

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND 112 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622). THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE. FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON ARRIVAL.

1. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTOR'S FOREMAN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT KIM STAMPER OR KERRY DECKER WITH THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-8994/502-782-5536) OR EMAIL (KIM.STAMPER@KY.GOV/KERRY.DECKER@KY.GOV).
2. CONTRACTOR SHALL CONTACT THE WAREHOUSE TO PREARRANGE PICK UP OF MATERIALS. CONTRACTOR SHALL EMAIL THE PROJECT MATERIALS RELEASE FORM WITH REQUIRED SIGNATURES TO THE WAREHOUSE AT KIM.STAMPER@KY.GOV AND SHALL NOTIFY THE WAREHOUSE BY PHONE (502-782-8994/502-330-8153) OR EMAIL KIM.STAMPER@KY.GOV AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL.
3. CONTRACTOR SHALL ALSO CONTACT THE SYSTEM OPERATIONS BRANCH OF THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-5543) OR EMAIL (JOE.THOMPSON@KY.GOV) AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL TO FACILITATE PROGRAMMING OF ROUTERS.
4. CONTRACTOR SHALL ARRIVE AT THE KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622) AT THE PREARRANGED DATE/TIME FOR MATERIAL PICK UP. TO FACILITATE THIS PROCESS, ENSURE CONTRACTOR'S DELIVERY DRIVER HAS A COPY OF THE PROJECT MATERIALS RELEASE FORM WITH THE REQUIRED SIGNATURES.

ADD SENTENCE TO SECTION 835.17: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

MEASUREMENT NOTES THAT ARE IN ADDITION TO SECTION 723

BLANKOUT SIGN - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED, THE DEPARTMENT WILL NOT MEASURE CONNECTION TO SIGNAL CONDUCTORS OR SPAN WIRE HANGER ASSEMBLY (PELCO SE-3019 OR APPROVED EQUAL) AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK.

ADVANCE WARNING FLASHER - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED, THE DEPARTMENT WILL NOT MEASURE 48X48 INCH SIGN WITH CHANNEL POSTS, 72X48 INCH SPAN MOUNTED SIGN, CONDUIT FROM STEEL STRAIN POLE TO SIGNAL HEADS ON SIDE MOUNTED SIGN, CONDUIT FITTINGS AND STRAPS, OR ANY ASSOCIATED SIGN MOUNTING HARDWARE AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK.

INSTALL VIDEO CAMERA - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED, THE DEPARTMENT WILL NOT MEASURE INSTALLATION OF SPECIFIED VIDEO CAMERA, VIDEO MODULES, OR MOUNTING BRACKET AS SHOWN ON THE DETAIL SHEET AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL NOT MEASURE FURNISHING AND INSTALLING TRUSS TYPE ARM (IF NECESSARY), POWER CABLE, COAXIAL CABLE, OR ANY HARDWARE NECESSARY FOR PROPER INSTALLATION AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER WHEN INSTALLATION IS COMPLETE FOR PLACEMENT OF LOOPS.

INSTALL TEMPORARY VIDEO CAMERA - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED, THE DEPARTMENT WILL NOT MEASURE INSTALLING AND MAINTAINING SPECIFIED VIDEO CAMERA, VIDEO MODULES, OR MOUNTING BRACKET AS SHOWN ON THE DETAIL SHEET AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL NOT MEASURE FURNISHING AND INSTALLING TRUSS TYPE ARM (IF NECESSARY), POWER CABLE, COAXIAL CABLE, OR ANY HARDWARE NECESSARY FOR PROPER INSTALLATION AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK, UP TO TWO RELOCATIONS OF THE VIDEO CAMERA TO A TRAFFIC POLE AND ANY CAMERA MODIFICATIONS DUE TO LANE SHIFTS OR CLOSURES WILL NOT BE MEASURED BY THE DEPARTMENT AND WILL BE CONSIDERED INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL NOT MEASURE THE REMOVAL OF VIDEO CAMERA EQUIPMENT, MOUNTING BRACKET, WIRES, OR ANY OTHER ASSOCIATED HARDWARE AND WILL CONSIDER THEIR REMOVAL INCIDENTAL TO THIS ITEM OF WORK. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER WHEN VIDEO LOOPS ARE TO BE INSTALLED, UPON COMPLETION OF SIGNAL WORK ALL UNUSED EQUIPMENT SHALL BE RETURNED TO THE DIVISION OF TRAFFIC OPERATIONS IN FRANKFORT, KY. THE CONTRACTOR SHALL NOTIFY DISTRICT TRAFFIC TWO WEEKS IN ADVANCE OF ANY MODIFICATIONS OR RELOCATIONS OF VIDEO CAMERAS.

