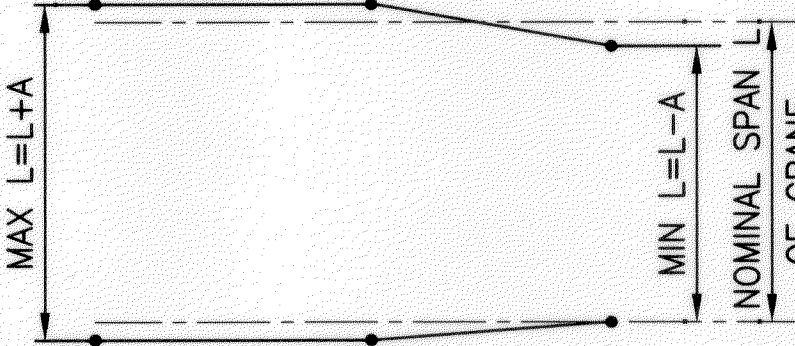
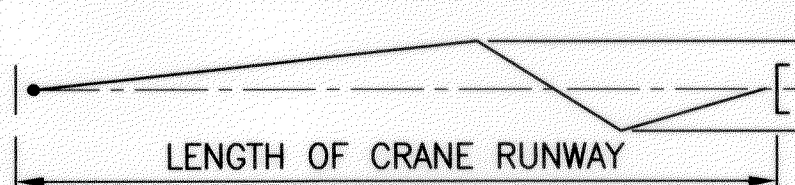
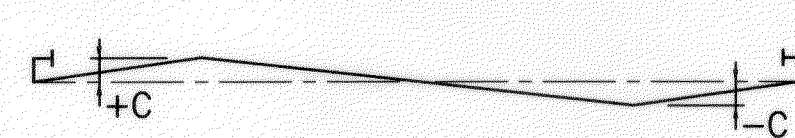
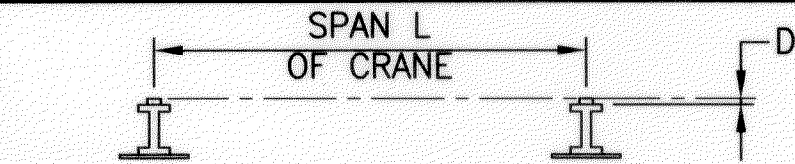


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-05-98	2002	71	99

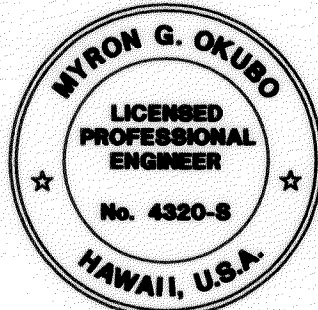
# BRIDGE CRANE

- CONSTRUCTION TOLERANCE
  - PRE-ENGINEERED RIGID FRAME AND CRANE RUNWAY ASSEMBLY SHALL BE CONSTRUCTED TO BE WITHIN FOLLOWING TOLERANCES.

ITEM	BUILDING RUNWAY TOLERANCES PER C.M.A.A. SPECIFICATIONS 70	OVERALL TOLERANCE	MAXIMUM RATE OF CHANGE
SPAN		$A = 3/16"$	1/4" IN 20'-0"
STRAIGHTNESS		$B = 3/8"$	1/4" IN 20'-0"
ELEVATION		$C = 3/8"$	1/4" IN 20'-0"
RAIL-TO-RAIL ELEVATION		$D = 3/16" (\pm)$	1/4" IN 20'-0"

- LATERAL DEFLECTION SHALL NOT EXCEED  $L/400$  BASED ON 10% OF MAXIMUM WHEEL LOADING(S) WITHOUT IMPACT. VERTICAL DEFLECTION SHALL NOT EXCEED  $L/800$  BASED ON MAXIMUM WHEEL LOAD(S) WITHOUT IMPACT.

- RUNWAY ASSEMBLY
  - CRANE RUNWAY GIRDER, RUNWAY RAILS, CRANE STOPS, WHEEL STOPS, AND FASTENINGS (INCLUDING RAIL HOOK BOLTS) SHALL BE COORDINATED WITH CRANE MANUFACTURER. COMPONENTS SHALL BE DESIGNED TO SUIT SPECIFIC CRANE TO BE INSTALLED. NECESSARY FIELD ADJUSTMENTS SHALL BE PROVIDED FOR A SATISFACTORY INSTALLATION.
  - RUNWAY RAILS SHALL BE STRAIGHT, PARALLEL, LEVEL AND AT SAME ELEVATION. RUNWAY RAILS SHALL BE PROVIDED WITH PROPER RAIL SPLICES AND HOLD-DOWN FASTENERS. RAIL SPLICES SHALL NOT BE LOCATED AT CRANE RUNWAY GIRDER JOINTS. RAIL SEPARATION AT A JOINT SHALL NOT EXCEED 1/32 INCH.
  - CLEARANCE BETWEEN END OF CRANE AND BUILDING COLUMNS, KNEE BRACES, OR ANY OTHER OBSTRUCTIONS SHALL NOT BE LESS THAN 2 INCHES WITH CRANE CENTERED ON RUNWAY RAILS. PIPES, CONDUITS AND OTHER ITEMS. SHALL NOT REDUCE REQUIRED CLEARANCE. ADDITIONAL DIMENSIONS REQUIREMENTS SHALL BE AS NOTED IN DESIGN DRAWINGS AND SHOP DRAWINGS.

