

ITEM 632 - LOOP DETECTOR TIE-IN, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE WORK NECESSARY TO SPLICE A NEW DETECTOR WIRE TO EXISTING LOOP LEAD-IN CABLE IN A PULL BOX AT A DETECTOR LOOP REPLACEMENT LOCATION. THE CONTRACTOR SHALL CAREFULLY REMOVE AN EXISTING EPOXY INSULATED SPLICE KIT TO MINIMIZE ANY DAMAGE AND TO PRESERVE THE AMOUNT OF SLACK IN THE EXISTING LOOP LEAD-IN CABLE. THE CONTRACTOR SHALL ALSO REMOVE THE EXISTING DETECTOR WIRE IN THE PULL BOX AND IN THE CONDUIT TO THE PAVEMENT EDGE. THIS ITEM SHALL ALSO INCLUDE THE SOLDERING AND SPLICING OF THE WIRE TOGETHER WITH THE CABLE AND INSTALLING A NEW EPOXY INSULATED SPLICE KIT AS DESCRIBED IN CMS 632.23.

THE DEPARTMENT WILL MEASURE ITEM 632 - LOOP DETECTOR TIE-IN, AS PER PLAN, BY THE NUMBER OF EACH COMPLETE TIE-IN INSTALLED AND ACCEPTED. THIS WILL ALSO INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THIS ITEM OF WORK.

ITEM 632 - COMBINATION STRAIN POLE, TYPE TC-81.11, DESIGN 13

ITEM 632 - STRAIN POLE, TYPE TC-81.11, DESIGN 12, BY LENGTH, AS PER PLAN

THE CONTRACTOR WILL BE REQUIRED TO PURCHASE DESIGN 12, 32' AND 34', SIGNAL STRAIN POLES WITH ANCHOR BOLTS FOR THIS CONTRACT. IN ADDITION TO CMS 732.12, ALL POLES WILL REQUIRE BOTH A 3-INCH BLIND COUPLING AT 1-FOOT DOWN FROM THE TOP OF THE POLE AT 180 DEGREES FROM THE HANDHOLE, A 1.5-INCH BLIND COUPLING AT 1-FOOT ABOVE AND AT 90 DEGREES FROM THE HANDHOLE, AND A 2-INCH BLIND HALF COUPLING AT 1-FOOT ABOVE THE BOTTOM OF THE POLE AT 270 DEGREES FROM THE HANDHOLE.

IT MAY BE NECESSARY TO CUT DOWN A 32' OR 34' SUPPLIED POLE TO ACCOMMODATE OVERHEAD UTILITIES OR OTHER SITE CONSTRAINTS. SIGNAL PLANS WILL INDICATE WHERE THIS IS REQUIRED. ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO CUT DOWN THE STRAIN POLE WILL BE INCLUDED IN THE COST OF THE STRAIN POLE.

THE COMBINATION STRAIN POLES ARE INTENDED FOR USE AT THE INTERSECTION OF BYPASS 4 AND PRINCETON RD IN BUTLER COUNTY. DESIGN DETAILS AND REQUIREMENTS WILL BE GIVEN TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

ITEM 608 - CURB RAMP, AS PER PLAN

THIS ITEM WILL CONSIST OF INSTALLING A CURB RAMP(S) ON A CORNER AT AN INTERSECTION IN ACCORDANCE WITH CMS 608.07. INCLUDED IN THIS ITEM WILL BE THE REMOVAL OF ANY EXISTING CURB AND NON-COMPLIANT CURB RAMPS, ACCORDING TO CMS 202.05, THAT IS NECESSARY TO INSTALL THE CURB RAMP.

THE PROPOSED CURB RAMP SHALL CONFORM TO STANDARD CONSTRUCTION DRAWING BP-7.1 AND MAY BE A TYPE A1, A2, B1, B2, C1, C2 OR D CURB RAMP. ALSO INCLUDED IN THIS PAY ITEM SHALL BE NEW CURB NECESSARY TO REPLACE THE CURB REMOVED FOR THE INSTALLATION OF THE CURB RAMP. CURB MAY BE EITHER TYPE 2 OR TYPE 6.

IF IT IS NECESSARY TO REMOVE ANY PAVEMENT TO FACILITATE INSTALLATION OF THE CURB RAMP, THE REMOVAL SHALL NOT BE MORE THAN 2 FEET FROM THE FACE OF CURB, OR EDGE OF PAVEMENT. THE PAVEMENT SHALL BE RESTORED WITH FULL DEPTH ASPHALT ON 304 AGGREGATE BASE. ALL LABOR, MATERIALS AND EQUIPMENT NEEDED FOR THE REMOVAL OF ANY PAVEMENT AND SUBSEQUENT RESTORATION FOR THE INSTALLATION OF A CURB RAMP SHALL BE INCLUDED WITH THIS ITEM FOR PAYMENT.

