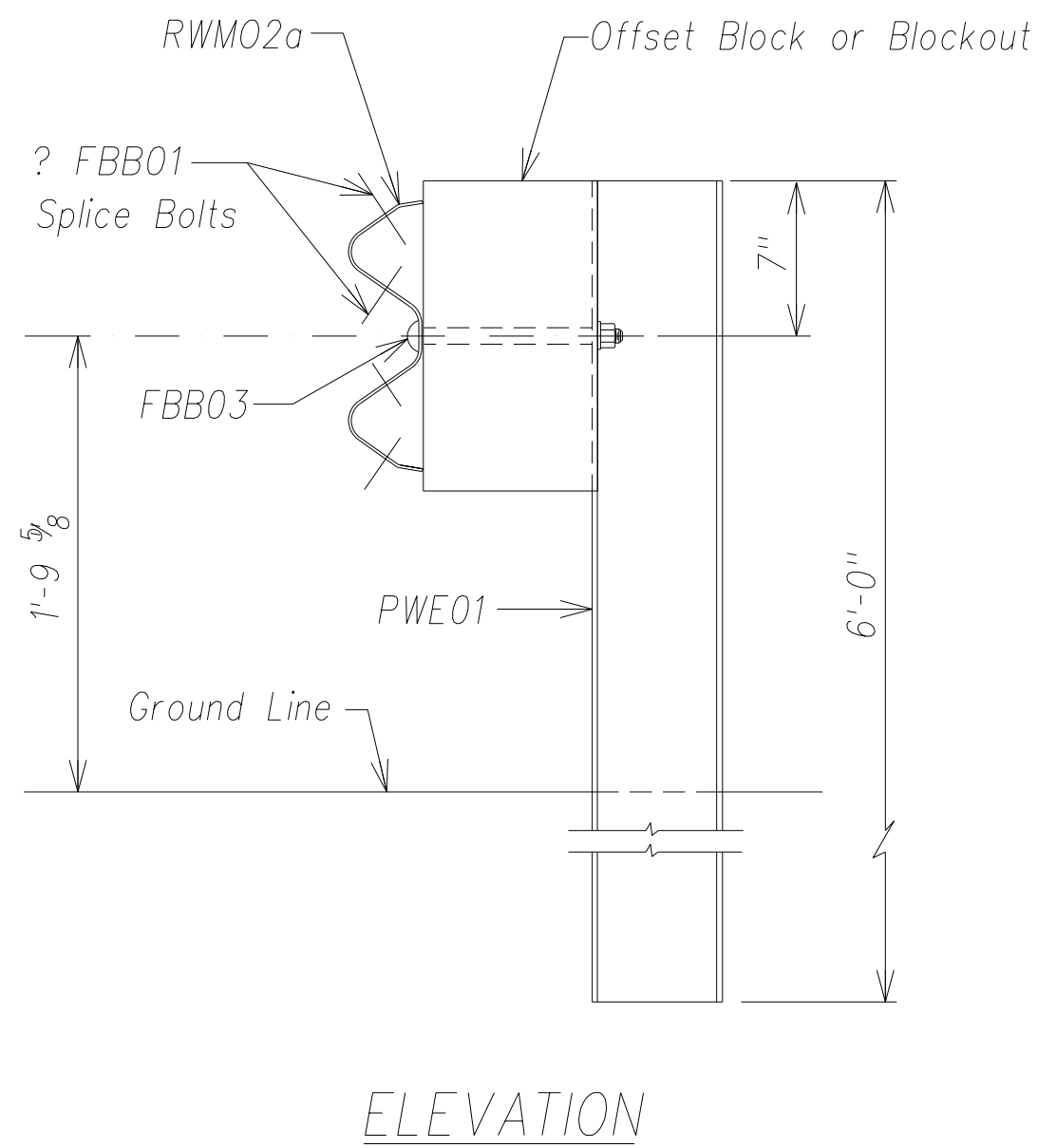
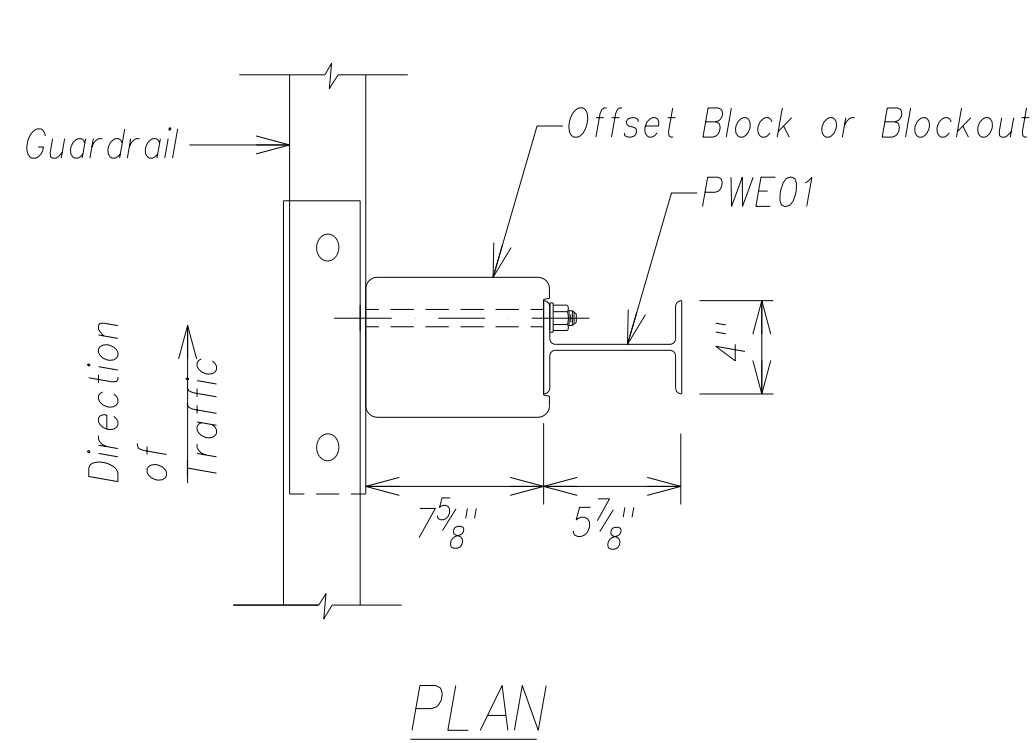
