

SEE SHEET 2 FOR INDEX OF SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

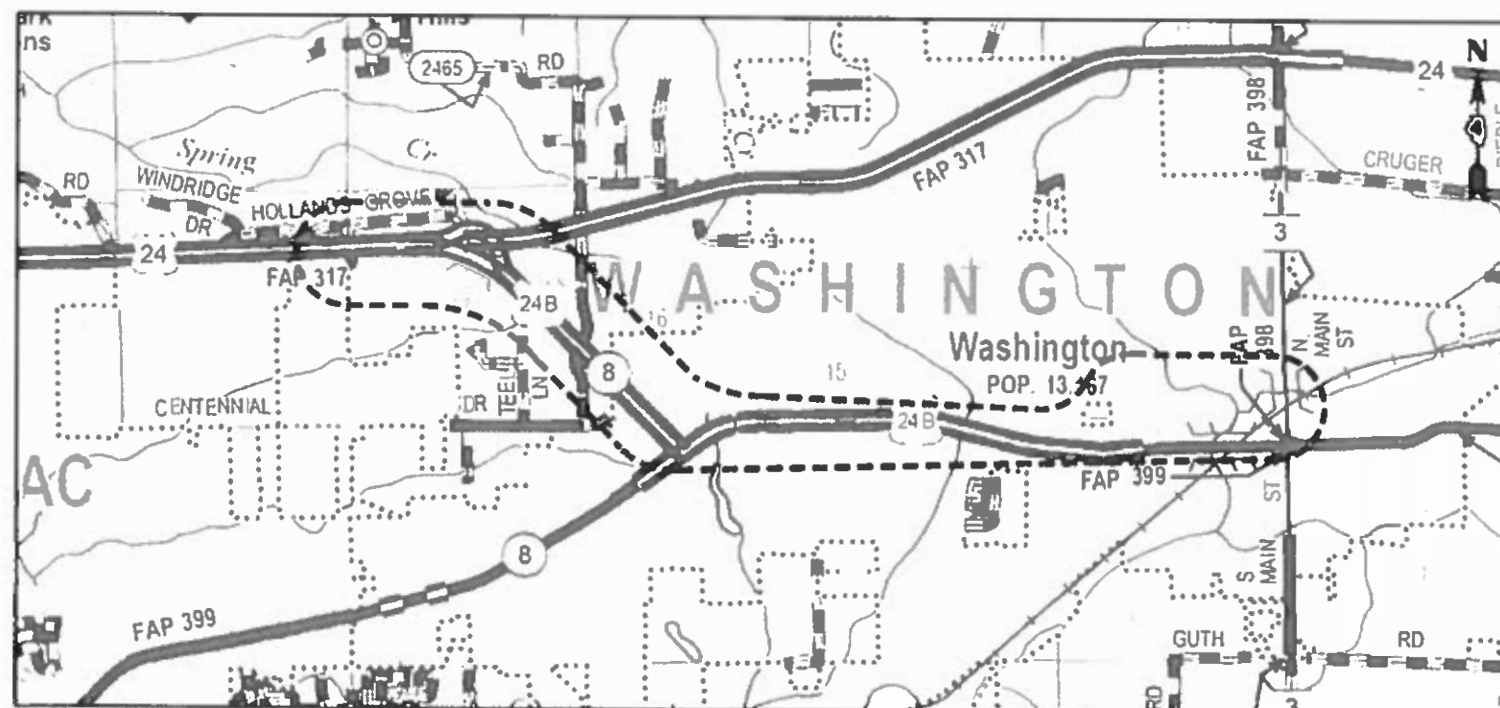
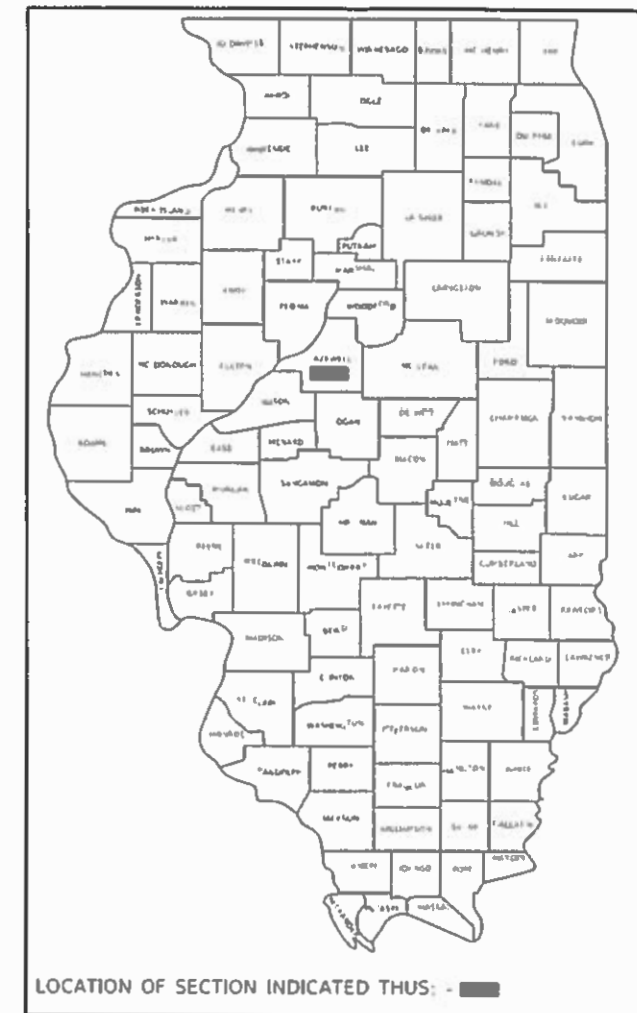
VARIOUS ROUTES
SECTION 17TS-1; 35TS; 36TS-3

TAZEWELL COUNTY

C-94-018-19

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	17TS-1 35TS 36TS-3	TAZEWELL	15	1
ILLINOIS CONTRACT NO. 68E78				

D-94-014-19



HIGHWAY STANDARDS

SEE SHEET 2 FOR A LIST OF APPLICABLE HIGHWAY STANDARDS

PROJECT DESCRIPTION

INSTALLATION OF FIBER OPTIC CABLE, DUCT, COMMUNICATION VAULTS AND CCTV CAMERAS AT VARIOUS LOCATIONS AROUND THE CITY OF WASHINGTON LOCATED IN TAZEWELL COUNTY.

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

PROJECT ENGINEER: ERIC HOWALD (309) 671-4481
PROJECT MANAGER: BEN TELLEFSON (309) 671-4477
CATALOG NO. 035679-00D
CONTRACT NO. 68E78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Oct 24 2018
Kenzel A Barnett (KSP)
REGION THREE ENGINEER

Dec 7 2018
Eric A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT

Dec 7 2018
Paul P. [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 3

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

NO COMMITMENTS HAVE BEEN MADE IN CONJUNCTION WITH THIS PROJECT.

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15	COMMUNICATIONS VAULT AND HANDHOLE INSTALLATION DETAIL

HIGHWAY STANDARDS	
STANDARD	APPLICATION
001006	DECIMAL OF AN INCH AND OF A FOOT
000001-07	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701011-04	OFF-ROAD OPERATIONS, 2L, 2W, DAY ONLY
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701456-05	PARTIAL EXIT RAMP CLOSURE, FREEWAY / EXPRESSWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-09	URBAN LANE CLOSURE, MULTILANE, 2W WITH NONTRAVERSABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
814001-03	HANDHOLES
830021-03	LIGHT POLE STEEL TENON TOP
836001-04	LIGHT POLE FOUNDATION
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH

FIBER OPTIC CABLE SLACK
HANDHOLE: 10.0 FT.
DOUBLE HANDHOLE: 30.0 FT.
COMMUNICATIONS VAULT: 100.0 FT.
JUNCTION BOX: 10.0 FT.
ITS OR SIGNAL CABINET: 10.0 FT.

