

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	1
		ILLINOIS	CONTRACT NO. 68G19	

INDEX OF SHEETS:  
SEE SHEET 2 FOR INDEX OF SHEETS

PROPOSED  
HIGHWAY PLANS

VARIOUS ROUTES  
SECTION D4 ITS SYSTEM 2021

VARIOUS COUNTIES

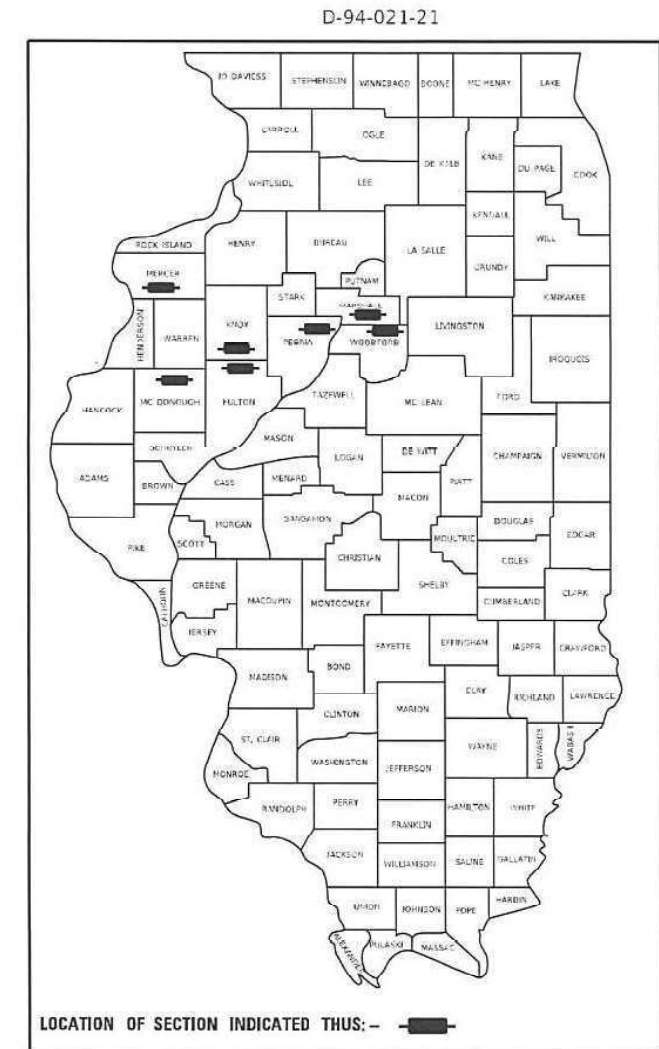
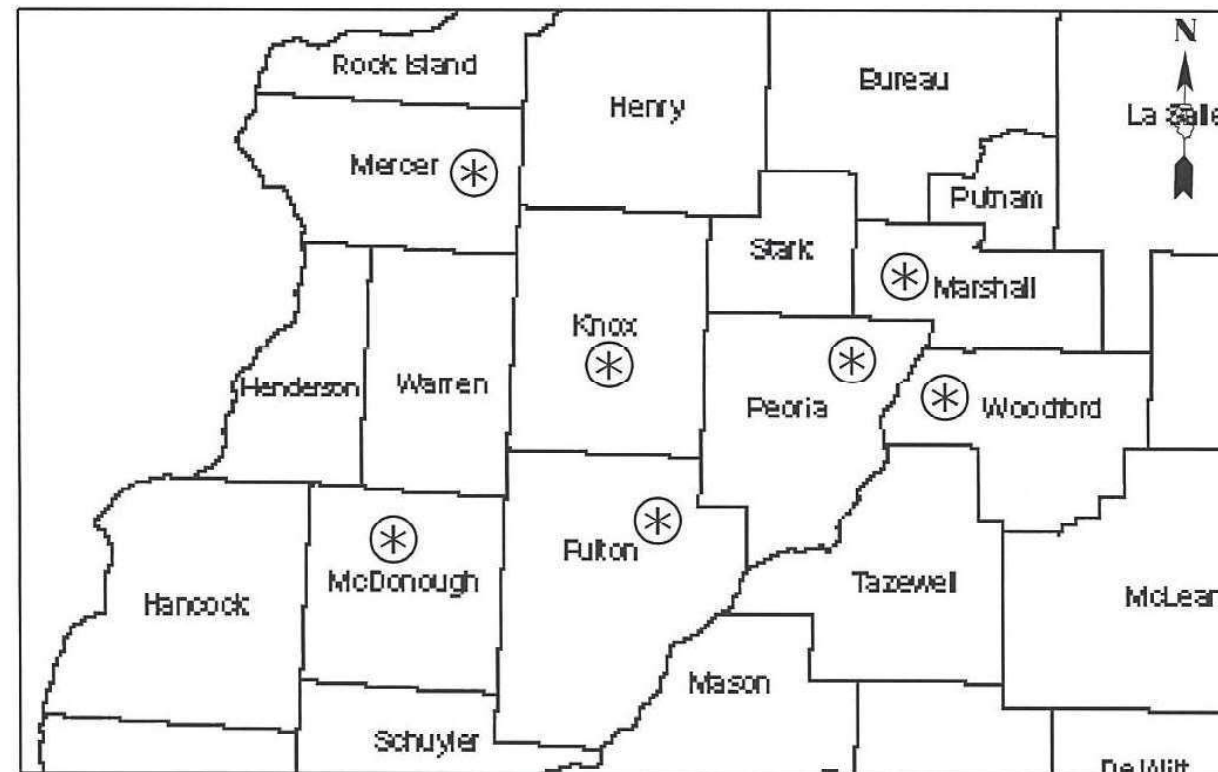
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HIGHWAY STANDARDS:  
SEE SHEET 2 FOR A LIST OF  
APPLICABLE HIGHWAY STANDARDS

PROJECT DESCRIPTION:  
INSTALLATION OF NEW TRAFFIC SIGNAL  
CABINETS, TRAFFIC SIGNAL CONTROLLERS,  
COMMUNICATIONS EQUIPMENT, AND VIDEO  
DETECTION SYSTEMS AT VARIOUS LOCATIONS  
IN DISTRICT FOUR.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS  
1-800-892-0123  
OR 811

PROJECT ENGINEER : ERIC HOWALD (309) 671-4481  
PROJECT MANAGER : BEN TELLEFSON (309) 671-4477  
CATALOG NO. 036151-00D  
CONTRACT NO. 68G19



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED February 2, 2021  
*Ben Tellefson*  
REGIONAL ENGINEER

March 19, 2021  
*Eric Howald*  
ENGINEER OF DESIGN AND ENVIRONMENT

March 19, 2021  
*James J. ...*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

NO COMMITMENTS HAVE BEEN MADE IN CONJUNCTION WITH THIS PROJECT.

INDEX OF SHEETS	
SHEET	DESCRIPTION
1	COVER SHEET
2	COMMITMENTS, INDEX OF SHEETS, AND HIGHWAY STANDARDS
3	CONSTRUCTION NOTES
4	SUMMARY OF QUANTITIES
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11	FIBER OPTIC CABLE INSTALLATION DIAGRAM
12 - 15	PROPOSED TRAFFIC SIGNAL CONTROLLER PHASE DIAGRAMS AND INSTALLATION NOTES

HIGHWAY STANDARDS	
STANDARD	APPLICATION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES

701001-02

701006-05

701106-02

FIBER OPTIC CABLE SLACK
HANDHOLE: 10.0 FT.
DOUBLE HANDHOLE: 30.0 FT.
COMMUNICATIONS VAULT: 200.0 FT.
TRAFFIC SIGNAL CABINET: 10.0 FT.

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

COMMITMENTS, INDEX OF SHEETS, AND HIGHWAY STANDARDS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	2
			CONTRACT NO. 68G19	
			ILLINOIS FED. AID PROJECT	