ANY WALK NECESSARY TO INSTALL THE CURB RAMP WILL BE PAID UNDER A SEPARATE PAY ITEM.

PAYMENT FOR CURB RAMP, AS PER PLAN SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ANY EXISTING CURB OR CURB RAMPS, RESTORATION OF SURFACES, BASE COURSE MATERIAL, EXPANSION JOINT MATERIAL, GRADING, FORMING, FINISHING, TRUNCATED DOMES, MATERIALS, LABOR AND EQUIPMENT NECESSARY TO INSTALL A CURB RAMP(S) ON A CORNER AT AN INTERSECTION.

ITEM 631 - SCHOOL SPEED LIMIT SIGN ASSEMBLY, SOLAR POWERED, AS PER PLAN

THIS SPECIFICATION APPLIES TO SCHOOL SPEED LIMIT SIGN FLASHERS POWERED BY BATTERIES AND RECHARGED BY SOLAR PANELS.

THE ENTIRE SCHOOL ZONE FLASHER AND SIGN ASSEMBLY SHALL CONFORM TO THE CONTRACT DOCUMENTS AND MEET THE REQUIREMENTS SET FORTH IN THE ODOT. THE SIGN SIZE FOR THE SCHOOL ZONE SPEED LIMIT SHALL BE 24"x48".

THE FLASHER CONTROL AND BATTERY WILL BE HOUSED IN ONE OR MORE STAINLESS STEEL OR ALUMINUM ENCLOSURES WITH A NEMA RATING OF AT LEAST 3X. SEAL ENCLOSURE CONDUIT ENTRIES TO PREVENT INSECT AND/OR RODENT ENTRY. ENCLOSURE EXTERIOR SURFACES SHALL BE BARE OR POWDER COAT ALUMINUM OR STAINLESS STEEL. THE ENCLOSURE INTERIOR SURFACES SHALL BE THE SAME AS THE EXTERIOR.

IF CONTAINED IN A SINGLE ENCLOSURE, THE CONTROL ELECTRONICS AND BATTERY SHALL BE SEPARATED IN A MANNER TO PREVENT DAMAGE TO THE CONTROL ELECTRONICS IF THE BATTERY ENVELOPE IS COMPROMISED.

PROVIDE A LOCKING ENCLOSURE USING EITHER AN INTEGRATED LOCKING MECHANISM OR A PADLOCK PER CMS 631.06. PROVIDE SEALED GEL-CELL AGM (ABSORBED GLASS MAT) LEAD-ACID BATTERIES FOR ALL INSTALLATIONS WITH INSTANTANEOUS LOAD REQUIREMENTS OF 4 WATTS OR ABOVE, REGARDLESS OF DUTY CYCLE. A PAIR OF LED SIGNAL BEACONS ABOVE THE SCHOOL ZONE SPEED LIMIT SIGN, MEETING THE CURRENT ITE VEHICLE TRAFFIC CONTROL SIGNAL HEADS STANDARD WILL BE USED UNLESS OTHERWISE SPECIFIED. THE MANUFACTURER OF THE SIGNAL BEACON SHALL BE LISTED ON THE DEPARTMENT'S QUALIFIED PRODUCTS LIST FOR LED SIGNAL LAMPS.

THE SOLAR PANEL AND/OR CONTROLLER MANUFACTURER WILL PROVIDE SIGNED COPIES OF CALCULATIONS USED TO SIZE THE SOLAR PANEL AND BATTERIES. INCLUDED IN THESE CALCULATIONS WILL BE THE INSOLATION VALUE USED AND ITS SOURCE, THE SOLAR PANEL EFFICIENCY, CHARGER/CONTROLLER EFFICIENCY, PROPOSED LED LAMP LOAD AND A FIGURE REPRESENTING ANTICIPATED MISCELLANEOUS LOSSES.

