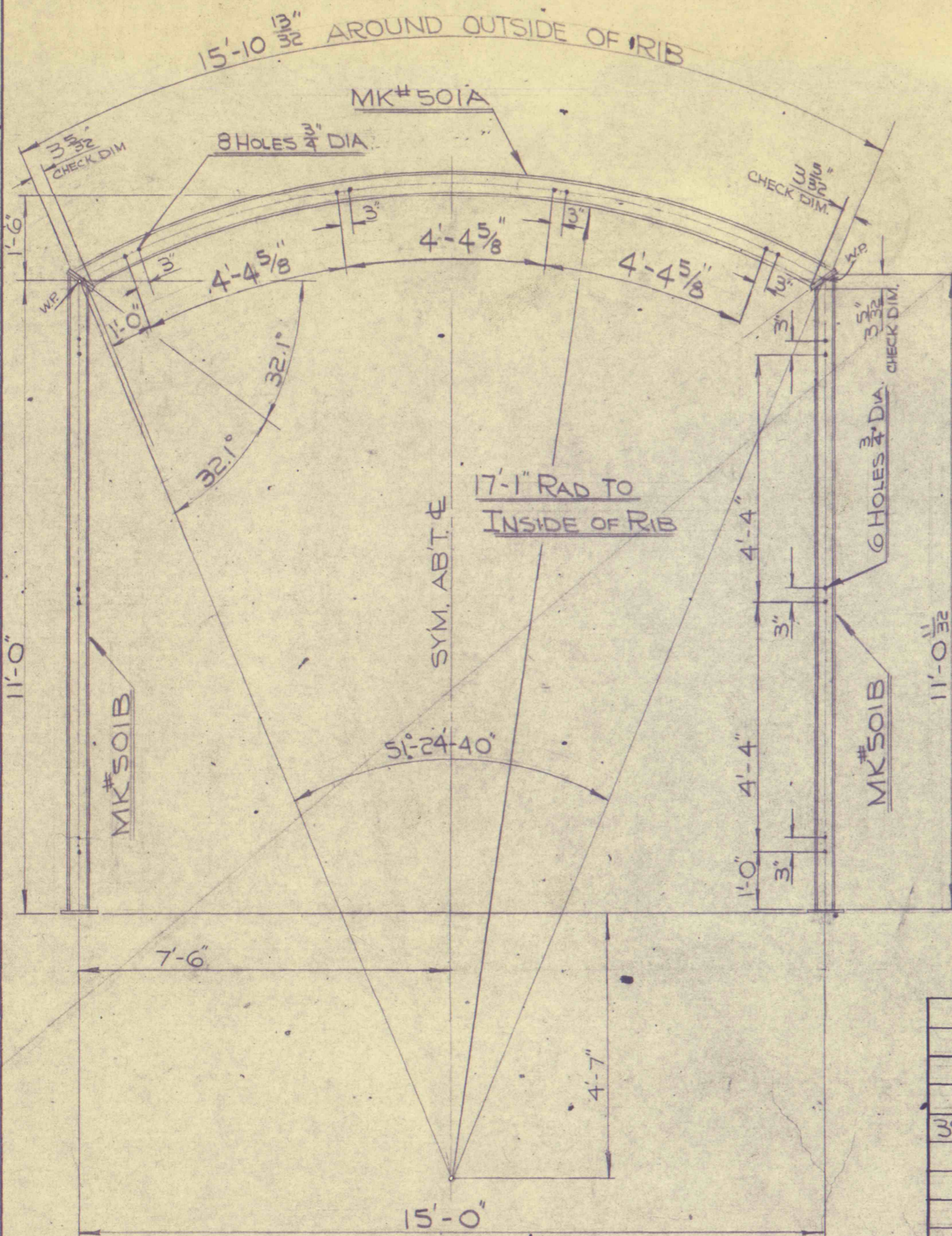


SECTION		MARK NO.	MILL ORDER SIZE	WEIGHT	PART NO.
5" WF 60# 501A					
OPER. NO.	OPERATION	CUT LGTH.	WT.	PART NO.	
1	CUT TO LGTH	15'-11"			<p>57.9° 1'-6" 57.9° RISE 15'-0" CHORD CUT TO CUT OF PLATES MEASURED ON 1/4" RIB</p>
2	PIERCE WEB				
3	BEND				
4	TRIM ENDS				
5	ASSEMBLY WELD				