**CONSTRUCTION NOTES**

1. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.
3. ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.
4. THE LOCATIONS FOR COMMUNICATIONS VAULTS ARE PROVIDED FOR REFERENCE ONLY. THE ENGINEER OF TRAFFIC SHALL BE NOTIFIED FOR LOCATION VERIFICATION BEFORE INSTALLATION.
5. ALL EXISTING IDOT ELECTRIC FACILITIES SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED CONDUIT AND FIBER OPTIC CABLE.
6. THE CONTRACTOR SHALL PROVIDE ELECTRICAL CABLE SLACK IN ACCORDANCE WITH ARTICLE 873.03.
7. REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK, PAVEMENT, AND CONCRETE ISLANDS FOR UTILITY LOCATING PURPOSES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE CONDUIT PAY ITEM.
8. POTHOLING TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE CONDUIT PAY ITEM.
9. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
10. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 24" MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THIS COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE FOR THE CONDUIT.
12. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BIDDING. THERE WILL BE NO ADDITIONAL COMPENSATION PAID FOR CLAIMS THAT ARISE FROM A FAILURE TO FULLY INVESTIGATE EXISTING FIELD CONDITIONS.
13. REMOVAL OF EXISTING TRAFFIC SIGNAL COMPONENTS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES FOR THE PROPOSED ITEMS.
14. THERE SHALL BE NO ADDITIONAL SPLICES IN THE FIBER OPTIC CABLE EXCEPT WHERE NOTED IN THE PLANS, OR UPON APPROVAL OF THE TRAFFIC ENGINEER.
15. COMMUNICATIONS VAULTS SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE SURFACE OF THE MEDIAN, SIDEWALK, OR GROUNDLINE.
16. COILABLE POLYETHYLENE DUCT MAY BE SUBSTITUTED FOR PVC PUSHED OR TRENCHED.
17. THE CONTRACTOR SHALL INSTALL A #12 (XLP-TYPE USE OR THHN) TRACER WIRE ALONG WITH THE FIBER OPTIC CABLE FOR LOCATING PURPOSES. THE TRACER WIRE SHALL BE CONTINUOUS AND BE ACCESSIBLE FROM COMMUNICATION VAULTS, HANDHOLES, AND TRAFFIC SIGNAL CABINETS. THE COST OF FURNISHING AND INSTALLING THE TRACER WIRE SHALL BE INCLUDED IN THE BID PRICE FOR
18. ALL COMMUNICATION DUCT SHALL BE INSTALLED AND PAID FOR IN ACCORDANCE WITH SECTION 810 "UNDERGROUND RACEWAYS" OF THE STANDARD SPECIFICATIONS.
19. THE LOCATION OF THE PROPOSED CONDUIT AS SHOWN ON THE PLAN SHEETS IS APPROXIMATE AND NOT DRAWN TO SCALE. CONDUIT SHALL BE INSTALLED UNDER THE EXISTING SIDEWALK WHEN POSSIBLE. THE CONDUIT SHALL BE INSTALLED AT A 24" MINIMUM DEPTH EXCEPT WHEN CROSSING WATERWAYS AND DRAINAGE FLOW LINES WHERE IT SHALL BE INSTALLED AT A 60" DEPTH.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING DRAINAGE STRUCTURES. THE CONTRACTOR SHALL MAKE AN EFFORT TO MINIMIZE DAMAGE TO THESE FACILITIES DURING THE INSTALLATION OF CONDUIT AND COMMUNICATION VAULTS. IN THE EVENT THAT THESE FACILITIES ARE DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING REPAIRS TO THESE ITEMS AND RESTORING FUNCTIONALITY TO THE SATISFACTION OF THE ENGINEER.
21. THE CONTRACTOR SHALL PLAN AND CONDUCT COMMUNICATIONS VAULT, CONDUIT AND FIBER OPTIC CABLE INSTALLATION OPERATIONS TO MINIMIZE THE NUMBER OF ROAD LANE CLOSURES AND TO MINIMIZE TRAFFIC DISRUPTIONS AND DELAYS FOR THE MOTORING PUBLIC.
22. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR INSTALLING COMMUNICATIONS DUCT AND COMMUNICATIONS VAULTS UNDER AND ALONG STATE, CITY, AND TOWNSHIP ROADWAYS.
23. ALL CCTV CAMERAS SHALL BE INSTALLED AT A MINIMUM MOUNTING HEIGHT OF 43 FT.
24. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS BY GRADING AND SEEDING. THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE PROPOSED CONDUIT.
25. ALL TERMINATED FIBERS SHALL BE Laterally Spliced Inside Communications Vaults and Handholes. All unused fibers and buffer tubes shall remain intact for future use.
26. THE DEPARTMENT WILL PROGRAM THE TRAFFIC SIGNAL CONTROLLERS PRIOR TO INSTALLATION IN THE FIELD.
27. THE TRAFFIC SIGNAL CONTROLLER AND CABINET SHALL BE ORIENTED SO THAT THE DOOR IS FACING AWAY FROM TRAFFIC.
28. THE CONTRACTOR SHALL REMOVE THE EXISTING TRAFFIC SIGNAL CABINET AND PERIPHERAL EQUIPMENT FROM THE LOCATIONS AS LISTED IN THE PLANS AND DELIVER THEM TO THE IDOT TRAFFIC BUILDING AT 1025 W. DETWEILLER DR. PEORIA, IL 61615.
29. THE CONTRACTOR SHALL REMOVE EXISTING BATTERY BACKUP SYSTEM CABINETS AND COMPONENTS FROM EXISTING TRAFFIC SIGNAL CONTROLLER CABINETS AND INSTALL THEM IN THE PROPOSED CONTROLLER CABINETS AT EACH LOCATION. THIS WORK SHALL BE INCLUDED IN THE BID PRICE OF THE PROPOSED TRAFFIC SIGNAL CABINETS.
30. THE CONTRACTOR SHALL FURNISH AND INSTALL A MINIMUM OF TWO STOP SIGNS PER APPROACH WHEN THE INTERSECTION IS OPERATING IN ALL-RED FLASH MODE OR ALL-WAY STOP CONTROL FOR TIME PERIODS IN EXCESS OF FIFTEEN MINUTES. THE STOP SIGNS SHALL BE DISPLAYED IN ACCORDANCE WITH ALL APPLICABLE MUTCD REQUIREMENTS. ALL COSTS (LABOR, MATERIALS, AND EQUIPMENT) ASSOCIATED WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE PROPOSED TRAFFIC SIGNAL CABINETS AND CONTROLLERS. THERE WILL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.

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DEPARTMENT OF TRANSPORTATION

CONSTRUCTION NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	3
			CONTRACT NO. 68G19	
		ILLINOIS	FED. AID PROJECT	

**SUMMARY OF QUANTITIES**

SUMMARY OF QUANTITIES				VARIOUS COUNTIES	FULTON COUNTY				KNOX COUNTY			MCDONOUGH COUNTY			
				CONST. TYPE CODE 0021 100% STATE 0% COUNTY ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 95% STATE 5% CANTON ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 93.3% STATE 6.7% CANTON ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 90% STATE 10% CANTON ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 90% STATE 10% ABINGDON ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 100% STATE 0% GALESBURG ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 90% STATE 10% GALESBURG ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 90% STATE 10% GOOD HOPE ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 100% STATE 0% MACOMB ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 90% STATE 10% MACOMB ITS / SIGNALS URBAN	CONST. TYPE CODE 0021 80% STATE 20% MACOMB ITS / SIGNALS URBAN	
ITEM CODE	ITEM DESCRIPTION	UNIT	TOTAL QTY.												
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	170.0	170											
44000600	SIDEWALK REMOVAL	SQ FT	200.0	200											
67100100	MOBILIZATION	L SUM	1.0	0.3			0.2	0.1	0.1		0.1		0.2		
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	4670.0	4670.0											
87900200	DRILL EXISTING HANDHOLE	EACH	5.0	5.0											
X0320023	CLOSED CIRCUIT TELEVISION DOME CAMERA, HD	EACH	4.0	4.0											
X0323071	SPARE FULL ACTUATED CONTROLLER, SPECIAL	EACH	10.0	10.0											
X0326266	ETHERNET SWITCH	EACH	7.0							7.0					
X0327739	MISCELLANEOUS ELECTRICAL WORK	L SUM	1.0	1.0											
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	0.3			0.2	0.1	0.1		0.1		0.2		
X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	12.0	3.0						6.0			3.0		
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	7.0				2.0	1.0	1.0		1.0		2.0		
X8710030	FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	7274.0	7274.0											
X8710050	FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	25.0	9.0	1.0	1.0	5.0	1.0	1.0		1.0	1.0	5.0		
Z0033052	COMMUNICATIONS VAULT	EACH	5.0	5.0											
Z0033072	VIDEO VEHICLE DETECTION SYSTEM	EACH	2.0										1.0	1.0	

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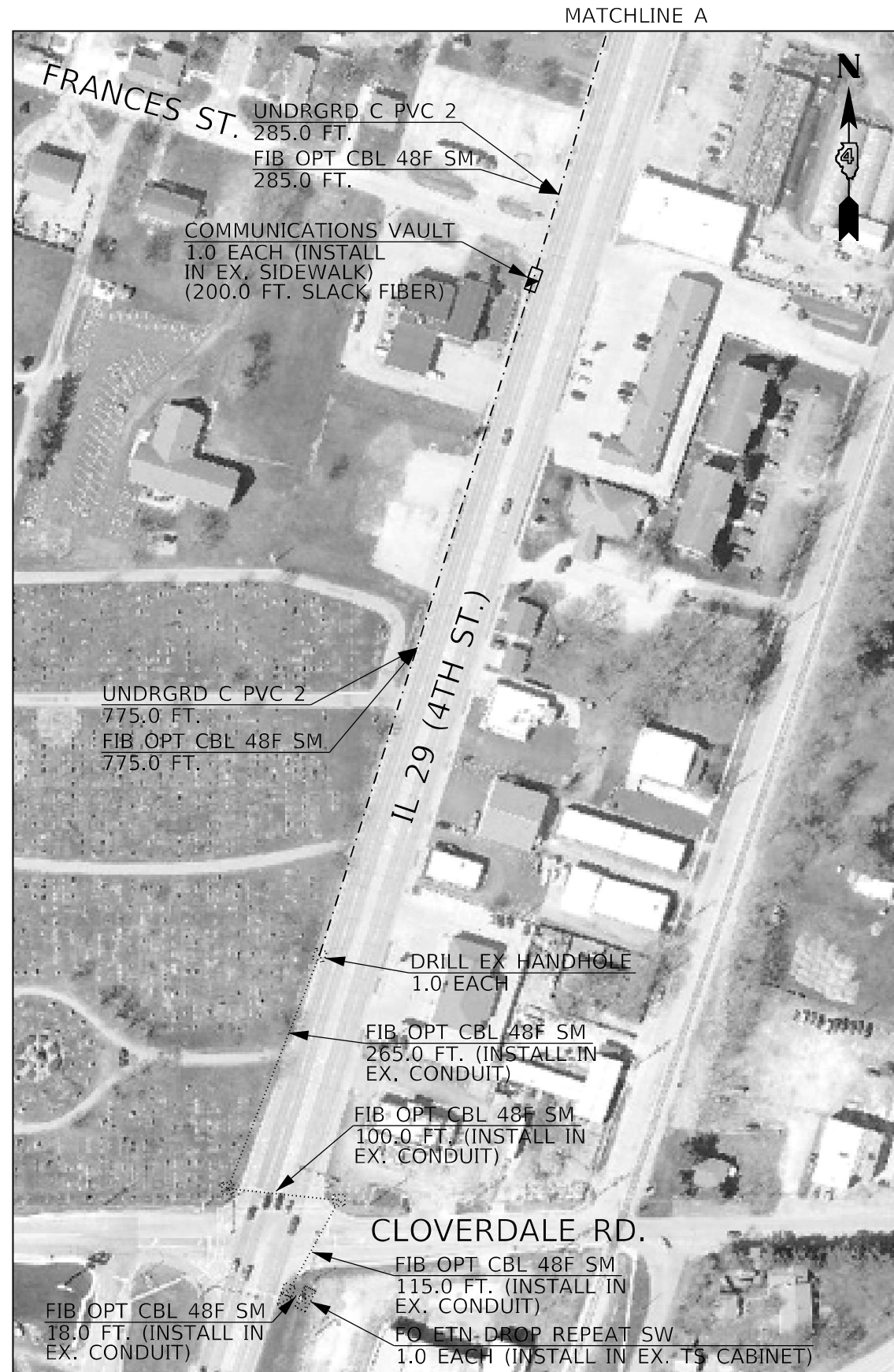
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DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68G19	







BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	34.0
SIDEWALK REMOVAL	SQ FT	40.0
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1060.0
DRILL EXISTING HANDHOLE	EACH	1.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	1831.0
FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	1.0
COMMUNICATIONS VAULT	EACH	1.0