INSTALL SIGNAL CONTROLLER TYPE ATC. THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED, THE DEPARTMENT WILL NOT MEASURE THE CONCRETE BASE, MOUNTING THE CABINET, CONNECTING THE SIGNAL AND DETECTORS, EXCAVATION, BACKFILLING, RESTORATION, ANY NECESSARY POLE MOUNTING HARDWARE, ELECTRIC SERVICE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES INVOLVING UTILITY SECONDARY/PRIMARY SERVICE FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE CONNECTING THE INDUCTION LOOP AMPLIFIERS, PEDESTRIAN ISOLATORS, LOAD SWITCHES, MODEL 400 MODEM CARD FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE FURNISHING AND INSTALLING ELECTRICAL SERVICE CONDUCTORS, CONDUITS, ANCHORS, METER BASE, FUSED CUTOFF, FUSES, GROUND RODS, GROUND LUGS, AND GROUND WIRES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

INSTALL RADAR PRESENCE DETECTOR TYPE A SHALL CONSIST OF INSTALLATION OF A POLE MOUNTED RADAR PRESENCE SENSOR, SENSOR MOUNTING BRACKET, SENSOR CABLES, INTERFACE BOXES, LEAD-IN CABLE, CONNECTORS (FURNISHED BY CONTRACTOR), AND CONTROLLER INTERFACE ASSEMBLY. RADAR PRESENCE DETECTOR TYPE A BID ITEM SHALL INCLUDE ALL LABOR REQUIRED TO PROVIDE A FUNCTIONAL DETECTION SYSTEM. RADAR PRESENCE DETECTOR TYPE A SHALL BE INSTALLED AND WIRED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. AFTER THE DETECTOR IS INSTALLED AND BEFORE THE DETECTOR IS POWERED ON, THE CONTRACTOR SHALL COORDINATE WITH DISTRICT TRAFFIC DIVISION'S REPRESENTATIVES TO SCHEDULE A TIME TO PERFORM THE DETECTOR SETUP. THE CONTRACTOR SHALL DOUBLE CHECK TO VERIFY THAT ALL WIRING IS CORRECTLY INSTALLED AND CONNECTED BEFORE SCHEDULING THE SETUP WORK. REPRESENTATIVES FROM KYTC AND/OR THE MANUFACTURER OR SALES REPRESENTATIVE WILL ASSIST WITH SETUP AND CALIBRATION. THE CONTRACTOR SHALL PROVIDE A BUCKET TRUCK AND OPERATORS AT THIS TIME FOR FINAL AIMING OF THE SENSORS. THE CONTRACTOR SHALL PROVIDE INDIVIDUALS CAPABLE OF OPERATING THE SETUP SOFTWARE AND LEARNING THE SETUP PROCESS SO THAT FUTURE INSTALLATIONS MAY BE COMPLETED WITHOUT ASSISTANCE FROM OTHERS.

INSTALL RADAR ADVANCE DETECTOR TYPE B SHALL CONSIST OF INSTALLATION OF A POLE MOUNTED RADAR PRESENCE SENSOR, SENSOR MOUNTING BRACKET, SENSOR CABLES, INTERFACE BOXES, LEAD-IN CABLE, CONNECTORS (FURNISHED BY CONTRACTOR), AND CONTROLLER INTERFACE ASSEMBLY. RADAR ADVANCE DETECTOR TYPE B BID ITEM SHALL INCLUDE ALL LABOR REQUIRED TO PROVIDE A FUNCTIONAL DETECTION SYSTEM. RADAR ADVANCE DETECTOR TYPE B SHALL BE INSTALLED AND WIRED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. AFTER THE DETECTOR IS INSTALLED AND BEFORE THE DETECTOR IS POWERED ON, THE CONTRACTOR SHALL COORDINATE WITH DISTRICT TRAFFIC DIVISION'S REPRESENTATIVES TO SCHEDULE A TIME TO PERFORM THE DETECTOR SETUP. THE CONTRACTOR SHALL DOUBLE CHECK TO VERIFY THAT ALL WIRING IS CORRECTLY INSTALLED AND CONNECTED BEFORE SCHEDULING THE SETUP WORK. REPRESENTATIVES FROM KYTC AND/OR THE MANUFACTURER OR SALES REPRESENTATIVE WILL ASSIST WITH SETUP AND CALIBRATION.