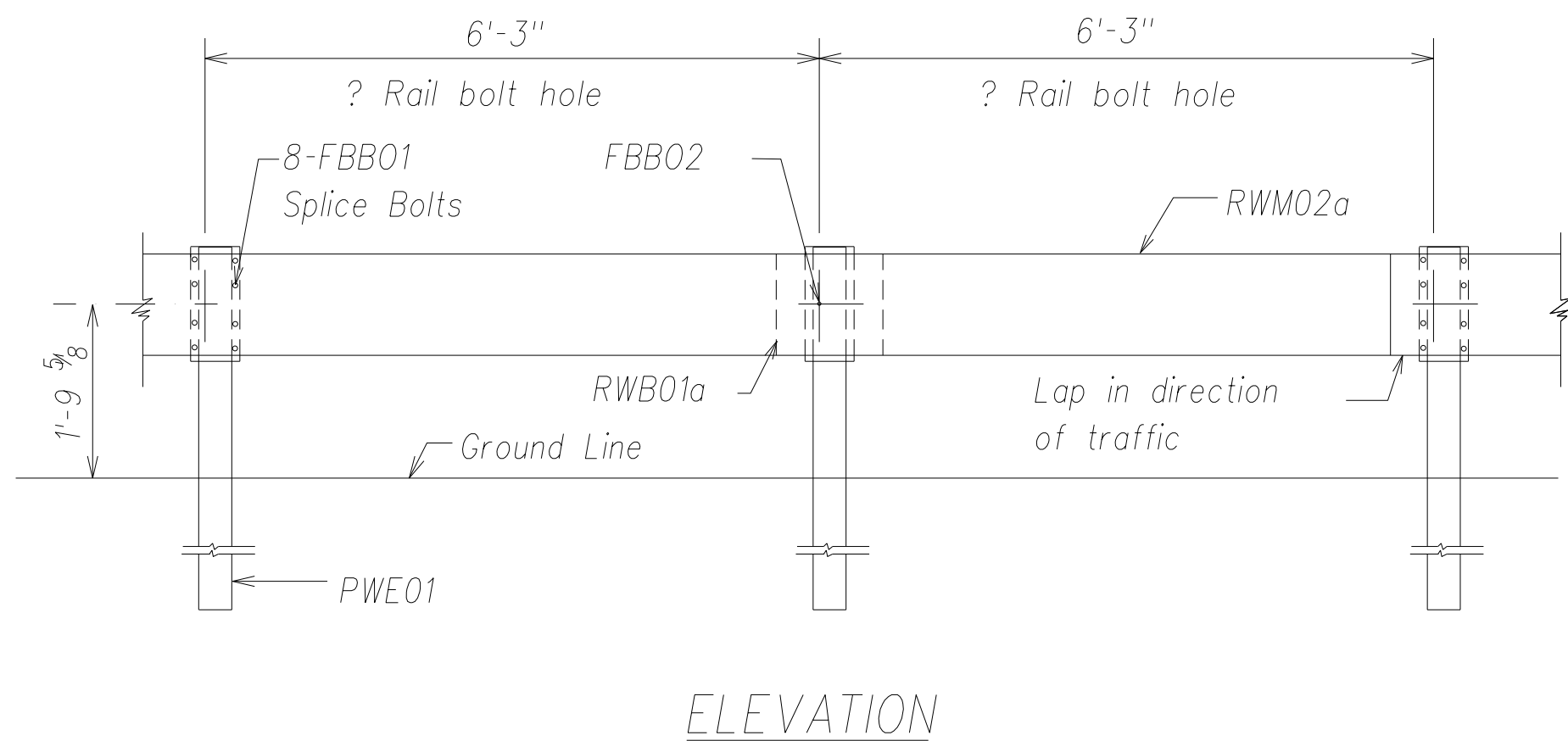


