

Fig. No. 1—General Plan and Elevation, C.P.R. Concrete Trestle

eighth inch. In the vertical posts the reinforcing consists of thirty-two bars of the same diameters. The outside post is battered one in twelve. All corners above ground are rounded off to a two-inch radius and the paneling of both posts and struts gives a particularly pleasing effect.

The ballast walls are each spaced thirty-six feet from the last bent and are of the standard retaining wall type.

The T-slabs which constitute the floor system were moulded on a site adjoining the railway track, a short distance east of the trestle. One concrete-mixing plant and special forms were used on this portion of the work exclusively. Referring to Fig. No. 2, it will be noted that in preparing the design, special attention was paid to the shearing stress in these slabs. Bent-up bars and stirrups, at comparatively close spacing, have been provided. These T-slabs are six feet high from bridge seat to base of rail. The outer slab

carries an additional load of the coping blocks and the sidewalk brackets.

The concrete throughout the entire superstructure is mixed in the proportion of one part of Portland cement, one and one-half parts of washed sand and three parts of broken stone. The reinforcing steel is placed as shown in detail in Figs. No. 2 and No. 3.



Pouring the Pre-moulded Concrete Slabs

The deck of the trestle, consisting of the slabs described above grouted in place and anchored to the bents, is covered with a coat of waterproofing. This coat consists of one ply of waterproofing paper, lapped two inches; one ply of fifteen-pound bituminous felt, lapped two inches; two plies of unsaturated burlap, lapped half width; and one ply of bituminous felt, lapped two

inches. All layers are mopped with bituminous cement, except the surfaces of contact with concrete slab or waterproof paper. The waterproofing is finished with a protective coat of three-quarters of an inch of mastic asphalt.

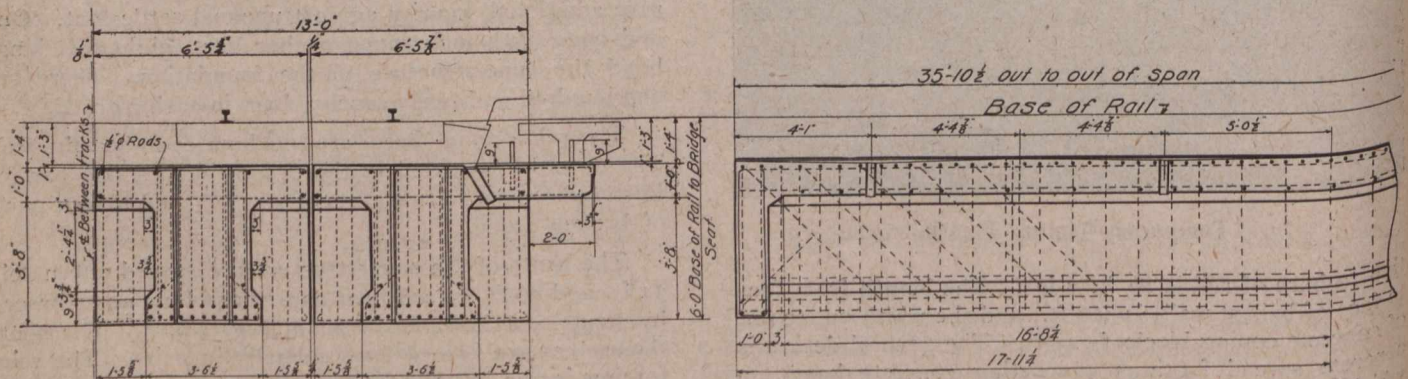


Fig. No. 2—Cross-Section and Longitudinal Section of Inner and Outer Slabs