INSTALL SOLAR SCHOOL FLASHER ASSEMBLY - THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED, THE DEPARTMENT WILL NOT MEASURE THE FURNISHING OF ASSEMBLIES FOR MOUNTING EQUIPMENT, INSTALLING SOLAR PANEL, INSTALLING BATTERY CABINET, AND INSTALLING BEACONS AND ANY ASSOCIATED MOUNTING HARDWARE FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL NOT MEASURE FURNISHING AND INSTALLING SCHOOL ZONE AND SPEED SIGNS ALONG WITH ANY HARDWARE ASSEMBLIES FOR SIGNS, FURNISHING WIRE CONNECTIONS AND GROUNDING OF CABINET INCLUDING GROUND RODS/GROUND LUGS/GROUND WIRE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

INSTALL RECTANGULAR RAPID FLASHING BEACON. THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED, THE DEPARTMENT WILL NOT MEASURE THE FURNISHING OF ASSEMBLIES FOR MOUNTING EQUIPMENT, INSTALLING SOLAR PANEL, INSTALLING CONTROL BATTERY CABINET, INSTALLING PUSH BUTTON, INSTALLING SIGN PANEL, FURNISHING WIRE CONNECTIONS, AND GROUNDING OF THE CABINET INCLUDING GROUND RODS/GROUND LUGS/GROUND WIRE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

