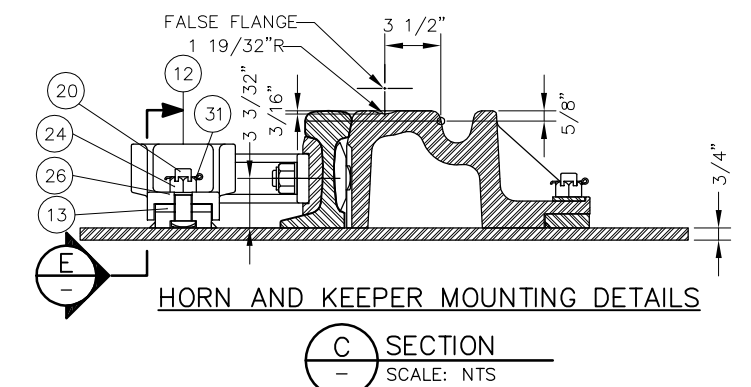
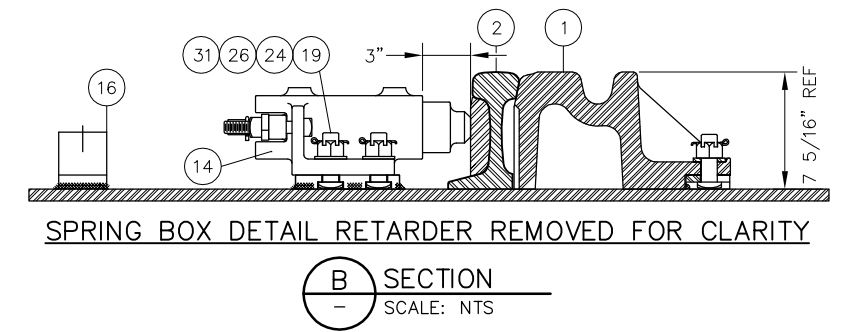
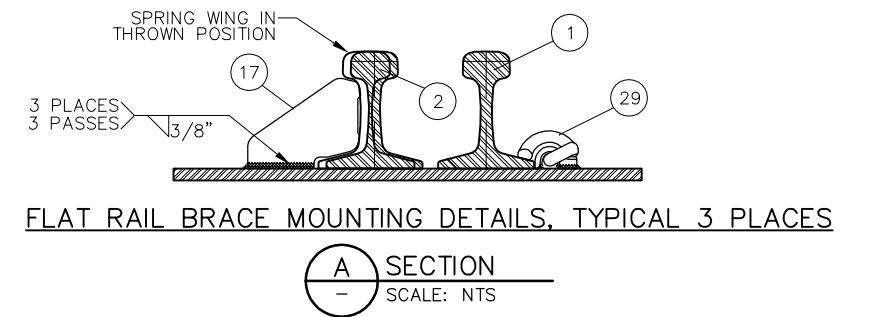
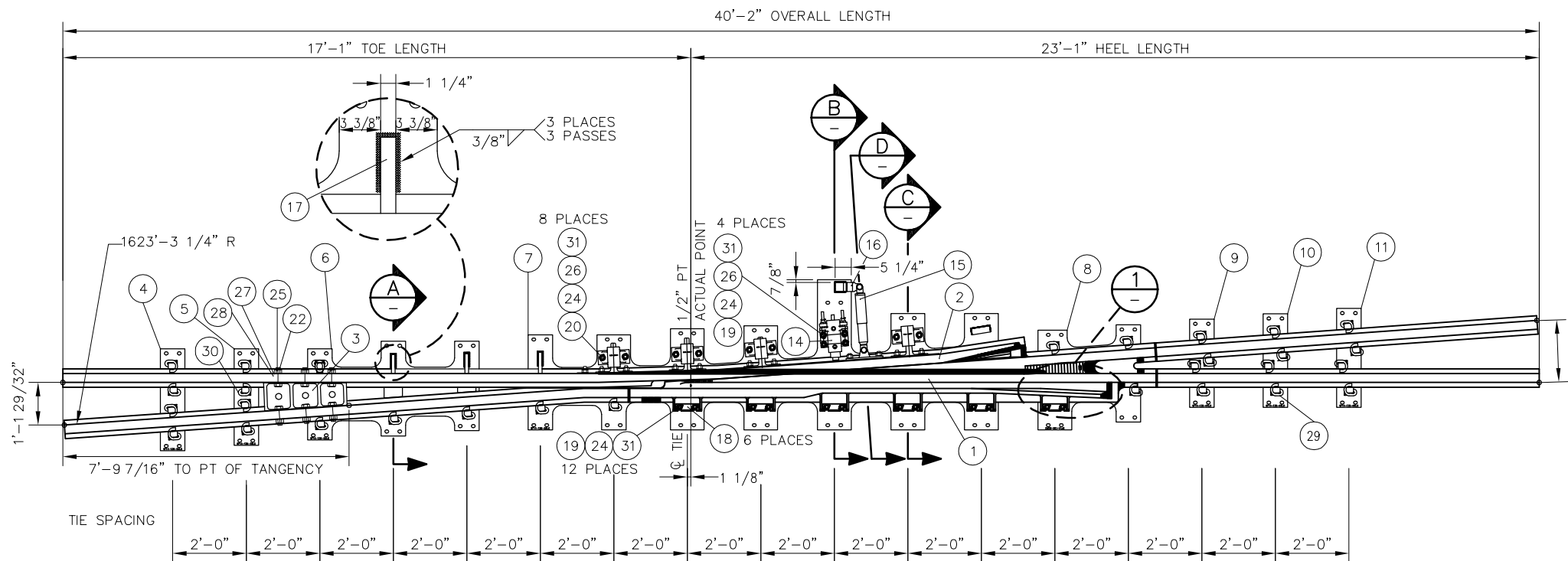
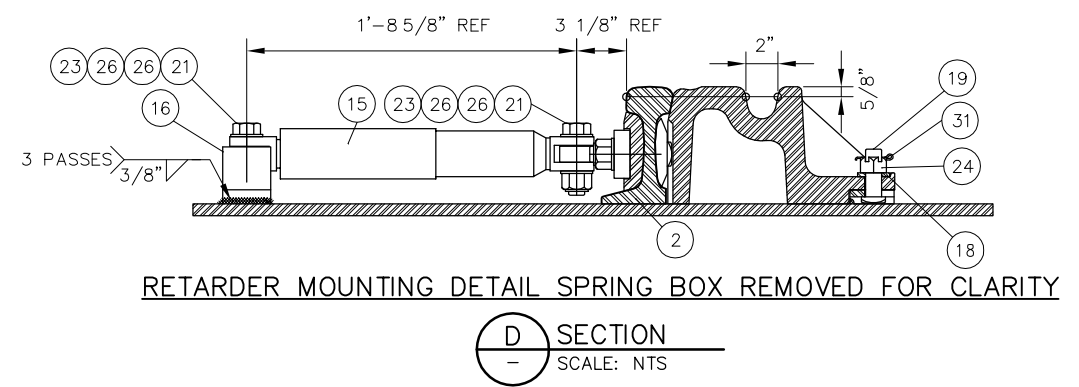
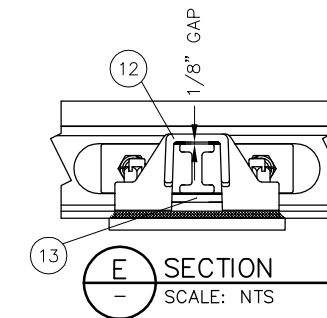
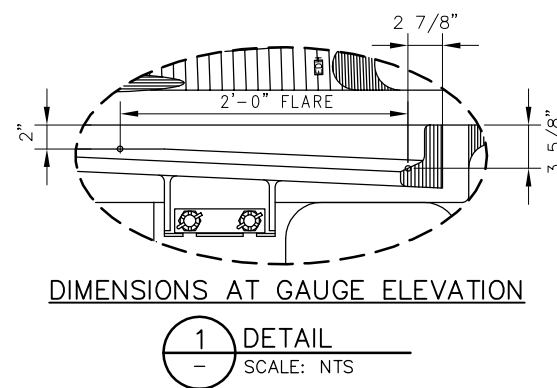


BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	NO 14-136 LB RE SPRING FROG, LH POINT ASSEMBLY	-	16	1	RETARDER PLATE BRACKET FOR FROG C/W HYDRAULIC RETARDER	-
2	1	SPRING WING RAIL, NO 14-136LB RE, LH C/W HARDWARE	-	17	3	FLAT RAIL BRACE FOR NON D-BAR APPLICATIONS	-
3	1	TOE BLOCK, NO 14-136 LB RE WSM	-	18	6	WASHER, BOLT CAPTURE STYLE, 1/4" THICK	-
4	1	FROG PLATE (14-136-50LC)	SD-2625	19	16	BOLT, 1" DIA X 3", THIN SQ HEAD, DRILLED @ 2 1/2", GR 5	-
5	1	FROG PLATE (14-136-51LC)	SD-2625	20	8	BOLT, 1" DIA X 3 1/2", THIN SQ HEAD, DRILLED @ 2 11/16", GR 5	-
6	1	FROG PLATE (14-136-52LC)	SD-2627	21	2	BOLT, 1" DIA X 4 1/8", HEAVY HEX HEAD, GR 8	-
7	1	FROG PLATE (14-136-55LC)	SD-2629	22	6	BOLT, 1 3/8" DIA X 5 1/2", SQUARE HEAD, GR 8	-
