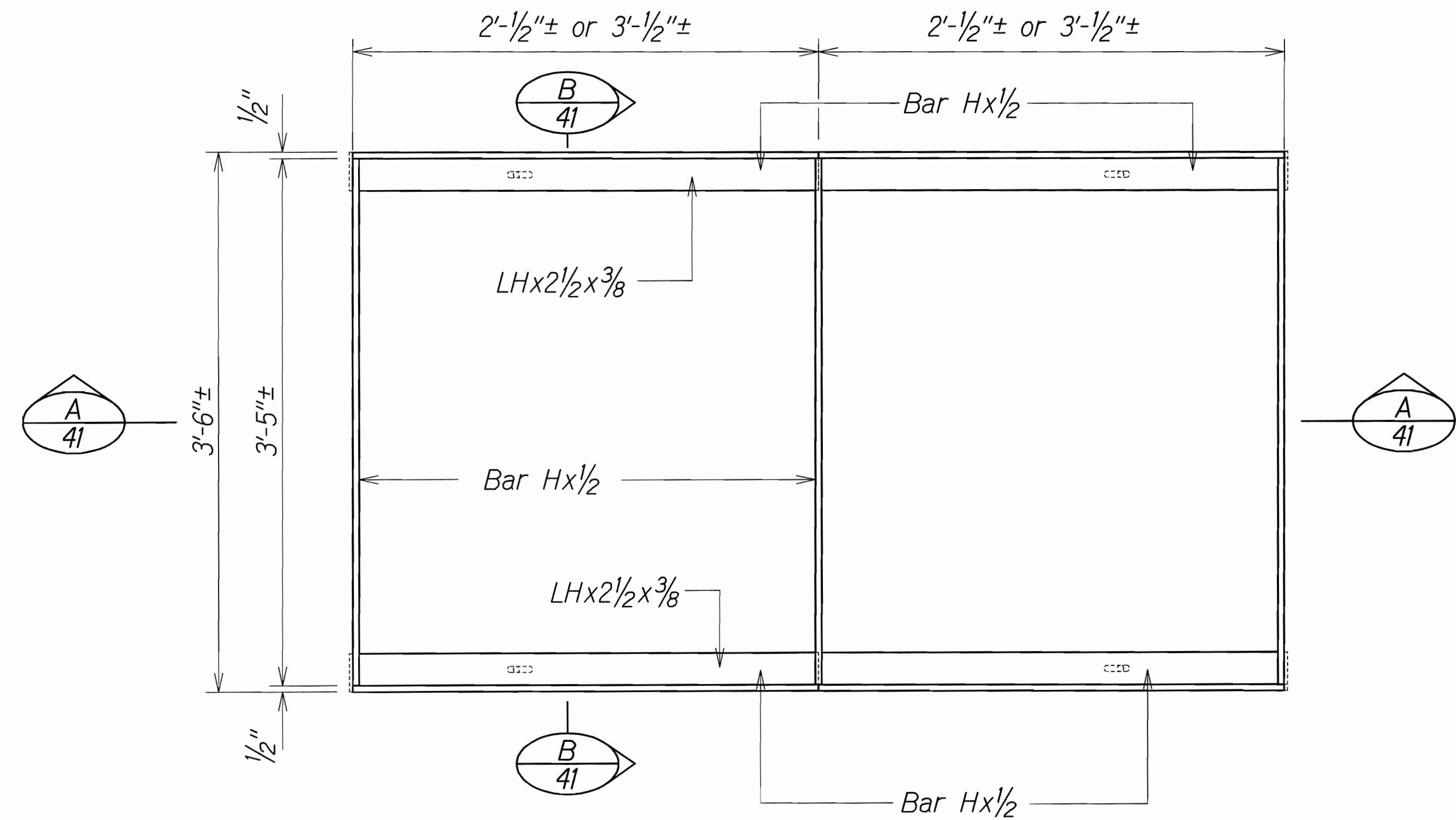
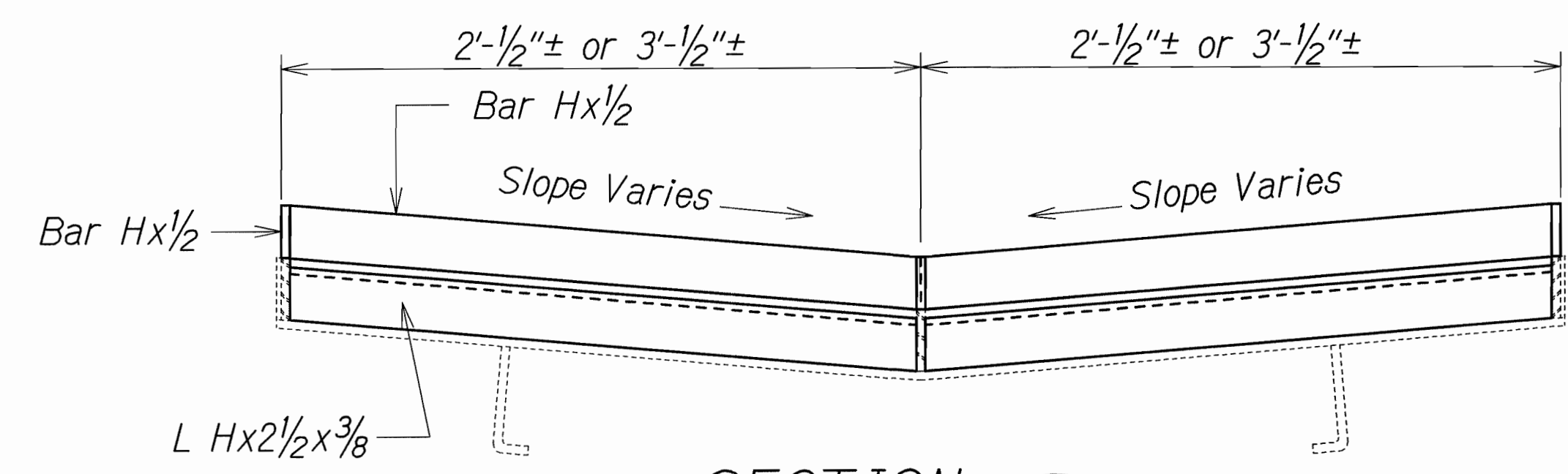


