

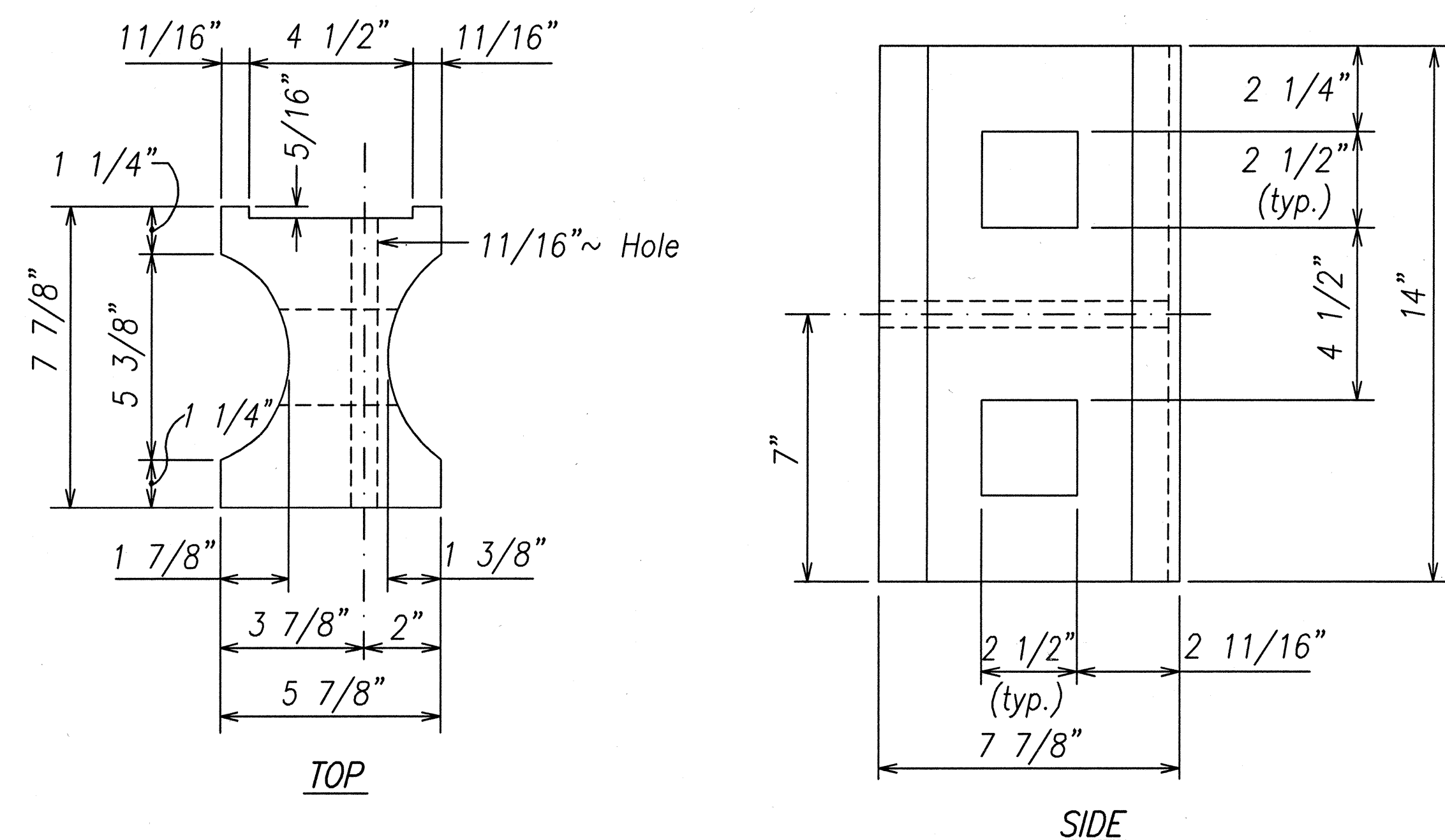
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(38)	2002	19	73

