

DESCRIPTION

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING BARRIER REFLECTORS ON GALVANIZED STEEL GUARD RAIL, CONCRETE BARRIER, RETAINING WALL AND/OR BRIDGE PARAPETS IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

MATERIAL

THE BARRIER REFLECTOR SHALL BE AS MANUFACTURED BY STIMSONITE, REFLEXITE OR AN APPROVED FUNCTIONAL EQUIVALENT.

STIMSONITE - MODEL 965 (WHITE & YELLOW) OR
REFLEXITE - MODEL 650 (WHITE & YELLOW)

THE REFLECTORS MAY BE ATTACHED BY ADHESIVE OR OTHER ACCEPTABLE METHOD.

THE ADHESIVE SHALL BE FRANKLIN PANEL AND METAL FRAMING
ADHESIVE AS MANUFACTURED BY FRANKLIN CHEMICAL INDUSTRIES,
PR-365 AS MANUFACTURED BY PRODUCTS RESEARCH AND CHEMICAL
CORPORATION, OR AN APPROVED EQUAL.

ALL MOUNTING HARDWARE UTILIZED IN ANY ACCEPTABLE ALTERNATE ATTACHMENT METHOD SHALL BE STAINLESS STEEL.

LAYOUT

THE CONTRACTOR SHALL LAYOUT ALL LOCATIONS TO ASSURE PROPER PLACEMENT. THE LAYOUT SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION OF THE REFLECTORS.

ALL BARRIERS SHALL HAVE A REFLECTOR AT THE BEGINNING AND THE END OF THE RUN AND AT LEAST ONE EVENLY SPACED BETWEEN THE TERMINI. THE REQUIRED NUMBER OF REFLECTORS (N) PER RUN FOR EACH LENGTH (L) OF RUN SHALL BE DETERMINED AS FOLLOWS:

N = L/100 + 1 (FOR TANGENTS AND CURVES LESS THAN 5°)
N = L/50 + 1 (FOR CURVES WITH DEGREE OF CURVATURE
OF 5° OR GREATER).
ROUND N TO NEXT WHOLE NUMBER WITH A MINIMUM OF 3.

THE SPACING ON TANGENTS AND CURVES LESS THAN 5° MAY VARY FROM 75' TO 100' IN THE FINAL 250' TO ASSURE APPROXIMATELY EVEN SPACING OF THE REFLECTORS.

INSTALLATION

1. ON CONCRETE BARRIERS, RETAINING WALLS AND BRIDGE PARAPETS THE HEIGHT OF THE TOP OF THE REFLECTOR SHALL BE 26 INCHES ABOVE THE NEAR EDGE OF PAVEMENT, BUT IN NO CASE SHALL THE TOP OF THE REFLECTOR BE LESS THAN 3 INCHES BELOW THE TOP OF THE CONCRETE BARRIER.
2. GUARDRAIL REFLECTORS SHALL BE INSTALLED WITHIN THE CONCAVE SURFACE OF THE GUARDRAIL. ATTACHMENT MAY BE BY BRACKET WHICH FITS UNDER THE HEAD OF THE POST BOLT, BY THE ABOVE REFERENCED ADHESIVE APPLIED PER MANUFACTURER'S RECOMMENDATION, OR OTHER ACCEPTABLE METHOD.
3. THE ABOVE REFERENCED ADHESIVE SHALL BE FILLED WHEN APPLIED TO ACHIEVE MAXIMUM BONDING STRENGTH.
4. WHEN MOUNTED ON A FLAT SURFACE, THE TOP OF THE REFLECTOR SHALL BE TILTED FORWARD FROM THE VERTICAL OR PLUMB POSITION 2-3 DEGREES TO FACILITATE "RAIN WASHING" OF THE REFLECTOR FACE.
5. ON TWO-LANE HIGHWAYS, WHITE UNITS SHALL BE PLACED ON THE RIGHT SIDE OF APPROACHING TRAFFIC. BIDIRECTIONAL WHITE REFLECTORS SHALL BE USED ON THE OUTSIDE OF CURVES.

6. ON DIVIDED HIGHWAYS, DIRECTIONAL ROADWAYS AND RAMPS, WHITE UNITS SHALL BE PLACED ON THE RIGHT SIDE OF APPROACHING TRAFFIC AND YELLOW ON THE LEFT.

METHOD OF MEASUREMENT

THE NUMBER OF BARRIER REFLECTORS OF EACH TYPE SHALL BE THE ACTUAL NUMBER IN PLACE, COMPLETED AND ACCEPTED. REFLECTORS MOUNTED ON GUARDRAIL SHALL BE MEASURED AS TYPE A. REFLECTORS MOUNTED ON CONCRETE BARRIER, RETAINING WALL OR BRIDGE PARAPETS SHALL BE MEASURED AS TYPE B. BIDIIRECTIONAL REFLECTORS SHALL BE MEASURED AS TYPE A2 OR TYPE B2 AS APPROPRIATE. A BIDIIRECTIONAL REFLECTOR MAY ACTUALLY CONSIST OF TWO 1-WAY REFLECTORS MOUNTED BACK-TO-BACK; HOWEVER, BOTH WILL BE INCLUDED IN THE UNIT PRICE FOR FOR A BIDIIRECTIONAL REFLECTOR.

Basis of Payment

BASIS OF PAYMENT SHALL BE AT THE UNIT PRICE BID FOR EACH REFLECTOR AND SHALL INCLUDE ALL LABOR, EQUIPMENT, HARDWARE, AND INCIDENTALS REQUIRED TO PERFORM THE WORK.

ITEM	UNIT	DESCRIPTION
620	EACH	BARRIER REFLECTOR, TYPE A AS PER PLAN
620	EACH	BARRIER REFLECTOR, TYPE B AS PER PLAN
620	EACH	BARRIER REFLECTOR, TYPE A2 AS PER PLAN
620	EACH	BARRIER REFLECTOR, TYPE B2 AS PER PLAN

[illegible]

MUSKINGUM COUNTY
MUS - C.R. 719

PCB 4-88
ROB 4-88

BUREAU OF DESIGN SERVICES
DIVISION OF HIGHWAYS
U.S. DEPARTMENT OF TRANSPORTATION

620 BARRIER
REFLECTORS

PLAN INSERT SHEET

6A
55

DATE
-28-88