COURSE # ①
3 PC. SET OF 5" WF @ 16' FT
SCALE: 1/2" = 1'-0"

RECEIVED
OCT 4 1968
ENGINEERING DEPARTMENT
FILE _____
REF: _____

GENERAL NOTES AND TOLERANCES:

Unless otherwise noted, the following notes and tolerances apply to the fabrication of the products called for on this drawing.

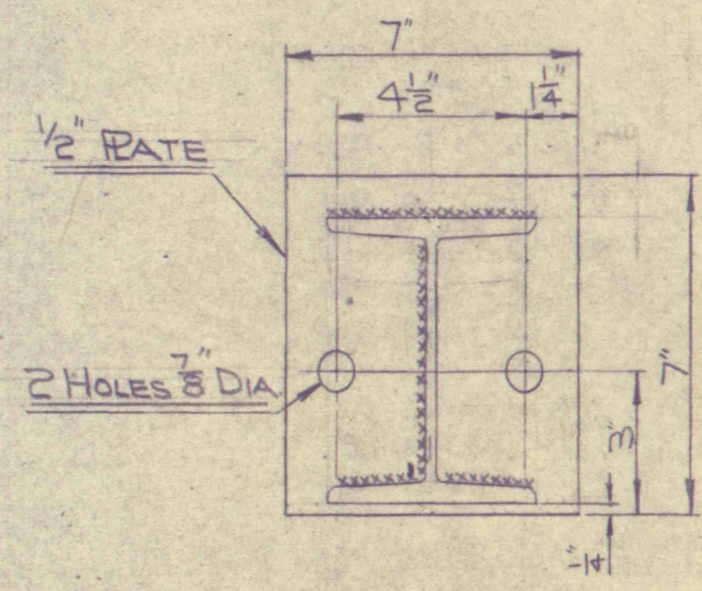
- 1—NOTE: Reference made to mill rolling tolerances below are those tolerances for structural shapes and plates as specified in ASTM Spec. A6.
- 2—BENDING TOLERANCES.
- (a) Rib segment assembly shall conform to true template at ends within tolerances stated below. Rib between end plates may depart from true template plus or minus $\frac{3}{8}$ " provided no point shall depart more than $\frac{1}{4}$ " in any 3 ft. gage length. The rib shall be of uniform contour.
 - (b) Flanges shall be true to shape within established mill rolling tolerances except that after bending, the outer flange will be permitted to droop $\frac{1}{4}$ " maximum toward the inner flange for all radii of bend which are 14 times the beam depth or greater. $\frac{1}{4}$ " maximum droop will be permitted for radii of bend which are less than 14 times the beam depth. Permissible flange droop will be in addition to any flange deviation, allowed within mill rolling tolerances.
 - (c) The web shall be true within established mill rolling tolerances being free of cracks and wrinkles. Where radii of bend are 14 or more times the beam depth, buckling of the web for a distance of $\frac{1}{2}$ the beam depth from each end will be permitted where deviation from flat does not exceed plus or minus $\frac{1}{4}$ ". Where radii of bend are less than 14 times the beam depth, buckling of the web for a distance equal to the beam depth from each end will be permitted where deviation from flat does not exceed plus or minus $\frac{3}{8}$ ".
 - (d) Depth of beam at web after bending can be a maximum of $\frac{1}{4}$ " less than the nominal depth.
 - (e) Sweep in beams between end plates will be permitted within established mill rolling tolerances.
- 3—FABRICATION TOLERANCES.
- (a) Chord out to out of butt and/or foot plates measured on centerline of rib to be within plus or minus $\frac{1}{4}$ " of theoretical length.
 - (b) Face of butt or foot plates after welding to be within plus or minus $\frac{1}{8}$ " of

theoretical plane. Any burrs or ragged edges on connection plates caused by cutting or punching shall be turned toward the rib segment in assembly.