TRAFFIC SIGNAL ESTIMATE OF QUANTITIES

TOTAL	UNITS	CODE	ITEM DESCRIPTION
60	SQ FT	2562	SIGNS
1	LP SUM	2569	DEMOBILIZATION (1.5%)
1	LP SUM	2650	MAINTAIN & CONTROL TRAFFIC (5%)
4	EACH	2775	FLASHING ARROW
638	LN FT	4790	CONDUIT 1/2 INCH
775	LN FT	4791	CONDUIT 3/4 INCH
70	LN FT	4792	CONDUIT 1 INCH
470	LN FT	4793	CONDUIT 1 1/4 INCH
40	LN FT	4794	CONDUIT 1 1/2 INCH
259	LN FT	4795	CONDUIT 2 INCH
35	LN FT	4796	CONDUIT 2 1/2 INCH
78	LN FT	4797	CONDUIT 3 INCH
40	LN FT	4798	CONDUIT 3 1/2 INCH
20	LN FT	4799	CONDUIT 4 INCH
10	EACH	4810	ELECTRICAL JUNCTION BOX
2	EACH	4811	ELECTRICAL JUNCTION BOX TYPE B
125	LN FT	4820	TRENCHING AND BACKFILLING
44	LN FT	4821	OPEN CUT ROADWAY
125	LN FT	4830	LOOP WIRE
	LN FT	4840	CABLE-INTERCONNECT
	LN FT	4841	CABLE-NO. 14/2C
	LN FT	4842	CABLE-NO. 14/3C
	LN FT	4843	CABLE-NO. 14/4C
	LN FT	4844	CABLE-NO. 14/5C
	LN FT	4845	CABLE-NO. 14/7C
	LN FT	4850	CABLE-NO. 14/1 PAIR
	LN FT	4851	CABLE-NO. 14/2 PAIR
	LN FT	4852	CABLE-NO. 14/3 PAIR
	EACH	4871	POLE 35' WOODEN
	EACH	4872	POLE 40' WOODEN
	EACH	4873	POLE 45' WOODEN
	EACH	4880	STEEL STRAIN POLE
	EACH	4881	MAST ARM POLE
	EACH	4882	SIGNAL PEDESTAL
	EACH	4883	POST
	EACH	4884	ANCHOR
	LN FT	4885	MESSENGER-10800 LB
	LN FT	4886	MESSENGER-15400 LB
	EACH	4887	INSTALL SIGNAL-8" LED
	LN FT	4894	PREFORMED LOOP/LEAD-IN
	LN FT	4895	LOOP SAW SLOT AND FILL
	EACH	4900	PEDESTRIAN DETECTOR
	EACH	4905	BLANKOUT SIGN
	EACH	4910	SIGNAL-8"
	EACH	4911	SIGNAL-12"
	EACH	4912	SIGNAL-3 SECTION 12"
	EACH	4913	SIGNAL-4 SECTION 12"
	EACH	4914	SIGNAL-5 SECTION 12"
	EACH	4915	SIGNAL-PROGRAMMED
	EACH	4916	SIGNAL-PEDESTRIAN
	EACH	4920	SIGNAL CONTROLLER-TYPE 170
	EACH	4930	BEACON CONTROLLER-2 CIRCUIT
	EACH	4931	INSTALL SIG CONTROLLER-TYPE 170
	LP SUM	4932	INSTALL STEEL STRAIN POLE
	LP SUM	4950	REMOVE SIGNAL EQUIPMENT
	SQ YD	4960	REMOVE AND REPLACE SIDEWALK
	EACH	6472	INSTALL SPAN MOUNTED SIGN
	EACH	2009NS835	INSTALL PEDESTRIAN HEAD LED
	EACH	2018NS835	INSTALL SIGNAL-3 SECTION LED
	EACH	2018NS835	INSTALL SIGNAL-4 SECTION LED
	EACH	2026ES835	INSTALL SIGNAL-4 SECTION LED
	EACH	2027SEC	VIDEO DETECTION-INSTALL
	EACH	2039NS835	INSTALL COORDINATING UNIT
	EACH	2039NS835	ELECTRICAL JUNCTION BOX TYPE A
	EACH	2040NS835	ELECTRICAL JUNCTION BOX TYPE B
	EACH	2040NS835	INSTALL SIGNAL-12" LED
	LN FT	2045ZNS835	PREFORMED LOOPS
	LN FT	2045NS835	PREFORMED QUADRAPOLE LOOPS
	EACH	2045NS835	VIDEO CAMERA
	EACH	2045NS835	INSTALL TEMP VIDEO CAMERA
	EACH	2045NS835	INSTALL PED DETECTOR AUDIBLE
	EACH	2049NS835	AUDIBLE PEDESTRIAN DETECTOR
	EACH	20631ND	INSTALL POLE MOUNTED SIGN
	LN FT	21543EN	BORE AND JACK CONDUIT
	EACH	21659NN	RELOCATE SIGNAL HEAD
	LP SUM	21684NN	PHOTOVOLTAIC POWERED SCHOOL BEACON
	LP SUM	21734NN	PEDESTAL CONTROL EQUIPMENT
	EACH	21743NN	INSTALL PEDESTRIAN DETECTOR
	EACH	22631NN	INSTALL MAST ARM POLE
	EACH	23051NN	PEDESTAL POST
	EACH	23052NN	SPAN MOUNTED SIGN
	EACH	23053NN	ADVANCE BEACON CONTROL
	EACH	23068NN	REMOVE & REINSTALL COORDINATING UNIT
	CU YD	23157EN	TRAFFIC SIGNAL POLE BASE
	EACH	23230EC	ILLUMINATED STREET SIGN
	EACH	23222EC	INSTALL SIGNAL PEDESTAL
	EACH	23235EC	INSTALL PEDESTAL POST
	EACH	23982EC	INSTALL ANTENNA
	EACH	24525EC	ADVANCE WARNING FLASHER
	EACH	24601EC	INSTALL -

FILE NAME: C:\SERS\BESSICA\DOWN\DESIGN\TRAFFIC SIGNAL\ESTIMATE OF QUANTITIES SHEET SJLJON
 USER: j_miller\j_miller
 DATE PLOTTED: June 11, 2024
 E-SHEET NAME:
 SheetNo: Design: 23.00.01.11

COUNTY OF	ITEM NO.	SHEET NO.