GENERAL NOTES:

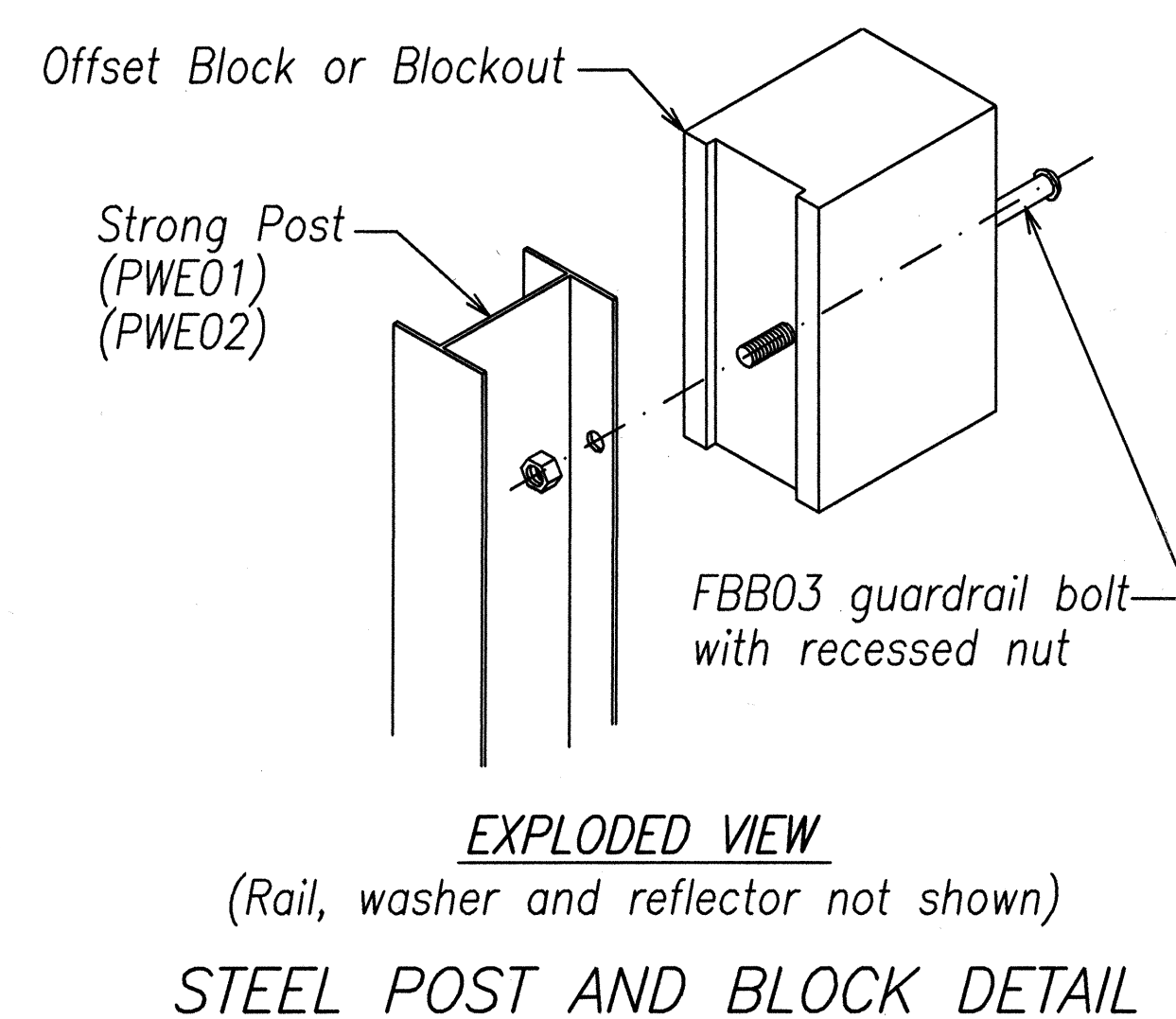
- All hardware, posts and fasteners shall be hot-dip zinc coated galvanized after fabrication. No punching, drilling or cutting will be permitted after galvanizing.
- Where conditions require, special post lengths in increments of 6 inches may be specified.
- All fasteners, posts, and rail elements (i.e. FBB03, PWE01, RWM02a, 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.
- The Recycled Plastic Block or Offset Block shall be approved by the State.
- Prior to installing A.C. Mix. No. IV, level & remove vegetation and compact existing ground to 95% compaction. New A.C. pavement at guardrails shall extend 6' longitudinally beyond terminal ends.
- After the guardrail posts are installed in the paved area, the Contractor shall place A.C. filler around the guardrail post and seal all cracks in the paved area that was 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 placing A.C. filler. The cost for this work shall not be paid for separately, but shall be considered incidental to the various guardrail items.
- When standards for the fill slope area cannot be met, a site specific, Engineer-approved design may be used.
- Reflector Markers (RM-5) mounted on new and existing guardrails within the project limits shall be spaced every 50'-0". RM-5's shall not be installed on the FLEAT-350 or Type "G" Modified Terminal Sections. RM-5 shall be incidental to Item 606.0100.