SOLAR PANEL MANUFACTURER MUST TEST PANEL ACCORDING TO IEC61215 OR EQUIVALENT APPROVED STANDARD. SOLAR PANEL MOUNTING MUST BE RATED FOR 90MPH DESIGN WIND AND DESIGNED TO RESIST VANDALISM. RUN REQUIREMENTS ARE 4 HOURS PER DAY FOR 2 WEEKS UNDER CONTINUOUS WORST-CASE (MINIMUM) INSOLATION FIGURES (USUALLY DECEMBER) FOR THE APPROVED GEOGRAPHIC LOCATION. USING A PANEL ELEVATION ANGLE APPROPRIATE TO THE SITE LATITUDE, AT A SUSTAINED TEMPERATURE OF 25 DEGREES FAHRENHEIT (-4 DEGREES CELSIUS).

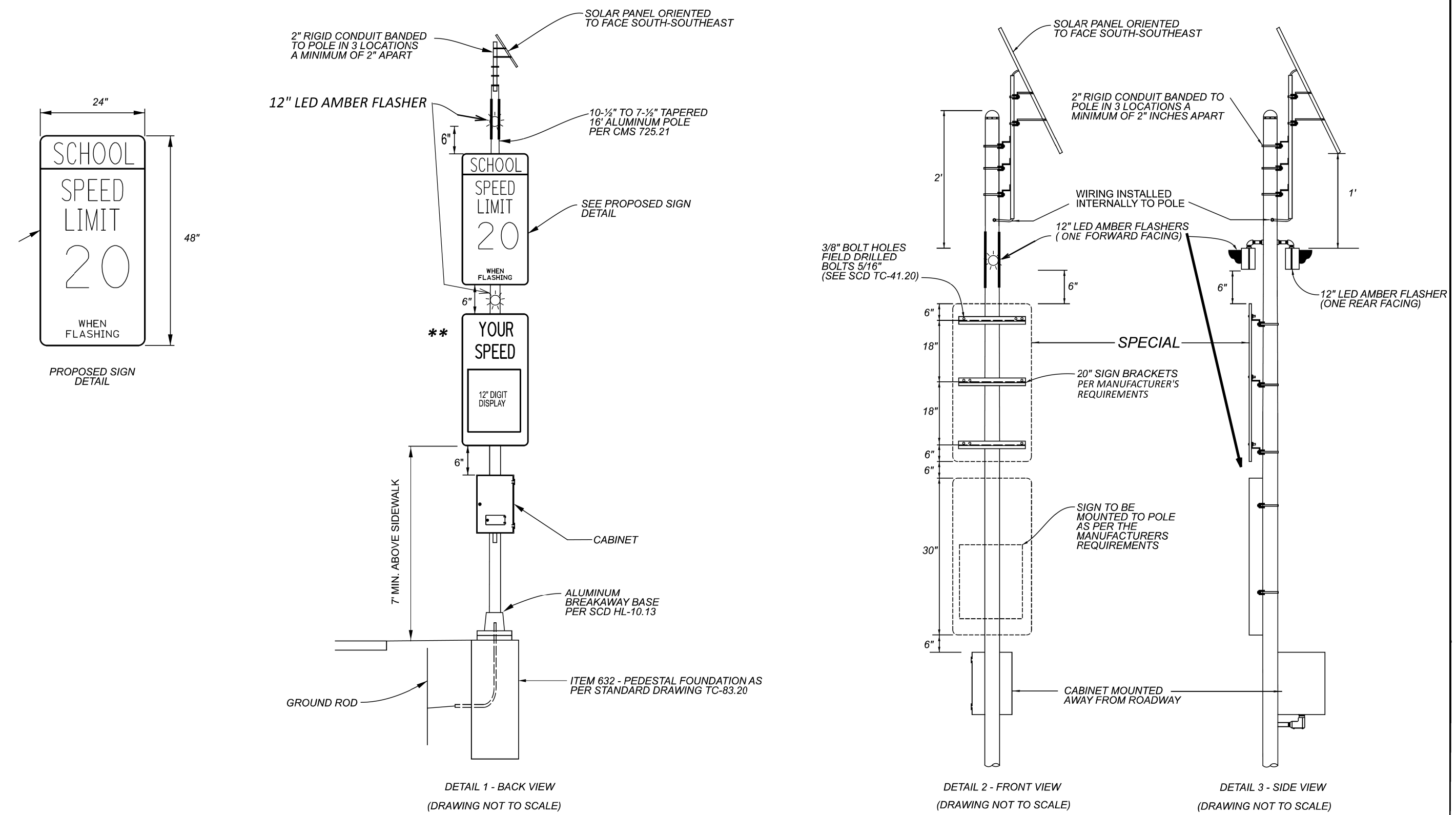
IF VOLTAGES OVER 50V AC OR DC ARE PRESENT, GROUNDING AND BONDING REQUIREMENTS SPECIFIED IN THE ODOT CMS WILL BE FOLLOWED.