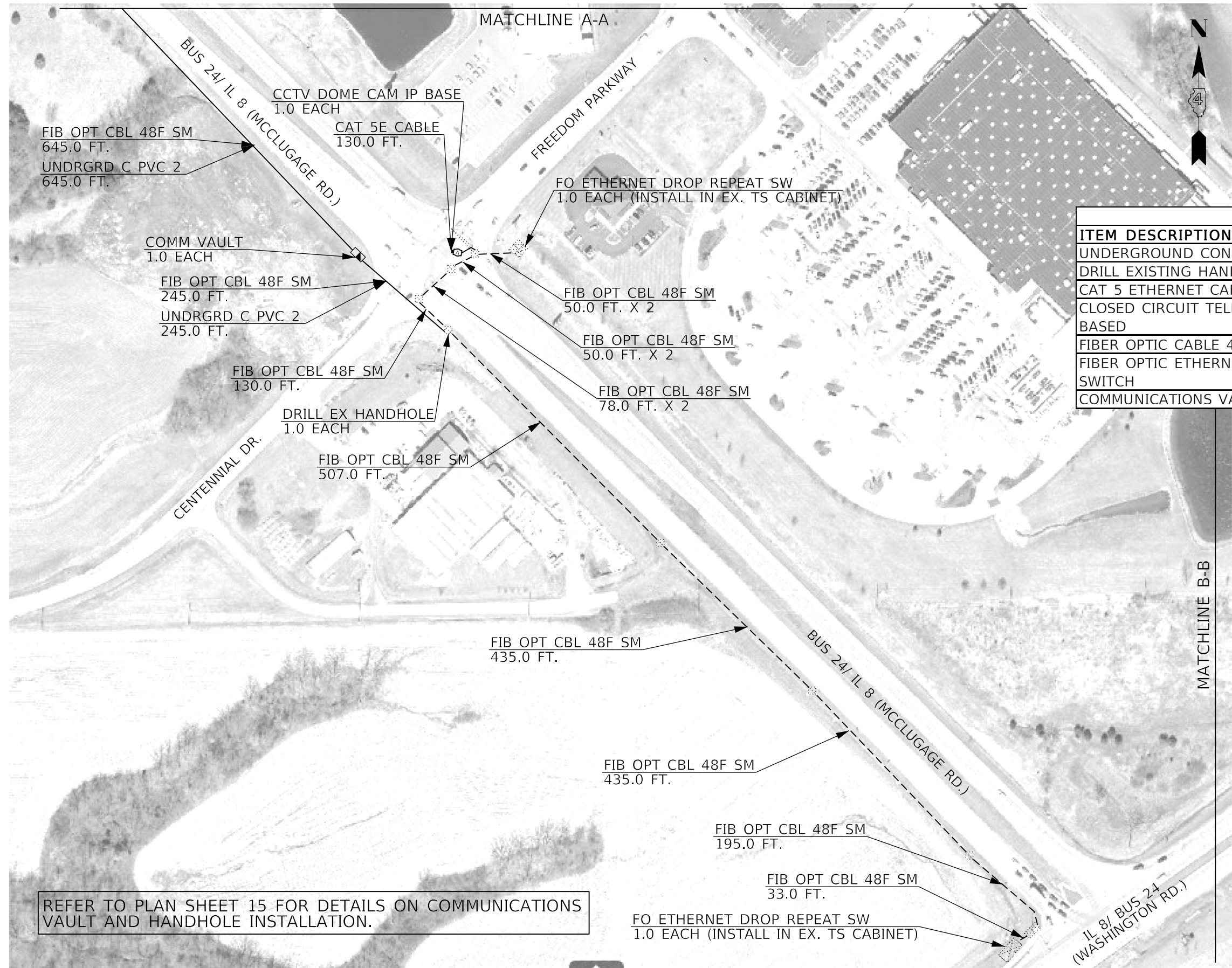
CONSTRUCTION NOTES

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 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 HANDHOLES, COMMUNICATION VAULTS, CAMERA POLES AND JUNCTION BOXES 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 FIBER OPTIC CABLE SLACK IN ACCORDANCE WITH THE TABLE PROVIDED IN THE PLANS.
7. ELECTRICAL CABLE WILL BE MEASURED FOR PAYMENT IN ACCORDANCE WITH ARTICLE 871.05 & 871.06.
8. POTHOLING TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE CONDUIT PAY ITEMS.
9. REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK, PAVEMENT, AND ISLANDS FOR UTILITY LOCATING PURPOSES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE CONDUIT PAY ITEMS.
10. THERE SHALL BE NO ADDITIONAL SPLICES IN THE FIBER OPTIC CABLE EXCEPT WHERE NOTED IN THE PLANS, OR UPON APPROVAL OF THE TRAFFIC ENGINEER.
11. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
12. COILABLE POLYETHYLENE DUCT MAY BE SUBSTITUTED FOR PVC PUSHED OR TRENCHED.
13. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
14. 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 PRICES FOR THE CONDUITS.
15. PCC HANDHOLES AND COMMUNICATIONS VAULTS SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE SURFACE OF THE MEDIAN, SIDEWALK, OR GROUND LINE.
16. 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, TRAFFIC SIGNAL CABINETS, AND CCTV CABINETS. THE COST OF FURNISHING AND INSTALLING THE TRACER WIRE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE PAY ITEM "FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE."
17. ALL COMMUNICATION DUCT SHALL BE INSTALLED AND PAID FOR IN ACCORDANCE WITH SECTION 810 "UNDERGROUND RACEWAYS" OF THE STANDARD SPECIFICATIONS.
18. THE LOCATION OF THE PROPOSED CONDUIT AS SHOWN ON THE PLAN SHEETS IS APPROXIMATE AND NOT DRAWN TO SCALE. CONDUIT INSTALLED ALONG ROADWAYS SHALL BE LOCATED A MAXIMUM OF 10 FT. FROM THE EDGE OF THE R.O.W. UNLESS DIRECTED OTHERWISE BY THE RESIDENT ENGINEER. 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.
19. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED TO ATTACH THE CONDUITS AND JUNCTION BOXES TO THE STRUCTURES, INCLUDING, BUT NOT LIMITED TO UNI-STRUT, BRACKETS, SEAL-TITE, LBS, FITTINGS, HARDWARE, AND OTHER MISCELLANEOUS ITEMS. THESE ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID UNIT PRICE FOR THE CONDUIT ATTACHED TO STRUCTURE PAY ITEM.
20. ALL CONDUIT ATTACHMENT BRACKETS AND HARDWARE SHALL BE STAINLESS STEEL.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING FIELD TILE, UNDERDRAIN, AND 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.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MOWING, BRUSH AND SHRUB REMOVAL, AND SMALL TREE (10" DIAMETER OR LESS) REMOVAL REQUIRED TO INSTALL THE PROPOSED CONDUIT AND COMMUNICATION VAULTS. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED ITEMS OFF OF THE JOB SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICES FOR THE CONDUIT PAY ITEM.
23. THE CONTRACTOR SHALL PLAN AND CONDUCT CONDUIT AND FIBER INSTALLATION OPERATIONS TO MINIMIZE THE NUMBER OF ROAD LANE CLOSURES AND TO MINIMIZE TRAFFIC DISRUPTIONS AND DELAYS FOR THE MOTORING PUBLIC.
24. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR INSTALLING COMMUNICATIONS DUCT AND COMMUNICATION VAULTS UNDER AND ALONG STATE, COUNTY AND TOWNSHIP ROADWAYS.
25. 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.
26. ALL CAMERAS SHALL BE INSTALLED AT A MINIMUM MOUNTING HEIGHT OF 43 FT.
27. THE COST OF INSTALLING THE PROPOSED CONDUITS INTO METAL LIGHT POLE FOUNDATIONS SHALL BE INCLUDED IN THE COST OF THE PROPOSED CONDUIT PAY ITEMS.
28. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS BY GRADING AND SEEDING. THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE PROPOSED CONDUIT.
29. THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE CONDUIT AND ELECTRICAL CABLE IN LIEU OF THE UNIT DUCT PAY ITEMS AT NO ADDITIONAL COMPENSATION.
30. THE DEPARTMENT WILL SUPPLY ONE LIGHT POLE AND CCTV CABINET FOR INSTALLATION AT THE INTERSECTION OF WILMOR & JEFFERSON AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL HARDWARE REQUIRED TO INSTALL THE LIGHT POLE AND CCTV CABINET IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE MISCELLANEOUS ELECTRICAL WORK PAY ITEM.
31. THE CONTRACTOR SHALL INSTALL CAPS OVER THE TENON MOUNT BRACKETS TO PREVENT WATER INTRUSION ON THE PROPOSED LIGHT POLES THAT ARE BEING UTILIZED AS CAMERA POLES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM FOR THE PROPOSED LIGHT POLES.
32. THE CONTRACTOR SHALL REMOVE THE SHEATHING ON THE UNIT DUCT WHEN ROUTING THROUGH HANDHOLES, JUNCTION BOXES, AND COMMUNICATIONS VAULTS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED UNIT DUCT.
33. ALL TERMINATED FIBERS SHALL BE Laterally SPLICED INSIDE COMMUNICATION VAULTS AND HANDHOLES. ALL UNUSED FIBERS AND BUFFER TUBES SHALL REMAIN INTACT FOR FUTURE USE.
34. THE COST OF THE WALL PENETRATION AT THE WASHINGTON POLICE DEPARTMENT SHALL BE INCLUDED IN THE COST OF THE STAINLESS STEEL JUNCTION BOX.

