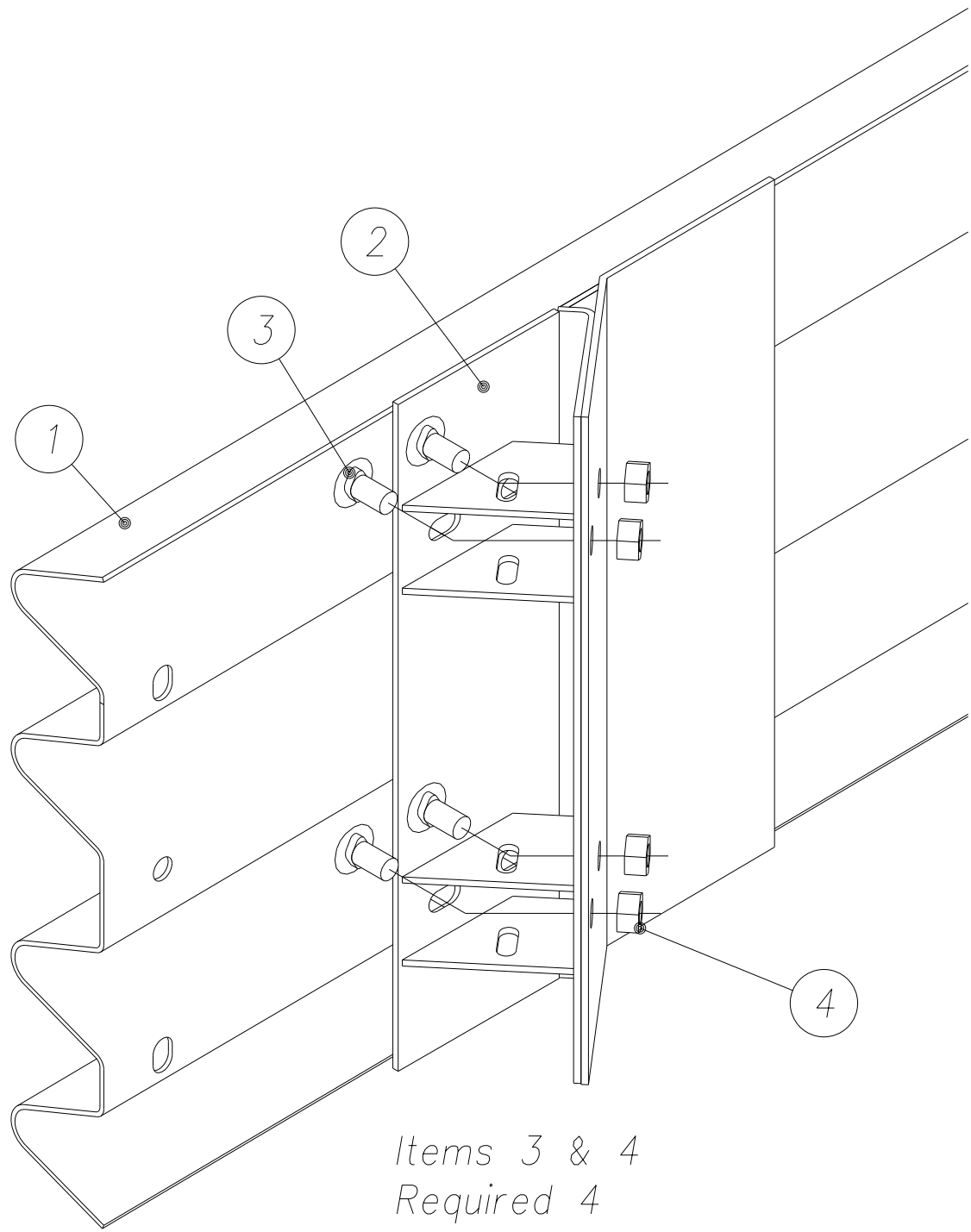


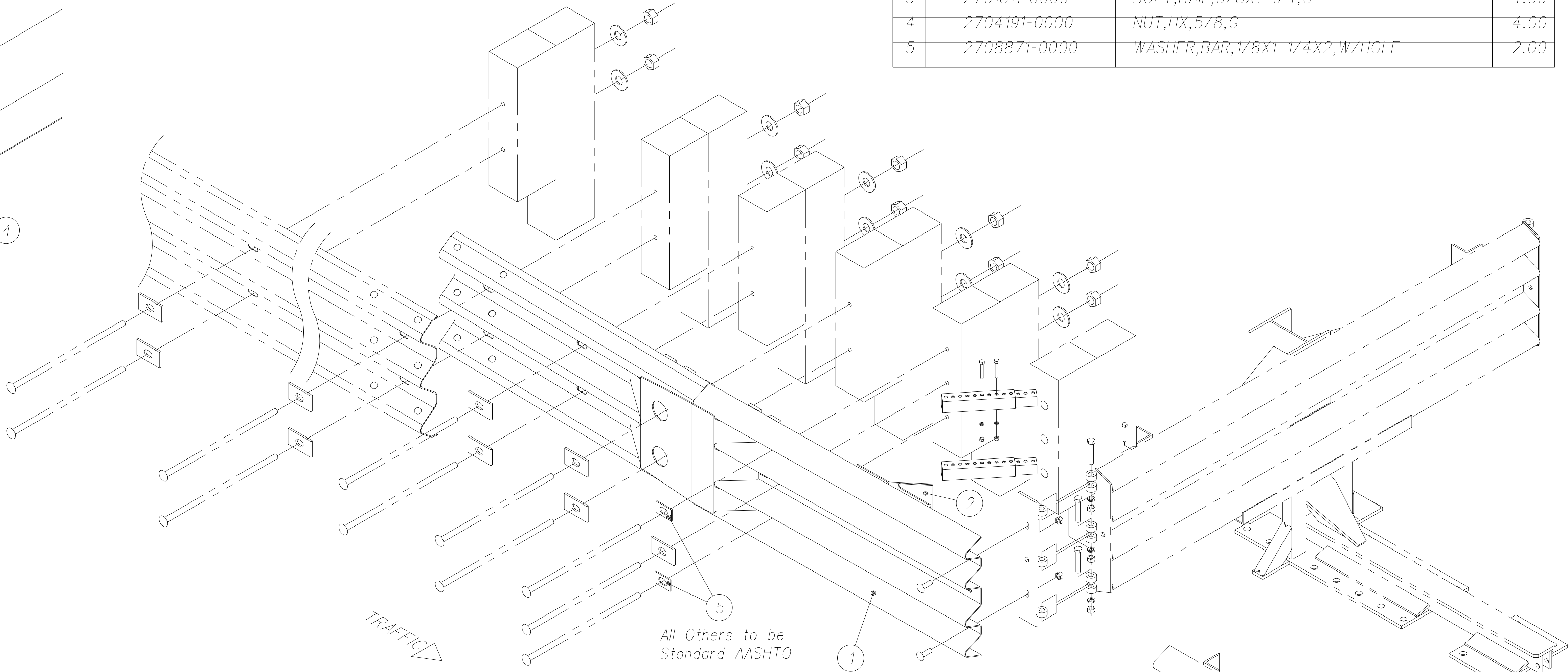
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-050-1(036)	FY13/14	Model	141

1	2760331-0000	QUADGUARD TO THRIE-BEAM TRANS. PANEL	1.00
2	2760503-0000	BRACKET,PIVOT SUPPORT,TRANS,QG	1.00
3	2701811-0000	BOLT,RAIL,5/8X1 1/4,G	4.00
4	2704191-0000	NUT,HX,5/8,G	4.00
5	2708871-0000	WASHER,BAR,1/8X1 1/4X2,W/HOLE	2.00



