

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AMERICAN ELECTRIC POWER AT&T
 2622 SR 100 130 N. ERIE STREET
 TIFFIN, OHIO 44883 TOLEDO, OHIO 43624
 PH: (419) 209-5583 PH: (419) 245-7304

BUCKEYE CABLEVISION BUCKEYE PIPELINE
 2700 OREGON RD. P.O. BOX 368
 NORTHWOOD, OHIO 43519 EMMAUS, PA
 PH: (419) 724-3713 PH: (484) 232-4000

CHARTER TELECOMMUNICATIONS COLUMBIA GAS OF OHIO, INC.
 3760 INTERCHANGE DR. 2901 E. MANHATTAN BLVD.
 COLUMBUS, OHIO 43204 TOLEDO, OHIO 43611
 PH: (419) 255-6340 PH: (419) 539-6066

CITY OF FREMONT LEVEL 3 COMMUNICATIONS, LLC
 323 S. FRONT ST. 1025 ELDORADO BLVD.
 FREMONT, OHIO 43420 BROOMFIELD, CO 80021
 PH: (419) 249-5218 PH: (512) 742-1428

SANDUSKY COUNTY SANITARY ENGINEER TOLEDO EDISON
 2100 COUNTRYSIDE PLACE 6099 ANGOLA RD.
 FREMONT, OHIO 43420 HOLLAND, OHIO 43528
 PH: (419) 332-9967 PH: (419) 249-5218

SURVEYING PARAMETERS

VERTICAL POSITIONING
 ORTHOMETRIC HEIGHT DATUM: NAVD88 (ODOT VRS DELIVERED)
 GEOID: 2018
 HORIZONTAL POSITIONING
 REFERENCE FRAME: NAD83 (2011)
 ELLIPSOID: GRS80
 MAP PROJECTION: LAMBERT CONFORMAL CONIC
 COORDINATE SYSTEM: OHIO STATE PLANE NORTH
 COMBINED SCALE FACTOR: 1.00000000
 USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.
 UNITS ARE IN U.S. SURVEY FEET.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CONTINGENCY QUANTITIES

THE FOLLOWING ITEMS HAVE BEEN INCLUDED AS A CONTINGENCY QUANTITY TO BE APPROVED BY THE PROJECT ENGINEER AND CARRIED TO THE GENERAL SUMMARY.

| | |
|---|--------|
| ITEM 611 - CATCH BASIN ADJUSTED TO GRADE | 1 EACH |
| ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE | 1 EACH |
| ITEM 611 - MANHOLE ADJUSTED TO GRADE | 1 EACH |
| ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE | 1 EACH |
| ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE | 1 EACH |
| ITEM 638 - VALVE BOX ADJUSTED TO GRADE | 1 EACH |

PROFILE AND ALIGNMENT

THE WORK PROPOSED BY THIS PROJECT IS FOR THE RESURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT.

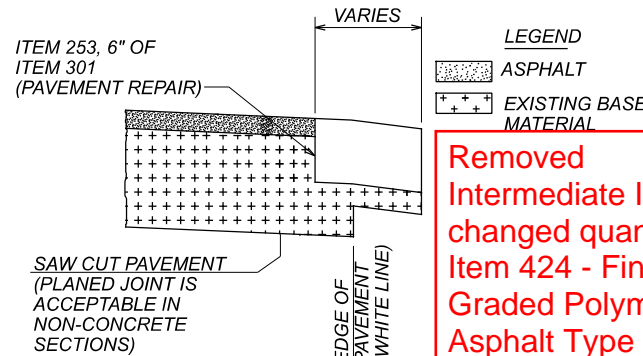
PLANED SURFACES

NO PLANED SURFACES SHALL BE OPEN TO THE PUBLIC FOR MORE THAN 7 DAYS. IF THE PLANED SURFACE IS OPEN FOR MORE THAN 7 DAYS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR THE PAVEMENT FAILURES THAT OCCURED AFTER THE 7 DAY LIMIT.