FILE NAME =	USER NAME = SUSERS	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONSTRUCTION NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
SFILES		DRAWN - _____	REVISED - _____			US 24 (VAR); BUS 24	17TS-1; 35TS; 36TS-3	TAZWELL	15	3	
	PLOT SCALE = SCALES	CHECKED - _____	REVISED - _____			CONTRACT NO. 68E78					
	PLOT DATE = SDATES	DATE - _____	REVISED - _____			ILLINOIS FED. AID PROJECT					

SUMMARY OF QUANTITIES				TAZEWELL COUNTY CONST. TYPE CODE 0021 (100% STATE HOMELAND SECURITY FUNDS) URBAN	
CODE	ITEM DESCRIPTION	UNIT	TOTAL QTY.		
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	374.0		374.0
44000600	SIDEWALK REMOVAL	SQ FT	440.0		440.0
67100100	MOBILIZATION	L SUM	1.0		1.0
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	17461.0		17461.0
81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12"X12"X6"	EACH	1.0		1.0
81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	7.0		7.0
81603040	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	975.0		975.0
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1586.0		1586.0
83060830	LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	1.0		1.0
83600360	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 6'	EACH	2.0		2.0
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	783.0		783.0
87900200	DRILL EXISTING HANDHOLE	EACH	5.0		5.0
X0324597	CLOSED CIRCUIT TELEVISION CABINET	EACH	1.0		1.0
X0324603	CIRCUIT BREAKER, 1-POLE, 20 AMP, 120V IN EXISTING TSC CABINET	EACH	2.0		2.0
X0326252	COMPUTER WORKSTATION	EACH	2.0		2.0
X0326253	LCD MONITOR	EACH	2.0		2.0
X0326812	CAT 5 ETHERNET CABLE	FOOT	649.0		649.0
X0326905	CLOSED CIRCUIT TELEVISION DOME CAMERA, IP BASED	EACH	5.0		5.0
X0327739	MISCELLANEOUS ELECTRICAL WORK	L SUM	1.0		1.0
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0		1.0
X8110456	CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., STAINLESS STEEL	FOOT	5.0		5.0
X8130110	JUNCTION BOX (SPECIAL)	EACH	1.0		1.0
X8710030	FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	27559.0		27559.0
X8710050	FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	6.0		6.0
Z0033052	COMMUNICATIONS VAULT	EACH	14.0		14.0

SCHEDULE OF QUANTITIES			TOTAL QTY.	BUS 24/ IL 8 (MCCLUGAGE) & CENTENNIAL / FREEDOM	US 24 & GRANGE AND US 24 & BUS 24/ IL 8 INTERCHANGE	BUS 24 (WASHINGTON) - IL 8 (MCCLUGAGE) TO LAKESHORE	BUS 24 (WASHINGTON) - CUMMINGS TO MT. VERNON	BUS 24 (PEORIA) - COMMERCIAL ENTR. TO EAGLE	BUS 24 (PEORIA) - MULLER TO WILMOR	WILMOR & JEFFERSON AND JEFFERSON FROM WILMOR TO WASHINGTON POLICE DEPT.
CODE	ITEM DESCRIPTION	UNIT								
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	374.0					136.0	68.0	170.0
44000600	SIDEWALK REMOVAL	SQ FT	440.0					160.0	80.0	200.0
67100100	MOBILIZATION	L SUM	1.0	0.1	0.2	0.1	0.1	0.1	0.2	0.2
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	17461.0	890.0	7550.0	6.5		3080.0	2096.0	3845.0
81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12"X12"X6"	EACH	1.0							1.0
81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	7.0					2.0	2.0	3.0
81603040	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	975.0		975.0					
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1586.0						1356.0	230.0
83060830	LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	1.0		1.0					
83600360	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 6'	EACH	2.0		1.0					1.0
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	783.0						658.0	125.0
87900200	DRILL EXISTING HANDHOLE	EACH	5.0	1.0	1.0			1.0	2.0	
X0324597	CLOSED CIRCUIT TELEVISION CABINET	EACH	1.0		1.0					
X0324603	CIRCUIT BREAKER, 1-POLE, 20 AMP, 120V IN EXISTING TSC CABINET	EACH	2.0		1.0				1.0	
X0326252	COMPUTER WORKSTATION	EACH	2.0							2.0
X0326253	LCD MONITOR	EACH	2.0							2.0
X0326812	CAT 5 ETHERNET CABLE	FOOT	649.0	130.0	191.0				283.0	45.0
X0326905	CLOSED CIRCUIT TELEVISION DOME CAMERA, IP BASED	EACH	5.0	1.0	2.0				1.0	1.0
X0327739	MISCELLANEOUS ELECTRICAL WORK	L SUM	1.0							1.0
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	0.1	0.2	0.1	0.1	0.1	0.2	0.2
X8110456	CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., STAINLESS STEEL	FOOT	5.0							5.0
X8130110	JUNCTION BOX (SPECIAL)	EACH	1.0		1.0					
X8710030	FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	27559.0	3314.0	8227.0	2453.0	3224.0	3825.0	2216.0	4300.0
X8710050	FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	6.0	2.0	2.0				1.0	1.0
Z0033052	COMMUNICATIONS VAULT	EACH	14.0	1.0	8.0			2.0		3.0

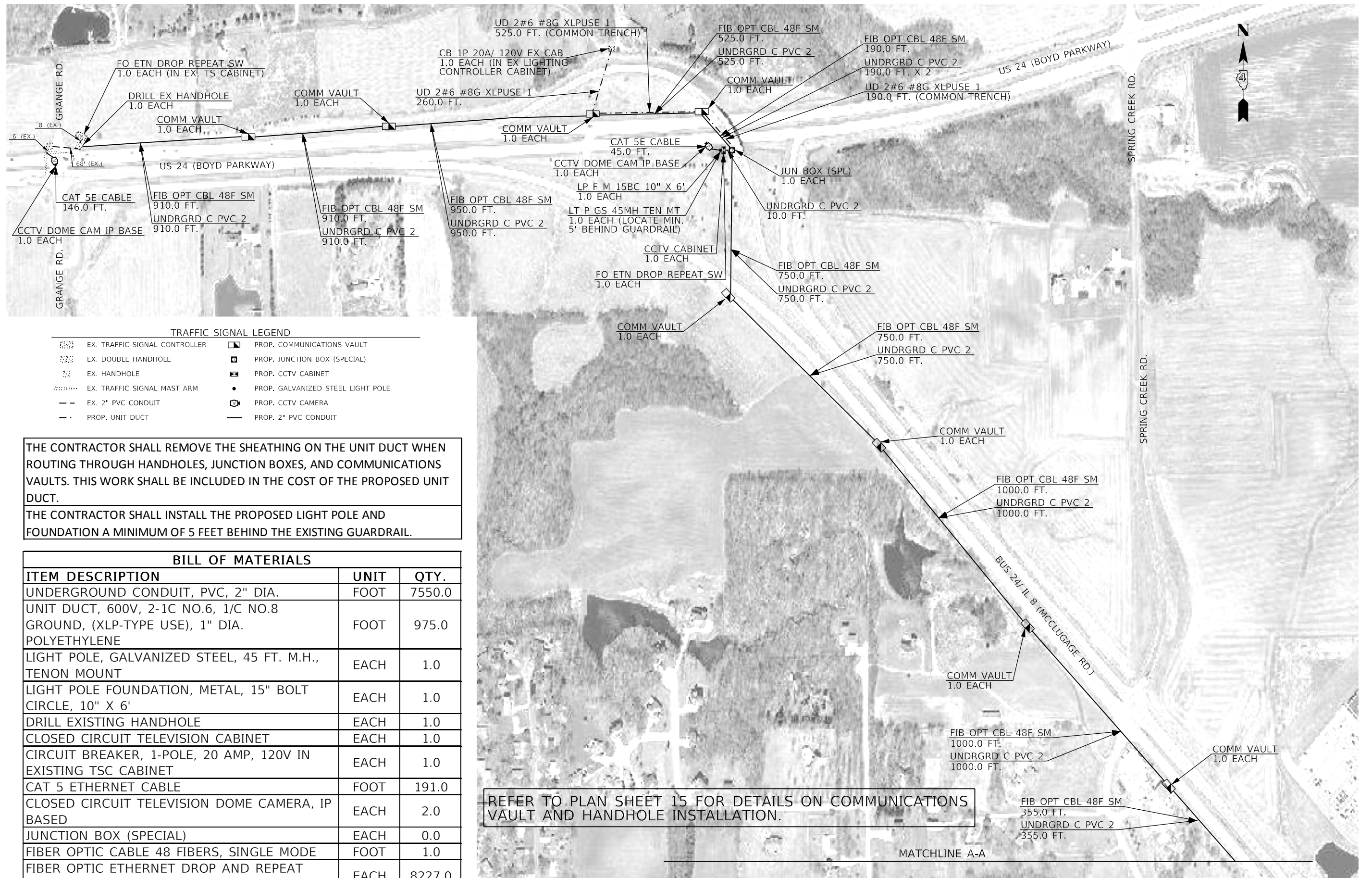


BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	890.0
DRILL EXISTING HANDHOLE	EACH	1.0
CAT 5 ETHERNET CABLE	FOOT	130.0
CLOSED CIRCUIT TELEVISION DOME CAMERA, IP BASED	EACH	1.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	3314.0
FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	2.0
COMMUNICATIONS VAULT	EACH	1.0

REFER TO PLAN SHEET 15 FOR DETAILS ON COMMUNICATIONS VAULT AND HANDHOLE INSTALLATION.