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-050-1(036)	FY13/14	Model	50

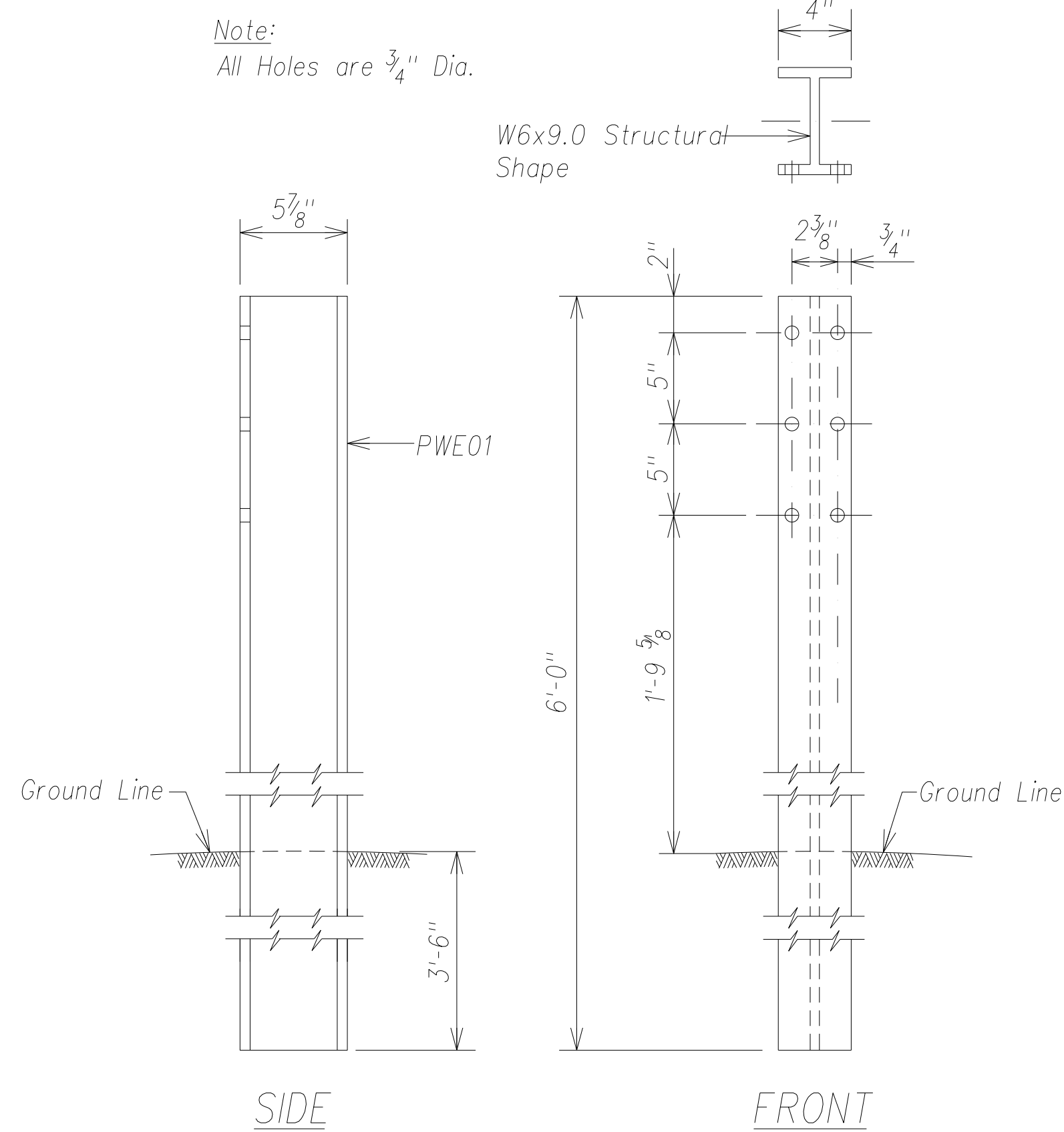


STRONG POST W-BEAM GUARDRAIL (SGR04a)
Not to scale

