FIBER IN CABINET	EACH	36					4	4		4
XX008252	QUAD ENCODER	EACH	7			1	1	1			
XX008253	VIDEO ENCODER	EACH	3								
XX008392	OUTDOOR RATED NETWORK CABLE	FOOT	1413	223	130		238		142		
Z0010688	CAMERA MOUNTING ASSEMBLY	EACH	1								
Z0033072	VIDEO VEHICLE DETECTION SYSTEM	EACH	2						1		
Z0033090	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1200								
XX008453	ETHERNET SWITCH, TYPE 1	EACH	14	1	1	1	1	1		1	1
XX008454	ETHERNET SWITCH, TYPE 2	EACH	3						1		
XX008452	MAFUNCTION MANAGEMENT UNIT	EACH	15	1	1	1	1	1	1		1
XX008483	MODIFY EXISTING UPS FOR SYSTEM COMMUNICATIONS	EACH	2								
XX007953	NETWORK CONFIGURATION	L SUM	1								
XX008484	VIDEO VEHICLE DETECTION IP INTERFACE PANEL UPGRADE	EACH	5	1	1						1



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 50'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: 1" = 50' SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P

336

SECTION

09-00272-01-TL

COUNTY

KANE

TOTAL SHEETS

68

SHEET NO.

4

CONTRACT NO. 63540

\$00-1

ILLINOIS FED. AID PROJECT

SCHEDULE OF QUANTITIES (CONTD.)

			CONSTRUCTION CODE								
			ORCHARD RD. & SULLIVAN RD.	ORCHARD RD. & I-88 (EB EXIT/ENT. RAMP)	ORCHARD RD. & I-88 (WB EXIT/ENT. RAMP)	ORCHARD RD. & ORCHARD GATEWAY	ORCHARD RD. @ OAK ST.	ORCHARD RD. @ OAK ST. & HANSON BLVD.	ORCHARD RD. @ WHITE OAK DR.	ORCHARD RD. @ COMMISKY DR.	ORCHARD RD. @ RANDALL RD.
CODE NO.	ITEM	UNIT	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL	ROADWAY 0021 RURAL
67100100	MOBILIZATION	L SUM									
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM									
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM									
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM									
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM									
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM									
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	1	1	1	1	1	1	1
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH		1	1						
85700500	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1			1	1	1	1		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT									
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH									
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4								
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1			1	1	1	1	1	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT		1200							
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1	1	1	1	1	1	1	1
X0324264	SIGNAL HEAD, LED, RETROFIT	EACH				2	2		2		
X0325462	MEDIA CONVERTER	EACH					1				
X0329851	FIBER OPTIC PATCH PANEL	EACH	1	1	1	1	1	1	1	1	1
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT		1200							
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	636	366	585						
XX007017	TERMINATE FIBER IN CABINET	EACH	8	8	8	16	12	4	8	8	8
XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH		1	1		1				
XX008019	UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1	1	1	1	1		1		
XX008251	SPLICE FIBER IN CABINET	EACH	4	4	4		4		4	4	
XX008252	QUAD ENCODER	EACH				1	1		1	1	
XX008253	VIDEO ENCODER	EACH	1								1
XX008392	OUTDOOR RATED NETWORK CABLE	FOOT		294	128		258				
Z0010688	CAMERA MOUNTING ASSEMBLY	EACH		1							
Z0033072	VIDEO VEHICLE DETECTION SYSTEM	EACH	1								
Z0033090	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT		1200							
XX008453	ETHERNET SWITCH, TYPE 1	EACH	1	1	1	1		1	1	1	
XX008454	ETHERNET SWITCH, TYPE 2	EACH					1				1
XX008452	MAFUNCTION MANAGEMENT UNIT	EACH	1	1	1	1	1		1	1	1
XX008483	MODIFY EXISTING UPS FOR SYSTEM COMMUNICATIONS	EACH								1	1
XX007953	NETWORK CONFIGURATION	L SUM									
XX008484	VIDEO VEHICLE DETECTION IP INTERFACE PANEL UPGRADE	EACH	1								1



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 50'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES (CONTD)

SCALE: 1" = 50' SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.P

SECTION

336

09-00272-01-TL

COUNTY

KANE

TOTAL SHEETS

68

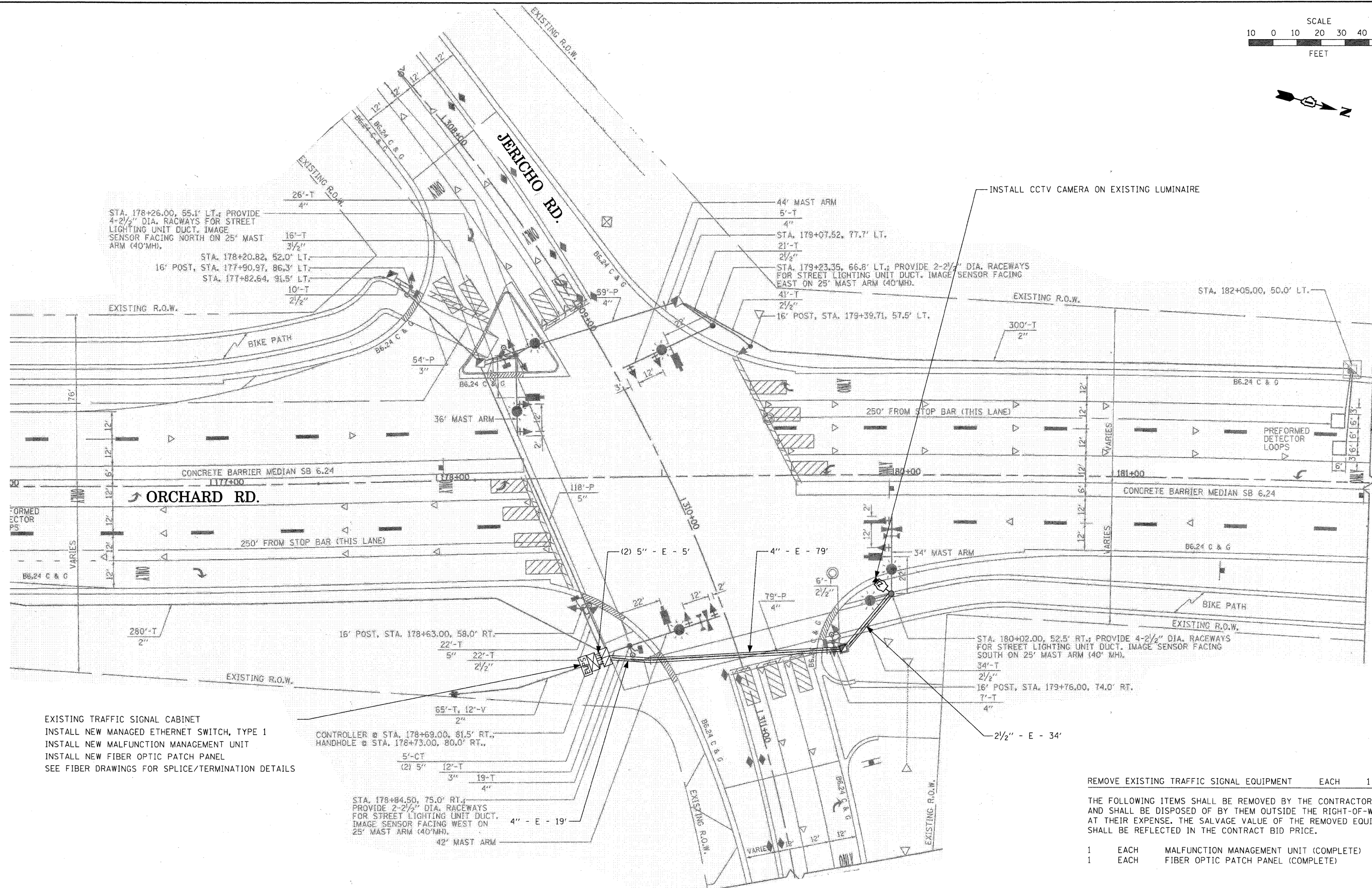
SHEET NO.

5

CONTRACT NO. 63540

S00-2

ILLINOIS FED. AID PROJECT



EXISTING TRAFFIC SIGNAL CABINET
INSTALL NEW MANAGED ETHERNET SWITCH, TYPE 1
INSTALL NEW MALFUNCTION MANAGEMENT UNIT
INSTALL NEW FIBER OPTIC PATCH PANEL
SEE FIBER DRAWINGS FOR SPLICE/TERMINATION DETAILS

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH MALFUNCTION MANAGEMENT UNIT (COMPLETE)
1 EACH FIBER OPTIC PATCH PANEL (COMPLETE)



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 20'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

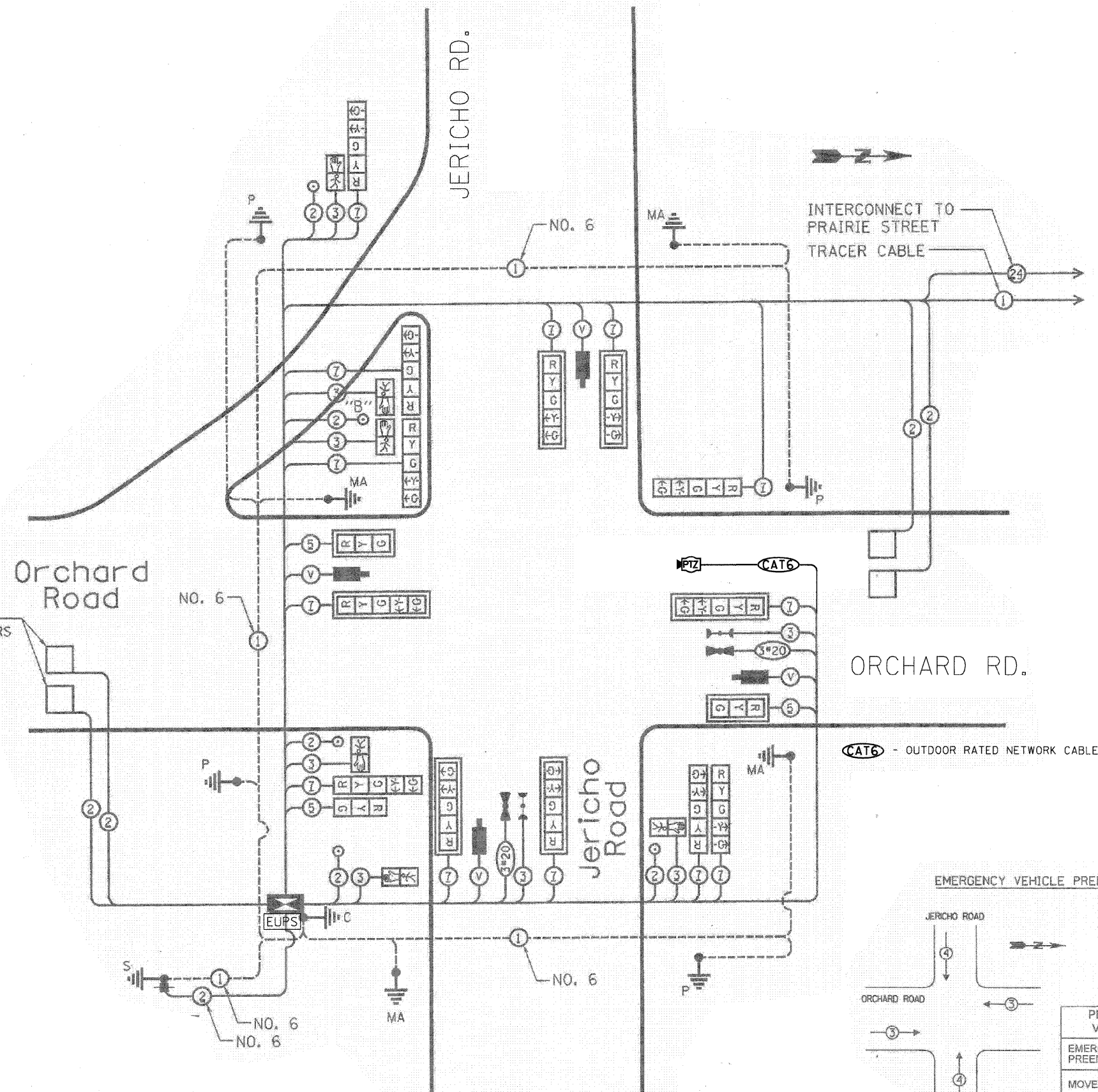
TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & JERICHO RD.

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

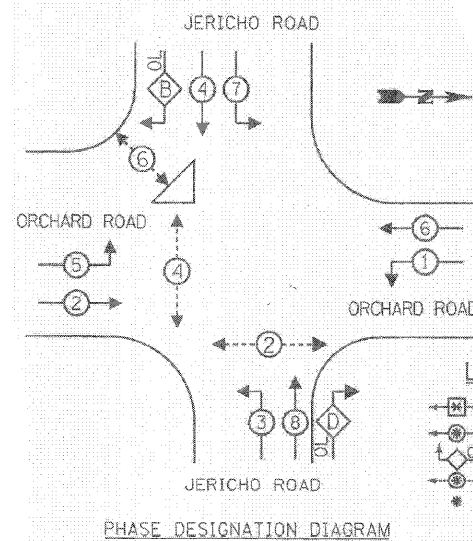
F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	6
CONTRACT NO. 63540				
INT-1 ILLINOIS FED. AID PROJECT				

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	223
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAJFUNCTION MANAGEMENT UNIT	EACH	1
VIDEO VEHICLE DETECTION IP INTERFACE PANEL UPGRADE	EACH	1

CABLE PLAN



CONTROLLER SEQUENCE



INTERSECTION & SAMPLING (SYSTEM) DETECTORS

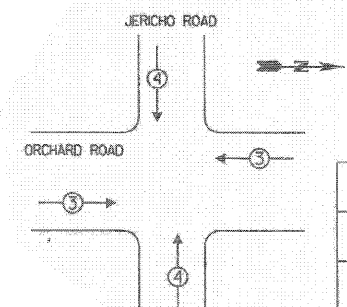
LEGEND

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE.

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
D	= 8	+ 1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←→	↑↓	



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 20'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & JERICHO RD.

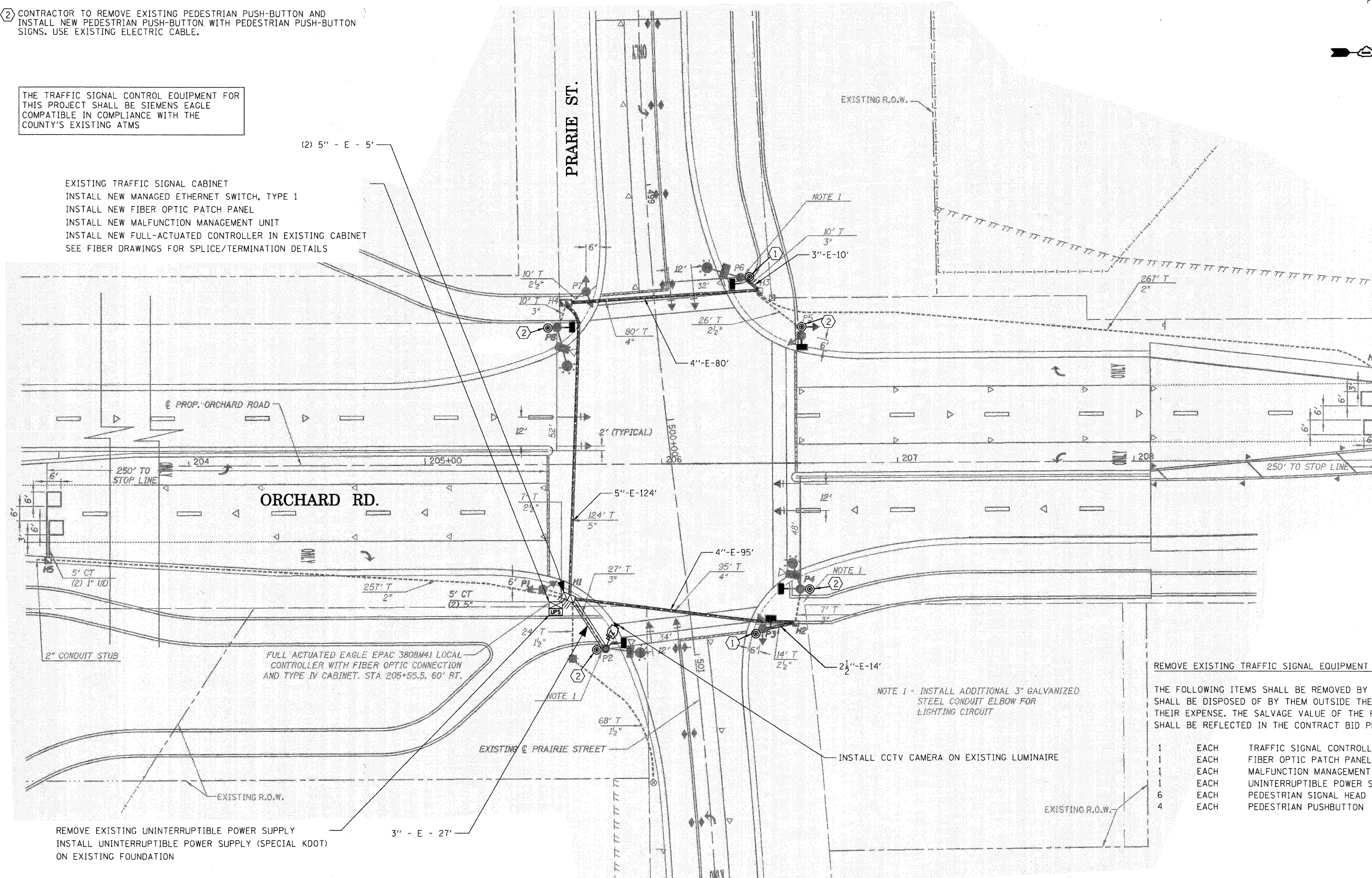
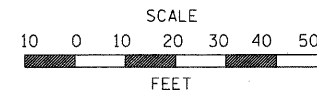
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	7
CONTRACT NO. 63540				
INT-1-C				ILLINOIS FED. AID PROJECT

CONSTRUCTION NOTES:

- ① CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- ② CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS



REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	TRAFFIC SIGNAL CONTROLLER (COMPLETE)
1	EACH	FIBER OPTIC PATCH PANEL (COMPLETE)
1	EACH	MAJUNCTION MANAGEMENT UNIT (COMPLETE)
1	EACH	UNINTERRUPTIBLE POWER SUPPLY (COMPLETE)
6	EACH	PEDESTRIAN SIGNAL HEAD
4	EACH	PEDESTRIAN PUSHBUTTON



KANE COUNTY
DIVISION OF TRANSPORTATION

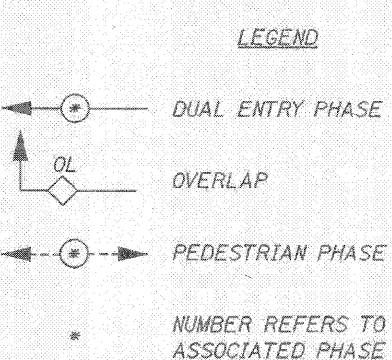
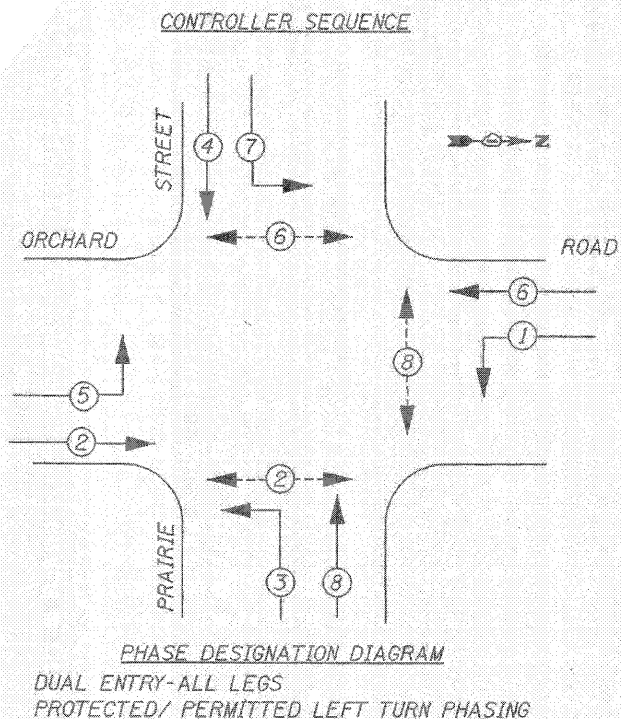
USER NAME = JM	DESIGNED - DG	REVISED -
DRAWN - JM/SM	REVIEWED -	
PLOT SCALE = 1" = 20'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & PRAIRIE ST.

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

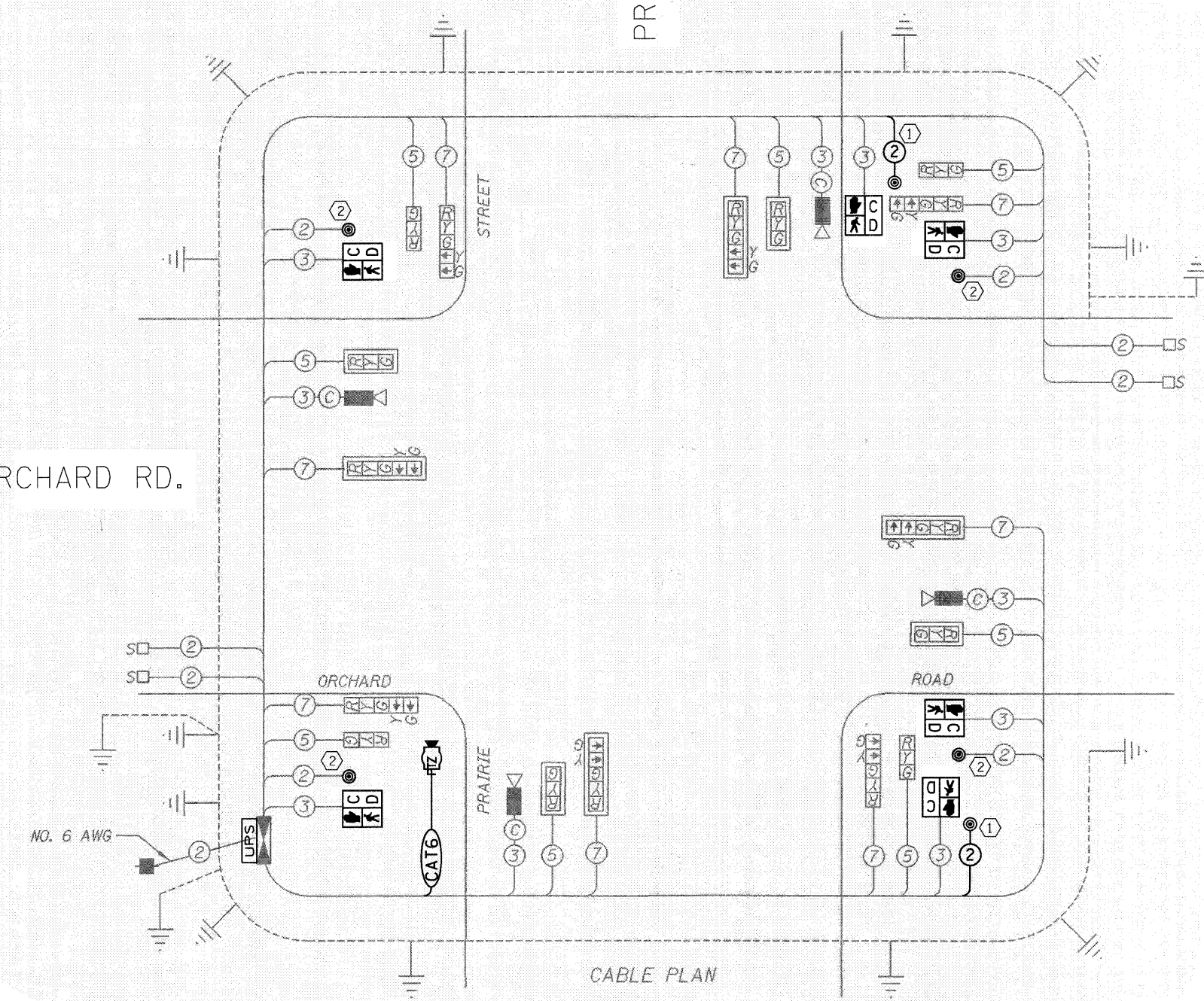
F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	8
CONTRACT NO. 63540				
INT-2 ILLINOIS FED. AID PROJECT				



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

ORCHARD RD.

PRAIRIE ST.



CAT6 - OUTDOOR RATED NETWORK CABLE

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	419
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
PEDESTRIAN PUSH-BUTTON	EACH	6
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	130
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAJUNCTION MANAGEMENT UNIT	EACH	1
VIDEO VEHICLE DETECTION IP INTERFACE PANEL UPGRADE	EACH	1

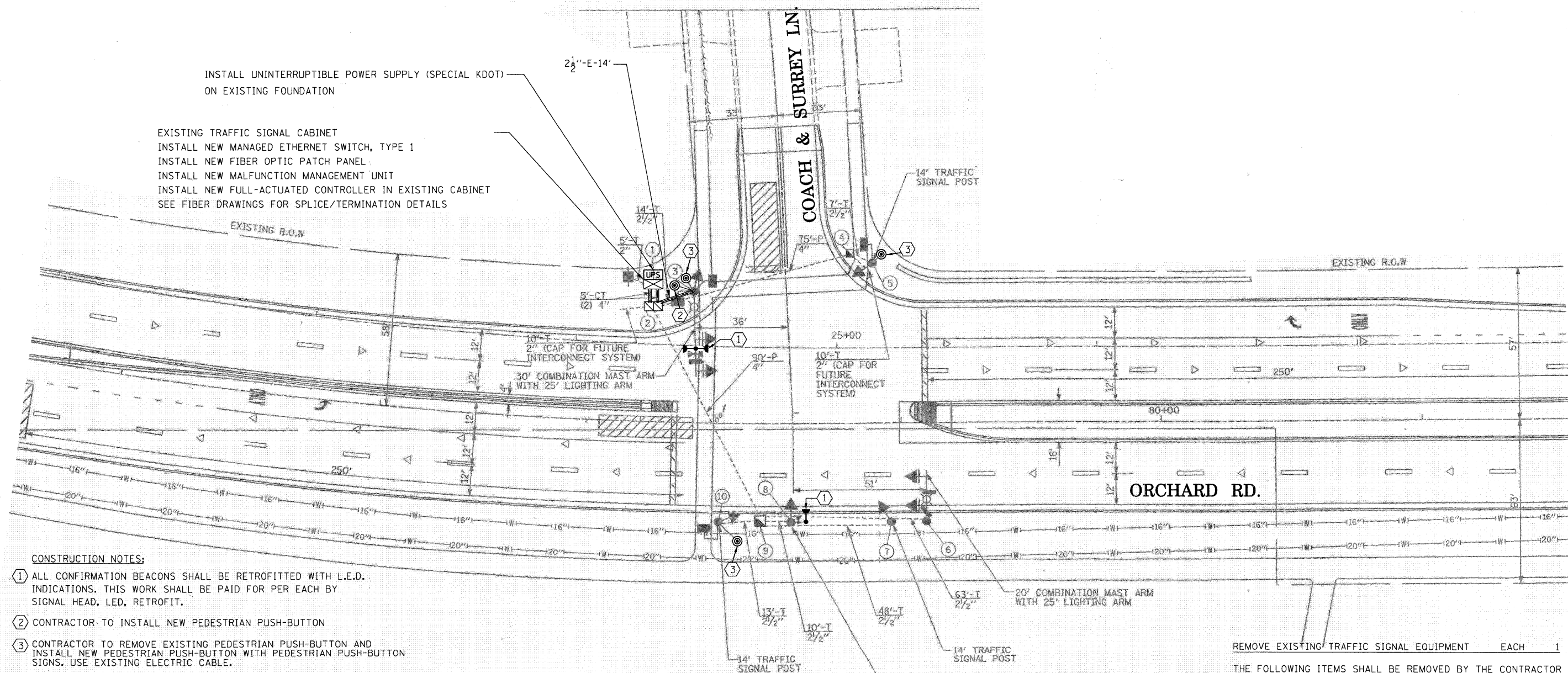
- CONSTRUCTION NOTES:**
- CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
 - CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

INSTALL UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)
ON EXISTING FOUNDATION

EXISTING TRAFFIC SIGNAL CABINET
INSTALL NEW MANAGED ETHERNET SWITCH, TYPE 1
INSTALL NEW FIBER OPTIC PATCH PANEL
INSTALL NEW MALFUNCTION MANAGEMENT UNIT
INSTALL NEW FULL-ACTUATED CONTROLLER IN EXISTING CABINET
SEE FIBER DRAWINGS FOR SPLICE/TERMINATION DETAILS



CONSTRUCTION NOTES:

- ① ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.
- ② CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- ③ CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- | | | |
|---|------|---|
| 1 | EACH | TRAFFIC SIGNAL CONTROLLER (COMPLETE) |
| 1 | EACH | FIBER OPTIC PATCH PANEL (COMPLETE) |
| 1 | EACH | MALFUNCTION MANAGEMENT UNIT (COMPLETE) |
| 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY (COMPLETE) |
| 3 | EACH | PEDESTRIAN PUSHBUTTON |



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 20'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & COACH & SURREY LN.

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

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	10
CONTRACT NO. 63540				
INT-3 ILLINOIS FED. AID PROJECT				

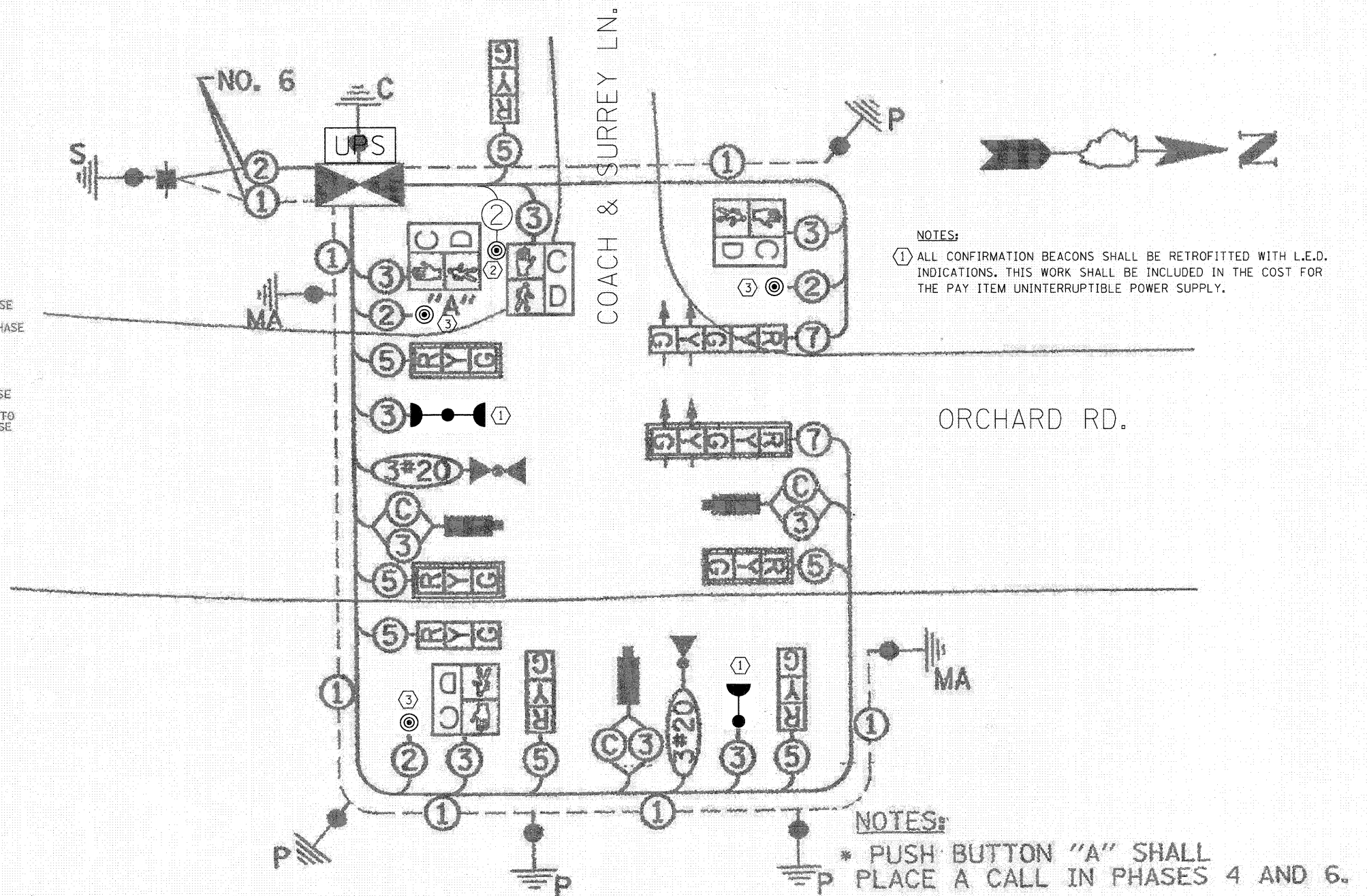
PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	49
PEDESTRIAN PUSH-BUTTON	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, RETROFIT	EACH	2
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
QUAD ENCODER	EACH	1
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAFUNCTION MANAGEMENT UNIT	EACH	1

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

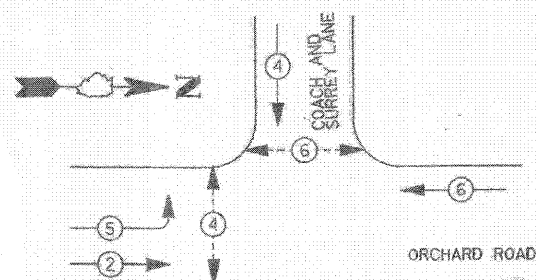
CONSTRUCTION NOTES:

- ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.
- CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.

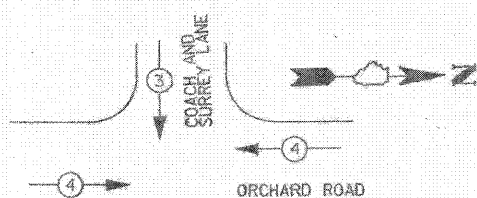
PROPOSED CABLE PLAN



PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE SEQUENCE



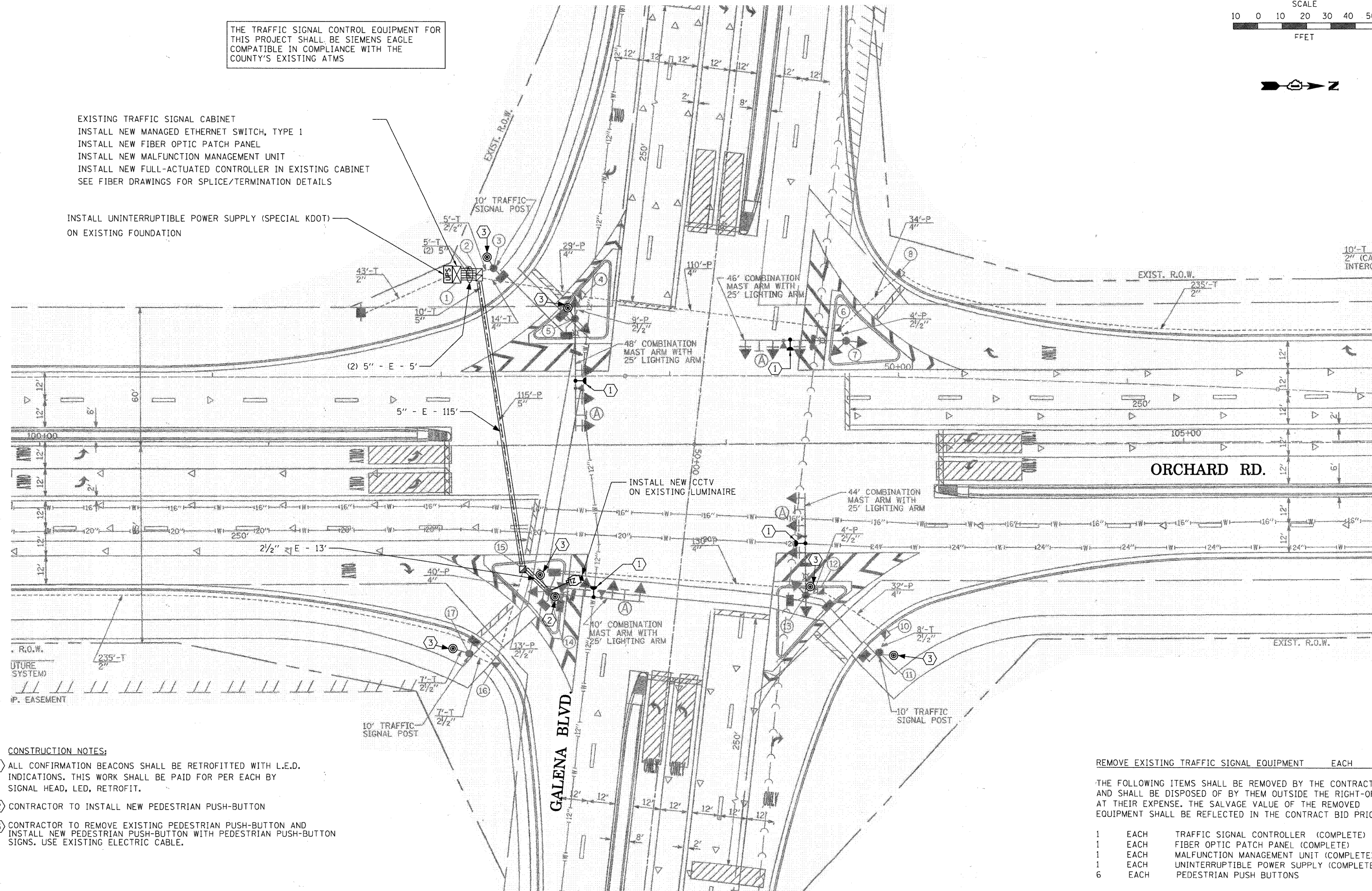
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

SCALE
10 0 10 20 30 40 50
FEET



EXISTING TRAFFIC SIGNAL CABINET
INSTALL NEW MANAGED ETHERNET SWITCH, TYPE 1
INSTALL NEW FIBER OPTIC PATCH PANEL
INSTALL NEW MALFUNCTION MANAGEMENT UNIT
INSTALL NEW FULL-ACTUATED CONTROLLER IN EXISTING CABINET
SEE FIBER DRAWINGS FOR SPLICE/TERMINATION DETAILS

INSTALL UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)
ON EXISTING FOUNDATION



CONSTRUCTION NOTES:

- 1 ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.
- 2 CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- 3 CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	TRAFFIC SIGNAL CONTROLLER (COMPLETE)
1	EACH	FIBER OPTIC PATCH PANEL (COMPLETE)
1	EACH	MALFUNCTION MANAGEMENT UNIT (COMPLETE)
1	EACH	UNINTERRUPTIBLE POWER SUPPLY (COMPLETE)
6	EACH	PEDESTRIAN PUSH BUTTONS



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 20'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

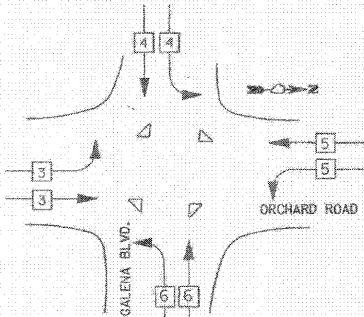
TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & GALENA BLVD.