PROVIDE AN AP21 GPS TIMER THAT SATISFIES THE REQUIREMENTS OF CMS 731.10 AND IS LISTED ON THE ODOT QUALIFIED PRODUCTS LIST.

PAYMENT FOR ITEM 631 SCHOOL SPEED LIMIT SIGN ASSEMBLY, SOLAR POWERED, AS PER PLAN, SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, TESTING, CERTIFICATIONS AND OTHER INCIDENTALS NECESSARY TO FURNISH THE SOLAR POWERED SCHOOL ZONE FLASHER COMPLETE IN PLACE, INCLUDING THE SIGN, SUPPORT, BEACONS, GPS TIMER, ALL CONNECTIONS MADE, WIRING COMPLETE, TESTED AND ACCEPTED.

ITEM 632 - INTERCONNECT CABLE, MISC.: RADAR CABLE

THIS ITEM WILL CONSIST OF SUPPLYING A CABLE THAT IS COMPATIBLE WITH THE WAVETRONIX RADAR UNITS THAT ARE TO BE REWIRED. PAYMENT WILL BE MADE PER FOOT OF CABLE INSTALLED ON THE PROJECT.



** DIGITAL SPEED LIMIT SIGN NOT REQUIRED FOR THIS PROJECT. PEDESTAL POLE MAY BE SHORTENED AS LONG AS THE MINIMUM SIGN MOUNTING IS PROVIDED PER TC-85.10

LOCATION SPECIFIC NOTES:

BUT-747 AT TYLERSVILLE: WORK AT THIS LOCATION WILL CONSIST OF RELAMPING LED'S AND THE REPLACEMENT OF ALL CABLE TO SIGNAL HEADS AND RADARS. EXISTING CABLE WILL BE REMOVED AND DISPOSED.

CLE-125 AT AMELIA SCHOOL: WORK AT THIS LOCATION WILL INCLUDE THE REMOVAL OF THE CANTILEVER SCHOOL SPEED LIMIT SIGN, SUPPORT AND FOUNDATION AT THE CORNER OF SR 125 AND FLORAL AVE. THIS WILL ALSO INCLUDE THE REMOVAL OF ANY ELECTRIC SERVICE CABLES FEEDING THE SIGN. ONCE THE SIGN SUPPORT IS REMOVED, THE SIDEWALK/CURB RAMP WILL NEED TO BE RESTORED. IT IS THE INTENT TO REMOVE THE AFFECTED WALK TO THE NEAREST JOINT.

THE CANTILEVER SIGN INSTALLATION WILL BE REPLACED BY A SCHOOL FLASHER ASSEMBLY (HARDWIRED AERIALY AT THE NEAREST TRANSFORMER), AND IS TO BE PLACED BETWEEN THE CURB AND SIDEWALK, NEAR THE UTILITY POLE. DO NOT REMOVE THE EXISTING SCHOOL FLASHER UNTIL THE NEW FLASHER IS INSTALLED AND OPERATIONAL. THE NEW INSTALLATION WILL BE BE PAID PER THE PAY ITEMS IN THE SUBSUMMARY.

CLE-232 AT BICK ELEMENTARY: REMOVE EXISTING SET OF SCHOOL FLASHERS AND ALL ASSOCIATED ELECTRICAL CABLES. EXISTING FLASHERS ARE TO BE REPLACED WITH SOLAR POWERED SCHOOL FLASHERS INSTALLED IN SAME VICINITY. DO NOT REMOVE EXISTING SCHOOL FLASHERS UNTIL THE NEW SOLAR POWERED FLASHERS ARE INSTALLED AND OPERATIONAL.

CLE-50 AT CLERMONT NORTHEASTERN HIGH SCHOOL: EXISTING SIGNS WITH ILLUMINATED 20MPH SECTION IS TO BE REMOVED AND DISPOSED. REPLACE WITH STANDARD 24" X 48" FLAT SHEET SCHOOL SPEED LIMIT SIGN (S5-H1). EXISTING YELLOW BEACONS ARE TO REMAIN, BUT LED MODULES WILL BE REPLACED.