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723

SUBSECTION: 03.02 POLES AND BASES INSTALLATION, B)
 REVISION: REPLACE ENTIRE TABLE WITH THE FOLLOWING:

MAX SERVICE MOMENT (FT-KIPS)	DIAMETER (IN.)	DEPTH (FEET)				VERTICAL BARS		TIES OR SPIRAL	
		< 2:1 GROUND SLOPE		2:1 GROUND SLOPE		SIZE	TOTAL	BAR SIZE	SPACING OR PITCH (IN.)
		SOIL	ROCK	SOIL	ROCK				
0-9.9	36	6	6	6.5	6	13	#8	#4	12
10-19.9	36	6	6	6	6	13	#8	#4	12
20-29.9	36	8	6	6	6	13	#8	#4	12
30-39.9	36	8	6	6	6	13	#8	#4	12
40-49.9	36	9.5	6	11.0	6	13	#8	#4	12
50-59.9	36	11	6	11.5	6	13	#8	#4	12
60-69.9	36	11	6	12	6	13	#8	#4	12
70-99.9	36	12.5	6	12.5	6	13	#8	#4	12
100-149.9	36	14.5	6	16	6	13	#8	#4	12
150-199.9	36	17	6	17.5	6	13	#8	#4	12
200-249.9	36	18.5	6	19.5	6	13	#8	#4	12
250-299.9	36	18.5	6.5	21	6.5	18	#8	#4	12
300-349.9	36	21	7	23	7	18	#8	#4	12
400-499.9	48	21.5	7.5	25	7.5	18	#8	#4	12
500-500	48	22.5	7.5	25.5	7.5	18	#8	#4	12

SUBSECTION: 03.05 CONDUIT INSTALLATION
 REVISION: REPLACE THE FIRST TWO SENTENCES WITH THE FOLLOWING:
 PROVIDE SCHEDULE 80 PVC OR DUCT (AS STATED IN SUBSECTION 834.06) CONDUIT ENCASUREMENTS FOR CONDUCTORS EXCEPT AS SPECIFIED IN THE CONTRACT. PROVIDE SCHEDULE 80 STEEL SCHEDULE 80 HDPE OR SDR 13.5 HDPE CONDUIT ENCASUREMENT FOR ALL CONDUCTORS UNDER ANY ROAD CROSSING AND IN BASES WITH BREAKAWAY DEVICES INSTALLED EXCEPT AS SPECIFIED IN THE CONTRACT OR STATED BELOW.

REVISION: REPLACE THE FOURTH SENTENCE WITH THE FOLLOWING:
 PROVIDE SCHEDULE 40 PVC, SCHEDULE 40 HDPE, OR SDR 13.5 HDPE FOR ENCASUREMENT INSIDE CONCRETE BARRIER WALLS, EXCEPT FOR CONDUITS COMING IN FROM UNDER THE ROADWAY WHICH SHALL BE RIGID STEEL, SCHEDULE 80 PVC, SCHEDULE 80 HDPE, OR SDR 13.5 HDPE.

REVISION: ADD THE FOLLOWING AT THE END OF THE PARAGRAPH:
 ADD A PULL STRING TO ALL SPARE CONDUITS, THE PULL STRING SHALL BE TIED OFF AT EACH END OF THE CONDUITS.

SUBSECTION: 03.13 LOOP INSTALLATION.
 REVISION: REPLACE FIRST SENTENCE NOTE WITH THE FOLLOWING:
 TWIST UNSHEATHED LOOP WIRES (MSA 51-7) WITH 3 TO 5 TURNS PER FOOT FROM THE START OF THE HOMERUN TO THE JUNCTION BOX, CABINET, OR POLE. SLOT CAN BE WIDEN TO 1/2" TO 5/8" TO HELP WITH THE INSTALLATION OF THE TWISTED WIRE.

SUBSECTION: 03.17 A) TESTING.
 REVISION: REPLACE FIFTH SENTENCE WITH THE FOLLOWING:
 THE CONTRACTOR SHALL VERIFY THAT THE LOOPS (BOTH EXISTING AND REPLACEMENT LOOPS) MEETS THE REQUIREMENTS BEFORE THE FINAL SURFACE IS LAID. ADD FOLLOWING SENTENCE AT END OF PARAGRAPH:
 IF THE ENGINEER DECIDES TO REPLACE ANY LOOPS BEFORE TESTING, BID ITEM LOOP TEST WILL NOT BE USED FOR THAT LOOP LOCATION.