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

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	12
CONTRACT NO. 63540				
INT-4 ILLINOIS FED. AID PROJECT				

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	170
PEDESTRIAN PUSH-BUTTON	EACH	7
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, RETROFIT	EACH	4
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
QUAD ENCODER	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	238
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAJUNCTION MANAGEMENT UNIT	EACH	1

PROPOSED EMERGENCY VEHICLE SEQUENCE

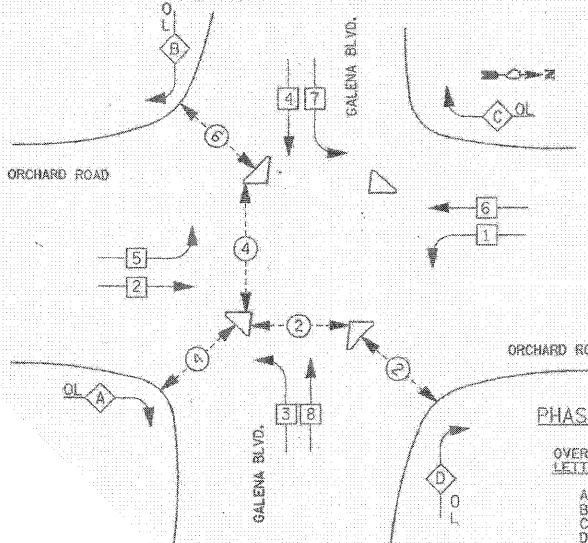


EMERGENCY VEHICLE PRE-EMPTORS	3	4	5	6
MOVEMENT	→	↓	←	↑

- NOTES:
- *PUSH BUTTON "A" SHALL PLACE A CALL IN PHASE 2 AND 4
 - *PUSH BUTTON "B" SHALL PLACE A CALL IN PHASE 4 AND 6
 - *PUSH BUTTON "C" SHALL PLACE A CALL IN PHASE 2

PROPOSED CONTROLLER SEQUENCE

SINGLE ENTRY - PROTECTED ONLY LEFT TURN PHASING (ALL APPROACHES)

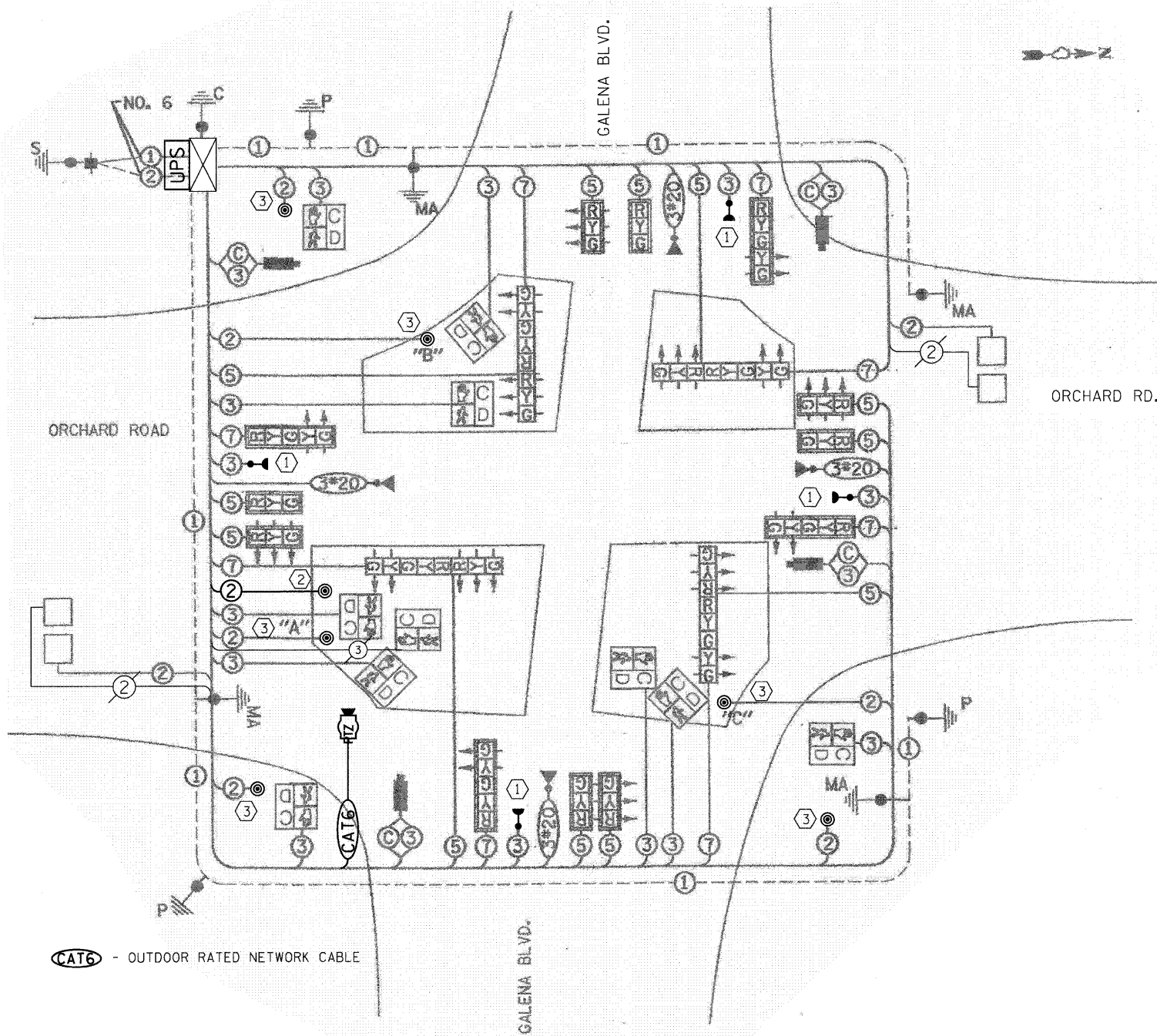


- LEGEND
- DUAL ENTRY PHASE
 - SINGLE ENTRY PHASE
 - ◇ OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

OVERLAP LETTERS	PERMISSIVE PHASE	PROTECTED PHASE
A	2	+
B	4	+
C	6	+
D	8	+

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS



CONSTRUCTION NOTES:

- ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.
- CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
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PLOT DATE = 12-21-2010

DESIGNED - DG
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REVISED -
REVISED -
REVISED -

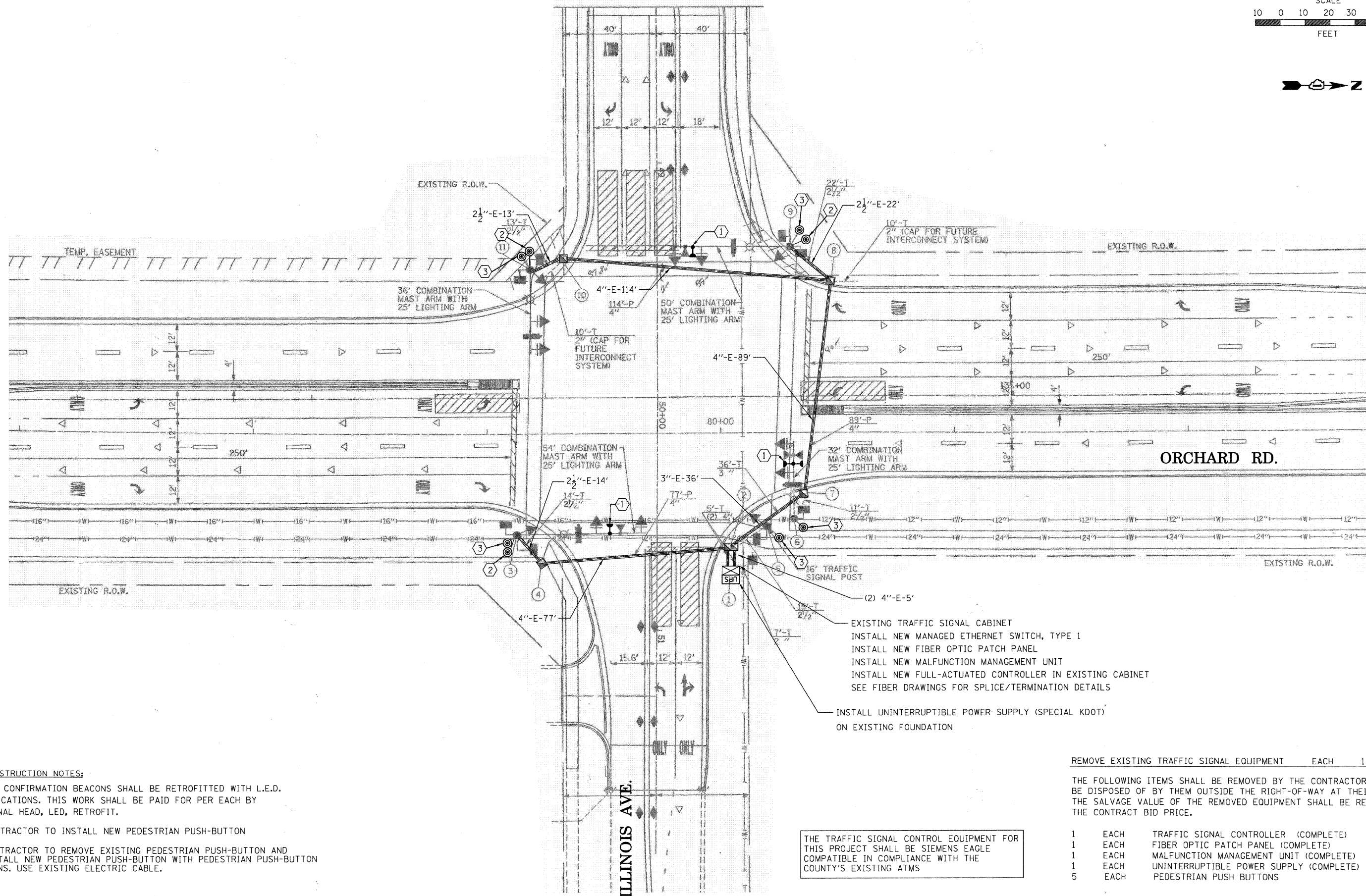
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & GALENA BLVD.

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	13
INT-4-C ILLINOIS FED. AID PROJECT				

CONTRACT NO. 63540



CONSTRUCTION NOTES:

- ① ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.
- ② CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- ③ CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	TRAFFIC SIGNAL CONTROLLER (COMPLETE)
1	EACH	FIBER OPTIC PATCH PANEL (COMPLETE)
1	EACH	MALFUNCTION MANAGEMENT UNIT (COMPLETE)
1	EACH	UNINTERRUPTIBLE POWER SUPPLY (COMPLETE)
5	EACH	PEDESTRIAN PUSH BUTTONS



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 20'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & ILLINOIS AVE.

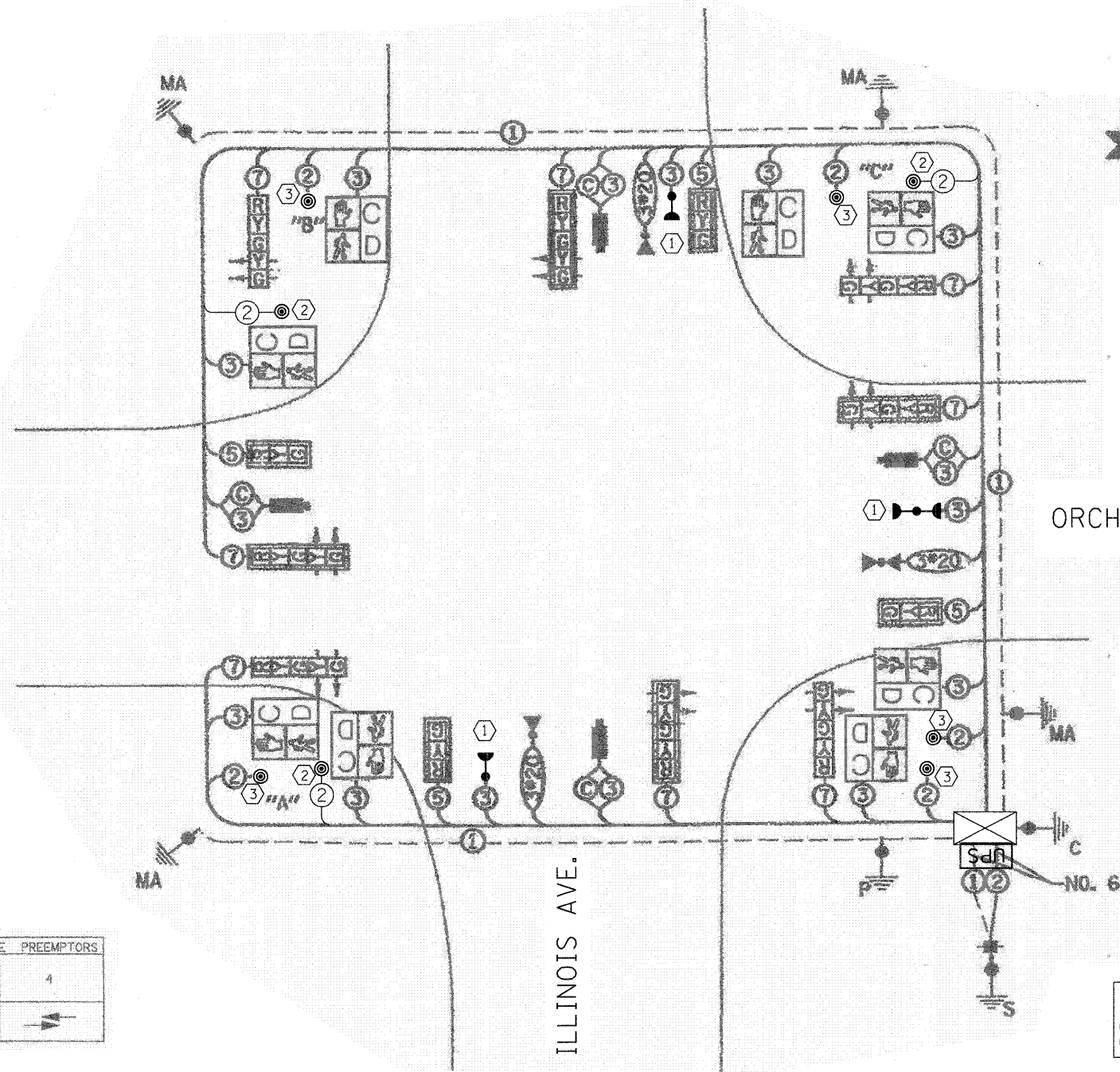
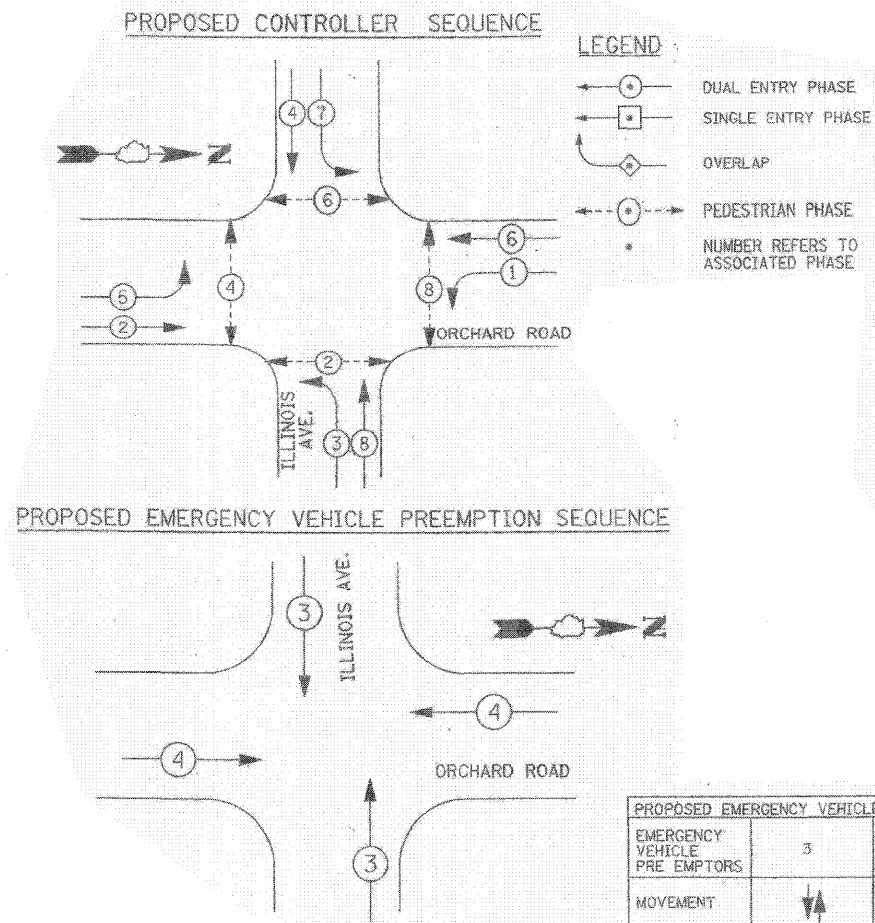
SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	14
INT-5				CONTRACT NO. 63540
ILLINOIS FED. AID PROJECT				

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	634
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, RETROFIT	EACH	3
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
SPLICE FIBER IN CABINET	EACH	4
QUAD ENCODER	EACH	1
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAFUNCTION MANAGEMENT UNIT	EACH	1

CONSTRUCTION NOTES:

- ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.
- CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.



ORCHARD RD.

NOTE:

- *PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
- *PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
- *PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE, COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 20'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & ILLINOIS AVE.

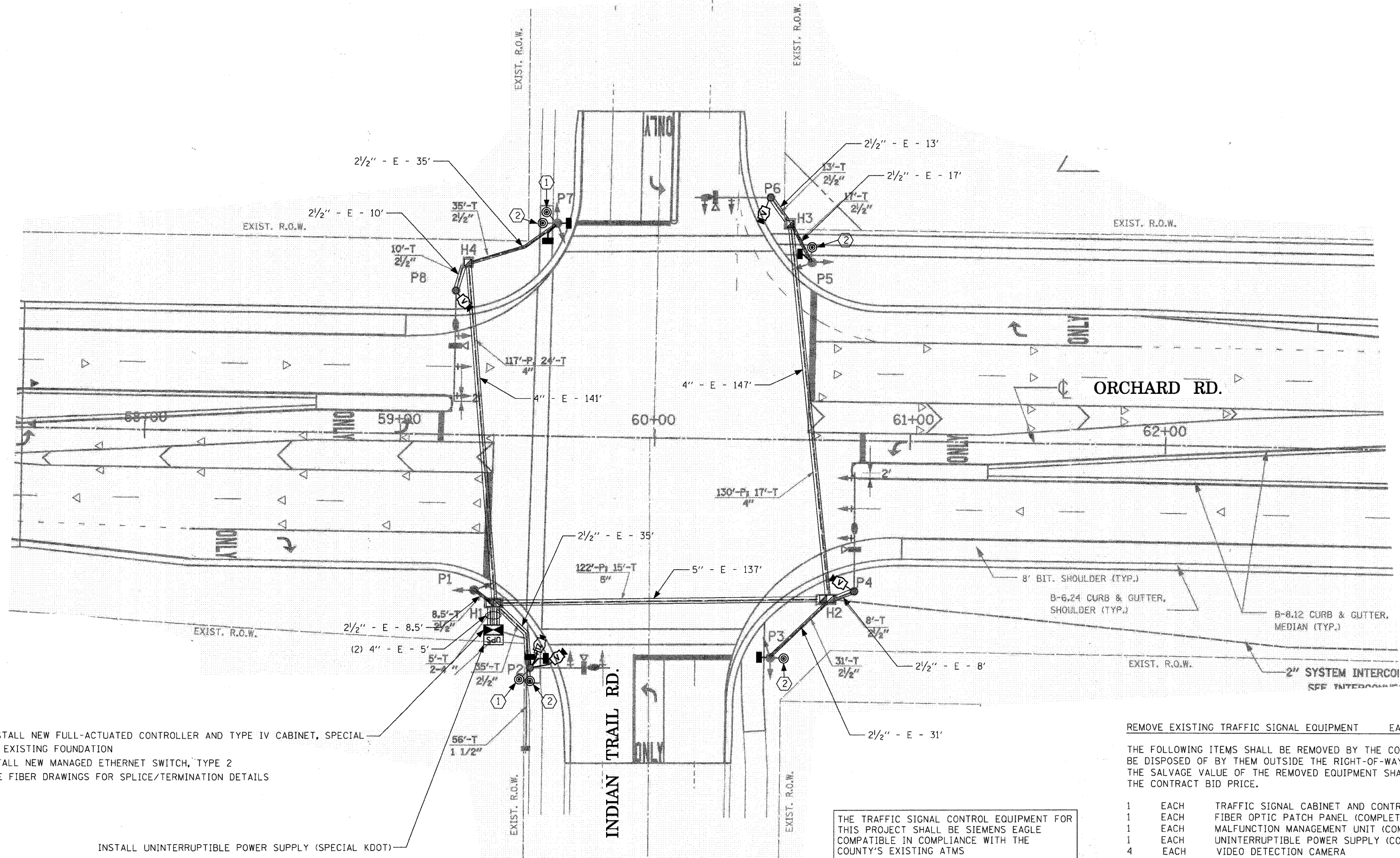
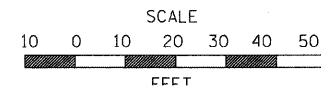
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	15
CONTRACT NO. 63540				
INT-5-C ILLINOIS FED. AID PROJECT				

CONSTRUCTION NOTES:

- ① CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- ② CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.

ALL VIDEO DETECTION CAMERAS AND CCTV TO BE INSTALLED ON EXISTING LUMINAIRES



INSTALL NEW FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
ON EXISTING FOUNDATION
INSTALL NEW MANAGED ETHERNET SWITCH, TYPE 2
SEE FIBER DRAWINGS FOR SPLICE/TERMINATION DETAILS

INSTALL UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)
ON EXISTING FOUNDATION

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- | | | |
|---|------|--|
| 1 | EACH | TRAFFIC SIGNAL CABINET AND CONTROLLER (COMPLETE) |
| 1 | EACH | FIBER OPTIC PATCH PANEL (COMPLETE) |
| 1 | EACH | MALFUNCTION MANAGEMENT UNIT (COMPLETE) |
| 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY (COMPLETE) |
| 4 | EACH | VIDEO DETECTION CAMERA |
| 6 | EACH | PEDESTRIAN SIGNAL HEAD |
| 4 | EACH | PEDESTRIAN PUSH BUTTON |

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & INDIAN TRAIL RD.

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

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	16
CONTRACT NO. 63540				
INT-6 ILLINOIS FED. AID PROJECT				

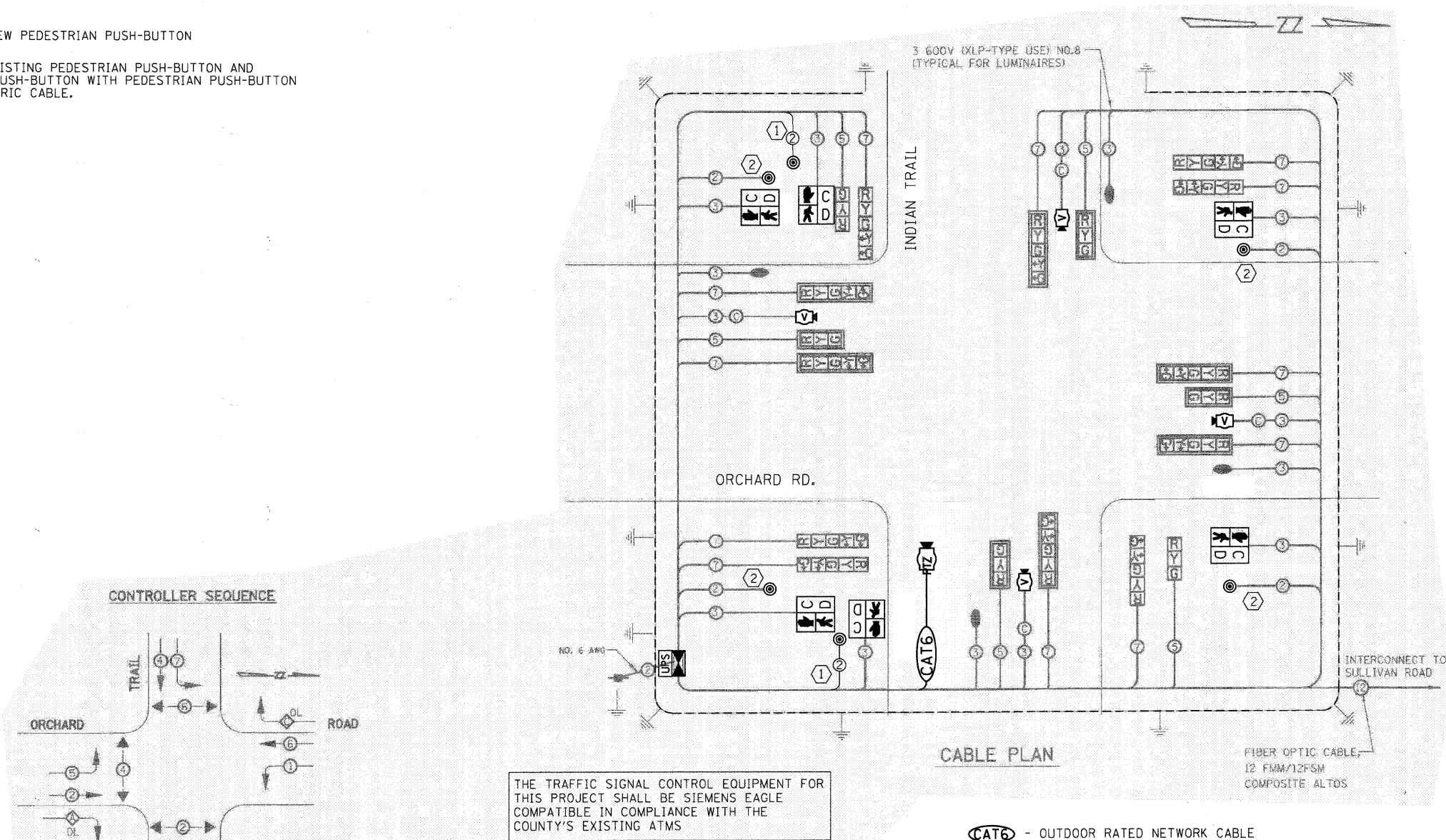


KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
DRAWN - JM/SM	REVISOR -	
PLOT SCALE = 1" = 20'	CHECKED - DG	REVISOR -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISOR -

CONSTRUCTION NOTES:

- 1 CONTRACTOR TO INSTALL NEW PEDESTRIAN PUSH-BUTTON
- 2 CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.



PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	288
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
PEDESTRIAN PUSH-BUTTON	EACH	6
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO VEHICLE DETECTION SYSTEM	EACH	1
MEDIA CONVERTER	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	599
TERMINATE FIBER IN CABINET	EACH	12
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
SPLICE FIBER IN CABINET	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	142
MANAGED ETHERNET SWITCH, TYPE 2	EACH	1
MAJFUNCTION MANAGEMENT UNIT	EACH	1



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010
PLOT SCALE = 1" = 20'
PLOT DATE = 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

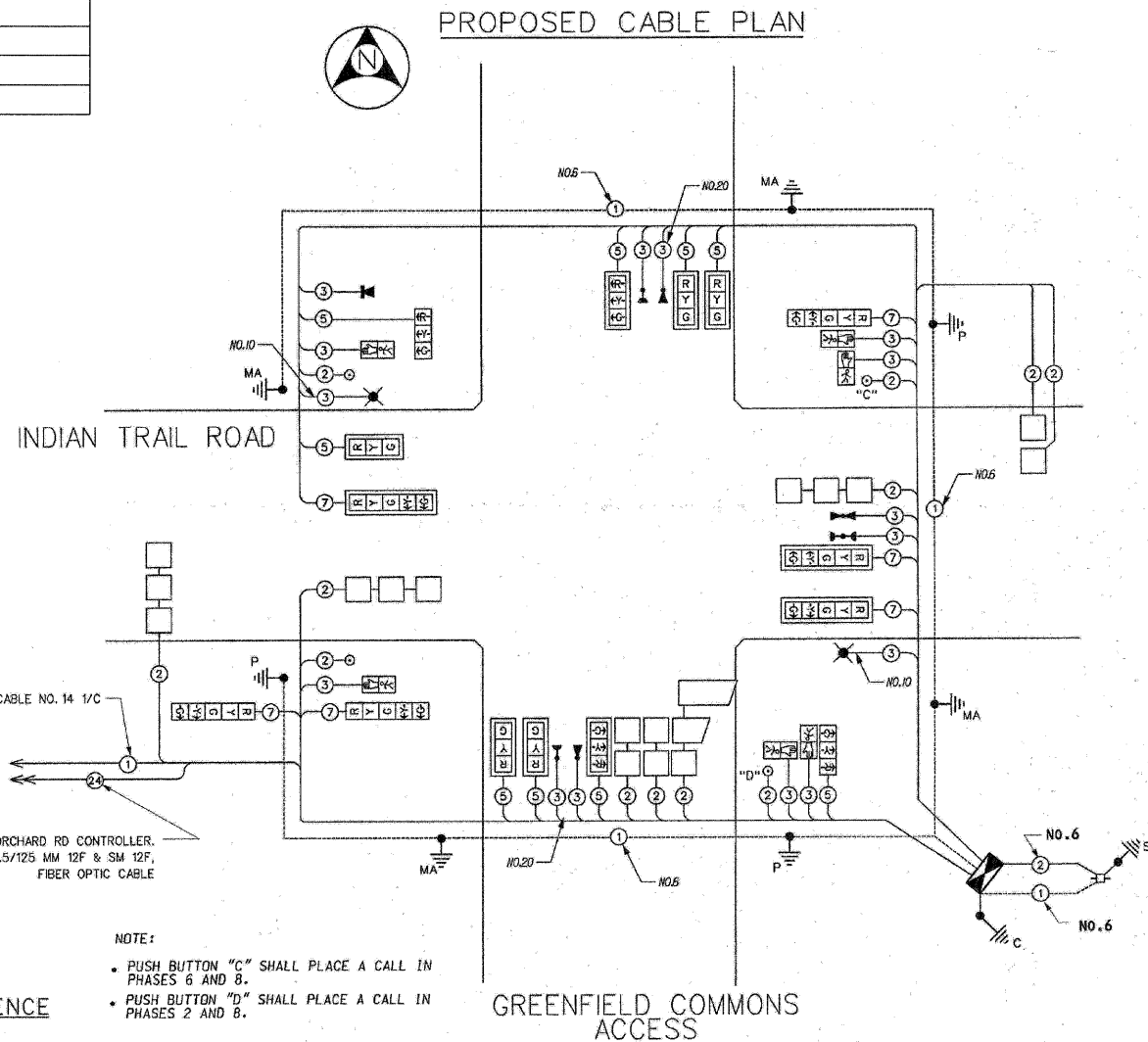
CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & INDIAN TRAIL RD.