LOCATION SPECIFIC NOTES (CONT):

WAR-48 AT LEBANON/ARROW SPRINGS: WORK AT THIS LOCATION WILL CONSIST OF REMOVING THE EXISTING POLE MOUNTED CABINET AND UPS IN THE NORTH EAST CORNER AND REPLACING IT WITH A NEW GROUND MOUNTED CABINET ON THE SOUTHEAST CORNER. A NEW CABINET, FOUNDATION, WORK PAD AND NEW SIGNAL CABLE WILL BE INSTALLED. REPLACE LOOP DETECTORS WITH RADAR. ALL CURRENT DETECTION ZONES ARE TO BE MAINTAINED. REMOVE ALL LOOP LEAD-IN CABLE AND PULL BOXES SERVING LOOPS AND DISPOSE. SEE SHEET 40 FOR MORE DETAILS.

CCTV CAMERA INSTALLATIONS: IT IS THE INTENT TO INSTALL THE CCTV ON THE SIGNAL SUPPORT NEAREST THE CABINET. WHERE THIS IS NOT FEASIBLE (DUE TO INSUFFICIENT POLE HEIGHT, OTHER SIGNAL EQUIPMENT TAKING UP THE SPACE, OR IN LIEU OF A BETTER VANTAGE POINT ON ANOTHER POLE), AN ADDITIONAL LENGTH OF ETHERNET CABLE HAS BEEN PROVIDED IN THE PLANS TO INSTALL ON A DIFFERENT SUPPPORT.

HAM-74 EB AND WB RAMPS AT NEW HAVEN RD: WORK AT THESE LOCATIONS WILL CONSIST OF REPLACING ALL CABLE TO ALL SIGNAL HEADS AND RADARS. SIGNAL CABLE IS TO BE HOMERUN FROM EACH HEAD TO THE CONTROLLER. DISPOSE ALL REMOVED CABLE.

PAY ITEMS FOR THE WORK DESCRIBED IN THIS SECTION CAN BE FOUND IN THE ESTIMATED QUANTITIES SECTION.

ITEM 631 – TIMER WITH ENCLOSURE, AS PER PLAN

THIS ITEM WILL CONSIST OF FURNISHING AND INSTALLING A TIMER WITH ENCLOSURE. THE TIMER TO BE SUPPLIED IS AN AP21 SERIES GPS TIMER THAT SATISFIES THE REQUIREMENTS OF CMS 731.10 AND IS LISTED ON THE ODOT TAP LIST.

ITEM 630 – REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, AS PER PLAN

THIS ITEM WILL CONSIST OF THE REMOVAL OF THE CANTILEVER SIGN SUPPORT AT THE INTERSECTION OF SR 125 AND FLORAL AVE. THIS WORK WILL ALSO INCLUDE THE DISCONNECTION AND REMOVAL OF THE ELECTRIC SERVICE TO THE SCHOOL FLASHER SIGN AND ANY NECESSARY SITE RESTORATION. CONCRETE WALK/CURB RAMP RESTORATION WILL BE PAID UNDER SEPARATE ITEM.

| | |
|---------------|--------|
| DESIGN AGENCY | |
| DESIGNER | TCS |
| REVIEWER | MAG |
| PROJECT ID | 105514 |
| SHEET | 3 |
| TOTAL | 40 |