Items 3 & 4
Required 4
Places

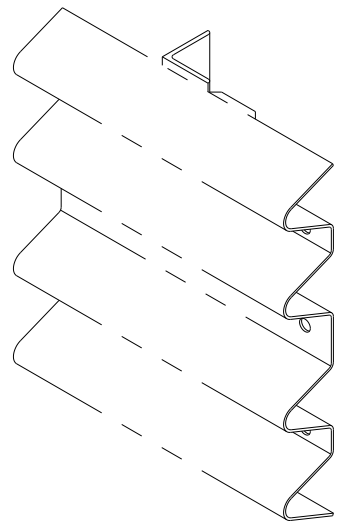
Item 2 Assembly
Not to scale



All Others to be
Standard AASHTO

NOTES:

1. Panel overlap shown is for traffic direction shown. Actual overlap shall be determined by the site conditions and project engineer per traffic direction. Use standard guardrail connection.
2. This assembly is not included in the quad-guard system model number & must be ordered separately.
3. Energy absorption systems, inc., supplies the stock items shown in the parts list with the assembly number. All other componenets of the downstream guardrail (posts, hardware and rail elements) are standard highway materials and may be obtained from your local highway supply vendors.
4. Panel may be used on left and/or right side.



Replace Side Panel
Part No. 2760471-0000
With Transition Panel (Item 1)



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

SIGNATURE
April 30, 2016
EXPIRATION DATE
OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