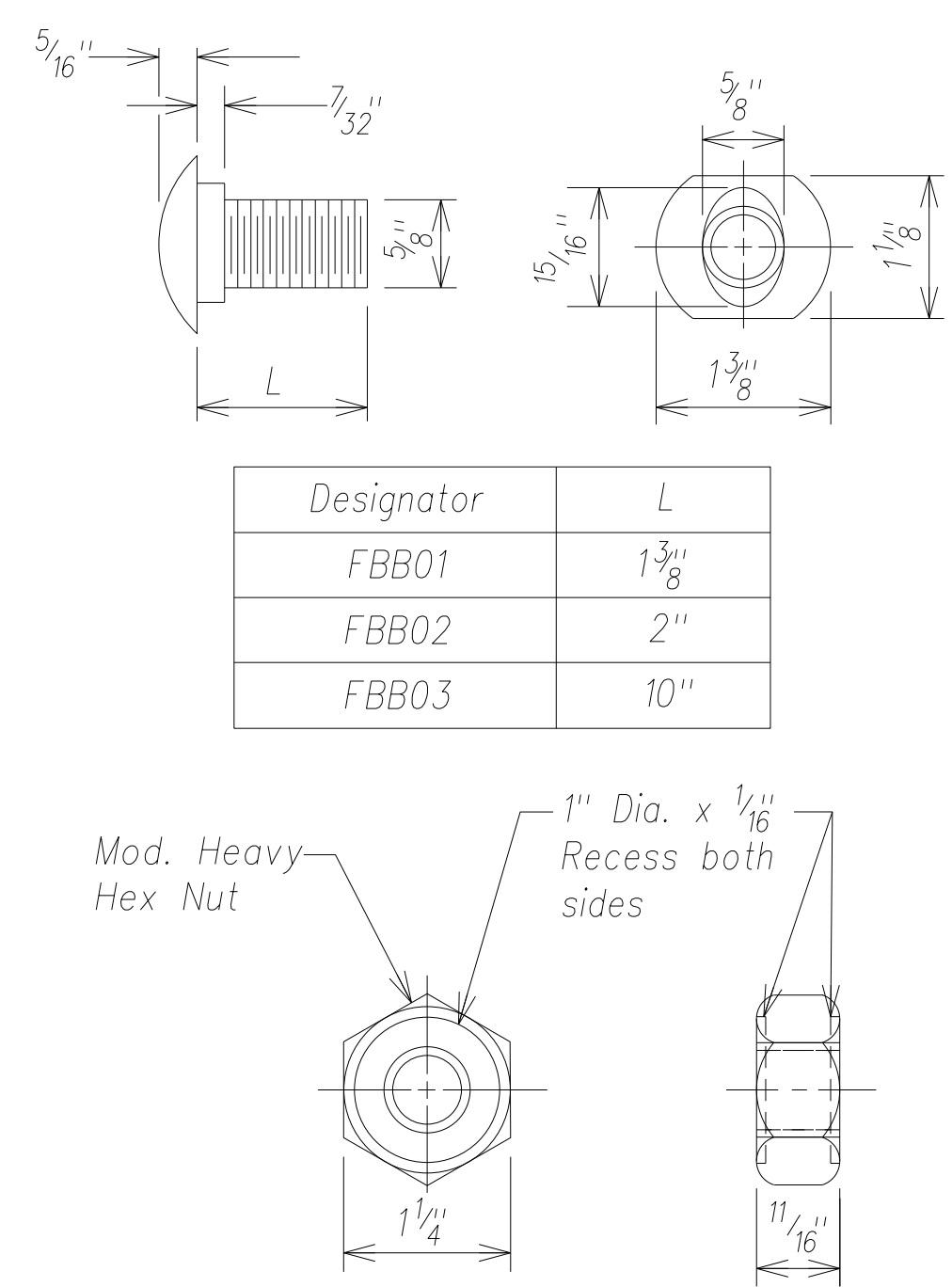
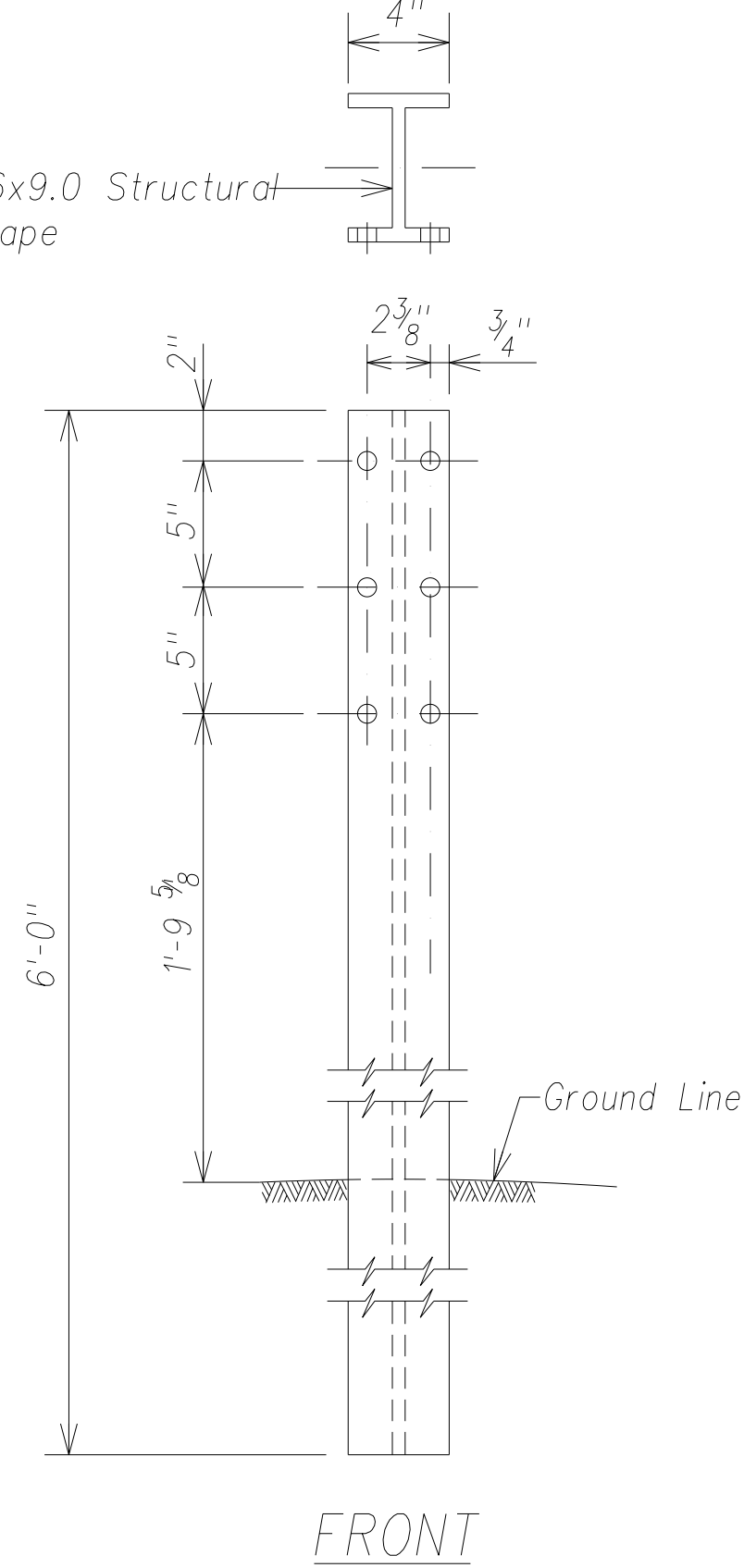


STRONG POST W-BEAM GUARDRAIL WITH
RECYCLED OFFSET BLOCK OR PLASTIC BLOCKOUT
Not to scale

Note:
All Holes are 3/4" Dia.