| SHEET NUM. | | | | | | | | | | | | PART. | ITEM | ITEM | GRAND | UNIT | DESCRIPTION | SEE SHEET NO. | |
|------------|----|-------|----|----|-----|-------|-----|-----|-------|----|----|----------|--------|-------|-------|--------|-------------|--|----|
| 5 | 9 | 10 | 14 | 16 | 17 | 18 | 25 | 26 | 33 | 34 | 40 | 1/SAE/21 | EXT | TOTAL | | | | | |
| | | | | | 52 | | 44 | | 51 | | 7 | | 404 | 625 | 25408 | 404 | FT | CONDUIT, 2", 725.051 | |
| | | | | | 73 | | 145 | | 39 | | 7 | | 364 | 625 | 25604 | 364 | FT | CONDUIT, 4", 725.051 | |
| | | | | | 303 | | 122 | | 270 | | | | 895 | 625 | 25900 | 895 | FT | CONDUIT, JACKED OR DRILLED, 725.052, 4" | |
| | | | | | 125 | | 174 | | 66 | | 7 | | 822 | 625 | 29000 | 822 | FT | TRENCH | |
| | | | | | | | | | | | | | 100 | 625 | 29400 | 100 | FT | TRENCH IN PAVED AREA | |
| | | | | | | | | | | | | | 8 | 625 | 30700 | 8 | EACH | PULL BOX, 725.08, 18" | |
| | | | | | 5 | | 5 | | 5 | | 1 | | 22 | 625 | 30706 | 22 | EACH | PULL BOX, 725.08, 24" | |
| | | | | | 4 | | 2 | | 2 | | 8 | | 21 | 625 | 31510 | 21 | EACH | PULL BOX REMOVED | |
| | 3 | | | | 7 | | 6 | | 6 | | 1 | | 45 | 625 | 32000 | 45 | EACH | GROUND ROD | |
| | | | | | | | | | | | | | 2 | 632 | 04816 | 2 | EACH | VEHICULAR SIGNAL HEAD, (LED), 1-SECTION, 12" LENS, 4-WAY, ALUMINUM, BLACK | |
| | | | 7 | | | | | | | | | | 7 | 632 | 04910 | 7 | EACH | VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, ALUMINUM, BLACK, WITHOUT BACKPLATE | |
| | | | | | 11 | | 7 | | 9 | | | | 43 | 632 | 05006 | 43 | EACH | VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK | |
| | | | | | | | | | | | | | 2 | 632 | 05064 | 2 | EACH | VEHICULAR SIGNAL HEAD, (LED), 4-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK | |
| | | | | | | | | | | | | | 2 | 632 | 05080 | 2 | EACH | VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, ALUMINUM, BLACK, WITHOUT BACKPLATE | |
| | | | | | 1 | | 1 | | 1 | | | | 11 | 632 | 05086 | 11 | EACH | VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK | |
| | 92 | 182 | | | | | | | | | | | 182 | 632 | 10101 | 182 | EACH | RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, AS PER PLAN, CIRCULAR RED | 2 |
| | | 179 | | | | | | | | | | | 271 | 632 | 10101 | 271 | EACH | RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, AS PER PLAN, CIRCULAR YELLOW | 2 |
| | 34 | | | | | | | | | | | | 34 | 632 | 10101 | 34 | EACH | RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, AS PER PLAN, CIRCULAR YELLOW, LOW VOLTAGE | 2 |
| | | 161 | | | | | | | | | | | 161 | 632 | 10101 | 161 | EACH | RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, AS PER PLAN, CIRCULAR GREEN | 2 |
| | | 28 | | | | | | | | | | | 28 | 632 | 10101 | 28 | EACH | RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, AS PER PLAN, RED ARROW | 2 |
| | | 55 | | | | | | | | | | | 55 | 632 | 10101 | 55 | EACH | RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, AS PER PLAN, YELLOW ARROW | 2 |
| | | 72 | | | | | | | | | | | 72 | 632 | 10101 | 72 | EACH | RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, AS PER PLAN, GREEN ARROW | 2 |
| | | 50 | | | | | | | | | | | 50 | 632 | 10101 | 50 | EACH | RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, AS PER PLAN, WALKING PERSON/UPRAISED HAND | 2 |