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

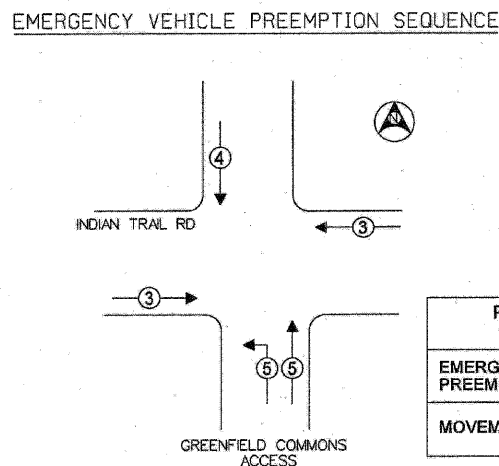
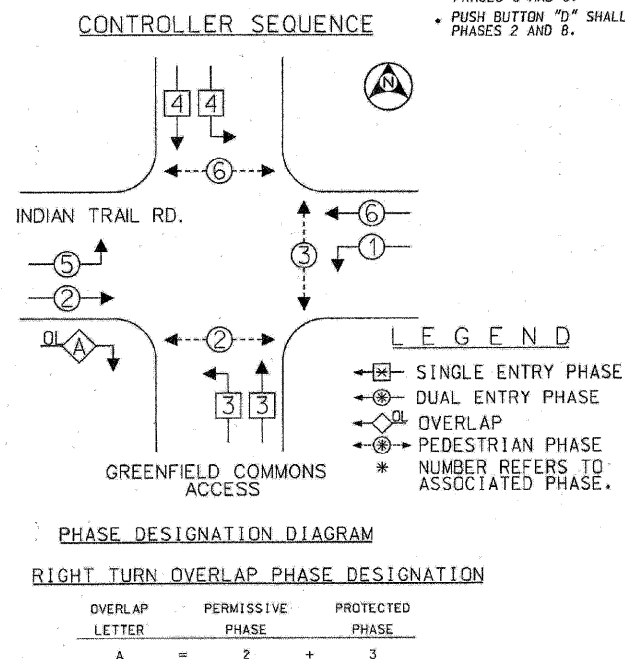
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	17
INT-6-C		ILLINOIS FED. AID PROJECT		



PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←→	↓	↑

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
INDIAN TRAIL RD. & GREENFIELD DR.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	19
INT-7-C				ILLINOIS FED. AID PROJECT



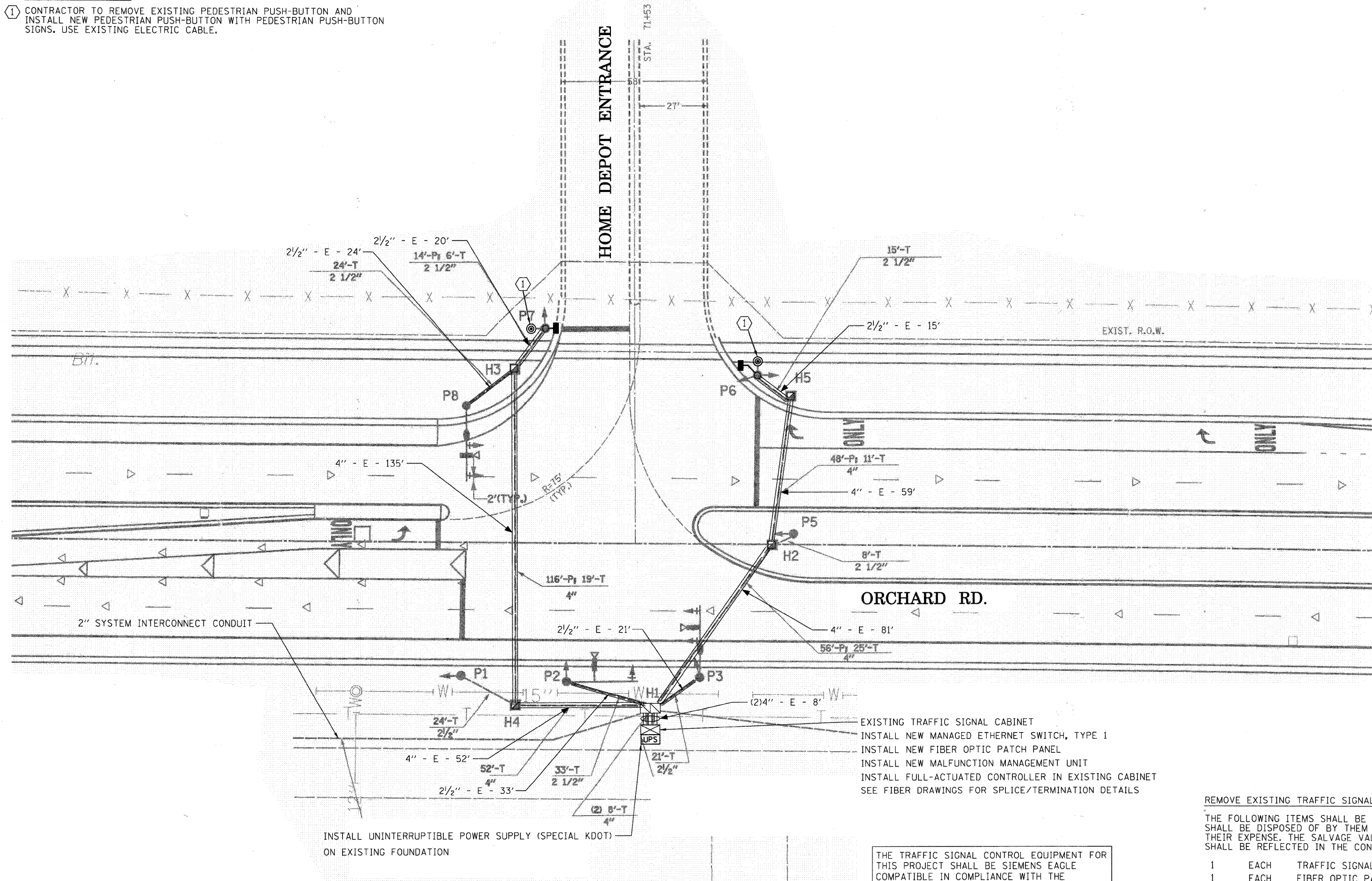
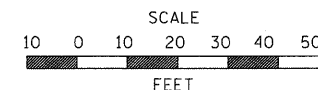
KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
PLOT SCALE = 1" = 20'	DRAWN - JM/SM	REVISED -
PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -
	DATE - 12-21-2010	REVISED -

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

CONSTRUCTION NOTES:

- 1 CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 20'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

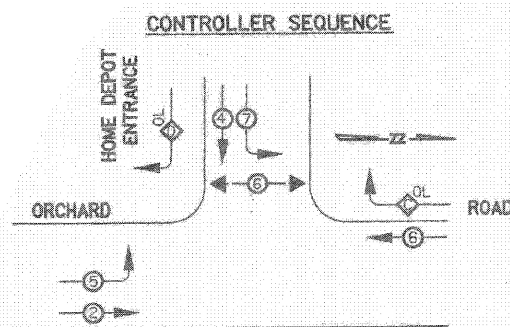
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & COMMERCIAL ENTRANCE (HOME DEPOT)

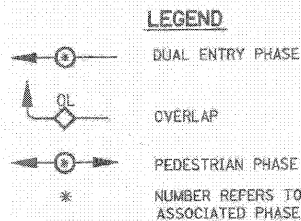
SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	20
CONTRACT NO. 63540				
ILLINOIS FED. AID PROJECT				

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	494
TERMINATE FIBER IN CABINET	EACH	8
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
SPLICE FIBER IN CABINET	EACH	4
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAJFUNCTION MANAGEMENT UNIT	EACH	1
VIDEO VEHICLE DETECTION IP INTERFACE PANEL UPGRADE	EACH	1

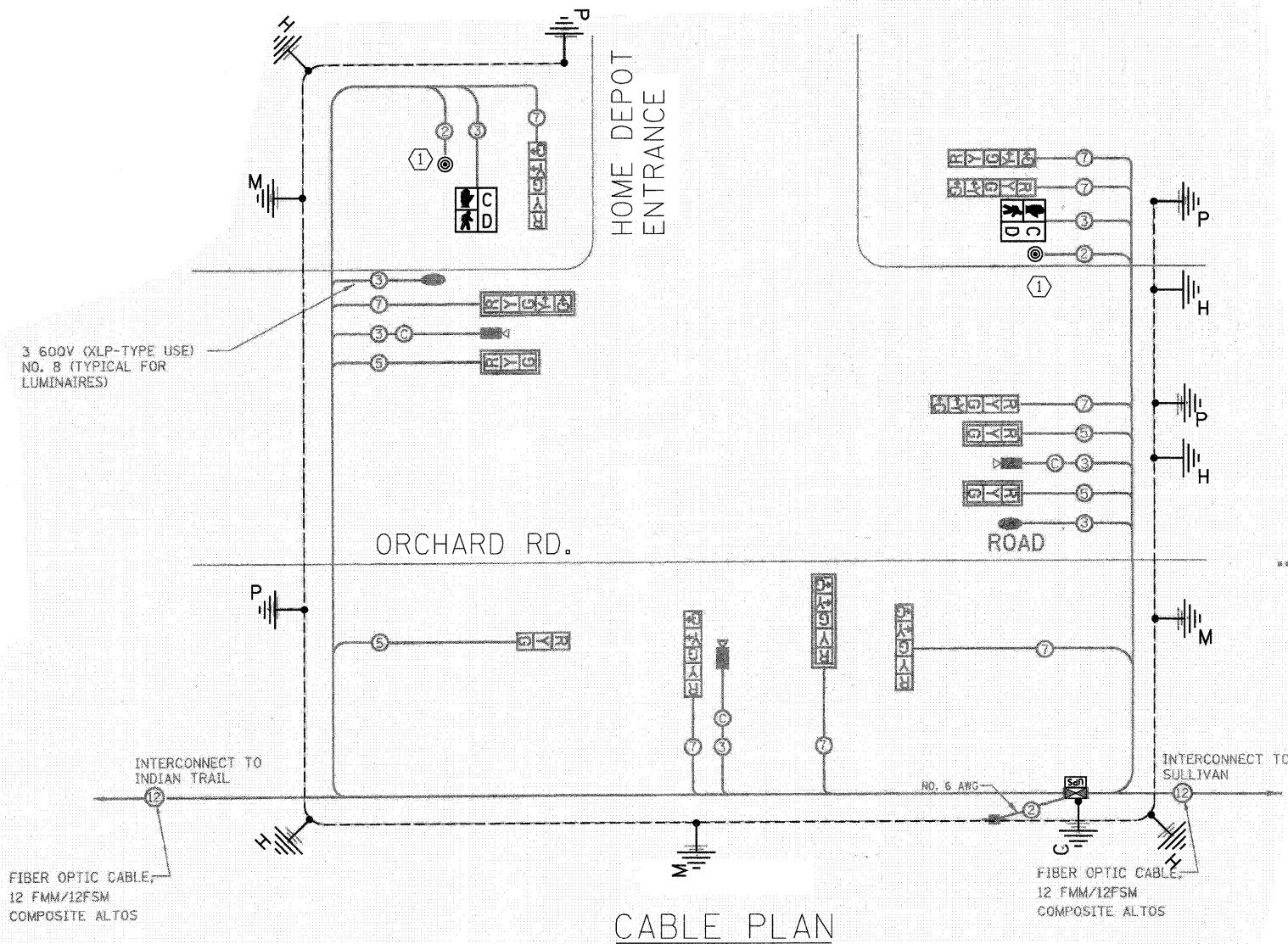


PHASE DESIGNATION DIAGRAM
DUAL ENTRY-ALL LEGS
PROTECTED/PERMITTED LEFT TURN PHASING
WITH RIGHT TURN OVERLAP



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE	DISPLAY
C	= 6	+ 7	= 6
D	= 4	+ 5	= 4



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

CONSTRUCTION NOTES:

1 CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
PLOT SCALE = 1" = 20'	DRAWN - JM/SM	REVISED -
PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -
	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

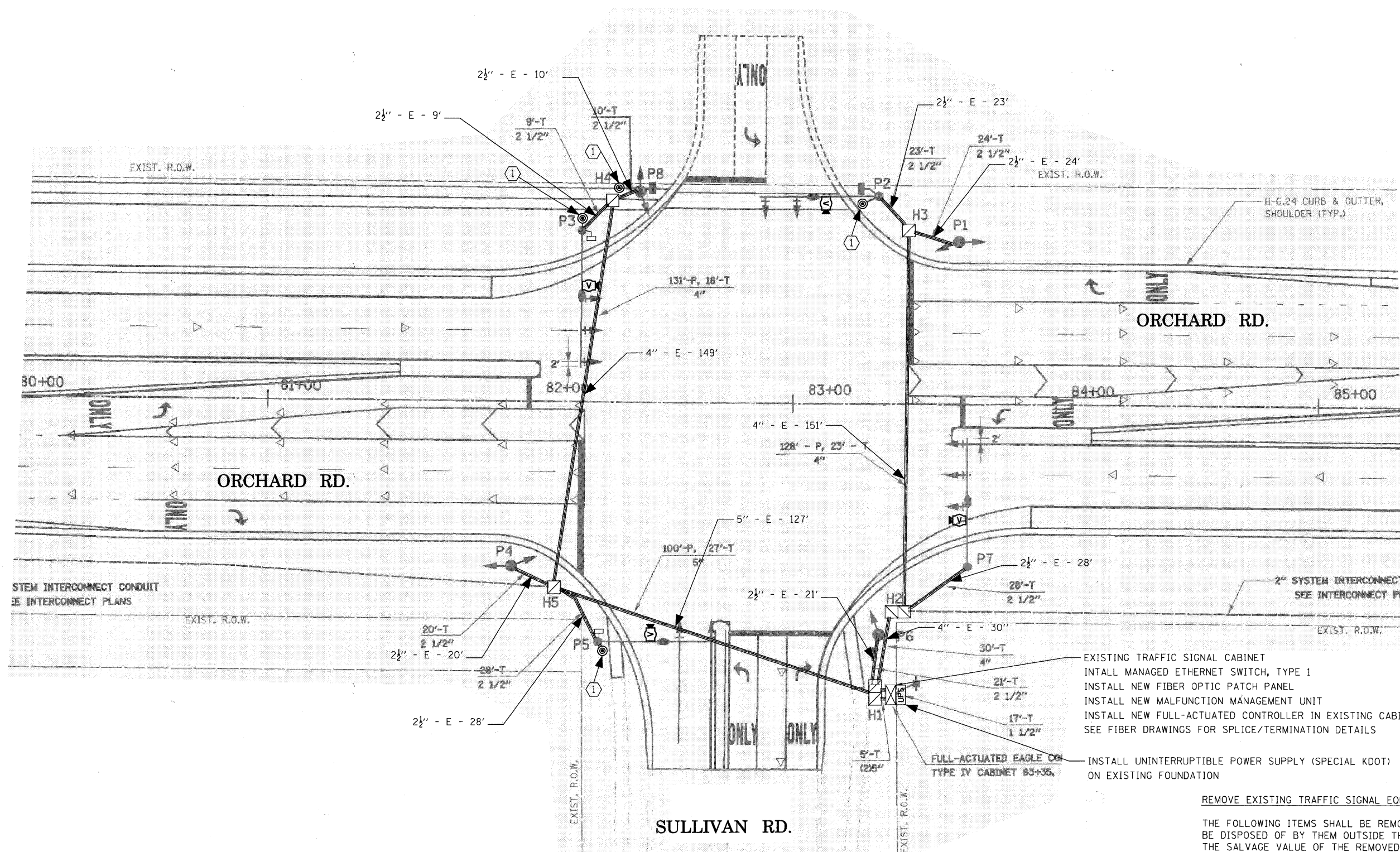
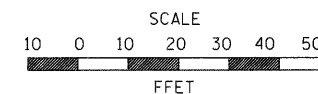
CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & COMMERCIAL ENTRANCE (HOME DEPOT)

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	21
CONTRACT NO. 63540				
INT-8-C ILLINOIS FED. AID PROJECT				

CONSTRUCTION NOTES:

- 1 CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.



EXISTING TRAFFIC SIGNAL CABINET
 INSTALL MANAGED ETHERNET SWITCH, TYPE 1
 INSTALL NEW FIBER OPTIC PATCH PANEL
 INSTALL NEW MALFUNCTION MANAGEMENT UNIT
 INSTALL NEW FULL-ACTUATED CONTROLLER IN EXISTING CABINET
 SEE FIBER DRAWINGS FOR SPLICE/TERMINATION DETAILS

FULL-ACTUATED EAGLE ON
 TYPE IV CABINET 83+35.5
 INSTALL UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)
 ON EXISTING FOUNDATION

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	TRAFFIC SIGNAL CONTROLLER
1	EACH	FIBER OPTIC PATCH PANEL (COMPLETE)
1	EACH	MALFUNCTION MANAGEMENT UNIT (COMPLETE)
1	EACH	VIDEO DETECTION SYSTEM
4	EACH	PEDESTRIAN PUSH-BUTTON

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
 ORCHARD RD. & SULLIVAN RD.

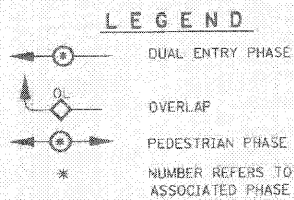
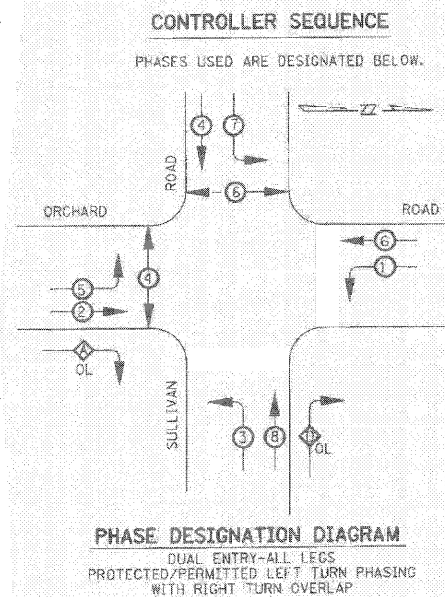
SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	22
CONTRACT NO. 63540				
ILLINOIS FED. AID PROJECT				

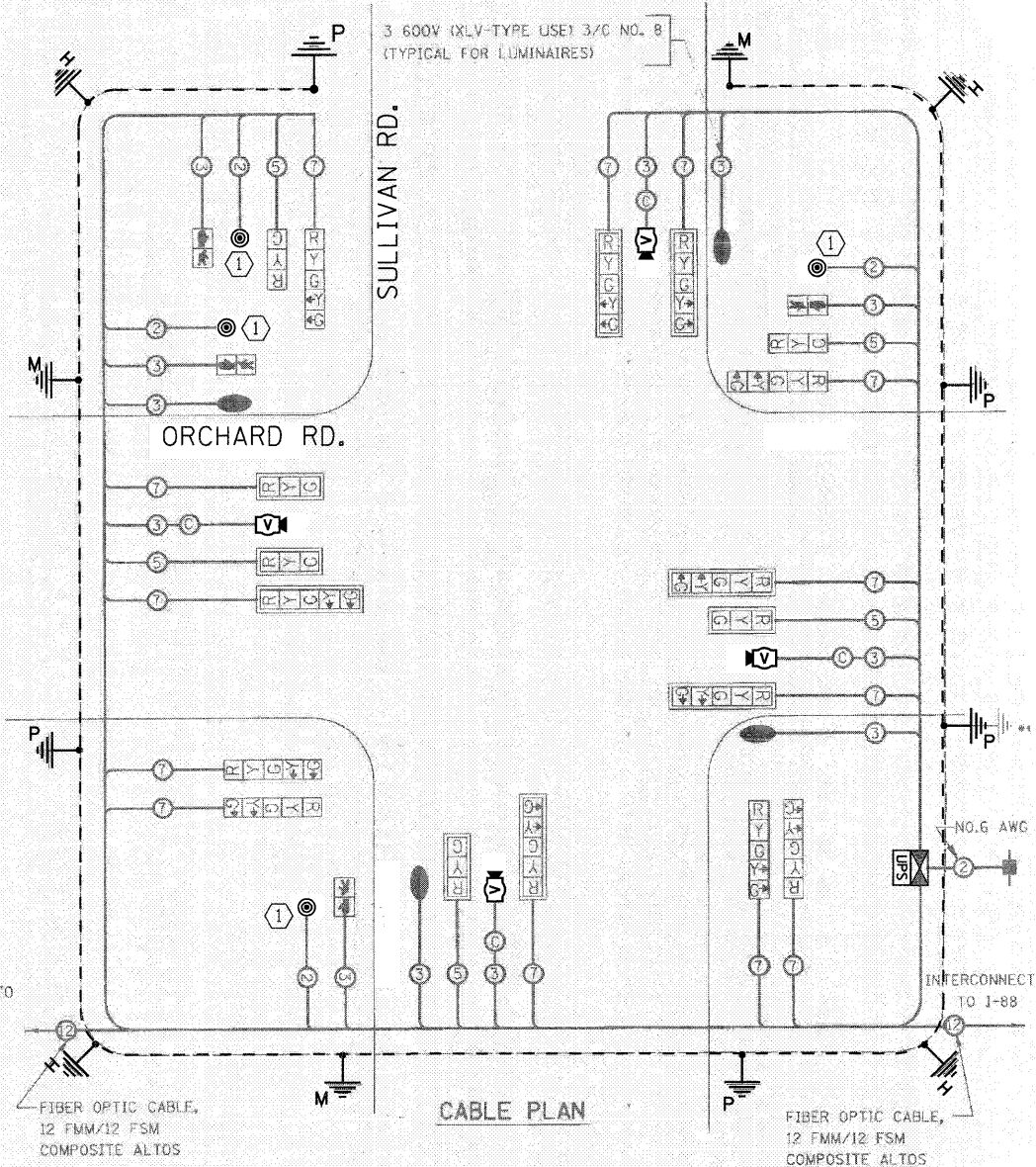
KANE COUNTY
 DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
PLOT SCALE = 1" = 20'	DRAWN - JM/SM	REVISED -
PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -
	DATE - 12-21-2010	REVISED -

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO VEHICLE DETECTION SYSTEM	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	636
TERMINATE FIBER IN CABINET	EACH	8
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KD0T)	EACH	1
SPLICE FIBER IN CABINET	EACH	4
VIDEO ENCODER	EACH	1
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAJFUNCTION MANAGEMENT UNIT	EACH	1
VIDEO VEHICLE DETECTION IP INTERFACE PANEL UPGRADE	EACH	1



INTERCONNECT TO INDIAN TRAIL



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

CONSTRUCTION NOTES:

- ① CONTRACTOR TO REMOVE EXISTING PEDESTRIAN PUSH-BUTTON AND INSTALL NEW PEDESTRIAN PUSH-BUTTON WITH PEDESTRIAN PUSH-BUTTON SIGNS. USE EXISTING ELECTRIC CABLE.



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
PLOT SCALE = 1" = 20'	DRAWN - JM/SM	REVISED -
PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -
	DATE - 12-21-2010	REVISED -

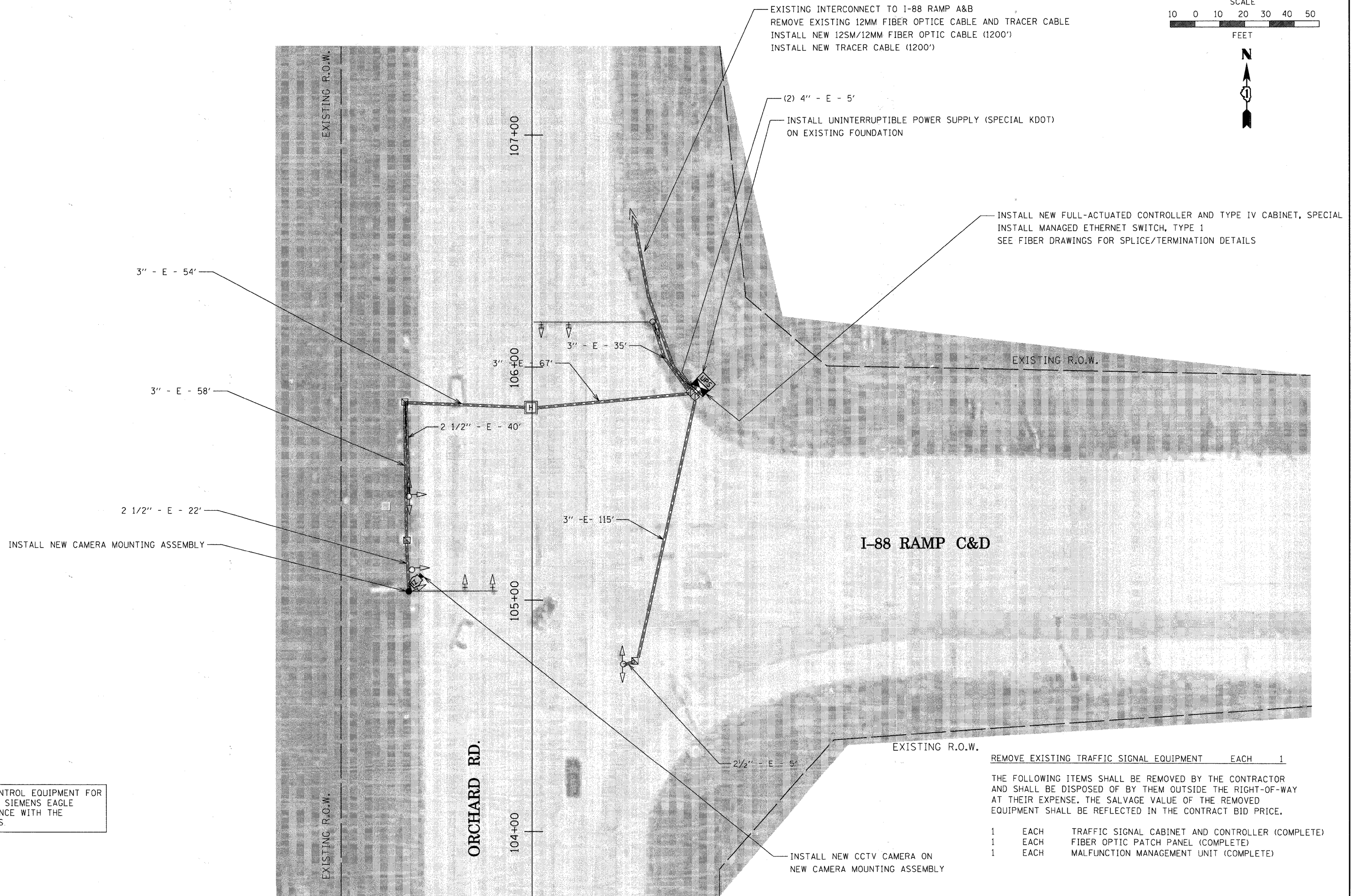
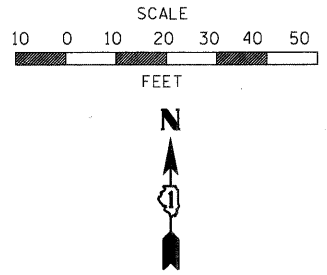
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & SULLIVAN RD.

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	23
INT-9-C				ILLINOIS FED. AID PROJECT

CONTRACT NO. 63540



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR
THIS PROJECT SHALL BE SIEMENS EAGLE
COMPATIBLE IN COMPLIANCE WITH THE
COUNTY'S EXISTING ATMS.



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
DRAWN - JM/SM	CHECKED - DG	REVISED -
PLOT SCALE = 1" = 20'	DATE - 12-21-2010	REVISED -
PLOT DATE = 12-21-2010		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

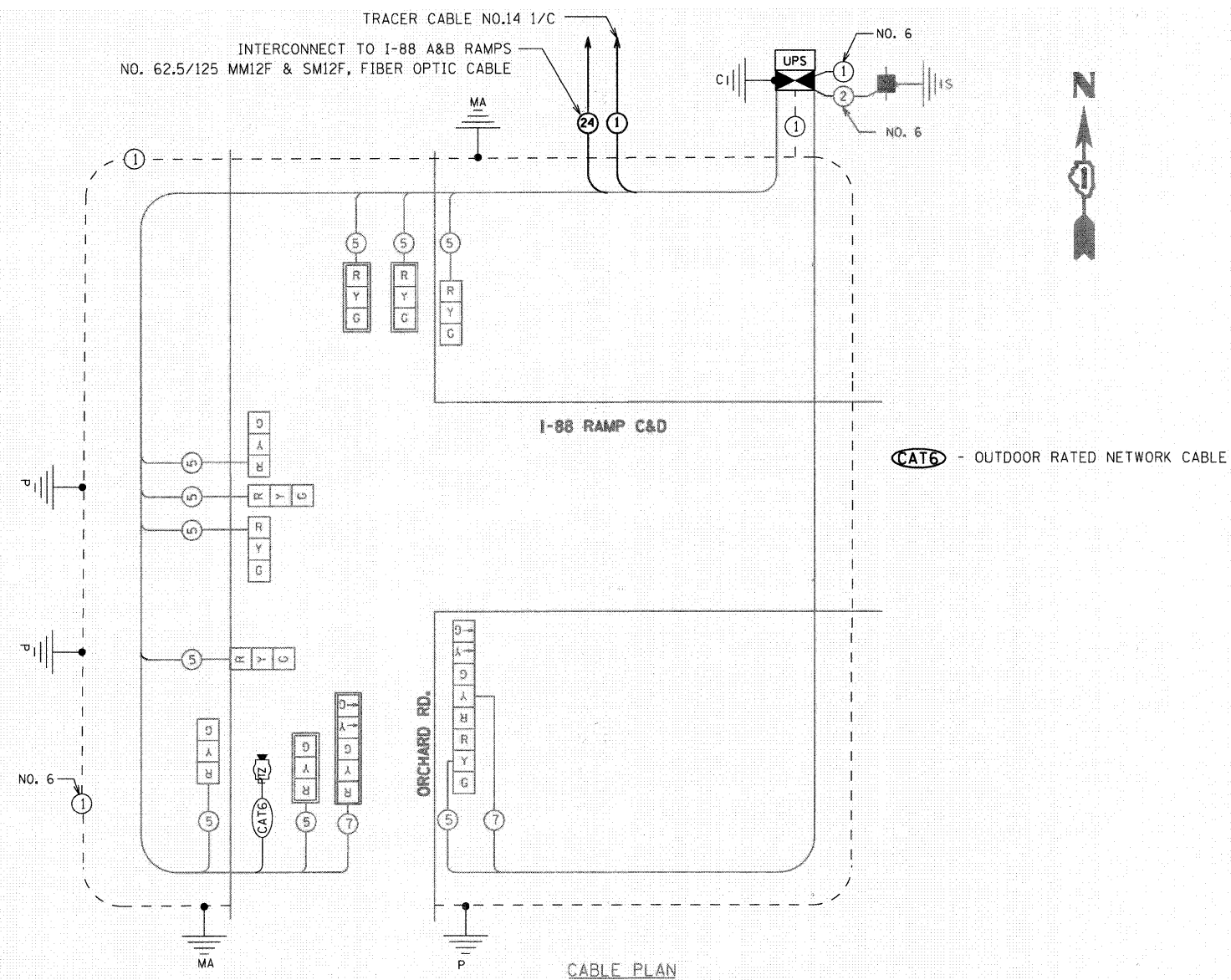
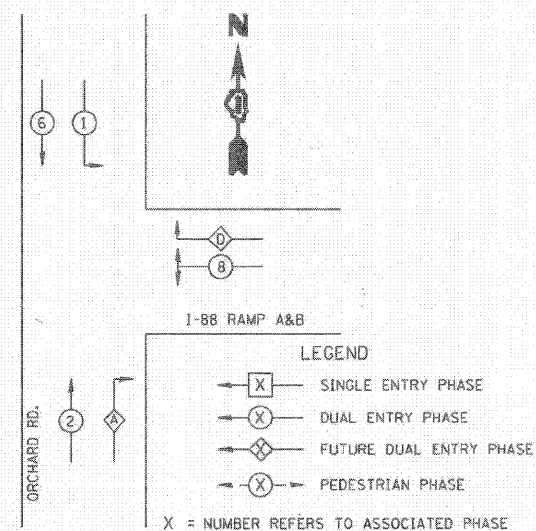
TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & I-88 (EB EXIT/ENTRANCE RAMP)

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

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	24
CONTRACT NO. 63540				
INT-10 ILLINOIS FED. AID PROJECT				

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1200
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1200
CAMERA MOUNTING ASSEMBLY	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1200
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	366
TERMINATE FIBER IN CABINET	EACH	8
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
SPLICE FIBER IN CABINET	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	294
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1

CONTROLLER SEQUENCE



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS



KANE COUNTY

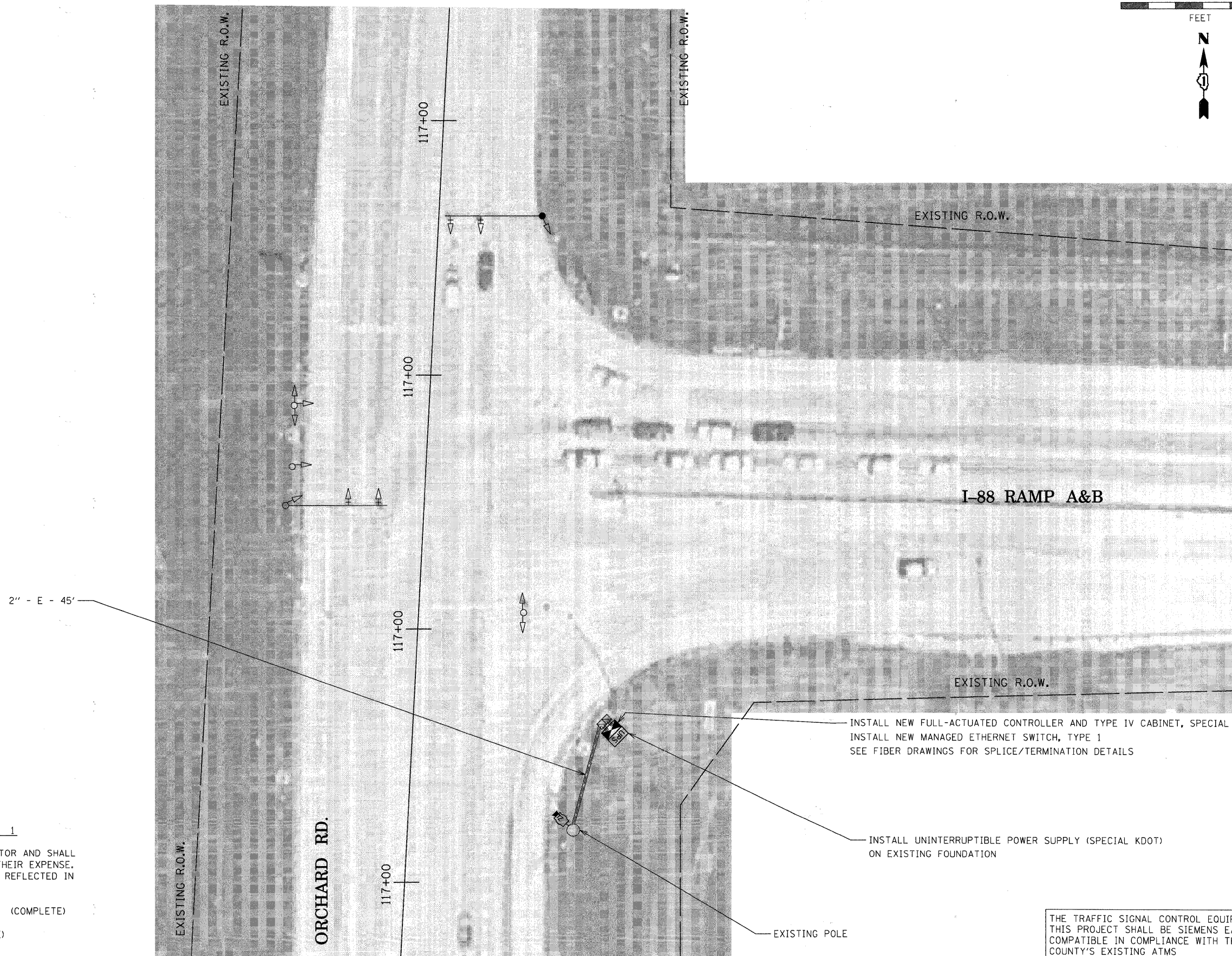
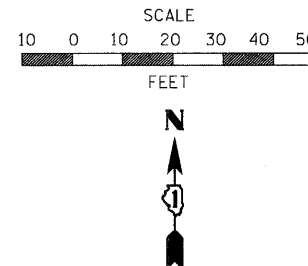
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	DRAWN - JM/SM
PLOT SCALE = 1" = 20'	CHECKED - DG
PLOT DATE = 12-21-2010	DATE - 12-21-2010

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & I-88 (EB EXIT/ENTRANCE RAMP)**

SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	25
		CONTRACT NO. 63540		
INT-10-C		ILL. INOIS FED. AID PROJECT		



REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH TRAFFIC SIGNAL CABINET AND CONTROLLER (COMPLETE)
- 1 EACH FIBER OPTIC PATCH PANEL (COMPLETE)
- 1 EACH MALFUNCTION MANAGEMENT UNIT (COMPLETE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 20'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

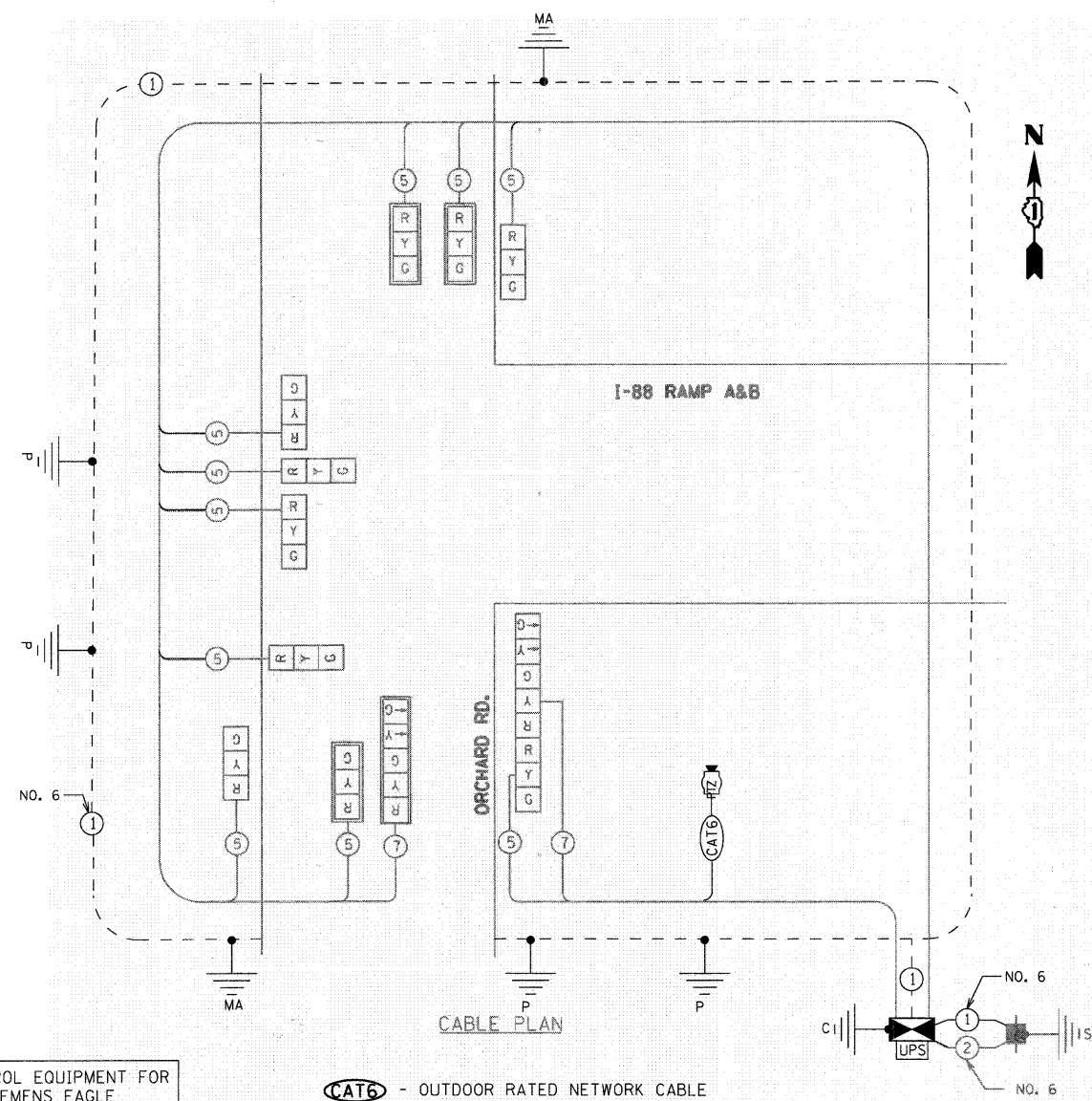
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & I-88 (WB EXIT/ENTRANCE RAMP)

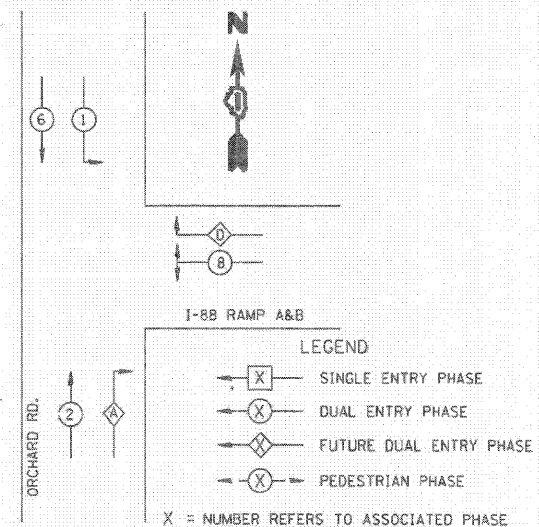
SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	26
INT-11 ILLINOIS FED. AID PROJECT				