PAVEMENT REPAIRS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED FOR PAVEMENT REPAIR ON SR 19 AS DIRECTED BY THE ENGINEER AND ARE BASED ON THE PERCENTAGES SHOWN:

SAN 19 SLM 10.91 -14.26 AND 14.26 -17.49 - 15%
 ITEM 253 - PAVEMENT REPAIR 6" = 2955.4 CY
 ITEM 253 TOTAL = 2955.4 CY CARRIED TO GENERAL SUMMARY



ASPHALT CONCRETE - SAFETY EDGE

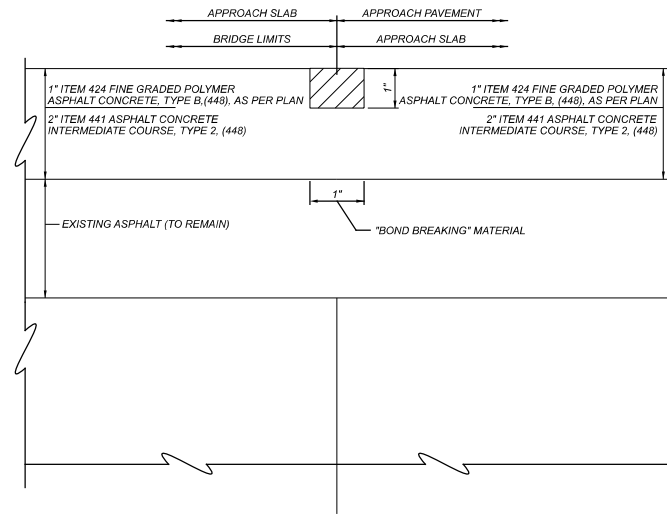
THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED FOR THE CONSTRUCTION OF THE SAFETY EDGE. SEE SCD BP-3.2.

SAN SR 19 (10.91-14.26 & 14.26-17.49)
 STA. 572+15 TO STA. 923+35
 ITEM 209 - PREPARING SUBGRADE FOR SHOULDER PAVING 13.3 MILE
 ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (448), AS PER PLAN 52 CY

QUANTITIES TO BE USED FOR THE SAFETY EDGE HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

MISCELLANEOUS ITEMS FOR GUARDRAIL

THE FOLLOWING ITEMS ARE TO BE USED AS DIRECTED BY THE ENGINEER. THE ESTIMATED QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY AND ARE TO BE USED FOR PROPOSED GUARDRAIL RUNS:
 INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
 ITEM 203 100 CY EMBANKMENT
 ITEM 601 100 CY CRUSHED AGGREGATE SLOPE PROTECTION
 EMBANKMENT SHALL BE USED TO OBTAIN A GRADED SLOPE OF 10:1 OR FLATTER THROUGHOUT THE GUARDRAIL RUN UP TO FACE OF GUARDRAIL.



SAWING AND SEALING BITUMINOUS JOINTS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED FOR SAWING AND SEALING BITUMINOUS JOINTS ON SR 19.
 SAN-19-1184 and SAN-19-1370
 ITEM - SAWING AND SEALING BITUMINOUS JOINTS = 240 FT
 ITEM TOTAL = 240 FT CARRIED TO GENERAL SUMMARY

ITEM SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS

1) DESCRIPTION:
 THIS WORK SHALL CONSIST OF CUTTING AND SEALING TRANSVERSE JOINTS IN THE NEW BITUMINOUS CONCRETE OVERLAY. BITUMINOUS CONCRETE JOINTS SHALL BE CONSTRUCTED DIRECTLY OVER, AND IN LINE WITH, THE EXISTING UNDERLYING TRANSVERSE JOINT OF THE APPROACH SLAB & APPROACH PAVEMENT.

2) MATERIALS:
 THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ITEM 705.04, JOINT SEALANTS, HOT-POURED, FOR CONCRETE AND ASPHALT PAVEMENTS. ACCEPTABLE ALTERNATE MATERIALS ARE:
 A SILICONE SEALANT MEETING FEDERAL SPECIFICATIONS TT-S-001543A CLASS A (ONE-PART SILICONE SEALANTS) AND TT-S-00230C CLASS A (ONE-COMPONENT SEALANTS), SUCH AS THOSE MANUFACTURED BY GENERAL ELECTRIC, SILICONE PRODUCTS DIVISION, 4015 EXECUTIVE PARK DRIVE, CINCINNATI, OHIO 45242 (513-243-1953) OR DOW CORNING, 400 TECHNE CENTER, SUITE 103, MILFORD, OHIO 45150 (513-831-3586); OR SOF-SEAL, A COLD-APPLIED, LOW-MODULUS, TWO-COMPONENT POLYMERIC COMPOUND HORIZONTAL SEALANT AS MANUFACTURED BY W.R.MEADOWS, INC., P.O.BOX 543, ELGIN, ILLINOIS 60121 (800-342-5976).