| | | | | | 4 | | 4 | | | | | | 14 | 632 | 20731 | 14 | EACH | PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN | 13 |
| | | | | | 3 | | 4 | | | | | | 13 | 632 | 20750 | 13 | EACH | ACCESSIBLE PEDESTRIAN PUSHBUTTON | |
| | | | | | | 1 | | | | | | | 1 | 632 | 20751 | 1 | EACH | ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN | 13 |
| | | | | | 12 | | 8 | | 10 | | | | 67 | 632 | 25000 | 67 | EACH | COVERING OF VEHICULAR SIGNAL HEAD | |
| | | | | | 4 | | 4 | | | | | | 14 | 632 | 25010 | 14 | EACH | COVERING OF PEDESTRIAN SIGNAL HEAD | |
| | | | | | | | | | | | | | 1 | 632 | 26501 | 1 | EACH | DETECTOR LOOP, AS PER PLAN | 2 |
| | | | | | | | | | | | | | 1 | 632 | 27004 | 1 | EACH | LOOP DETECTOR UNIT | |
| | | | | | | | | | | | | | 1 | 632 | 27201 | 1 | EACH | LOOP DETECTOR TIE IN, AS PER PLAN | 3 |
| | | | | | | | | | | | | | 750 | 632 | 30200 | 750 | FT | MESSENGER WIRE, 7 STRAND, 3/8" DIAMETER WITH ACCESSORIES | |
| | | | | | | | | | | | | | 750 | 632 | 30600 | 750 | FT | TETHER WIRE, WITH ACCESSORIES | |
| | | 5,940 | | | | 447 | 550 | | | | | | 1,497 | 632 | 40500 | 1,497 | FT | SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG | |
| | | | | | | 1,813 | | 931 | 1,518 | | | | 14,377 | 632 | 40700 | 14,377 | FT | SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG | |
| | | 1,800 | | | | | | | | | | | 1,800 | 632 | 62810 | 1,800 | FT | INTERCONNECT CABLE, MISC.: RADAR CABLE | 3 |
| | | | | | | | | | | | | | 12 | 632 | 64000 | 12 | EACH | STRAIN POLE FOUNDATION | |
| | | | | | | 3 | | 3 | 2 | | | | 8 | 632 | 64010 | 8 | EACH | SIGNAL SUPPORT FOUNDATION | |
| | 3 | | | | | 3 | | 1 | | 2 | | | 15 | 632 | 64020 | 15 | EACH | PEDESTAL FOUNDATION | |
| | | | | | | 417 | | 516 | | | | | 1,733 | 632 | 65300 | 1,733 | FT | LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG | |
| | | | | | | | | 94 | | 98 | | | 539 | 632 | 68300 | 539 | FT | POWER CABLE, 3 CONDUCTOR, NO. 6 AWG | |
| | | | | | | | | | | | | | 160 | 632 | 68400 | 160 | FT | POWER CABLE, 4 CONDUCTOR, NO. 6 AWG | |
| | | | | | | | | | | | | | 200 | 632 | 69800 | 200 | FT | SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG | |
| | | | | | | | | | | | | | 107 | 632 | 69910 | 107 | FT | SERVICE CABLE, 3 CONDUCTOR, WITH GROUND, NO. 4 AWG | |
| | 1 | | | | | 1 | | 1 | | 1 | 1 | | 7 | 632 | 70001 | 7 | EACH | POWER SERVICE, AS PER PLAN | 11 |
| | | | | | | | | | | | | | 6 | 632 | 70400 | 6 | EACH | CONDUIT RISER, 2" DIAMETER | |
| | | | | | | | | 2 | | | | | 2 | 632 | 72110 | 2 | EACH | SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 4 | |
| | | | | | 1 | | | | | 1 | | | 2 | 632 | 72140 | 2 | EACH | SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13 | |
| | | | | | | | | 1 | | | | | 1 | 632 | 79100 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 2 | |
| | | | | | 2 | | | 1 | | | | | 2 | 632 | 79140 | 2 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13 | |
| | | | | | | | | | | | 1 | | 1 | 632 | 80700 | 1 | EACH | SIGNAL SUPPORT, MISC.: SIGNAL SUPPORT TC-12.31 DESIGN 10 WITH TC-81.22 DESIGN 12 AND DESIGN 13 ARMS, WITH SIGN SUPPORT TC-9.11 DESIGN 2 ARMS | 13 |
| | | | | | | | | | | | | | 4 | 632 | 86141 | 4 | EACH | STRAIN POLE, TYPE TC-81.11, DESIGN 12, AS PER PLAN, (32') | 3 |