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CLOSED CIRCUIT TELEVISION DOME CAMERA	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	585
TERMINATE FIBER IN CABINET	EACH	8
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
SPLICE FIBER IN CABINET	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	128
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1



CONTROLLER SEQUENCE

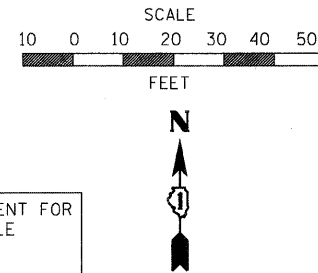


STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM ORCHARD RD. & I-88 (WB EXIT/ENTRANCE RAMP)

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	27
INT-11-C				ILLINOIS FED. AID PROJECT

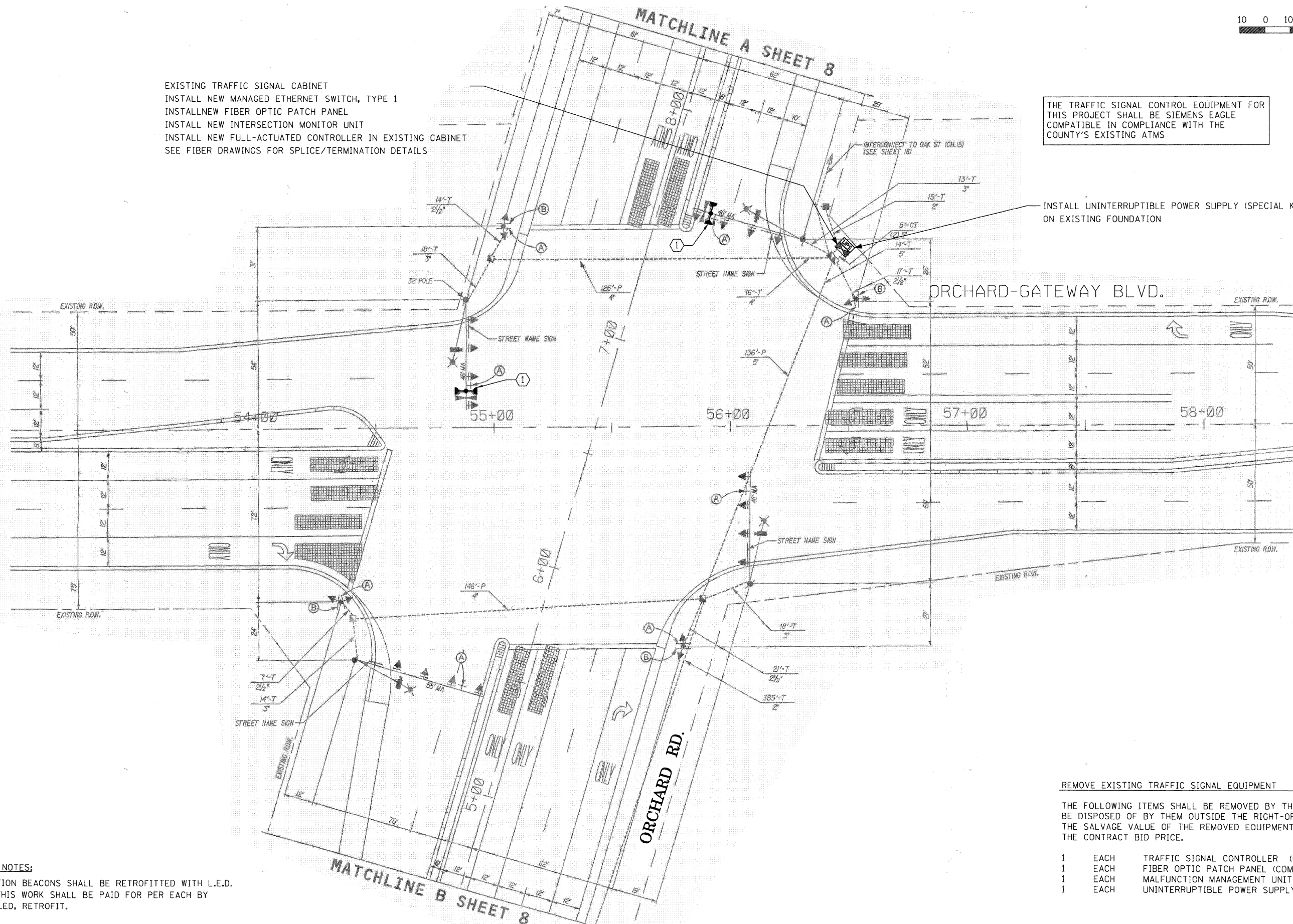
USER NAME = JM	DESIGNED - DG	REVISED -
PLOT SCALE = 1" = 20'	DRAWN - JM/SM	REVISED -
PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -
	DATE - 12-21-2010	REVISED -



EXISTING TRAFFIC SIGNAL CABINET
INSTALL NEW MANAGED ETHERNET SWITCH, TYPE 1
INSTALL NEW FIBER OPTIC PATCH PANEL
INSTALL NEW INTERSECTION MONITOR UNIT
INSTALL NEW FULL-ACTUATED CONTROLLER IN EXISTING CABINET
SEE FIBER DRAWINGS FOR SPLICE/TERMINATION DETAILS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

INSTALL UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT) ON EXISTING FOUNDATION



CONSTRUCTION NOTES:

- 1 ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- | | | |
|---|------|---|
| 1 | EACH | TRAFFIC SIGNAL CONTROLLER (COMPLETE) |
| 1 | EACH | FIBER OPTIC PATCH PANEL (COMPLETE) |
| 1 | EACH | MAJFUNCTION MANAGEMENT UNIT (COMPLETE) |
| 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY (COMPLETE) |



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
PLOT SCALE = 1" = 20'	DRAWN - JM/SM	REVISED -
PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -
	DATE - 12-21-2010	REVISED -

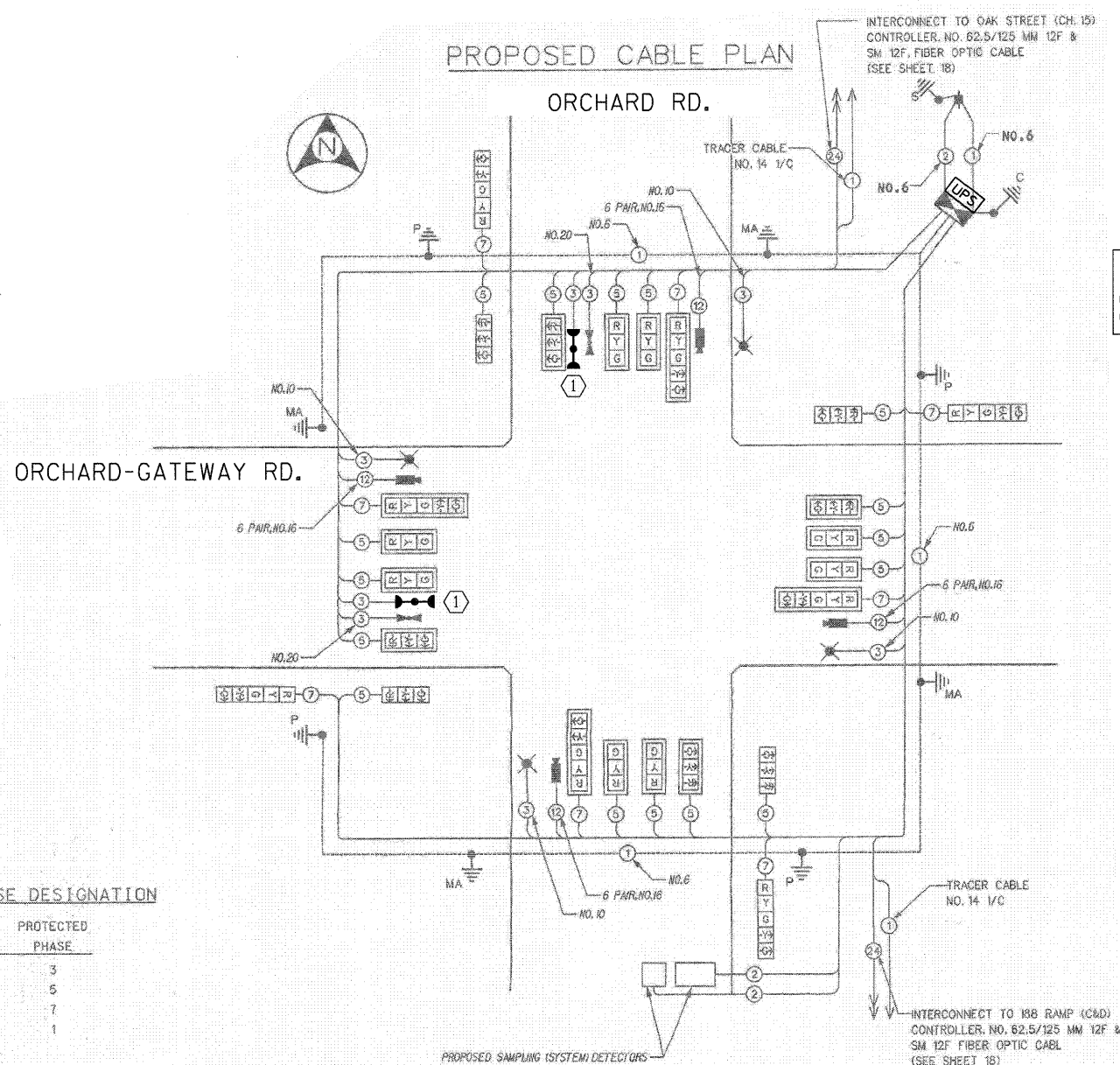
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & ORCHARD GATEWAY

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

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	28
CONTRACT NO. 63540				
INT-12 ILLINOIS FED. AID PROJECT				

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, RETROFIT	EACH	2
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	16
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
QUAD ENCODER	EACH	1
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAJFUNCTION MANAGEMENT UNIT	EACH	1



CONSTRUCTION NOTES:

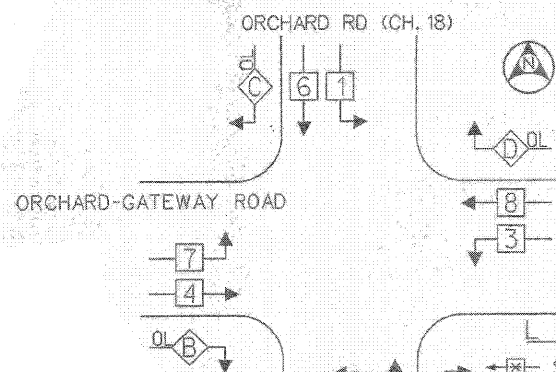
① ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	2	3
B	4	5
C	6	7
D	8	1

PROPOSED CONTROLLER SEQUENCE

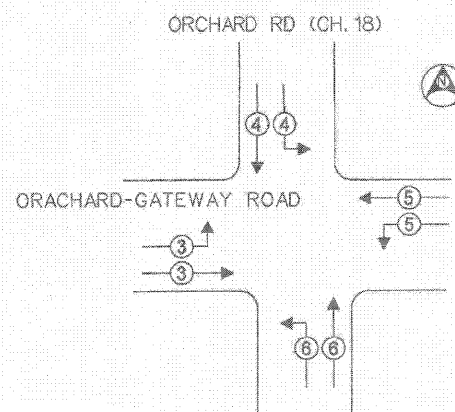


LEGEND

- SINGLE ENTRY PHASE
- ⊕ DUAL ENTRY PHASE
- ⊖ OVERLAP
- ⊙ PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE.

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↓	←	↑

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & ORCHARD GATEWAY

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	29
CONTRACT NO. 63540				
ILLINOIS FED. AID PROJECT				



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 20'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -



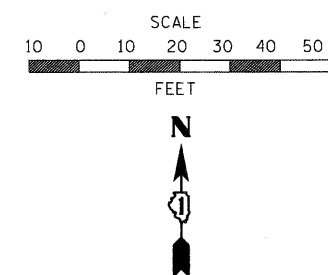
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: 1" = 20'	SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	30
		CONTRACT NO. 63540		
INT-13		ILLINOIS FED. AID PROJECT		

1	EACH	TRAFFIC SIGNAL CONTROLLER
1	EACH	MALFUNCTION MANAGEMENT UNIT (COMPLETE)
1	EACH	FIBER OPTIC PATCH PANEL (COMPLETE)
1	EACH	UNINTERRUPTIBLE POWER SUPPLY (COMPLETE)

① ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR
THIS PROJECT SHALL BE SIEMENS EAGLE
COMPATIBLE IN COMPLIANCE WITH THE
COUNTY'S EXISTING ATMS

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	TRAFFIC SIGNAL CONTROLLER (COMPLETE)
1	EACH	FIBER OPTIC PATCH PANEL (COMPLETE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**TRAFFIC SIGNAL MODERNIZATION PLAN
OAK ST. & HANSEN BLVD.**

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	32
		CONTRACT NO. 63540		
INT-14		ILLINOIS FED. AID PROJECT		

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1

CABLE PLAN LEGEND

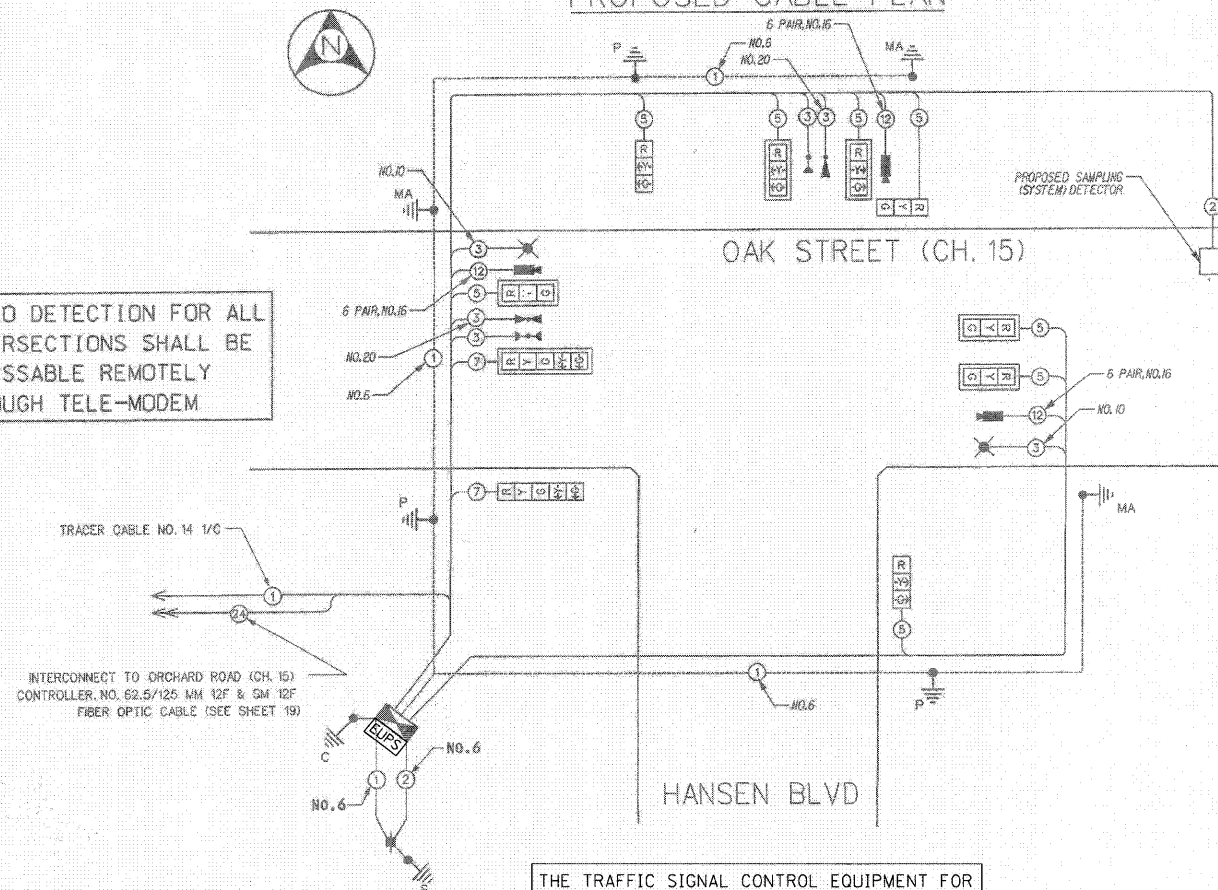
EXISTING	PROPOSED	DESCRIPTION
1	2	8" (200mm) TRAFFIC SIGNAL SECTION
3	4	12" (300mm) TRAFFIC SIGNAL SECTION
5	6	12" (300mm) PEDESTRIAN SIGNAL SECTION
7	8	12" (300mm) PEDESTRIAN SIGNAL SECTION
9	10	CONTROLLER CABINET
11	12	SERVICE INSTALLATION
13	14	TELEPHONE CONNECTION
15	16	MAGNETIC DETECTOR
17	18	EMERGENCY VEHICLE LIGHT DETECTOR
19	20	CONFIRMATION BEACON
21	22	PUSHBUTTON DETECTOR
23	24	VEHICLE DETECTOR, INDUCTION LOOP
25	26	VEHICLE DETECTOR, INDUCTION LOOP
27	28	VEHICLE DETECTOR, INDUCTION LOOP
29	30	VEHICLE DETECTOR, INDUCTION LOOP
31	32	VEHICLE DETECTOR, INDUCTION LOOP
33	34	VEHICLE DETECTOR, INDUCTION LOOP
35	36	VEHICLE DETECTOR, INDUCTION LOOP
37	38	VEHICLE DETECTOR, INDUCTION LOOP
39	40	VEHICLE DETECTOR, INDUCTION LOOP
41	42	VEHICLE DETECTOR, INDUCTION LOOP
43	44	VEHICLE DETECTOR, INDUCTION LOOP
45	46	VEHICLE DETECTOR, INDUCTION LOOP
47	48	VEHICLE DETECTOR, INDUCTION LOOP
49	50	VEHICLE DETECTOR, INDUCTION LOOP
51	52	VEHICLE DETECTOR, INDUCTION LOOP
53	54	VEHICLE DETECTOR, INDUCTION LOOP
55	56	VEHICLE DETECTOR, INDUCTION LOOP
57	58	VEHICLE DETECTOR, INDUCTION LOOP
59	60	VEHICLE DETECTOR, INDUCTION LOOP
61	62	VEHICLE DETECTOR, INDUCTION LOOP
63	64	VEHICLE DETECTOR, INDUCTION LOOP
65	66	VEHICLE DETECTOR, INDUCTION LOOP
67	68	VEHICLE DETECTOR, INDUCTION LOOP
69	70	VEHICLE DETECTOR, INDUCTION LOOP
71	72	VEHICLE DETECTOR, INDUCTION LOOP
73	74	VEHICLE DETECTOR, INDUCTION LOOP
75	76	VEHICLE DETECTOR, INDUCTION LOOP
77	78	VEHICLE DETECTOR, INDUCTION LOOP
79	80	VEHICLE DETECTOR, INDUCTION LOOP
81	82	VEHICLE DETECTOR, INDUCTION LOOP
83	84	VEHICLE DETECTOR, INDUCTION LOOP
85	86	VEHICLE DETECTOR, INDUCTION LOOP
87	88	VEHICLE DETECTOR, INDUCTION LOOP
89	90	VEHICLE DETECTOR, INDUCTION LOOP
91	92	VEHICLE DETECTOR, INDUCTION LOOP
93	94	VEHICLE DETECTOR, INDUCTION LOOP
95	96	VEHICLE DETECTOR, INDUCTION LOOP
97	98	VEHICLE DETECTOR, INDUCTION LOOP
99	100	VEHICLE DETECTOR, INDUCTION LOOP

NOTE: ALL NEW GROUND RODS SHALL BE 3/4" X 10'-0" LONG COPPER CLAD. THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION.

ALL INDICATIONS SHALL BE LED

VIDEO DETECTION FOR ALL INTERSECTIONS SHALL BE ACCESSABLE REMOTELY THROUGH TELE-MODEM

PROPOSED CABLE PLAN



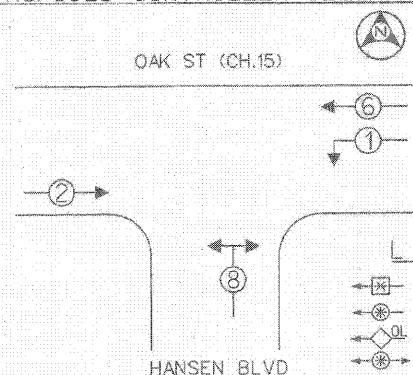
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS EAGLE COMPATIBLE IN COMPLIANCE WITH THE COUNTY'S EXISTING ATMS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE LIGHT DETECTORS AND LIGHT DETECTOR AMPLIFIER FOR THIS PROJECT SHALL BE "TOMAR OR OPTICOM" TO MEET LOCAL FIRE DEPARTMENT REQUIREMENTS.

FOR INFORMATION ONLY

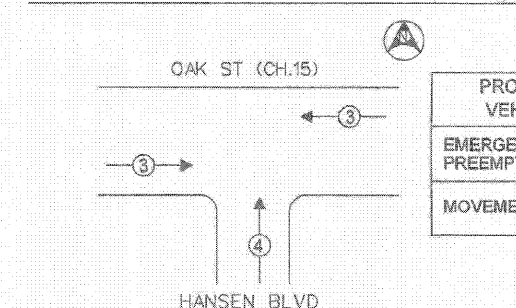
PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND
1 SINGLE ENTRY PHASE
2 DUAL ENTRY PHASE
3 OVERLAP
4 PEDESTRIAN PHASE
5 NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3 4
MOVEMENT	← →

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED % OPERATIONS	
SIGNAL (RED)	10	135	17	0.50
(YELLOW)	10	135	25	0.25
(GREEN)	10	135	15	0.25
ARROW	4	135	12	0.10
PED. SIGNAL	90	25	1.00	1.00
CONTROLLER	1	100	100	1.00
ILLUM. SIGN	84			0.05
FLASHER				0.50
ENERGY COSTS TO:				TOTAL = 289.8
VILLAGE OF NORTH AURORA				
NORTH AURORA ILLINOIS 601				
ENERGY SUPPLY - CONTACT:				
PHONE:				
COMPANY:				

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH, AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAYS SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOVED LAWNS SHALL BE REPLACED WITH AN APPROVED SOG, AND ALL DAMAGE TO UNMOVED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.1)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2 =
E - N ARM POLE		SIGNAL POST	2 (1.0)	(6.1±L-1.0)±	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

METRO TRANSPORTATION GROUP, INC.
TRAFFIC ENGINEERING, TRANSPORTATION PLANNING
AND SIGNAL SYSTEMS/DESIGN
3100 W. HIGGINS ROAD, HOFFMAN ESTATES, IL 60195 PH# 630 213-1000

REVISIONS	
NO.	DATE
1	1-17-06
2	3-8-06
3	06-15-06
	DESCRIPTION
	STREET LIGHTING/SERVICE MODIFICATIONS
	KDOT COMMENTS
	KDOT COMMENTS

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
OAK STREET (CH. 15) @ HANSEN BLVD
NORTH AURORA, ILLINOIS

FILE NAME:	15_cp.dgn	SHEET NO.:	15
DATE:	JULY 14, 2005		
PROJECT NO.:	H0408-15		



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED = DG	REVISED =
PLOT SCALE = 1" = 20'	DRAWN = JM/SM	REVISED =
PLOT DATE = 12-21-2010	CHECKED = DG	REVISED =
	DATE = 12-21-2010	REVISED =

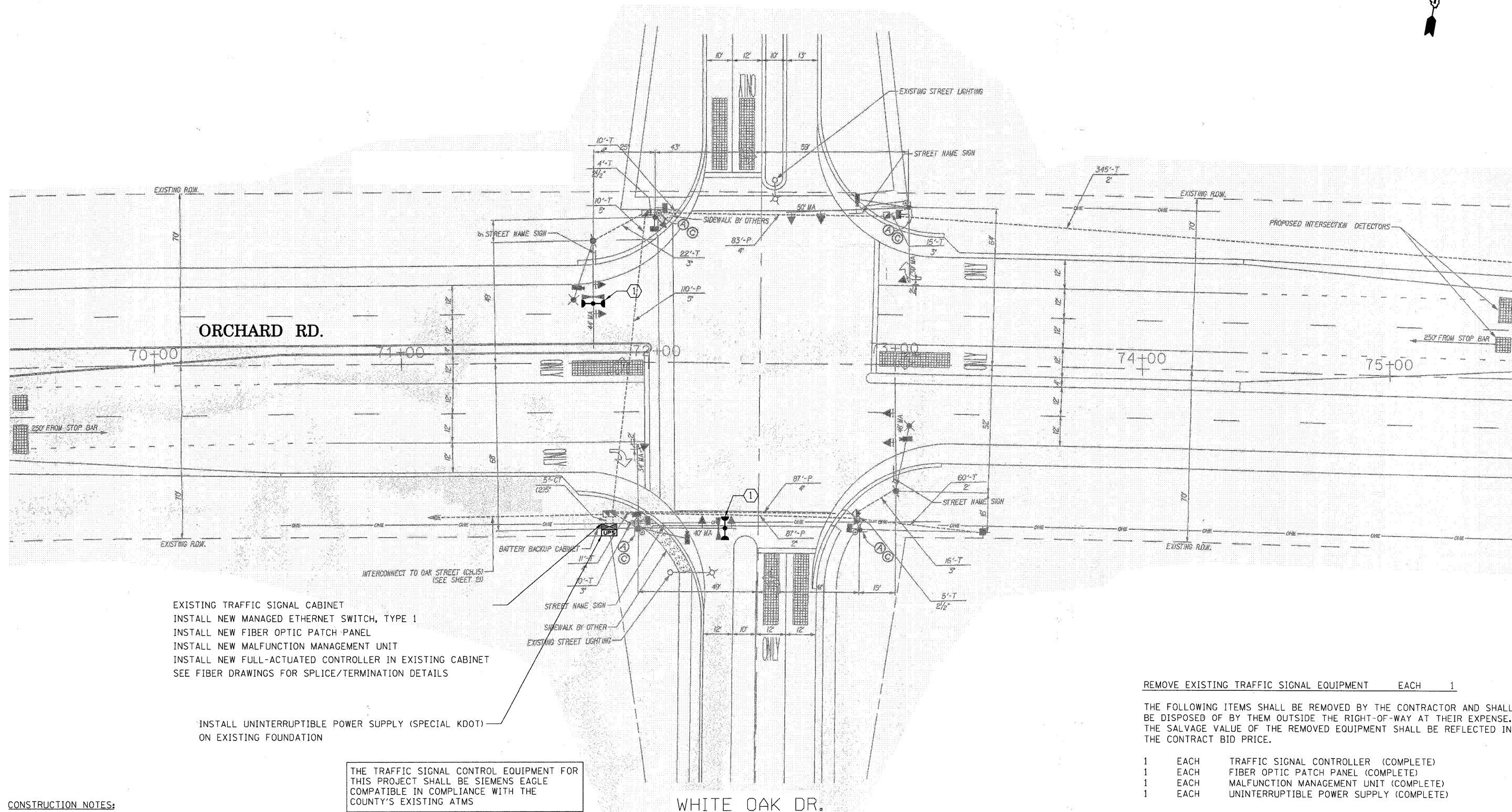
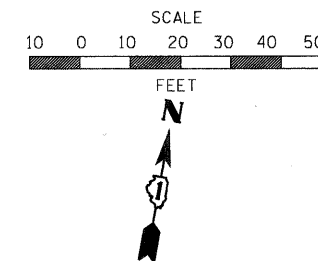
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
OAK ST. & HANSEN BLVD.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	33
CONTRACT NO. 63540				

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

INT-14-C ILLINOIS FED. AID PROJECT



CONSTRUCTION NOTES:

- 1 ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D.
INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY
SIGNAL HEAD, LED, RETROFIT.



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 20'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

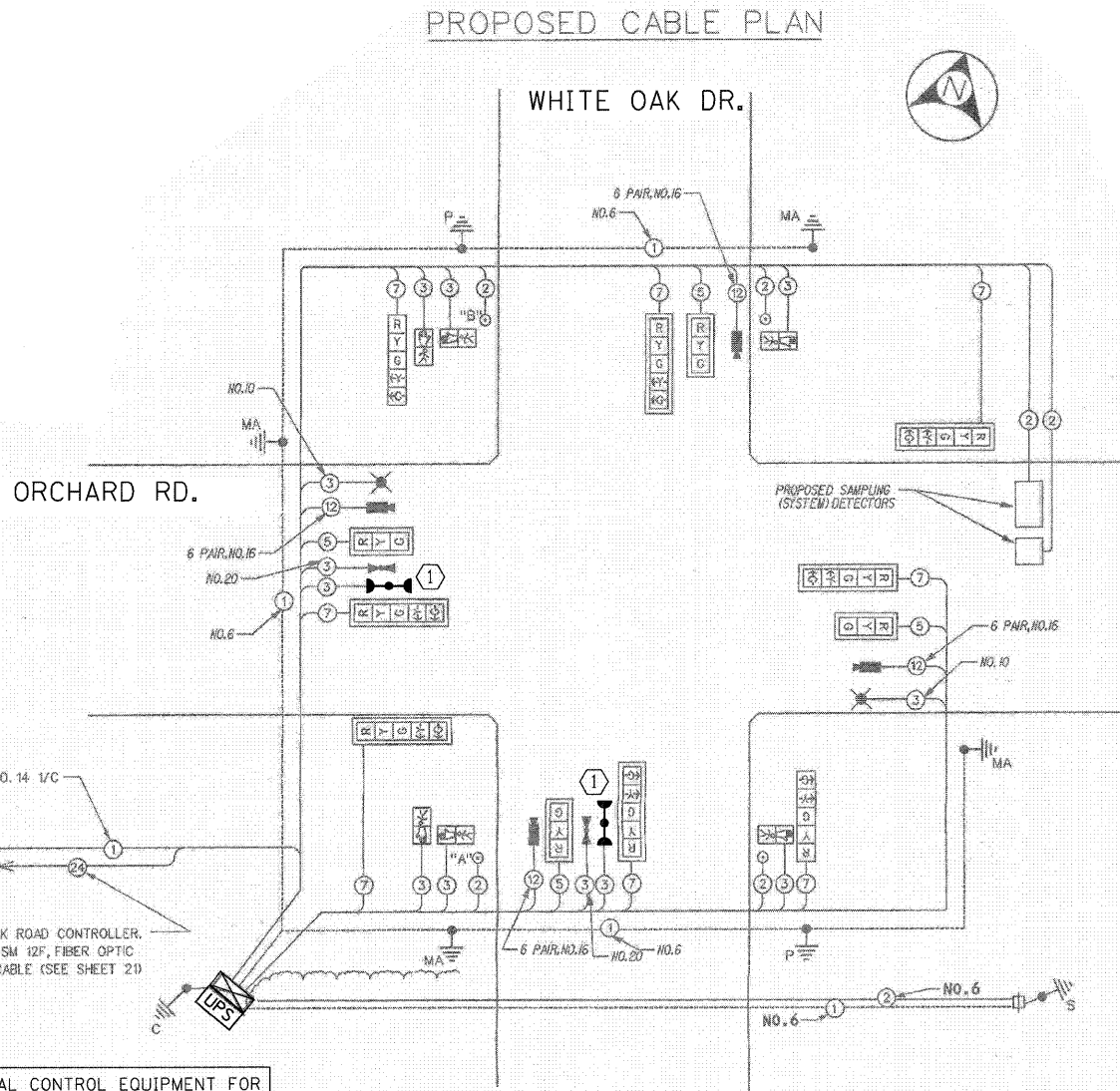
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & WHITE OAK DR.

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

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	34
CONTRACT NO. 63540				
INT-15 ILLINOIS FED. AID PROJECT				

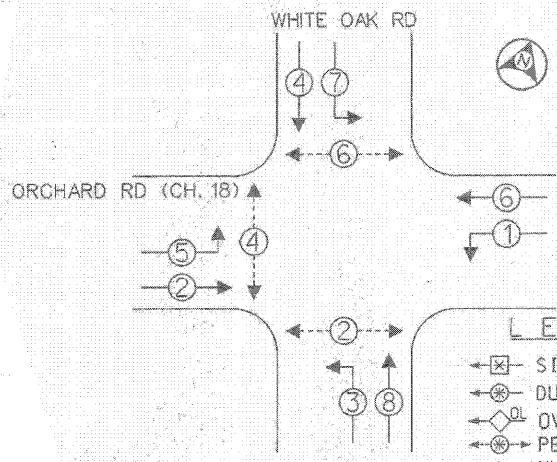
PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, RETROFIT	EACH	2
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	EACH	1
SPLICE FIBER IN CABINET	EACH	4
QUAD ENCODER	EACH	1
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MAINTENANCE MANAGEMENT UNIT	EACH	1



CONSTRUCTION NOTES:

① ALL CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE PAID FOR PER EACH BY SIGNAL HEAD, LED, RETROFIT.

CONTROLLER SEQUENCE

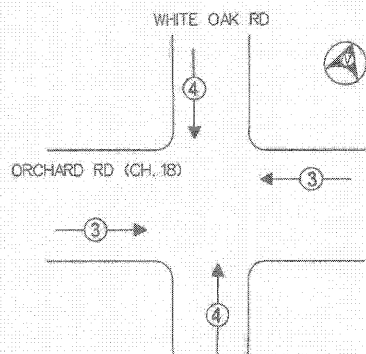


LEGEND

- ☒ SINGLE ENTRY PHASE
- ☉ DUAL ENTRY PHASE
- ◊ OVERLAP
- ⊕ PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE.

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↑

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & WHITE OAK DR.