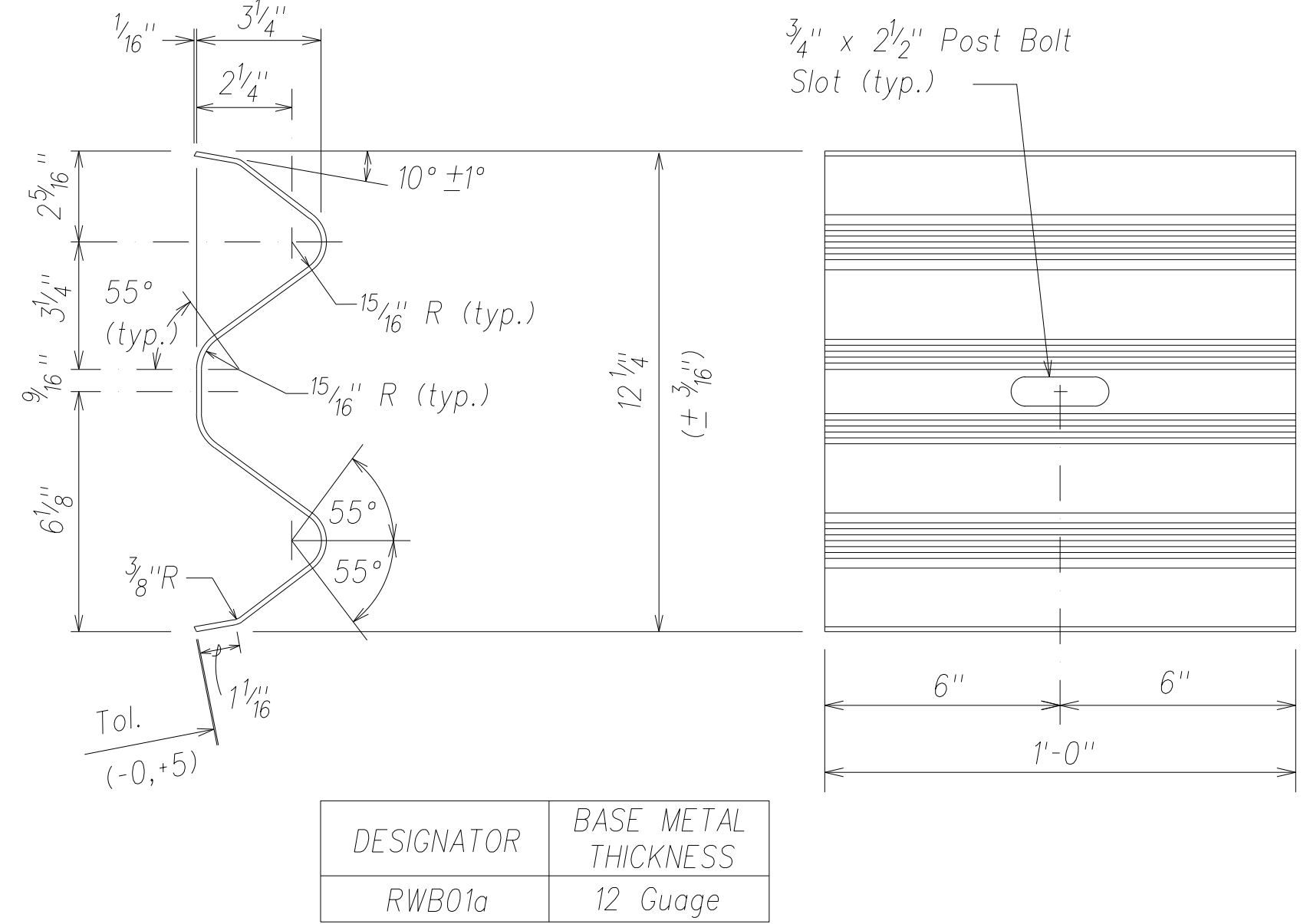


W-BEAM STRONG POST (PWE01)
Not to scale



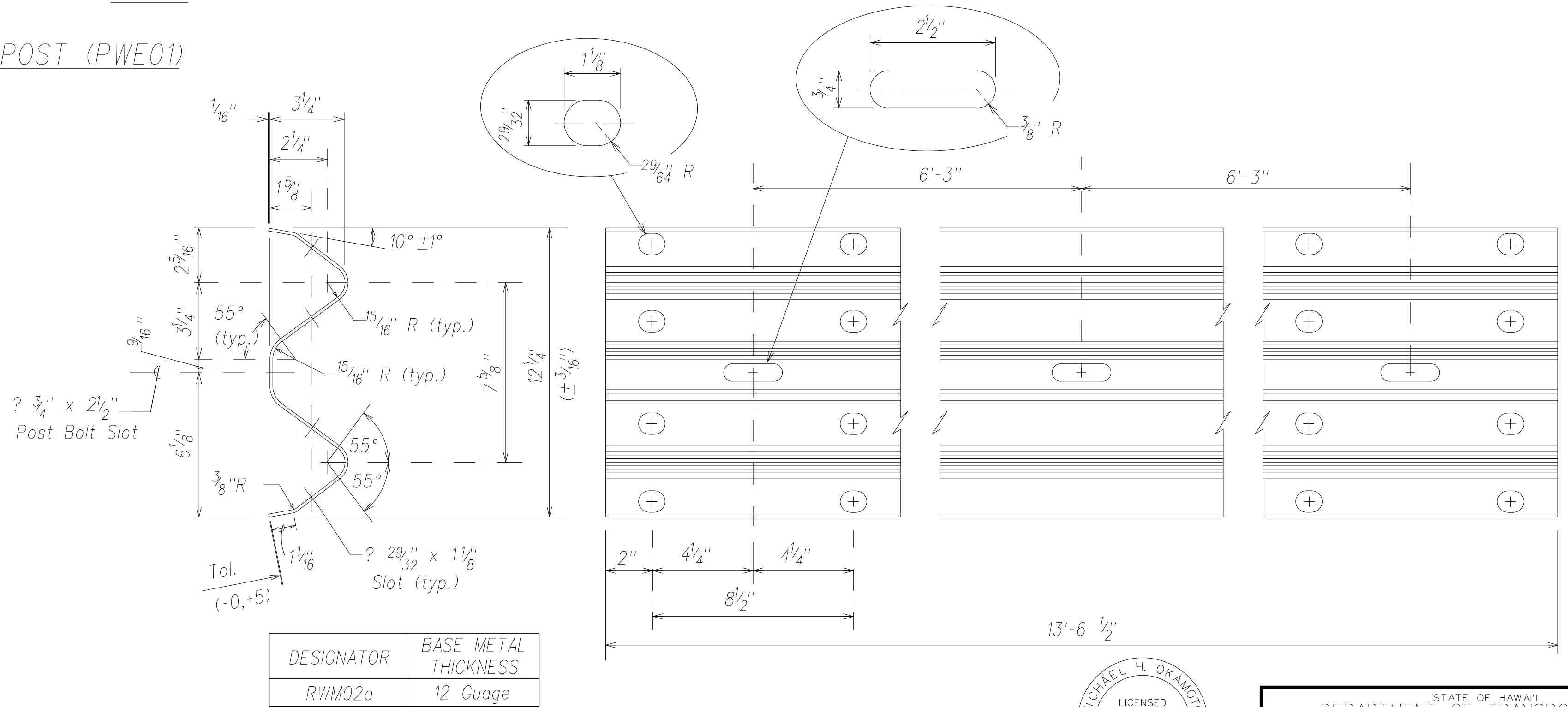
Designator	L
FBB01	1 3/8
FBB02	2
FBB03	10

GUARDRAIL BOLTS AND
RECESSED NUT
Not to scale



DESIGNATOR	BASE METAL THICKNESS
RWB01a	12 Gauge

W-BEAM BACK-UP-PLATE (RWB01a)
Not to scale



2 SPACE W-BEAM GUARDRAIL (RWM02a)
Not to scale



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION AND