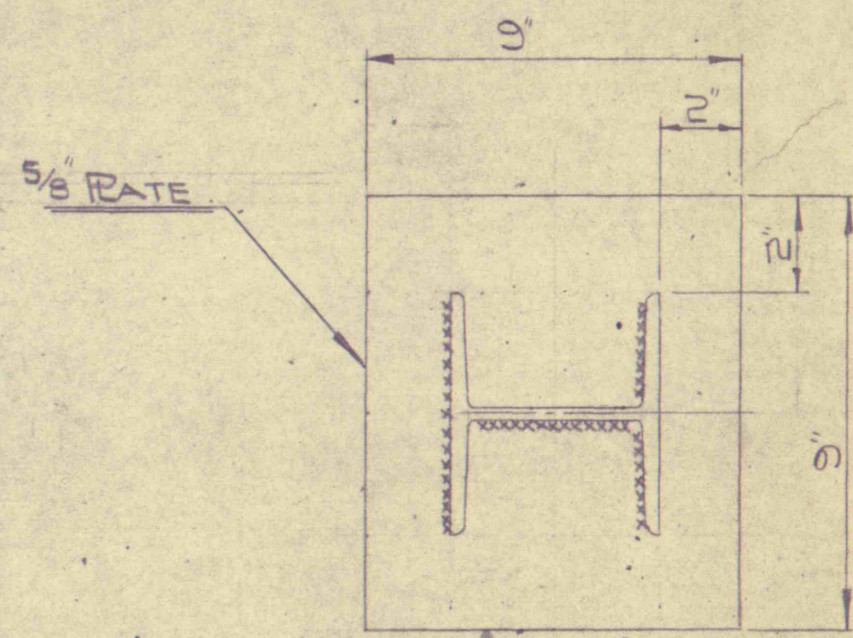
- (c) Gap between ends of beams and butt or foot plates prior to welding shall not exceed $\frac{1}{8}$ " for at least 75% of the cross-sectional area of the beam. Where gaps are in excess of $\frac{1}{8}$ ", they shall be filled by additional welding.
- (d) Tie rod holes in web of rib segments may be distorted and out of round due to piercing before bending, however, tie rods shall pass freely through the holes. Pairs of tie rod holes shall lie within plus or minus $\frac{3}{8}$ " of dimensions shown on plans.
- (e) Mill rolling tolerances to apply to width of mill edge plates. Width or length of sheared plates to be within plus or minus $\frac{1}{8}$ " of theoretical dimensions.
- (f) Center to center of hole dimensions on butt or foot plates to be held within plus or minus $\frac{1}{8}$ ".
- (g) Groups of holes in butt plates after assembly shall lie within $\frac{1}{8}$ " of correct location irrespective of the variations which may exist in the beam as a result of allowable tolerances.
- (h) Camber and sweep permitted in straight structural members not to exceed mill rolling tolerances.

4 — WELDING.

- (a) All welds $\frac{1}{4}$ " minimum fillet welds unless otherwise noted:
- (b) Welding shall conform to the applicable provisions of the American Welding Societies specification for Welded Highway and Railroad Bridges AWS D2.0-66. Welding process will be in accord with Section 1, paragraph 106 using one or more of the following processes:
- (1) Shielded metal arc welding
 - (2) Submerged arc welding
 - (3) Semi-automatic welding using Lincoln Innershield Process



BUTT RATE DETAIL
MK # 501C
SCALE: 3" = 1'-0"



FOOT RATE DETAIL
MK # 501D
SCALE 3" = 1'-0"

[illegible]

IMAP# 09222 9927-96 TC-1