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	35
INT-15-C				ILLINOIS FED. AID PROJECT



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 20'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

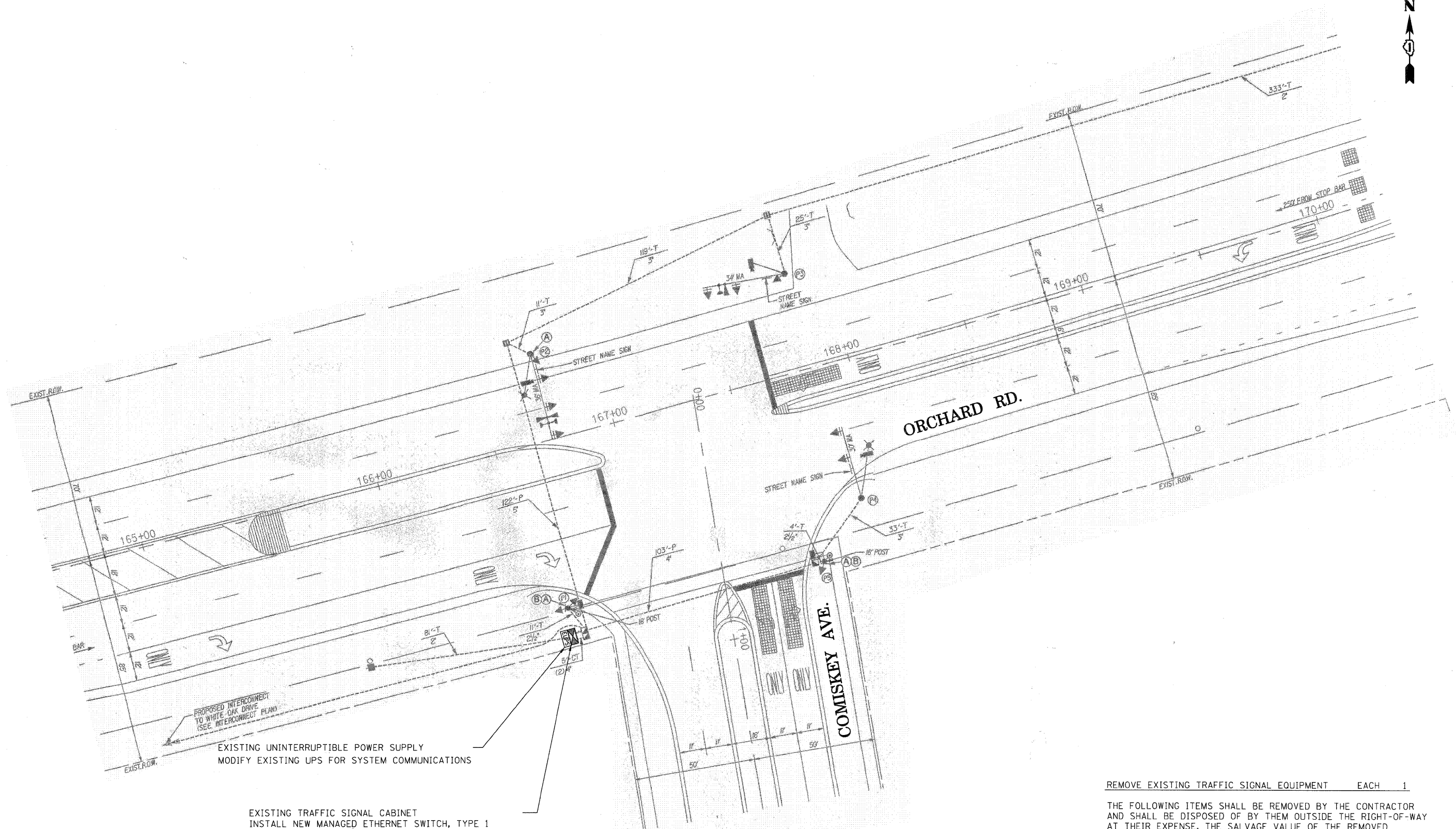


**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	36
		CONTRACT NO. 63540		
INT-16		ILLINOIS FED. AID PROJECT		

1	EACH	FIBER OPTIC PATCH PANEL (COMPLETE)
1	EACH	MAJORITY MANAGEMENT UNIT (COMPLETE)

EXISTING TRAFFIC SIGNAL CABINET
INSTALL NEW MANAGED ETHERNET SWITCH, TYPE 1
INSTALL NEW FIBER OPTIC PATCH PANEL
INSTALL NEW MALFUNCTION MANAGEMENT UNIT
SEE FIBER DRAWINGS FOR SPLICE/TERMINATION DETAILS



PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	4
QUAD ENCODER	EACH	1
MANAGED ETHERNET SWITCH, TYPE 1	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1
MODIFY EXISTING UPS FOR SYSTEM COMMUNICATIONS	EACH	1

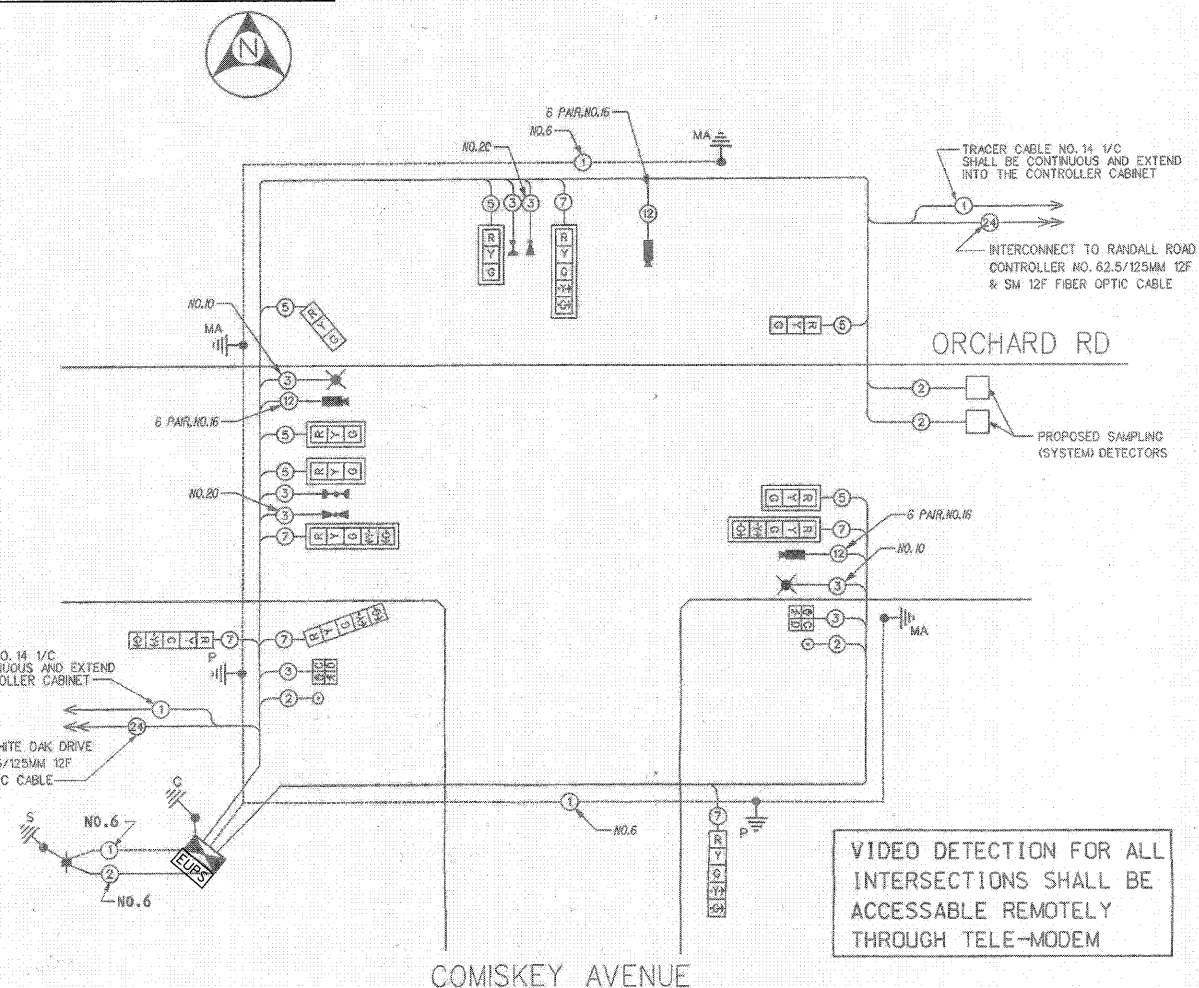
CABLE PLAN LEGEND

- 8" (200mm) TRAFFIC SIGNAL SECTION
- 12" (300mm) TRAFFIC SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMERS
- CONTROLLER CABINET
- SERVICE INSTALLATION
- TELEPHONE CONNECTION
- MAGNETIC DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PUSHBUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- DEMOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
- SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD
- RAILROAD CONTROL CABINET
- ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
- ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
- GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H) OR CONTROLLER (C)
- GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
- GROUND ROD AT ELECTRIC SERVICE INSTALLATION
- GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)
- NO. 62.5/125 MM 12F & SM 12F, FIBER OPTIC CABLE
- NO. 8281 COAXIAL CABLE
- VIDEO DETECTION CAMERA
- DOME P.Z.T. CAMERA
- LUMINAIRE, SODIUM VAPOR, HORIZ. MOUNT PHOTO CELL CONT., 310 W, 120 V BALLAST

NOTE: ALL NEW GROUND RODS SHALL BE 3/4" X 18"-24" LONG COPPER CLAD. THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION.

FOR INFORMATION ONLY

PROPOSED CABLE PLAN



THE LIGHT DETECTORS AND LIGHT DETECTOR AMPLIFIER FOR THIS PROJECT SHALL BE "TOMAR OR OPTICOM" TO MEET LOCAL FIRE DEPARTMENT REQUIREMENTS.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RIGHT TURN OVERLAP PHASE DESIGNATION

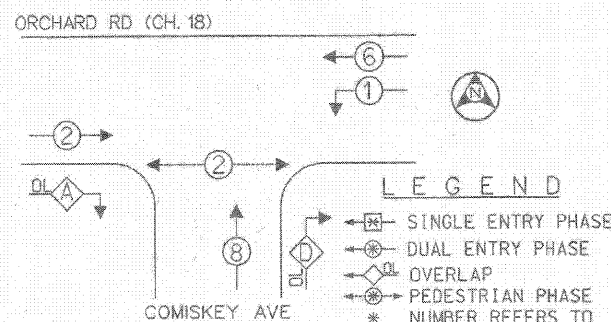
OVERLAP LETTER	PROTECTED PHASE
A	5
D	1

ALL INDICATIONS SHALL BE LED

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH, AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOG, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.1)
B - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' ± L-2 = (6.1 ± L-1.0) =
C - M ARM POLE	2 (0.6)	SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.3)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.3)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.3)	POST MOUNTED	6 (1.8)

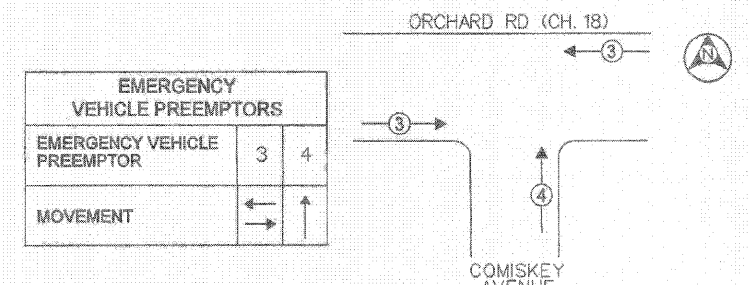
PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE.

EMERGENCY VEHICLE PREEMPTION SEQUENCE



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED % OPERATIONS		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	386.4

VILLAGE OF NORTH AURORA
25 EAST STATE ST
NORTH AURORA, ILLINOIS 60133
(630) 897-8228
ENERGY SUPPLY - CONTACT: KATHY OLEVA
PHONE: (847) 608-2338
COMPANY: COMED

METRO TRANSPORTATION GROUP, INC.
TRAFFIC ENGINEERING, TRANSPORTATION PLANNING
AND SIGNAL SYSTEMS/DESIGN
3100 W. HIGGINS ROAD, HOFFMAN ESTATES, IL 60195 PH# 630 213-1000

REVISIONS	
NO.	DATE

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
ORCHARD ROAD (CH. 18) @ COMISKEY AVENUE
NORTH AURORA, ILLINOIS

FILE NAME: 08_cp.dgn	SHEET NO.: 8
DATE: SEPTEMBER 22, 2006	PROJECT NO.: H0510-03
	OF 22



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 20'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

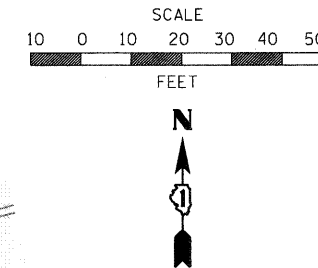
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & COMMISKY DR.

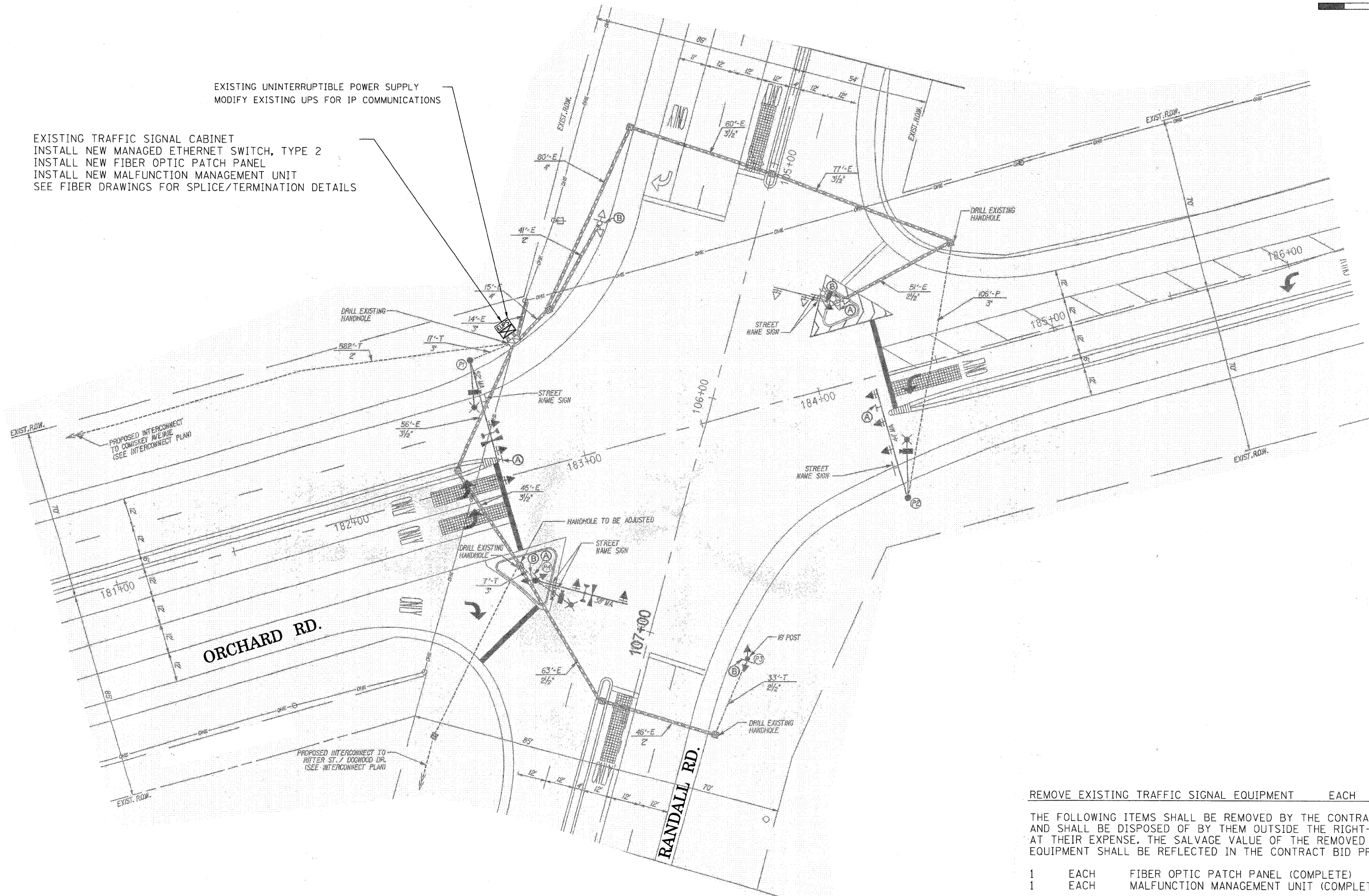
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P. SECTION COUNTY TOTAL SHEETS SHEET NO.
336 09-00272-01-TL KANE 68 37
CONTRACT NO. 63540
INT-16-C ILLINOIS FED. AID PROJECT



EXISTING UNINTERRUPTIBLE POWER SUPPLY
MODIFY EXISTING UPS FOR IP COMMUNICATIONS

EXISTING TRAFFIC SIGNAL CABINET
INSTALL NEW MANAGED ETHERNET SWITCH, TYPE 2
INSTALL NEW FIBER OPTIC PATCH PANEL
INSTALL NEW MALFUNCTION MANAGEMENT UNIT
SEE FIBER DRAWINGS FOR SPLICE/TERMINATION DETAILS



REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH FIBER OPTIC PATCH PANEL (COMPLETE)
1 EACH MALFUNCTION MANAGEMENT UNIT (COMPLETE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
ORCHARD RD. & RANDALL RD.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	38
CONTRACT NO. 63540				

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

INT-17 ILLINOIS FED. AID PROJECT



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
PLOT SCALE = 1" = 20'	DRAWN - JM/SM	REVISED -
PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -
	DATE - 12-21-2010	REVISED -

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FIBER OPTIC PATCH PANEL	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
VIDEO ENCODER	EACH	1
MANAGED ETHERNET SWITCH, TYPE 2	EACH	1
MAJUNCTION MANAGEMENT UNIT	EACH	1
MODIFY EXISTING UPS FOR SYSTEM COMMUNICATIONS	EACH	1
VIDEO VEHICLE DETECTION IP INTERFACE PANEL UPGRADE	EACH	1

CABLE PLAN LEGEND

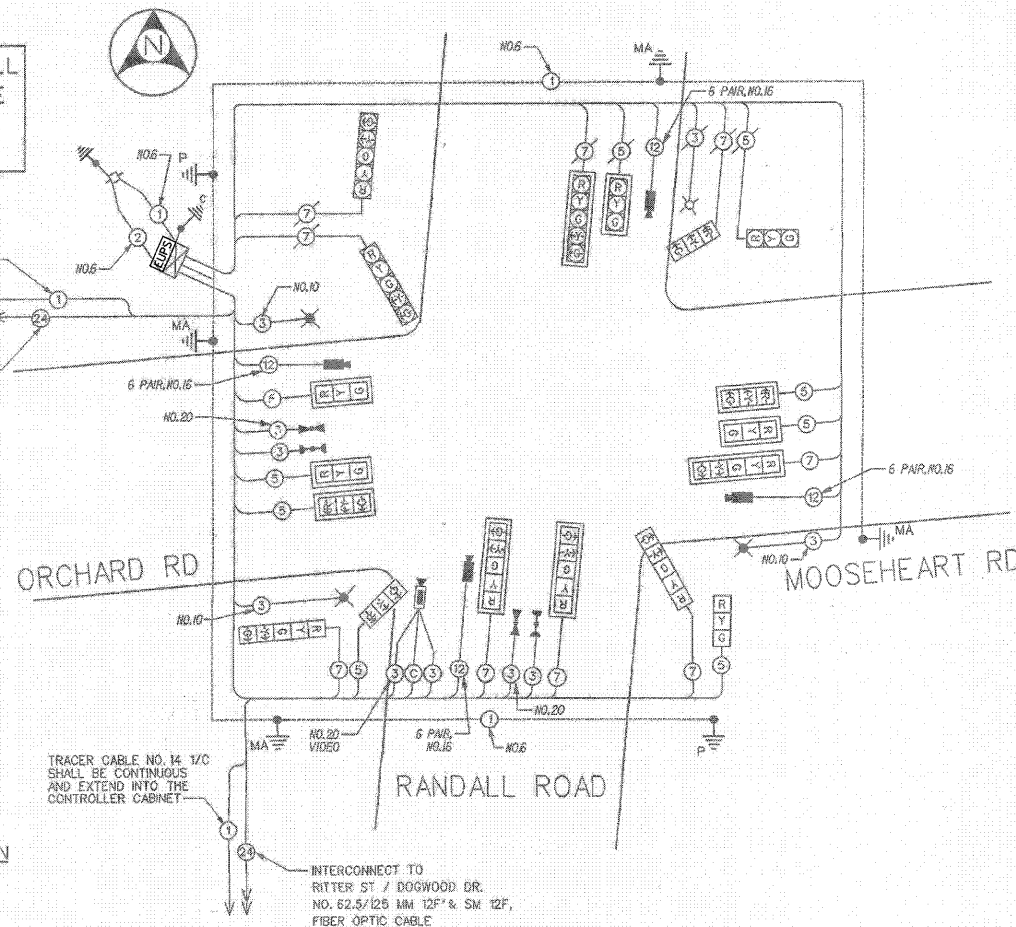
- EXISTING**
- 9" (228mm) TRAFFIC SIGNAL SECTION
 - 12" (305mm) TRAFFIC SIGNAL SECTION
 - 12" (305mm) PEDESTRIAN SIGNAL SECTION
 - 12" (305mm) PEDESTRIAN SIGNAL SECTION
 - CONTROLLER CABINET
 - SERVICE INSTALLATION
 - TELEPHONE CONNECTION
 - MAGNETIC DETECTOR
 - EMERGENCY VEHICLE LIGHT DETECTOR
 - CONFIRMATION BEACON
 - PUSHBUTTON DETECTOR
 - VEHICLE DETECTOR, INDUCTION LOOP
 - DENOTES NUMBER OF CONDUCTORS
 - ALL CABLE NO. 14 EXCEPT AS INDICATED
 - ALL LOOP DETECTOR CABLE TO BE SHIELDED
- PROPOSED**
- SIGNAL FACE WITH BACKPLATE
 - *P* INDICATES PROGRAMMED HEAD
 - RAILROAD CONTROL CABINET
 - ILLUMINATED SIGN, FIBER OPTIC
 - NO LEFT TURN
 - ILLUMINATED SIGN, FIBER OPTIC
 - NO RIGHT TURN
 - GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H) OR CONTROLLER (C)
 - GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
 - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)
 - NO. 62.5/125 MM 12F & SM 12F, FIBER OPTIC CABLE
 - NO. 8281 COAXIAL CABLE
 - VIDEO DETECTION CAMERA
 - DOVE P.Z.T. CAMERA
 - LUMINAIRE, SODIUM VAPOR, HORIZ. MOUNT
 - PHOTO CELL CONT., 310 W, 120 V BALLAST
- NOTE: ALL NEW GROUND RODS SHALL BE 3/4" X 18" LONG COPPER CLAD. THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION.

FOR INFORMATION ONLY

VIDEO DETECTION FOR ALL INTERSECTIONS SHALL BE ACCESSABLE REMOTELY THROUGH TELE-MODEM

TRACER CABLE NO. 14 1/2 SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

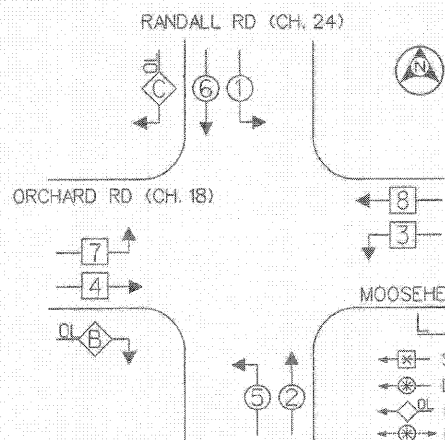
INTERCONNECT TO COMSKEY AVE NO. 62.5/125 MM 12F & SM 12F, FIBER OPTIC CABLE



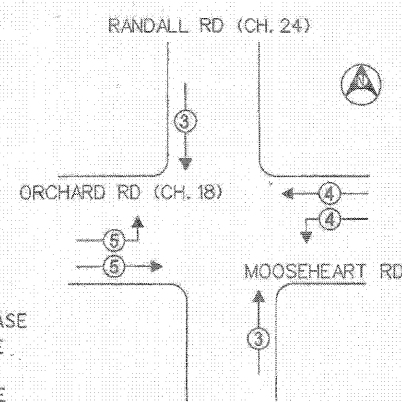
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PROTECTED PHASE
C	7
B	5

PROPOSED CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE.

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTIONS			
EMERGENCY VEHICLE PREEMPTION	3	4	5
MOVEMENT	↑	↓	→

THE LIGHT DETECTORS AND LIGHT DETECTOR AMPLIFIER FOR THIS PROJECT SHALL BE "TOMAR OR OPTICOM" TO MEET LOCAL FIRE DEPARTMENT REQUIREMENTS.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

ALL INDICATIONS SHALL BE LED

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH, AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOG, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250, RESPECTIVELY.

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED	XX OPERATIONS	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	28	135	12	0.10	33.6
PED. SIGNAL	1	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	392.6

VILLAGE OF NORTH AURORA

ILLINOIS 60133

ENERGY SUPPLY - CONTACT:

PHONE:

COMPANY: COMED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.1)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2 = (6.1±L-1.0)
E - M ARM POLE	2 (1.0)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	7 (0.5)	POST MOUNTED	6 (1.8)

METRO Transportation Group, Inc.
TRAFFIC ENGINEERING, TRANSPORTATION PLANNING
AND SIGNAL SYSTEMS/DESIGN
3100 W. HIGGINS ROAD, HOFFMAN ESTATES, IL 60195 PH# 630 213-1000

REVISIONS		
NO.	DATE	DESCRIPTION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
RANDALL ROAD @ ORCHARD ROAD (CH.18) AND MOOSEHEART ROAD
NORTH AURORA, ILLINOIS

FILE NAME: 14_cp.dgn	SHEET NO. 14
DATE: SEPTEMBER 22, 2006	OF 22
PROJECT NO. H0510-03	



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM

PLOT SCALE = 1" = 20'

PLOT DATE = 12-21-2010

DESIGNED - DG

DRAWN - JM/SM

CHECKED - DG

DATE = 12-21-2010

REVISED -

REVISED -

REVISED -

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD RD. & RANDALL RD.

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P

SECTION

336 09-00272-01-TL

INT-17-C

ILLINOIS FED. AID PROJECT

COUNTY

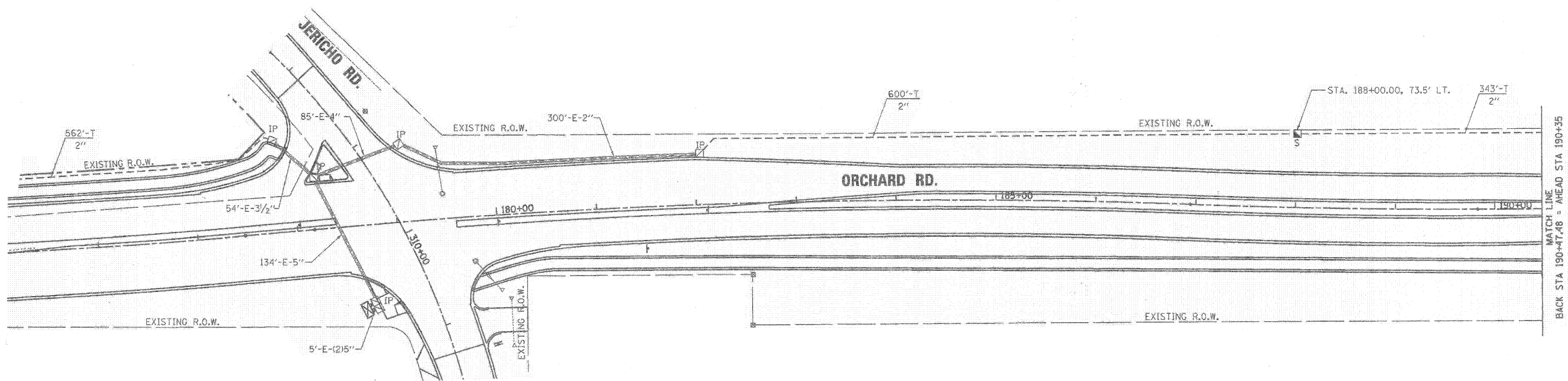
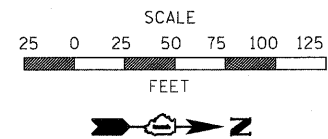
KANE

CONTRACT NO. 63540

TOTAL SHEETS 68

SHEET NO. 39

EXISTING PLANS FOR INFORMATION ONLY



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

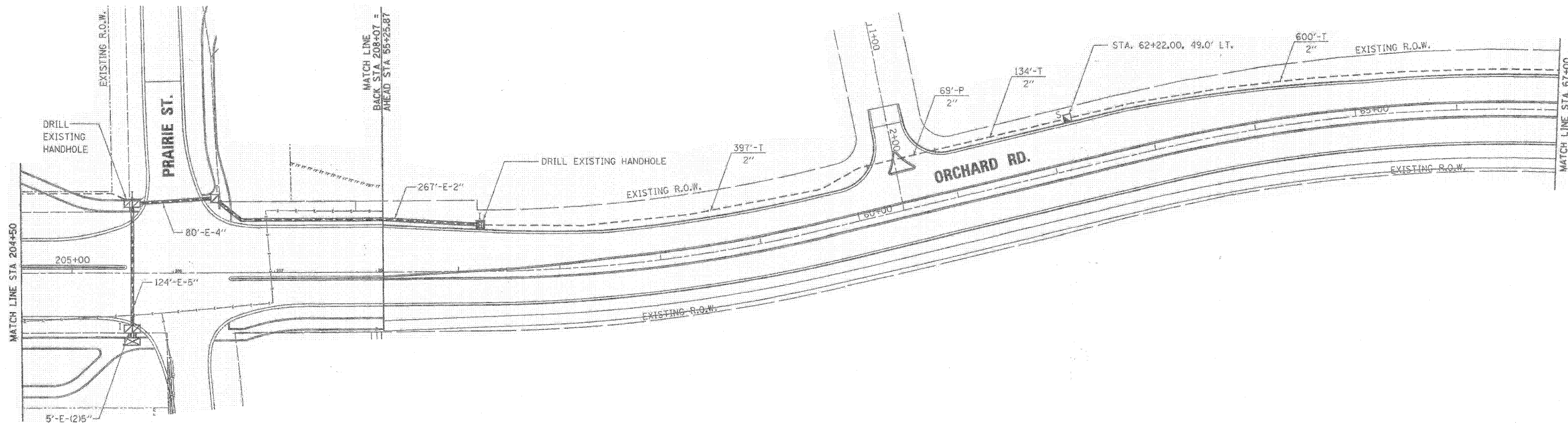
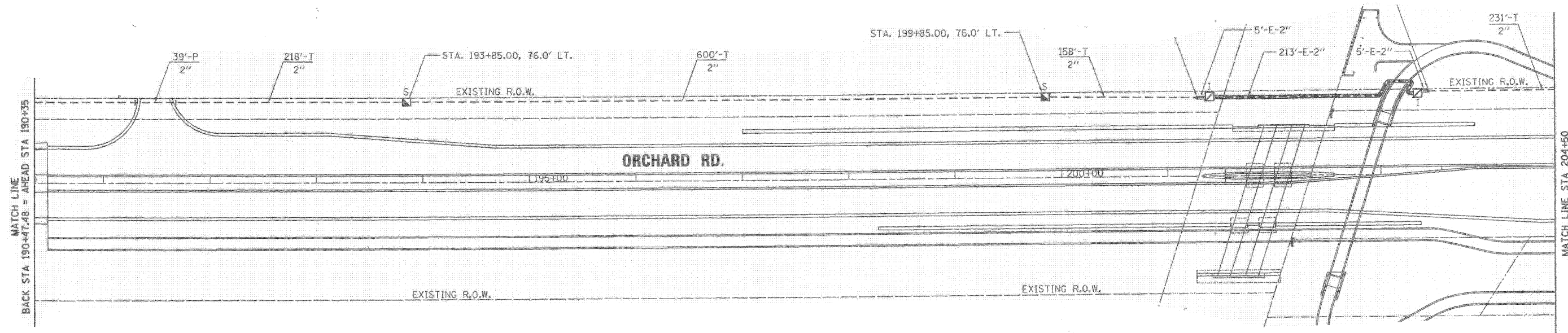
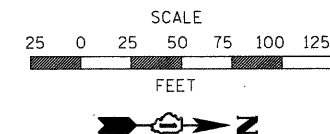
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 1 OF 15 SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	40
		CONTRACT NO. 63540		
IC-1		ILLINOIS FED. AID PROJECT		

EXISTING PLANS FOR INFORMATION ONLY



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 50'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

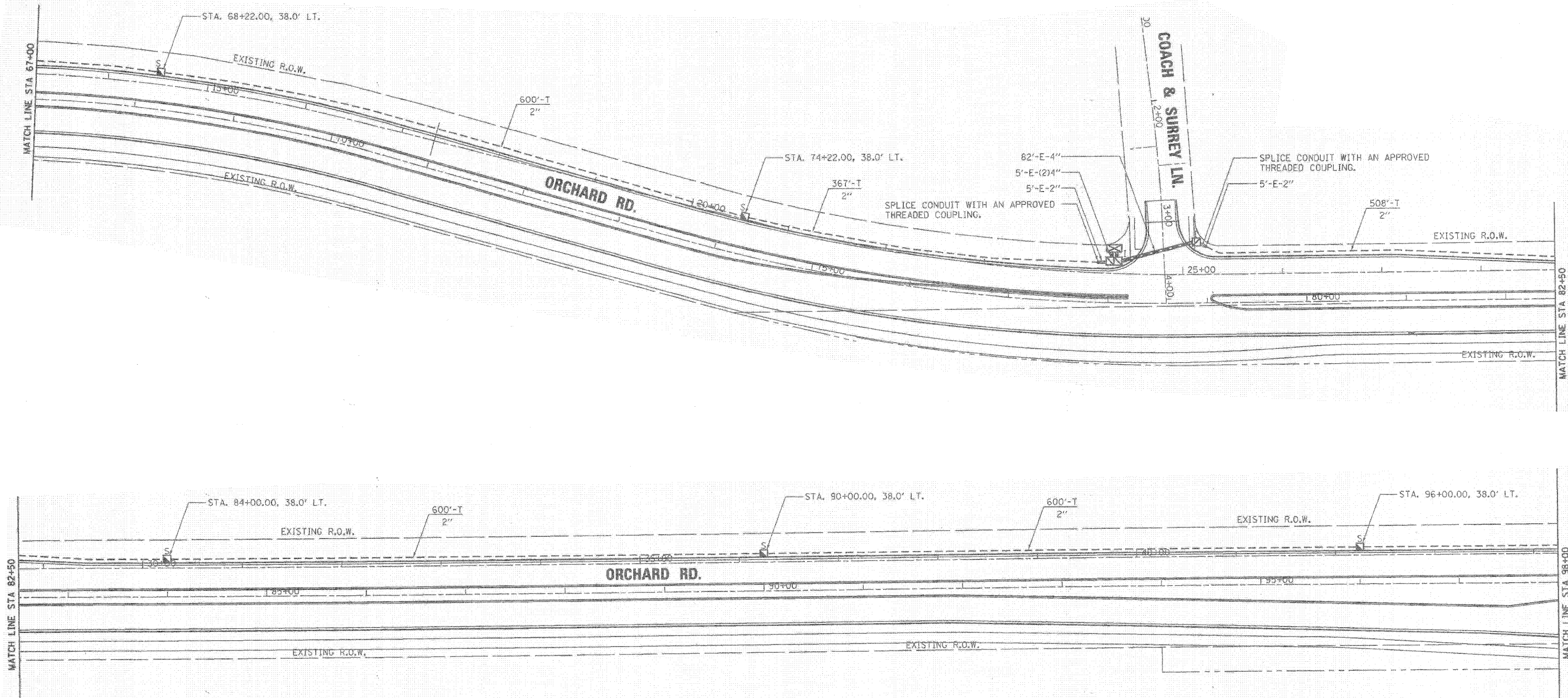
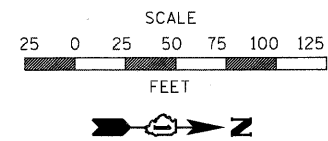
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION


INTERCONNECT PLAN
ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 2 OF 15 SHEETS STA. TO STA.

