

GENERAL NOTES

C. **CABLE PLACEMENT:** THE CONTRACTOR SHALL INSTALL THE CABLES ON THE POSTS AS SHOWN IN THE PLANS AND AS FOLLOWS. THE TOP CABLE SHALL BE PLACED 27 INCHES ABOVE THE FINISHED GRADE LINE AND ON THE SIDE OF THE POST THAT IS CLOSEST TO THE TRAVELLED PAVEMENT. THE MIDDLE CABLE SHALL BE PLACED 24 INCHES ABOVE THE FINISHED GRADE AND ON THE OPPOSITE SIDE OF THE POST. THE BOTTOM CABLE SHALL BE PLACED 21 INCHES ABOVE THE FINISHED GRADE AND ON THE SAME SIDE OF THE POST AS THE TOP CABLE. IN NO CASE SHALL THE CABLES SWITCH SIDES DURING A CONTINUOUS RUN BETWEEN ANCHORS, EXCEPT AT THE TRANSITION POST FOR INTERMEDIATE ANCHORAGES (SEE DETAIL ON SHEET 11). IF THE CABLE MEDIAN BARRIER CROSSES THE CENTERLINE OF THE MEDIAN DURING A CONTINUOUS RUN, THE CONTRACTOR SHALL INSTALL THE TOP AND BOTTOM CABLE ON THE SIDE AS DIRECTED BY THE ENGINEER, AND THE MIDDLE CABLE ON THE OPPOSITE SIDE.

D. **CABLE MEDIAN BARRIER TENSIONING:** THE CONTRACTOR SHALL INSTALL AND TENSION THE CABLE MEDIAN BARRIER AS FOLLOWS. PROPERLY SEAT THE SPRING COMPENSATION DEVICE AND THEN PERMANENTLY MARK THE UNLOADED POSITION. COMPLETE THE ASSEMBLY OF THE GUIDE RAILING AND SET THE COMPENSATING DEVICES TO A SPRING COMPRESSION OF 3 1/2 INCHES. LEAVE THE SPRINGS AT THIS SETTING FOR AT LEAST 2 WEEKS THEN SET THEM TO THE PROPER SETTING ACCORDING TO THE FOLLOWING:

VALUES TO BE USED TO TIGHTEN TURNBUCKLES DEPENDING ON THE TEMPERATURE AT THE TIME OF THE ADJUSTMENT

TEMPERATURE (FAHRENHEIT)													
120	109	99	89	79	69	59	49	39	29	19	9	-1	-11
TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO	TO
110	100	90	80	70	60	50	40	30	20	10	0	-10	-20

SPRING COMPRESSION FROM UNLOADED POSITION IN EACH SPRING

1" 1.25" 1.5" 1.75" 2" 2.25" 2.5" 2.75" 3" 3.25" 3.5" 3.75" 4" 4.25"

E. AT ALL LOCATIONS WHERE THE CABLE IS CONNECTED TO A CABLE SOCKET WITH A WEDGE TYPE CONNECTION, ONE WIRE OF THE WIRE ROPE SHALL BE CRIMPED OVER THE BASE OF THE WEDGE TO HOLD IT FIRMLY IN PLACE.

F. COMPENSATING DEVICES MUST HAVE A SPRING RATE OF 450±50 LBS. PER INCH AND A TOTAL AVAILABLE "THROW" OF 6 INCH MINIMUM.

G. THE FOLLOWING CRITERIA SHALL APPLY IN THE ARRANGEMENT OF THE SPRING CABLE END ASSEMBLIES (COMPENSATING DEVICES) AND TURNBUCKLE CABLE END ASSEMBLIES:

LENGTH OF CABLE RUNS:

1. TO 500 FEET - USE TURNBUCKLE ON THE APPROACHING TRAFFIC END AND COMPENSATING DEVICE ON THE OTHER END OF EACH INDIVIDUAL CABLE.
2. OVER 500 TO 1000 FEET - USE COMPENSATING DEVICE ON EACH END OF EACH INDIVIDUAL CABLE.
3. OVER 1000 FEET - START NEW STRETCH BY INTERLACING AT LAST PARALLEL POST. (SEE "TYPICAL CABLE MEDIAN BARRIER ANCHORAGE LAYOUT" ON SHEET 11).

IV. **METHOD OF MEASUREMENT**

A. **CABLE MEDIAN BARRIER:** THE QUANTITY OF CABLE MEDIAN BARRIER MEASURED FOR PAYMENT WILL BE THE NUMBER OF LINEAR FEET MEASURED FROM CENTERLINE TO CENTERLINE OF ANCHORAGE UNITS (SEE SHEET 11), EXCLUDING LENGTHS OF CABLE MEDIAN BARRIER TO GUARDRAIL TRANSITIONS.