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION.

SIGNATURE _____
EXPIRATION DATE
OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRONG POST W-BEAM
GUARDRAIL DETAILS - 1

PHASE 1 - KAUMUALI'Y HIGHWAY
LIHU'E MILL BRIDGE TO RICE STREET
PHASE 1 - HO'OMANA ROAD

Scale: As Shown Date: December 4, 2012

SHEET No. C-33 OF 50 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

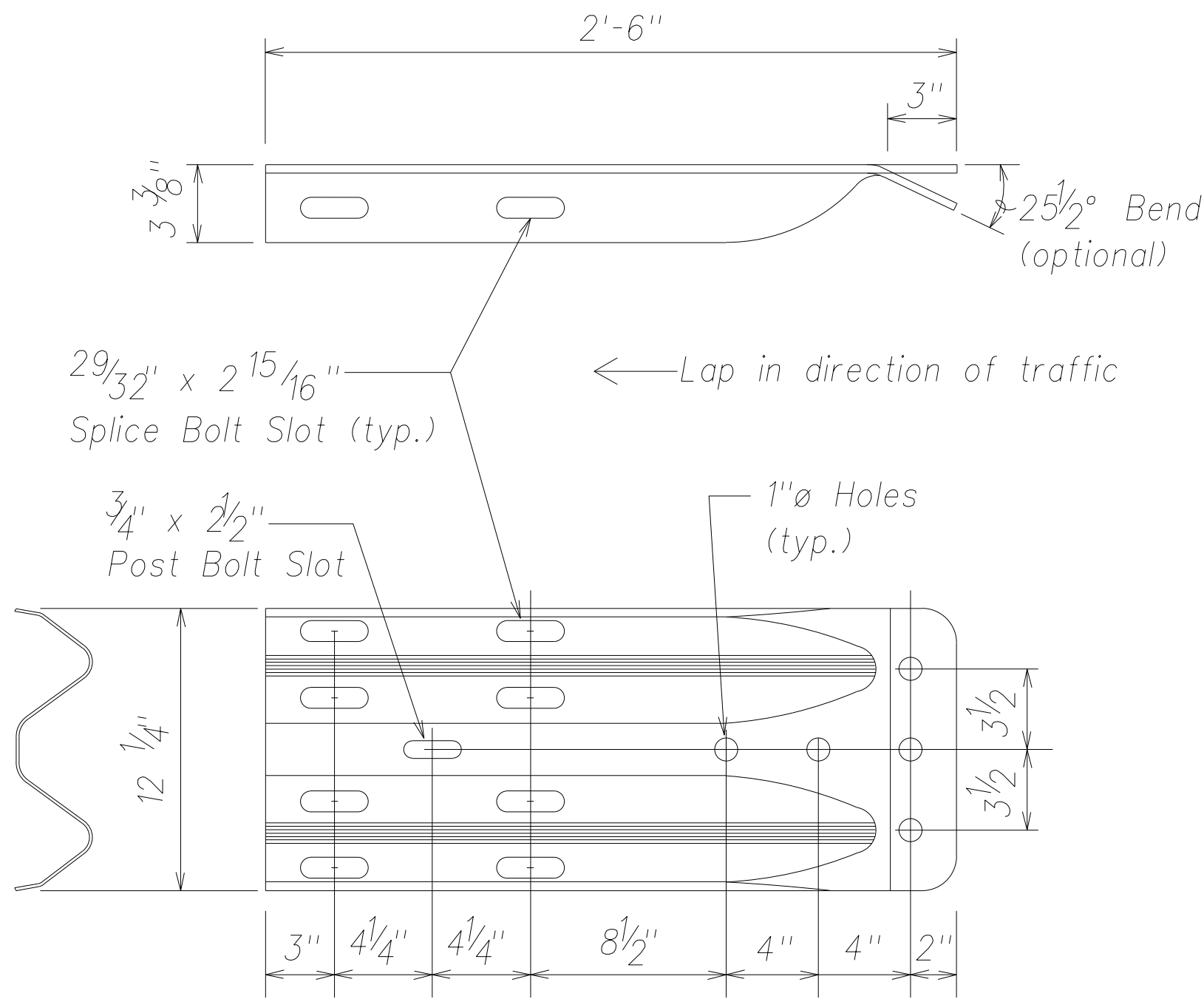
"AS-BUILT"

