

## FOOTNOTES

- 1 ALLOWANCE TO COVER THE COST ASSOCIATED WITH POWER CONNECTION FOR THE TRAFFIC SIGNAL OR RDS UNIT FROM THE TRANSFORMER TO THE DEMARCATION POINT. THE UNIT PRICE BID FOR THIS ITEM WILL BE ADJUSTED BY SHELBY COUNTY TO MATCH THE FEE CHARGED BY MLGW FOR PROVIDING THE ELECTRICAL SERVICE CONNECTION.
- 2 SEE THE LATEST "CITY OF MEMPHIS - STANDARD CONSTRUCTION SPECIFICATIONS" FOR TECHNICAL REQUIREMENTS.
- 3 SEE PROJECT SPECIAL PROVISIONS FOR RADAR DETECTION EQUIPMENT.
- 4 SEE CITY OF MEMPHIS SPECIFICATIONS FOR "BLUETOOTH DETECTION SYSTEM". THE INSTALLATION AT EACH LOCATION SHALL INCLUDE BLUETOOTH SENSOR, NEMA ENCLOSURE, CONDUIT AND RISER FROM CONTROLLER CABINET TO SIGNAL POLE, POWER OVER ETHERNET SUBSYSTEM, ANTENNA, ETHERNET CABLE, AND ALL OTHER CABLING, CONNECTIONS AND HARDWARE TO COMPLETE THE INSTALLATION OF A FULLY FUNCTIONAL BLUETOOTH DETECTION SYSTEM ON THE EXISTING SIGNAL POLE WHICH IS DENOTED ON THE PLANS. THIS LUMP SUM ITEM ALSO INCLUDES THE BLUETOOTH SOFTWARE LICENSE FEE FOR ALL INSTALLED UNITS. THE LUMP SUM PRICE INCLUDES ALL SOFTWARE AND HARDWARE INSTALLATION AND INTEGRATION WORK TO PROVIDE A FULLY FUNCTIONAL BLUETOOTH SYSTEM THAT ALLOWS MONITORING AND RETRIEVAL OF TRAVEL TIME AND SPEED DATA REMOTELY.
- 5 QUAZITE BRAND (MODEL NO. PG2436BB24 WITH PG2436HH6L COVER) OR APPROVED EQUIVALENT. COST INCLUDES REPAIR OF LANDSCAPING, REMOVING EXISTING PULL BOX, AND OTHER MISCELLANEOUS WORK NECESSARY TO COMPLETE PULL BOX INSTALLATION.
- 6 QUAZITE BRAND (MODEL NO. PG3048BB36 WITH PG3048HS6L COVER) OR APPROVED EQUIVALENT. COST INCLUDES REPAIR OF LANDSCAPING, REMOVING EXISTING PULL BOX, AND OTHER MISCELLANEOUS WORK NECESSARY TO COMPLETE PULL BOX INSTALLATION.
- 7 CONTRACTOR RESPONSIBLE FOR ALL COST ASSOCIATED WITH POWER CONNECTION FOR TRAFFIC SIGNAL OR RDS UNIT FROM THE DEMARCATION POINT TO THE CABINET.
- 8 CONTRACTOR SHALL INSTALL A TRACER WIRE WITH THE FIBER OPTIC CABLE FOR ALL CONDUIT ROUTING. TRACER WIRE SHALL BE 10 AWG STRANDED COPPER CONDUCTOR CABLE WITH BOTH THHN AND THWN RATINGS AND YELLOW IN COLOR.
- 9 TO BE ITERIS VANTAGE SYSTEM OR APPROVED EQUIVALENT. INCLUDES DETECTION CAMERAS, PROCESSOR UNIT, CARD RACK, POWER SUPPLY UNIT, 10" COLOR LCD MONITOR, MOUSE, VIDEO REMOTE MANAGEMENT CARD WITH ETHERNET INTERFACE AND ALL OTHER CABLING, CONNECTIONS AND HARDWARE TO COMPLETE THE INSTALLATION OF A FULLY FUNCTIONAL VIDEO DETECTION SYSTEM.
- 10 INSTALL ONE (1) DETECTOR CARD PER INTERSECTION APPROACH WHERE ADVANCE DETECTION LOOPS ARE TO BE REPAIRED OR REPLACED. SEE INTERSECTION LAYOUT SHEETS.
- 11 TO BE GTT OPTICOM SYSTEM OR APPROVED EQUIVALENT. INCLUDES OPTICAL DETECTORS, CONFIRMATION LAMPS (PAR 90), POLE-MOUNTED BEACONS, FOUR-CHANNEL PHASE SELECTOR, CARD RACK (OPTICOM 760) AND ALL CABLING, CONNECTIONS AND HARDWARE TO COMPLETE THE INSTALLATION OF A FULLY-FUNCTIONAL PREEMPTION SYSTEM, INCLUDING FIELD FINE-TUNING.
- 12 THE TRAFFIC SIGNAL CONTROLLER SHALL BE AN EAGLE EPAC M52 KEYBOARD UNIT OR APPROVED EQUIVALENT WITH NTCIP COMPLIANT SOFTWARE AND SEPAC, BUILT-IN ETHERNET PORT AND BUILT-IN STRETCH AND DELAY FEATURES FOR EACH PHASE. THE TRAFFIC CONTROLLER INSTALLATION ALONG WITH ALL AUXILIARY EQUIPMENT TO BE INSTALLED IN THE CABINET SHALL BE MANUFACTURED, SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST CITY OF MEMPHIS TRAFFIC SIGNAL CONTROLLER AND CABINET SPECIFICATIONS. THE INSTALLATION SHALL HAVE A 12-CHANNEL MALFUNCTION MONITOR UNIT INSTALLED AS MODEL EDI SSM12LEiP.
- 13 FOR USE WHERE AND AS DIRECTED BY THE ENGINEER. INCLUDES REMOVAL OF EXISTING CURB RAMP, SIDEWALK, CURB, AND GUTTER AS REQUIRED, AND CONSTRUCTION OF NEW SIDEWALK AND RAMP WITH LANDING AREA AND TRANSITIONS.
- 14 ITEM TO INCLUDED ALL MATERIALS AND LABOR NECESSARY FOR INSTALLATION AND CONNECTION OF SOLAR POWER TO RDS UNIT.
- 15 FOR POST TYPE CABLE MARKERS USED IN INTERCHANGES AND OPEN AREAS.
- 16 ITEM TO INCLUDED REMOVAL OF ALL EXISTING SIGNAL EQUIPMENT AS SHOWN IN PLANS. INCLUDES BUT IS NOT LIMITED TO REMOVAL OF SIGNAL CABINET, WIRING, ETC. MEASURED ON A PER EACH INTERSECTION WHERE EQUIPMENT REMOVAL IS REQUIRED.
- 17 ITEM TO INCLUDE ALL MATERIALS NESSARY TO ATTACH CONDUIT TO BRIDGE. INCLUDES WRAP AROUND CABLE MARKERS AT 100 FOOT SPACING.
- 18 SEE CITY OF MEMPHIS SPECIFICATIONS FOR "RUGGEDIZED ETHERNET CABINET SWITCH".
- 19 SEE CITY OF MEMPHIS SPECIFICATIONS FOR "RUGGEDIZED ETHERNET HUB SWITCH".
- 20 SEE CITY OF MEMPHIS SPECIFICATIONS FOR "SERIAL DEVICE SERVER".
- 21 SEE PROJECT SPECIAL PROVISIONS FOR UTILITY CABINETS.
- 22 SEE CITY OF MEMPHIS SPECIFICATIONS FOR "FIELD HUB CABINET".