TRAFFIC SIGNAL LEGEND	
	EX. TRAFFIC SIGNAL CONTROLLER
	EX. DOUBLE HANDHOLE
	EX. HANDHOLE
	EX. TRAFFIC SIGNAL MAST ARM
	PROP. CCTV CAMERA
	EX. CONDUIT (2" PVC UNLESS NOTED OTHERWISE)
	PROP. CONDUIT
	PROP. CAT 5E CABLE

NOT TO SCALE



TRAFFIC SIGNAL LEGEND

- | | | | |
|--|-------------------------------|--|-----------------------------------|
| | EX. TRAFFIC SIGNAL CONTROLLER | | PROP. COMMUNICATIONS VAULT |
| | EX. DOUBLE HANDHOLE | | PROP. JUNCTION BOX (SPECIAL) |
| | EX. HANDHOLE | | PROP. CCTV CABINET |
| | EX. TRAFFIC SIGNAL MAST ARM | | PROP. GALVANIZED STEEL LIGHT POLE |
| | EX. 2" PVC CONDUIT | | PROP. CCTV CAMERA |
| | PROP. UNIT DUCT | | PROP. 2" PVC CONDUIT |

THE CONTRACTOR SHALL REMOVE THE SHEATHING ON THE UNIT DUCT WHEN ROUTING THROUGH HANDHOLES, JUNCTION BOXES, AND COMMUNICATIONS VAULTS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED UNIT DUCT.

THE CONTRACTOR SHALL INSTALL THE PROPOSED LIGHT POLE AND FOUNDATION A MINIMUM OF 5 FEET BEHIND THE EXISTING GUARDRAIL.

BILL OF MATERIALS

ITEM DESCRIPTION	UNIT	QTY.
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	7550.0
UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	975.0
LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	1.0
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 6'	EACH	1.0
DRILL EXISTING HANDHOLE	EACH	1.0
CLOSED CIRCUIT TELEVISION CABINET	EACH	1.0
CIRCUIT BREAKER, 1-POLE, 20 AMP, 120V IN EXISTING TSC CABINET	EACH	1.0
CAT 5 ETHERNET CABLE	FOOT	191.0
CLOSED CIRCUIT TELEVISION DOME CAMERA, IP BASED	EACH	2.0
JUNCTION BOX (SPECIAL)	EACH	0.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	1.0
FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	8227.0
COMMUNICATIONS VAULT	EACH	2.0

REFER TO PLAN SHEET 15 FOR DETAILS ON COMMUNICATIONS VAULT AND HANDHOLE INSTALLATION.

MATCHLINE A-A

NOT TO SCALE



BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	2453.0

TRAFFIC SIGNAL LEGEND	
	EX. TRAFFIC SIGNAL CONTROLLER
	EX. DOUBLE HANDHOLE
	EX. HANDHOLE
	EX. 2" CONDUIT (2" PVC UNLESS NOTED OTHERWISE)

NOT TO SCALE

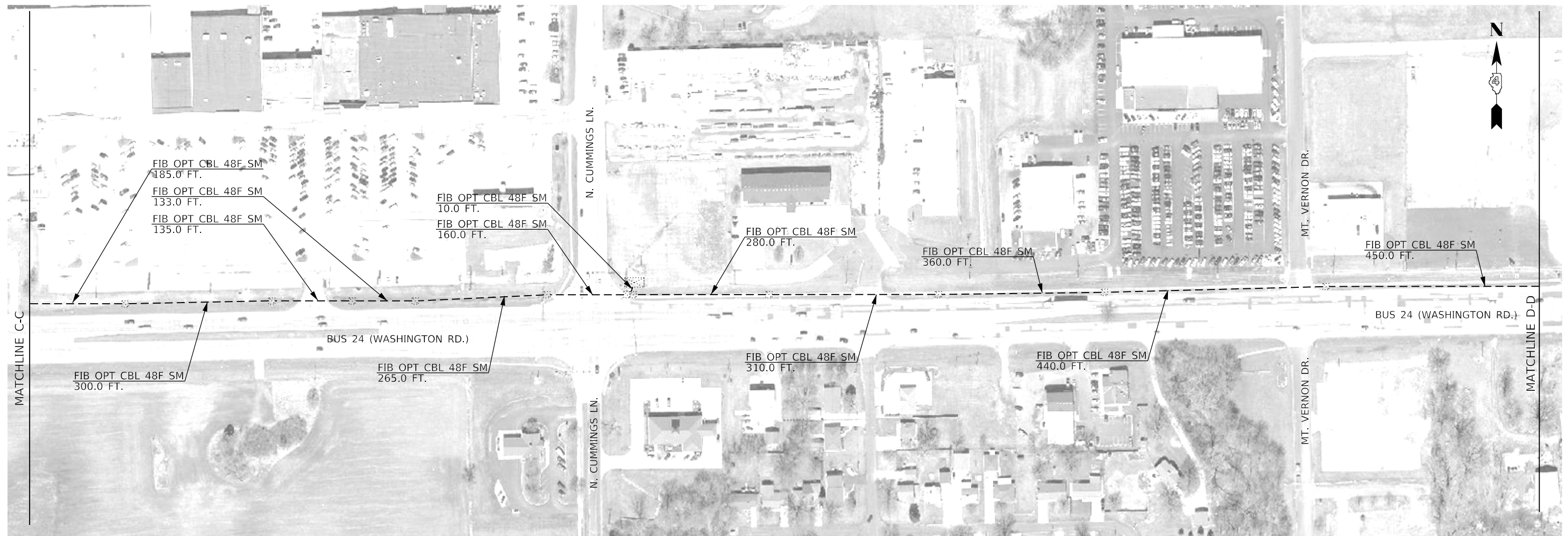
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	PLOT SCALE = SCALES	CHECKED -	REVISED -
	PLOT DATE = SDATES	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED FIBER INSTALLATION
BUS 24 (WASHINGTON RD.) - IL 8 (MCCLUGAGE RD.) TO LAKESHORE DR.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 24 (VAR); BUS 24	17TS-1; 35TS; 36TS-3	TAZWELL	15	8
CONTRACT NO. 68E78				
ILLINOIS FED. AID PROJECT				