QUADGUARD TRANSITION DETAILS

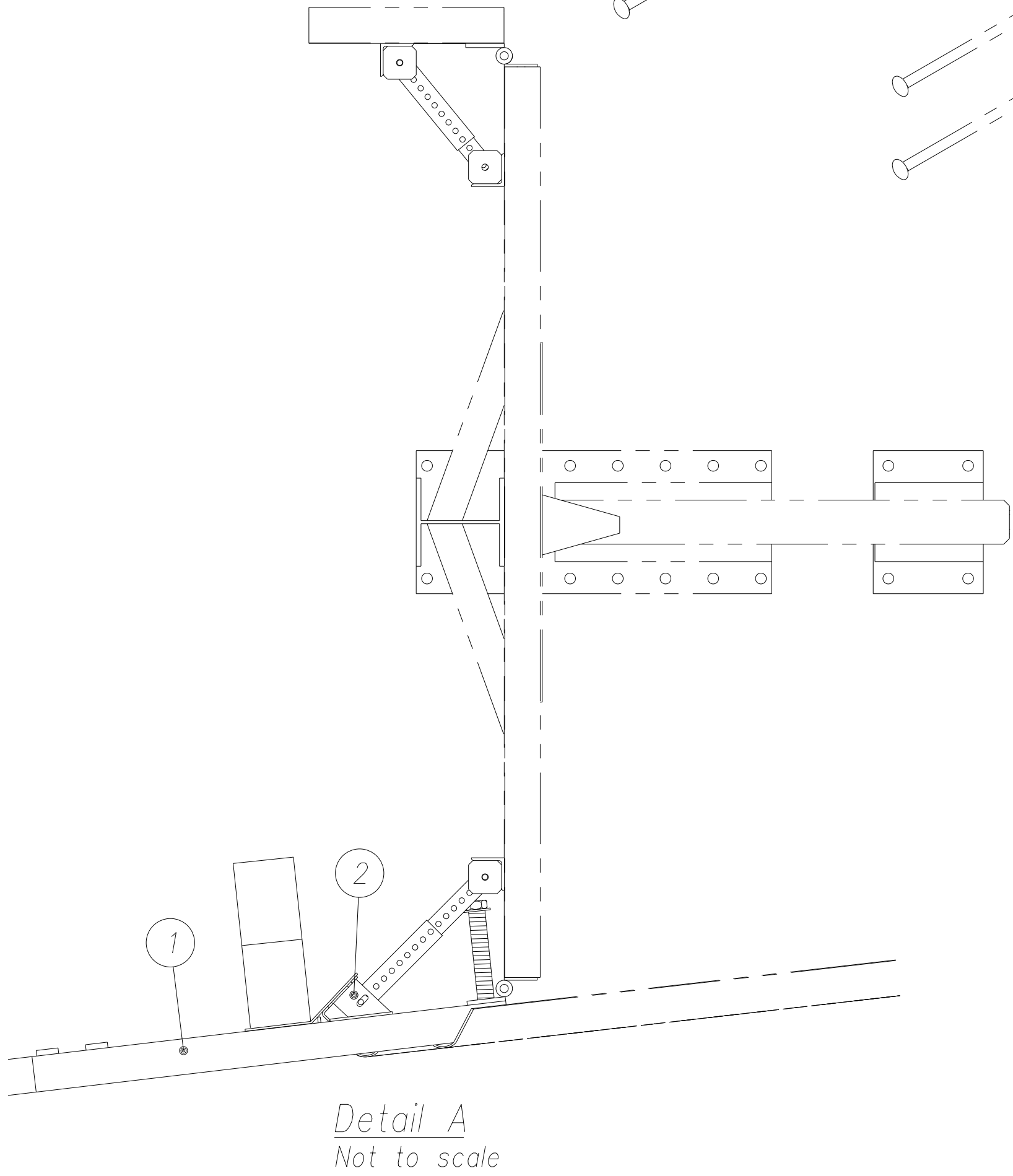
PHASE 1 - KAUMUALII HIGHWAY
LIHUE MILL BRIDGE TO RICE STREET