GUARDRAIL TYPE	DIMENSION		
	H	A*	B*
Strong Post w/ W Beam	1'-9 5/8"	1'-6"	1'-0"
Rubrail	2'-0"	1'-6"	2'-0"
Modified Thrie Beam	2'-0"	2'-0"	1'-0"

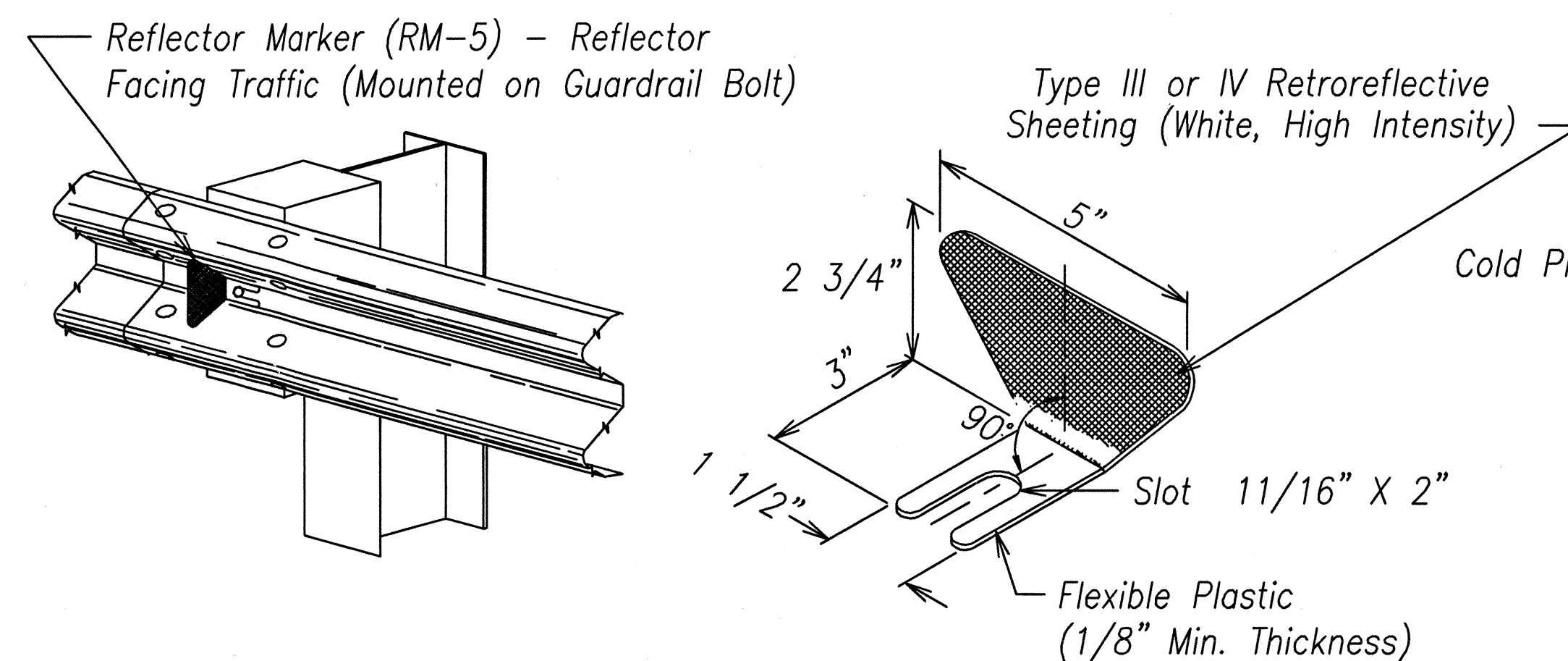
* Unless noted otherwise on plans.
** Where room available.