3) CONSTRUCTION DETAILS:
 A) GENERAL: THE CONTRACTOR SHALL CONDUCT HIS OPERATION SO THAT THE CUTTING, CLEANING AND SEALING OF TRANSVERSE JOINTS IS A CONTINUOUS OPERATION THAT WILL BE PERFORMED AS SOON AS PRACTICAL AFTER THE PAVING, BUT NO LATER THAN FOUR (4) DAYS AFTER PLACEMENT OF THE ASPHALT CONCRETE SURFACE COURSE. TRAFFIC SHALL NOT BE ALLOWED TO KNEAD TOGETHER OR DAMAGE JOINT CUT PRIOR TO SEALING.

B) CUTTING OF TRANSVERSE JOINTS: THE CONTRACTOR SHALL SAW OR ROUT TRANSVERSE JOINTS TO THE DIMENSIONS SHOWN IN THE DETAILS ON THIS SHEET. THE CUT JOINTS SHALL LIE DIRECTLY ABOVE EACH APPROACH SLAB END. THE BLADE OR BLADES SHALL BE OF SUCH SIZE THAT THE FULL WIDTH AND DEPTH OF THE CUT CAN BE MADE WITH ONE PASS. DRY OR WET CUTTING WILL BE ALLOWED. JOINTS SHALL EXTEND THE FULL WIDTH OF THE BRIDGE.

C) CLEANING JOINTS: DRY SAWED JOINTS SHALL BE THOROUGHLY CLEANED WITH A SUFFICIENT AMOUNT OF COMPRESSED AIR TO REMOVE ANY DIRT, DUST, OR DELETERIOUS MATTER. WET SAWED JOINTS SHALL BE WASHED CLEAN OF ALL CUTTINGS BY FLUSHING WITH A JET OF WATER AND WITH OTHER TOOLS AS NECESSARY. AFTER FLUSHING, THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR HAVING A PRESSURE OF AT LEAST 90 P.S.I. SHALL BE USED TO BLOW OUT THE JOINT AND REMOVE ALL TRACES OF DUST.

IN THE EVENT FRESHLY CUT JOINTS BECOME CONTAMINATED BEFORE THEY ARE SEALED, THEY SHALL BE RECLEANED OF ALL FOREIGN MATERIAL BY HIGH PRESSURE WATER JET.

D) SEALING JOINT: THE JOINT SHALL BE THOROUGHLY DRY WHEN THE SEALANT IS PLACED. AFTER CLEANING AND DRYING, A BOND-BREAKER MATERIAL SHALL BE APPLIED TO THE BOTTOM OF THE GROOVE.

HOT-POURED JOINT SEALANT MATERIAL SHALL BE HEATED IN A KETTLE OR MELTER CONSTRUCTED AS A DOUBLE BOILER, WITH THE SPACE BETWEEN THE INNER AND OUTER SHELLS FILLED WITH OIL OR HEAT TRANSFER MEDIUM. POSITIVE TEMPERATURE CONTROL AND MECHANICAL AGITATION SHALL BE PROVIDED. HEATING MUST BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. JOINT SEALER MATERIAL SHALL NEVER BE KEPT HEATED AT THE POURING TEMPERATURE FOR MORE THAN FOUR (4) HOURS AND SHALL NEVER BE REHEATED. SEALER LEFT IN THE APPLICATOR AT THE END OF A DAY'S WORK SHALL NOT BE USED.

HOT-POURED SEALANT SHALL BE APPLIED IMMEDIATELY THROUGH A NOZZLE, WHICH MUST PROJECT INTO THE SAWED JOINT. FILLING FROM THE BOTTOM UP THE SEALANT SHALL COMPLETELY FILL THE JOINT IN SUCH A MANNER THAT, AFTER COOLING, THE LEVEL OF THE SEALANT WILL NOT BE HIGHER THAN 1/8" BELOW THE PAVEMENT SURFACE. ANY DEPRESSION IN THE COOLED SEAL GREATER THAN 3/16" SHALL BE BROUGHT UP TO THE SPECIFIED LIMIT BY FURTHER ADDITION OF HOT-POURED SEALANT. CARE SHALL BE TAKEN IN THE SEALING OF THE JOINTS SO THAT THE FINAL APPEARANCE WILL PRESENT A NEAT FINE LINE.

THE COLD APPLIED SEALANT MATERIALS (POLYURETHANE, SILICONE, AND POLYMERIC COMPOUNDS) SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS, EXCEPT AS MODIFIED BY THIS DRAWING. THE SEALANT SHALL BE INSTALLED WHEN THE AMBIENT TEMPERATURE IS 40 DEGREES F OR HIGHER. TRAFFIC SHALL NOT BE ALLOWED ON THE JOINT FOR ONE HOUR AFTER APPLICATION OF THE SEALANT.