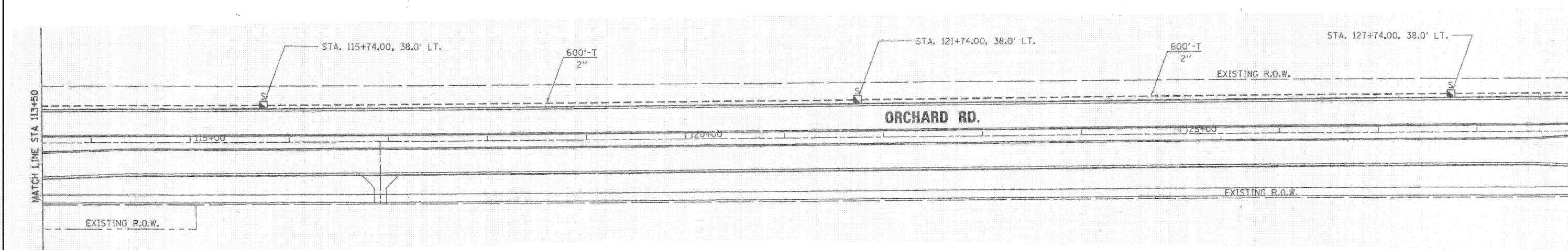
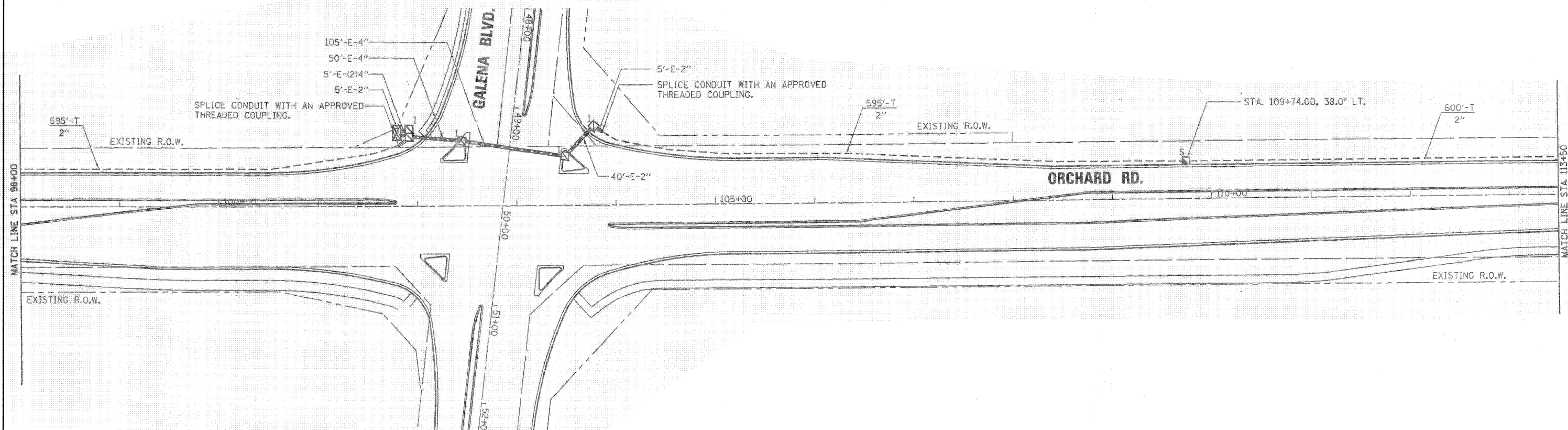
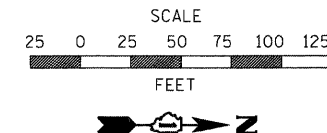
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	41
CONTRACT NO. 63540				
IC-2 ILLINOIS FED. AID PROJECT				

EXISTING PLANS FOR INFORMATION ONLY



 <div>KANE COUNTY DIVISION OF TRANSPORTATION</div>	USER NAME = JM	DESIGNED - DG	REVISED -	<div>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</div>	<div>INTERCONNECT PLAN ORCHARD RD. FROM JERICO RD. TO RANDALL RD.</div>			F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1" = 50'	DRAWN - JM/SM	REVISED -					336	09-00272-01-TL	KANE	68	42
	PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -		SCALE: 1" = 50'			SHEET NO. 3 OF 15 SHEETS	STA.	TO STA.	CONTRACT NO. 63540	
	DATE - 12-21-2010	DATE - 12-21-2010	REVISED -		IC-3 ILLINOIS FED. AID PROJECT							

EXISTING PLANS FOR INFORMATION ONLY



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

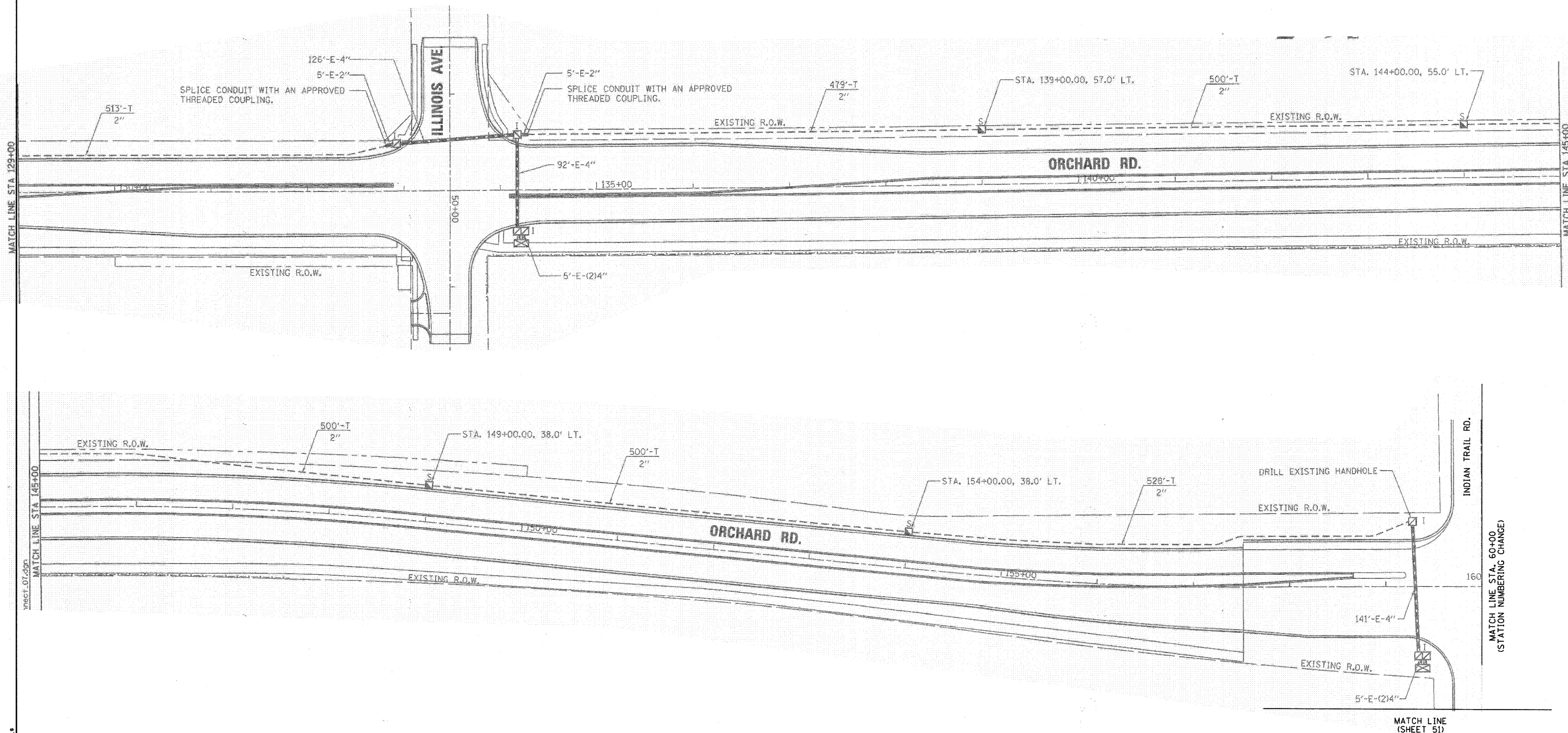
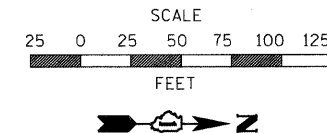
INTERCONNECT PLAN
ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 4 OF 15 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	43
CONTRACT NO. 63540				

IC-4 ILLINOIS FED. AID PROJECT

EXISTING PLANS FOR INFORMATION ONLY



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
DRAWN - JM/SM	REVISED -	
CHECKED - DG	REVISED -	
DATE - 12-21-2010	REVISED -	

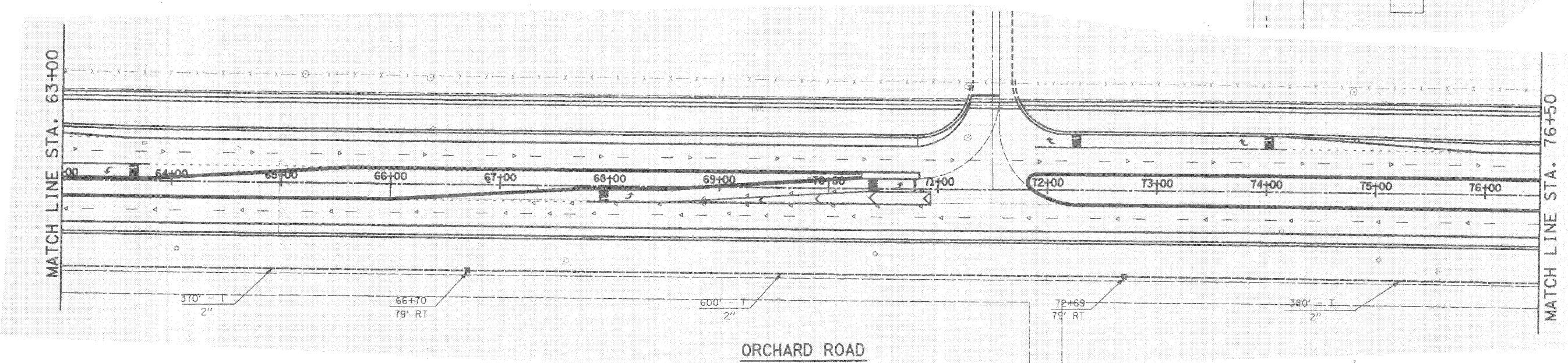
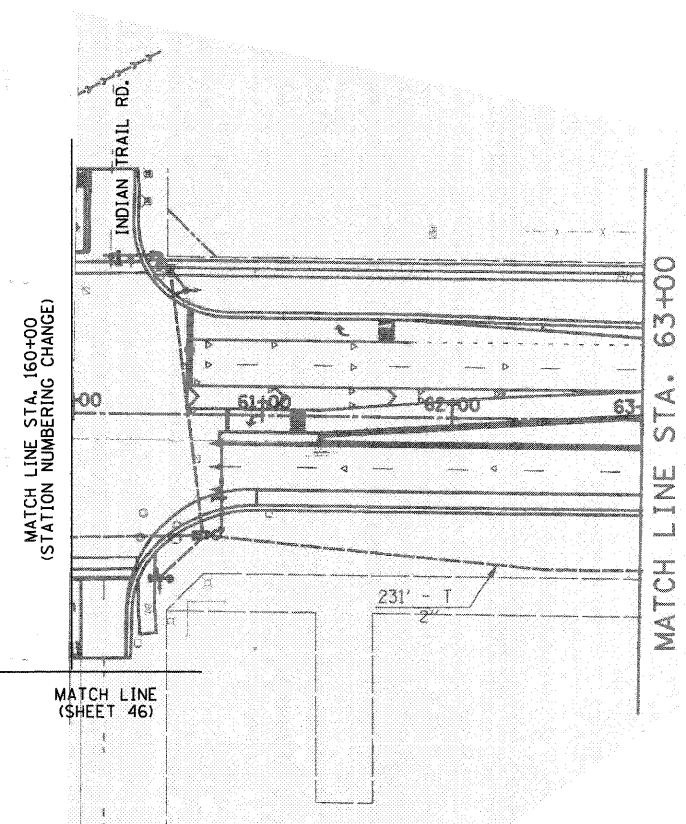
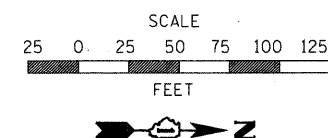
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 5 OF 15 SHEETS STA. TO STA.

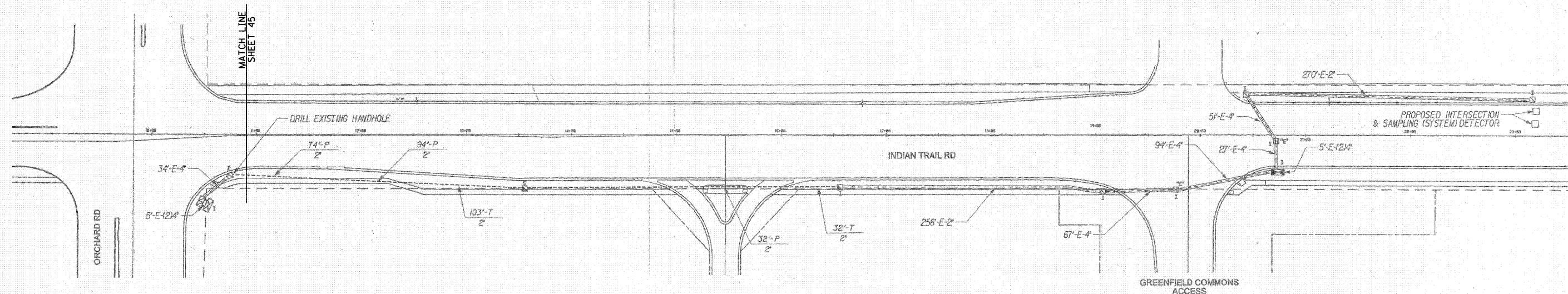
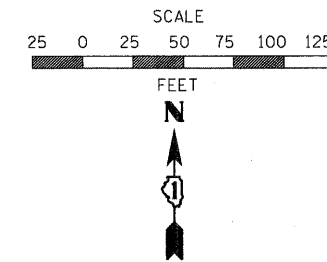
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	44
CONTRACT NO. 63540				
ILLINOIS FED. AID PROJECT				

EXISTING PLANS FOR INFORMATION ONLY



<p>KANE COUNTY DIVISION OF TRANSPORTATION</p>	USER NAME = JM		DESIGNED - DG	REVISED -	<p>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	INTERCONNECT PLAN		F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - JM/SM		CHECKED - DG	REVISED -		ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.		336	09-00272-01-TL	KANE	68	45
	PLOT SCALE = 1" = 50'		DATE - 12-21-2010	REVISED -		SCALE: 1" = 50'		SHEET NO. 6 OF 15 SHEETS		CONTRACT NO. 63540		
	PLOT DATE = 12-21-2010					STA. TO STA.		IC-6		ILLINOIS FED. AID PROJECT		

EXISTING PLANS FOR INFORMATION ONLY



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

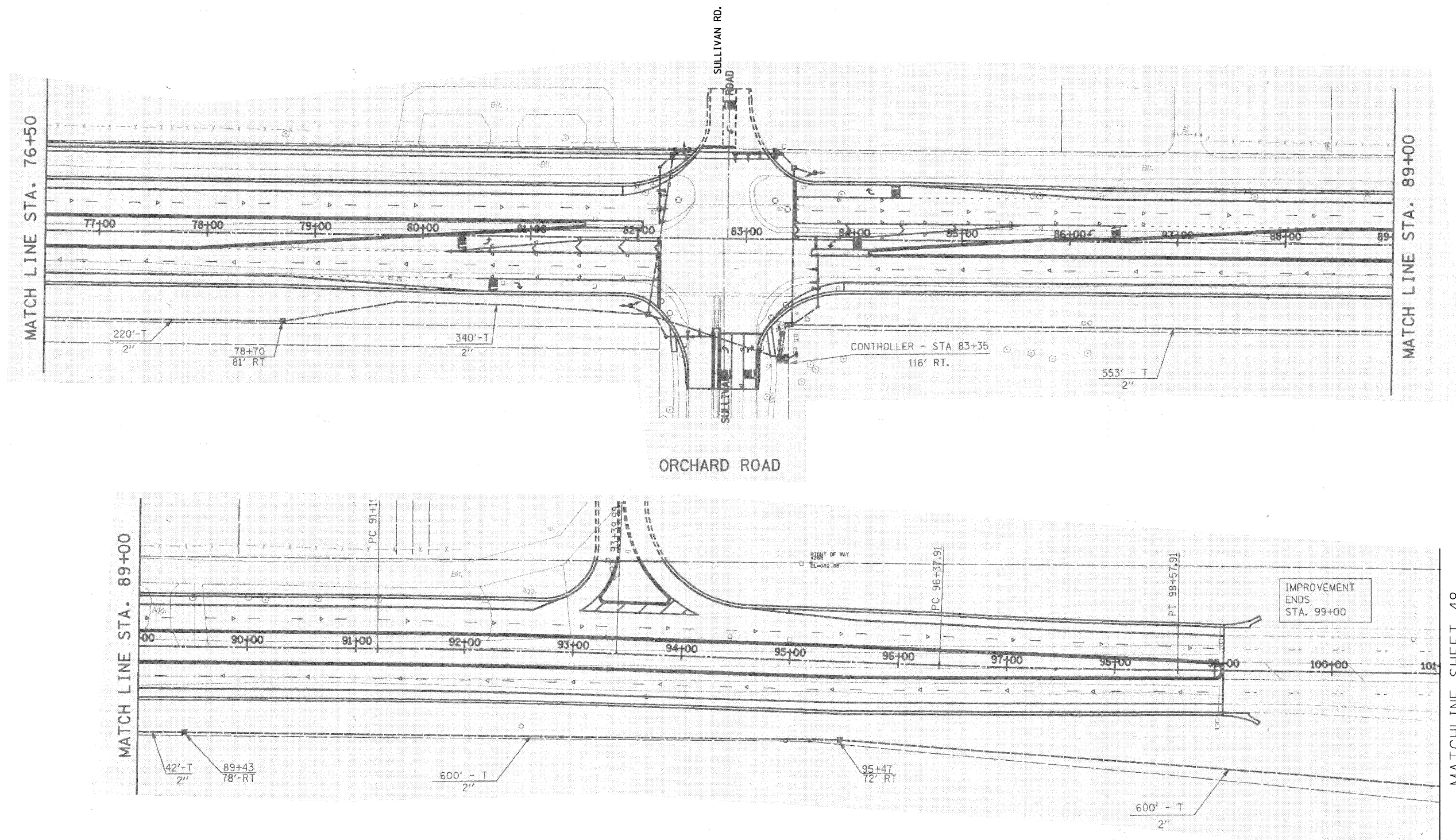
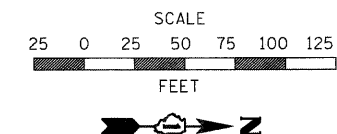
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 7 OF 15 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	46
CONTRACT NO. 63540				
ILLINOIS FED. AID PROJECT				

EXISTING PLANS FOR INFORMATION ONLY



FILE NAME = 8FLE18



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 50'
PLOT DATE = 12-21-2010

DESIGNED - DG	REVISED -
DRAWN - JM/SM	REVISED -
CHECKED - DG	REVISED -
DATE - 12-21-2010	REVISED -

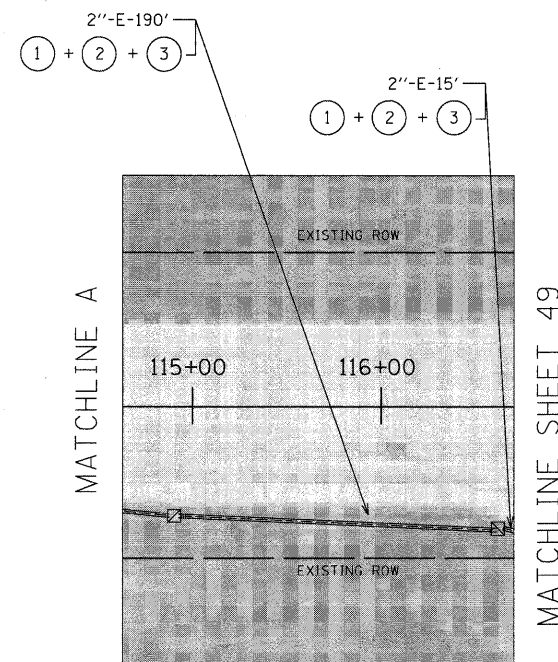
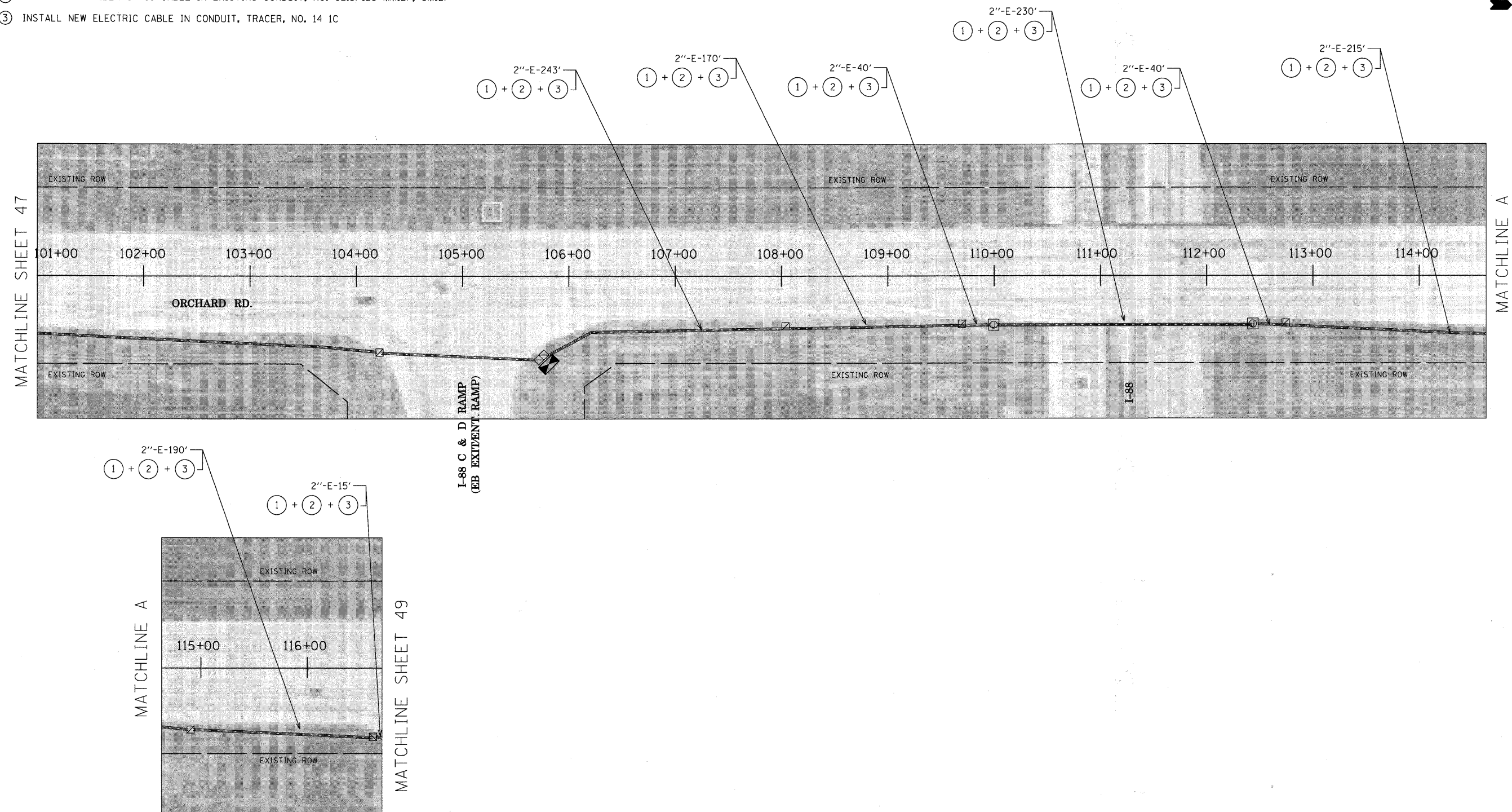
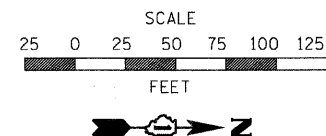
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 8 OF 15 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	47
IC-8		ILLINOIS FED. AID PROJECT		

- ① REMOVE EXISTING FIBER OPTIC CABLE, MM12F IN EXISTING CONDUIT
- ② INSTALL NEW FIBER OPTIC CABLE IN EXISTING CONDUIT, NO. 62.5/125 MM12F, SM12F
- ③ INSTALL NEW ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 50'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

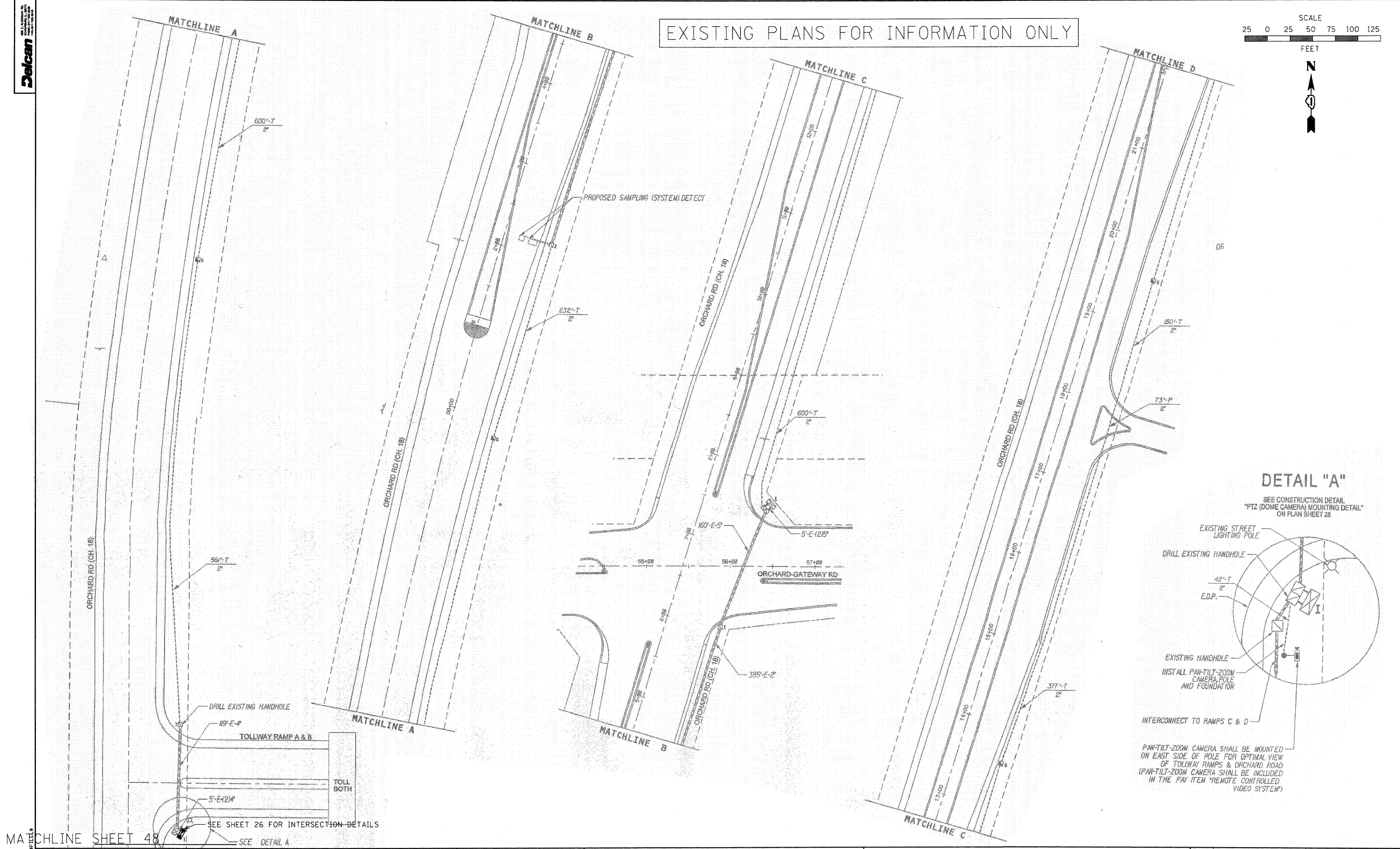
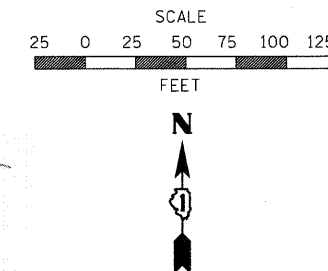
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICO RD. TO RANDALL RD.

SCALE: 1" = 50' | SHEET NO. 9 OF 15 SHEETS | STA. TO STA.

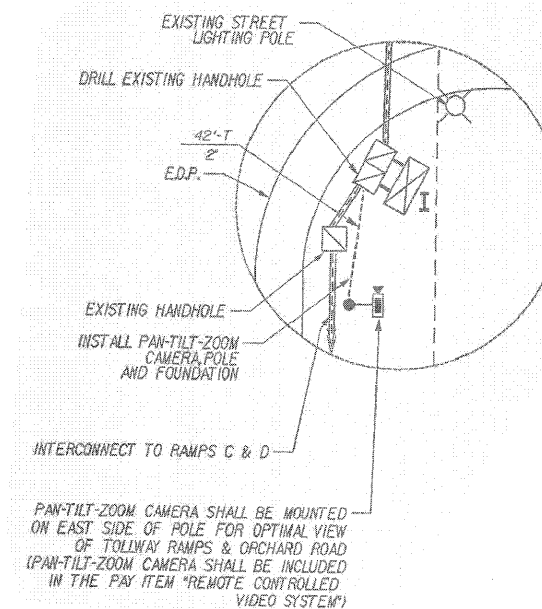
F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	48
CONTRACT NO. 63540				
ILLINOIS FED. AID PROJECT				

EXISTING PLANS FOR INFORMATION ONLY



DETAIL "A"

SEE CONSTRUCTION DETAIL
"PTZ (DOME CAMERA) MOUNTING DETAIL"
ON PLAN SHEET 28



MATCHLINE SHEET 48



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

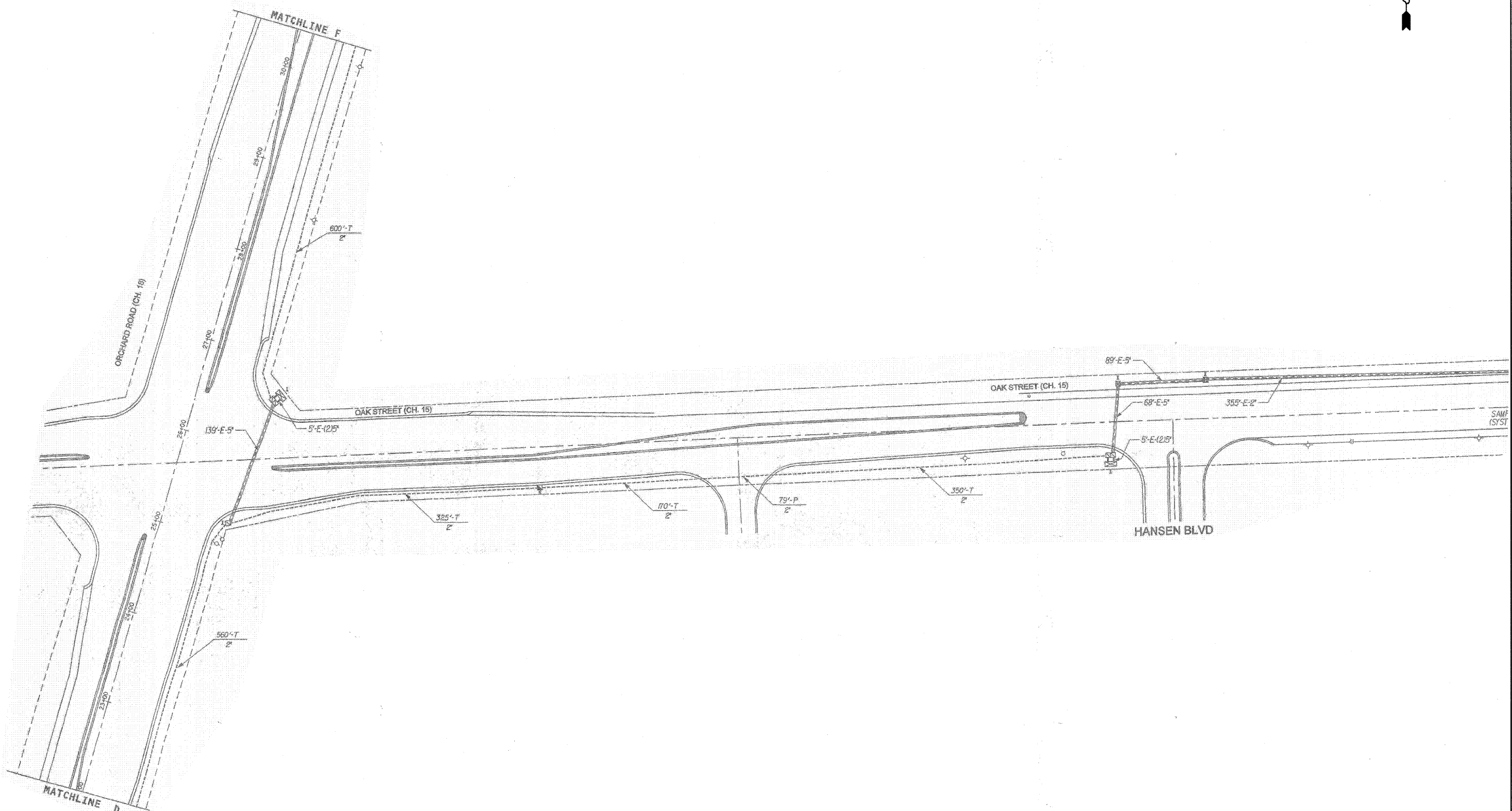
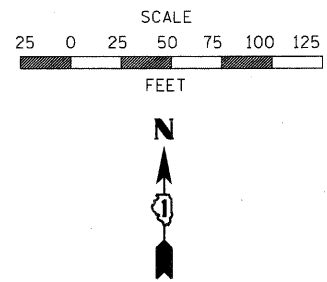
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 10 OF 15 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	49
CONTRACT NO. 63540				
ILLINOIS FED. AID PROJECT				

EXISTING PLANS FOR INFORMATION ONLY



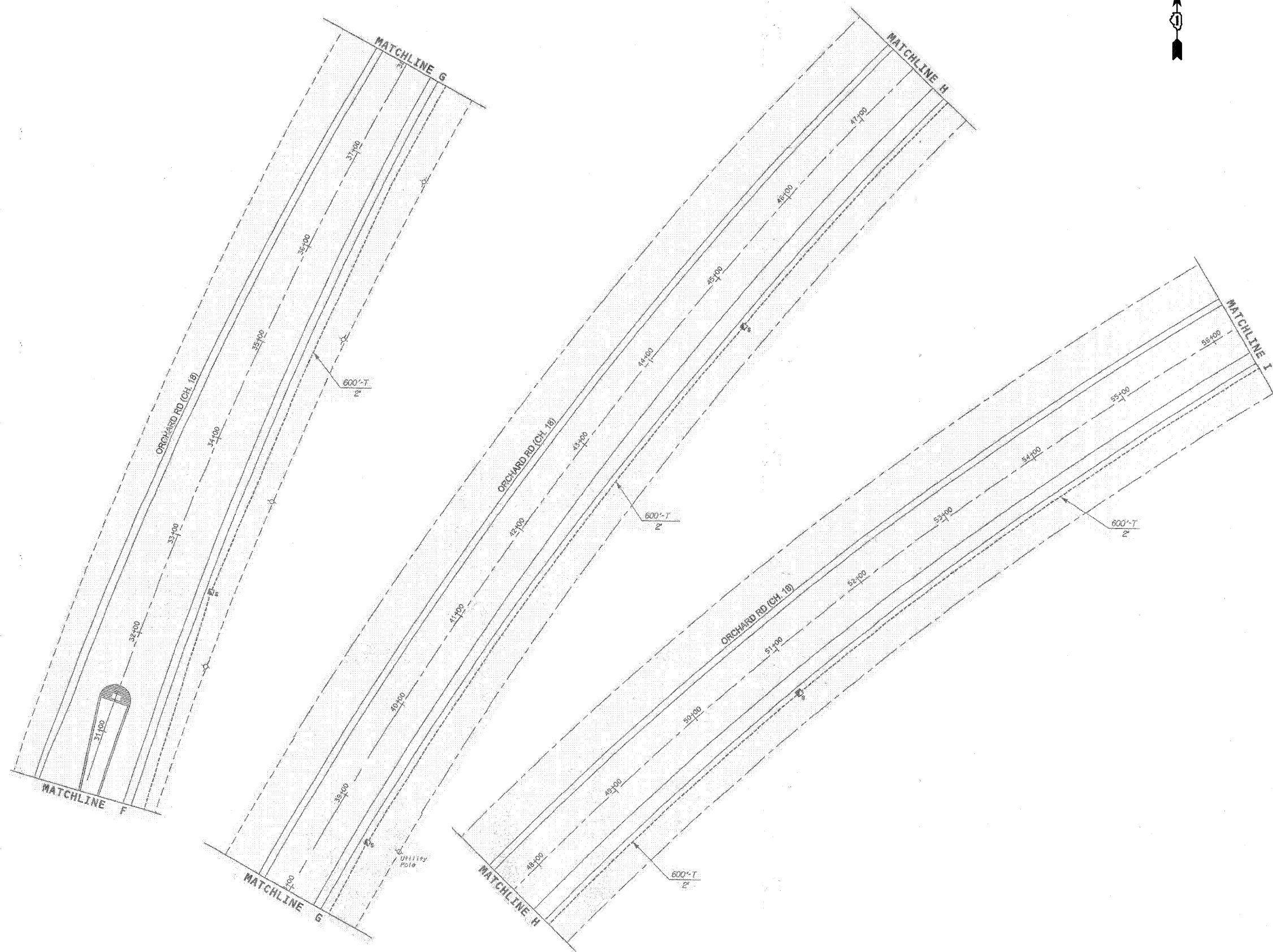
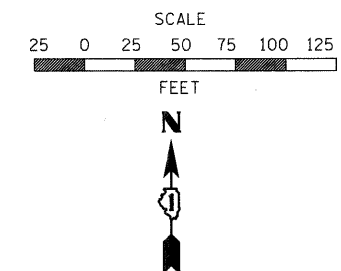
USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN			
ORCHARD RD. FROM JERICO RD. TO RANDALL RD.			
SCALE: 1" = 50'	SHEET NO. 11 OF 15 SHEETS	STA.	TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	50
CONTRACT NO. 63540				
IC-11 ILLINOIS FED. AID PROJECT				

EXISTING PLANS FOR INFORMATION ONLY



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

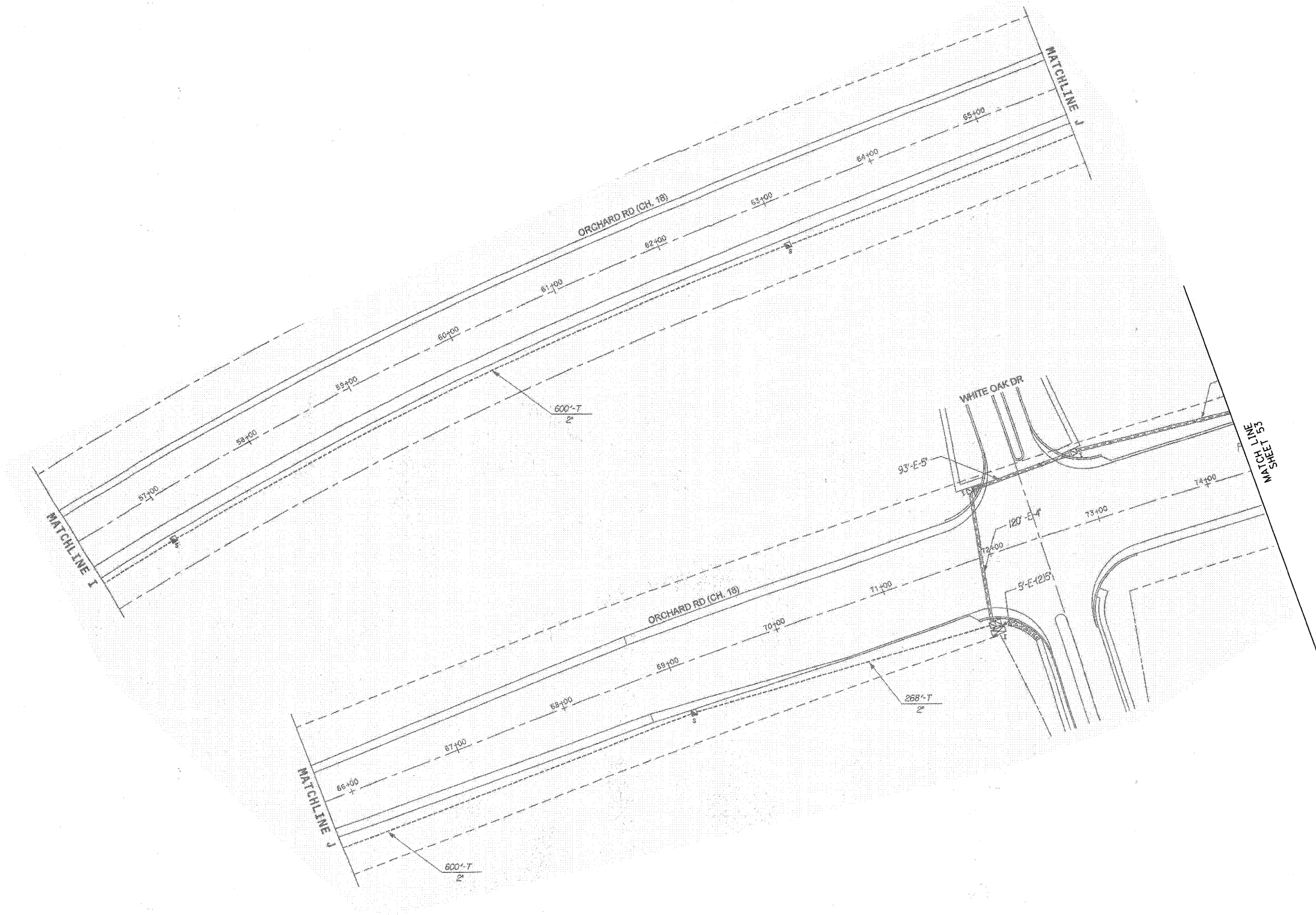
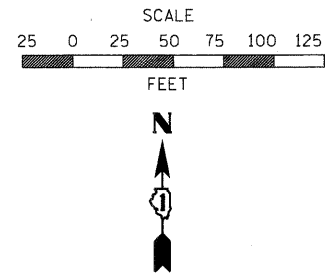
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 12 OF 15 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	51
CONTRACT NO. 63540				
IC-12 ILLINOIS FED. AID PROJECT				

EXISTING PLANS FOR INFORMATION ONLY



FILE NAME = SFILEL8



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

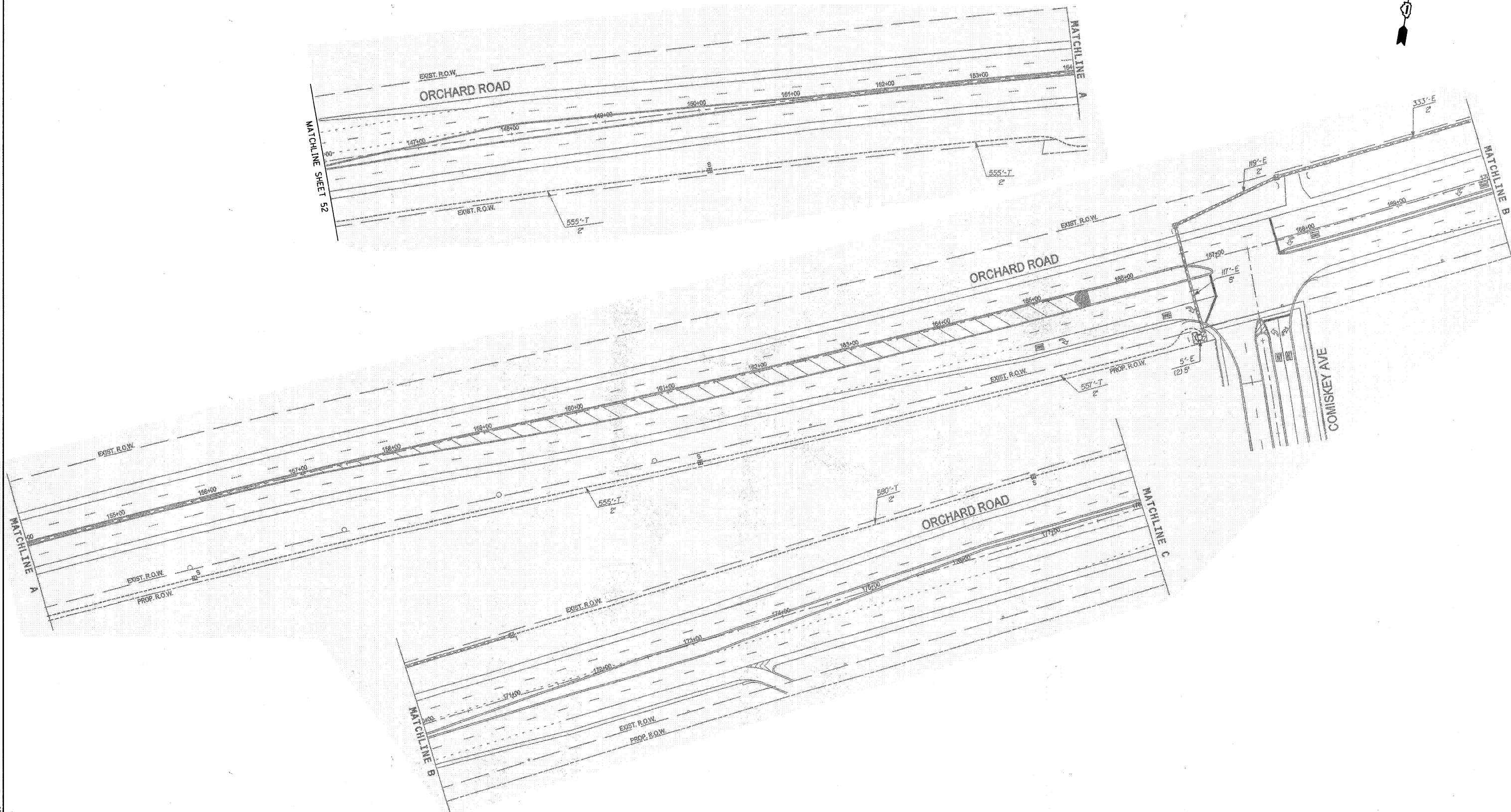
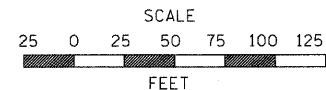
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 13 OF 15 SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	52
CONTRACT NO. 63540				
IC-13 ILLINOIS FED. AID PROJECT				

EXISTING PLANS FOR INFORMATION ONLY



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM
PLOT SCALE = 1" = 50'
PLOT DATE = 12-21-2010

DESIGNED - DG
DRAWN - JM/SM
CHECKED - DG
DATE - 12-21-2010

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ORCHARD RD. FROM JERICO RD. TO RANDALL RD.