PHASE 3 - REHABILITATION OF LIHUE MILL
BRIDGE AND MAKAI WIDENING

Scale: As Shown Date: May 2, 2014

SHEET No.C-59 OF 82 SHEETS

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

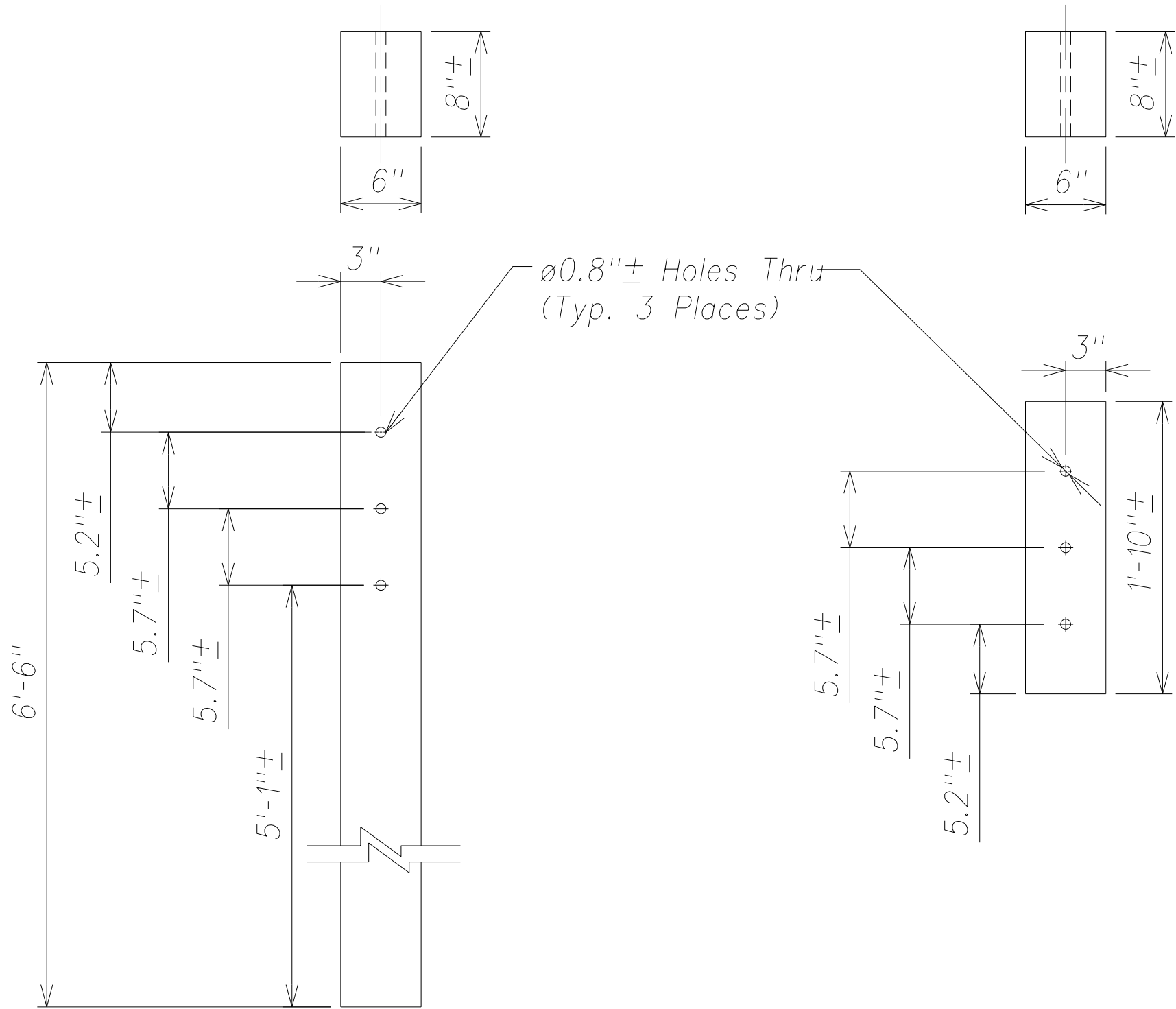


Detail A
Not to scale

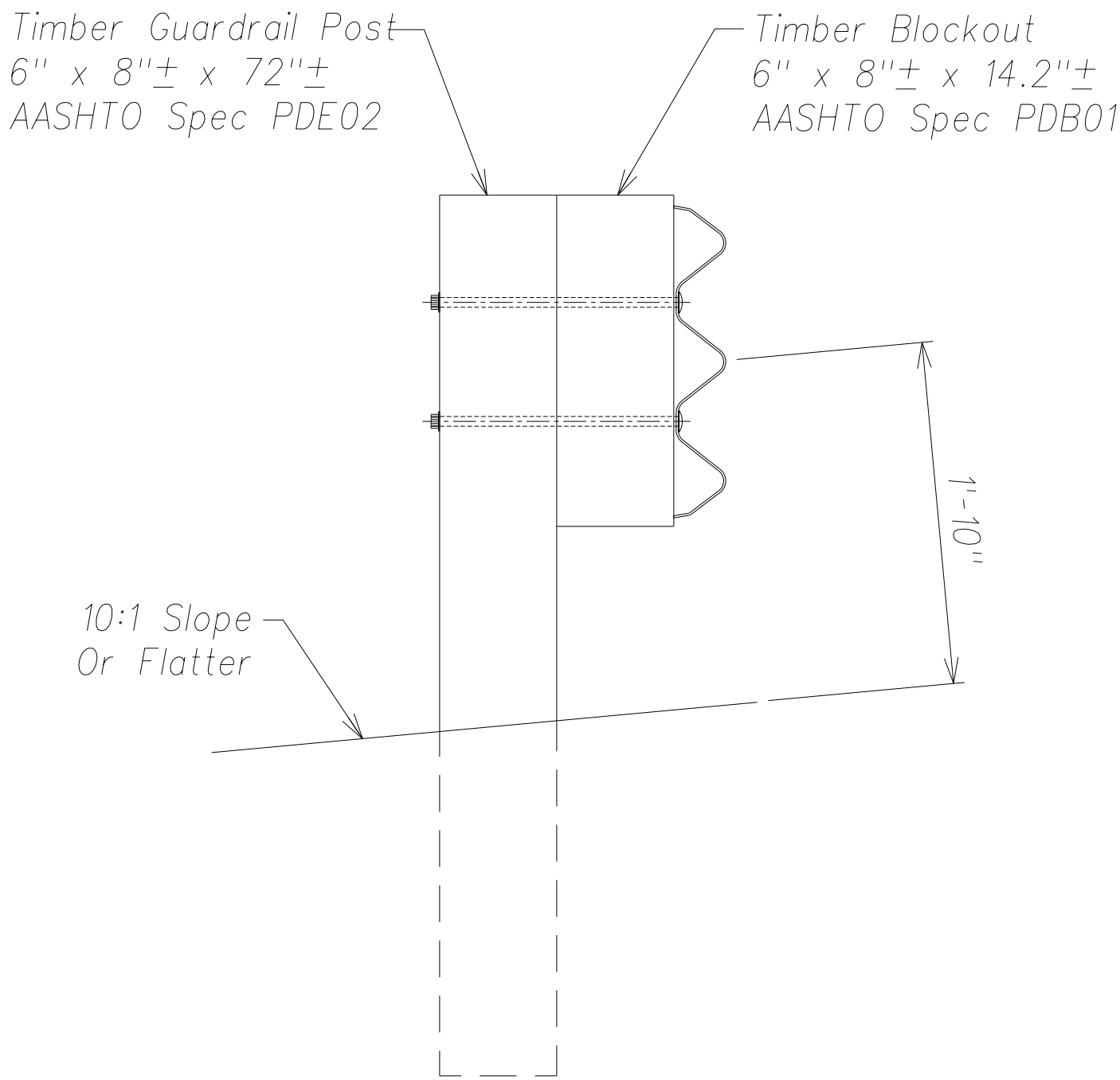
"AS-BUILT"