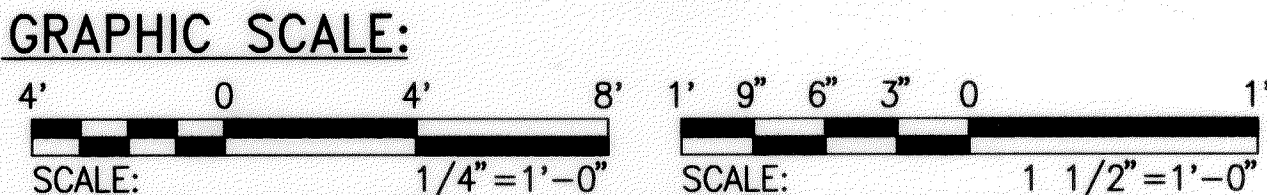
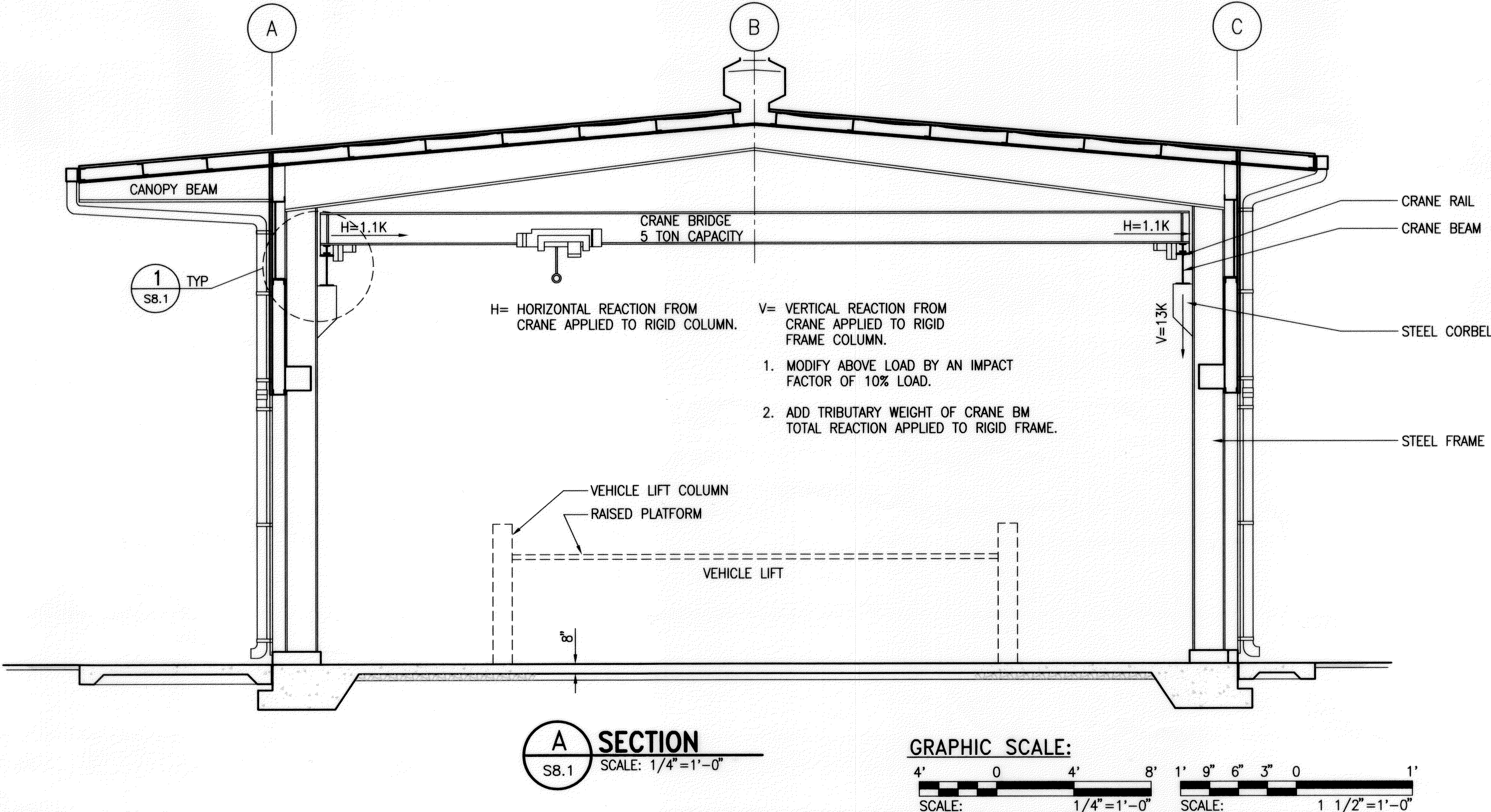
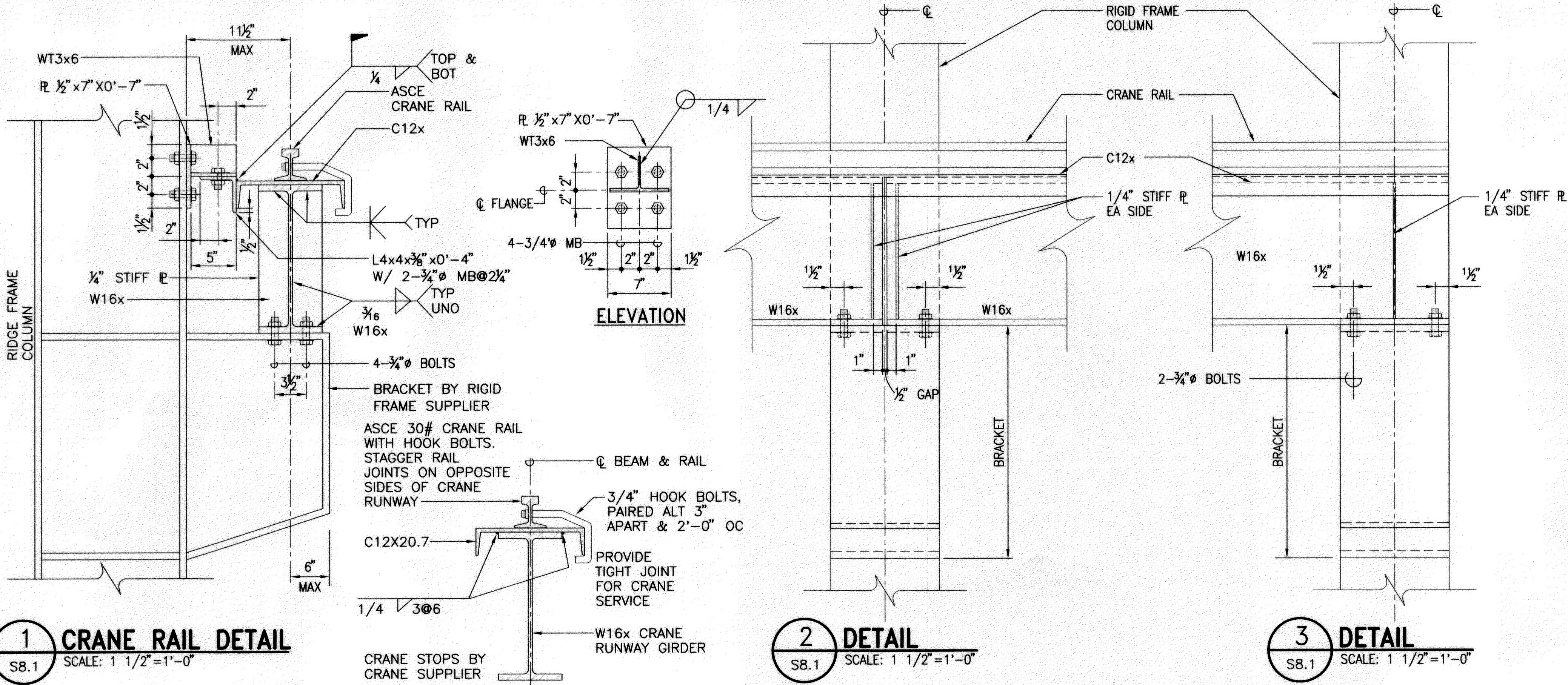


THIS WORK WAS PREPARED BY  
ME OR UNDER MY SUPERVISION

*Myron Okubo*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**CRANE RAIL DETAILS  
AND BLDG SECTION**  
MOLOKAI BASEYARD  
MOLOKAI INDUSTRIAL PARK  
Project No. HWY-M-05-98  
Scale: As Noted      Date: SEPT. 13, 2001  
SHEET No. S8.1 OF S8.1 SHEETS

MAINTENANCE BUILDING



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	
NO.	

6143S18.DWG 08/27 04/03/00 M:\DWG\6143-01\STRUCT