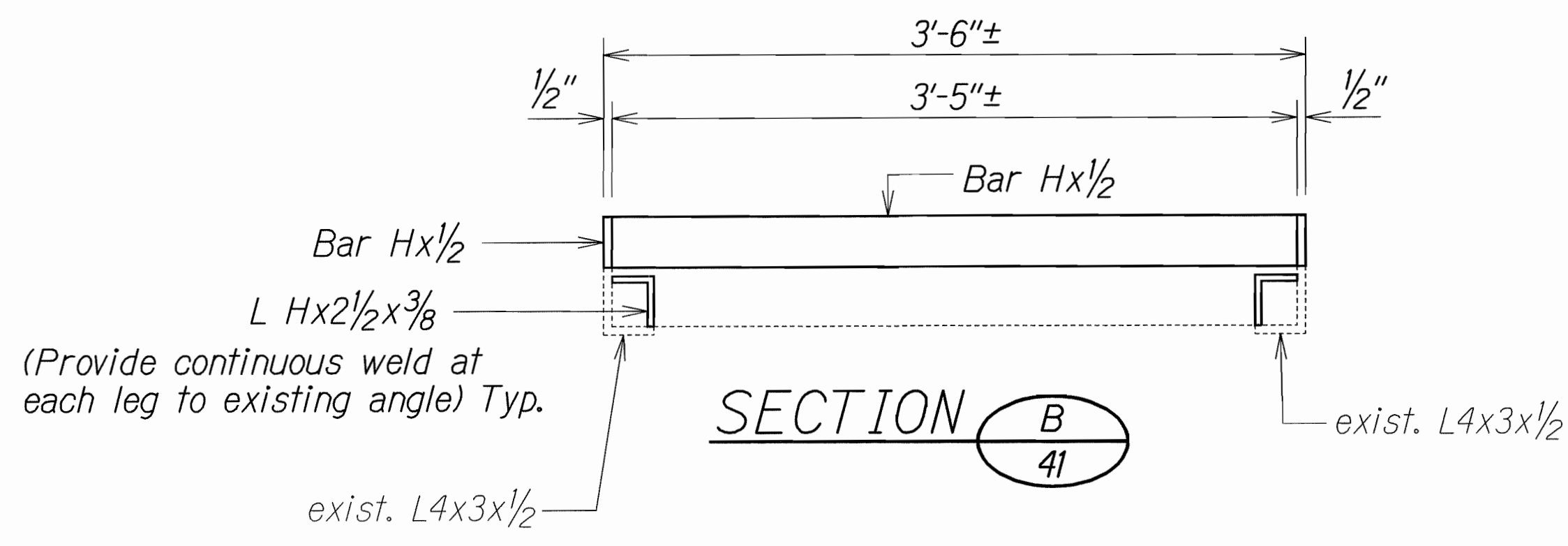
DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-019-2(62)	2012	41	42



