

Exploded View

(Rail and washer not shown)

STEEL POST AND BLOCK DETAIL

## DIMENSION GUARDRAIL TYPE 1'-6'' 2'-1'' MGS w/ Standard 8" Offset Block 2'-7/8'' MGS w/ No Blockout

Guardrail-->

- Offset Block or Blockout

-Guardrail Post

Fill/seal around post

## (See Note No. 6) PLAN Additional Paved Shoulder Paved Area\* 1'-0'' 4'-1'' Min. (See Note No. 8) 2'-0" Min. ----Grade ≠ Compact at Fill Area (See Note No. 7) Guardrail -> Post A.C. Type III or IV Retroreflective Filler Slope Con't. Break -Fill Slope -1½" HMA Pav't.,/ Pav't. 2:1 Max. Mix No. V Design — *∟*Parabolic Rounding Existing ← Prior to installing HMA Pav't. Mix. No. V, Ground

## GENERAL NOTES

1. All hardware, posts and fasteners shall be hot-dip zinc coated galvanized after fabrication. No punching, drilling or cutting will be permitted after galvanizing.

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- 2. Where conditions require, special post lengths in increments of 6 inches may be specified by the Engineer.
- 3. All fasteners, posts, and rail elements (i.e. FBB03, PWE01, RWM04b, etc.) shall conform to the latest edition and amendments of "A Guide to Standardized Highway Barrier Rail Hardware", a report prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee, Subcommittee On New Highway Materials, Task Force 13 Report. Dimensions of fastners, posts and rail elements have been converted from metric units into their present form.
- 4. The Blockout or Offset Block shall be approved by the
- 5. All new guardrail systems (system consists of total length of guardrail including both end treatments) shall include the Additional Paved Area.
- 6. After the guardrail posts are installed in the paved area, the Contractor shall fill/seal around each guardrail post and all cracks in the paved area caused during the guardrail post installation. If required by the inspector/engineer, the Contractor shall tamper the paved area around the guardrail post prior to filling/sealing. All costs associated with this work shall not be paid for separately, but shall be considered incidental to the various guardrail items.
- 7. When standards for the fill slope area cannot be met, a site specific, engineer approved design may be used.
- 8. Minimum working width (clear distance) between back of MGS post to any fixed object is 4'-1" (49").
- 9. New Hot Mix Asphalt (HMA) pavement at guardrails shall extend 6 feet longitudinally beyond terminal ends.
- 10. Reflector Markers (RM-5) mounted on guardrails shall be spaced every 25 feet. RM-5's shall not be installed on Terminal Sections. Furnishing and installing of each RM-5 shall be considered incidental to the guardrail system.
- 11. Compact subrgrade and HMA Pav't. until there is no visible evidence of further consolidation. Removal of vegetation, organic and deleterious materials, levelling and compaction of subgrade shall be considered incidental to Item No. 401.0500 - HMA Pav't. Mix No. V and will not be paid separetely.

## SURVEY PLOTTE DRAWN BY X TRACED BY DESIGNED BY X QUANTITIES BY CHECKED BY ORIGINAL PLAN NOTE BOOK kel.bermle 5khikms0l.dgn No.

Reflector Marker (RM-5) - Reflector Sheeting (High Intensity); Facing Traffic (Mounted on Guardrail Color of Retroreflective Between Posts with FBB01) Sheeting shall conform to the color of the adjacent edge line ——— 23/4" Slot 11/16" X 2" Approved Plastic Product REFLECTOR MARKER (RM-5) DETAIL AND TYPICAL INSTALLATION

TYPICAL GUARDRAIL INSTALLATION

ELEVATION

level \$ remove vegetation, organic \$ deleterious |

material. level and compact finished grade

(See note No. 11 this sheet).

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

GUARDRAIL DETAILS & NOTES

KUHIO HIGHWAY GUARDRAIL AND SHOULDER IMPROVEMENTS AT VARIOUS LOCATIONS, PART 7

Federal-Aid Project No. STP-0700(090) Scale: NTS

SHEET No. 1

SHEETS **OF** 8

Date: July 2023