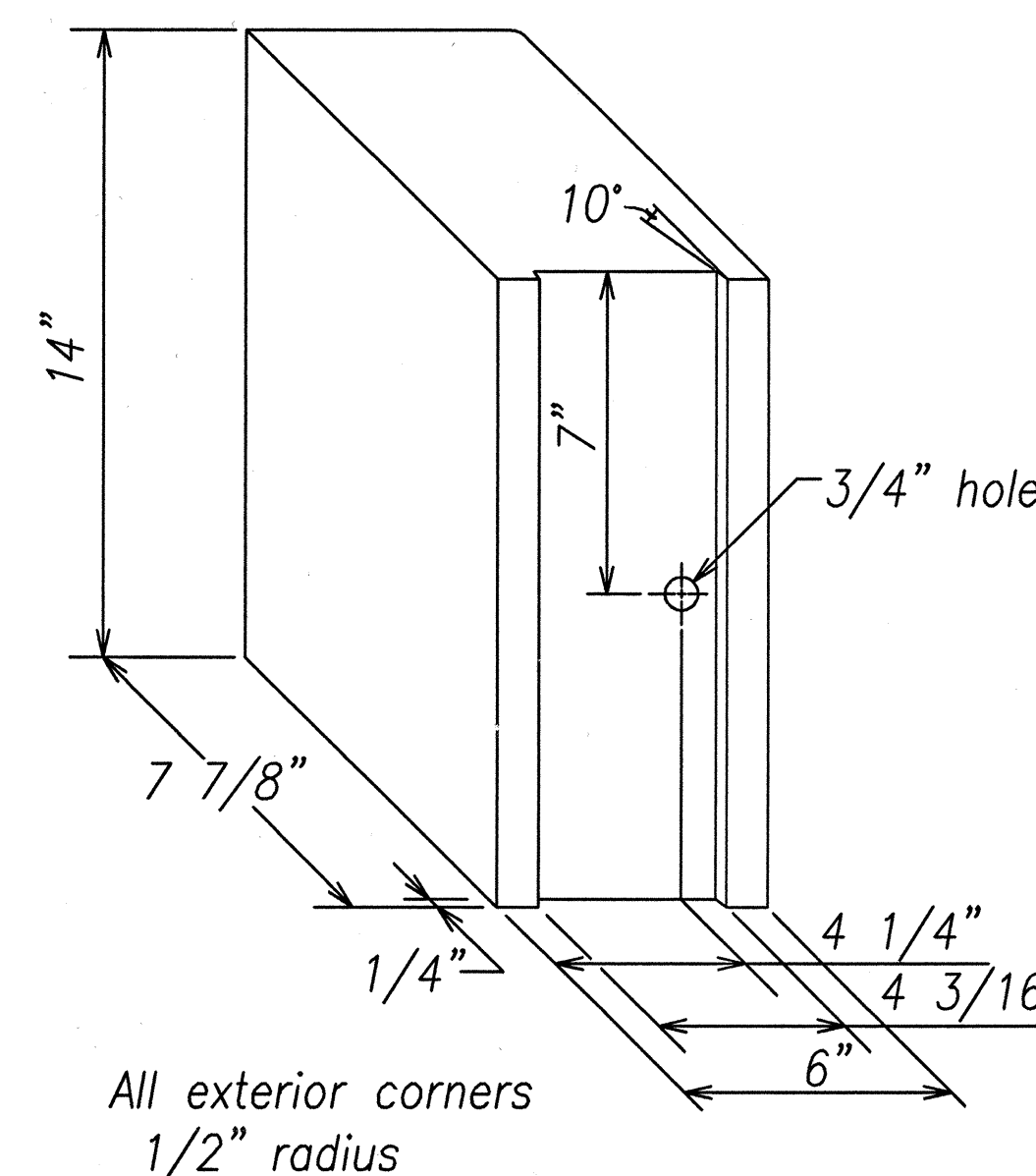
RECYCLED PLASTIC BLOCKOUT (TYPE I)