Model

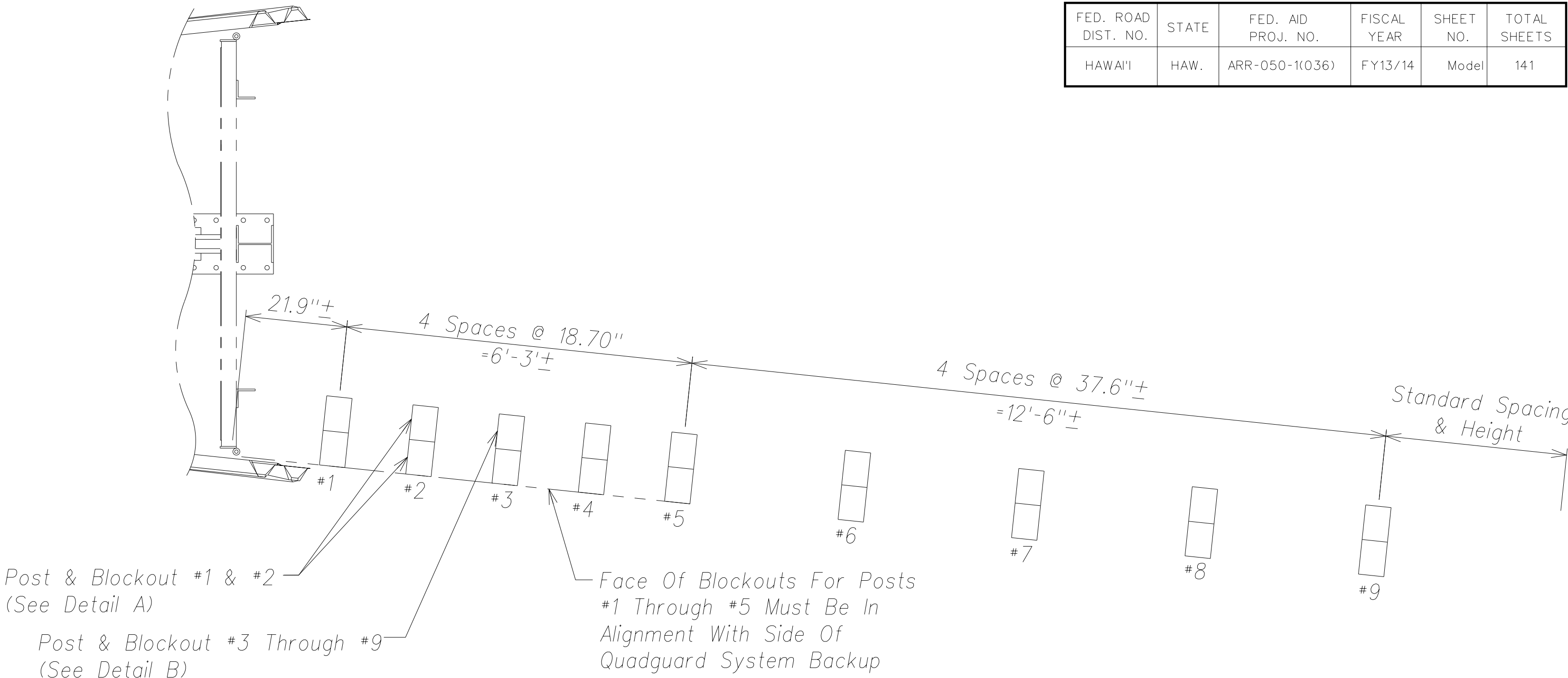
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-050-1(036)	FY13/14	Model	141