SCALE: _____ STA. _____ TO STA. _____

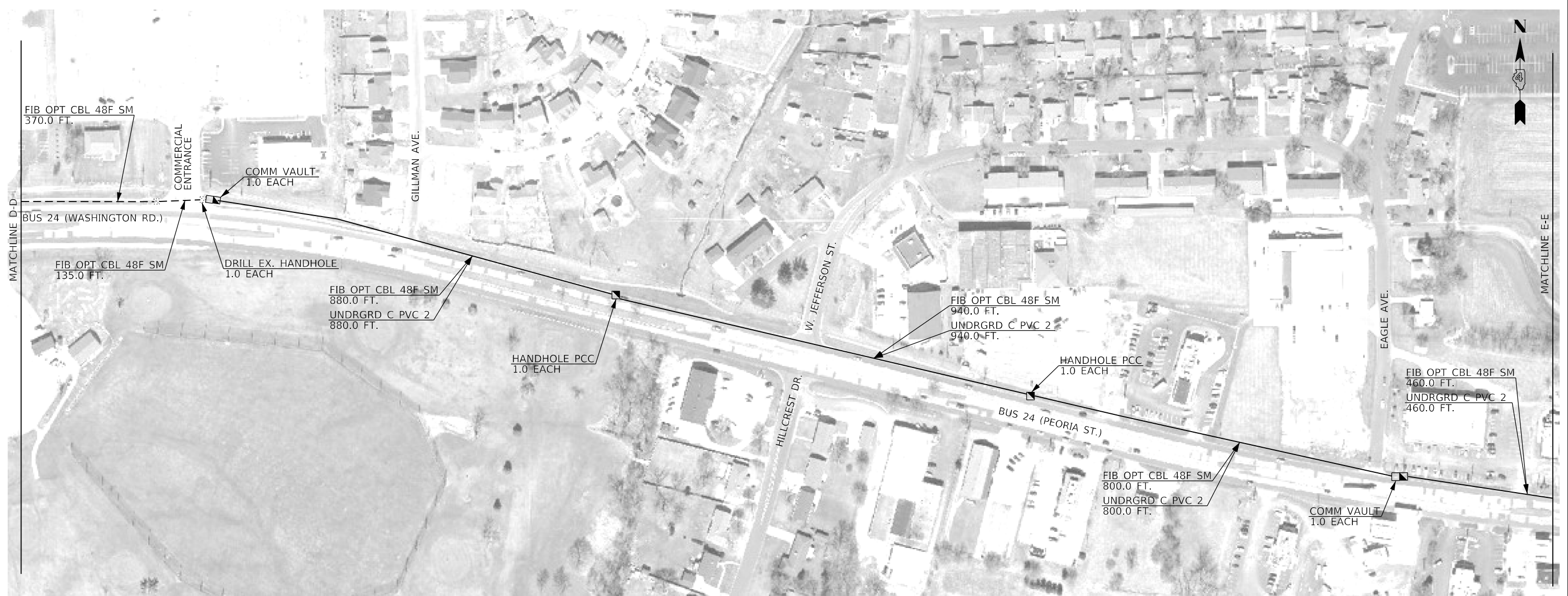


BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	3224.0

TRAFFIC SIGNAL LEGEND	
	EX. TRAFFIC SIGNAL CONTROLLER
	EX. DOUBLE HANDHOLE
	EX. HANDHOLE
	EX. CONDUIT (2" PVC UNLESS NOTED OTHERWISE)

NOT TO SCALE

FILE NAME = SFILERS	USER NAME = SUSERS	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED FIBER INSTALLATION BUS 24 (WASHINGTON RD.) - CUMMINGS LN. TO MT. VERNON DR.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = SCALES	DRAWN - _____	REVISED - _____			US 24 (VAR); BUS 24	17TS-1; 35TS; 36TS-3	TAZWELL	15	9	
	PLOT DATE = SDATES	CHECKED - _____	REVISED - _____			CONTRACT NO. 68E78					
		DATE - _____	REVISED - _____			SCALE: _____		STA. _____ TO STA. _____		ILLINOIS FED. AID PROJECT	



BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	136.0
SIDEWALK REMOVAL	SQ FT	160.0
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	3080.0
HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2.0
DRILL EXISTING HANDHOLE	EACH	1.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	3825.0
COMMUNICATIONS VAULT	EACH	2.0

REFER TO PLAN SHEET 15 FOR DETAILS ON COMMUNICATIONS VAULT AND HANDHOLE INSTALLATION.

TRAFFIC SIGNAL LEGEND	
	EX. HANDHOLE
	PROP. HANDHOLE
	PROP. COMMUNICATIONS VAULT
	PROP. 2" PVC CONDUIT
	EX. CONDUIT (2" PVC UNLESS NOTED OTHERWISE)

NOT TO SCALE

FILE NAME =	USER NAME = SUSERS	DESIGNED -	REVISED -
SFILES		DRAWN -	REVISED -
	PLOT SCALE = SCALES	CHECKED -	REVISED -
	PLOT DATE = SDATES	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED FIBER AND CONDUIT INSTALLATION
BUS 24 (PEORIA ST.) - COMMERCIAL ENTRANCE TO EAGLE AVE.**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 24 (VAR); BUS 24	17TS-1; 35TS; 36TS-3	TAZWELL	15	10
CONTRACT NO. 68E78				
ILLINOIS FED. AID PROJECT				

SCALE: _____ STA. _____ TO STA. _____

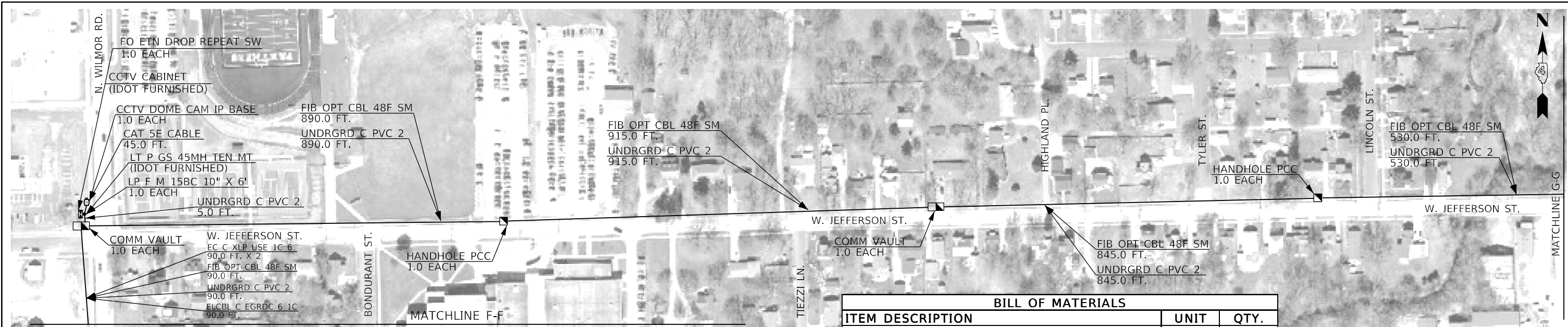


BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	68.0
SIDEWALK REMOVAL	SQ FT	80.0
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	2096.0
HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2.0
UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE) 1" DIA POLYETHYLENE	FOOT	1356.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	658.0
DRILL EXISTING HANDHOLE	EACH	2.0
CIRCUIT BREAKER, 1-POLE, 20 AMP, 120V IN EXISTING TSC CABINET	EACH	1.0
CAT 5 ETHERNET CABLE	FOOT	283.0
CLOSED CIRCUIT TELEVISION DOME CAMERA, IP BASED	EACH	1.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	2216.0
FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	1.0

REFER TO PLAN SHEET 15 FOR DETAILS ON COMMUNICATIONS VAULT AND HANDHOLE INSTALLATION.

TRAFFIC SIGNAL LEGEND	
	EX. TRAFFIC SIGNAL CONTROLLER
	EX. DOUBLE HANDHOLE
	EX. HANDHOLE
	EX. TRAFFIC SIGNAL MAST ARM
	PROP. HANDHOLE
	PROP. CCTV CAMERA
	EX. CONDUIT (2" PVC UNLESS NOTED OTHERWISE)
	PROP. 2" PVC CONDUIT
	PROP. CAT 5E CABLE

NOT TO SCALE



REFER TO PLAN SHEET 15 FOR DETAILS ON COMMUNICATIONS VAULT AND HANDHOLE INSTALLATION.

BILL OF MATERIALS		
ITEM DESCRIPTION	UNIT	QTY.
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	136.0
SIDEWALK REMOVAL	SQ FT	160.0
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	3280.0
HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	230.0
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 6"	EACH	1.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	125.0
CAT 5 ETHERNET CABLE	FOOT	45.0
CLOSED CIRCUIT TELEVISION DOME CAMERA, IP BASED	EACH	1.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	3610.0
FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	1.0
COMMUNICATIONS VAULT	EACH	2.0

