

**PAVEMENT MARKINGS**

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DOCUMENT THE LAYOUT OF THE EXISTING PAVEMENT MARKINGS INCLUDING EXISTING LANE AND SHOULDER WIDTHS IN A LOG AND SUBMIT TO THE DEPARTMENT FOR ACCEPTANCE. THE DEPARTMENT WILL NOT ALLOW THE CONTRACTOR TO PERFORM ANY PAVEMENT WORK FUNCTIONS (MILLING, OVERLAY, ETC.) UNTIL ACCEPTANCE OF THE SUBMITTED EXISTING MARKING LOG.

MARKINGS SHALL BE REPLACED IN KIND EXCEPT WHERE EXISTING MARKINGS DO NOT MEET THE CURRENT STANDARD CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL COORDINATE AND CORROBORATE THE PROPOSED LAYOUT OF ALL PAVEMENT MARKINGS PER APPLICABLE STANDARD CONSTRUCTION DRAWINGS WITH ODOT.

NO PERMANENT PAVEMENT MARKINGS OR RAISED PAVEMENT MARKERS SHALL BE PLACED UNTIL THE ODOT PROJECT ENGINEER HAS APPROVED THE LOCATION AND/OR LAYOUT OF THE WORK ZONE PAVEMENT MARKINGS.

**PAVEMENT MARKINGS ON INTERSECTING ROADWAYS**

THE EDGE LINE SHALL BE CONTINUED AROUND ALL RADII TO MATCH THE EXISTING EDGE LINE OF THE INTERSECTING ROUTE. IF THE INTERSECTING ROUTE HAS A CENTER LINE MARKING, THE CENTER LINE SHALL BE RE-STRIPED OVER THE AREA OF RESURFACING.

**ENVIRONMENTAL NOTES**

PROTECTION OF POSSUM CREEK METROPARK: THE CONTRACTOR SHALL NOT STAGE ANY EQUIPMENT OR MATERIALS WITHIN POSSUM CREEK METROPARK, OUTSIDE OF THE EXISTING PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL ENSURE THAT ACCESS TO THE POSSUM CREEK METROPARK IS NOT RESTRICTED BY PROJECT CONSTRUCTION ACTIVITIES.

BICYCLE TRAFFIC ON UNION ROAD: UNION ROAD, WHICH CROSSES SR 4, IS A DESIGNATED ON-ROAD BIKE ROUTE. CONSTRUCTION PERSONNEL SHALL BE ALERT TO CYCLISTS AND ACCOMMODATE CYCLISTS SAFE TRAVEL THROUGH THE INTERSECTION DURING PAVING ACTIVITIES AS THIS INTERSECTION.

**TWIN CREEK ACCESS GRAVEL LOT**

A QUANTITY OF ITEM 617 COMPACTED AGGREGATE HAS BEEN INCLUDED IN THE PLANS TO FILL IN THE LARGE DROP-OFF ALONG THE LEFT SIDE OF SR 4 FROM SLM 2.51 TO SLM 2.57. THIS COMPACTED AGGREGATE SHOULD BE SPREAD OUT IN A 8' WIDTH ALONG THE EDGE OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.

ITEM 617 COMPACTED AGGREGATE 30 CY

**ITEM 809 - STOP-LINE RADAR DETECTION**

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT. THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

- POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
- ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
- THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
- SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
- THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ON-SITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.
- A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).
- THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.

PAYMENT FOR ITEM 809 STOP-LINE RADAR DETECTION SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH

UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED.

ITEM 809 - STOP LINE RADAR DETECTION	
LOCATION	QUANTITY
SR 4 X FARMERSVILLE/W. CARROLLTON RD (EASTBOUND)	1
SR 4 X FARMERSVILLE/W. CARROLLTON RD (WESTBOUND)	1
SR 4 X FARMERSVILLE/W. CARROLLTON RD (NORTHBOUND)	1
SR 4 X FARMERSVILLE/W. CARROLLTON RD (SOUTHBOUND)	1
TOTAL	4

**ITEM 809 - ADVANCE RADAR DETECTION**

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR ADVANCE

DETECTION UNIT (MODEL SS-200E). THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

- POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
- ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
- THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
- SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
- THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ON-SITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.
- A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).
- THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.

PAYMENT FOR ITEM 809 ADVANCE RADAR DETECTION SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT, CONNECTIONS TESTED AND ACCEPTED, AND ANY OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM.

THE ADVANCE RADAR DETECTION SHOULD BE INSTALLED AND OPERATIONAL PRIOR TO ANY PAVEMENT WORK.

ITEM 809 - ADVANCE RADAR DETECTION	
LOCATION	QUANTITY
SR 4 X FARMERSVILLE/W. CARROLLTON RD (NORTHBOUND)	1
SR 4 X FARMERSVILLE/W. CARROLLTON RD (SOUTHBOUND)	1
TOTAL	2

**632 SIGNALIZATION, MISC.: UNLASH AND RELASH MESSENGER WIRE**

THE CONTRACTOR SHALL REMOVE EXISTING MESSENGER WIRE LASHING RODS AND REINSTALL THEM AS NECESSARY FOR THE INSTALLATION OF ANY NEW CABLES ON THE EXISTING INTERSECTION SIGNAL SPANS. THE CABLES SHALL ENTER THE EXISTING STRAIN POLE THROUGH THE POLE CABLE ENTRANCE FITTING AND USE THE EXISTING CONDUIT SYSTEM TO GET TO THE CONTROLLER CABINET. THE NEW CABLES SHALL BE SUPPORTED BY A NEW CABLE SUPPORT ASSEMBLY AT THE TOP OF THE STRAIN POLE.

THE NEW SIGNAL CABLES SHALL BE BID BY SEPARATE BID ITEMS.

PAYMENT FOR ITEM 632 "SIGNALIZATION MISC.: UNLASH AND RELASH MESSENGER WIRE" SHALL BE MADE AT THE CONTRACT UNIT PRICE PER PER FOOT AND SHALL INCLUDE ALL LABOR, MATERIALS, CABLE SUPPORT ASSEMBLIES AND EQUIPMENT TO INSTALL NEW CABLES ON EXISTING SIGNAL SPAN WIRE INSTALLATIONS.

REMOVE AND REINSTALL LASHING RODS	
LOCATION	FT
SR 4 X FARMERSVILLE/W. CARROLLTON ROAD	110

**ITEM 632 REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: LOOP DETECTOR LEAD-IN CABLE**

THIS ITEM CONSISTS OF REMOVING THE LOOP DETECTOR LEAD-IN CABLE FROM THE LOOP LEAD-IN TIE-IN SPLICE KIT AT THE PULLBOX ADJACENT TO THE LOOP TO THE CONTROLLER CABINET BACK PANEL.

PAYMENT FOR ITEM 632 REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: LOOP DETECTOR LEAD-IN CABLE SHALL BE MADE AT THE CONTRACT UNIT PRICE PER FOOT AND SHALL INCLUDE ALL LABOR, EQUIPMENT AND DISPOSAL OF THE LOOP DETECTOR LEAD-IN CABLE.

REMOVAL OF LOOP DETECTOR LEAD-IN CABLE	
LOCATION	FT
SR 4 X FARMERSVILLE/W. CARROLLTON ROAD	5900

**TRAFFIC SIGNAL WORK SCHEDULE**

THE RADAR DETECTION WORK MUST BE COMPLETED FOR THE TRAFFIC SIGNALS BEFORE ANY PAVEMENT PLANING MAY OCCUR.