Model

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-050-1(036)	FY13/14	Model	50

General Notes:

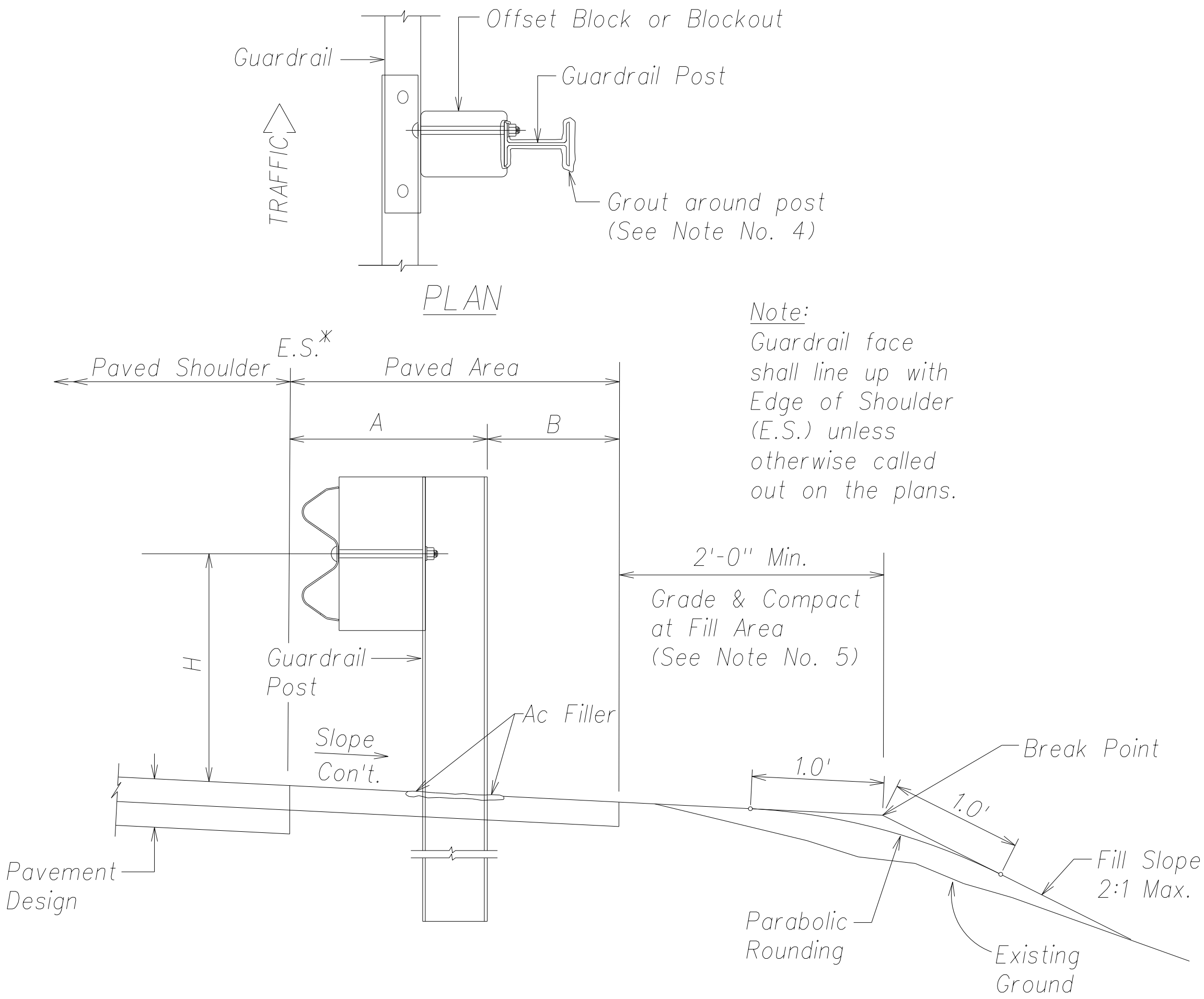
- All hardware, posts and fasteners shall be hot-dip zinc coated galvanized after fabrication. No punching, drilling or cutting will be permitted after galvanizing.
- Where conditions require, special post lengths in increments of 6 inches may be specified.
- All fasteners, posts, and rail elements (i.e. 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.
- After the guardrail posts are installed in the paved area, the Contractor shall fill/seal 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 filling/sealing. 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.