8	1	FROG PLATE (14-136-62LC)	SD-2631	23	2	SECURITY LOCK NUT, 1" DIA, HEX (SH521), GR 5	-
9	1	FROG PLATE (14-136-64LC)	SD-2631	24	24	NUT, 1" DIA HEAVY HEX, SLOTTED, GR 5	-
10	1	FROG PLATE (14-136-65LC)	SD-2633	25	6	SECURITY LOCK NUT, 1 3/8" DIA HEX (SH530), GR 8	-
11	1	FROG PLATE (14-136-66LC)	SD-2633	26	16	FLAT WASHER, FOR 1" DIA x 5/32" THICK, HARDENED	-
12	4	HORN KEEPER, REVERSIBLE	-	27	6	FLAT WASHER, FOR 1 3/8" DIA x 1/4" THICK, HARDENED	-
13	4	WEAR PLATE FOR REVERSIBLE HORN KEEPER	-	28	6	TAIL WASHER, FLAT (837K)	-
14	1	SPRING BOX ASSEMBLY, WITH 3" MAXIMUM PLUNGER TRAVEL	-	29	28	PANDROL SPRING CLIP E2055	-
15	1	RETARDER, ENDINE P/N: SP22917, CLEVIS ENDS WITH HARDWARE	-	30	1	PANDROL SPRING CLIP E2056	-
				31	24	COTTER PIN, 1/4" DIA x 2" LONG	-



- NOTES:**
- RETARDER CLOSING TIME RANGES FROM 1 TO 3 MINUTES
  - SPRING BOX LOAD IS 300 LBS/IN
  - SPRING WING SHALL BE THROWN TO A 17/8" FLANGEWAY AT THE 3/4" POINT TO DETERMINE THE SPRING WING THROWN POSITION
  - FLAT RAIL BRACES (ITEM NO 17) SHALL BE WELDED WHERE SHOWN, UP AGAINST SPRING WING WHEN FULLY THROWN