LEGEND

- EXISTING TRAFFIC SIGNAL CABINET
- EXISTING DOUBLE HANDHOLE
- EXISTING HANDHOLE
- PROPOSED FIBER OPTIC CABLE IN EX. CONDUIT
- PROPOSED COMMUNICATIONS VAULT
- PROPOSED FIBER OPTIC CABLE IN PROP. CONDUIT

REFER TO PLAN SHEET 10 FOR DETAILS ON COMMUNICATIONS VAULT INSTALLATION

NOT TO SCALE

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED FIBER OPTIC INSTALLATION  
IL 29 (4TH ST.) - CHILLICOTHE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	6
			CONTRACT NO. 68G19	
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BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	68.0
SIDEWALK REMOVAL	SQ FT	80.0
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1540.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	1940.0
COMMUNICATIONS VAULT	EACH	2.0

- LEGEND
- PROPOSED COMMUNICATIONS VAULT
  - PROPOSED FIBER OPTIC CABLE IN PROP. CONDUIT

REFER TO PLAN SHEET 10 FOR DETAILS ON COMMUNICATIONS VAULT INSTALLATION

NOT TO SCALE

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE:		SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	7
			CONTRACT NO. 68G19	
ILLINOIS FED. AID PROJECT				



BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1075.0
DRILL EXISTING HANDHOLE	EACH	2.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	1529.0
FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	1.0

LEGEND

- EXISTING TRAFFIC SIGNAL CABINET
- EXISTING DOUBLE HANDHOLE
- EXISTING HANDHOLE
- PROPOSED FIBER OPTIC CABLE IN EX. CONDUIT
- PROPOSED FIBER OPTIC CABLE IN PROP. CONDUIT

REFER TO PLAN SHEET 10 FOR DETAILS ON COMMUNICATIONS VAULT INSTALLATION

NOT TO SCALE

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE:		SHEET	OF	SHEETS	STA.	TO	STA.
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PROPOSED FIBER OPTIC INSTALLATION  
IL 29 (4TH ST.) - CHILLICOTHE (CONTINUED)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	8
			CONTRACT NO. 68G19	
		ILLINOIS	FED. AID PROJECT	





MATCHLINE C

BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	68.0
SIDEWALK REMOVAL	SQ FT	80.0
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	995.0
DRILL EXISTING HANDHOLE	EACH	2.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	1960.0
FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	1.0
COMMUNICATIONS VAULT	EACH	2.0

LEGEND

- EXISTING TRAFFIC SIGNAL CABINET
- EXISTING DOUBLE HANDHOLE
- EXISTING HANDHOLE
- PROPOSED FIBER OPTIC CABLE IN EX. CONDUIT
- PROPOSED COMMUNICATIONS VAULT
- PROPOSED FIBER OPTIC CABLE IN PROP. CONDUIT

REFER TO PLAN SHEET 10 FOR DETAILS ON COMMUNICATIONS VAULT INSTALLATION

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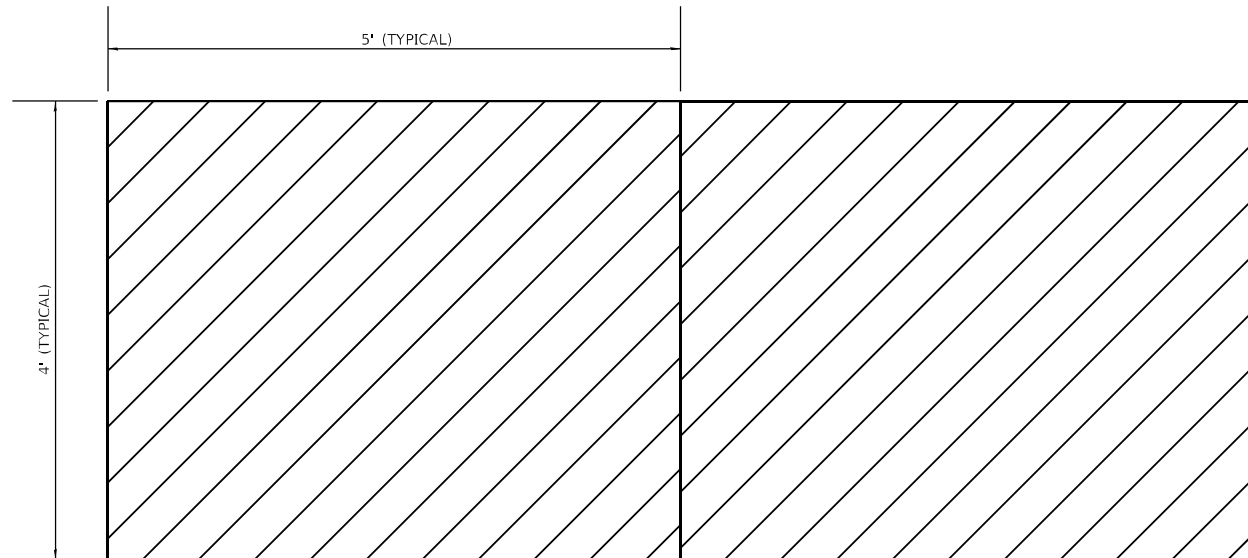
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SCALE:		SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	9
CONTRACT NO. 68G19				
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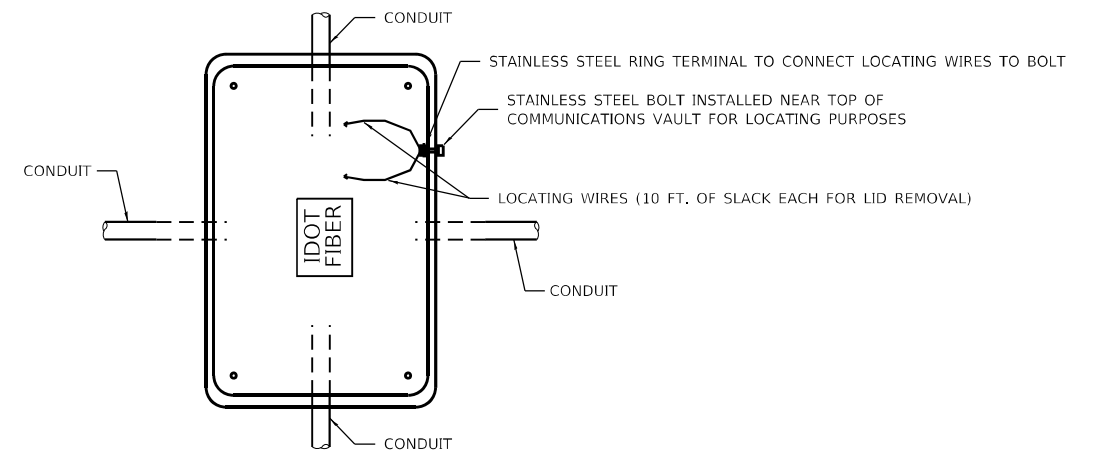
PROPOSED FIBER OPTIC INSTALLATION  
IL 29 (4TH ST.) - CHILlicothe (CONTINUED)

**SIDEWALK REMOVAL FOR PROPOSED COMMUNICATIONS VAULT**



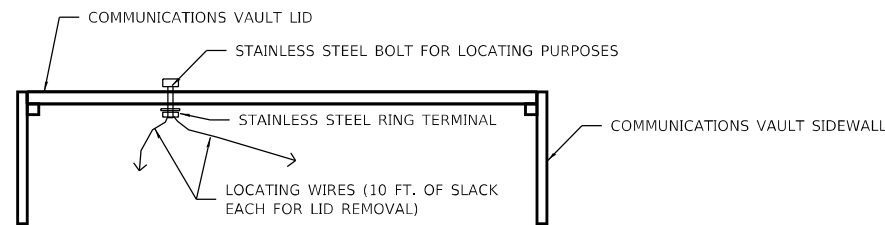
NOTES:  
 1. THE CONTRACTOR SHALL REMOVE TWO (2) PANELS OF SIDEWALK (40 SQ FT) TO ACCOMODATE PROPOSED HANDHOLE/ COMMUNICATIONS VAULT AND CONDUIT INSTALLATION.

**PROPOSED COMMUNICATIONS VAULT INSTALLATION (NON-SIDEWALK)**



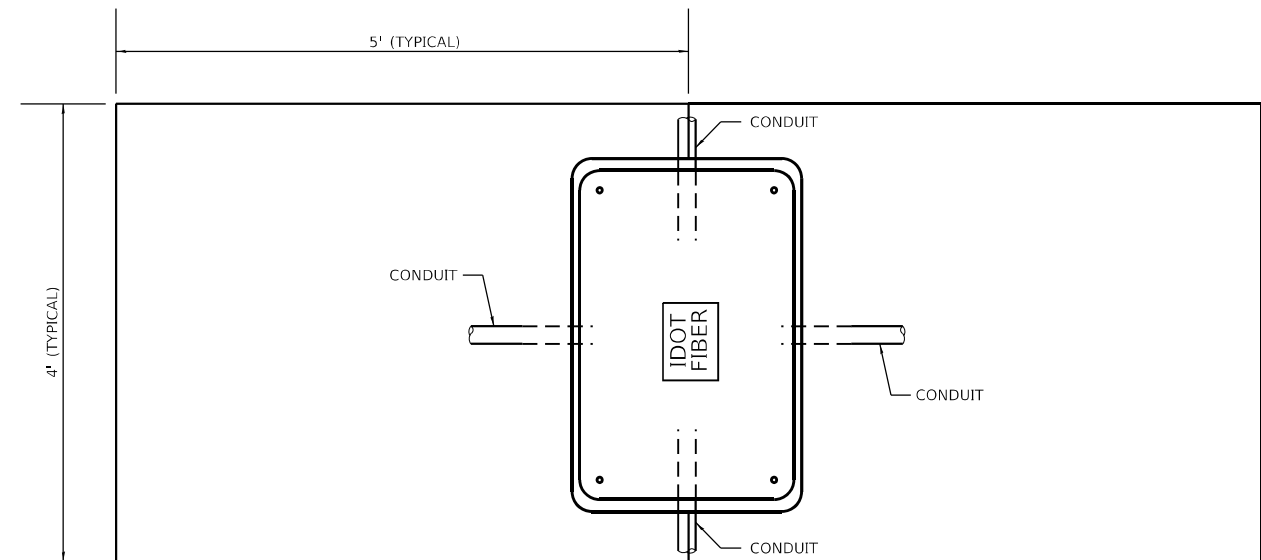
NOTES:  
 1. COMMUNICATIONS VAULT LOCATIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER OF TRAFFIC PRIOR TO INSTALLATION.  
 2. LOCATING WIRES MUST BE ACCESSIBLE FROM OUTSIDE COMMUNICATIONS VAULT. THE CONTRACTOR SHALL DRILL A HOLE THROUGH THE COMMUNICATIONS VAULT SIDEWALL 1" BELOW THE LID AND INSTALL A 3/8" STAINLESS STEEL BOLT WITH LOCK NUT THROUGH THE HOLE. THE CONTRACTOR SHALL ATTACH BOTH OF THE LOCATING WIRES (10 FT. OF SLACK FOR EACH WIRE) TO THE STAINLESS STEEL BOLT TO PROVIDE EXTERNAL ACCESS TO LOCATING WIRES.

