

## GENERAL NOTES

LAK - 2 - 5.96

**ITEM 614 MAINTAINING TRAFFIC**

THE CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM 614 MAINTAINING TRAFFIC. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT. IN ADDITION TO THE REQUIREMENTS OF ITEM 614, THE FOLLOWING SPECIFIC PROVISIONS SHALL APPLY:

**I. CONCRETE MEDIAN BARRIER AND SHOULDER WIDENING**

- A. ALL TRAFFIC CONTROL ZONES FOR THIS WORK SHALL BE SET UP AT THE BEGINNING OF EACH WORK DAY AND REMOVED AT THE END OF THE DAY. LANE CLOSURES SHALL NOT BE PERMITTED FROM 7:00 A.M. TO 9:00 A.M. IN THE WESTBOUND LANES AND FROM 3:00 P.M. TO 6:00 P.M. IN THE EASTBOUND LANES. THE LENGTH AND TIME OF LANE CLOSURES SHALL BE KEPT TO A MINIMUM.
- B. TRAFFIC SHALL BE MAINTAINED WITH SIGNS AND CONES IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-95.30. THE ADVISORY SPEED FOR THE WORK ZONE SHALL BE 45 MILES PER HOUR AND SHALL BE POSTED AS SHOWN IN STANDARD CONSTRUCTION DRAWING MT-95.30.
- C. WORK ZONES SHALL BE SET UP IN ONLY ONE TRAVELING LANE ON EITHER SIDE OF THE MEDIAN (EXCEPT FOR THE LANE LIMITATIONS REFERRED TO ABOVE), BUT NOT IN BOTH.
- D. TRENCH FOR WIDENING. TRENCH EXCAVATION FOR SHOULDER WIDENING SHALL BE ONLY ON ONE SIDE OF THE MEDIAN AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH CONES, DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
- E. OVERNIGHT TRENCH CLOSING. A FLASHING CAUTION BAR (PER STANDARD CONSTRUCTION DRAWING FOR FLASHING ARROW PANEL TC-35.10) SHALL BE USED IN ADVANCE OF ANY SHOULDER WIDENING NOT COMPLETED TO A DEPTH 3 INCHES BELOW THE EXISTING PAVEMENT AT THE END OF THE WORK DAY. TRAFFIC CONTROL BARRELS WITHOUT LIGHTS WILL BE USED IN THE OPEN SECTION OF TRENCH AND PLACED AT 25 FOOT CENTERS NEXT TO THE TRENCH ALONG THE EDGE NEAREST THE TRAVEL LANE. THE CONSTRUCTION SIGN OW-132, SHOULDER WORK AHEAD, WILL BE PLACED 1500 FT. PRIOR TO THE BEGINNING OF THE SHOULDER WORK AREA AS SHOWN IN FIGURE C-11, SECTION 7D-16 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

**II. CABLE MEDIAN BARRIER**

- A. ALL TRAFFIC CONTROL ZONES FOR THIS WORK SHALL BE SET UP AT THE BEGINNING OF EACH WORK DAY AND REMOVED AT THE END OF THE DAY. LANE CLOSURES SHALL NOT BE PERMITTED FROM 7:00 A.M. TO 9:00 A.M. IN THE WESTBOUND LANES AND FROM 3:00 P.M. TO 6:00 P.M. IN THE EASTBOUND LANES. THE LENGTH AND TIME OF LANE CLOSURES SHALL BE KEPT TO A MINIMUM.
- B. TRAFFIC SHALL BE MAINTAINED WITH SIGNS AND CONES IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-95.30. THE ADVISORY SPEED FOR THE WORK ZONE SHALL BE 45 MILES PER HOUR AND SHALL BE POSTED AS SHOWN IN STANDARD CONSTRUCTION DRAWING MT-95.30.
- C. WORK ZONE SHALL BE SET UP IN ONLY ONE TRAVELING LANE ON EITHER SIDE OF THE MEDIAN (EXCEPT FOR THE LANE LIMITATION REFERRED TO ABOVE), BUT NOT IN BOTH.