  - RAIL END DRILLING SHALL BE @ 9" AND 15 1/2", 3 3/32" ABOVE RAIL BASE, 1 5/16" DIA AT ALL 4 RAIL ENDS. ALL RAIL HOLE EDGES SHALL BE ROUNDED WITH A 1/8" R
  - RETARDER BRACKET (ITEM NO 16) SHALL BE WELDED AS SHOWN
  - FROG SHALL BE CONSTRUCTED TO TOLERANCES GIVEN ON LATEST AREMA PLAN 1010, PERMISSIBLE VARIATIONS IN COMPLETED FROGS
  - INSERT SHALL BE EXPLOSIVE DEPTH HARDENED TO 352 BRINELL PER AREMA
  - NAME TAG SHALL BE AFFIXED TO RIGID WING RAIL NEAR 1/2" PT WITH INFORMATION SHOWN
  - CALTRAIN WILL CONSIDER A TAPERED HEEL SPRING OF SAME ALIGNMENT AND DIMENSIONS TO REPLACE WSM



REV	DATE	BY	CHK	APP	DESCRIPTION

<b>PENINSULA CORRIDOR JOINT POWERS BOARD</b>		<b>STANDARD DRAWINGS</b>		CADD FILE NO: SD-2623
APPROVED BY: <i>Bernard Anagnostis</i> ENGINEERING MANAGER		 1250 San Carlos Avenue San Carlos, CA 94070		REV 0 DATE 093011
<i>Stephen Chen</i> DEPUTY DIRECTOR OF ENGINEERING		SPECIAL TRACKWORK NO 14 TURNOUT		SPECIAL TRACKWORK
		WSM FROG LH AND FROG PACK		STANDARD NO: SD-2623