**COMMUNICATIONS VAULT LID DETAIL FOR SIDEWALK LOCATIONS**



NOTES:  
 1. LOCATING WIRES SHALL BE ACCESSIBLE FROM OUTSIDE COMMUNICATIONS VAULT. THE CONTRACTOR SHALL DRILL A HOLE THROUGH THE COMMUNICATIONS VAULT LID AWAY FROM THE EDGES AND INSTALL A3/8" STAINLESS STEEL BOLT WITH LOCK NUT THROUGH THE HOLE. THE CONTRACTOR SHALL ATTACH BOTH OF THE LOCATING WIRES (10 FT. OF SLACK FOR EACH WIRE) TO THE STAINLESS STEEL BOLT TO PROVIDE EXTERNAL ACCESS TO LOCATING WIRES.

**PROPOSED COMMUNICATIONS VAULT INSTALLATION (SIDEWALK)**



NOTES:  
 1. COMMUNICATIONS VAULT CANNOT BE INSTALLED MONOLITHICALLY WITHIN SIDEWALK.  
 2. COMMUNICATIONS VAULT LOCATIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER OF TRAFFIC PRIOR TO INSTALLATION.  
 3. THE CONTRACTOR SHALL BACKFILL WITH CONTROLLED LOW STRENGTH MATERIAL TO PREVENT SETTLEMENT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED COMMUNICATIONS VAULT.  
 4. THE CONTRACTOR SHALL REPLACE TWO PANELS OF PCC SIDEWALK (33.75 SQ FT.)

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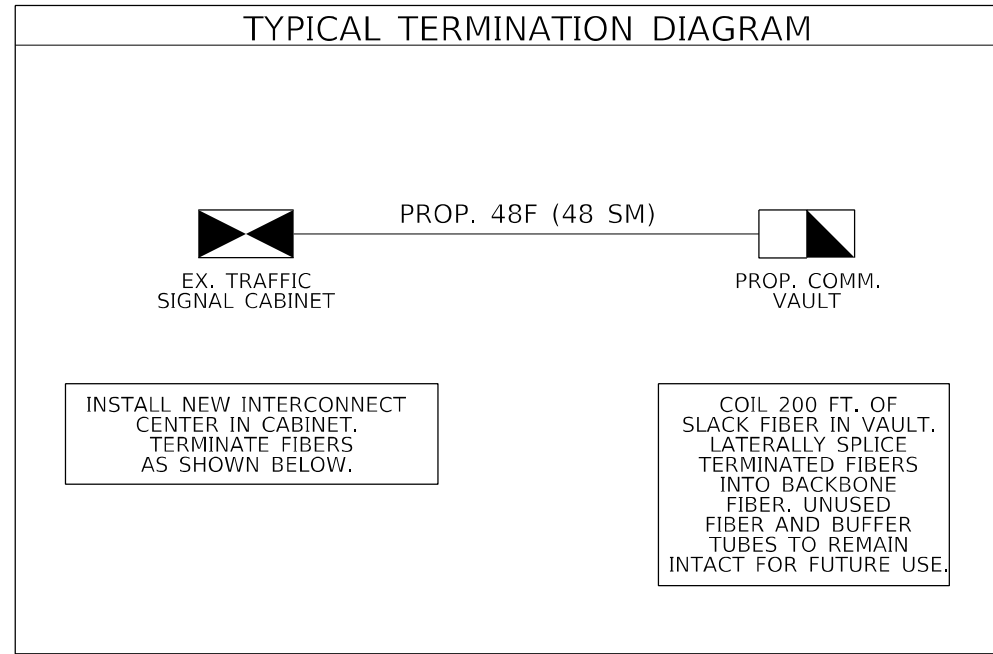
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COMMUNICATIONS VAULT INSTALLATION DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	10
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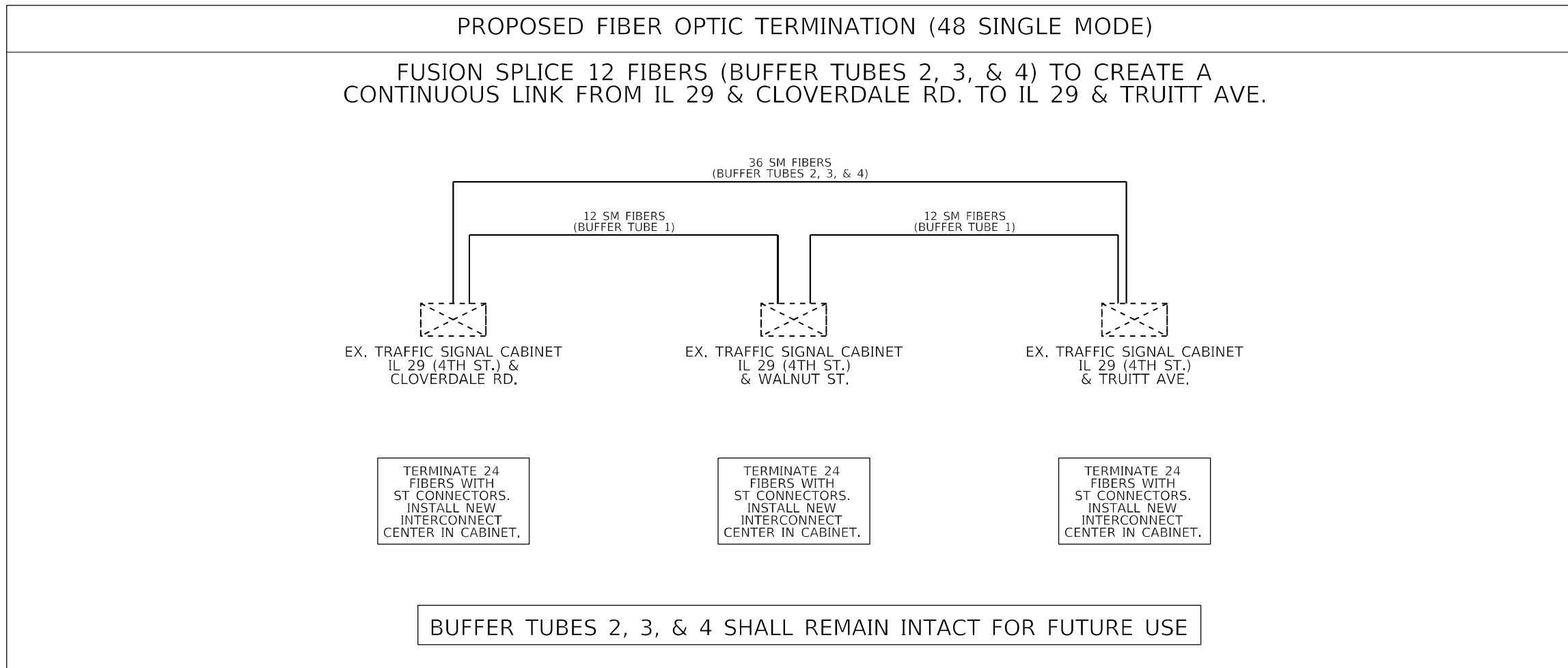
TYPICAL TERMINATION DIAGRAM



FIBER OPTIC CABLE TERMINATION NOTES (SINGLE MODE FIBER OPTIC CABLE)

1. THE PROPOSED FIBER OPTIC CABLE SHALL BE TERMINATED AS SHOWN ON THE FIBER OPTIC LINE/ TERMINATION DIAGRAM.
2. ALL CABLE SPLICES AND TERMINATIONS SHALL BE FUSION SPLICED.
3. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR FIBER OPTIC CABLE TERMINATION, INCLUDING, BUT NOT LIMITED TO, BREAKOUT KITS, FANOUT KITS, ENCLOSURES, WEATHERPROOF SPLICE BOOTS, SPLICE SLEEVES, CONNECTORS, ETC.
4. ALL FIBER CONNECTORS SHALL BE FUSION SPLICED UTILIZING PRE-FORMED CABLES WITH CONNECTORS THAT ARE FUSION SPLICED TO THE PROPOSED FIBER.
5. ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE BID PRICE FOR THE PROPOSED FIBER OPTIC CABLE. THERE WILL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.
6. ALL TERMINATED FIBERS SHALL BE LATERALLY SPLICED INSIDE COMMUNICATION VAULTS AND HANDHOLES.
7. ALL UNUSED FIBERS AND BUFFER TUBES SHALL REMAIN INTACT FOR FUTURE USE.

