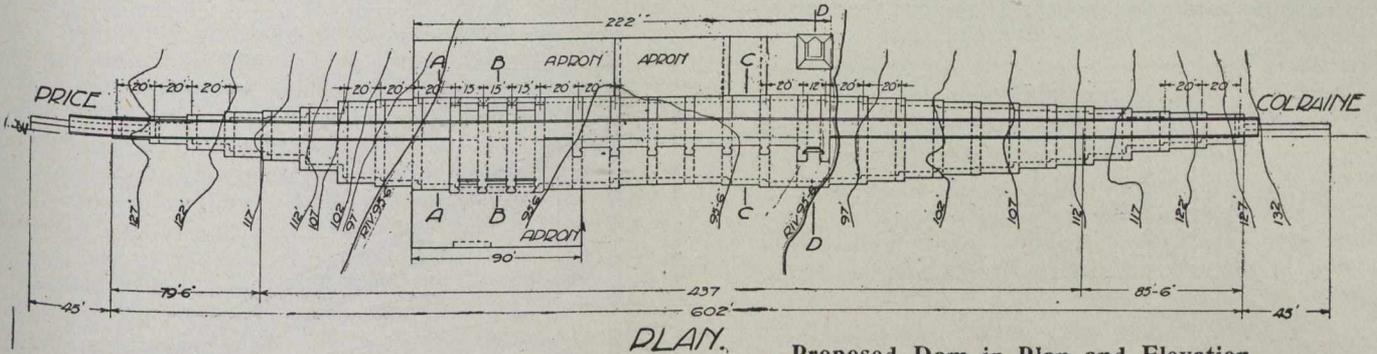


of the buttresses and flush with their up-stream face seats are provided for supporting the deck slab. In the buttresses of the gate section both up-stream and down-stream faces rise vertically from the floor, as shown in section B-B, the slope in the upper portion being the same as that in section A-A. In these buttresses, which are at

The exterior face of the deck slab which rests on the floor and buttresses has the same slope of the latter from the floor changing to the vertical for its last three feet in height. The interior face is in the form of a circular arch of 15 ft. radius with a rise of 2 ft. In the log sluice the deck slab is replaced by a solid concrete wall.



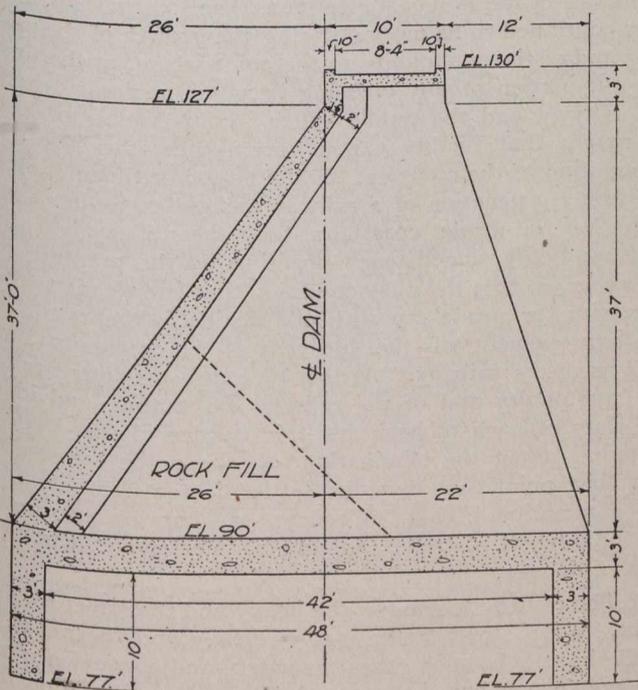
Proposed Dam in Plan and Elevation.

On the down-stream side of the deck slab and resting on the floor, the design calls for a stone embankment with a slope of 1:1, the exposed side to be faced with cement mortar.

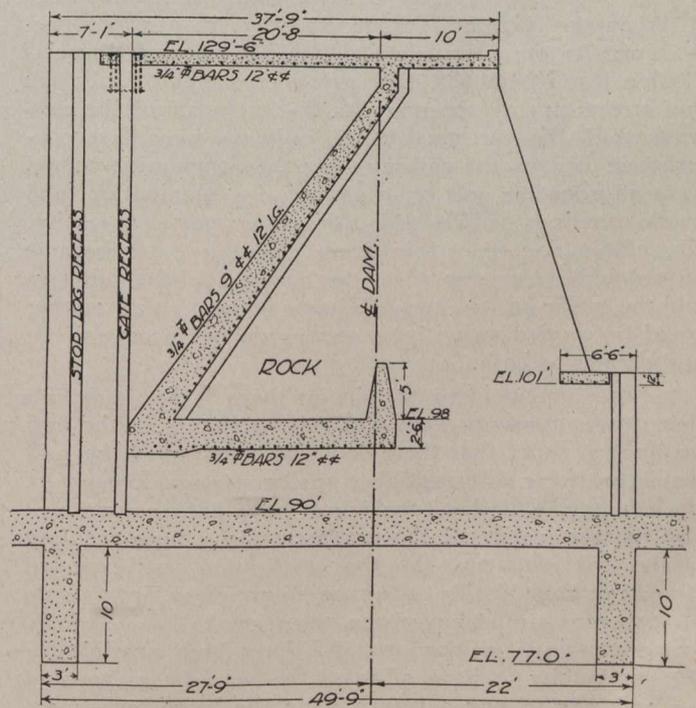
The roadway, 12 inches in thickness, and of varying width, as stated, is to be reinforced with 3/4-inch square twisted steel bars placed at 12-inch centres. Over the gate section it is supported by two 10-inch beams 15 ft. long embedded in concrete on the up-stream side. The down-stream side of the roadway forms a straight line from one end of the dam to the other. A parapet 6 inches high and 10 inches wide, equipped with drainage tile, protects the roadway on either side. A concrete surfacing is to be used.

The stop logs are to be of Douglas fir or yellow pine, the ends protected by steel plates. For the spillway and gates up-stream they will be 12 x 12 inches x 17 ft. and 12 ft. long respectively. Those for the gates down-stream will be 8 x 12 inches x 12 ft. long, and for the log sluice 10 x 12 inches and 11 ft. long.

12-ft. centres, two sets of vertical recesses are built into the lateral faces to receive the stop logs and the gate. In the spillway section the form which the buttresses take is shown in section C-C. These are also provided in their lateral faces with vertical recesses 12 inches deep and 13 inches wide to receive the stop logs. It will be noted that the down-stream face of the spillway buttresses has the ordinary slope. The log sluice buttresses are sloped on their up-stream face for 22 ft. above the floor and vertical for 17 ft. 6 inches. In addition to recesses for stop logs these have another set of recesses for the log-slide support.



Typical Section A-A of Dam.



Section B-B Through Sluices.