GENERAL SUMMARY


| | |
|---------------|--------|
| DESIGN AGENCY | |
| | |
| DESIGNER | TCS |
| REVIEWER | MAG |
| PROJECT ID | 105514 |
| SHEET | 7 |
| TOTAL | 40 |

D08-TSG-FY23/FY24

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| SHEET NUM. | | | | | | | | | | | | PART. | ITEM | ITEM | GRAND | UNIT | DESCRIPTION | SEE SHEET NO. | |
|------------|----|-------|----|----|----|----|----|----|----|----|-----|-------|-------|------|-------|-------|-------------|--|----------|
| 5 | 9 | 10 | 14 | 16 | 17 | 18 | 25 | 26 | 33 | 34 | 40 | | | | | | | | 1/SAE/21 |
| | | | | | | | | | | | | | 4 | 632 | 86141 | 4 | EACH | STRAIN POLE, TYPE TC-81.11, DESIGN 12, AS PER PLAN, (34') | 3 |
| | | | | | | | | | | | | | 4 | 632 | 87150 | 4 | EACH | COMBINATION STRAIN POLE, TYPE TC-81.11, DESIGN 13 | |
| | | | | | | | | | | | | | 2 | 632 | 89301 | 2 | EACH | WOOD POLE, AS PER PLAN | 2 |
| | | | | | | | | | | | | | 2 | 632 | 89400 | 2 | EACH | DOWN GUY | |
| | | | | | | | | | | | | | 2 | 632 | 89401 | 2 | EACH | DOWN GUY, AS PER PLAN | 2 |
| | | | | | | 2 | | | | | | | 8 | 632 | 89900 | 8 | EACH | PEDESTAL, 8', TRANSFORMER BASE | |
| | | | | | | 1 | | 1 | | | | | 2 | 632 | 90010 | 2 | EACH | PEDESTAL, MISC.: 15' PEDESTAL | 13 |
| | | | | | | | | | | | 2 | | 2 | 632 | 90010 | 2 | EACH | PEDESTAL, MISC.: 21' PEDESTAL | 13 |
| | 1 | | | | | | | | | | | | 1 | 632 | 90010 | 1 | EACH | PEDESTAL, MISC.: 25' PEDESTAL | 13 |
| | | | | | | | | | | | | | 10 | 632 | 90020 | 10 | EACH | REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: VARIOUS SIGNAL COMPONENTS | |
| | | | | | | 1 | | 1 | | 1 | | | 5 | 632 | 90100 | 5 | EACH | REMOVAL OF TRAFFIC SIGNAL INSTALLATION | |
| | | | | | | 1 | | 1 | | | 1 | | 9 | 632 | 90104 | 9 | EACH | REUSE OF TRAFFIC CONTROL ITEM: VARIOUS SIGNAL COMPONENTS | |
| | | 2,800 | | | | | | | | | | | 5 | 632 | 90400 | 5 | EACH | SIGNALIZATION, MISC.: SPANWIRE ADJUSTMENT | 2 |
| | | | | | | | | | | | 445 | | 3,595 | 632 | 90500 | 3,595 | FT | SIGNALIZATION, MISC.: UNLASH AND RELASH MESSENGER WIRE | 2 |
| | | | | | | 1 | | 1 | | 1 | 1 | | 6 | 633 | 65521 | 6 | EACH | CABINET, TYPE 332, AS PER PLAN | 13 |
| | | | | | | 1 | | 1 | | 1 | 1 | | 6 | 633 | 67101 | 6 | EACH | CABINET FOUNDATION, AS PER PLAN | 13 |
| | | | | | | 1 | | 1 | | 1 | 1 | | 6 | 633 | 67201 | 6 | EACH | CONTROLLER WORK PAD, AS PER PLAN | 13 |
| | | | | | | 1 | | 1 | | | 1 | | 1 | 633 | 71000 | 1 | EACH | FLASHER CONTROLLER | |
| | | | | | | 1 | | 1 | | 1 | 1 | | 6 | 633 | 75001 | 6 | EACH | UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN | 13 |
| | | 6 | | | | 1 | | 1 | | 1 | | | 9 | 809 | 60000 | 9 | EACH | CCTV IP-CAMERA SYSTEM, DOME-TYPE | |
| | | 450 | | | | | | | | | | | 450 | 809 | 64550 | 450 | FT | ETHERNET CABLE, OUTDOOR-RATED | |
| | | 14 | | | | 3 | | 3 | | 3 | 2 | | 29 | 809 | 69001 | 29 | EACH | ADVANCE RADAR DETECTION, AS PER PLAN | 14 |
| | | 12 | | | | 3 | | 3 | | 3 | 4 | | 33 | 809 | 69101 | 33 | EACH | STOP LINE RADAR DETECTION, AS PER PLAN | 14 |
| | | | | | | 1 | | 1 | | 1 | | | 5 | 809 | 69123 | 5 | EACH | ATC CONTROLLER, AS PER PLAN | 14 |
| | | | | | | 1 | | 1 | | | | | 2 | 815 | 30001 | 2 | EACH | SPREAD SPECTRUM RADIO, AS PER PLAN | 14 |
| 100 | | | | | | | | | | | | | 100 | 614 | 11110 | 100 | hour | MAINTENANCE OF TRAFFIC LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | |
| | 33 | 24 | | | | | | | | | 1 | | 58 | 614 | 18000 | 58 | EACH | MAINTAINING TRAFFIC, MISC.: MAINTAINING TRAFFIC PER SIGNAL MODIFICATION/ UPGRADE LOCATION | 4 |
| | | | | | | | | | | | | | 5 | 614 | 18000 | 5 | EACH | MAINTAINING TRAFFIC, MISC.: MAINTAINING TRAFFIC PER SIGNAL INSTALLATION | 4 |
| | | | | | | | | | | | | | LS | 623 | 10001 | LS | | INCIDENTALS CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN | 2 |
| | | | | | | | | | | | | | LS | 624 | 10000 | LS | | MOBILIZATION | |

GENERAL SUMMARY

| | |
|---|--------|
| DESIGN AGENCY | |
|  | |
| DESIGNER | TCS |
| REVIEWER | MAG |
| PROJECT ID | 105514 |
| SHEET | TOTAL |
| 8 | 40 |