ALL OF THE ABOVE WORK SHALL BE INCLUDED WITH PAYMENT FOR ITEM 614 MAINTAINING TRAFFIC.

**UNDERGROUND UTILITIES**

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

**UTILITY OWNERSHIP**

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THE PROJECT:

**ELECTRIC LIGHT CABLE:** LAKE COUNTY ENGINEERS  
550 BLACKBROOK ROAD  
PAINESVILLE, OHIO 44077  
(216) 357-2770

**LOOP DETECTORS:** OHIO DEPARTMENT OF TRANSPORTATION  
5500 TRANSPORTATION BOULEVARD  
GARFIELD HEIGHTS, OH 44125  
(216) 581-2100

**GAS LINES:** THE EAST OHIO GAS COMPANY  
1717 EAST NINTH STREET  
P.O. BOX 5759  
CLEVELAND, OHIO 44101-0759  
(216) 432-6832

**ELECTRIC SERVICE:** CLEVELAND ELECTRIC ILLUMINATING  
55 PUBLIC SQUARE  
CLEVELAND, OH 44113  
(216) 479-4489

**ELECTRIC LIGHT CABLE, LOOP DETECTOR WIRE**

THE LOCATIONS OF THE ELECTRIC LIGHT CABLE, AND LOOP DETECTOR WIRE, SHOWN ON THE PLANS, ARE APPROXIMATE. THE CONTRACTOR SHALL GIVE THE RESPECTIVE OWNERS AT LEAST TWO (2) WEEKS NOTICE TO HAVE THESE FACILITIES LOCATED IN THE FIELD.

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY THE PLAN NOTE AS "DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING THE COMPLETION OF THIS PROJECT.

**ITEM 310 SUBBASE, TYPE I GRADING A, AS PER PLAN AND ITEM 304 AGGREGATE BASE, AS PER PLAN**

MATERIALS FURNISHED FOR THESE ITEMS SHALL INCLUDE ALL SLAG EXCEPT GRANULATED OR CRUSHED AIR-COOLED BLAST FURNACE SLAG.

**ITEM SPECIAL - CABLE MEDIAN BARRIER****I. DESCRIPTION:**

THIS WORK SHALL CONSIST OF THE CONSTRUCTION OF CABLE MEDIAN BARRIER, IN ACCORDANCE WITH THESE SPECIFICATIONS AND WITH THE LINES AND GRADES SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE CONSTRUCTION OF THE CABLE MEDIAN BARRIER SHALL INCLUDE THE FURNISHING, ASSEMBLING AND ERECTING OF ALL COMPONENT PARTS AND MATERIALS, COMPLETE IN PLACE, AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