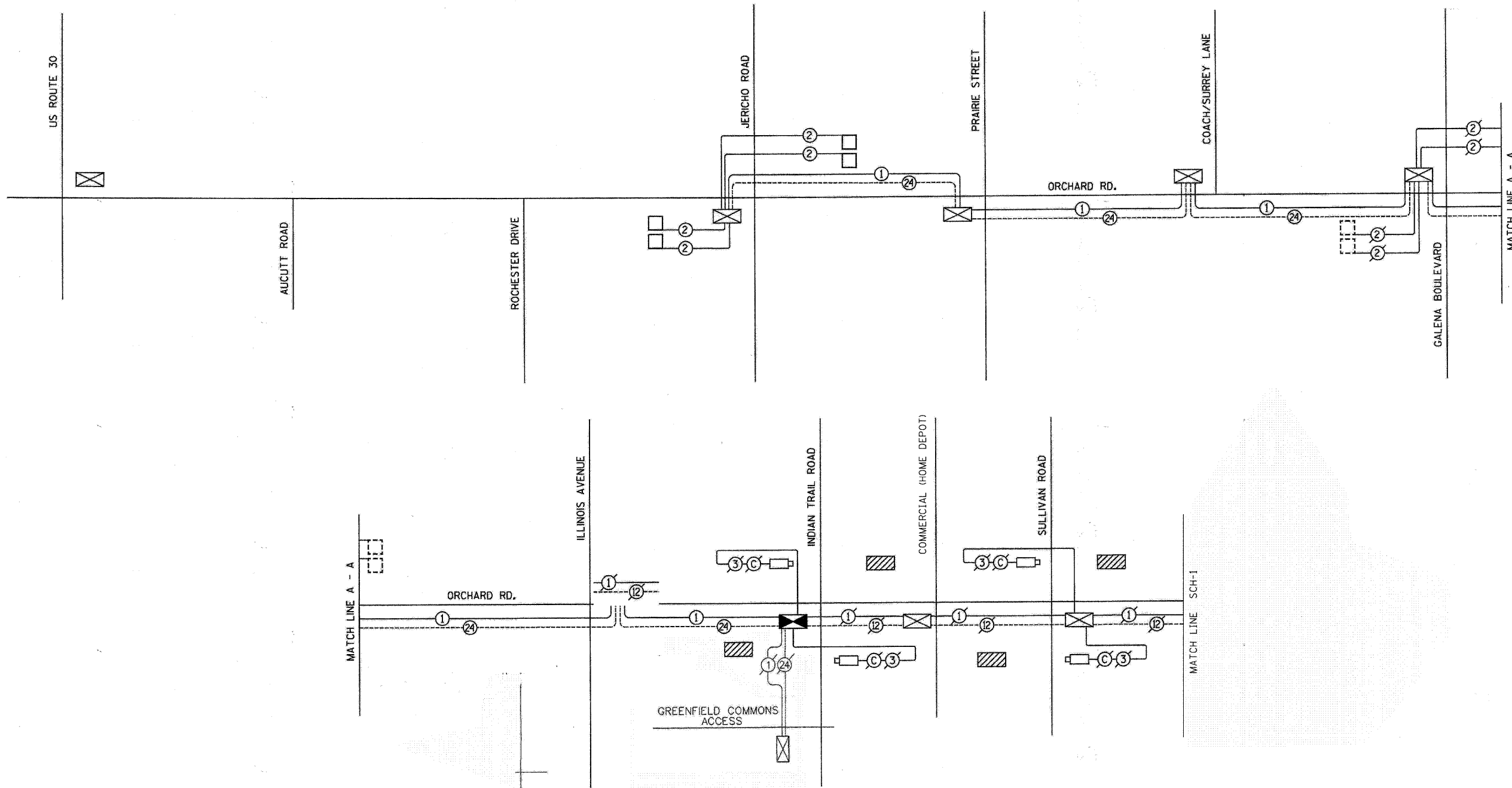
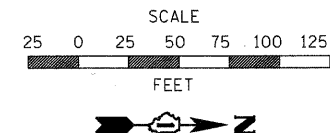
SCALE: 1" = 50' SHEET NO. 14 OF 15 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	53
CONTRACT NO. 63540				
ILLINOIS FED. AID PROJECT				



DESIGNED - DG	REVISED -
DRAWN - JM/SM	REVISED -
CHECKED - DG	REVISED -
DATE - 12-21-2010	REVISED -

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	54
		CONTRACT NO. 63540		
IC-15		ILLINOIS FED. AID PROJECT		



KANE COUNTY
DIVISION OF TRANSPORTATION

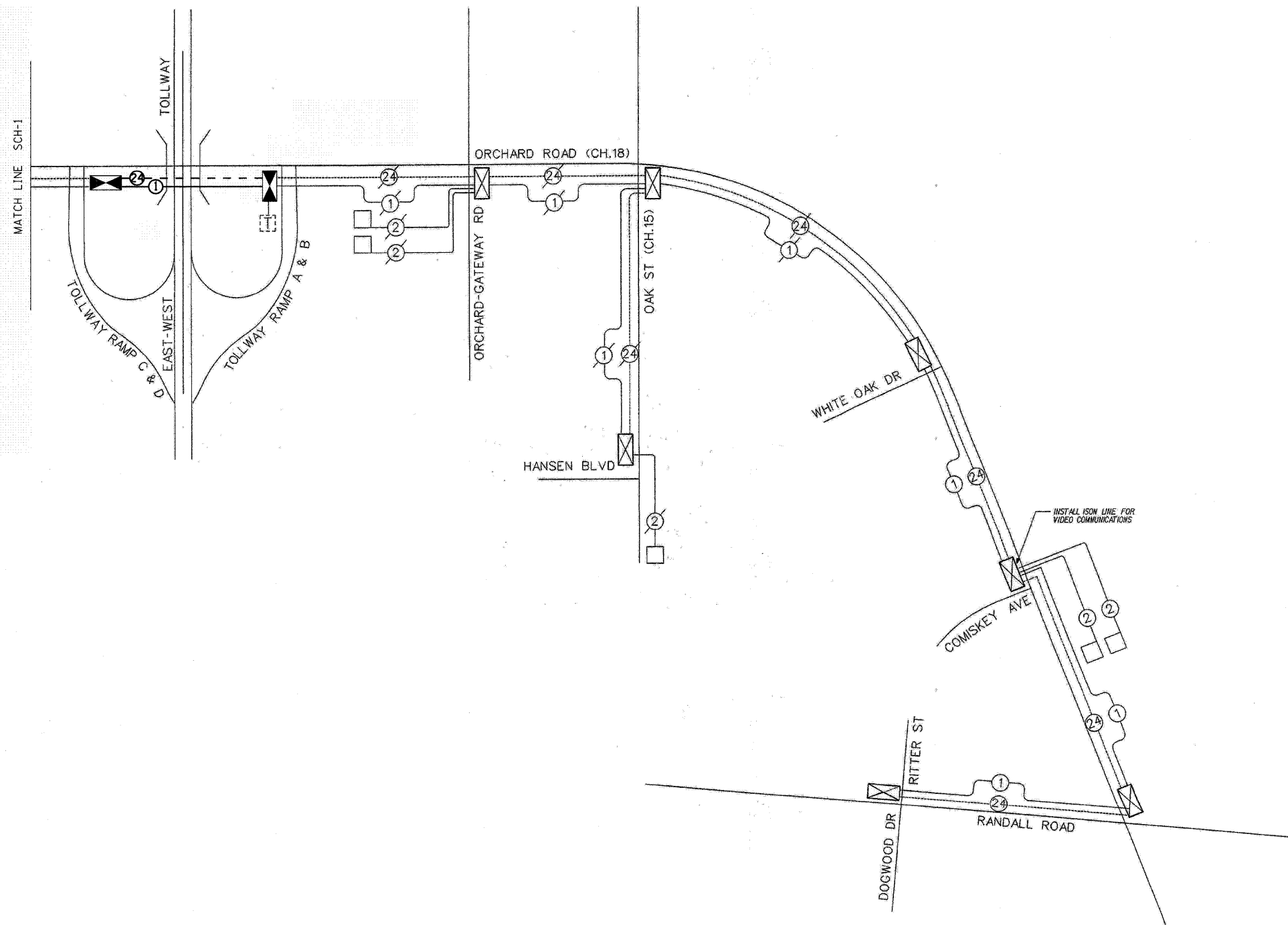
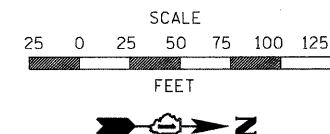
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DRAWN - JM/SM	CHECKED - DG	REVISED -
PLOT SCALE = 1" = 50'	DATE - 12-21-2010	REVISED -
PLOT DATE = 12-21-2010		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEMATICS
ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	55
CONTRACT NO. 63540				
SCH-1 ILLINOIS FED. AID PROJECT				



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEMATICS
ORCHARD RD. FROM JERICHO RD. TO RANDALL RD.

SCALE: 1" = 50' SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	56
		CONTRACT NO. 63540		
SCH-2		ILLINOIS FED. AID PROJECT		



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

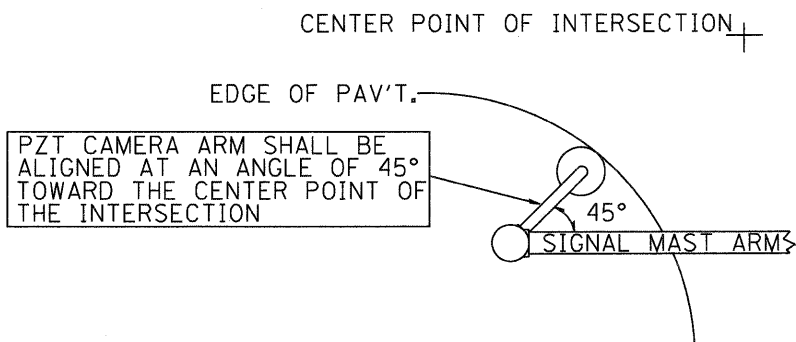
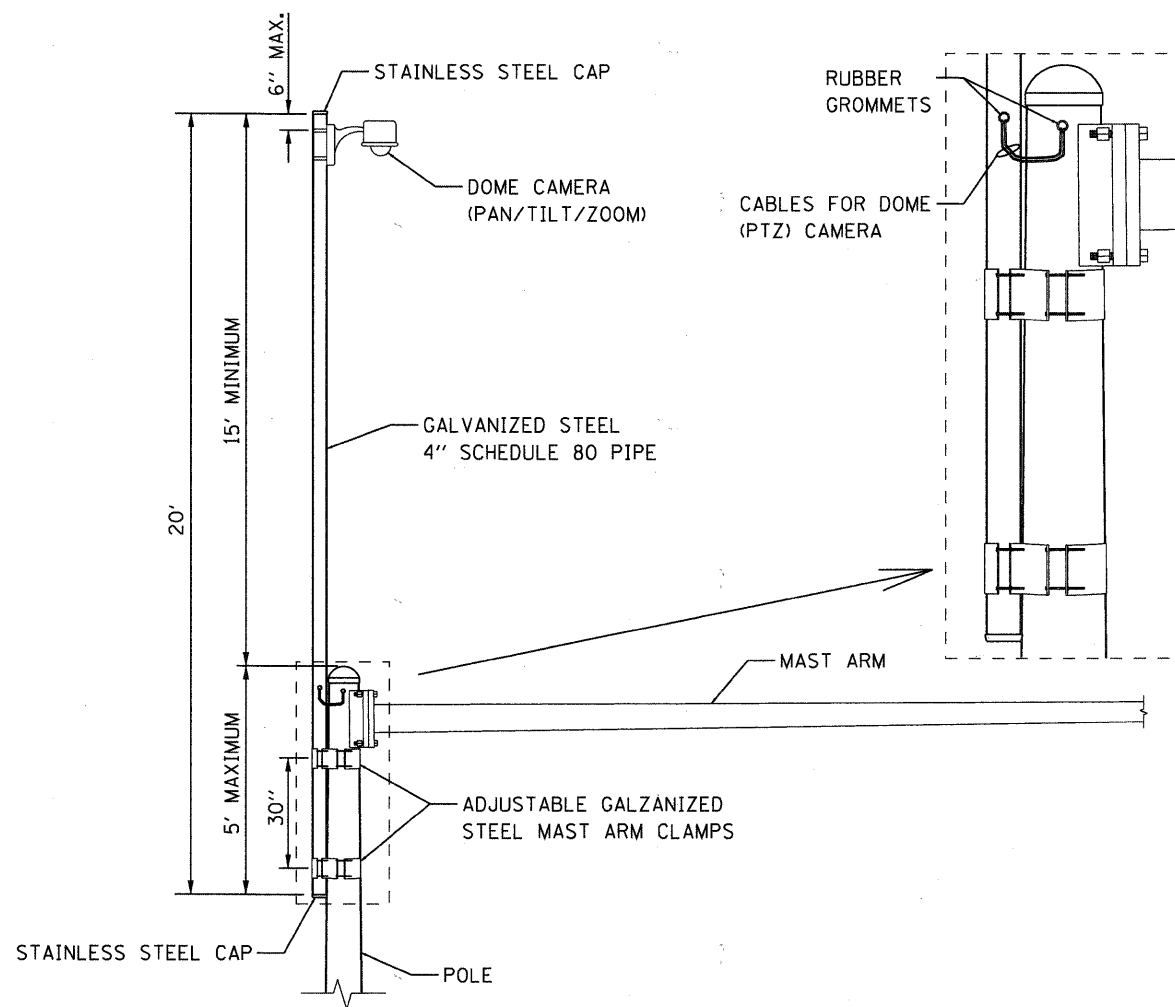


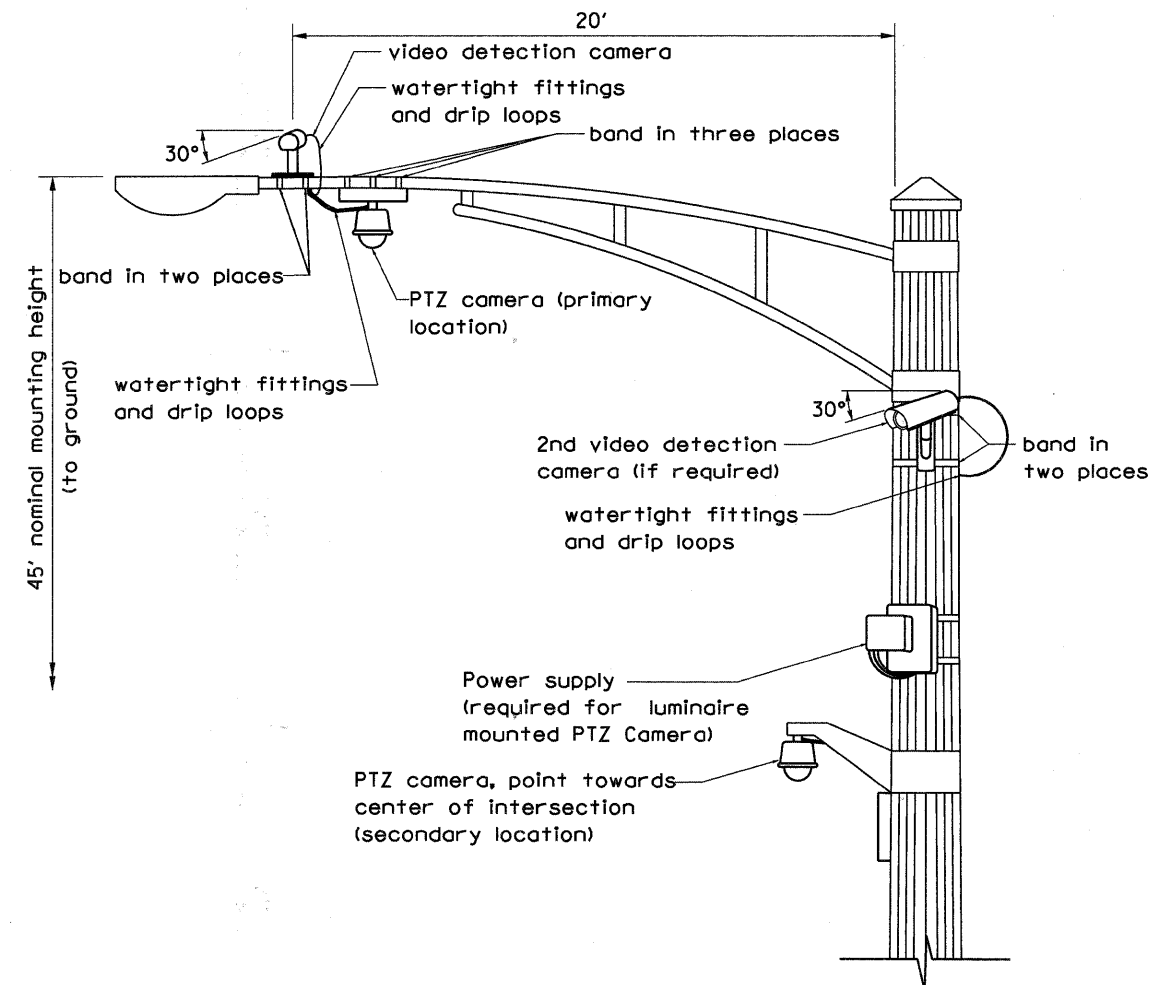
IMAGE SENSOR MOUNTING DETAILS

(NO SCALE)



CAMERA MOUNTING ASSEMBLY DETAIL

(NOT TO SCALE)



VIDEO DETECTION CAMERA(S) AND DOME (PTZ) CAMERA MOUNTING DETAIL

(NOT TO SCALE)

- NOTES FOR SINGLE, DUAL AND MULTIPLE MVP MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
 - AIM BRACKET TOWARD DIRECTION OF TRAFFIC TO BE DETECTED.
 - MOUNT MACHINE VISION PROCESSOR AIMING DOWN AT 30 DEGREE ANGLE.



KANE COUNTY
DIVISION OF TRANSPORTATION

USER NAME = JM	DESIGNED - DG	REVISED -
PLOT SCALE = 1" = 50'	DRAWN - JM/SM	REVISED -
PLOT DATE = 12-21-2010	CHECKED - DG	REVISED -
	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CCTV AND VIDEO DETECTION MOUNTING DETAIL

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	57
DET-1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 63540

ROCHESTER / ORCHARD

JERICO / ORCHARD

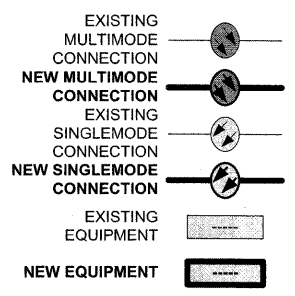
PRARIE / ORCHARD

SURREY / ORCHARD

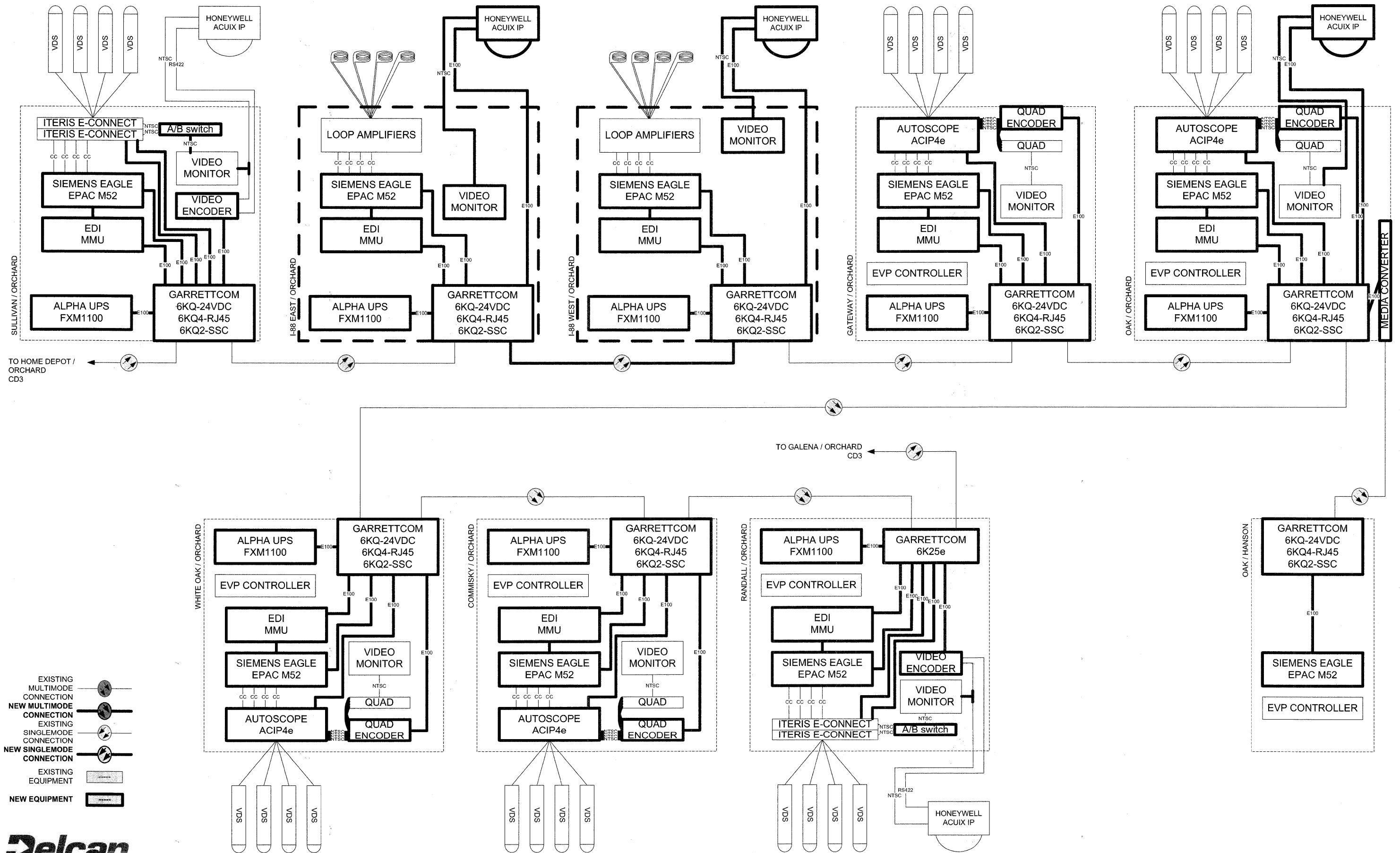
GALENA / ORCHARD

TO ORCHARD /
RANDALL
CD4

TO SULLIVAN / ORCHARD
CD4



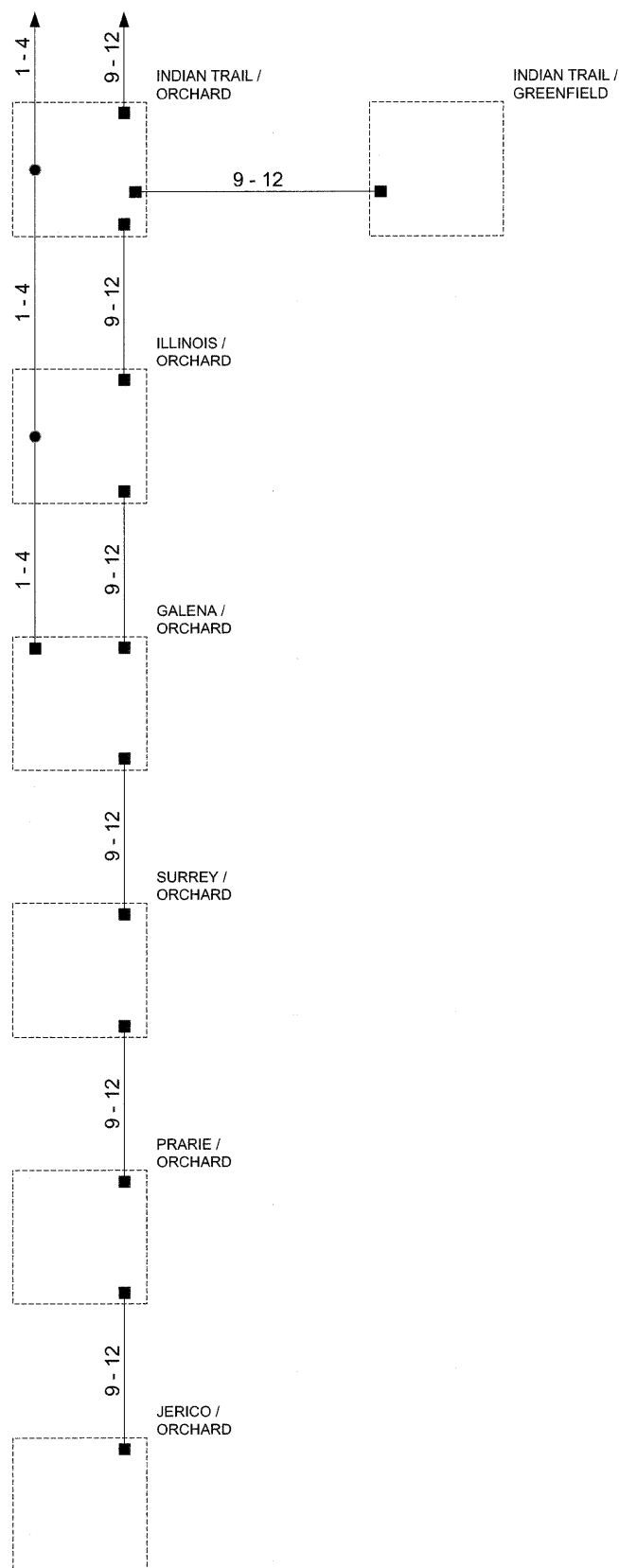
FILE NAME:	DESIGNED DJG	KANE COUNTY	CABINET DETAIL3	ROUTE	COUNTY	SECTION NUMBER	SHEETS	SHEET
	DRAWN DJG	Division of Transportation	ORCHARD FROM ROCHESTER TO HOME DEPOT		KANE	08-00379-00-TL	68	58
	CHECKED DJG							
	DATE 2010/05/26							



Delcan
TRANSPORTATION • INFORMATION TECHNOLOGY • WATER

FILE NAME:	DESIGNED DRAWN CHECKED DATE	DJG DJG 2010/05/26	KANE COUNTY Division of Transportation	CABINET DETAIL 4 ORCHARD FROM SULLIVAN TO RANDALL	ROUTE COUNTY	SECTION NUMBER	SHEETS	SHEET
					KANE	08-00379-00-TL	68	59

TO ORCHARD / HOME DEPOT
FSD3

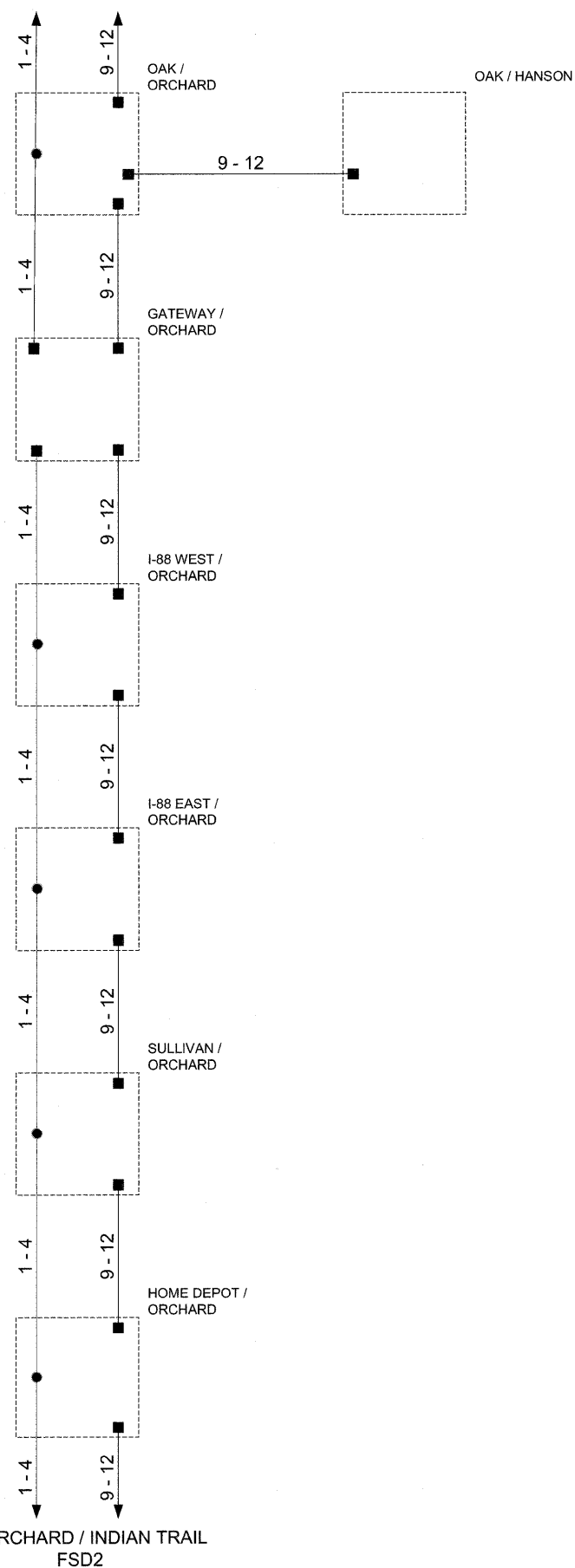


- EXISTING CONNECTOR /
EXISTING FIBER
- PROPOSED CONNECTOR /
EXISTING FIBER
- PROPOSED FUSION
SPlice / EXISTING FIBER
- PROPOSED CONNECTOR /
PROPOSED FIBER
- PROPOSED FUSION
SPlice / PROPOSED FIBER
- FUTURE FIBER
(BY OTHERS)



FILE NAME:		DESIGNED	DJG	KANE COUNTY Division of Transportation	FIBER SPLICING DIAGRAM 2 ORCHARD FROM JERICO TO INDIAN TRIAL	ROUTE	COUNTY	SECTION NUMBER	SHEETS	SHEET
		DRAWN	DJG							
		CHECKED	DJG							
		DATE	2010/05/26							
							KANE	08-00379-00-TL	68	60

TO ORCHARD / WHITE OAK
FSD4

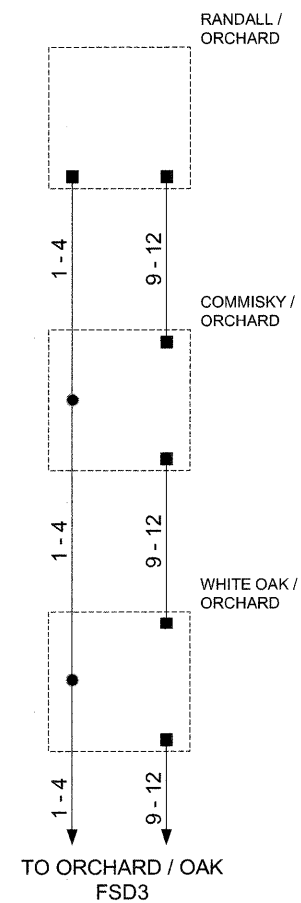


- EXISTING CONNECTOR / EXISTING FIBER
- PROPOSED CONNECTOR / EXISTING FIBER
- PROPOSED FUSION SPLICE / EXISTING FIBER
- PROPOSED CONNECTOR / PROPOSED FIBER
- PROPOSED FUSION SPLICE / PROPOSED FIBER
- FUTURE FIBER (BY OTHERS)



FILE NAME:	DESIGNED	DJG	KANE COUNTY Division of Transportation	FIBER SPLICING DIAGRAM 3 ORCHARD FROM HOME DEPOT TO OAK	ROUTE	COUNTY	SECTION NUMBER	SHEETS	SHEET
	DRAWN	DJG				KANE	08-00379-00-TL	68	61
	CHECKED	DJG							
	DATE	2010/05/26							

- ■ — EXISTING CONNECTOR / EXISTING FIBER
- ■ — PROPOSED CONNECTOR / EXISTING FIBER
- ● — PROPOSED FUSION SPLICE / EXISTING FIBER
- ■ — PROPOSED CONNECTOR / PROPOSED FIBER
- ● — PROPOSED FUSION SPLICE / PROPOSED FIBER
- — FUTURE FIBER (BY OTHERS)

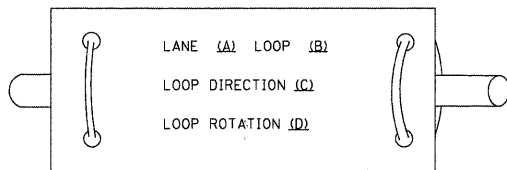


FILE NAME:		DESIGNED	DJG	KANE COUNTY Division of Transportation	FIBER SPLICING DIAGRAM 4 ORCHARD FROM WHITE OAK TO RANDALL	ROUTE	COUNTY	SECTION NUMBER	SHEETS	SHEET
		DRAWN	DJG				KANE	08-00379-00-TL	68	62
		CHECKED	DJG							
		DATE	2010/05/26							