PROPOSED FIBER OPTIC TERMINATION (48 SINGLE MODE)



NOT TO SCALE

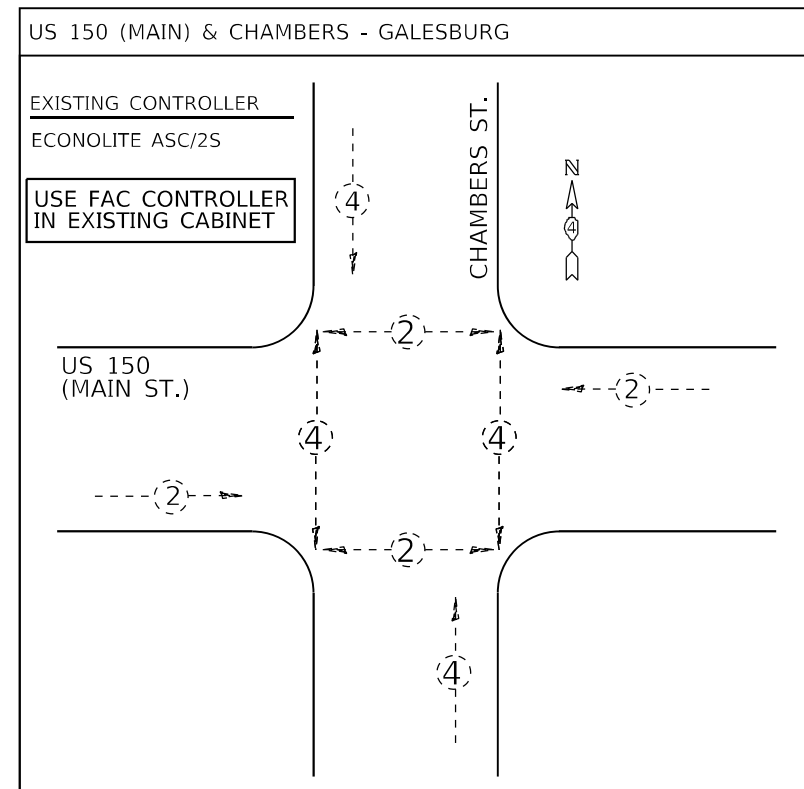
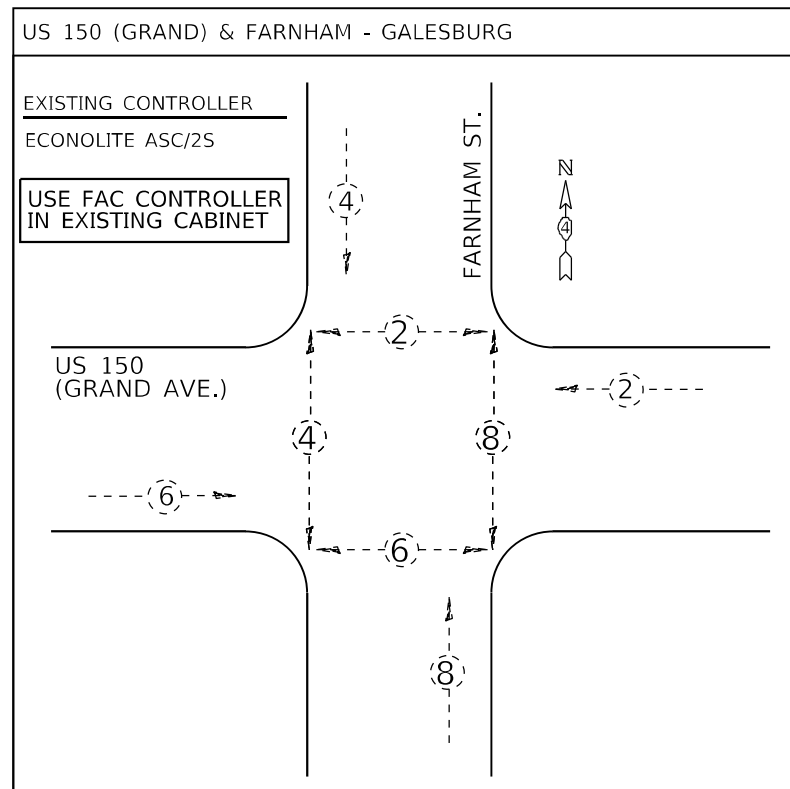
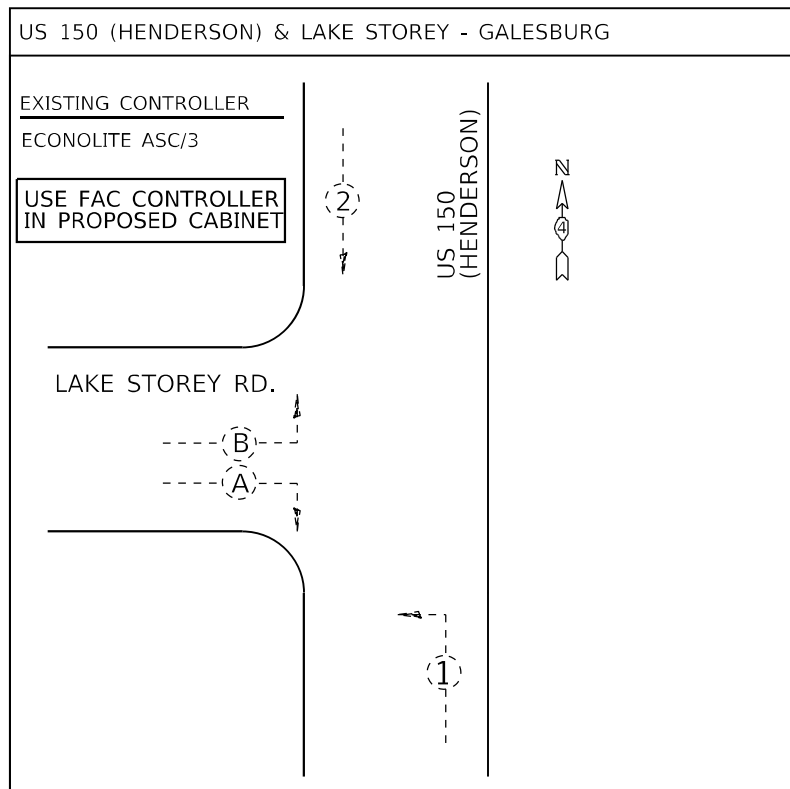
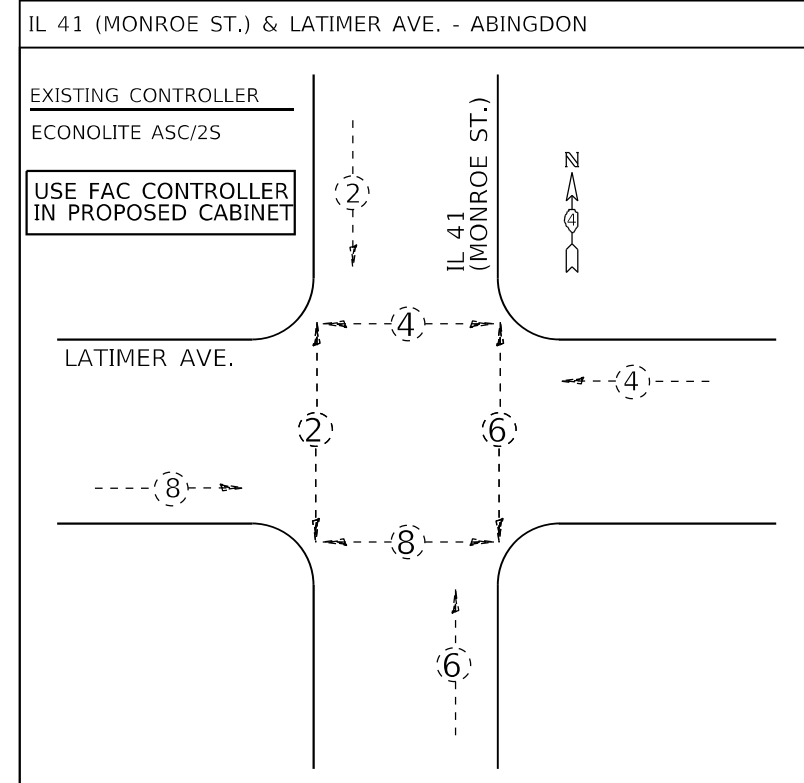
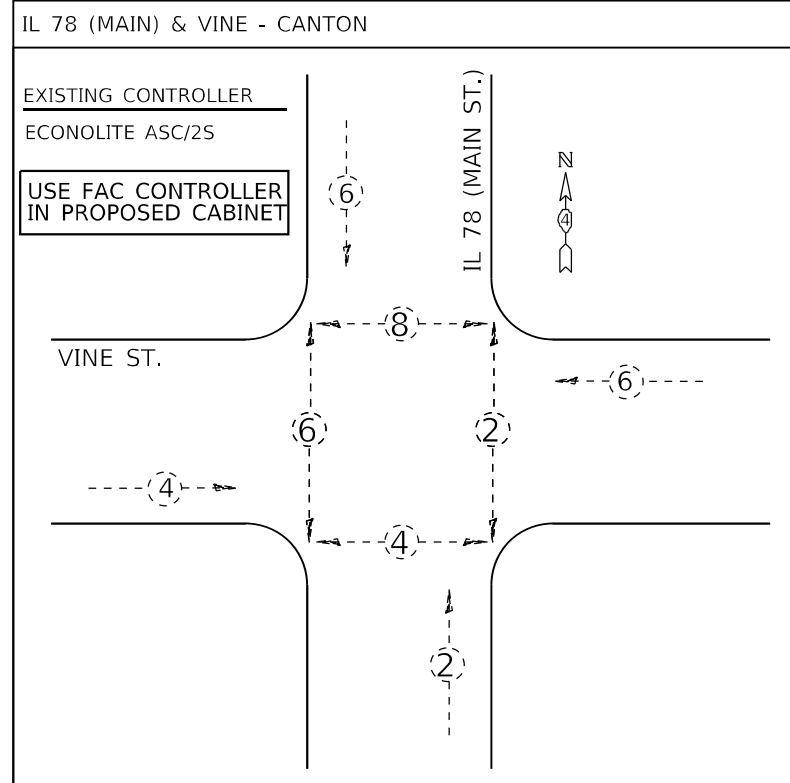
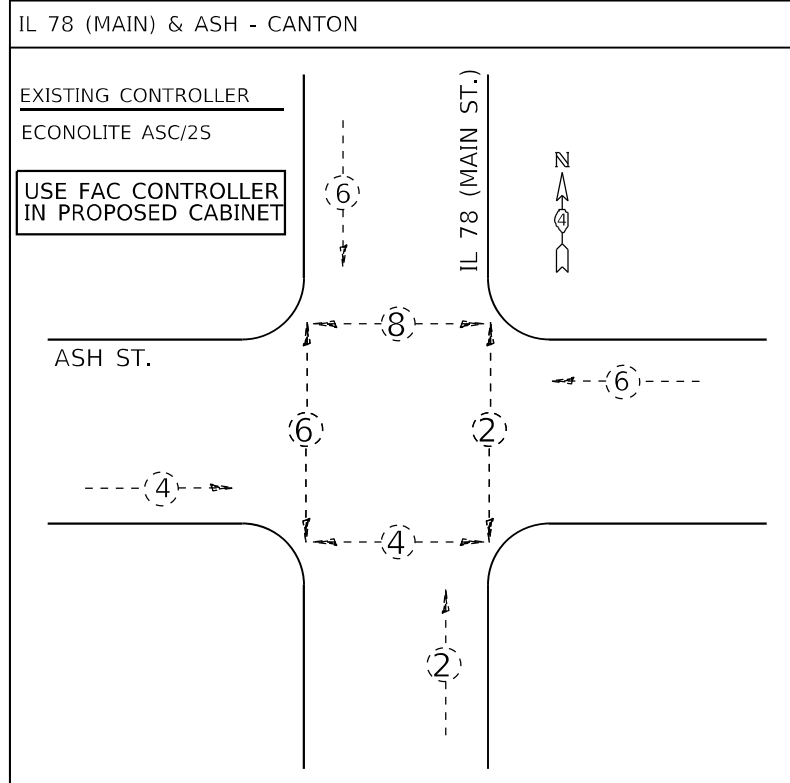
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PLOT DATE = 2/4/2021	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC CABLE TERMINATION DIAGRAM	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	11
			CONTRACT NO. 68G19	
ILLINOIS FED. AID PROJECT				