B. **CABLE MEDIAN BARRIER ANCHORAGE UNITS AND CABLE MEDIAN BARRIER TRANSITIONS:** CABLE MEDIAN BARRIER ANCHORAGE UNITS AND CABLE MEDIAN BARRIER TRANSITIONS WILL BE MEASURED BY THE ACTUAL NUMBER OF UNITS INSTALLED IN ACCORDANCE WITH THE PLANS OR AS DIRECTED BY THE ENGINEER.

V. **BASIS OF PAYMENT**

THE ACCEPTED QUANTITIES OF NEW CABLE MEDIAN BARRIER WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT, COMPLETE IN PLACE.

CABLE MEDIAN BARRIER ANCHORAGE UNITS AND CABLE MEDIAN BARRIER TO GUARDRAIL TRANSITIONS FOR CABLE MEDIAN BARRIER WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR THE TYPE SPECIFIED, COMPLETE IN PLACE.

PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	LINEAR FOOT	CABLE MEDIAN BARRIER
SPECIAL	EACH	CABLE MEDIAN BARRIER ANCHORAGE UNIT
SPECIAL	EACH	CABLE MEDIAN BARRIER TO GUARDRAIL TRANSITION, TYPE 1
SPECIAL	EACH	CABLE MEDIAN BARRIER TO GUARDRAIL TRANSITION, TYPE 3

GUARDRAIL AND CABLE MEDIAN BARRIER OVER CULVERTS AND STORM SEWERS

WHEN SUFFICIENT POST DEPTH IS NOT AVAILABLE DUE TO A CULVERT OR STORM SEWER, THE POSTS DIRECTLY OVER THE CONDUIT SHALL NOT BE DRIVEN, BUT SET IN HOLES. IF THE DISTANCE BETWEEN THE GROUND LINE AND THE TOP OF THE CULVERT OR STORM SEWER IS LESS THAN 3 FEET, THE POST SHALL BE ENCASED IN A MINIMUM OF 4" THICKNESS OF CLASS C CONCRETE FOR THE FULL DEPTH OF THE POST. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 606 GUARDRAIL, TYPE 5, ITEM 606 BARRIER GUARDRAIL, AND ITEM SPECIAL CABLE MEDIAN BARRIER.

LOCATION OF GUARDRAIL AND CABLE MEDIAN BARRIER

THE LOCATIONS OF GUARDRAIL AND CABLE MEDIAN BARRIER RUNS, AS SHOWN ON THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

ITEM 802 BARRIER REFLECTORS, TYPE A & TYPE B

THIS ITEM SHALL BE USED AS DESCRIBED IN THE ODOT SUPPLEMENTAL SPECIFICATION 802 AND IS TO BE PLACED ON THE PROPOSED CONCRETE MEDIAN BARRIER AND GUARDRAIL. THE BARRIER REFLECTORS ARE ALSO TO BE PLACED ON ALL REMAINING EXISTING GUARDRAIL WITHIN THE WORK LIMITS.

FOR QUANTITIES AND STATION LIMITS FOR PLACEMENT OF ITEM 802 BARRIER REFLECTOR, TYPE A, SEE THE GUARDRAIL SUB-SUMMARY ON SHEET 10. FOR THE QUANTITIES AND STATION LIMITS OF ITEM 802 BARRIER REFLECTOR, TYPE B, SEE THE CONCRETE BARRIER SUB-SUMMARY ON SHEET 10.

ITEM 202 GUARDRAIL REMOVED FOR STORAGE

GUARDRAIL DESIGNATED TO BE REMOVED FOR STORAGE ON THE PLANS SHALL BE CAREFULLY REMOVED AND STOCKPILED FOR PICK-UP BY COUNTY FORCES.

ITEM 630 REMOVAL OF GROUND MOUNTED SIGN AND STORAGE

GROUND MOUNTED SIGNS AND SUPPORTS DESIGNATED FOR REMOVAL AND STORAGE OCCUR AT STATION 222+16 AND STATION 222+46. THE SIGNS AND SUPPORTS ARE TO BE CAREFULLY REMOVED AND STORED FOR PICK-UP BY COUNTY FORCES.

ITEM	DESCRIPTION	QUANTITY
630	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	4 EA.
630	REMOVAL OF GROUND MOUNTED POST SUPPORT AND STORAGE	2 EA.