**II. MATERIALS:**

- A. STEEL POSTS, BOLTS, FITTINGS AND OTHER ACCESSORIES SHALL BE GALVANIZED. SPECIFIC MATERIALS SHALL BE AS FOLLOWS:
- |                       |              |
|-----------------------|--------------|
| GALVANIZING, HARDWARE | 711.02       |
| CONCRETE (CLASS C)    | 499 AND 511  |
| REINFORCING STEEL     | 509.02       |
| STEEL POSTS           | 710.15       |
| TRANSITION BRACKETS   | ASTM A36     |
| END POST CAPS         | ASTM A36     |
| WIRE CABLE            | ASTM A741-86 |
- B. ALL POSTS SHALL BE S3x5.7 (3Ix5.7) ROLLED STEEL SECTIONS. POSTS AND PLATES SHALL CONFORM TO ASTM A36 AND SHALL BE GALVANIZED IN ACCORDANCE WITH 711.02 OF THE STANDARD SPECIFICATIONS.
- C. 3/4" ROUND STEEL WIRE CABLE SHALL CONSIST OF THREE STRANDS (7 WIRES PER STRAND) AND HAVE A MINIMUM TENSILE STRENGTH OF 25,000 POUNDS AND SHALL CONFORM TO ASTM A741-86.
- D. MATERIALS INDICATED AS "MALLEABLE IRON" SHALL CONFORM TO ASTM A47 AND BE GRADE 35018 WITH THE EXCEPTION OF THE CABLE SPLICE (SEE SHEET 12) WHICH SHALL CONFORM TO ASTM A47 AND BE GRADE 32510.
- E. HOOK BOLTS AS INSTALLED, SHALL DEVELOP AN ULTIMATE PULL OPEN STRENGTH OF FROM 500 LBS TO 1000 LBS APPLIED IN A DIRECTION NORMAL TO THE LONGITUDINAL AXIS OF THE POST.
- F. ALL FITTINGS (INCLUDING SPLICES) SHALL BE DESIGNED TO USE THE WEDGE SHOWN IN DETAIL "X" (SHEET 12) AND SHALL DEVELOP THE FULL STRENGTH OF THE 3/4" ROUND CABLE (25,000 LBS). ALL FITTINGS, EXCEPT THE WEDGE SHOWN IN DETAIL "X" (SHEET 12), SHALL BE HOT DIPPED GALVANIZED AS INDICATED ABOVE.
- G. GUARDRAIL TRANSITION BRACKETS USED AT TRANSITIONS FROM CABLE MEDIAN BARRIER TO GUARDRAIL SHALL BE AS SHOWN IN THE DETAIL ON SHEET 13. A SIMILAR BRACKET IS SHOWN IN PLATE NO. 629.01 BY THE SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION.

**III. CONSTRUCTION DETAILS:**

- A. **ANCHORAGE UNITS:** THE CONCRETE ANCHOR SHALL BE SET INTO AN EXCAVATION AS DETAILED ON THE PLANS. THE BOTTOM OF THE ANCHOR SHALL HAVE A FULL AND EVEN BEARING ON THE SURFACE UNDER IT. CONCRETE FOR THE ANCHOR SHALL BE CLASS C CONCRETE IN ACCORDANCE WITH 499 AND 511. AFTER THE

CONCRETE ANCHOR IS IN PLACE, THE EXCAVATION SHALL BE BACKFILLED IN ACCORDANCE WITH ITEM 203 AND THE DETAILS SHOWN ON THE PLANS.

AFTER THE END POSTS ARE DRIVEN TO THE SPECIFIED LINE AND GRADE, THE "CLAMPED ON" BEARING ANGLES SHALL BE ADJUSTED IN THE FIELD TO PROVIDE A FULL AND EVEN BEARING ON THE UNDERLYING SURFACE.

- B. **SETTING POSTS:** POSTS SHALL BE SET PLUMB IN HOLES, OR DRIVEN. THE MANNER OF DRIVING SHALL BE SUCH AS TO AVOID BATTERING OR DISTORTING OF POSTS. POSTS SET OR DRIVEN TO WITHIN 1 INCH OF GRADE NEED NOT BE TRIMMED. POST HOLES SHALL BE BACKFILLED WITH AN ACCEPTABLE MATERIAL PLACED IN LAYERS AND THOROUGHLY COMPACTED.

FOR POSTS DRIVEN THROUGH ASPHALT CONCRETE, THE CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO PAVED AREAS. LARGE HOLES AND VOIDS CAUSED BY DRIVING THE POSTS SHALL BE FILLED AND COMPACTED WITH ASPHALT CONCRETE SIMILAR TO THAT DAMAGED. THE SMALL AREA ADJACENT TO THE POST DISTURBED DURING INSTALLATION OR WHERE GAPS EXIST AT THE POST AFTER PAVEMENT REPAIRS SHALL BE SEALED WITH A BITUMINOUS MATERIAL APPROVED BY THE ENGINEER.