PLAN



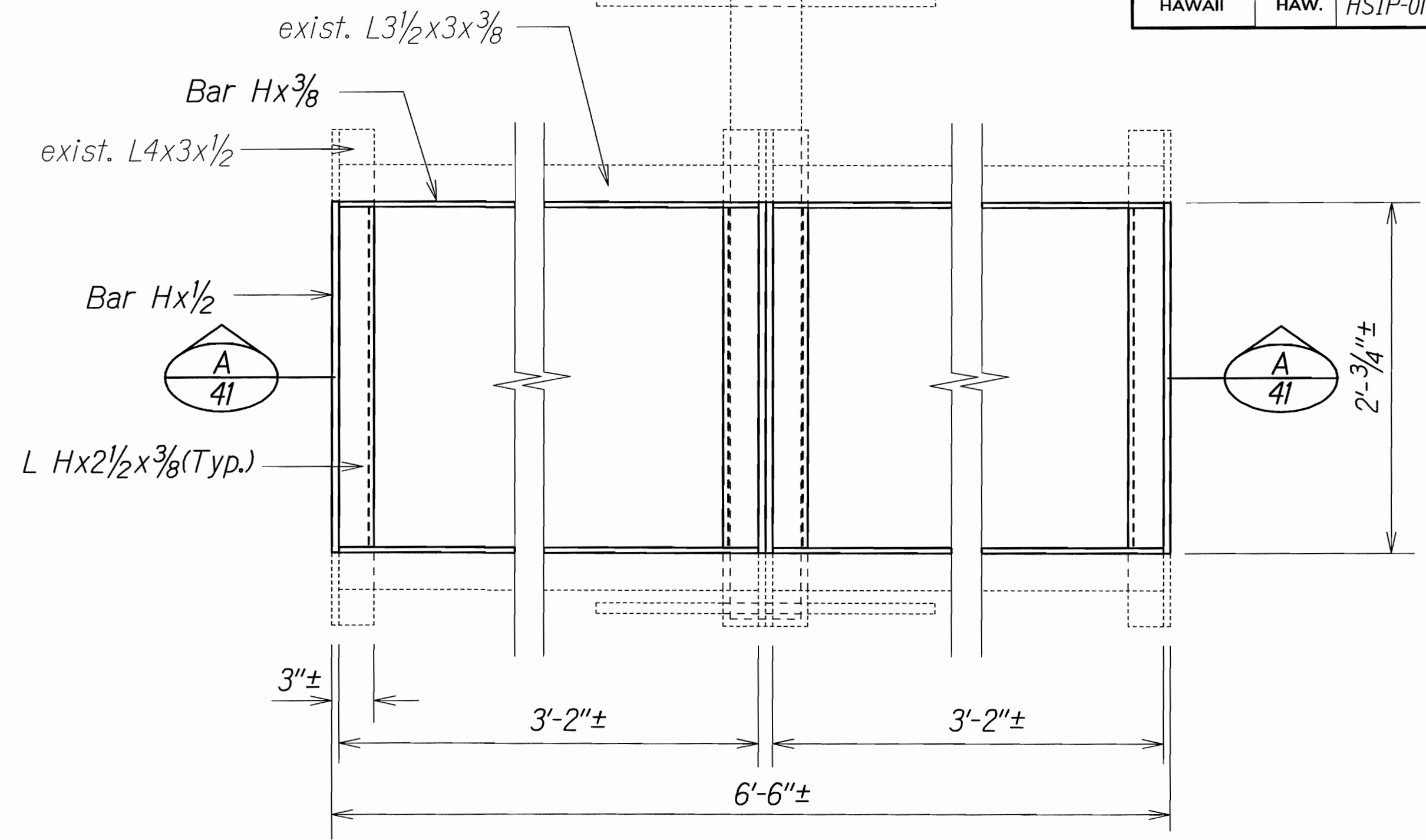
SECTION A-A



SECTION B-B

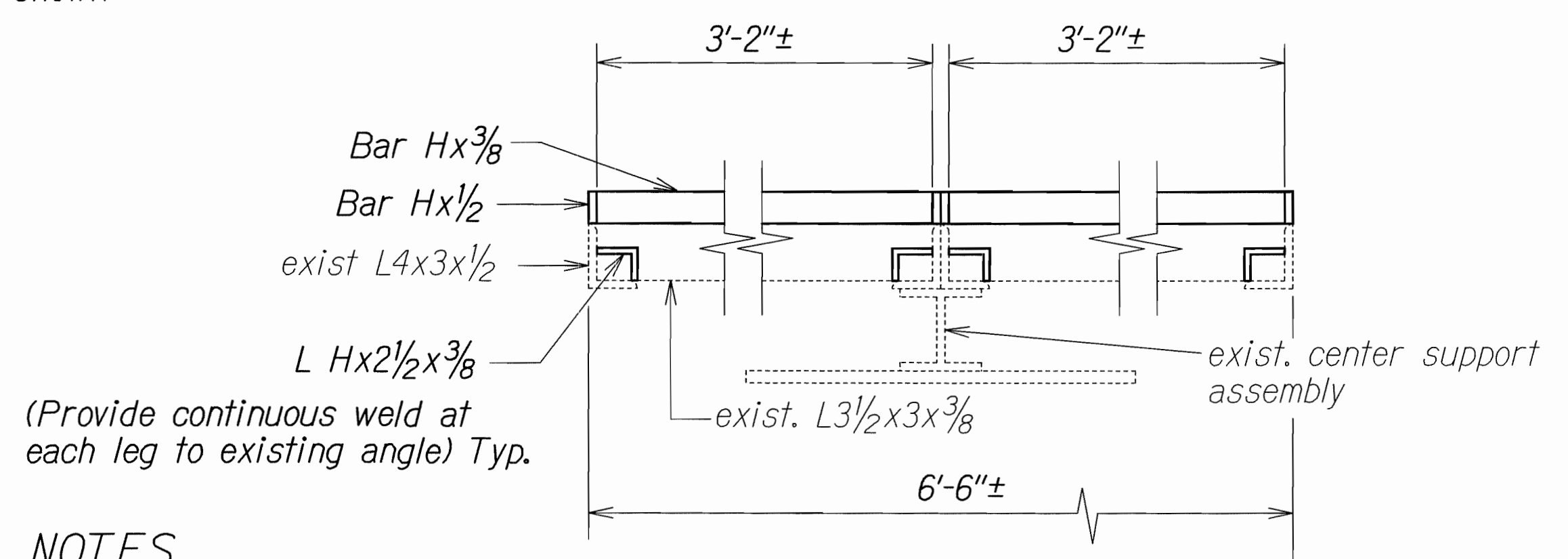
V STEEL FRAME

RAISE DRAINAGE STEEL FRAME DETAILS



PLAN

Note: Grating not shown



SECTION A-A

A-9P OR 2A-9P STEEL FRAME

GENERAL NOTES

1. All welds 3/8" unless otherwise noted.
2. Modified Frames shall be zinc coated after fabrication.
3. Areas that are field welded shall be field galvanized in accordance with standard specs.
4. See Std. Plan B-01 for additional notes.
5. Contractor shall verify dimensions prior to ordering material.
6. H dimension is the height to raise grate. Maximum height to raise grate using this detail is 3 1/2".

ORIGINAL PLAN	DATE
DRAWN BY	11/13/2011
DESIGNED BY	
CHECKED BY	
NOTED BY	
APPROVED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE GRATE DETAIL

HAWAII BELT ROAD
Safety Improvements
Laupahoehoe Gulch and Ka'awali'i Gulch
Federal Aid Project No. HSIP-019-2(62)

Scale: 1 1/2" = 1'-0" Date: June, 2012

SHEET No. 1 OF 1 SHEETS