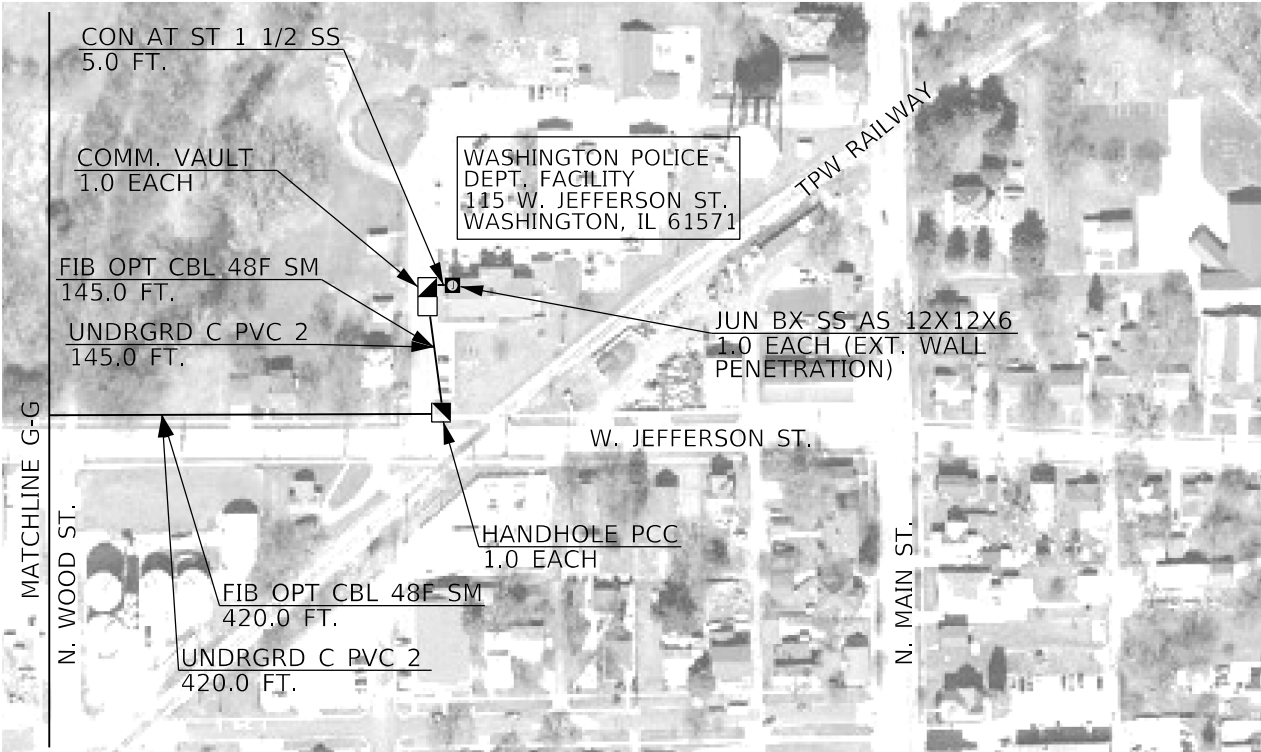
TRAFFIC SIGNAL LEGEND

- ▣ PROP. HANDHOLE
- ▣ PROP. COMMUNICATIONS VAULT
- ▣ PROP. CCTV CABINET
- PROP. GALVANIZED STEEL LIGHT POLE
- ◻ PROP. CCTV CAMERA
- PROP. 2" PVC CONDUIT
- PROP. CAT 5E CABLE

NOT TO SCALE

REFER TO PLAN SHEET 15 FOR DETAILS ON COMMUNICATIONS VAULT AND HANDHOLE INSTALLATION.

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	565.0
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12"X12"X6"	EACH	1.0
HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1.0
COMPUTER WORKSTATION	EACH	2.0
LCD MONITOR	EACH	2.0
CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., STAINLESS STEEL	FOOT	5.0
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	690.0
COMMUNICATIONS VAULT	EACH	1.0



TRAFFIC SIGNAL LEGEND

- ▣ PROP. HANDHOLE
- ▣ PROP. COMMUNICATIONS VAULT
- ▣ PROP. JUNCTION BOX (ATTACHED TO STRUCTURE)
- PROP. 2" PVC CONDUIT

NOT TO SCALE

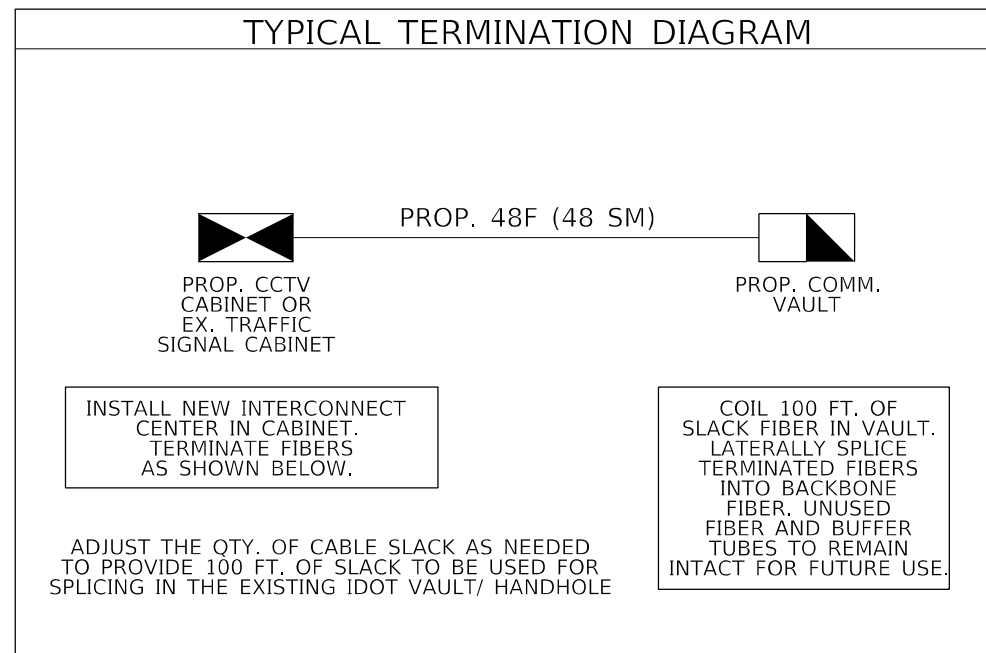
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SFILES		DRAWN -	REVISED -
	PLOT SCALE = SCALES	CHECKED -	REVISED -
	PLOT DATE = SDATES	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

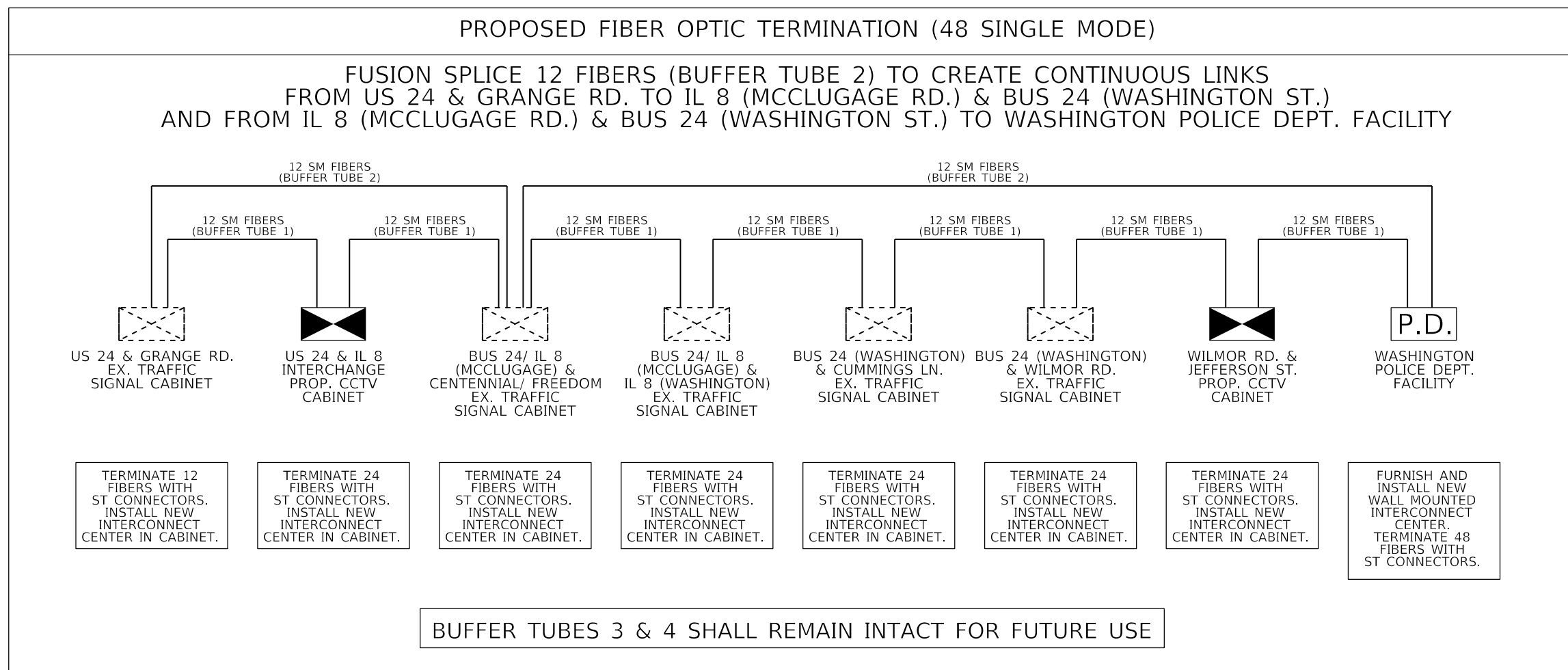
PROPOSED FIBER, CCTV AND CONDUIT INSTALLATION
BUS 24 (PEORIA ST./JEFFERSON ST. - WILMOR RD. TO WASHINGTON PD)