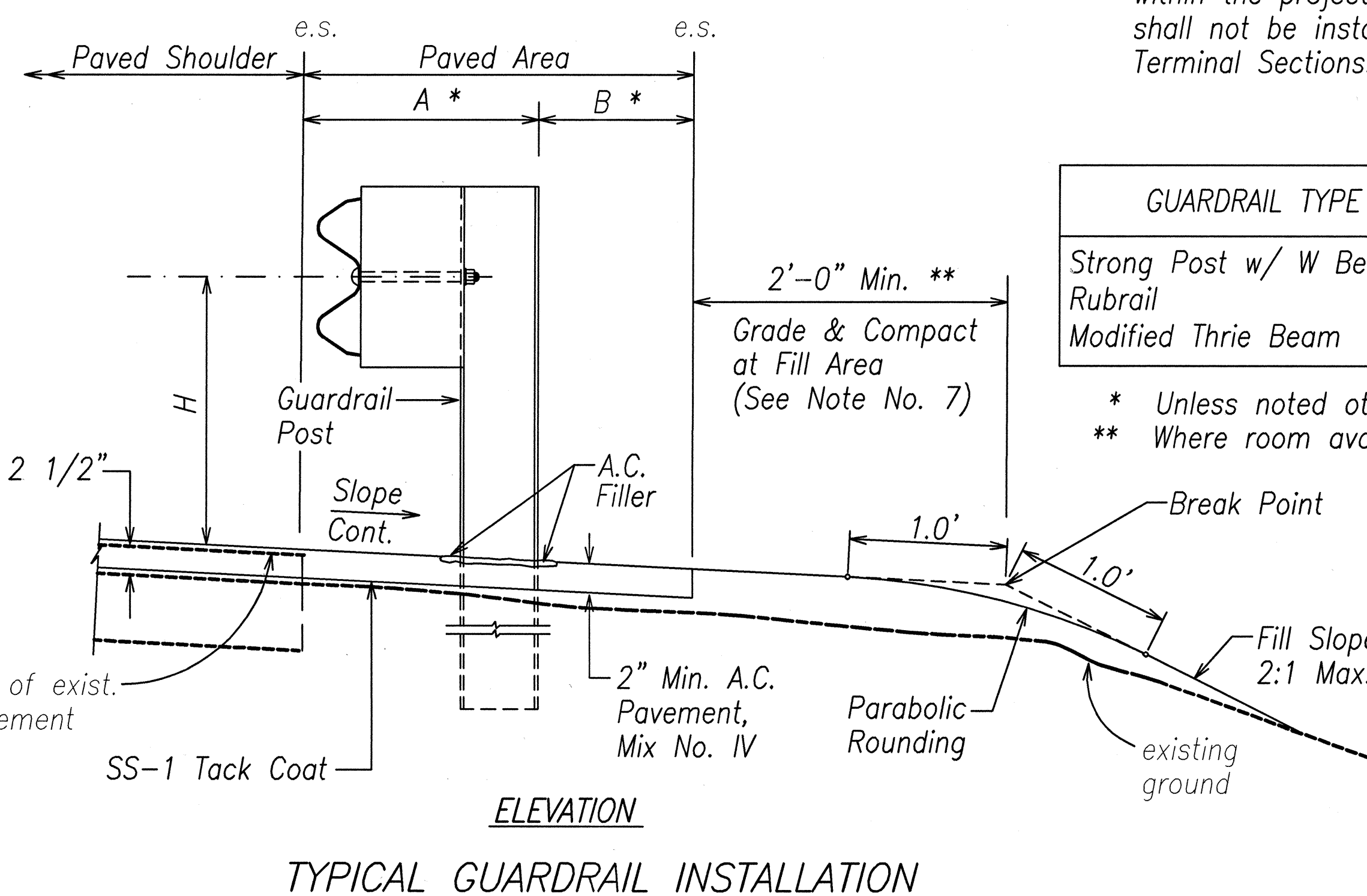
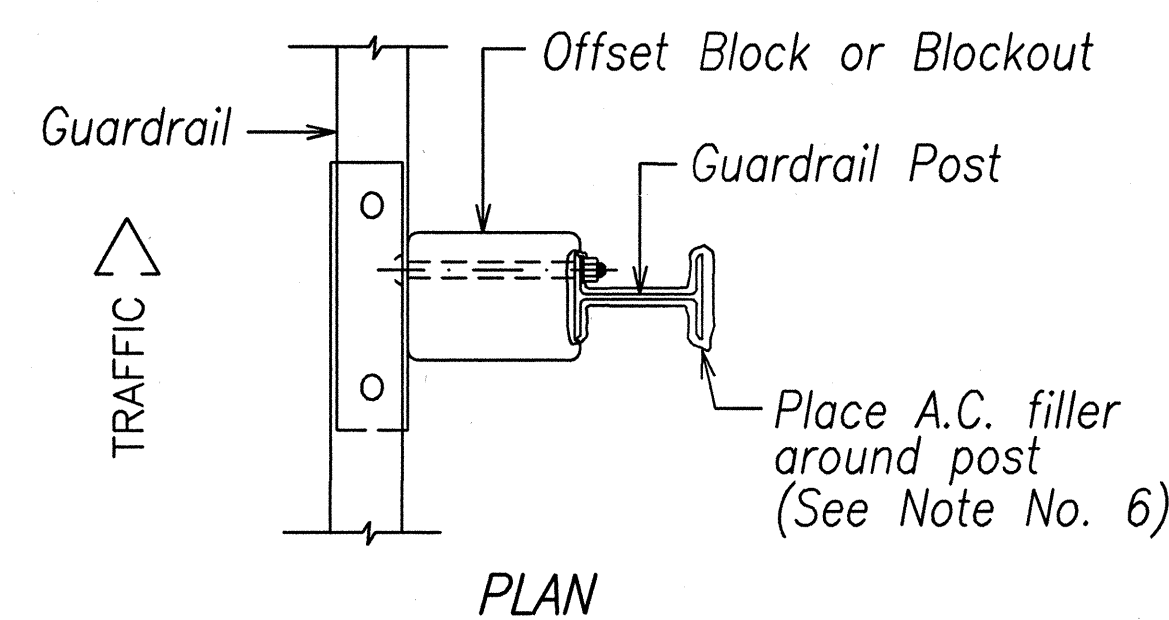
STEEL POST AND BLOCK DETAIL



REFLECTOR MARKER (RM-5) DETAIL AND TYPICAL INSTALLATION



RECYCLED POLYETHYLENE
OFFSET BLOCK (TYPE II)



TYPICAL GUARDRAIL INSTALLATION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GUARDRAIL DETAILS AND NOTES
HAWAII BELT ROAD
KUPAPAU'UA BRIDGE WIDENING
HAMAKUA DISTRICT
Federal-Aid Project No. BR-019-2(38)

Scale: As Noted
Date: Aug 2001
SHEET No. C-17 OF 41 SHEETS