4) METHOD OR MEASUREMENT:
 THE QUANTITY TO BE PAID FOR UNDER THIS ITEM WILL BE THE NUMBER OF LINEAR FEET OF JOINTS SAWED AND SEALED AS PER THE ABOVE REQUIREMENTS.

5) BASIS OF PAYMENT:
 THE UNIT PRICE PER LINEAR FOOT FOR ITEM SPECIAL-"SAWING AND SEALING BITUMINOUS CONCRETE JOINTS" SHALL INCLUDE THE

THIS ITEM SHALL MEET THE MATERIAL (SECTION 2) AND SEALING (SECTION 3D) SPECIFICATIONS OF ITEM SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS.

DESIGN AGENCY



DESIGNER
 MJF

REVIEWER
 DAR MM-DD-YY

PROJECT ID
 94329

SHEET TOTAL
 12 42

| SHEET NUM. | | | | | | PART. | | | ITEM | ITEM EXT | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET NO. |
|------------|----|----|----|----|---------|-----------|-----------|--|---------|----------|-------------|------|--|---------------|
| 12 | 13 | 14 | 19 | 21 | 22 | 01/S<2/PV | 02/STR/PV | | | | | | | |
| | | | | | 5,862 | 3,337.5 | 2,524.5 | | 202 | 38000 | 5,862 | FT | ROADWAY | |
| | | | | | 3 | 2 | 1 | | 202 | 42000 | 3 | EACH | ANCHOR ASSEMBLY REMOVED, TYPE A | |
| | | | | | 13 | 6 | 7 | | 202 | 42010 | 13 | EACH | ANCHOR ASSEMBLY REMOVED, TYPE E | |
| | | | | | 12 | 5 | 7 | | 202 | 42040 | 12 | EACH | ANCHOR ASSEMBLY REMOVED, TYPE T | |
| | | | | | 2 | 1 | 1 | | 202 | 42050 | 2 | EACH | ANCHOR ASSEMBLY REMOVED, TYPE B | |
| | | | | | 12 | 4 | 8 | | 202 | 47000 | 12 | EACH | BRIDGE TERMINAL ASSEMBLY REMOVED | |
| 100 | | | | | | | 100 | | 203 | 20000 | 100 | CY | EMBANKMENT | |
| | | | | | 68 | 37 | 31 | | 209 | 15000 | 68 | STA | RESHAPING UNDER GUARDRAIL | |
| 100 | | | | | | | 100 | | 601 | 20010 | 100 | CY | CRUSHED AGGREGATE SLOPE PROTECTION | |
| | | | | | 5,174.5 | 3,337.5 | 1,837 | | 606 | 15050 | 5,174.5 | FT | GUARDRAIL, TYPE MGS | |
| | | | | | 662.5 | | 662.5 | | 606 | 15100 | 662.5 | FT | GUARDRAIL, TYPE MGS WITH LONG POSTS | |
| | | | | | 25 | | 25 | | 606 | 17350 | 25 | FT | GUARDRAIL, TYPE MGS, 25' LONG-SPAN | |
| | | | | | 2 | 1 | 1 | | 606 | 26050 | 2 | EACH | ANCHOR ASSEMBLY, MGS TYPE B | |
| | | | | | 14 | 7 | 7 | | 606 | 26150 | 14 | EACH | ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016 | |
| | | | | | 14 | 6 | 8 | | 606 | 26550 | 14 | EACH | ANCHOR ASSEMBLY, MGS TYPE T | |
| | | | | | 4 | | 4 | | 606 | 35002 | 4 | EACH | MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 | |
| | | | | | 8 | 4 | 4 | | 606 | 35140 | 8 | EACH | BRIDGE TERMINAL ASSEMBLY, TYPE 4 | |
| | | | | | 138 | 74 | 64 | | 614 | 13318 | 138 | EACH | BARRIER REFLECTOR, TYPE 5 BIDIRECTIONAL | |
| | 22 | | | | | | 22 | | 623 | 38501 | 22 | EACH | MONUMENT ASSEMBLY, TYPE C, AS PER PLAN | 13 |
| | | | | | | | | | | | | | EROSION CONTROL | |
| | | | | | | | 2,000 | | 832 | 30000 | 2,000 | EACH | EROSION CONTROL | |
| | | | | | | | | | | | | | DRAINAGE | |
| 1 | | | | | | | 1 | | 611 | 98630 | 1 | EACH | CATCH BASIN ADJUSTED TO GRADE | |
| 1 | | | | | | | 1 | | 611 | 98634 | 1 | EACH | CATCH BASIN RECONSTRUCTED TO GRADE | |