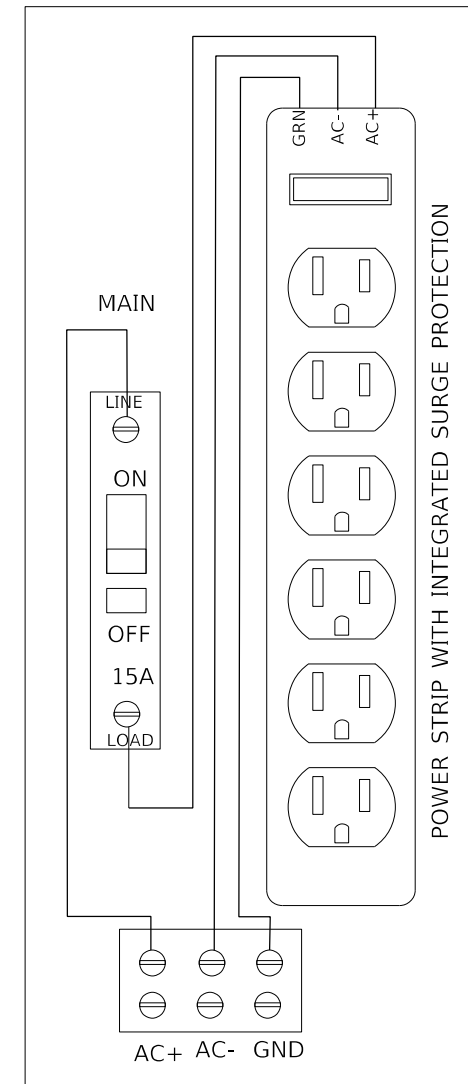
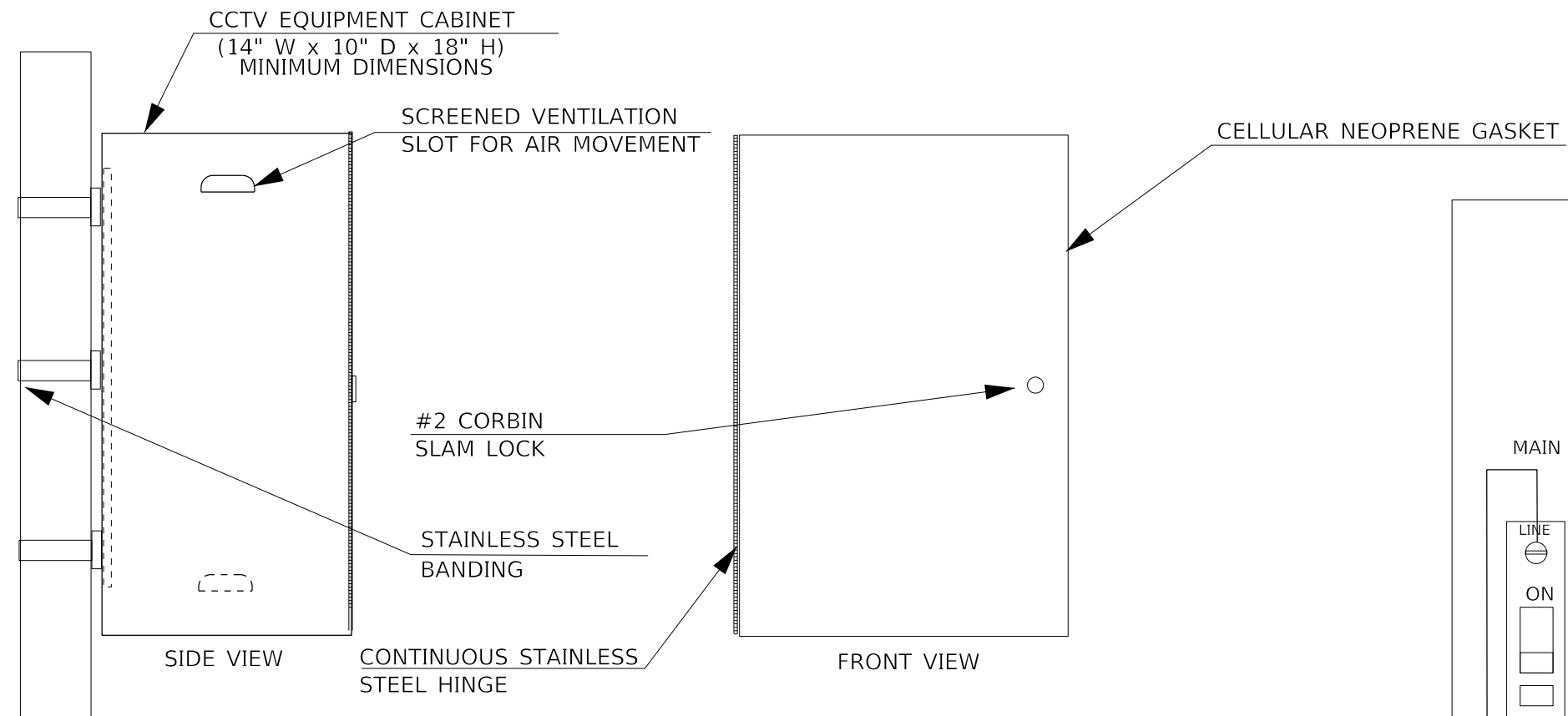
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 24 (VAR); BUS 24	17TS-1; 35TS; 36TS-3	TAZWELL	15	12
CONTRACT NO. 68E78				
ILLINOIS FED. AID PROJECT				

SCALE: _____ STA. _____ TO STA. _____



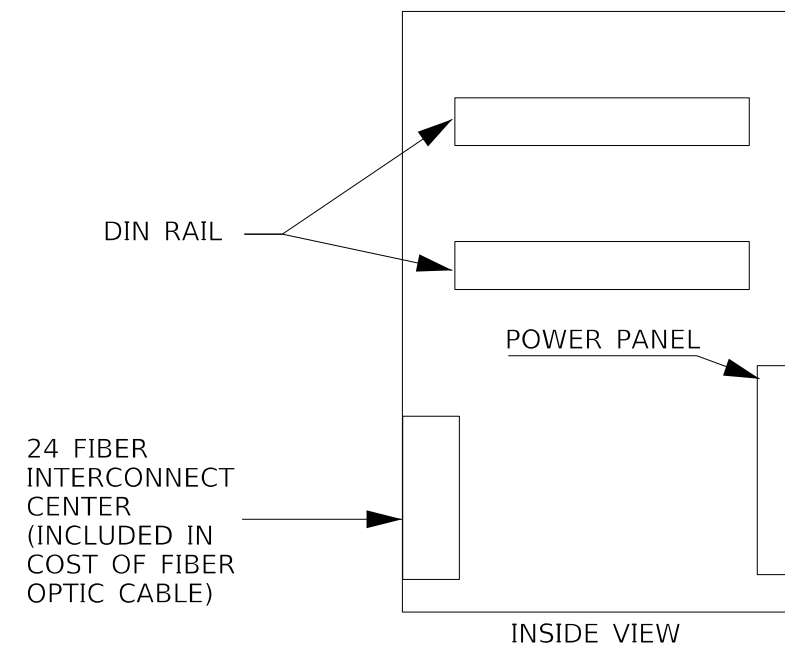
- ### FIBER OPTIC CABLE TERMINATION NOTES (SINGLE MODE FIBER OPTIC CABLE)
1. THE PROPOSED FIBER OPTIC CABLE SHALL BE TERMINATED AS SHOWN ON THE FIBER OPTIC LINE/ TERMINATION DIAGRAM.
 2. ALL CABLE SPLICES AND TERMINATIONS SHALL BE FUSION SPLICED.
 3. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS 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.





ITS EQUIPMENT CABINET POWER PANEL DETAIL
(TERMINAL STRIP TO BE EQUIPPED WITH PLEXI-GLASS SAFETY SHIELD)

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL GALVANIZED STEEL BRACKETING AND HARDWARE REQUIRED FOR CABINET INSTALLATION ON THE PROPOSED CAMERA POLES

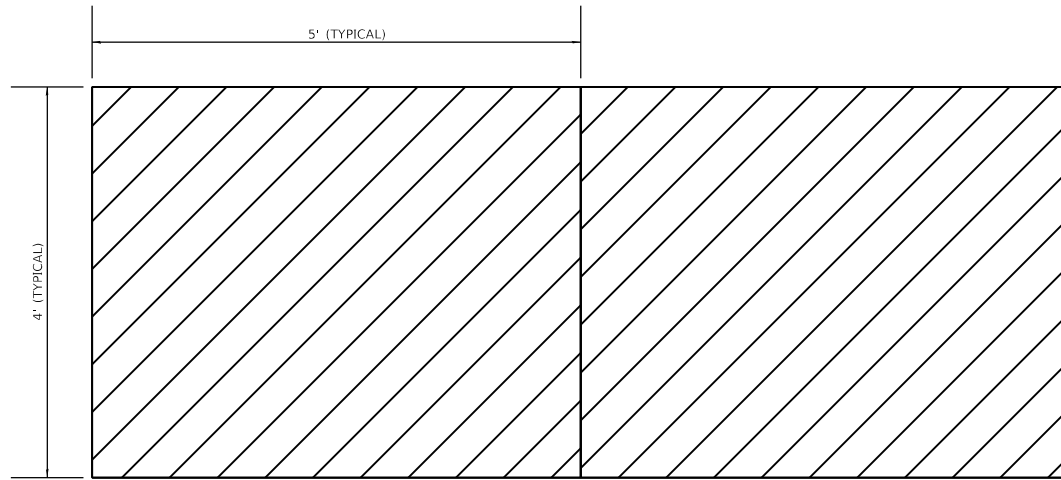


NOTES

1. THE ITS EQUIPMENT CABINET SHALL BE A NEMA TYPE 3R CABINET WITH MINIMUM OUTSIDE DIMENSIONS OF 14" W X 10" D X 18" H (NOMINAL). THE CABINET SHALL BE CONSTRUCTED FROM .125" THICK ALUMINUM AND HAVE A NATURAL FINISH.
2. THE CABINET SHALL BE EQUIPPED WITH A #2 CORBIN (OR SKELETON KEY) SLAM LOCK, AND ALL STAINLESS STEEL HARDWARE.