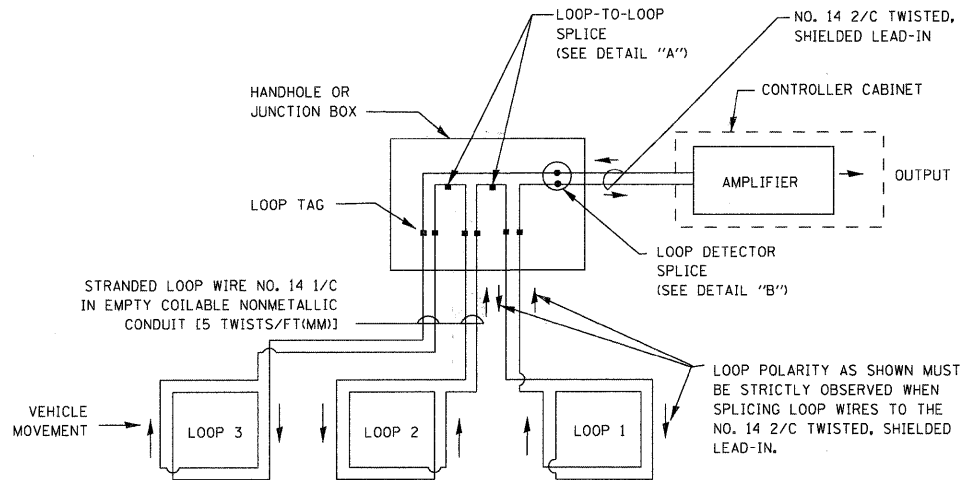
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

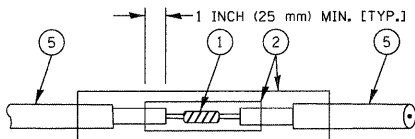


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

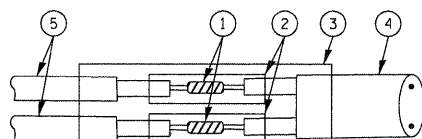


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm), IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

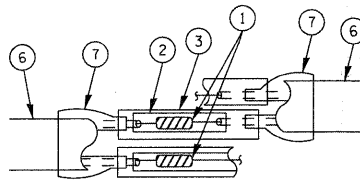


DETAIL "A"
LOOP-TO-LOOP SPLICE

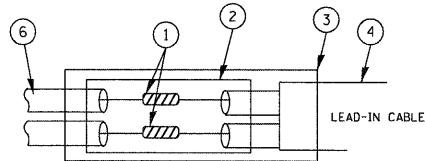


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PREFORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = #USER#	DESIGNED - DAD	REVISED -
*FILE#		DRAWN - BCK	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - DAD	REVISED -
	PLOT DATE = #DATE#	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	63
CONTRACT NO. 63540				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



KANE COUNTY
DIVISION OF TRANSPORTATION

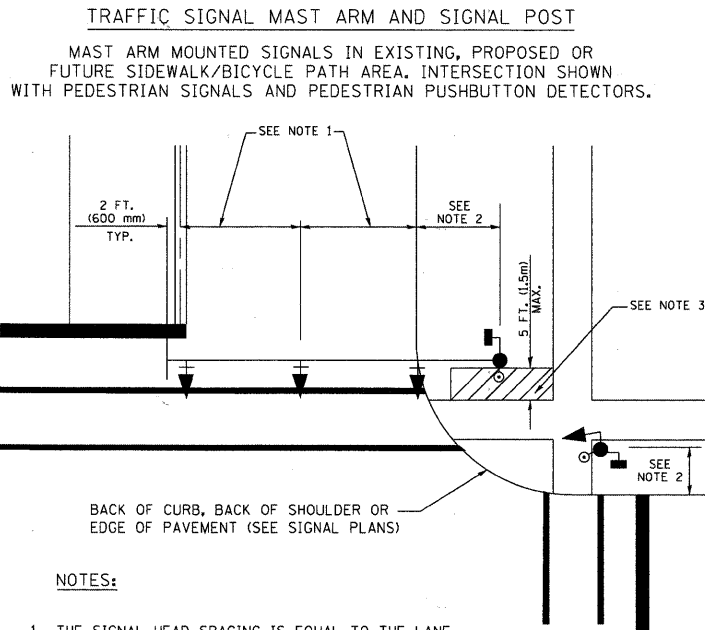
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PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC DESIGN DETAILS

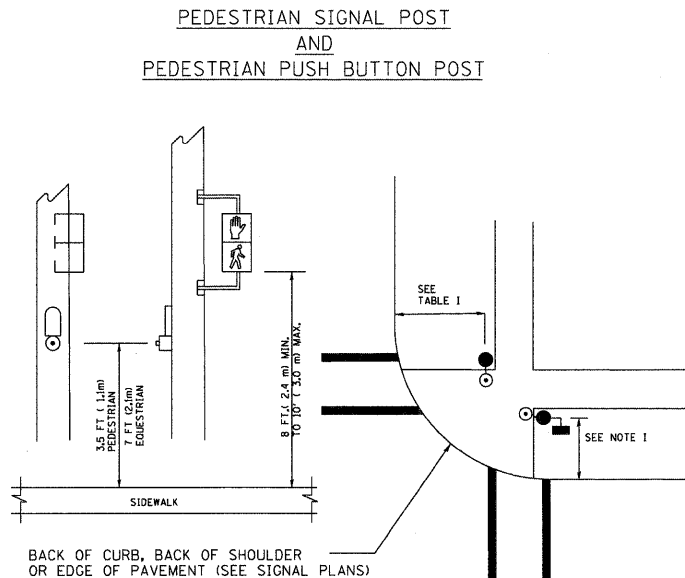
SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	63
CONTRACT NO. 63540				
ISTD-1 ILLINOIS FED. AID PROJECT				



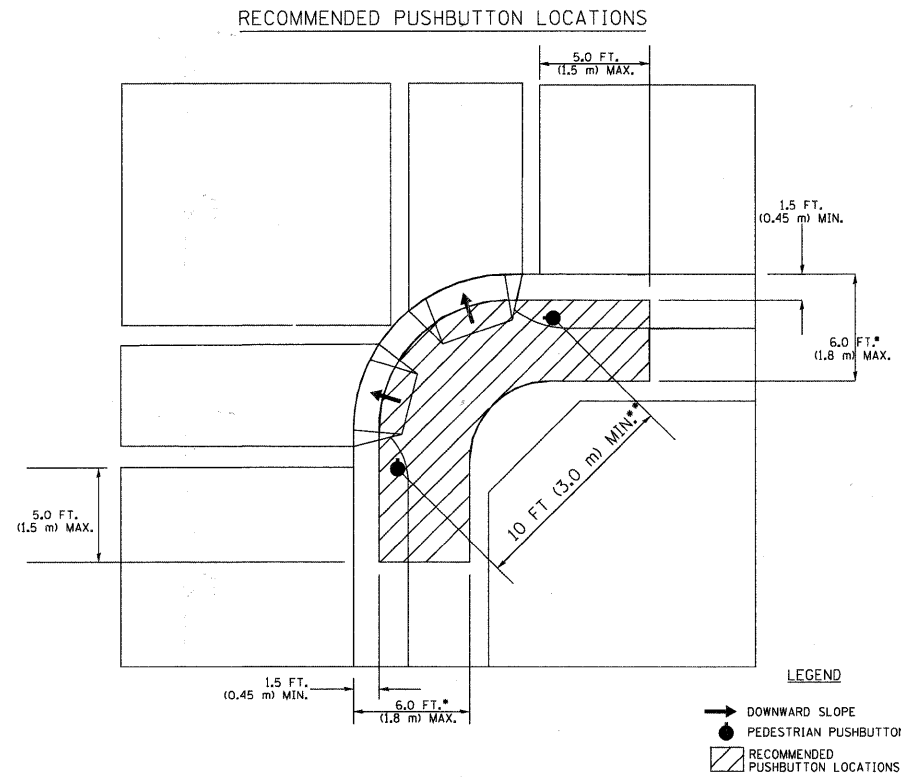
NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

FILE NAME =	USER NAME = #USER#	DESIGNED - DAD	REVISED -
#FILE#		DRAWN - BCK	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - DAD	REVISED -
	PLOT DATE = #DATE#	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DETAILS**

SCALE: NONE	SHEET NO. 2 OF 6 SHEETS	STA. TO STA.	F.A.P. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			TS-05			
				CONTRACT NO.		



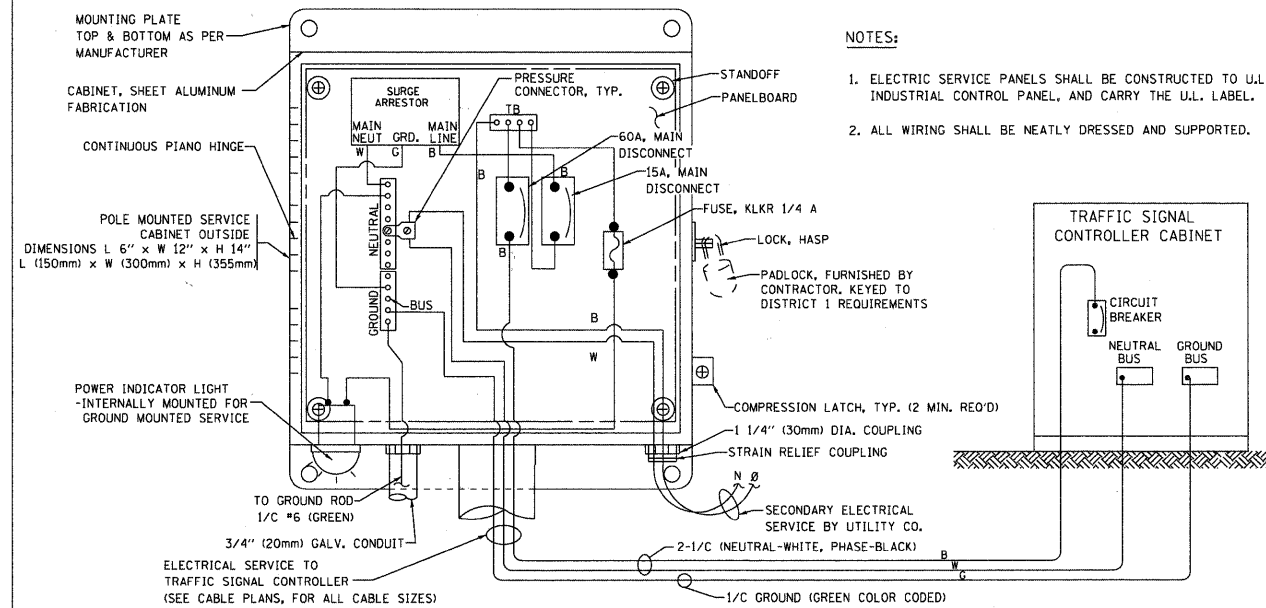
**KANE COUNTY
DIVISION OF TRANSPORTATION**

USER NAME = JM	DESIGNED - DG	REVISED -
	DRAWN - JM/SM	REVISED -
PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

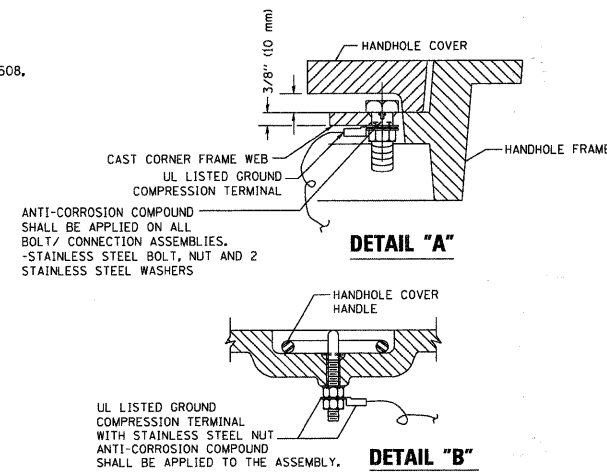
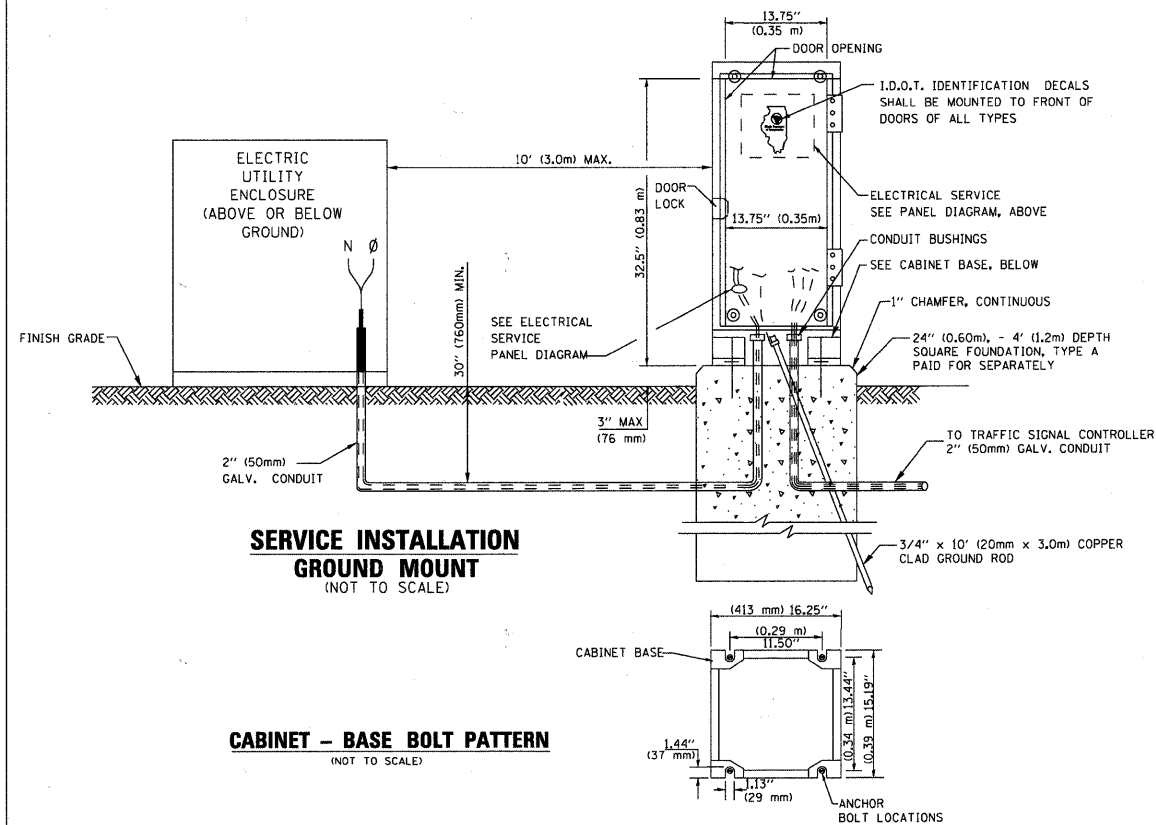
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC DESIGN DETAILS**

SCALE: NONE	SHEET NO. 2 OF 6 SHEETS	STA. TO STA.	F.A.P. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			336	09-00272-01-TL	KANE	68
						64
			ISTD-2	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 63540



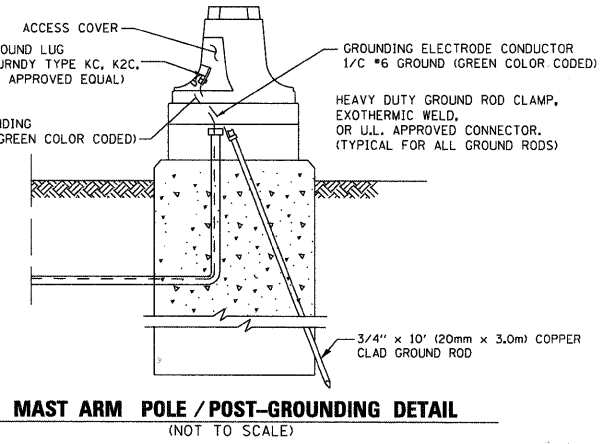
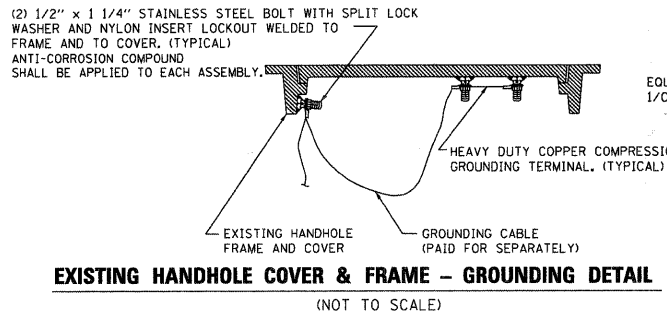
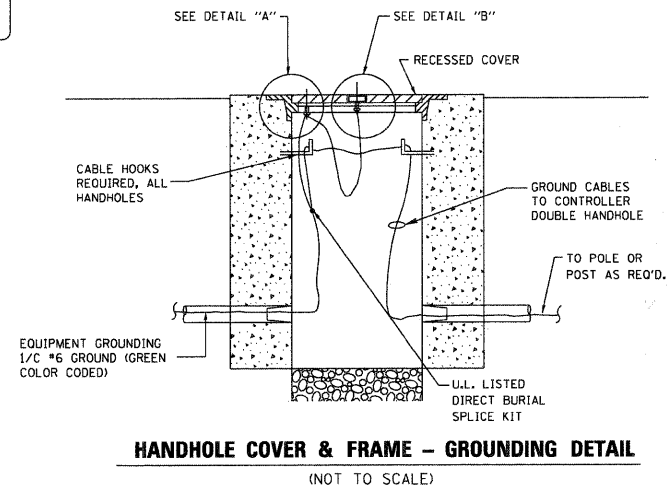
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)



NOTES:

GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



FILE NAME =	USER NAME = *USER*	DESIGNED - DAD	REVISED -
*FILE#		DRAWN - BCK	REVISED -
	PLOT SCALE = *SCALE*	CHECKED - DAD	REVISED -
	PLOT DATE = *DATE*	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		336	09-00272-01-TL	KANE	68	65
SCALE: NONE		SHEET NO. 3 OF 6 SHEETS		CONTRACT NO. 63540		
		STA. TO STA.		ILLINOIS FED. AID PROJECT		



KANE COUNTY
DIVISION OF TRANSPORTATION

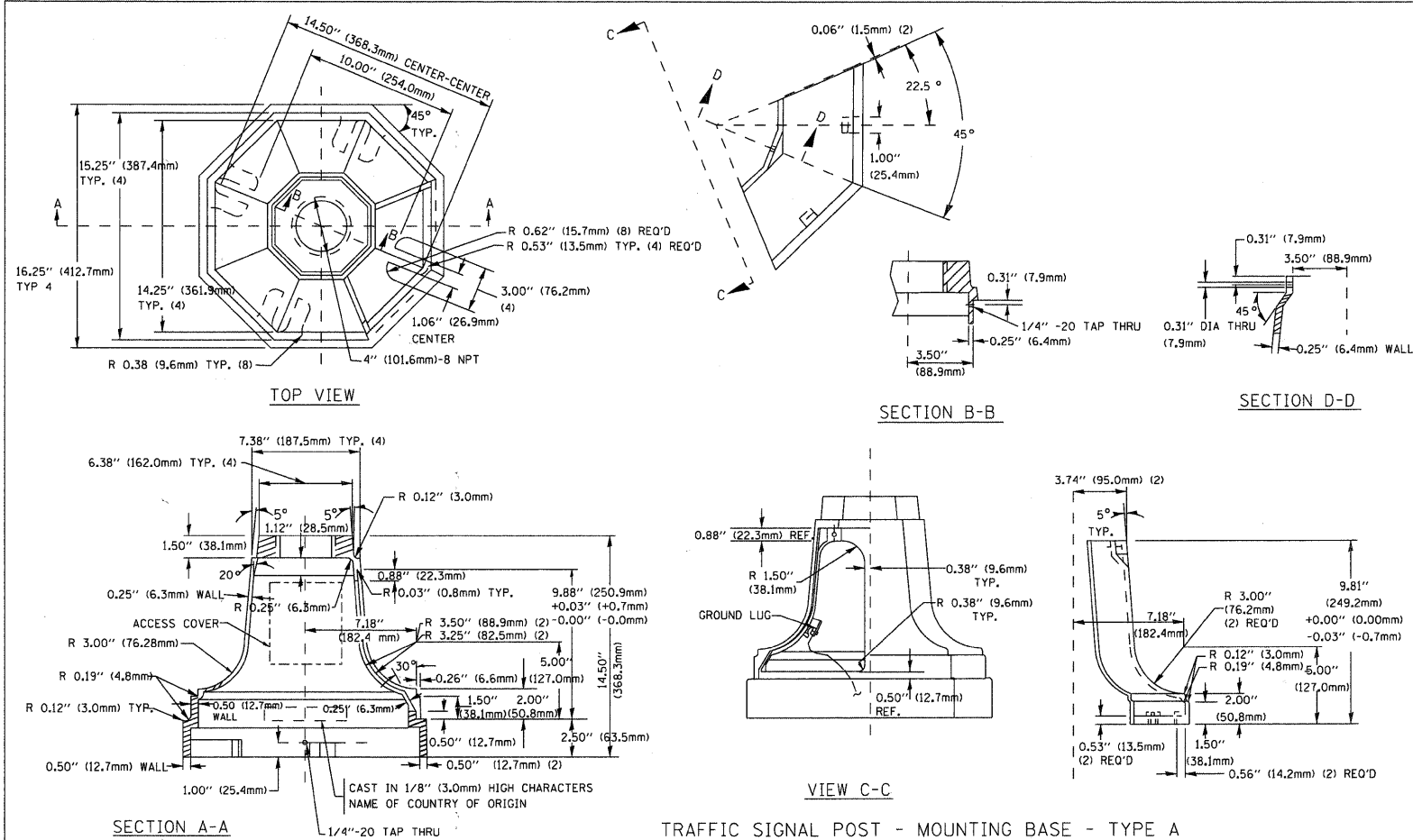
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	DRAWN - JM/SM	REVISED -
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PLOT DATE = 12-21-2010	DATE - 12-21-2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

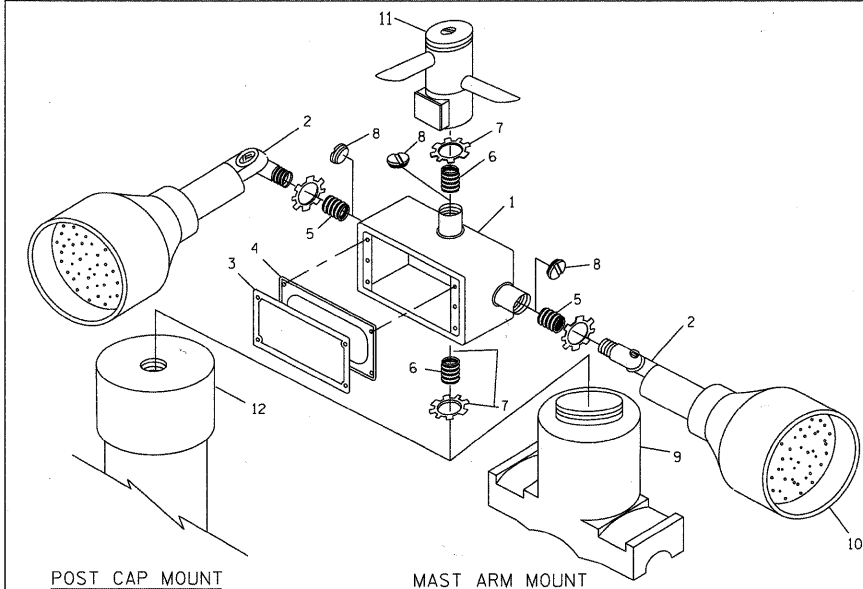
DISTRICT ONE
STANDARD TRAFFIC DESIGN DETAILS

SCALE: NONE	SHEET NO. 3 OF 6 SHEETS	STA. TO STA.
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F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	65
ISTD-3		ILLINOIS FED. AID PROJECT		



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



POST CAP MOUNT

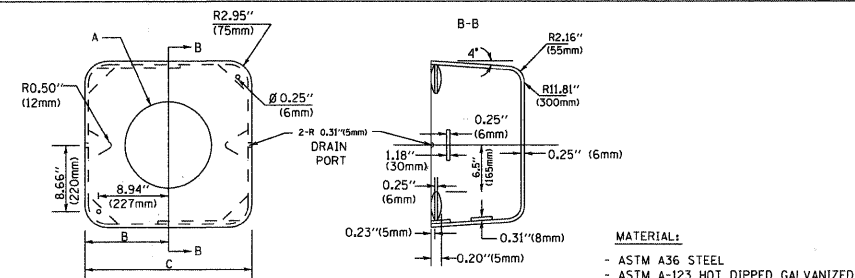
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU. IN. (0.000344 CU. M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	1/4" (19 mm) CLOSE NIPPLE
7	1/4" (19 mm) LOCKNUT
8	1/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEORNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

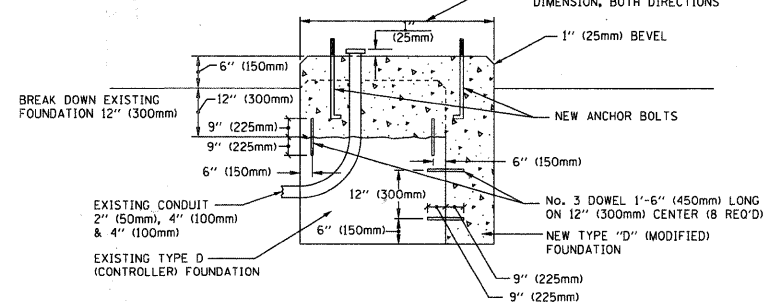
SHROUD

NOTES:

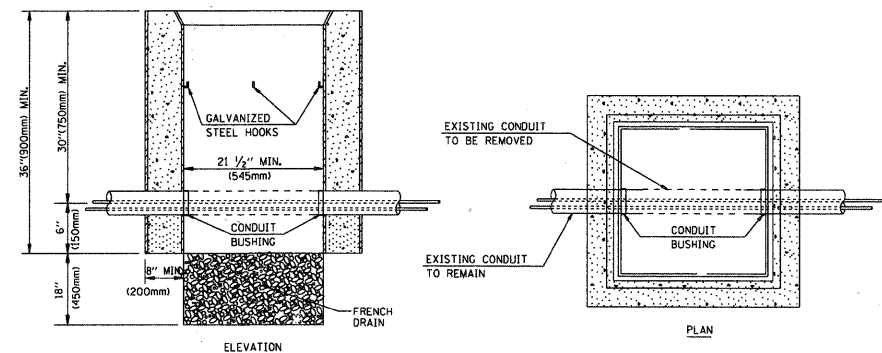
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

FILE NAME =	USER NAME = #USER#	DESIGNED - DAD	REVISED -
#FILE#		DRAWN - BCK	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - DAD	REVISED -
	PLOT DATE = #DATE#	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 4 OF 6 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	66
CONTRACT NO. 63540				



KANE COUNTY
DIVISION OF TRANSPORTATION

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PLOT SCALE = 1" = 50'	CHECKED - DG	REVISED -
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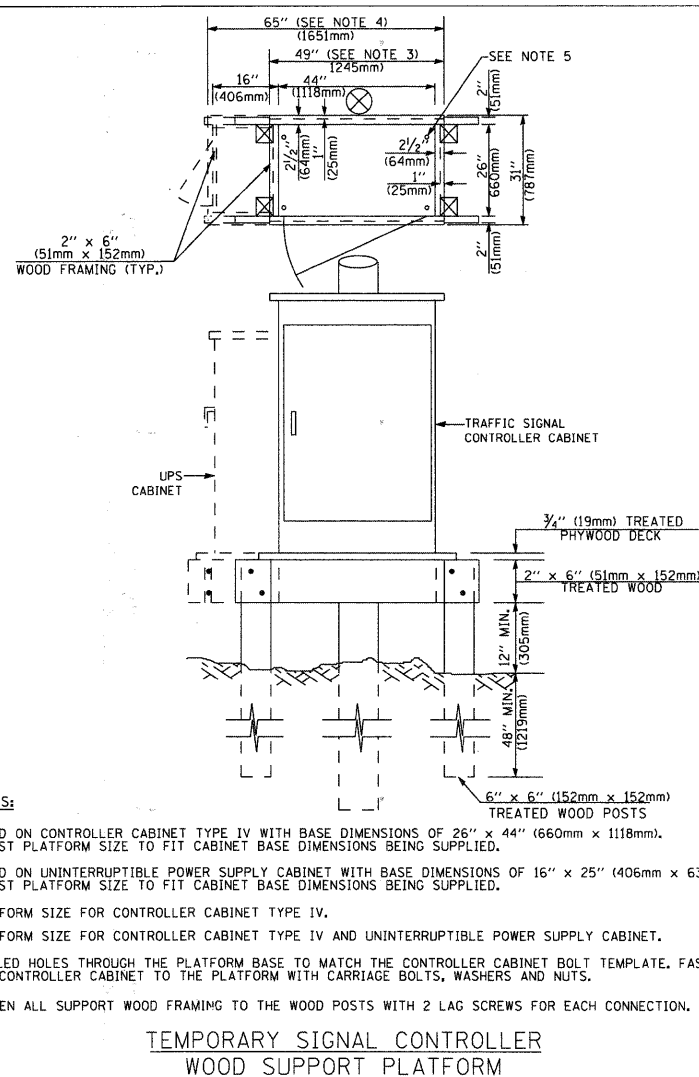
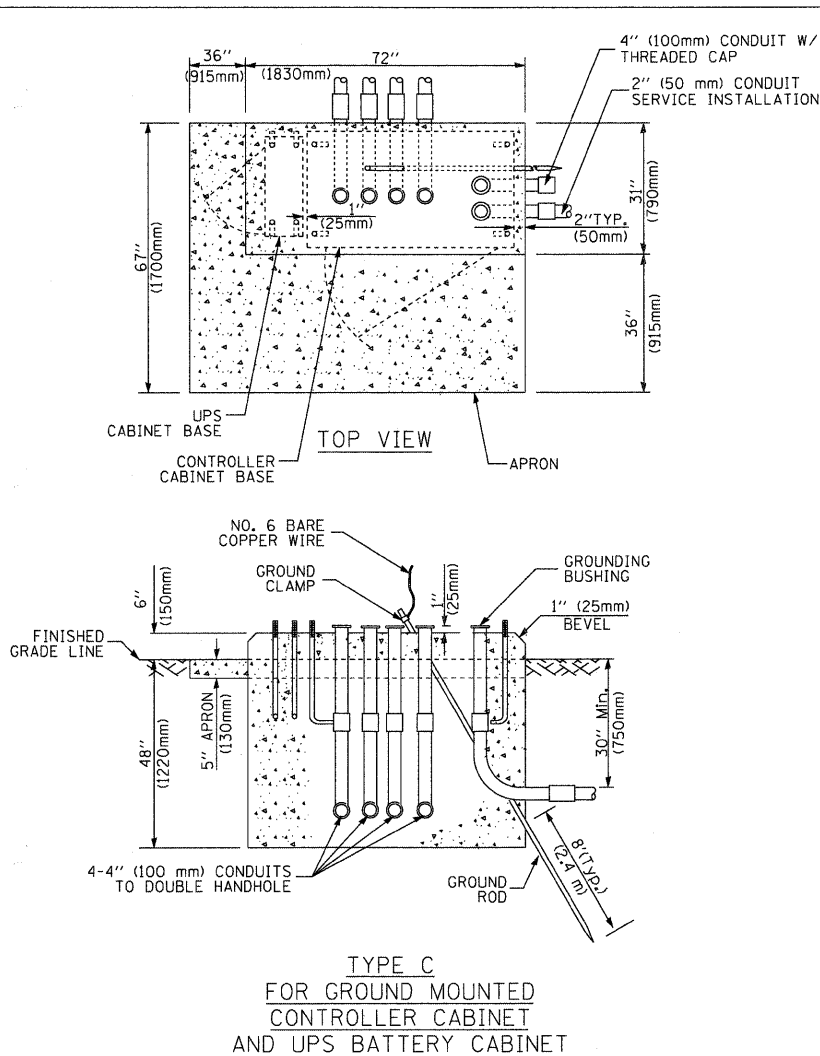
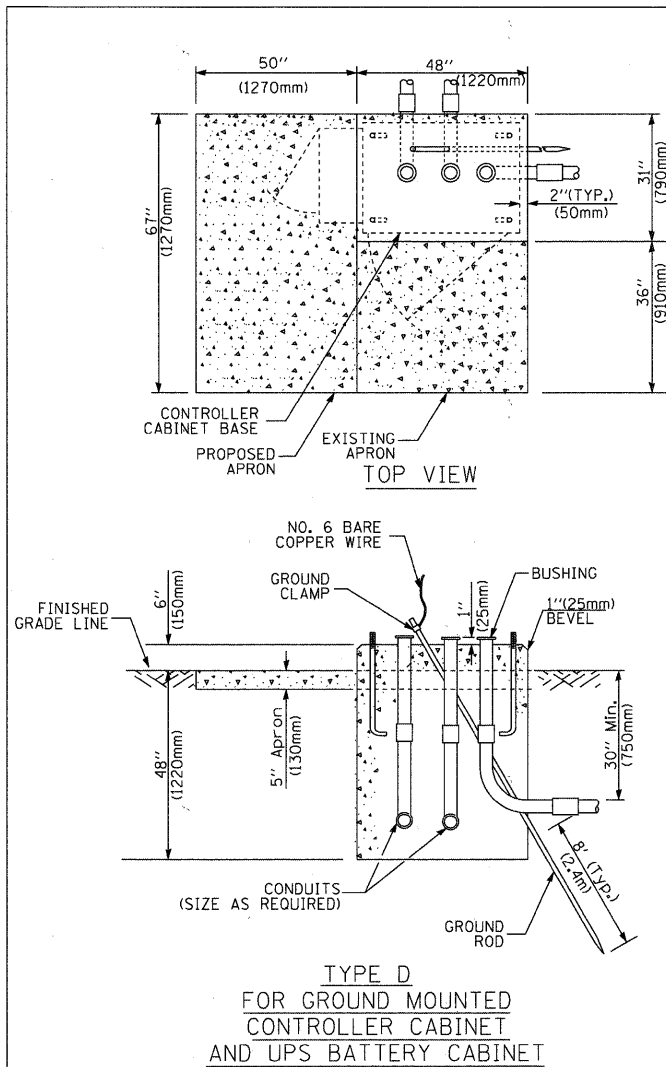
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 4 OF 6 SHEETS STA. TO STA.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	09-00272-01-TL	KANE	68	66
CONTRACT NO. 63540				

ISTD-4 ILLINOIS FED. AID PROJECT



CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average unconfined compressive strength (q_u) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
- Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
- For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = #USER#	DESIGNED - DAG	REVISED -
#FILE#		DRAWN - BCK	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - DAG	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE	SHEET NO. 5 OF 6 SHEETS	STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			TS-05				CONTRACT NO.



KANE COUNTY
DIVISION OF TRANSPORTATION

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE	SHEET NO. 5 OF 6 SHEETS	STA. TO STA.	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			336	09-00272-01-TL	KANE	68	67

ISTD-5 ILLINOIS FED. AID PROJECT
CONTRACT NO. 63540

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET			
RAILROAD CONTROL CABINET			
COMMUNICATIONS CABINET			
MASTER CONTROLLER			
MASTER MASTER CONTROLLER			
UNINTERRUPTIBLE POWER SUPPLY			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT			
STEEL MAST ARM ASSEMBLY AND POLE			
ALUMINUM MAST ARM ASSEMBLY AND POLE			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA			
SIGNAL POST			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM			
GUY WIRE			
SIGNAL HEAD			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			
SIGNAL HEAD WITH BACKPLATE			
SIGNAL HEAD OPTICALLY PROGRAMMED			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)			
PEDESTRIAN SIGNAL HEAD			
PEDESTRIAN PUSHBUTTON DETECTOR			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR			
ILLUMINATED SIGN "NO LEFT TURN"			
ILLUMINATED SIGN "NO RIGHT TURN"			
DETECTOR LOOP, TYPE I			
PERFORMED DETECTOR LOOP			
MICROWAVE VEHICLE SENSOR			
VIDEO DETECTION CAMERA			
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA			
WIRELESS DETECTOR SENSOR			
WIRELESS ACCESS POINT			

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR			
CONFIRMATION BEACON			
HANDHOLE			
HEAVY DUTY HANDHOLE			
DOUBLE HANDHOLE			
JUNCTION BOX			
GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION			
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE			
SIGNAL FACE			
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD			
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER			
RADIO INTERCONNECT			
RADIO REPEATER			
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED			
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)			

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
COAXIAL CABLE			
VENDOR CABLE FOR CAMERA			
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
FIBER OPTIC CABLE NO. 62.5/125, MM12F			
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SAMPLING (SYSTEM) DETECTOR			
EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PREFORMED SAMPLING (SYSTEM) DETECTOR			

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

FILE NAME =	USER NAME = #USER#	DESIGNED - DAG/BCK	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE	SHEET NO. 6 OF 6 SHEETS	STA. TO STA.	F.A.P. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			TS-05	KANE	68	68
						CONTRACT NO. 63540

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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			ISTD-6	KANE	68	68
						CONTRACT NO. 63540

KANE COUNTY
DIVISION OF TRANSPORTATION

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