SUBSECTION: 03.12 WIRING INSTALLATION.
 REVISION: SEE TRAFFIC OPERATIONS WEBSITE FOR WORD DOCUMENT TO REPLACE ALL CHARTS FOR WIRING TO SHOW CHANGES FOR EQUIPMENT GROUNDING.

SUBSECTION: 04.22 REMOVE SIGNAL EQUIPMENT. (PERMIT ONLY)
 REVISION: REPLACE ENTIRE NOTE WITH THE FOLLOWING:
 THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH REMOVAL OF SIGNAL EQUIPMENT. THE CONTRACTOR SHALL DISPOSE ALL MATERIALS REMOVED FROM THE PROJECT IN ACCORDANCE WITH THE DEPARTMENT WAREHOUSE. THE CONTRACTOR SHALL TAKE ALL STEEL AND ALUMINUM POLES (WITH THE EXCEPTION OF PLASTIC) IN FRANKFORT, KENTUCKY. ALL OTHER MATERIALS WITH THE EXCEPTION OF PLASTIC ITEMS AND WOOD POLES SHALL BE TAKEN TO LOCATIONS IDENTIFIED BY THE DISTRICT TRAFFIC ENGINEER. THE CONTRACTOR SHALL SCHEDULE A TIME WITH THE DISTRICT TRAFFIC ENGINEER, THE CONTRACTOR SHALL SCHEDULE A TIME WITH THE DISTRICT TRAFFIC ENGINEER (502-564-3916) TO SCHEDULE A TIME TO REMOVE THE EQUIPMENT POLES TO THE EQUIPMENT WAREHOUSE. THE CONTRACTOR SHALL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

SUBSECTION: 04.22 REMOVE SIGNAL EQUIPMENT. (CONSTRUCTION ONLY)
 REVISION: REPLACE THE PARAGRAPH WITH THE FOLLOWING:
 THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH REMOVAL OF SIGNAL SYSTEM MATERIALS ASSOCIATED WITH ANY STRUCTURAL OR ELECTRICAL COMPONENT OF THE SIGNAL SYSTEM INCLUDING, BUT NOT LIMITED TO, POLE BASES, POLES, JUNCTION BOXES, CABINETS, AND WOOD POLES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

TRAFFIC SIGNAL ESTIMATE OF QUANTITIES MEASUREMENT, CONST. AND MISC NOTES

MATERIAL NOTES THAT ARE CONTRARY TO SECTION 835

SUBSECTION: 07.02 MAST ARM POLES
 REVISION: REPLACE ENTIRE 9) NOTE FOR "THE DETAIL ANALYSIS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING CALCULATIONS:" WITH THE FOLLOWING:
 LIMIT VERTICAL DEFLECTION TO 8 INCHES FOR GALLOPING FOR ALL ARMS.

SUBSECTION: .21 WARNING TAPE.
 REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING IN 834.33:
 PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL) THICK.

MATERIAL NOTES IN ADDITION TO SECTION 835

SUBSECTION: 16.07 SIGNAL TETHER CABLE
 ADDITION: PROVIDE TETHER CABLE THAT CONSISTS OF "CLASS A" ZINC-COATED, COMMON GRADE STEEL AND EXTRA GALVANIZED PER ASTM 457-03. PROVIDE A MINIMUM 1/4 INCH DIAMETER WITH 7 STRANDS AND MINIMUM BREAKING STRENGTH OF 1,900 POUNDS.

SUBSECTION: 16.08 SIGNAL TETHER STRANDWISE
 ADDITION: PROVIDE A STRANDWISE THAT HAS AN AUTOMATIC JAW TYPE DEAD-END FOR 1/4 INCH GALVANIZED STEEL MESSENGER. USE HUBBELL GD5200L OR APPROVED EQUAL.

SUBSECTION: 16.09 SIGNAL TETHER STRANDLINK
 ADDITION: PROVIDE A STRANDLINK THAT IS A SPLICE FOR 1/4 INCH GALVANIZED STEEL MESSENGER. USE HUBBELL GL55000 OR APPROVED EQUAL.