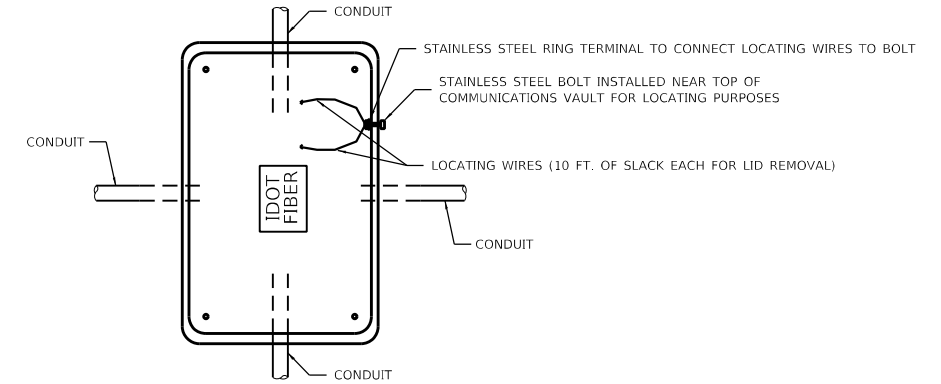
FILE NAME = SFILES	USER NAME = SUSERS	DESIGNED - ____	REVISED - ____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CLOSED CIRCUIT TELEVISION CABINET DETAIL		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ____	REVISED - ____		SCALE: _____	STA. _____ TO STA. _____	US 24 (VAR); BUS 24	17TS-1; 35TS; 36TS-3	TAZWELL	15	14
		CHECKED - ____	REVISED - ____				CONTRACT NO. 68E78				
		DATE - ____	REVISED - ____				ILLINOIS		FED. AID PROJECT		

SIDEWALK REMOVAL FOR PROPOSED HANDHOLE/ COMMUNICATIONS VAULT



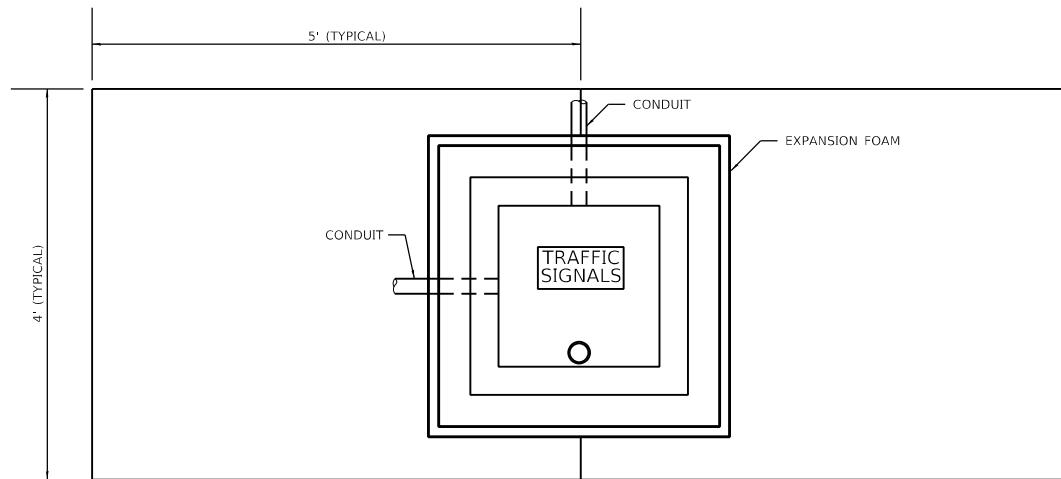
NOTES:
 1. THE CONTRACTOR SHALL REMOVE TWO (2) PANELS OF SIDEWALK (40 SQ FT) TO ACCOMODATE PROPOSED HANDHOLE/ COMMUNICATIONS VAULT AND CONDUIT INSTALLATION.

PROPOSED COMMUNICATIONS VAULT INSTALLATION (NON-SIDEWALK)



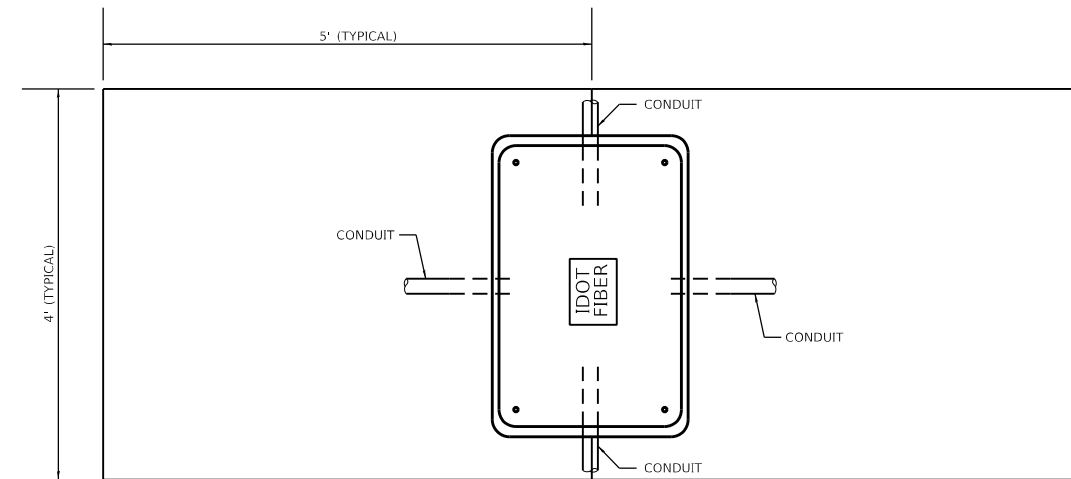
NOTES:
 1. COMMUNICATIONS VAULT LOCATIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER OF TRAFFIC PRIOR TO INSTALLATION.
 2. LOCATING WIRES MUST BE ACCESSIBLE FROM OUTSIDE COMMUNICATIONS VAULT. THE CONTRACTOR SHALL DRILL A HOLE THROUGH THE COMMUNICATIONS VAULT SIDEWALL 1" BELOW THE LID AND INSTALL A 3/8" 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.

PROPOSED HANDHOLE INSTALLATION



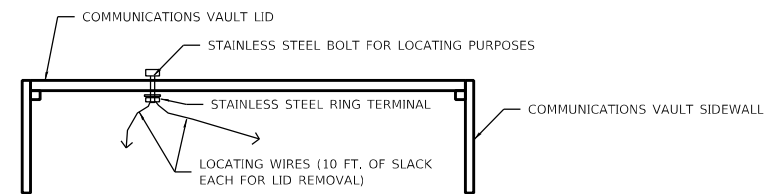
NOTES:
 1. HANDHOLE CANNOT BE INSTALLED MONOLITHICALLY WITHIN SIDEWALK.
 2. HANDHOLE LOCATIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER OF TRAFFIC PRIOR TO INSTALLATION.
 3. THE CONTRACTOR SHALL BACKFILL WITH CONTROLLED LOW STRENGTH MATERIAL TO PREVENT SETTLEMENT. THE COST OF THIS WORK SHALL BE INCLUDED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

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.)

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 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.

FILE NAME = SFFILES	USER NAME = SUSERS	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COMMUNICATIONS VAULT AND HANDHOLE INSTALLATION DETAIL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - _____	REVISED - _____			US 24 (VAR); BUS 24	17TS-1; 35TS; 36TS-3	TAZWELL	15	15	
		CHECKED - _____	REVISED - _____			CONTRACT NO. 68E78					
		DATE - _____	REVISED - _____			ILLINOIS FED. AID PROJECT					