**LEGEND**  
 EX. VEHICULAR MOVEMENT  
 EX. PEDESTRIAN MOVEMENT  
 NUMBER REFERS TO ASSOCIATED PHASE

REFER TO INSTALLATION NOTES ON SHEET 15

NOT TO SCALE

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PROPOSED TRAFFIC SIGNAL CONTROLLER PHASE DIAGRAMS  
 AND INSTALLATION NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

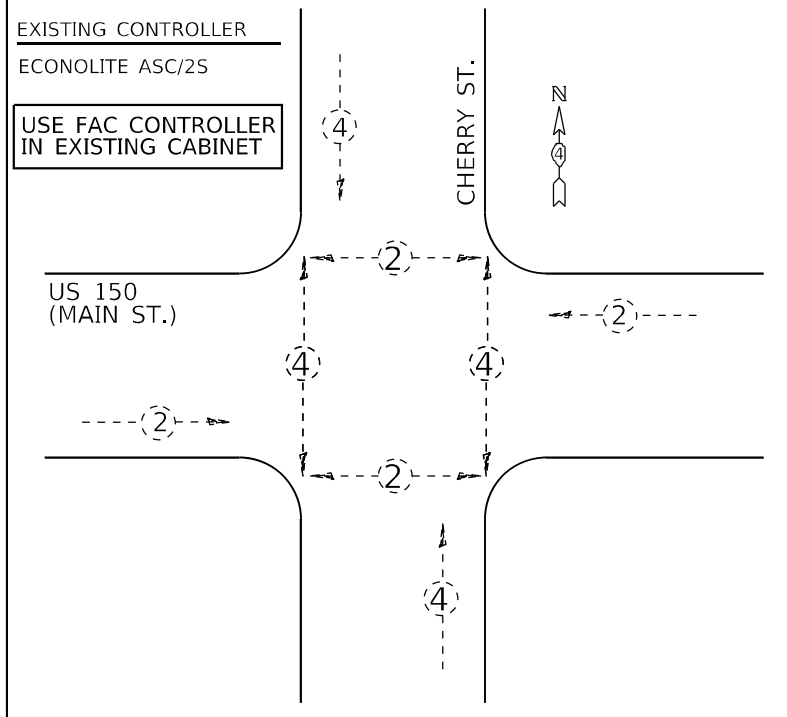
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VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	12
CONTRACT NO. 68G19				
ILLINOIS FED. AID PROJECT				



US 150 (MAIN) & CHERRY - GALESBURG

EXISTING CONTROLLER  
ECONOLITE ASC/25

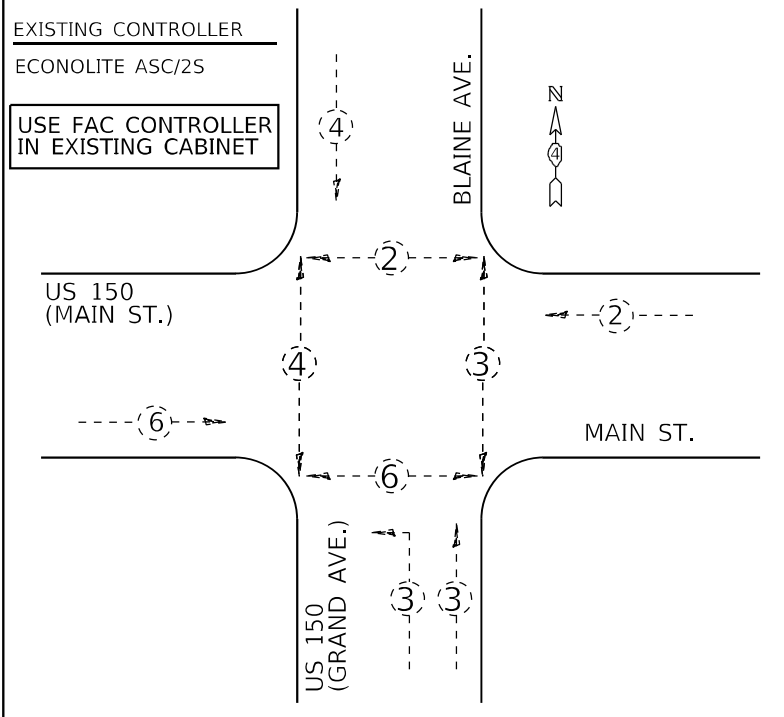
USE FAC CONTROLLER  
IN EXISTING CABINET



US 150 (MAIN) & GRAND - GALESBURG

EXISTING CONTROLLER  
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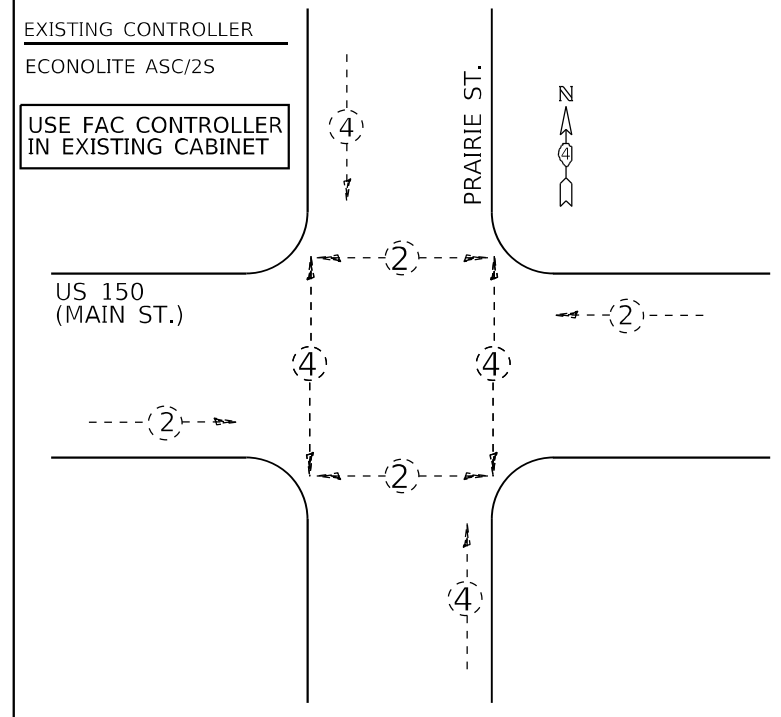
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US 150 (MAIN) & PRAIRIE - GALESBURG

EXISTING CONTROLLER  
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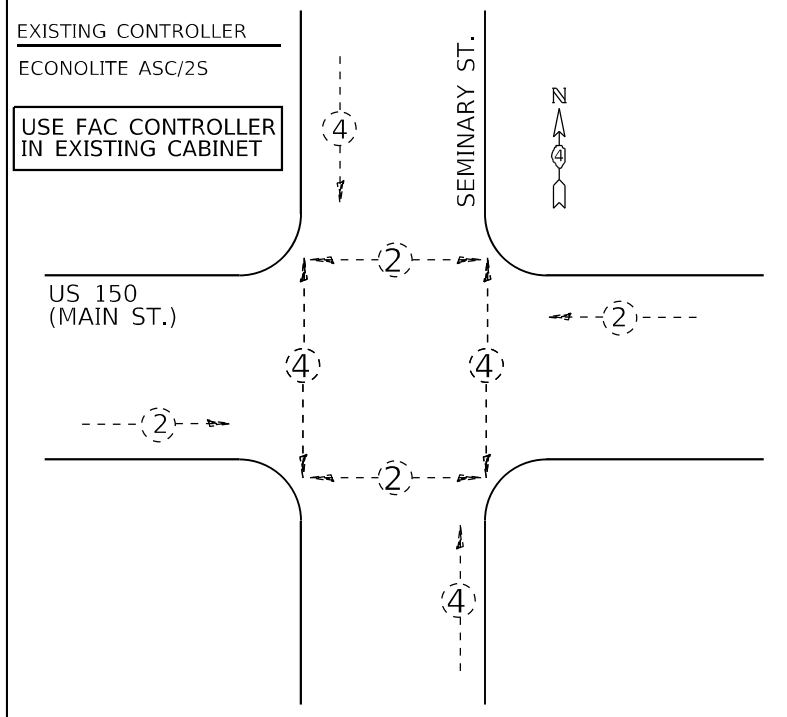
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US 150 (MAIN) & SEMINARY - GALESBURG

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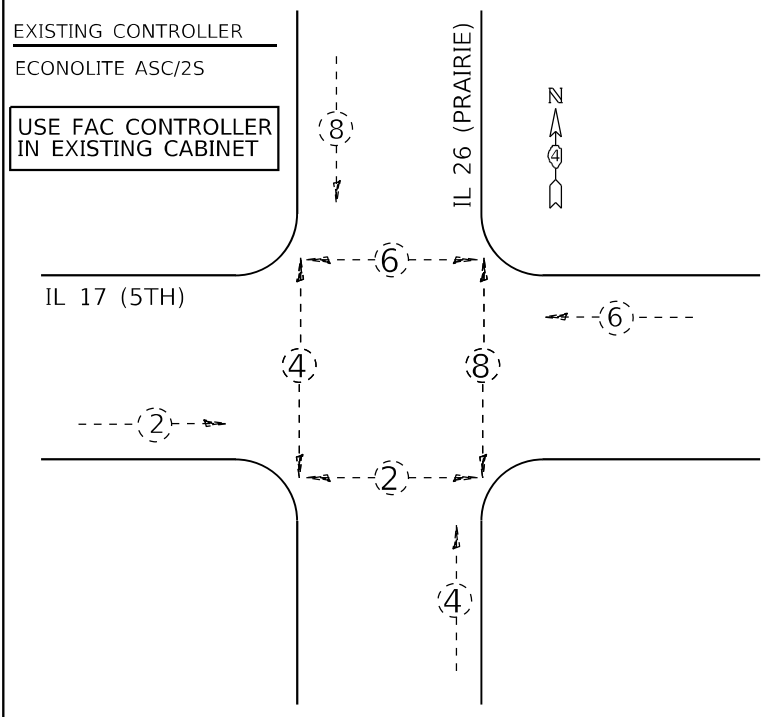
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IL 17 (5TH) & IL 26 (PRAIRIE) - LACON

