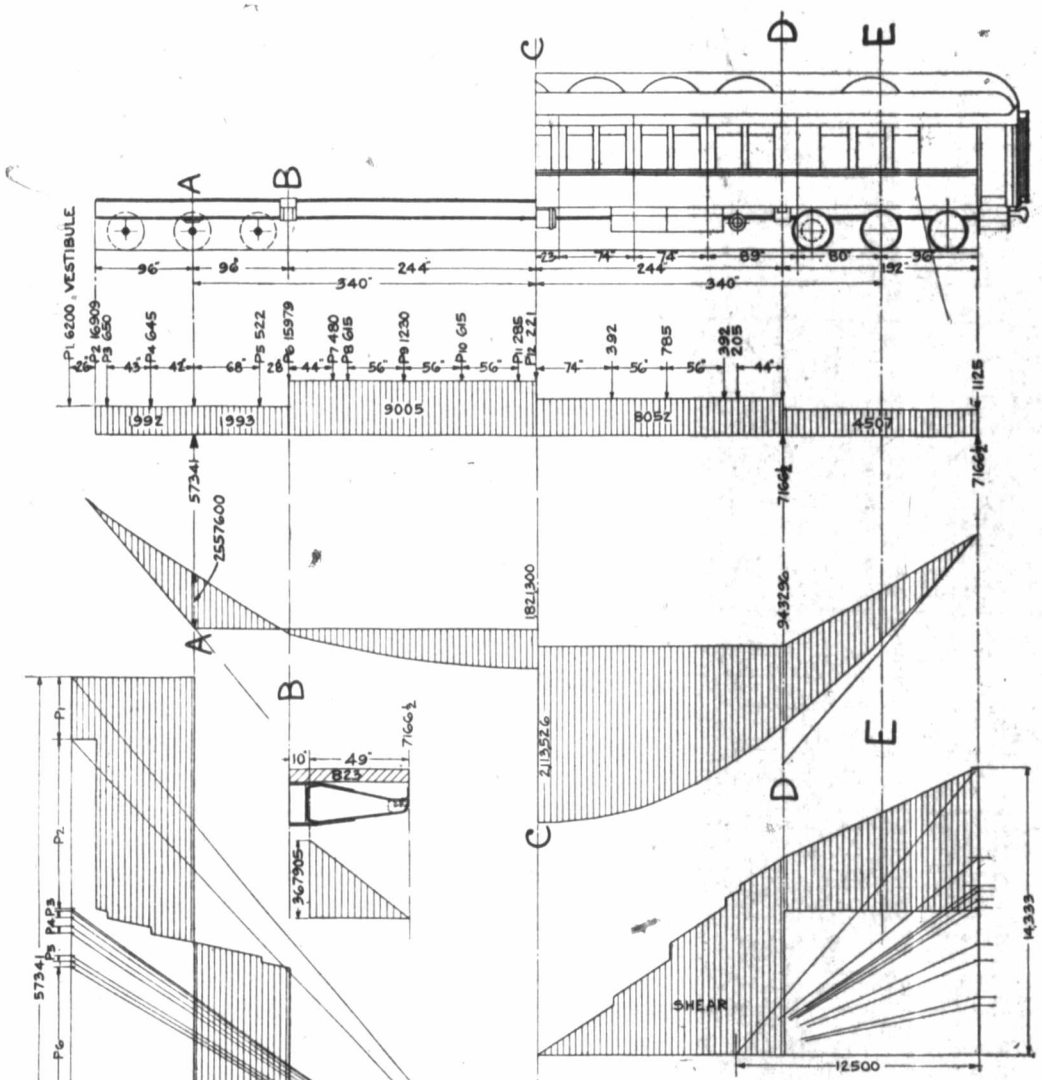
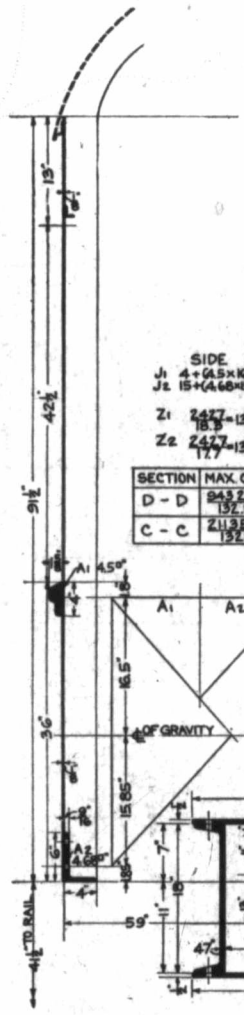


STRESS DIAGRAM
72' 8" STEEL SLEEPING CAR
FRAME CONSTRUCTION
TYPE 4.



SIDE GIRDER

J1 4+(4.5×16.5²) = 1232
J2 15+(4.66×15.85²) = 1195
2427

Z1 2427/18.5 = 132.8
Z2 2427/17.7 = 137

SECTION	MAX. COMPRESSION	MAX. TENSION.
D - D	943296/132.8 = 7100*#*	943296/137 = 6900*#*
C - C	2113526/132.8 = 15900*#*	2113526/137 = 15400*#*

CENTER SILL

J1 24×9.25² = 2054
J2 2×584 = 1168
RIVET HOLES 376
3222
2898

Z 2898/9.5 = 305

AREA OF CENTER SILL 50.5□"

SECTION	MAX. COMPRESSION	MAX. TENSION
A - A	2557600/305 + 400000/50.5 + 400000 X 2.81/305 = 12270*#*	2557600/305 = 8040*#*
C - C	182300/305 + 400000/50.5 + 400000 X 2.81/305 = 17590*#*	182300/305 = 5980*#*