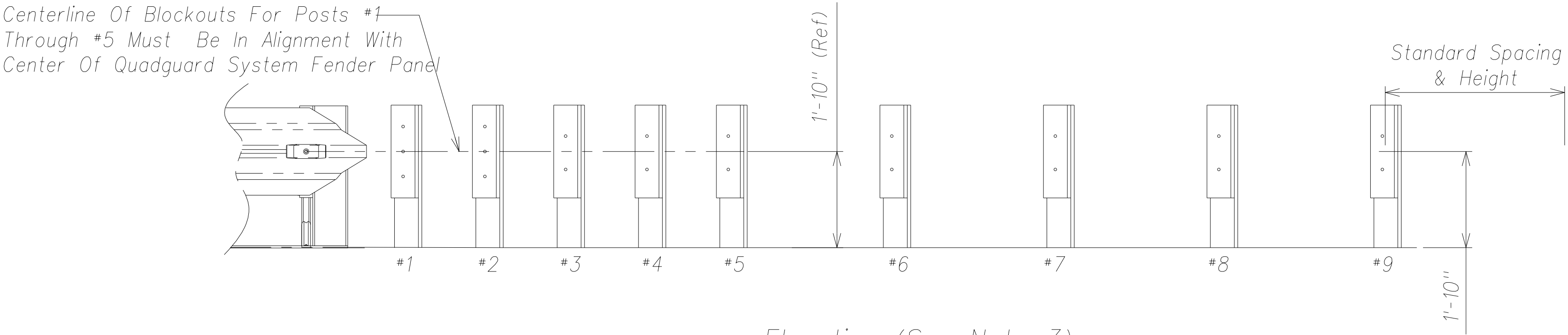
Detail A - Posts & Blockouts #1 & #2
(Non-Standard) (See Note 2)
Not to Scale



Detail B - Posts & Blockouts #3 Thru #9
Not to Scale



Plan (See Note 3)
Not to Scale



Elevation (See Note 3)
Not to Scale

- NOTES:
- Dimensions are in inches unless otherwise noted.
 - Posts & blockouts shall be made of timber with a stress grade of at least 8 MPa. Stress grading shall be in accordance with the rules of the West Coast Lumber Inspection Bureau, Southern Pine Inspection Bureau or other appropriate timber association. Timber for posts shall be either rough sawn (unplaned) or S4S (Surfaced Four Sides) with nominal dimensions indicated. The size tolerance of posts in the direction parallel to the axis of the bolt holes shall not be more than ± 6 mm. All timber shall receive a preservation treatment in accordance with AASHTO M133 after all end cuts are made and all holes are drilled.
 - Guardrail & transition panel not shown for clarity.



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

QUADGUARD TRANSITION DETAILS

PHASE 1 - KAUMUALII HIGHWAY
LIHUE MILL BRIDGE TO RICE STREET

PHASE 3 - REHABILITATION OF LIHUE MILL
BRIDGE AND MAKAI WIDENING

Scale: As Shown Date: May 2, 2014

SHEET No. C-60 OF 82 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
CHECKED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN	No.
NOTE BOOK	