EXISTING CONTROLLER  
ECONOLITE ASC/25

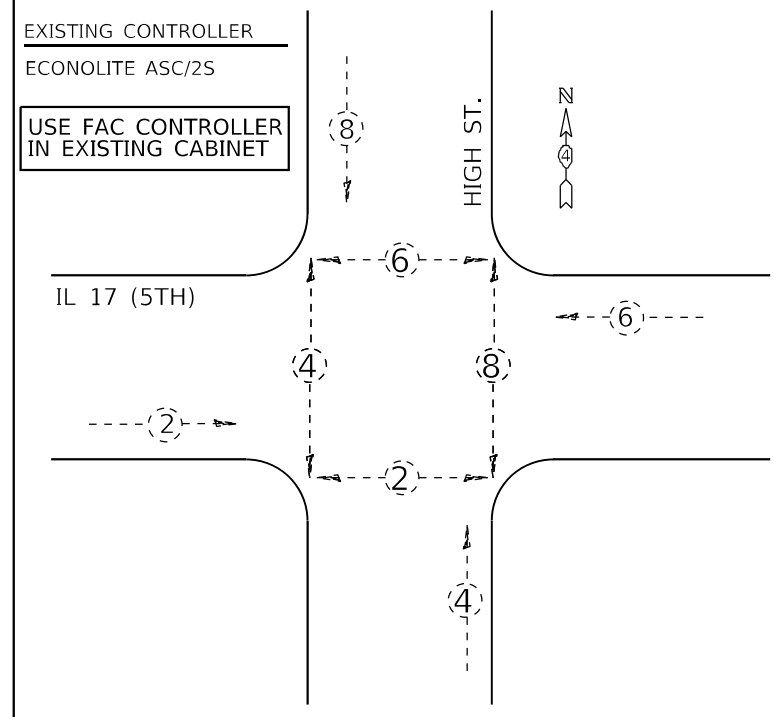
USE FAC CONTROLLER  
IN EXISTING CABINET



IL 17 (5TH) & HIGH - LACON

EXISTING CONTROLLER  
ECONOLITE ASC/25

USE FAC CONTROLLER  
IN EXISTING CABINET



**LEGEND**

REFER TO INSTALLATION NOTES ON SHEET 15

NOT TO SCALE

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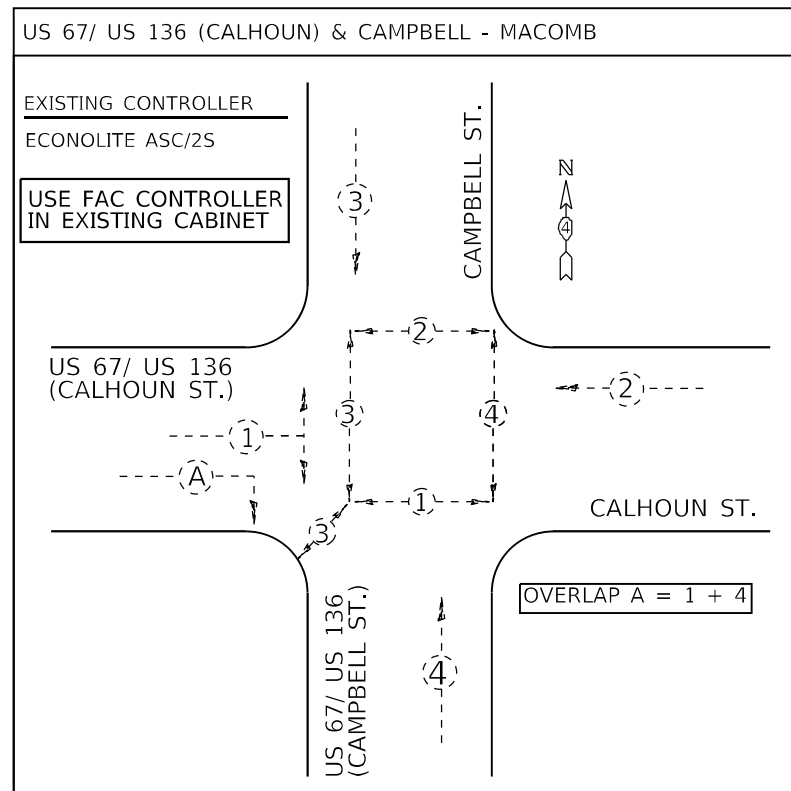
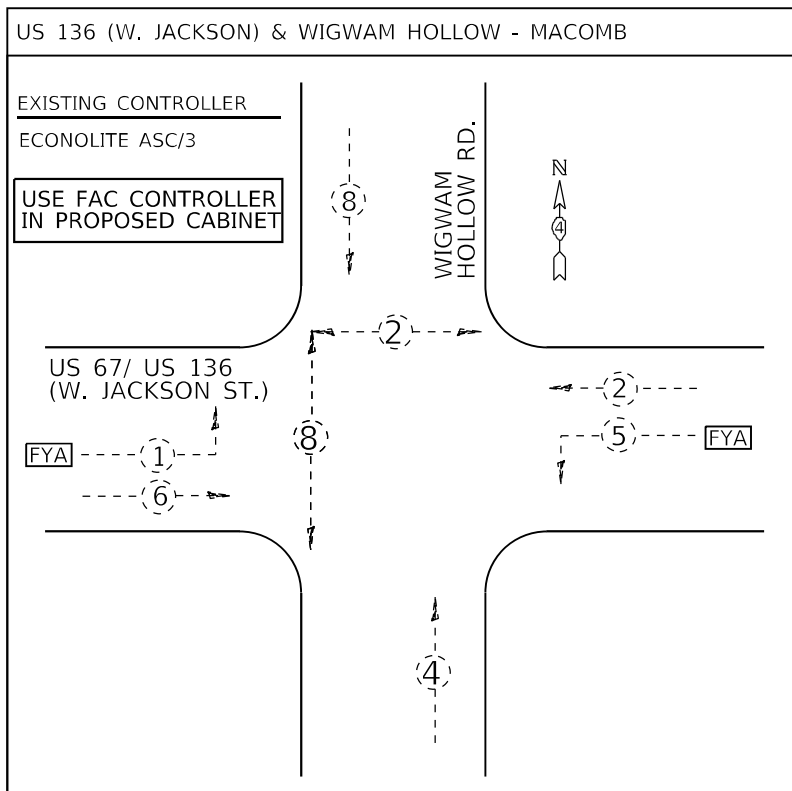
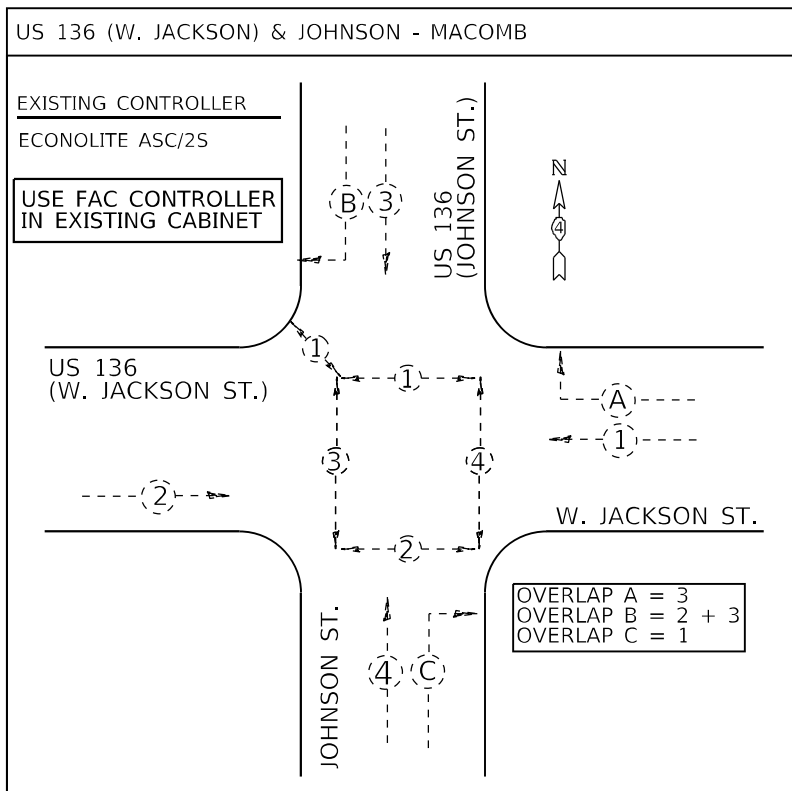
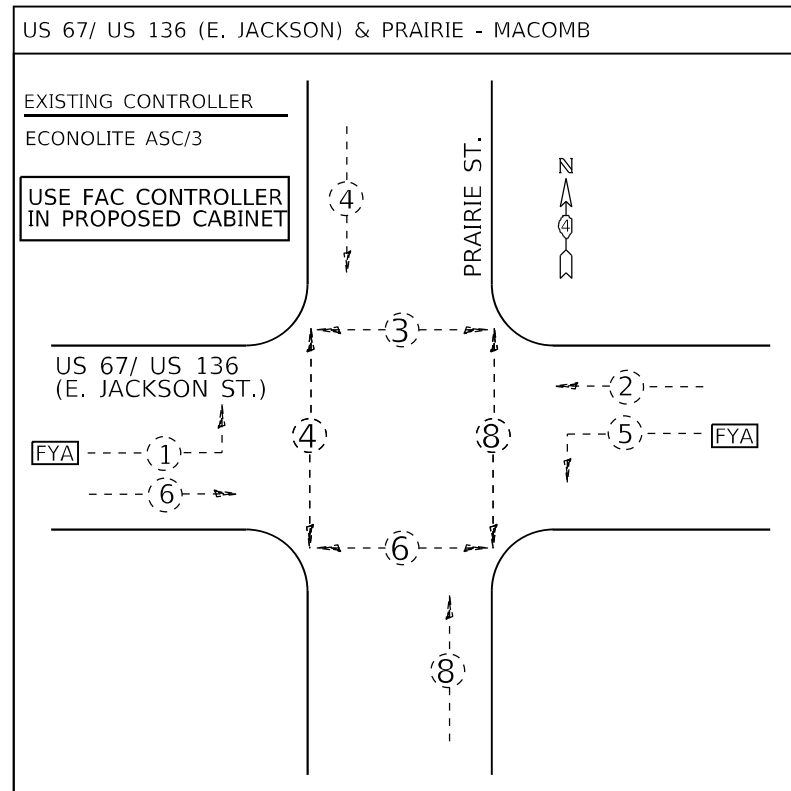
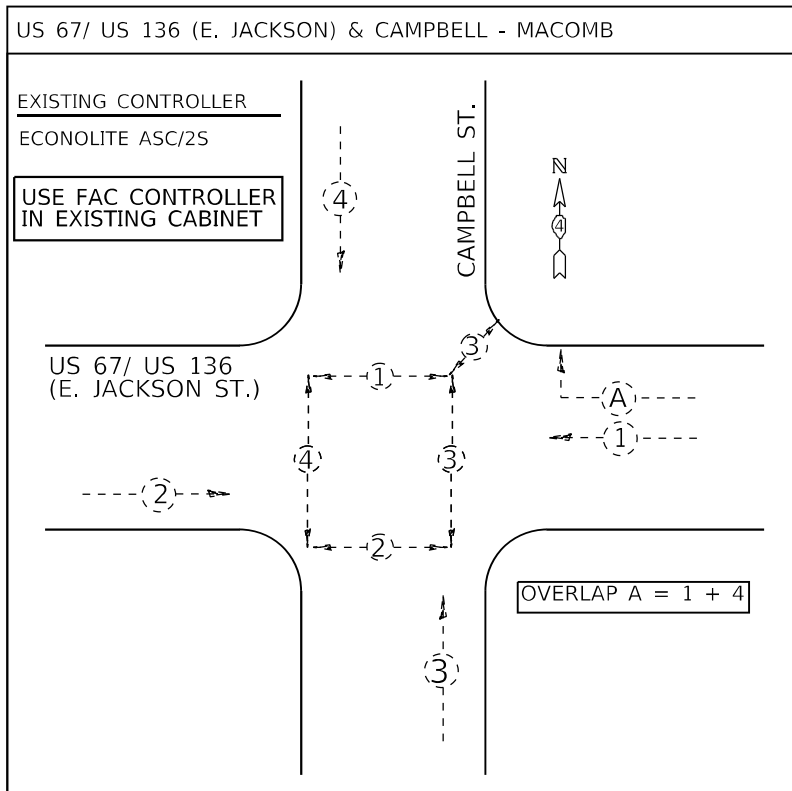
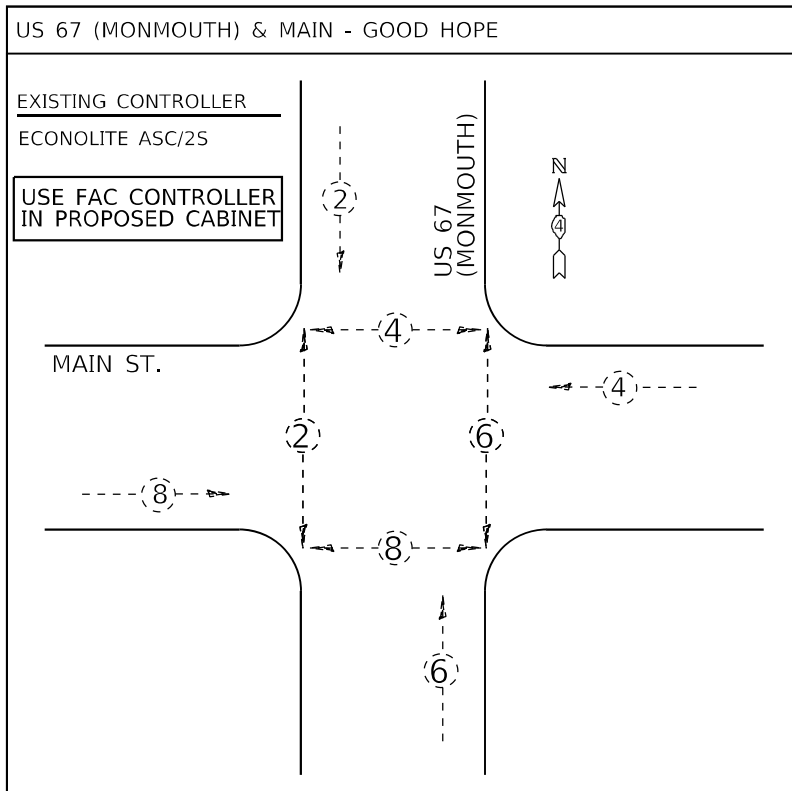
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PLOT DATE = 2/4/2021	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED TRAFFIC SIGNAL CONTROLLER PHASE DIAGRAMS  
AND INSTALLATION NOTES - CONTINUED