| 1 | | | | | | | 1 | | 611 | 99654 | 1 | EACH | MANHOLE ADJUSTED TO GRADE | |
| 1 | | | | | | | 1 | | 611 | 99660 | 1 | EACH | MANHOLE RECONSTRUCTED TO GRADE | |
| 1 | | | | | | | 1 | | 623 | 39500 | 1 | EACH | MONUMENT ASSEMBLY ADJUSTED TO GRADE | |
| 1 | | | | | | | 1 | | 638 | 10800 | 1 | EACH | VALVE BOX ADJUSTED TO GRADE | |
| | | | | | | | | | | | | | PAVEMENT | |
| | | | | | 15 | 2.4 | 12.6 | | 209 | 60500 | 15 | MILE | LINEAR GRADING | |
| 13.3 | | | | | | | 13.3 | | 209 | 72050 | 13.3 | MILE | PREPARING SUBGRADE FOR SHOULDER PAVING | |
| 2,955.4 | | | | | | | 2,955.4 | | 253 | 02000 | 2,955.4 | CY | PAVEMENT REPAIR | |
| | | | | | 120,528 | 27,928 | 92,600 | | 254 | 01000 | 120,528 | SY | PAVEMENT PLANING, ASPHALT CONCRETE 3" | |
| | | | | | 16,874 | 3,910 | 12,964 | | 407 | 20000 | 16,874 | GAL | NON-TRACKING TACK COAT | |
| | | | | | 3,349 | 776 | 2,625 | | 424 | 14001 | 3,401 | CY | FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (448), AS PER PLAN | 12 |
| | | | | | 6,697 | 1,552 | 5,145 | | 441 | 50301 | 6,697 | CY | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN | 12 |
| | | | | | 240 | | 240 | | SPECIAL | 51631200 | 240 | FT | SAWING AND SEALING BITUMINOUS CONCRETE JOINTS | 12 |
| | | | | | 1,345 | 233 | 1,112 | | 617 | 10100 | 1,345 | CY | COMPACTED AGGREGATE | |
| | | | | | 14 | 2.4 | 11.6 | | 618 | 41000 | 14 | MILE | RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE) | |
| | | | | | | | 22 | | 623 | 38500 | 22 | EACH | MONUMENT ASSEMBLY, TYPE C | |
| | | | | | 5,859 | 1,105 | 4,754 | | 875 | 10000 | 5,859 | LB | LONGITUDINAL JOINT ADHESIVE | |
| | | | | | | | | | | | | | TRAFFIC CONTROL | |
| | | | | | 532 | 153 | 379 | | 621 | 00100 | 532 | EACH | RPM | |
| | | | | | 532 | 153 | 379 | | 621 | 54000 | 532 | EACH | RAISED PAVEMENT MARKER REMOVED | |
| | | | | | 13.25 | 2.5 | 10.75 | | 642 | 00104 | 13.25 | MILE | EDGE LINE, 6", TYPE 1 | |
| | | | | | 6.77 | 1.13 | 5.64 | | 642 | 00300 | 6.77 | MILE | CENTER LINE, TYPE 1 | |
| | | | | | 0.54 | 0.54 | | | 642 | 00204 | 0.54 | MILE | LANE LINE, 6", TYPE 1 | |
| | | | | | 629 | 442 | 187 | | 644 | 00404 | 629 | FT | CHANNELIZING LINE, 12" | |
| | | | | | 142 | 120 | 22 | | 644 | 00500 | 142 | FT | STOP LINE | |
| | | | | | 535 | 178 | 357 | | 644 | 00700 | 535 | FT | TRANSVERSE/DIAGONAL LINE | |
| | | | | | 2 | | 2 | | 644 | 01000 | 2 | EACH | RAILROAD SYMBOL MARKING | |
| | | | | | 10 | 6 | 4 | | 644 | 01300 | 10 | EACH | LANE ARROW | |
| | | | | | 6 | 1 | 5 | | 644 | 40000 | 6 | EACH | SPEED MEASUREMENT MARKING | |
| | | | | | | | | | | | | | TRAFFIC SIGNALS | |
| | 1 | | | | | | 1 | | 632 | 90020 | 1 | EACH | REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: LOOP LEAD-IN CABLE | 13 |
| | 1 | | | | | | 1 | | 809 | 69101 | 1 | EACH | STOP LINE RADAR DETECTION, AS PER PLAN | 13 |

Updated Quantity

Deleted Quantity

Updated

-Updated the Quantity for Item 424
-Changed the Item #441 and Updated Quantity