Note:
The cross-sectional dimensions for this part are to fit over part RWM02b on the approach end and under part RWM02b on the trailing end.

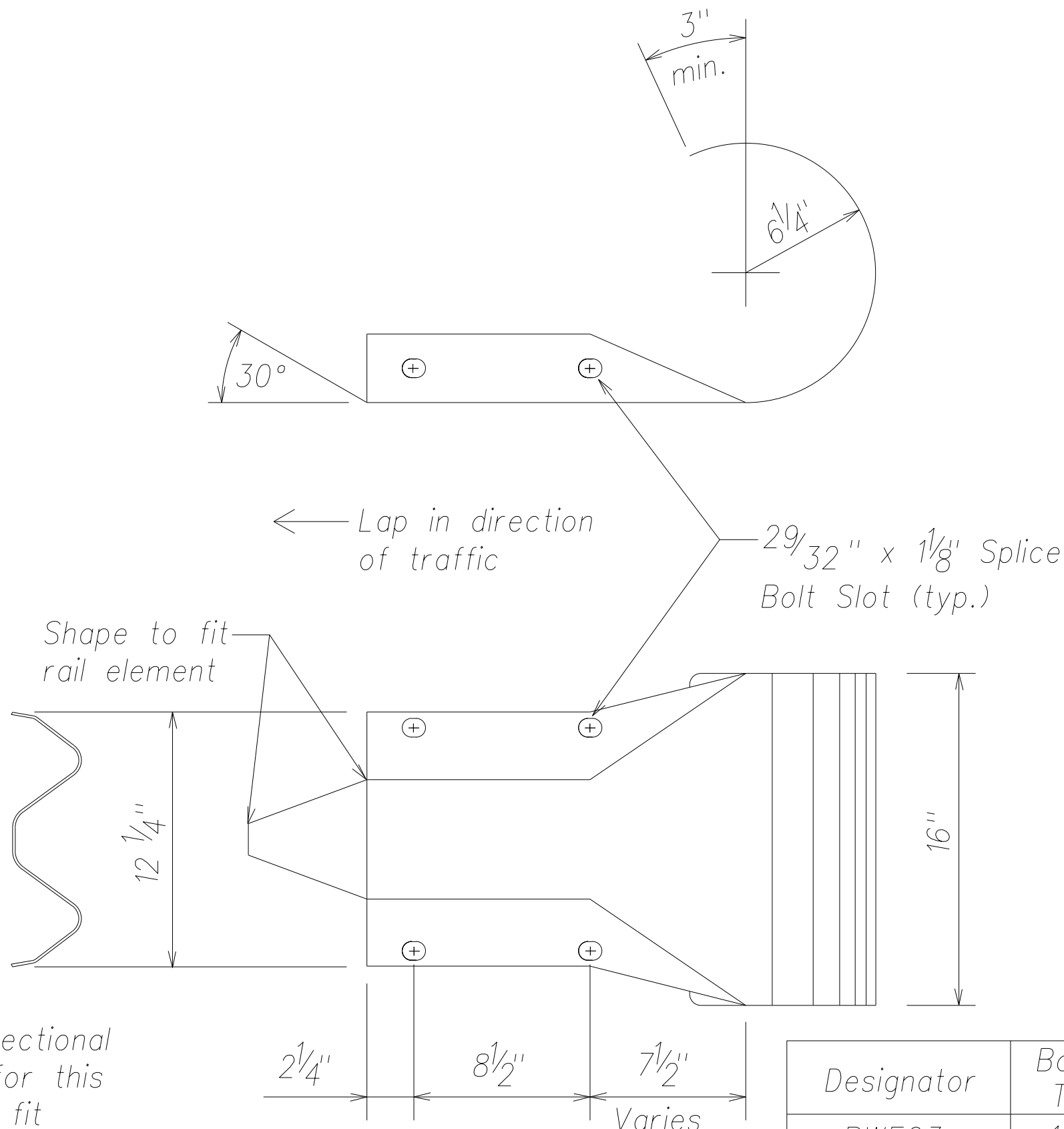
Designator	Base Metal Thickness
RWE02b	10 Guage

W-BEAM TERMINAL CONNECTOR (RWE02b)
Not to Scale



ELEVATION
TYPICAL GUARDRAIL INSTALLATION
Not to Scale

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



Note:
The cross-sectional dimensions for this part are to fit over part RWM02b

Designator	Base Metal Thickness
RWE03a	12 Guage

W-BEAM END SECTION (ROUNDED RWE03a)
Not to Scale



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

SIGNATURE
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STRONG POST W-BEAM
GUARDRAIL DETAILS - 2

PHASE 1 - KAUMUALI'I HIGHWAY
LIHU'E MILL BRIDGE TO RICE STREET
PHASE 1 - HO'OMANA ROAD

Scale: As Shown
Date: December 4, 2012

SHEET No. C-34 OF 50 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	