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	13
CONTRACT NO. 68G19				
ILLINOIS FED. AID PROJECT				



**LEGEND**  
 EX. VEHICULAR MOVEMENT  
 EX. PEDESTRIAN MOVEMENT  
 NUMBER REFERS TO ASSOCIATED PHASE

REFER TO INSTALLATION NOTES ON SHEET 15

NOT TO SCALE

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PLOT DATE = 2/4/2021	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PROPOSED TRAFFIC SIGNAL CONTROLLER PHASE DIAGRAMS  
 AND INSTALLATION NOTES - CONTINUED

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	14
CONTRACT NO. 68G19				
ILLINOIS FED. AID PROJECT				

IL 116 (MT. VERNON) & IL 89 (NILES) - METAMORA

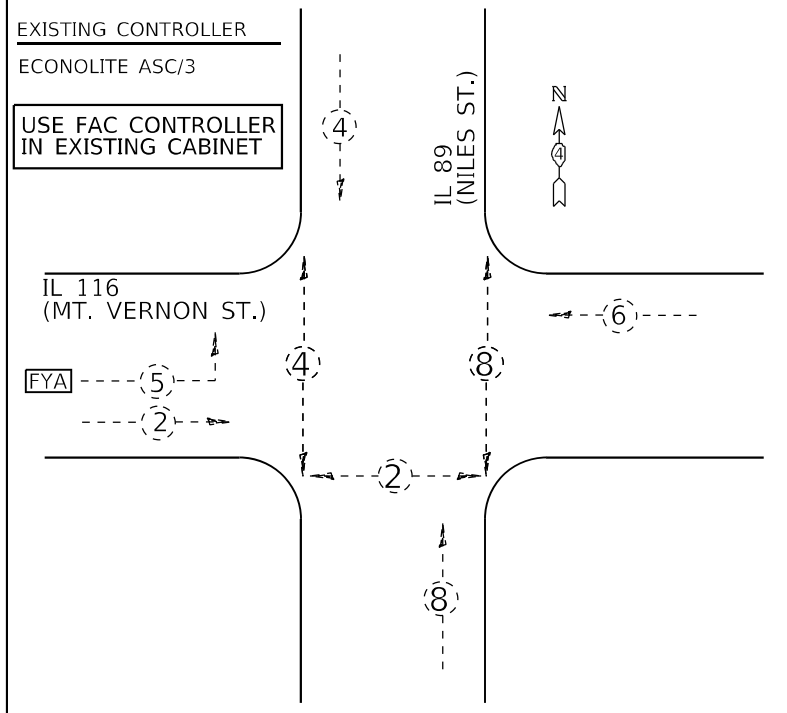
EXISTING CONTROLLER  
ECONOLITE ASC/3

USE FAC CONTROLLER  
IN EXISTING CABINET

IL 116  
(MT. VERNON ST.)

IL 89  
(NILES ST.)

FYA



**TRAFFIC SIGNAL CONTROLLER/ CABINET CONSTRUCTION STAGING NOTES**

1. THE CONTRACTOR WILL BE ALLOWED TO PLACE THE INTERSECTION INTO ALL-RED FLASH MODE TO FACILITATE THE INSTALLATION OF THE PROPOSED TRAFFIC SIGNAL CONTROLLERS, CABINETS, AND OTHER COMPONENTS.
2. THE CONTRACTOR SHALL FURNISH AND INSTALL A MINIMUM OF TWO STOP SIGNS PER APPROACH WHEN THE INTERSECTION IS OPERATING IN ALL-RED FLASH MODE. THE TRAFFIC SIGNALS MAY BE PLACED INTO ALL-RED FLASH MODE BETWEEN THE HOURS OF 8:30AM AND 3:00PM ONLY.
3. THE CONTRACTOR SHALL RESTORE THE TRAFFIC SIGNAL TO NORMAL OPERATION AT ALL OTHER TIMES, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY THE ENGINEER.
4. ALL COSTS (LABOR, MATERIALS, AND EQUIPMENT) ASSOCIATED WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE SIGNAL CONTROLLER OR SIGNAL CONTROLLER AND CABINET. THERE WILL BE NO ADDITIONAL COMPENSATION FOR ITEMS REQUIRED TO IMPLEMENT STAGING, INCLUDING BUT NOT LIMITED TO TEMPORARY TRAFFIC POSTS, AND PREMIUM TIME HOURS.
5. THE CONTRACTOR SHALL VERIFY THE EXISTING CONTROLLER CABINET PHASING, OVERLAPS, AND PREEMPTION (IF APPLICABLE) PRIOR TO RELEASING THE CONTROLLER CABINET.

LEGEND	
	EX. VEHICULAR MOVEMENT
	EX. PEDESTRIAN MOVEMENT
	NUMBER REFERS TO ASSOCIATED PHASE

REFER TO INSTALLATION NOTES ON SHEET 15

NOT TO SCALE

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PROPOSED TRAFFIC SIGNAL CONTROLLER PHASE DIAGRAMS  
AND INSTALLATION NOTES - CONTINUED

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ITS SYSTEM 2021	VARIOUS	15	15
			CONTRACT NO. 68G19	
		ILLINOIS FED. AID PROJECT		